
*DRAFT CULTURAL LANDSCAPE REPORT
AND ENVIRONMENTAL ASSESSMENT*

THEODORE ROOSEVELT ISLAND

GEORGE WASHINGTON MEMORIAL PARKWAY
WASHINGTON, DC AND ROSSLYN, VIRGINIA



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Cover Photo: Title Page: Aerial drawing of proposed TR Memorial, c. 1960. (Theodore Roosevelt Digital Library, Dickinson State University)

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EXECUTIVE SUMMARY

Theodore Roosevelt Island is located in the Potomac River between Georgetown in Washington, DC and Rosslyn in Arlington County, Virginia. People have used this landscape with its high plateau, river, and woodlands for thousands of years. American Indian peoples utilized the island extensively as a fishing and agricultural hub until about 1717. The landscape gained historical prominence in the 18th century under the ownership of the Mason family, who established a ferry route from the island to Georgetown and later developed the land as a plantation. During the Civil War, the island supported a variety of Union Army functions. A camp was established there and, for a short period in the summer of 1863, it housed the 1st United States Colored Troops, a regiment composed of free and formerly enslaved black men. The island was purchased by the Roosevelt Memorial Association in 1931 and transferred to the federal government the following year with the intention of creating a presidential memorial to Theodore Roosevelt. The landscape was transformed from 1932 to 1938 by the establishment of a native hardwood planting plan designed by famed landscape architect Frederick Law Olmsted, Jr. and his associate, Henry V. Hubbard. In 1967, the memorial plaza on the island, designed by architect Eric Gugler and sculptor Paul Manship, was completed.

Theodore Roosevelt Island is significant primarily as a national memorial to President Theodore Roosevelt and his devotion to the conservation of America's natural resources. TRI is listed on the National Register of Historic Places (NRHP). The Period of Significance for TRI is defined as: American Indian Period (to 1717), Mason Settlement (1748-1833), Civil War Occupation (1861-1865), and Presidential Memorial (1931-1979). However, it also represents several other historic themes spanning centuries: the American Indian use of the landscape; the Mason family development of the site for residential, agricultural, and transportation purposes; and Civil War-era use and its connection with African American history.

This combined Cultural Landscape Report and Environmental Assessment recommends rehabilitation for the Theodore Roosevelt Island landscape. The rehabilitation approach provides a framework for the treatment of the landscape that preserves historic resources in their multilayered context. The Environmental Assessment is prepared in accordance with the National Environmental Policy Act (NEPA) and its implementing regulations (40CFR1500-1508) and Director's Order 12: Conservation Planning, Environmental Impact Analysis, and Decision

Making (NPS 2011) and its accompanying handbook (NPS 2015). Section 106 of the National Historic Preservation Act will be a separate, but parallel, process for this project. An *Assessment of Effects* report will be prepared to meet the requirements under Section 106. While the landscape conditions at Theodore Roosevelt Island strongly evoke the site's memorial character, the report also recommends enhanced interpretation of the earlier historic themes. Treatment focuses on the protection of important prehistoric and historic resources and enhanced accessibility for the landscape so that visitors may continue to enjoy this unique cultural landscape.

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CHAPTER 1: INTRODUCTION

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This document presents the Cultural Landscape Report and Environmental Assessment (CLR/EA) for Theodore Roosevelt Island (TR Island). This CLR/EA provides documentation of the historical development, an evaluation of existing conditions, analysis of landscape characteristics, an assessment of contributing features and integrity, and treatment recommendations. This work draws from and builds upon the numerous studies, investigations, and documents that already exist for the park, including the 2010 *Cultural Landscape Inventory* (CLI: Moss), 2008 *Historic American Landscapes Survey* (HALS: Pliska), and 2001 *National Register of Historic Places nomination* (NRHP: Fanning). Additional reports and studies on interpretation planning for the site, such as the 2005 *GWMP Long Range Interpretive Plan* (LRIP) and 2015 *TR Island Site Interpretation and Visitor Experience Plan*, were also referenced.

The National Park Service (NPS) uses the CLR/EA as the primary treatment document for significant cultural landscapes. It is also a primary document used to guide management and stewardship of TR Island. The intent of the CLR/EA is to establish a philosophy and a framework to guide treatment to enhance resource condition and visitor experience, support interpretive programming, streamline compliance for implementation, and to determine if significant environmental impacts will occur as a result of proposed treatments.

PROJECT PURPOSE AND NEED

The purpose of this project is to provide guidance for preserving the cultural landscape of TR Island and adjacent portion of the George Washington Memorial Parkway (GWMP). This project will identify and document landscape characteristics, patterns, and features that convey the historical significance of the cultural landscape. This project will guide the long-term stewardship of TR Island and a portion of the GWMP by recommending a treatment approach that adheres to *the Secretary of the Interior's Standards for the Treatment of Historic Properties* and providing a framework for the NPS to appropriately apply preservation measures when planning improvements at the site. The NPS seeks to ensure that the planning process properly considers the significance of the cultural landscape and historical features of these sites so that the historical context may be preserved while promoting a better visitor experience.

Chapter Cover Photo: "Climatic Forest, Roosevelt Island," 1932. (NPS Frederick Law Olmsted NHS)

The proposed project addresses the need to preserve the park's historically significant features. There is also a need to improve and modernize certain visitor amenities, access areas, and conditions at TR Island and a portion of the GWMP.

THE CLR/EA

- Documents existing conditions of the project site and identify characteristics that retain integrity and warrant preservation.
- Thoroughly describes the historical significance of the project site from pre-history to today through narrative and graphics.
- Develops treatment alternatives that accommodate recreation, visitor experience, and education while protecting the historically significant features of the cultural landscape.
- Provides treatment alternatives for the future preservation and management of the cultural landscape.
- Provides a preferred treatment recommendation for preserving and managing the cultural landscape.
- Ensures that proposed projects and developments are compatible with the cultural landscape.

SCOPE AND METHODOLOGY

The project scope includes preparation of a complete CLR and EA for the project area, along with an Assessment of Effects to be prepared as a separate document, meeting applicable guidelines and standards including *A Guide to Cultural Landscape Reports: Contents, Process, and Techniques*; *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Historic Landscapes*; federal regulations (40 CFR 1500-1508) implementing the *National Environmental Policy Act of 1969* (NEPA); regulations of the *Council on Environmental Quality* (40 CFR 1508.9); NPS *Director's Order 12: Conservation Planning, Environmental Impact Analysis, and Decision-Making*; and the *National Historic Preservation Act of 1966* (as amended). Other applicable regulatory requirements include: the *National Park Service Organic Act*, *Act for the Preservation of American Antiquities of 1906*, *Historic Sites Act of 1935*, NPS *Director's Order Number 28: Cultural Resource Management, Archeological Resources Protection Act*, and *Federal Endangered Species Act*.

The CLR/EA was conducted at a thorough level of investigation, documentation for historical research, existing condition assessment, landscape analysis, and treatment recommendations. The thorough level research methodology, as defined by the NPS, focused on the use of select documentation of known and

presumed relevance, including primary and secondary sources that are readily available (Page, Gilbert, and Dolan 1998).

The existing condition investigation was conducted according to best practices. A review of readily available documentation was undertaken. It included information from GWMP and the National Capital Region of the NPS (NPS-NCR), as well as the NPS Integrated Resource Management Applications (IRMA). This review included planning documents, administrative reports, technical reports, natural resource studies, and correspondence. Review of historical documentation included: the NRHP, CLI, and HALS for TR Island; the NRHP and Historic American Engineering Record (HAER) for GWMP; and historic drawings, photographs, and correspondence available from primary and secondary sources.

Background data provided by the NPS was used to prepare CLR/EA drawings and illustrations. This data included GIS files and historic drawings, which were supplemented with field observations and measurements. Archeological research focused on review of previous archeological investigations. The CLR/EA did not include any additional archeological investigations. Future archeological investigations will be undertaken by the NPS and are scheduled to start in 2018.

Chapters 2-4 of this report provide an overview of the physical evolution and traditional uses of the natural landscape, existing conditions documentation, and analysis of the cultural landscapes within the project area. This includes evaluation of the character-defining features, materials, and qualities that make the landscape significant. Multiple sources were consulted to document the appearance of the landscape during each time period. Chapters 5-7 select an appropriate management philosophy based on *The Secretary of the Interior's Standards for Treatment of Historic Properties with Guidelines for the Treatment of Historic Landscapes*, and provide a plan for the treatment and management of the natural and cultural resources within the project area that is consistent with the landscape's significance, condition, and use.

Although the federal government has standard guidelines for the preparation of Cultural Landscape Reports and others for Environmental Assessments, there are no guidelines for preparing a combined report. The NPS-NCR Office has recognized that combining the two documents increases the efficiency of the overall process by integrating the information generated through the

Cultural Landscape Report with the in-depth evaluation process inherent to the Environmental Assessment. In June 2016, the Johnson Mirmiran and Thompson (JMT) team attended a project initiation meeting with the NPS team at the GWMP headquarters. The JMT project team conducted site investigations in August and October, 2016 and May 2017. Documentation of existing conditions presented within this CLR is based on those investigations.

More information about project meetings and agency consultation is included in Appendix A: Consultation and Coordination.

STUDY AREA AND LANDSCAPE CHARACTER AREAS

PROJECT STUDY AREA

TR Island (including both the main TR Island and Little Island) is located along the 8.3-mile George Washington Memorial Parkway (GWMP). It is located roughly at the midpoint of the parkway, situated in the Potomac River between the Georgetown neighborhood of Washington, District of Columbia and the unincorporated area of Arlington County, Virginia known as Rosslyn (Figure 1). The study area, containing approximately 92 acres, incorporates the island, also known as Reservation 560, as well as the adjacent associated land in Virginia (Map 1).

The study area encompasses the boundaries of TR Island as designated in the National Register of Historic Places (NRHP):

The boundaries of the nominated property include all the land historically and currently known as Analostan, Mason's, or Roosevelt Island and all the accretions thereto to the mean low water; also including Little Island to the southeast. There are a few exceptions: the boundaries shall include the ruins of the historic

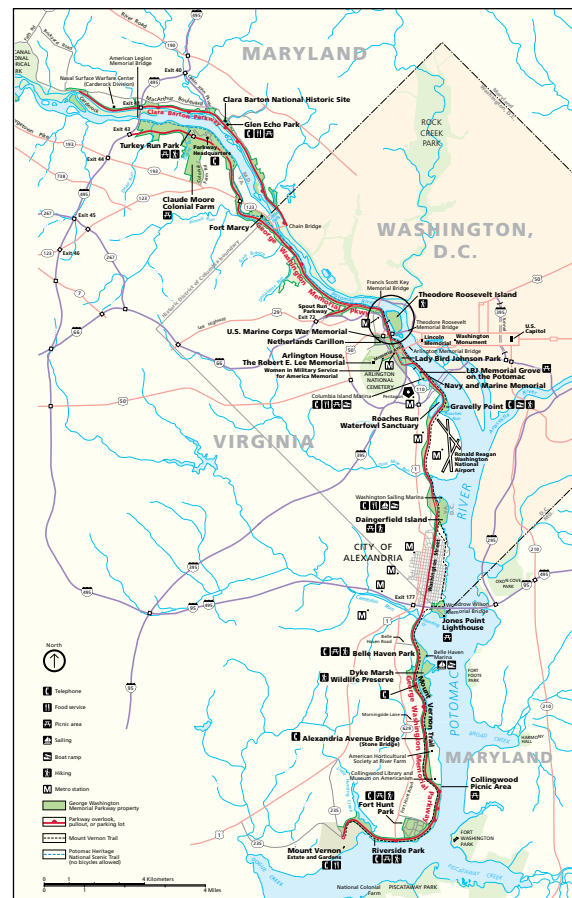


Figure 1. GWMP map, 2010. (NPS Harpers Ferry Center)



Mason's Causeway, which extends from the northwest shore of the island underwater to the Virginia shore; the remnants of wooden wharves and scows on the north shore; and two clusters of ruined scows which likely remain underwater at the northwestern corner of the island, and off the eastern shore, directly across from the mouth of Rock Creek. These scows are shown on the series of topographic maps prepared by Public Buildings and Public Parks of the National Capital for the Roosevelt Memorial Association in the early 1930s. (Fanning 2001:10–101)

Beyond those boundaries, the study area includes the portion of the GWMP that runs parallel with the island along the Virginia shoreline to the west, where parking is provided in a parking lot accessible from the northbound lanes of the GWMP. The Virginia portion of the study area encompasses the land bounded to the north by the Rosslyn Pedestrian Bridge, to the south by the southern edge of the Theodore Roosevelt Bridge (TR Bridge), and to the west by the GWMP roadway, inclusive of: a portion of the Mount Vernon Trail (MVT), which runs between TR Island and George Washington's Mount Vernon estate in Alexandria, VA; the Potomac Heritage Trail (PHT); and the TR Bridge, a section of U.S. Interstate 66, crosses the island near its southern terminus.

TR Island sits near the fall line in the Potomac River, where the rocky Piedmont Plateau meets the sandy soils of the Coastal Plain. The river flows to either side of the island in two channels: the narrower channel on the west (Rosslyn side) is known as Little River and the channel on the east (Georgetown side) is known as the Georgetown Channel.

For the purposes of this report, landscape character areas (LCAs) are used to define the distinct landscape groupings on the site. LCAs are areas that contain similar physical characteristics, qualities, attributes, and associated cultural landscape resources. The six LCAs used throughout the report—overview shown in Map 2—are defined below.

NORTH PLATEAU

Bounded on the west and north by water, the North Plateau is situated on the northwest portion of the island and includes the formal Theodore Roosevelt Memorial (1967). It is characterized by a relatively level topography on the high ground occurring in the mid-section of the island. The shoreline is largely composed of rocky boulders but a fine sand beach is located in the western portion of the north shore. Mature forest canopy covers much of this LCA, with dense understory found closer to the northern shore. Many trails, both formal and social, crisscross the North Plateau. Historic resources, such as the causeway remnants and wharf ruins, are located along the western and northern shorelines.

SOUTH PLATEAU

The southern half of the central section of the island is called the South Plateau. The highest point on the island is within the southern portion of this plateau; the Mason estate was situated here to take advantage of views south and east. An overlook was originally planned for the southernmost tip of the plateau, but the construction of TR Bridge impeded its construction. The South Plateau LCA is bounded on the north by the North Plateau; on the east by the Marsh and Swamp; and on the south and west by the West Terrace. The wide, stable Upland Trail that transverses this LCA is reminiscent of a promenade. The mature tree canopy overhanging the trail creates a sense of partial enclosure. The topography to the east, west, and south drops off, at times somewhat steeply, towards the Marsh and Swamp LCA.

WEST TERRACE

The West Terrace is situated immediately south and west of the South Plateau and is a relatively low area, but not typically marshy. It encompasses a heavily vegetated shoreline as well as higher ground and embankment (fill) areas created by the construction of TR Bridge, which runs east to west through this LCA. The Comfort Station is situated within the West Terrace, as are formal and social trails. Portions of stone retaining walls along former Olmsted trails both north and south of TR Bridge are visible in this area. To the south of TR Bridge, remnants of the original Olmsted trails and outlook are overgrown with vegetation. A natural viewpoint is located at the southern tip of the island.

MARSH AND SWAMP

The Marsh and Swamp runs along the entire eastern portion of the island. As evident from its name, this area is characterized by sections of open water bounded by a marsh and lowlands subject to frequent inundation. Ecologically, this is perhaps the most diverse area on the island with a rich variety of flora and fauna. An elevated boardwalk trail runs north-south through the area, providing visitors with views and vistas of this rich habitat, as well as greater Washington, DC.

LITTLE ISLAND

Little Island is an independent land mass located south of TR Island. It is separated from the main island by a narrow, shallow, unnamed waterway. The only access to Little Island is by boat. Little Island appears to share the naturalistic, mature vegetated landscape of the southern portion of the West Terrace.



Map 2. Overview of Landscape Character Areas

GEORGE WASHINGTON MEMORIAL PARKWAY

A transportation corridor running north-south on the Virginia mainland, the GWMP provides a strong visual and physical western boundary for the park. This scenic byway provides vehicular access to and from the park via the northbound lanes. This LCA is bounded by the Rosslyn Pedestrian Bridge to the north, the southern edge of TR Bridge to the south, Little River to the east, and the GWMP park boundary to the west. The parking lot and MVT are located within this section.

PARK PURPOSE AND SIGNIFICANCE

The purpose statement for the park reads: TR Island provides a memorial to President Theodore Roosevelt in the nation's capital and serves as a natural park for the recreation and enjoyment of the public. (NPS 2014:26)

TR Island's significance is attributed to the following factors (NPS 2014:26–27; NPS 2005:121):

- Designed by renowned landscape architects Frederick Law Olmsted, Jr. and Henry Vincent Hubbard, Theodore Roosevelt Island's woodland landscape reflects Roosevelt's conservation ethic and love of nature.
- Theodore Roosevelt Memorial Plaza is the only monument honoring the 26th president of the United States in Washington, DC.
- Theodore Roosevelt Island offers a rare opportunity for solitude and diverse outdoor recreation within the dense urban setting of our nation's capital.
- Many people, including American Indians, the Mason family, the U.S. military, and diverse visitors, have utilized the island for centuries.

MANAGEMENT SUMMARY AND PHILOSOPHY

The management philosophy for TR Island is to preserve and maintain the natural environment and historic features while providing public access, education, interpretation, and other low impact uses that are compatible with the cultural landscape and natural surroundings.

ENVIRONMENTAL ASSESSMENT IMPACT TOPICS**SCOPE OF THE CLR/EA**

This CLR/EA evaluates the potential effects of the proposed treatment alternatives and a no action alternative on environmental, socioeconomic, and cultural resources. The CLR/EA provides the decision-making framework that:

1. Analyzes a reasonable range of alternatives to meet objectives of the proposal,
2. Evaluates potential issues and impacts to the park's resources and values, and
3. Identifies mitigation measures to lessen the degree or extent of these impacts.

Impact topics evaluated in this document are cultural resources; wetlands; wildlife; views and vistas; and visitor experience. Some impact topics were dismissed because the project would result in no more than minor impacts. No major impacts were identified as a result of implementing the proposed alternatives in an initial analysis.

The public, regulatory agencies, and other stakeholders have an opportunity to comment on this CLR/EA. Comments received will be considered in the final evaluation of effects.

ISSUES AND IMPACT TOPICS

Issues describe problems or concerns associated with current impacts from environmental conditions or current operations, as well as problems that may arise from the implementation of any of the alternatives, and result in the development of impact topics. Potential issues associated with this project were identified by the public, park staff, and input from other agencies consulted. This input contributed to the identification of the following impact topics, which are discussed in “Chapter 3: Existing Conditions and Affected Environment” and analyzed in “Chapter 7: Affected Environment and Environmental Consequences.”

These potential issues or impact topics include cultural resources, water resources: wetlands, views and vistas, and visitor experience. These issues represent resources of concern that could be beneficially or adversely affected by the actions proposed under each alternative and were developed to ensure that the alternatives are evaluated and compared based on the most relevant resource topics. These impact topics were identified based on the following: issues rose during scoping, federal laws, regulations, executive orders, NPS Management Policies 2006, and NPS knowledge of limited or easily impacted resources.

This section identifies the issues carried forward for detailed analysis in the EA, as well as issues that are dismissed from detailed analysis.

IMPACT TOPICS RETAINED FOR ANALYSIS**Cultural Resources**

Cultural resources within the project area include archeological resources, built resources, and landscape elements. The treatment recommendations for cultural resources are key issues in this CLR/EA. Implementation of the proposed treatment alternatives could affect cultural resources within TR Island; therefore, this topic requires further analysis in this document.

Water Resources: Wetlands

Section 404 of the Clean Water Act (CWA), Executive Order 11990, NPS Management Policies 2006, and DO-77-1 Wetland Protection direct water resources and wetlands be protected and wetlands and wetland functions and values be preserved. These policies and orders further require direct and indirect impacts on wetlands be avoided when practicable alternatives exist. Based on NWI mapping, palustrine forested wetlands are present in the western and southern portions of the island and along the eastern edge; palustrine emergent wetlands are present on the southwestern side of the island adjacent to the forested wetlands; and the Potomac River is designated as a riverine wetland. Implementation of the proposed treatment alternatives could impact project area wetlands; therefore, this topic will require analysis in this document.

Views and Vistas

Managed under NPS Management Policies 2006, the proposed treatment alternatives could alter views and vistas to and from the island; therefore, this topic was retained for further analysis.

Visitor Experience

The proposed treatment alternatives could affect the overall visitor understanding of TR Island, including interpretive and educational opportunities as well recreational opportunities; therefore, this topic was retained for further analysis.

IMPACT TOPICS DISMISSED FROM FURTHER ANALYSIS

The following topics were eliminated from further analysis because either the resources are not present within the project area or because the impacts to the resources, if any, would be negligible to minor.

Water Resources: Streams, Rivers, and Water Quality

The CWA, Section 10 of the Rivers and Harbors Appropriation Act, EO 12088: Federal Compliance with Pollution Control Standards, and NPS Management Policies 2006 direct the NPS to avoid or minimize human caused pollution of waters and to avoid obstructing the navigable capacity of Waters of the U.S. TR

Island is located within the Potomac River. Under the treatment alternatives, clearing of rocks and other shoreline obstructions could occur to create the soft landings for non-motorized watercraft, but no excavation or grubbing is anticipated, nor are any docks, or piers planned. Because the action would have no more than a minimal impact on water resources, this topic was dismissed from further analysis.

Floodplains

EO 11988: Floodplain Management requires an examination of impacts on floodplains and potential risks involved in placing facilities within floodplains. NPS Management Policies 2006 and DO 77-2 Floodplain Management provide guidelines for proposed actions in floodplains. The treatment alternatives do not propose an increase in impervious surfaces nor do they result in the discharge of fill into floodplains. The treatment alternatives will not impact natural floodplain values or the ability of the floodplains to function naturally, and would not increase risk to property of life. Therefore, floodplains were dismissed from further analysis.

Species of Special Concern

The Endangered Species Act (ESA) of 1973 requires examination of impacts to all federally-listed threatened, endangered, and candidate species. Section 7 of the ESA requires all federal agencies to consult with the USFWS to ensure their actions do not jeopardize said species or critical habitats. The NPS Management Policies 2006 and NPS-77 requires the NPS to examine impacts on both Federally and State-listed threatened, endangered, sensitive and candidate species.

Correspondence with the USFWS, the District of Columbia Department of Energy and Environment, the Virginia Department of Game and Inland Fisheries, and the NPS Center for Urban Ecology occurred in August 2017. No federal or state listed species of concern occur within the project area vicinity and, therefore, this topic was dismissed from further analysis.

Vegetation

The proposed treatment alternatives would have little to no impact on park vegetation. No extensive earthwork, no new trails, and no clearing or grubbing are proposed. Minor disturbances associated with the alternatives could occur, but these impacts would be minimal, temporary, and negligible. Because impacts to park vegetation would be negligible, this topic was dismissed from further analysis. New plantings (i.e. to replace lost trees from EAB), is included under the Cultural Resources topic for analysis (as part of the Cultural Landscape).

Wildlife

The NPS Management Policies 2006 and NPS-77, as amended, offer guidance for the management, conservation and protection of natural systems found within NPS properties. TR Island is home to a diverse population of birds, deer, and small woodland animals. However, implementation of the treatment alternatives would not impact vegetation or alter the habitat of project area wildlife. Because impacts to wildlife habitat and wildlife are negligible, this topic was dismissed from further analysis.

Park Operations

Park operation activities include facilities management, compliance management, and employee and visitor health and safety. The proposed treatment alternatives would have little to no impact on park operations. Park operations would remain unchanged as a result of the proposed treatment alternatives. Because impacts to park operations would be negligible, this topic was dismissed from further analysis.

Geology and Soils

The proposed treatment alternatives would have little to no impact on park geology or soils because no extensive excavation is proposed. Minor soil disturbances associated with the treatment alternatives could occur but these impacts would be minimal, temporary, and negligible. Because impacts to geologic and soil resources would be negligible, this topic was dismissed from further analysis.

Indian Trust Lands

Secretarial Order 3175 requires that any anticipated impacts to Indian trust resources from a proposed action by Department of the Interior agencies be explicitly addressed in environmental documents. No lands within the project area boundary are held in trust by the Secretary of the Interior solely for the benefit of American Indians due to their status as American Indians; therefore, this topic was dismissed from further analysis.

Climate Change

Neither the treatment alternatives nor the no action alternative would have an impact on air quality, or increase greenhouse gas emissions. Short-term emissions from vehicles may increase during implementation of the treatment alternatives but the impacts would be temporary and minimal. Because the proposed treatment alternatives would result in indiscernible contributions to climate change, this topic was dismissed from further analysis.

Socioeconomics and Environmental Justice

Neither the no action alternative nor the proposed treatment alternatives would have disproportionate health or environmental effects on minorities or low-income populations or communities, nor would they result in an increase or decline in occupations or income associated with TR Island; therefore, socioeconomics and environmental justice topics were dismissed from further analysis.



CHAPTER 2: SITE HISTORY

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This chapter provides an overview of the historic context and physical evolution of TR Island. The history can be divided into the following major periods: American Indian (unknown to 1717); Mason Family Ownership (1717-1833); Post-Mason use (1833-1861); Civil War-era Occupation (1861-1865); Absentee Ownership and Ephemeral Use (1865-1899); Stalled Development (1900-1931); Presidential Memorial (1931-1967); and NPS Management (1967-present). The island is referred to as TR Island throughout the document, but the popular name of the island during each time period is listed below the title and date range.

AMERICAN INDIAN PERIOD (TO 1717)

ANACOSTIEN/ MY LORD'S ISLAND

TR Island was heavily used by American Indians until the 18th century. The island's prime location on the Atlantic Seaboard fall line meant that it "possessed an abundance of natural features that would have made it ideal for habitation: fish and migratory waterfowl, spring fish runs, and a rich diversity of animals and plants" characteristic of both the Piedmont plateau to the north and the Atlantic coastal plain to the south (Fanning 2001:8–34; Netherton and Netherton 1987:12). Two prehistoric site excavations on TR Island in the summer of 1967 uncovered large quantities of pottery sherds, projectile points, animal bones,



Chapter Cover Photo: CCC enrollees clearing brush, ca. 1932. (NPS Frederic Law Olmsted NHS)

Figure 2. "Early Life Analostan Island," 1940. Mural at the Arlington Post Office. (USPS via Smithsonian)

and similar artifacts, giving tangible proof of a substantial, and most likely long-lived, American Indian presence on the island (Ayers and Sprouse 1967). Figure 2 depicts American Indians on the island.

American Indian occupation of the area was first noted by Captain John Smith on his eponymous voyage up the Chesapeake Bay in 1608 (Cissna 1990:27; Papenfuss and Coale 1982:1). In June 1608, Smith sailed up the Potomac as far as TR Island, where the rocks of the fall line begin to impede navigation upriver. Smith noted the presence of two villages inhabited by members of the Nacotchtanke tribal grouping of Piscataway near the island; the northern of these, Namoraughquend (meaning “place where fish are caught”), was likely located either on TR Island or nearby on the Potomac’s western shore (1990:27–28). Figure 3 shows Captain Smith’s map with Namoraughquend indicated in red.

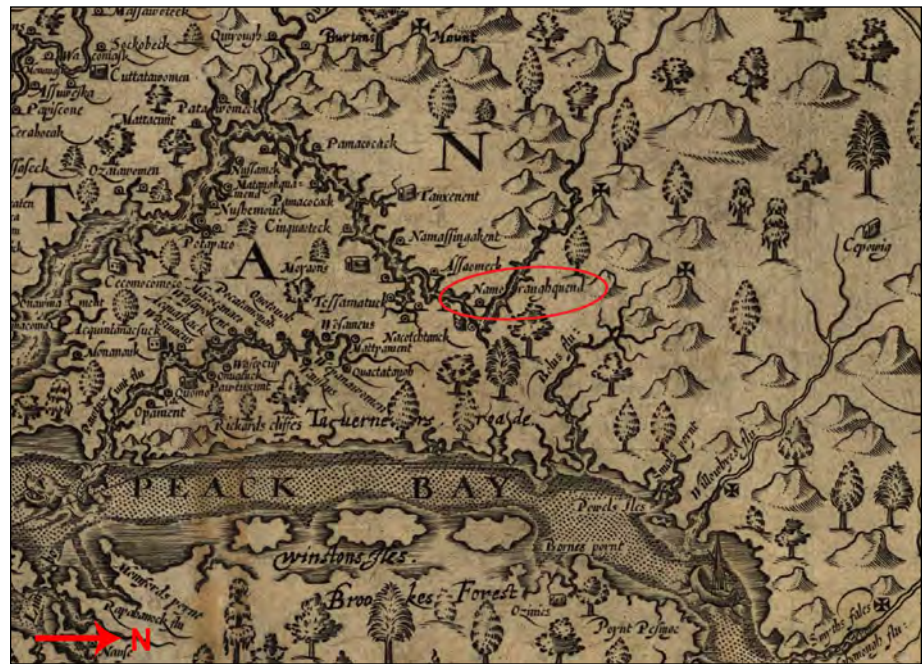


Figure 3. “Virginia,” 1612 [1624].
(www.loc.gov/item/99446115/)

Nacotchtanke is variously spelled Necostin, Anacostank, Anacostin, Anacostien, and Anacostan. The earliest titles given the island are presumably derivatives of the Anacostin name. Maps dating from the 17th and 18th centuries identify the island as “Anacostien” (Herrman, Faithorne, and Withinbrook 1673; Senex 1719). Likewise, “Anacosta Island” had been used as a landmark in metes and bounds descriptions of Virginia deeds and wills since at least 1657 (Netherton 1980:10) (Netherton 1980:10). Herrman’s map of 1670 lists the island as “Anacostien,” indicating that the Nacotchtanke were either living there at the time or had previously lived there (Cissna 1990:30; Cissna 1986:166).

The Nacotchtanke had camps or villages both at the confluence of the Anacostia (named after them) and Potomac Rivers, as well as on TR Island. These strategic positions allowed them to control trade with interior Piscataway populations (Cissna 1990:27). Whether a village was located on TR Island or it was merely utilized as a fishing and agricultural site is unknown. The island would have been an attractive location due to the ready availability of food items “such as hickory nuts; fish resources, including annual fish runs; migratory waterfowl (Canadian geese, mallard and black ducks); and assorted other fauna and flora” (Cissna 1990:9).

American Indian presence on the island was documented as late as 1711 when Swiss explorer Baron Christoph von Graffenried traveled up the Potomac River. There, according to Curry (1973:18) and Netherton (1980:14), he encountered American Indians living on TR Island; however, he may have been referring to a different island:

While the Baron’s apparent failure to mention the presence of Captain Brandt’s daughter’s family or tenants would, in isolation, strongly imply that the island was not properly “seated,” it is much more likely that he was referring to Heater’s (Conoy) Island, not Analostan. Heater’s Island is located up the Potomac by Point of Rocks, Maryland. It is well-documented that a number of the Piscataway were residing there in 1711 (Cissna 1986). Nevertheless, although it is unlikely, the possibility that some Indians may have been at least temporarily living on Analostan Island at that time should not be categorically ruled out before, at the very least, a reanalysis of the original source is completed. (Cissna 1990:36)

While American Indians continued to inhabit TR Island, the English Crown claimed sole title to the island and the surrounding lands until 1632. That year, King Charles I granted Cecilius Calvert, Second Lord Baltimore, a land patent for much of the colony of Maryland, which included the future site of Washington, DC (Thorpe 1909:1677). Several 17th and 18th century records describe the island as “My Lord’s Island,” presumably a designation used by Calvert as a sign of respect for his benefactor (Duhamel 1935:134). On July 21, 1680, Charles Calvert, Third Lord Baltimore, granted the island to Captain Randolph Brandt of Charles County, Maryland, as payment for protecting colonists from hostile Indians on the frontier. The grant, certified 29 April 1682, stipulated that Brandt was to receive:

... all that tract or parcel of land being an island now called Barbadoes lying in Charles County aforesaid in Potomack River near the falls of the said river over against Rock Creek commonly called or known by the name of the Annalostan Island containing by estimation and laid out for seventy five acres more or less. (MSA Liber CB3:48)

Upon his death in 1698, Brandt left the island to his daughter and son-in-law, Margaret and Francis Hammersley (Curry 1973, Netherton 1980).

MASON FAMILY OWNERSHIP (1717-1833)

MASON'S ISLAND

From 1717 to 1833, the Mason family of Virginia owned TR Island, during which time it became known as Mason's Island (Pliska 2008: 5). George Mason III purchased the island from Randolph Brandt's daughter and son-in-law in 1717 for £35 sterling; however, George Mason III never settled on the island and died unexpectedly in 1735, leaving the land to his son, George Mason IV.

The Mason family licensed Magee's (or McGee's) ferry, established circa 1737,



Figure 4. McGees Ferry, TR Island, and Rock Creek (#26, 27, 28, respectively), 1737. "A Plan of Patomack River, from the Mouth of Sherrendo, Down to Chapawamsick Key." (Library of Congress, www.loc.gov/item/88693249)

that ran from Virginia to Georgetown (see Figure 4). Mason constructed one or more landings on the island's northern shore in 1748 when he took over Magee's Ferry (Pliska 2008:6; Spratt 1953:185). He also constructed a two-story ferry house on the eastern edge of the island's northern shore. Ferries were vital to transportation at the time:

In the America of the 18th and early 19th centuries, when rivers formed the major arteries of transportation and commerce, the great corridor of the Potomac River allowed traders and settlers to travel west over the Appalachians and into the continent's interior. Roads were few, connecting only the most important buildings and settlements, and crossing rivers by means of fords or ferries. Ferries were "news and gossip centers," providing a "floating forum for the day's politics." No bridges were constructed over the Potomac for almost 200 years after the settling of Jamestown in 1607, until Long Bridge was built a mile or so south of Mason's Island in 1809 [sic]. Though the Potomac belonged to Maryland, Virginia chartered 14 ferries across it between 1732 and 1766, including three in the vicinity of the future city of Washington, among them Mason's Ferry. (Spratt 1953:183; Fanning 2001:8-34)

Army battalions crossed the river by the ferry, including General Braddock and his troops in 1755 during the French and Indian War and the armies of Rochambeau and Lafayette in 1781 while traveling to the final battle of the Revolutionary War at Yorktown. George Washington and Thomas Jefferson probably took the ferry on many occasions, as Washington noted the cost of passage in a 1785 diary entry. President James Madison, members of his cabinet, and other notable citizens fled to Virginia via the ferry when the British marched on Washington and burned numerous federal buildings in 1814 (Fanning 2001: 8-34).



Figure 5. View from Georgetown to the federal city (left) and Mason's Island to the right of the large sailboat. "Georgetown and the Federal City, or City of Washington," 1801. (George Washington University Albert H. Small Washingtonian Collection 325)

George Mason IV died in 1792 and the island passed to his fifth son, John Mason, who settled and developed the land. The precise date of when the island was cleared and buildings constructed is unknown, but it is believed that the conversion of the island into a functional plantation and rural estate began in 1793. By 1802, a large Classical Revival-style mansion named Analostan had been built on the southern portion of the island's central plateau, as seen in Figure 5 and Figure 6 (Pliska 2008: 7). To the north of the house were open parklands and cultivated fields, to the south were gardens and terraced lawns. A large crescent shaped marshy swamp dominated the northeast coast stretching inland and as far south as the tree line immediately north of the mansion. Plantation fields ended abruptly along the irregular edge. Mason also maintained a forested edge around



Figure 6. Analostan, 1897. (Gunston Hall)

the island's perimeter, which provided a means of concealing the estate from ferry traffic and ships on the Potomac. This screen was only broken immediately east of the mansion to afford a view across the river to the federal city (Moss 2010: 28).

Until the early 19th century, travelers typically arrived on the island by ferry from Georgetown and those traveling on to Virginia were forced to charter private craft to carry them across Little River. Mason constructed a causeway across Little River from the northwest corner of the island to the Virginia shore in 1807. A short road across the northern tip of the island connected the causeway and ferry landing, creating a single, heavily traveled route across the Potomac River (Pliska 2008: 11). The causeway linked Washington, DC and Maryland to Virginia for over 100 years.

Visitors approached the Mason estate from the north, via a formal tree-lined allee. This long, formal entrance served to separate the Mason family's private space from the public traffic to the north and to aggrandize the mansion at the end of the drive. A semicircular line of trees both further dramatized the act of approach and screened the mansion's northern elevation (Pliska 2008: 12).

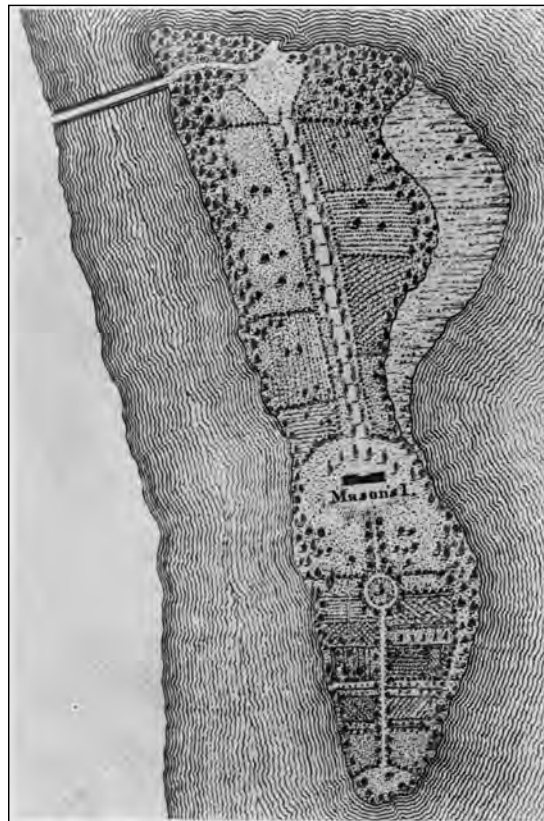


Figure 7. Illustrative site plan of the island during the Mason era, 1818. (Library of Congress Item 65001120)

In 1818, twenty years into Mason's development of the island, city surveyor Robert King developed a map of Washington that included a detailed description of the Island (see Figure 7). Much of the island was dominated by carefully laid out fields of neatly planted, ordered rows of crops, roughly divided between the smaller, private grounds south of the house and the larger more public gardens to the north. The kitchen garden, located to the south, consisted of several acres of land planted with culinary vegetables.

In addition to the kitchen outbuildings, slaves' quarters and workshops were also located south of the

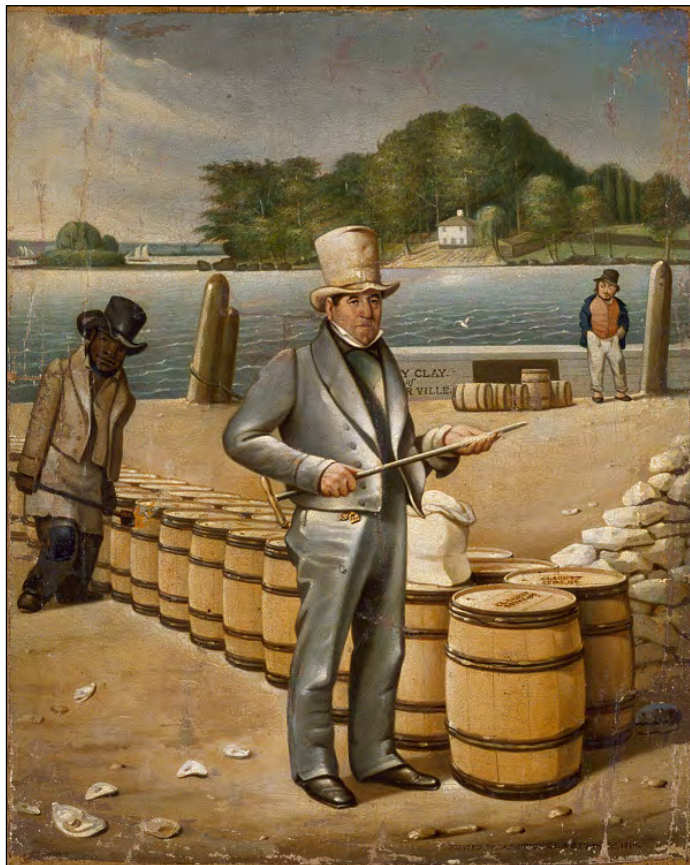
house, with at least some reported along the island's eastern shoreline (Moss 2010: 26).

Beginning in 1825, John Mason endured a series of poor investments and business ventures. He mortgaged the island to the Bank of the United States on December 31, 1825 and took out a second deed of trust on November 29, 1829 (Pliska 2008: 14). Unable to pay back his debts, the bank foreclosed on the island, as well as 1,800 acres of Mason's lands in northern Virginia, in 1833. John Mason retired to Clermont, a family farm in Fairfax County, Virginia where he died in 1849.

POST-MASON USE (1833-1861)

MASON'S/ ANALOSTAN ISLAND

After John Mason lost the island in 1833, it passed among a series of short-term owners and uses. The bank conveyed the island in trust to Richard Smith in 1838, who held the property for twelve common tenants. In 1842, one of these tenants, John Carter of Georgetown, purchased the island from the bank for \$8,600 and operated a commercial nursery (Curry 1971:25; Fanning 2001:8–39). He raised a variety of vegetable crops and planted peach trees and rose bushes. Carter owned the island until his death in 1850; whether or not he resided on the island



is unknown (Fanning 2001:8–39; Pliska 2008:15). An illustration of the island and ferry house as seen from Georgetown is shown in Figure 8.

During these years, TR Island became a favorite resort for Washingtonians, beginning a long tradition of recreational use. On July

Figure 8. TR Island at top right. George Shoemaker Inspecting Flour for the Port of Georgetown, 1840. (Smithsonian Institution)

30, 1834, while the Bank of the United States still held title to the island, a hot air balloon ascension took place from the “Analostin Gardens” (Curry 1971:74). A grandstand capable of holding 6,000-7,000 spectators had been specially built for the occasion. A second balloon ascension, combined with a fireworks display, took place in fall of 1834 (Netherton 1980:41; Pliska 2008:15).

William A. Bradley, former mayor of Washington and city postmaster, purchased the island in 1852. Earlier the same year, the causeway connecting the island to Virginia had been severely damaged by flooding. Bradley rented the majority of the island to tenant farmers and developed a portion of the island as a resort destination. He built a dancing saloon that adjoined the mansion and constructed two wharves, one on the north coast and the other on the east side of the island. Bradley presumably incorporated the still extant mansion, outhouses, cellars, icehouse, barn, and stables into his development scheme. On August 5, 1859, the *National Intelligencer* published a short article praising the resort.

ANALOSTAN ISLAND – One among the many places of resort during the summer season for pic-nic and other pleasure parties is the above-named island. Situated immediately opposite Georgetown, and to the west of our city, it is easy of access from all directions. A pleasure seeker has only to take the omnibus to Georgetown, then go down High street to the river, where he will always find a boat in readiness to take him across to the island. The situation is beautiful, and every convenience is to be found on the island that is conducive of pleasure to the excursionist. The pavilion is large and well built, immediately adjoining a large three-story brick house, which affords ample protection in case of rain, besides furnishing dining and other rooms appropriate to such an establishment. The proprietors are gentlemanly and obliging, and always succeed in sending their visitors home well pleased. (Analostan Island 1859)



Figure 9. “Topographical Map of the District of Columbia,” 1861. (www.loc.gov/item/88694013/)

The mention of the “three story brick house” may refer to a large building located west of the mansion, or another structure to the northwest of the mansion site. Bradley’s name appears above the former in an 1861 map drawn by city surveyor Albert Boschke (Figure 9). It is also possible that the newspaper was inaccurate, and the three story building in question was actually the one story Mason mansion. In this case, the pavilion would correspond with Bradley’s dancing saloon (Pliska 2008:16).

CIVIL WAR OCCUPATION (1861-1865)

MASON’S ISLAND

The Civil War broke out in April 1861 and TR Island was occupied by Union Troops only one month later (see Figure 10 showing tents or small temporary structures on the island). Forts Corcoran, Bennett, and Haggerty and three blockhouses were also established on the Virginia mainland to defend the nearby Aqueduct Bridge, which connected the Alexandria Canal to the C&O Canal prior to the war and had been converted to a viaduct for military purposes (see Figure 11).



Figure 10. Potomac River Looking Down from Georgetown, 1861-65. (Library of Congress LC-DIG-ppmsca-07307)



Figure 11. Map of the Environs of Washington, 1865. (Library of Congress item 88690673)

The soldiers left TR Island a year later in May 1862, but the Army returned to the island in September. The second occupants were members of the Commissary Department who operated a storage or distribution camp on the island's northern section until the end of the war (Pliska 2008: 16).

In 1862, President Abraham Lincoln emancipated all slaves residing in the District of Columbia. Then in January of 1863, he signed the Emancipation Proclamation, which freed slaves held in Confederate territory and allowed for black enlistment in the Union Army. Following these two events, the number of slaves fleeing to Washington increased dramatically. In the spring of 1863, white Army Chaplains J.D. Turner and W.G. Raymond began lobbying Lincoln to raise a regiment from the District's swelling African American population. Lincoln approved the request in May 1863, and the two men started recruiting for the 1st District of Columbia Colored Volunteers (Pliska 2008: 17).

The first two companies of the 1st District of Columbia Colored volunteers were moved to TR Island on May 19, 1863 to avoid racially motivated violence from confederate sympathizers. Three days later, on May 22, 1863, the War Department established the Bureau of Colored Troops, allowing African Americans to serve in the Union Army as regular soldiers rather than volunteers. On June 30, 1863, the 1st District of Columbia Colored Volunteers was officially re-designated the 1st United States Colored Troops (1st USCT) and became the first regiment of black soldiers to be formally mustered into federal service (see Figure 12). The regiment comprised ten companies, all stationed on TR Island (Pliska 2008: 18).

Figure 12. "1st US Colored Infantry," 1861-1865. (Library of Congress LC-USZC2-6431)



The 1st USCT learned the basics of army life on the island including: military etiquette, marching, guard duty, and the proper use and care of firearms. The soldiers were housed in typical military barracks. These lightweight, balloon-frame structures were long and narrow and stretched along either side of the road at the northern end of the island (see Figure 10 to Figure 14). The regiment's

officers likely occupied the Mason mansion and surviving outbuildings. The island remained a vital link in an important transportation route; the ferry, road, and causeway were used by Union troops (Fanning 2001: 8-4).



Figure 13. "Aqueduct of Potomac, Georgetown, D.C.," 1865 (Library of Congress LC-USZC4-1967)

In July 1863, the 1st USCT departed TR Island. These soldiers served with distinction at the Battles of Chaffin's Farm, Fair Oaks, and Fort Fischer, as well as the May 24, 1864 Union victory at Wilson's Wharf, the only battle in Virginia, and possibly the entire Civil war, in which nearly all the federal forces were black (Pliska 2008: 20). The federal government imposed the first compulsory draft in July 1863, which coincided with the 1st USCT's departure from the island.

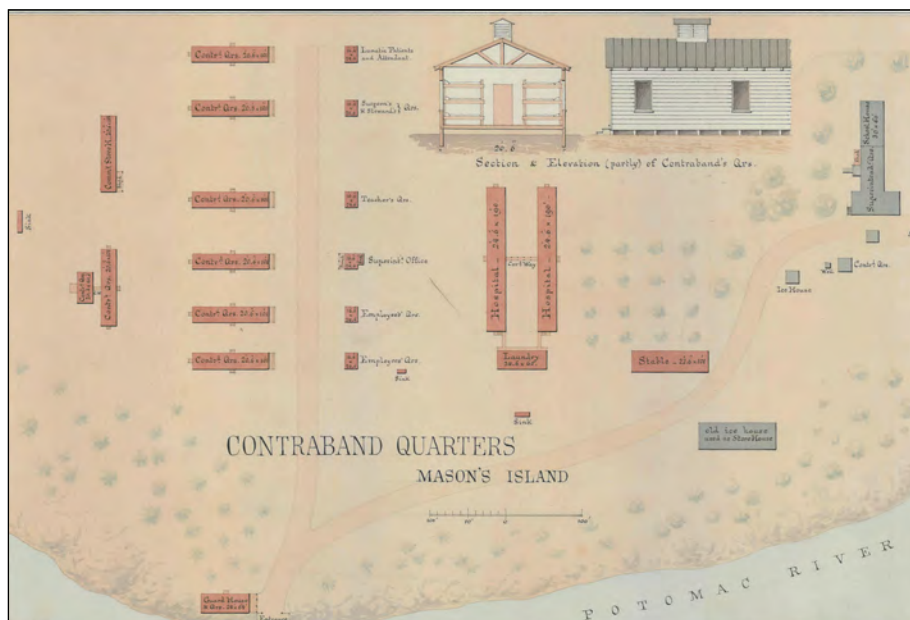


Figure 14. "Map Showing Contraband Quarters on Mason's Island. Washington, D.C.," ca. 1864. (NARA Record Group 92)

Local conscription followed in early August with white troops reporting to the island. The island became a “draft rendezvous,” where the men were initially accepted into the Army, inspected for physical disabilities, and held until assigned permanent units (Pliska 2008: 20). In November 1863, 811 enlisted men and 33 officers occupied TR Island; in December 1863, 785 enlisted men and 37 officers occupied the island; and by January 1864 the numbers had declined to 698 and 19, respectively (Pliska 2008: 21). The draft rendezvous remained in operation until late April/early May 1864. Draftees were permitted to bring their families with them to the island until an April 6, 1864 order barred all women and children, most likely as a means of encouraging orderly relocation of civilians in advance of closing the draft rendezvous (Pliska 2008: 21).

In May of 1864, the island was utilized as a temporary refugee camp to serve the increasing number of black refugees, referred to at the time as contraband, arriving in Washington, DC. This was done in response to the overcrowding at nearby refugee locations, namely the Freedman’s Village located on the former grounds of the Lee Family’s Arlington estate (now the site of Arlington National Cemetery). The island was intended as an employment depot and, therefore, few supplies were available besides the former barracks, which served as shelters for the refugees. TR island quickly turned into a state of disease-ridden squalor (Pliska 2008: 27).

The Association of Friends for the Aid and Elevation of the Freedmen, a Quaker sub-branch, visited the site and stepped in to relieve the situation at Mason’s Island. In July of 1864, The Association of Friends provided much needed aid in the form of clothing, food, education, and care to the refugees. They also established a hospital, a Sunday school, and an industrial school so the freedmen could be employed making and mending clothing. The Friends supplied the teachers, and the government provided a suitable location to cut clothing.

First Lieutenant Kilburn Knox conducted a military inspection of the camp in October 1864 and provided a written description:

The camp contained seven barracks, all comfortable and in good repair. Six measured 100’ long x 20’ wide, while the seventh was about 150’ long x 30’ wide, the same dimensions as the hospital building. Another building functioned as the camp’s commissary depot, presumably operated by an employee of the Quartermaster Department. Six smaller building housed “offices, guard rooms, etc.” All these buildings were built as Barracks for the use of Colored troops. He noted the camp was “about to erect another building” to be used as a school room and meeting house, and that after the onset of winter the freedmen could fill the island’s “fine, large” icehouse. (Pliska 2008: 28)

Knox's report is the only written account on record and, while it is detailed, it fails to mention some of the smaller structures in the camp (Moss 2010: 29).

In May 1865, a temporary pontoon bridge was constructed across the river from Georgetown to the northern end of TR Island to accommodate the Grand Review of Armies military procession that occurred in Washington, DC on May 23-24, 1865 (see Figure 15). The pontoon bridge was constructed to avoid potential crowding of the narrow Aqueduct bridge. The pontoon bridge was disassembled by the beginning of June 1865 (Moss 2010: 30).



Figure 15. "Pontoon bridge across Potomac River from Georgetown, D.C. to Analostan Island, June 1865." (Library of Congress LC-DIG-ppmsca-34793)

In the spring and summer of 1865, preparations were made for the closure of the island and the relocation of its remaining freedmen to Freedman's Village in Arlington. TR Island was returned to William Bradley on June 29, 1865.

ABSENTEE OWNERSHIP AND EPHEMERAL USE (1865-1899)

MASON'S/ ANALOSTAN ISLAND

The island was returned to Bradley seriously altered by the military occupation, as four years of continuous occupation by thousands of people took its toll on the landscape. Barracks and other buildings had been constructed and demolished, soldiers had dismantled some of the stone retaining walls dating to the Mason era to build boat landings, and cattle brought to the island ate or destroyed any existing crops (see island cleared of barracks in Figure 16 and Figure 17). Unable to rent the island on a long-term basis, Bradley restarted the decades-long practice of letting it out for short-term recreational activities (Pliska 2008:38; Curry 1971:26).

Figure 16. "View of the Potomac River in Front of Washington," 1875. (Keim's Illustrated Hand-Book of Washington and its Environs)



Figure 17. "Hydrographic map of the Potomac River from Aqueduct Bridge, Georgetown, to Long Bridge, Washington, D.C.," 1871. (Library of Congress Item 88693232)



In 1865, “the Game of the Tournament,” a medieval-style jousting competition, was held on a clearing on the northern part of the island, likely the current site of the Theodore Roosevelt Memorial (see Figure 18 and Figure 19 on the following pages):

Spectators filled a large grandstand, perched atop carriages, or watched from the grass as knights representing different regions competed against one another. There was no combat; instead riders on horseback speared small rings, vying for the honor of selecting the Queen of Love and Beauty and her maids of honor. With the Queen and her court crowned by the champions, the entourage, with the spectators in tow, proceeded down Mason’s allee to the mansion, where the throne was located. One by one the knights were formally introduced to the Queen, ending the night’s chivalry pageant. A moonlit dance followed. (Netherton 1980:42; Pliska 2008:38; A Tournament on the Potomac 1865)

The island hosted numerous picnics for individuals and clubs. It was a popular destination for hunting, fishing, and swimming. In 1866, the Association of the Oldest Inhabitants of Washington, DC—cofounded by Bradley the previous year—utilized the island for a club meeting, feast, dance, and athletic competition. Members participated in a game of leapfrog, footraces, high jumping, and other events (Pliska 2008:38).

Bradley retained ownership of the island until his death in 1867 and very little is known regarding the island’s use for nearly twenty years following. The island became even more isolated in that year with the cessation of Mason’s Ferry. An 1896 *Washington Post* article briefly recounts that “it was known as ‘Robey’s Resort,’ which was a small-sized Eldorado,” and “became the haunt of disreputable characters.” This “resort” apparently operated on the island illegally, as the Bradley heirs “refused to lease it to the proprietor,” presumably due to its sordid reputation (On Analostan Island: Proposed Location of Contagious Diseases Hospital 1896; Pliska 2008:39).

An 1890 magazine article gives a similar account, stating that “the island fell into disrepute and was the resort of negro roughs and gamblers” (Browne 1890:71; Pliska 2008:39). Regardless of the composition of the regulars at “Robey’s Resort,” the island appears to have been a rough, relatively lawless place that attracted members of society’s fringe.

The island is also reported to have been used for legitimate business activities during this time: it was rented out for agricultural purposes and then to the Great Falls Ice Company. The company, which purportedly “used to cut ice in Little River,” is said to have built icehouses on the property, with the remnants still discernible in March 1921 (Receiver for Island: Trustees Seek to Foreclose on

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HARPER'S WEEKLY.

[OCTOBER 7, 1865.]



TILTING THE RING.

A TOURNAMENT ON THE POTOMAC.

The game of the Tournament, as practiced in the District of Columbia and State of Virginia, bids fair to become a popular amusement, and may eventually become a national sport. There is a want of some such manly pastime in this country. England has her fox-hunting, and perhaps no exercise is more healthy or better calculated to produce bold, fearless riders, and self-reliant men; but it is objectionable as almost excluding the fair sex, and consequently has a brutalizing tendency. The tournament, unlike fox-hunting, enlists the sympathies of the ladies, who form an essential element in the sport; at the same time all the qualities of the fox-hunter are requisite in the male competitors—a good seat on horseback, a sturdy hand, a quick eye, and the fearless dash of a cavalry



CROWNING THE QUEEN OF LOVE AND BEAUTY.

charge, are all necessary to insure success; such an exercise can not but produce much physical benefit to the young men of the nation; and when incited to gallant deeds by the smile of beauty and encouraged by womanly influence, it can never degenerate into a gambling, horse-jockeying, or black-leg institution, as is the case with too many of our turf amusements.

The general mode of procedure at a tournament is as follows: A ring from two to three inches in diameter is suspended on a hook high enough to allow the riders to pass under it, each rider or knight is armed with a long spear, and in his turn visits the ring, at full speed—the speed is 100 yards in five seconds. If he carries off the ring he scores one, if he misses it or is not up to the required speed when he takes it, he does not score. Three tilts or courses in succession is



PROCESSION TO THE THRONE AND BALL-ROOM.

Figure 18. Tournament on the Potomac, 1865. (Harpers)

OCTOBER 7, 1865.]

HARPER'S WEEKLY.

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The general number tried, the knight who takes the ring of honor has the honor of choosing the Queen of Love and Beauty, the next best choosing the maid of honor. After the tilting is completed the knights are drawn up in line in front of the judge's stand, who then names the successful gallants and the honors they are entitled to. They then proceed to the ladies' stand and make choice of the Queen of Love and Beauty and her maids of honor; the whole cavalcade then form in procession, the beauties in a carriage, the gallant knights on horseback, and proceed to the ball-room, where is erected a throne to which the Queen and her maids are conducted, under which the knights under their distinguishing names—such as Knight of Orange, Knight of Columbia, etc., etc.—are presented to the Court of Love and Beauty. This concludes the ceremony, and knights and ladies fair join in the waltz dance.



INTRODUCTION OF KNIGHTS TO THE QUEEN.



DANCING BY MOONLIGHT.

The accompanying illustrations are from sketches by Mr. ANDREW M'CALLUM, taken at a tournament of the Association of Georgetown, District of Columbia, which took place at Annapolis Island (formerly Mason's Island) on the River Potomac, and will give a better idea of the merry scene than any description.

THE FOUNDER OF "ODD FELLOWS."

We give on page 628 a portrait of the late THOMAS WILDER, the founder of Odd Fellowship in this country, and an illustration of the monument erected to his memory by the members of the Order at Baltimore on September 20, 1863. THOMAS WILDER was born in London, on the 15th day of January, 1783, during the reign of George III., and about the close of the Revolutionary war. At five years of age he was placed at school, where he had but limited opportunity of education, and from which he was withdrawn in his fourteenth year to be apprenticed to a trade, in which he continued until he reached his majority, in the year 1804. He became an Odd Fellow at an early age, being initiated into Lodge No. 17, of the city of London. He entered upon his second official term as Grand Sire of the Order, having already served four years. In 1839, having sacrificed official position, we find him in the same Grand Lodge at Philadelphia, still laboring in the cause to which he seemed to have devoted his life. At this time the Order was eminently successful. It had been introduced into New Jersey and Rhode Island; he was there to give it life and energy. He carried it to Delaware, Ohio, Louisiana, Kentucky, and Virginia, and received in recognition of his services the thanks of the Grand Lodge at its next session. In 1840 the Grand Lodge of the United States ordered the full-length portrait of Mr. WILDER, and in 1841 again despatched him upon official business to the East and North. From this period the Grand Lodge of the United States, which had hitherto been for the most part composed of proxy representation, began to consider plans for assembling the State jurisdictions for proper personal representation. In 1843



ANAPOLIS ISLAND, DISTRICT OF COLUMBIA.

Figure 19. Tournament on the Potomac, 1865. (Harpers)

Analostan Property 1899; Shannon 1921). Precisely when these activities took place, and their locations on the island, remain unknown.

The trend of recreational use continued from 1889 to 1892 when the Columbia Athletic Club (CAC) leased the island (see Figure 20). Members had been holding events there since at least as early as 1887, the year the club was founded. Other groups, such as the Washington Canoe Association, utilized the island as well. In 1889, they had a floating boathouse moored off the shore, which nearly sank during a severe storm (Canoeists With Pluck 1889).



Figure 20. Rifle Range, 1890.
(Athletics in Washington)

During their brief tenure, the CAC operated a ferry between their boathouse at the foot of Thirty-Second Street in Georgetown and the north shore of the island, below which the Mason-era ferry house was “slowly crumbling,” as seen in Figure 21; compare with Figure 22 and Figure 23 (Browne 1890:71).



Figure 21. CAC Members at Ferry
House, 1890. (Athletics in Washinton)



Figure 22. "Weyl Painting of Mason Ferry House," 1879. (Pliska 2008)



Figure 23. "Glimpse of Georgetown from Analostan Island," 1874. (Picturesque America)

The club also carried out the first building projects on the island since the Civil War. They constructed a clubhouse, described in the *Washington Post* as a picturesque, “pretty little house, surrounded by its wide verandas, and half-hidden in the fine old trees” (Only Tin Roof Left 1891). They also built a quarter-mile bicycle and running track, baseball field, tennis courts, grandstand, shooting ranges, and additional athletic grounds (Browne 1890:71; Pliska 2008:41). A journalist described the island as

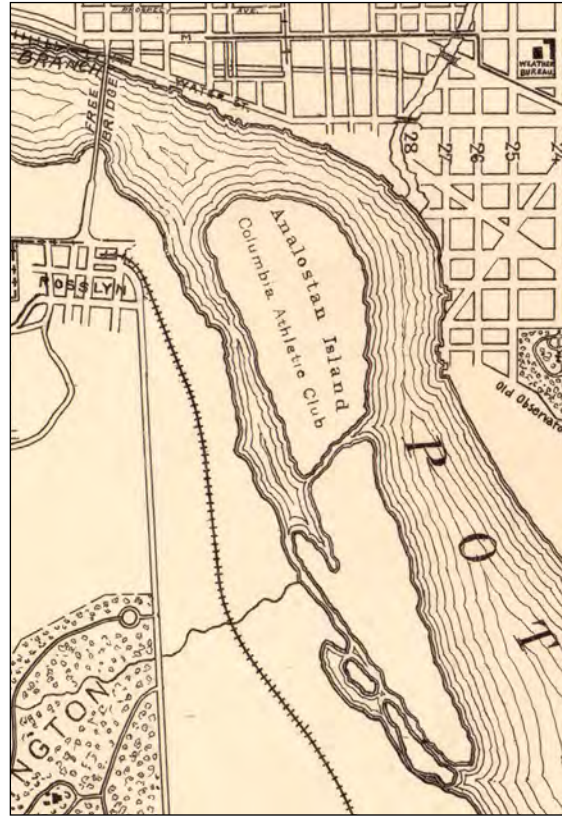


Figure 24. Map of Washington, DC and suburbs, 1892. (Library of Congress Item 88693395)

“well nigh covered with its ball fields, tennis courts, running track, grand stand and all the paraphernalia incident to active exercise in the out-of-doors” (Hood 1920:5). Most of these improvements were likely located on the island’s north end, with a 200-yard rifle range laid off near the Mason mansion (see Figure 24).



Figure 25. CAC Foresters, 1893. (Historical Society of Washington)

Owing to these extensive facilities, the island was a popular destination and was often crowded. The *Washington Post* reported that “there is always a pleasant party on the island on Sundays,” and advertised upcoming athletic competitions (On Analostan Island: Columbia Club Members Crown Their Pleasant Resort 1889; Pliska 2008:41). These competitions featured baseball and football games, tennis matches, track and field meets, sport shooting, rowing, and cycling. Most contests were local affairs, made up of regional athletes or played between the club’s two squads, the Blues and the Reds.

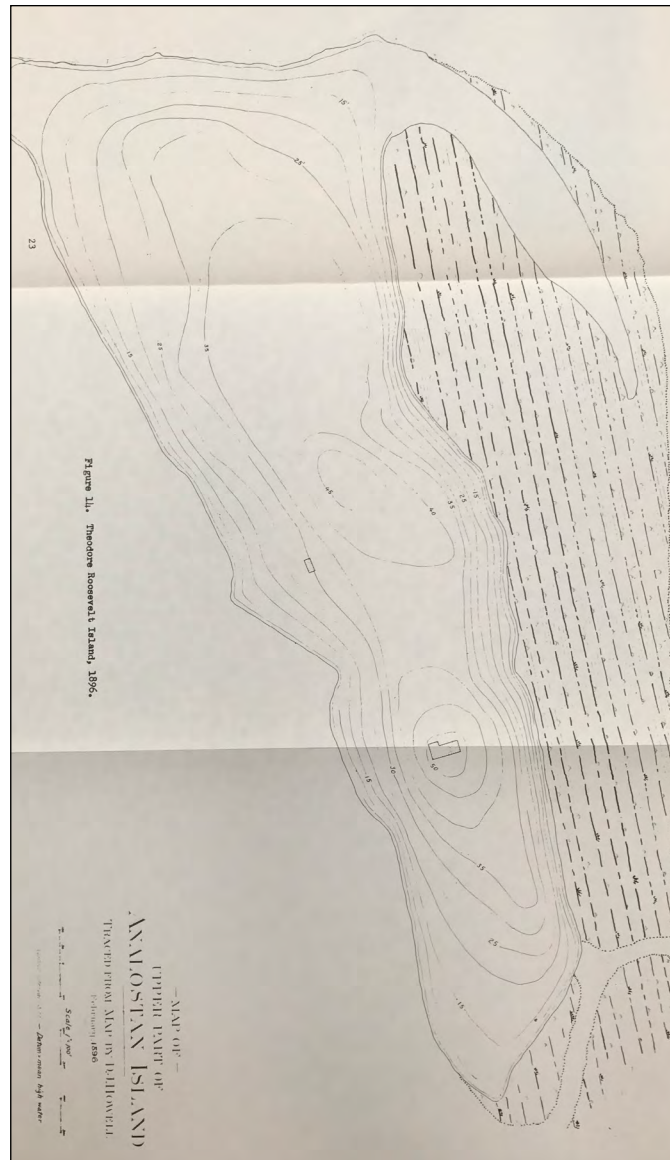
In 1890, the CAC hosted the annual meet of the American Athletic Union, drawing competitors from around the country. A young Theodore Roosevelt, then a civil service commissioner in the administration of President Benjamin Harrison, was a prominent member of the Club, and a vocal proponent of what he termed “the manly sports” (Mr. Roosevelt Opposes It: He Does Not Endorse the Action of the Columbia Club’s Governors 1890).

The clubhouse burned to the ground on the night of May 16, 1891, leaving only its tin roof behind, and the CAC left the island just over a year later (Only the Tin Roof Left: Columbia Athletic Clubhouse on Analostan Island Burned 1891). Several boat clubs, including the Analostan Boat Club, routinely used the island during regattas and other events but there is no evidence that any of them leased the site. The Analostan Boat Club, despite its name, had a clubhouse across the river from the island at the intersection of Twenty-seventh and F Streets and New Hampshire Avenue (near the current sites of the Kennedy Center and Watergate Hotel). The Analostan Gun Club, a hunting and sport shooting organization, was also based on the island (Plan Coney Island Here: Syndicate to Make Analostan Island a Summer Resort 1907).

Between February and May 1896, members of the Senate District Committee and District of Columbia commissioners explored the possibility of acquiring TR Island as the site of a contagious diseases hospital (see survey of island from that year in Figure 26). A heated debate ensued, during which proponents argued that the island was an ideal site for such a hospital, as it would necessarily need to be established in an isolated location removed from the general public, while at the same time readily accessible in order to serve Washington-area residents (The Uses of Analostan 1896; Cissna 1990:42).

Opponents countered that the cost to purchase the island, build the hospital, and provide access would not be economically viable, that it would be impossible to secure a sufficient supply of potable water to meet the facility’s needs, and that the island’s marshes and swamps were unsanitary and incompatible with

Figure 26. Tracing of Map of TR Island, 1896. (Thomas Figure 14)



a hospital site (Against Analostan Island 1896). The Bradley heirs, however, refused the government's purchase offer of \$75,000, and the Senate did not increase the bid (Pliska 2008:43).

Following the unsuccessful bid for an isolation hospital, the island briefly became an explosives test range during the Spanish-American War.

In early May 1898, Professors Wirt Tassin of the National Museum and Charles Monroe

of Columbia University received permission from the island's owners and the District commissioners to carry out tests of high explosives (Box Labeled Dynamite: Owner Found for Explosives Found on Analostan Island 1898; Prof. Monroe's Dynamite: Used on Analostan Island to Instruct Army and Navy Men 1898). The fact that the pair received authorization strongly implies that the island was not occupied, rented, or otherwise in regular use at this time. It did, however, remain in informal use. As the *Washington Post* reported, "while roaming about the island Monday evening several persons found the explosives in a mysterious-looking box labeled 'dynamite torpedo, Engineer Corps, D.C., dangerous.'" Police officers sent out to investigate the report said "they found the explosives as described near the ruins of the old Analostan mansion, and brought them to the station," where Monroe picked up the torpedo and returned it to the island (Box Labeled Dynamite: Owner Found for Explosives Found on Analostan Island

1898). He explained that a public notice had not been given because the tests were intended only for the education of a select group of qualified civilians and military personnel.

The following month Monroe confirmed that these tests had been carried out, unapologetically stating that “during the last few weeks Washington people have been frequently alarmed by loud and repeated explosions which the timid were inclined to attribute to a bombardment by Spanish warships coming up the Potomac” (Pliska 2008:42; Bache 1898).

While Monroe did not specifically mention employing the mansion as a target, he did describe a “demolition experiment” in which he fashioned timber rafts, loaded them with jovite, “and blew them up,” as well as practicing “several other such methods for destroying bridges, railroads, and aqueducts” (Bache 1898).

The Mason mansion would have made an acceptable stand-in for this infrastructure. With explosives planted nearby, it would have likely sustained at least collateral damage from the detonations. Visual evidence supports this contention. Two photographs from 1880-90 of the mansion’s north elevation (Figure 27 and Figure 28) show the house in reasonably good repair, missing its pedimented entrance, door, and window lights, but with the exterior walls completely intact, including the impost block, round arches, and recessed panels of the west pavilion. The west façade, visible at an extreme angle, is also in sound condition.

Most importantly, the main block’s gabled roof, the only portion of the roof visible in the photograph, appears intact and free of obvious holes or other damage. This image contrasts sharply with photograph of the Mason mansion taken ca. 1905 (Figure 29), by which time the mansion had been reduced to ruins, just as the *Washington Post* had reported seven years previously. The entire roof is absent and the central entrance bay of the main block has decayed down to the level of the raised basement. Even more notable is the near total lack of any remnants of the south wall of the main block above basement level.

While water infiltration can quickly bring about major damage to structures, given the relatively short span of time and apparently stable condition of the mansion prior to the explosives testing, this progression seems too excessive to solely attribute to water action as the catalyst of decay. It is therefore reasonable to conclude that the tests at least contributed to the mansion’s striking decline (Pliska 2008:44).



Figure 27. Mason House, ca. 1880-1890. (HABS DC-28-10)



Figure 28. Mason House, ca. 1880-1890. (Historical Society of Washington)



Figure 29. Mason House, ca. 1905. (HABS DC-28-11)

The three Bradley heirs entered a suit in equity in November 1899 seeking to foreclose on the island due to outstanding \$80,000 debt. The complainants asked for a sale of the property, with the proceeds applied to the payment of the debt (Receiver for Island: Trustees Seek to Foreclose on Analostan Property 1899). On October 18, 1900, Justice Job Barnard of the District Supreme Court ruled in favor of the complainants and decreed that unless a “certain indebtedness” was paid on or before 1 August 1901, two of the defendants named in the suit were to be appointed trustees and instructed to sell the island (Analostan Island May Be Sold: Court Allows Thirty Days in Which to Pay a Mortgage 1900). The Bradleys made no such payment but, owing to several delays, the sale was not completed for another nine years (Pliska 2008:44).

STALLED DEVELOPMENT (1900-1931)

ANALOSTAN ISLAND

By the early 20th century, TR Island had become a ragged, overgrown, and largely forgotten place. This isolation afforded Professor Samuel Pierpont Langley, secretary of the Smithsonian Institution, an ideal location to conduct field tests in the nascent fields of aerodynamics and aeronautics (Baxter 2005). On March 10, 1902, Langley was joined on TR Island by Alexander Graham Bell, who had been conducting experiments of his own since the 1890s. The pair attempted to fly a large, nearly 90” diameter hexagonal kite to test a method of obtaining automatic control of equilibrium while airborne. A lack of wind, however, prevented Langley and Bell from getting the kite aloft (Bell 1902). Although this is the only test known to have taken place on the island itself, Langley conducted numerous other experiments from boats on the Potomac River, and may have come ashore as well (Pliska 2008:45).

That same year, the *Washington Times* reported, “the interior aspect of Analostan Island is desolate in the extreme,” with the ruins of the Mason mansion obscured by a thick stand of young trees” (Beautiful Ruins of a Stately Colonial Home 1902). Five years later, the *Washington Post* echoed this impression, describing a “scene of dismal devastation” around the mansion site, as seen in Figure 30 (Island Famous Once: Stately Ruins Still Stand on Analostan Tract 1907).

New development schemes, beginning with the federal government revisiting the possibility of acquiring TR Island as the site of an isolation hospital, emerged at this time (Pliska 2008:45). However, the McMillan Commission’s report submitted that same year recommended that “the island should not be permitted to come into disagreeable occupancy, but at the earliest convenient opportunity it should be purchased and developed as a river park for the use of that portion of

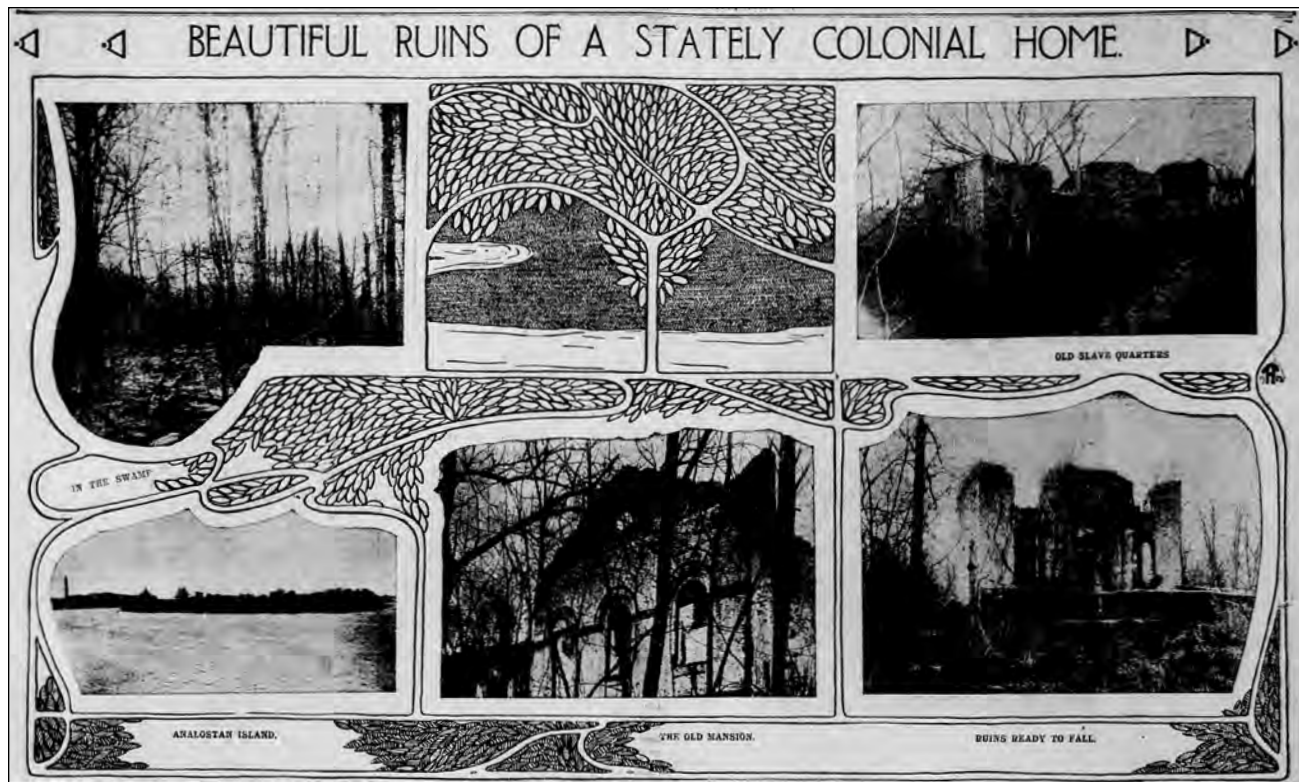


Figure 30. *Washington Times*, 1902.

Georgetown which is now entirely without park facilities.” Additionally, the first plan for the Arlington Memorial Bridge proposed a connection from the Lincoln Memorial to Arlington House by way of the island (Moore 1902:57–58).

Despite these proposals, the government did not purchase or foreclose on the island and a variety of potential private projects emerged over the next few years, including the construction of apartment houses, a university stadium, and even a tourist attraction named the “Palace of Progress” that was designed for the display and sale of merchandise from throughout the country (Pliska 2008:46; Fanning 2001:42).

The most notable scheme centered on developing the island as an amusement park. In July 1907, the *Washington Post* reported that a New York syndicate had purchased the island for \$100,000 with plans to invest a further \$500,000 in renovating it as a “summer resort, after the style of New York’s Coney Island” (Plan Coney Island Here: Syndicate to Make Annapolis Island a Summer Resort 1907). The promoters sought to integrate the island’s natural features and topography with the planned development. This scheme featured about twenty acres taken up by roller coasters, a large carousel, midway, and facilities for dancing, orchestral performances, and summer vaudeville, with the remainder of the island devoted to lovers’ lanes, picnic grounds, and even a five-acre lake, complete with boat rentals. Visitors would arrive via a planned spur from the

Aqueduct Bridge or on barges departing from the foot of New Hampshire Avenue and disembark onto a boardwalk encircling the island's entire shore. The timetable was as ambitious as the planned construction, with an opening date set for May 15, 1908, barely ten months after the reported purchase (Will Resemble Coney: Analostan Park Deal Is Now Practically Closed 1907; Netherton 1980:52–53).

This project was never realized, however, as the sale remained contested until late 1909 (Buys Analostan Isle: Chicago Concern to Make It an Amusement Resort 1909). In March 1909, a police raid also broke up a large crowd illegally gambling on Analostan Island, indicating that at least some of the more objectionable aspects of its past had returned (Pliska 2008:47). Through the spring of 1913 the only activities reported on the island were oyster roasts, as seen in Figure 31 (Lecture and Oyster Roast 1913).



Figure 31. Group at 44th Annual Oyster Roast of the Potomac Boat Club on Analostan Island, 1913. (Historical Society of Washington)

In May of 1913, the Washington Gas Light Company purchased the island as a potential site for a new gas plant. Although the company retained ownership for the next seventeen years, it did not build the plant or any other facilities (Closes Island Deal: Joseph Leiter Says Analostan May Go to Gas Co. 1913; Island to Be Gas Plant Site: Company Gets Analostan from Mr. Leiter for That Purpose 1914). During this time, the island was yet again neglected.

By 1927, the federal government had become concerned over the Washington Gas Light Company's plans to build gas works on Analostan Island, and their incompatibility with projected improvements for the river corridor, which included Arlington Memorial Bridge and the GWMP. With the support of the Commission of Fine Arts (CFA), the National Capital Park and Planning Commission (NCPPC) was considering plans to bring Analostan Island into the regional park system on the Virginia side of the river through the construction of a bridge from Columbia Island to the south end of Analostan. Arlington Memorial Bridge was scheduled to be completed on September 1, 1930, and development of Columbia Island would follow. The federal government began negotiations with the Gas Light Company to acquire the island in 1927 (Fanning 2001:8–46).

PRESIDENTIAL MEMORIAL (1931-1978)**ROOSEVELT ISLAND/ THEODORE ROOSEVELT ISLAND****THEODORE ROOSEVELT ASSOCIATION, OLMSTED, AND CIVILIAN CONSERVATION CORPS (1931-1938)**

While the federal government prepared to transform TR Island into a park, another organization was searching for the perfect location for a presidential monument. In September 1931, the Roosevelt Memorial Association (RMA; renamed Theodore Roosevelt Association, TRA, in 1953), purchased TR Island to create a “living memorial” to President Theodore Roosevelt (Pliska 2008: 48).

The RMA was formed in March 1919, two months after Roosevelt’s death, by a group of his close friends and colleagues. Their primary goal was the erection of a “monumental memorial in Washington to rank with the Washington Monument and the Lincoln Memorial” (Havig 1978:516). The association was chartered by Congress in 1920 and within two years had raised almost \$2 million in donations for several projects, including the restoration of Roosevelt’s boyhood home in New York City; the creation of a memorial park at Sagamore Hill, Roosevelt’s home on Long Island; and the support of various educational programs. Fully half the money, however, was slated for a grand national monument (Fanning 2001:8–44).

In January 1925, the RMA was granted authorization to use a site on the Tidal Basin south of the Mall for a memorial competition. The national memorial to Roosevelt on the Tidal Basin would have completed the McMillan Plan, its location at the southern end of the 16th Street cross axis to the Mall pairing it with the White House to the north, as seen in Figure 32. The McMillan Commission

plan had envisioned a formal landscape linking the Washington Monument grounds with a new building complex on the Tidal Basin, which they

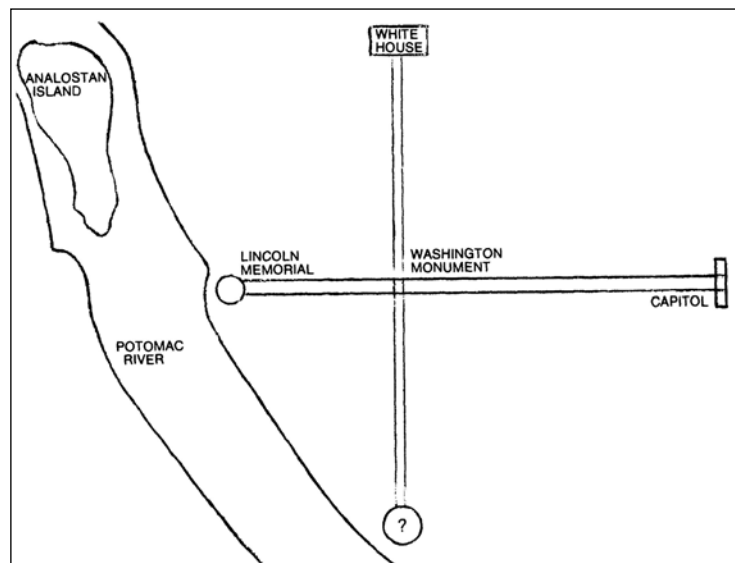


Figure 32. Diagram showing the large cross formed by the axes of the major monuments on the National Mall in 1922. (Havig 515)

suggested might house a Pantheon of American Heroes or a monument for one great individual. Their rendering of the site showed a domed colonnaded building flanked by pavilions (Fanning 2001:8–45).

The Roosevelt Memorial competition was held from April to October, 1925 and renowned architect John Russell Pope was selected the winner in December 1925 (Fanning 2001:8–44). The memorial (design shown in Figure 33), however, was never built: it sparked a debate in Congress and among the public that lasted from 1923 to 1926. The main obstacle hindering the monument's completion was a persistent concern over whether Roosevelt had a legitimate claim to a national memorial on a key site in Washington so soon after his death, before the commemoration of other figures, notably Thomas Jefferson (Fanning 2001:8–44). In May 1926, the site was secured instead for a future memorial to Thomas Jefferson (Fanning 2001:8–45).



Figure 33. John Russell Pope design for TR memorial, 1925. (Theodore Roosevelt Digital Library, Dickinson State University)

Frustrated over the loss of the initial site for the Roosevelt Memorial, the RMA requested that the NCPPC suggest alternate locations. Among those proposed was TR Island, which NCPPC was preparing to condemn for use as regional parkland (Pliska 2008:66–67). On May 8, 1930, the organization selected the island as “far more promising even than the original site” chosen seven years earlier. After a fifteen-month period of difficult negotiations with the Island’s owner, the Washington Gas Light Company, the RMA purchased the property in the fall of 1931 for \$364,00 (Havig 1978:529).

With homage to Roosevelt now slated in a physical context quite different from that of the Tidal Basin location, the RMA re-considered the image of Roosevelt that would be projected.

While Roosevelt the nation-healer, the unifier of sectional and social division, was symbolized in the Pope design, it was Roosevelt the rugged outdoorsman, the hiker and camper, the naturalist and conservationist, who was best represented by the overgrown and undeveloped woods and meadows of Analostan Island. “The Island gives an impression of wild country peculiarly appropriate as a setting for a memorial to Colonel Roosevelt,” [RMA director

Hermann] Hagedorn wrote, and for the present the R.M.A. was content to let the property itself stand as the memorial, unencumbered by structures or monuments. As Hagedorn told a Senate committee in 1932, the Island “should be kept . . . a wild place” so that it will retain “a sense of sanctuary where the people may flee from modern civilization.” (Havig 1978:530)

Congress officially renamed the island as Roosevelt Island on May 21, 1932, and less than one year later, President Herbert Hoover changed the official name to Theodore Roosevelt Island. On October 27, 1932, the RMA gave the island to the Federal government under the direction of the Office of Public Buildings and Public Parks (Pliska 2008: 48). At a White House ceremony to present the deed for the island to the federal government, President Hoover spoke of Roosevelt in his speech:

There is . . . an especial appropriateness in this memorial which you are giving to the Nation. This wooded island, set in the midst of the Potomac, is forever within view of the Lincoln Memorial, the Washington Monument, the Capitol and the White House. You have wisely chosen a bit of nature within the boundaries of this city which he loved, and where he rendered such noble service . . . (Fanning 2001:8–46)

While the land was transferred to the federal government, the RMA retained authority over certain aspects of the island, including the planting plan and the right to erect a monument to Roosevelt (Pliska 2008: 48, Fanning 2001:7-4).

In May of 1932, the RMA hired the Olmsted Brothers landscape architecture firm and architect John Russell Pope to prepare planting plans and designs for a monument. Primary responsibility for the landscape design was given to Frederick Law Olmsted, Jr. However, he was frequently ill and relied on his associate, landscape architect Henry V. Hubbard, for a great deal of help on the project (Pliska 2008: 68).

Within the first six months, Olmsted collected basic information about the island, conducted field surveys, and obtained an up-to-date topographic map. He also began to think about how to visually link TR Island with the other memorials in Washington, DC. In December 1932, Hubbard submitted the first report to the RMA, which included the overall design intent for the island. Olmsted and Hubbard stated that the island should be a sanctuary for small native animals and portions should be redeveloped as natural forest. In addition, he stated there was to be no through automobile traffic.

The document detailed plans for an architectural monument, and specified that the monument would be located at the southern end of the island. In addition, Hubbard proposed the construction of a pedestrian causeway on the northern end of the island and one automobile bridge, and called for the low-lying portions

of the island to be filled in (see Figure 34). “Apart from the eventual creation of the Theodore Roosevelt Memorial in the 1960s, each of these initial recommendations were either significantly modified before being carried out or were completely abandoned” (Pliska 2008: 69).

In 1933, the Office of Public Buildings and Public Parks was transferred to the National Park Service under the name “National Capital Parks,” granting NPS jurisdiction over TR Island and in January

1934, the NCPPC and CFA approved the development of TR Island. Olmsted immediately began working to reduce the risk of fire, which was high due to the island’s years of neglect.

Before clearing the island of any plants, he first marked off areas that contained the vegetation he wanted to preserve, including periwinkle, ivy ground cover, viburnums, hazel, and most of the living trees. Olmsted also identified plant species to be eradicated, including Japanese honeysuckle, blackberry, sumac, Joe-Pye-weed, and poison ivy, among others (Pliska 2008: 70).

On May 16, 1934, Olmsted submitted a twelve-page report outlining his general plan to the RMA, which would form the basis for all landscaping work carried out on the island, and expanded on the 1932 statement of intent:

[Olmsted] now considered his primary objective to be the creation of a mature, native forest modeled after that which he believed would have naturally evolved on the island without human interference. He viewed this landscape treatment as the most stable, aesthetically pleasing, and appropriate to commemorating Theodore Roosevelt. (Pliska 2008: 70)

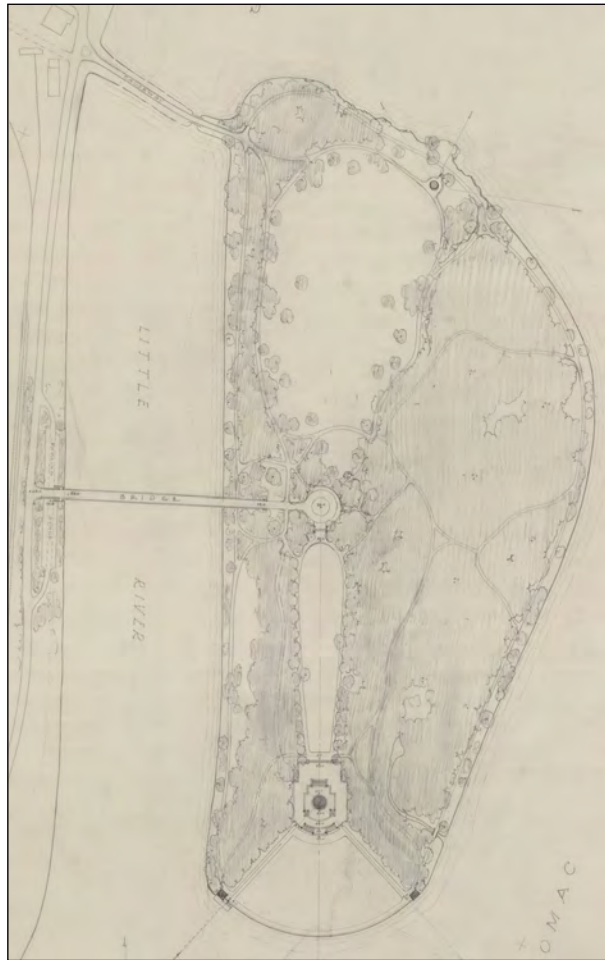


Figure 34. Study for Development of Island, Olmsted Brothers, December 15, 1932. (Olmsted Archive, Frederick Law Olmsted NHS)

Olmsted's report also described what he considered the most significant open space on the island, the "outlook terrace." Located south of the Mason house ruins on the island's ridge, the outlook terrace presented views of the Lincoln Memorial and Arlington Memorial Bridge (Pliska 2008: 71).



Figure 35. CCC enrollees clearing brush, 1935. (NPS)

The same month that Olmsted submitted his report to the RMA, he also recruited members of the Civilian Conservation Corps (CCC) to begin clearing the site of non-native

vegetation, including whatever remained of John Mason's plantings (Pliska 2008: 48, 58). By mid-June 1935, two-thirds of the island had been cleared. In October 1935, the CCC crews began to plant native hardwood trees and shrubs using Olmsted's two planting plans as guides (Pliska 2008: 73). See Figure 36.

Figure 36. CCC members working on the south overlook terrace, July 1935. (Olmsted Archive, Frederick Law Olmsted NHS)



Olmsted wanted to create a forest community that represented the mature stages of natural forest succession, also known as a climax forest. This meant that only native species of plants were planted and non-native species were removed (Pliska 2008: 48). CCC workers also took on the duties of grading areas of the island for pedestrian access, including laying walking trails and bridle paths. The workers

were originally sent from CCC camp NP-6-VA located at Fort Hunt, Virginia. Then in November 1934, another CCC camp (NP-8-VA) was set up closer to the island. This new camp eventually took over all operations on TR Island and became known as “Camp Roosevelt Island.” The CCC continued to work on the island until the intensive phase of work ended in 1937 (Pliska 2008: 58). “By the completion of the project, a total of 35,736 trees, shrubs, and other plants had been newly planted or transplanted in different locations on the island” (Pliska 2008: 48).

Like non-native plant species, there were some man-made elements that did not fit into Olmsted’s vision for the Island. Most notably these included the ruins of the Mason mansion and outbuildings, as well as traces of the Columbia Athletic Associations’ racetrack and old roads. Despite protests from architects and historians as early as 1933, the NPS gave approval to Olmsted’s team to demolish the Mason ruins. In February 1936, a team from the Historic American Buildings Survey (HABS) with help from CCC crews documented the site and conducted limited archeological excavations before the ruins were razed. The HABS survey resulted in the damage to roots of some important trees near the site. Therefore, in December 1936, Olmsted revised his plan to completely remove the ruins and instead instructed CCC crews to disguise the site as much as possible without harming any trees. Today, the only ruins that remain visible above ground are a small section of Mason’s icehouse (Pliska 2008: 49, 77-78).

By about 1935, Olmsted started to think about permanent visitor amenities such as a comfort station and public access on the north end of the island. He believed that these elements were necessary; however, it was equally essential to him that the relative isolation of the island not be destroyed. Therefore, public access to the island would only be possible via foot or horseback. The narrow bridges would, however, allow for the occasional service vehicle to access the island (Pliska 2008: 72). A plan for the south end of the island was completed around 1937 and featured a boat landing and shelter (Figure 37). The Commissioner of the National



Figure 37. Olmsted Plan for the southern end of the island, c. 1937. (Olmsted Archive, Frederick Law Olmsted NHS)

Capital Parks, C. Marshall Finnan, hoped that the island would be opened by the spring of 1938 at least for limited recreational use. The public did seem to begin visiting the island by the late 1930s, but the official dedication did not occur until well into the 1950s (Pliska 2008: 79).

WORLD WAR II (1941-1945)

In July 1941, TRA director Hagedorn wrote to Olmsted informing him that the organization was strongly considering approving a built memorial to Roosevelt on the island. The concept was based on another plan created by Carl Akeley twenty years prior. It called for the creation of a large stone lion, a common symbol of Theodore Roosevelt; however, as Olmsted noted, the setting of the open outlook terrace was much different than what Akeley had envisioned. This might have played a role in why this design was never authorized (Pliska 2008: 79).

During World War II, government agencies, including the Office of Strategic Services, are said to have used the island as a training site for their agents. Sometime prior to June 4, 1943, the War Department constructed temporary bridges linking the north end of the island with Georgetown and the Virginia shore, Little River with the Virginia shore, and cleared a connecting road across the island for emergency use.

The Army also made a “cut” at the northern end of the island for access to the pontoon bridge (see Figure 38 and Figure 39). This approach altered conditions to such an extent that Assistant National Capital Parks Superintendent Harry Thompson recommended ordering a revised topographical map showing “what it is that we now have to deal with in this place.”



Figure 38. Evening view [northwest] to Key Bridge, 1930-1940. (Historical Society of Washington)

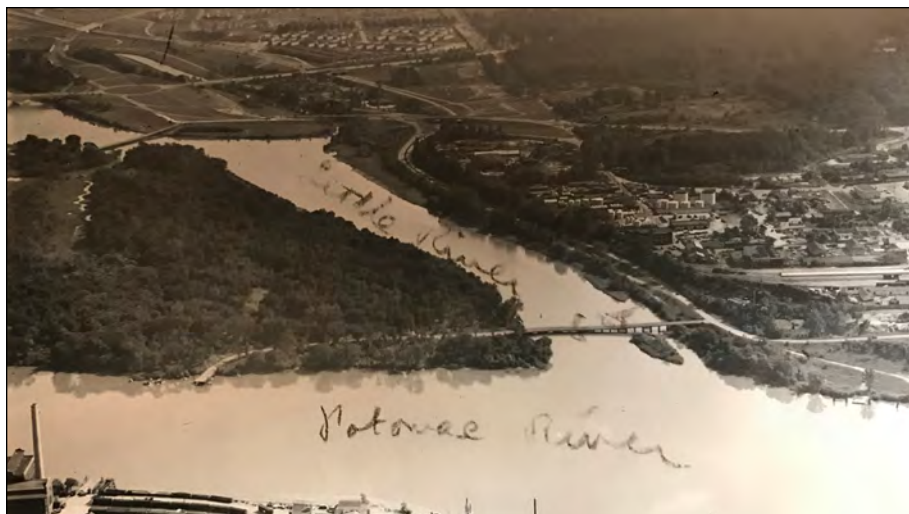


Figure 39. View of pontoon bridge crossing Little River from the Virginia shoreline to the island and road along northern end of Theodore Roosevelt Island, 1945. (Historical Society of Washington, Wire Photo Archive)

The War Department removed the pontoon bridges in 1945, after which it planned to also remove the connecting road and restore the area “to its original condition both in terms of topography and planting” (Pliska 2008:80). The FBI may also have used the island for training as late as 1952 (Deane 1952).

BUILT MEMORIAL (1952-1978)

The early 1950s also saw the beginning of plans for what would eventually become the Theodore Roosevelt Memorial Bridge (TR Bridge). Several plans to construct a bridge across the Potomac River were presented to Congress and five locations were seriously considered including: south of Little Island, over the north end of TR Island, over Little Island, over the center of TR Island, or over the south end of TR Island (Pliska 2008: 83). The TRA was against the idea of constructing a bridge because they felt that it would ruin the island’s feeling of sanctuary. They stated that Congress had passed a law protecting TR Island from any government use, and it was meant to be used only as a nature retreat. The TRA also held veto power over any construction proposed on the island and their dissent was enough to stall the project for a time (Pliska 2008: 83-84).

Despite the TRA’s outrage over the bridge proposal, it served to revitalize the association’s dedication to implementing Olmsted’s plan for the island. In 1952, the TRA produced a booklet in hopes of garnering public support to defeat the bridge proposal, as well as to complete the memorial, boat landing, and outlook plateau prior to the centennial of Theodore Roosevelt’s birth on October 27, 1958 (Pliska 2008: 84). The booklet contained “several impassioned pleas to protect the island from any such project that ‘would obviously destroy all suggestion of a wilderness’ in order ‘to provide a shortcut for local motorists’” (Pliska 2008: 84).

In January 1953, TRA director Hermann Hagedorn fought against the bridge development, meeting with members of the House and Senate Appropriations Committees and members of the Congressional District of Columbia Committees. TRA President McCoy, Ulysses S. Grant III, and NPS Director Conrad L. Wirth also joined together to publicly condemn the bridge plan (Pliska 2008: 84).

Despite protests by officials and citizens, in July 1953, the Washington, DC Board of Commissioners announced that there was nothing legally prohibiting the use of TR Island for part of the bridge crossing. The solicitor of the Department of the Interior also stated that although the construction of a bridge might be inconsistent with the purpose of donations from the TRA, there was no prohibition on simply banning an inconsistent use. However, if Congress voted to permit the bridge construction, they must compensate the TRA for taking away the association's interest in the island. Soon after, Congress authorized the construction of a bridge at the southern end of the TR Island (Pliska 2008: 85).

Multiple alternatives for bridge placement were proposed, with the intention of minimizing impact on Olmsted's memorial plans for TR Island. Most of these alternatives were prohibitively more expensive than the original plan, and therefore were never seriously considered. The position of the TRA had seriously weakened and on July 8, 1955, they announced that they would allow the bridge to be constructed at the southern end of the island. According to the TRA, they agreed to the construction only in the interest of preserving Washington's monumental core, especially existing views from the Arlington Memorial Bridge and Lincoln Memorial (Pliska 2008: 85).

Soon after the TRA's approval, the proposed bridge site was moved to the center of Theodore Roosevelt Island. Congress then appropriated \$1.5 million to begin construction. Highway engineers from Virginia felt the latest site proposal would be more expensive and would prevent the bridge from connecting with important roadways on the Virginia side. After all of this, the location was moved back to the southern portion of the island.

Finally, by early January 1956 the TRA formally approved the District's directive to build the new bridge across the southern end of Theodore Roosevelt Island. In return for this approval, however, the TRA made several demands. They required that the new structure be a low-level bridge, partly screened by the trees on the island; that the design receive CFA approval; that it bear the name "Theodore Roosevelt Bridge"; and that it include direct pedestrian and automobile access to the island. (Pliska 2008: 87)

Unfortunately, the construction of the Theodore Roosevelt Memorial Bridge was the death knell for Olmsted's plan for TR Island and it "ensured that Olmsted's

vision for the southern end of the island would never be carried out” (Pliska 2008: 87).

After the TRA agreed to the bridge’s construction, they asked architect Eric Gugler to prepare a design for the memorial to Theodore Roosevelt on the outlook terrace. Gugler based his design for the memorial on the ideas laid out in Hagedorn’s 1955 letter to the CFA. The design featured twelve granite panels arranged around a square plaza. Each panel was to be inscribed with a quote. At the center of the plaza, Gugler proposed a 30-foot by 40-foot bronze armillary sphere set on a granite base with a bas-relief of Roosevelt, facing a wide reflecting



Figure 40. Proposed Memorial for TR Island, 1956. (*Washington Star* Photograph Collection, Historical Society of Washington)

pool (see Figure 40). Gugler recommended sculptor Paul Manship design the sphere as the artist had already created several for other similar designs (Pliska 2008: 87-88).

The project plan included construction of the memorial and a large parking lot, along with installation of plumbing and electric lights. Cost estimates were set at \$2.5 million. The TRA wanted the entire development plan to be completed in time for the centenary of Roosevelt’s birth in 1958. The memorial was not completed in time, but the island was still officially dedicated during the city’s 1958 Fourth of July celebration, seen in Figure 41 (Pliska 2008: 88-89, Fanning 2001: 7-5).

Figure 41. TR Island Centennial Ceremony, 1958. (Theodore Roosevelt Digital Library, Dickinson State University)



By 1960, Gugler's design for the Theodore Roosevelt Memorial had been approved by the CFA, NPS, President Eisenhower, and the National Capital Planning Commission (NCPC). However, when the plan was introduced to Congress and became public, the design received a great deal of criticism. Negative feedback came from all sides including congressmen, reporters, the general public, conservationists, and even the Roosevelt family (Pliska 2008: 89). On 12 July 1960, the *Washington Post* reported that the TRA had originally intended the memorial to be much smaller, and that it was only enlarged after plans showed that the bridge would have screened it from the Lincoln Memorial, the only point from the mainland from which the memorial was to be visible. This argument, however, did not appease critics, who did not want the natural feel of the island to be disturbed. Theodore Roosevelt's own daughter, Alice Roosevelt Longworth, extended this criticism even further. Widely quoted as calling it a "globular jungle gym," she believed that the memorial "would desecrate the memory of anyone." She also strongly felt that "there are too few areas in this country that now where one can walk and enjoy wildlife in its primeval state," and that the "lovely, wild island should be left just as it is . . . It's a splendid memorial for my father" (Bowie 1960). The public, by and large, felt the same way.

Despite the protests of many, the House passed the bill, authorizing \$888,400 in Federal funds to finance the construction. The bill stalled, however, and in August 1960, the Senate voted to halt the bill until a design approved of by the Roosevelt family was proposed.

In 1961, Gugler and Manship presented a second design that garnered the approval of Roosevelt's family, the TRA, NCPC, and CFA. The new design, seen in Figure 42 and Figure 43, was completely different:



Figure 42. Rendering of proposed memorial, 1961. (NPS)



Figure 43. Aerial rendering of proposed memorial, 1961. (NPS)

No electric lights were included in this plan, and owing to the Roosevelts' strong desire to keep automobiles off the island, there was no parking lot. A bronze portrait statue of Theodore Roosevelt, right arm raised in a characteristic speaking pose, replaced the much-maligned armillary sphere as the centerpiece of a new elliptical plaza. Four large monoliths inscribed with Roosevelt quotations were fixed behind the statue, along the interior edge of a water-filled moat laid out around the memorial's perimeter. Two semi-circular pools were arranged symmetrically within the plaza, with each fed by a granite fountain basin raised atop ornamental supports. Matching granite step-bridges, placed on axis with the fountains, spanned the exterior moat. (Pliska, 2008: 92)

The design also contained detailed planting plans, and work began soon after the plan was approved. NPS landscape architect Lee Skillman was charged with overseeing the construction and installation process (Pliska 2008: 92).

Construction on the six-lane, 2400-foot-long Theodore Roosevelt Memorial Bridge, seen in Figure 44 and Figure 45, began in 1960 and was completed in 1964. The bridge is a shallow-arched, multiple-spanned, steel girder structure resting on low stone piers that crosses the Potomac River and connects Washington, DC with Virginia (Myer 1992: 15).

The bridge carries traffic across the Potomac River, running from the west end of Constitution Avenue at the base of Observatory Hill in the District, to the Virginia shore near Rosslyn. It crosses directly over the narrow channel separating Roosevelt Island from Little Island before passing over the southern end of Roosevelt Island. Particularly on the Virginia side, the bridge splits into a multitude of entrance and exit ramps, which run north, west, and south. Its low stone piers support steel girders and multiple shallow concrete arches. The low profile and lack of overhead construction make the bridge generally compatible with most other Potomac River bridges. (Fanning 2001: 7-18)

Figure 44. (L) Construction of TR Bridge looking east from Virginia, ca. 1961. (DDOT Historic Collections 112)

Figure 45. (R) Construction of TR Bridge looking east from Virginia, ca. 1964. (DDOT Historic Collections 169)



The TR Bridge necessitated the abandonment of several original Olmsted design concepts, including the outlook terrace and memorial structures. The comfort station was the only structure built in accordance with his original designs. The memorial site was moved to the far northwest part of the island, and construction occurred from 1964 until 1967.

During this period, access to the island was granted via boat or foot. The NPS constructed “what was originally intended as a temporary boat landing” on the north end of the island in 1952 (Pliska 2008: 83). The landing consisted of a barge anchored to the rocks some 75 feet offshore, connected to the island by way of a

sandbag walkway topped with a concrete or bituminous surface, as seen in Figure 46 (Pliska 2008:83). In 1953, the National Capital Parks utilized the boat landing when they began offering ferry service from the foot of Wisconsin Avenue in Georgetown to the island on summer weekends.



Figure 46. "Wood duck ferry leaves Roosevelt island wharf" ca. 1953. (NPS)

In 1955, the NPS constructed a service road in the location of the historic Mason causeway; this was widened and realigned in 1957 to accommodate power lines beneath and vehicles above (see Figure 47).



Figure 47. Service Road, 1973. (Historical Society of Washington, CHS Collection)

In 1964, ferry service was expanded and the ferry landing was enlarged, as seen in Figure 48.

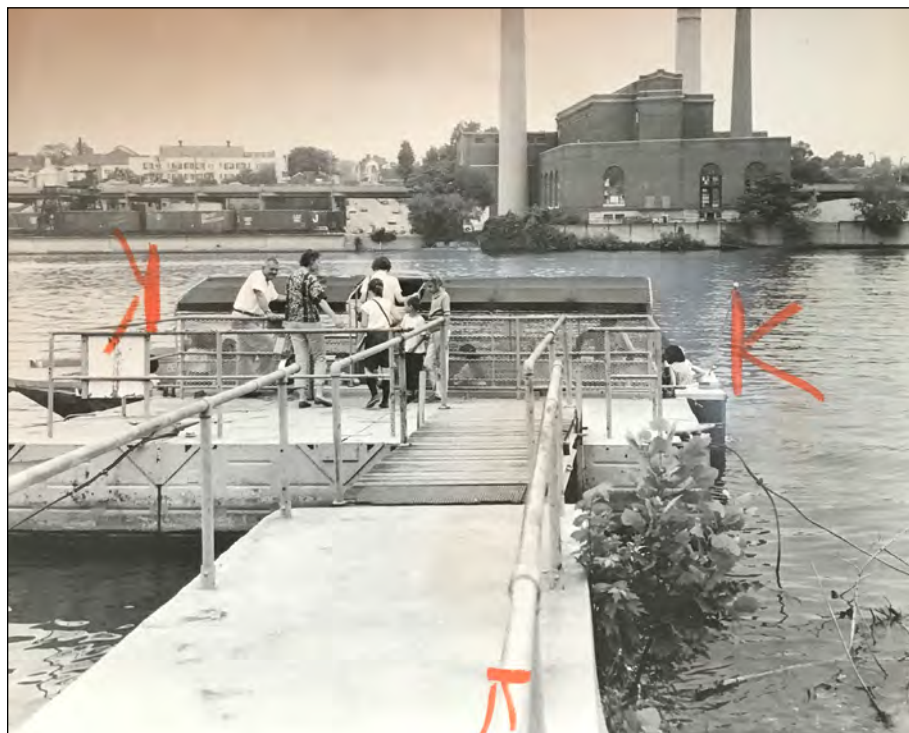


Figure 48. Ferry landing on TR Island, 1964. (*Washington Star* Photo Collection, Historical Society of Washington)

As construction of the memorial on the island progressed from 1964 to 1967, seen in Figure 49, a parking area was constructed on the Virginia mainland to accommodate visitors. The parking area, now the south parking bay, was located east of the GWMP. Vehicular access to the GWMP was at the north end .



Figure 49. Memorial under construction, 1965. (Library of Congress item 2013651404)

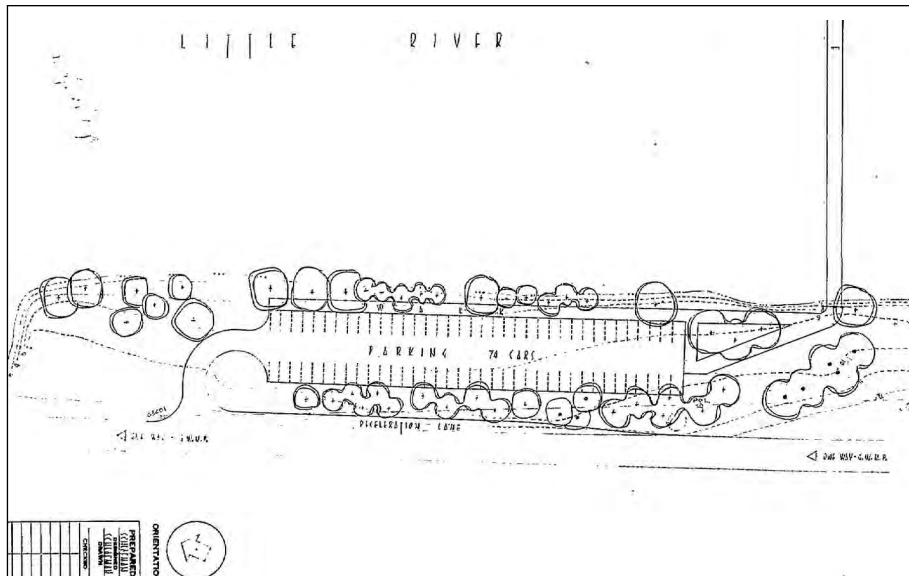


Figure 50. Footbridge for Roosevelt Island, 1963. (NPS 854/80130)

Finally, on Roosevelt's 109th birthday, October 27, 1967, the Theodore Roosevelt Memorial was formally dedicated by President Lyndon B. Johnson, seen in Figure 51 (Pliska 2008: 92-93).



Figure 51. Dedication of TR Memorial, 1967. (Theodore Roosevelt Digital Library, Dickinson State University)

While a formal pedestrian bridge connecting the mainland to the island was approved in 1964, funding was not available and a temporary causeway was constructed in 1967 to facilitate the movement of visitors to the island for the Roosevelt memorial dedication, seen in Figure 52 (Myer 1992: 34).

Figure 52. Service road construction, 1967. (*Washington Star* Photo Collection, Historical Society of Washington)



The existing TR Island Pedestrian Bridge, as seen in Figure 53 and Figure 54, was built in 1978 at the approximate location of the earlier causeway that connected the island with the Virginia shore (A New Bridge in Town 1978). The causeways were washed away during flood events; this occurred during Tropical Storm Agnes in 1972, necessitating \$15,000 in repairs (Hodge 1978). “The bridge is a seven [span] pre-stressed concrete structure resting on reinforced concrete piers and abutments. Wing walls are stone faced. Six reinforced concrete single piers are 3’ in diameter and support twin pre-stressed girders. The overall length is 491’ with a maximum span of 72’. The concrete deck is 12.3’ wide” (HAER VA-87: 2).



Figure 53. “A New Bridge in Town,” 1978. (*Washington Star*)



Figure 54. "A New Bridge in Town," 1978. (Washington Star)

NPS MANAGEMENT (1980-2017)

THEODORE ROOSEVELT ISLAND

The Mount Vernon Trail, a hiker/biker path from Mount Vernon to Arlington Memorial Bridge, was initially constructed by the NPS in 1973. In 1987, the NPS extended the MVT north to TR Island (NPS 1985:37). During this time, the parking lot was expanded to include the north bay; however, the entrance and exit remained in the same location.

In 1988, a pedestrian/bicycle bridge/overpass from Rosslyn was constructed at the north end of the parking lot, as seen in Figure 55 (Davis 1994: 186).

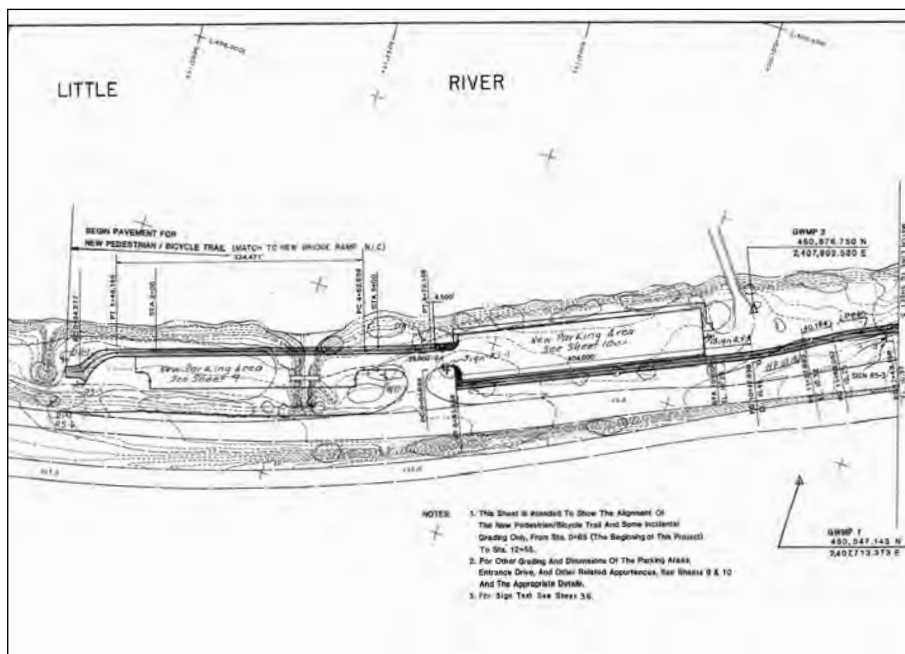


Figure 55. Commuter Bicycle Trail Link As Constructed Drawings, 1987. (NPS 850/41013A)



Figure 56. "Bikers' Bridge," 1988.
(*Washington Post*)

In 1994, the GWMP was widened and reconfigured; concurrently, the parking lot was largely reconstructed and the concrete retaining wall clad in stone that runs along the western edge of the parking lot was constructed, as seen in Figure 57 (Fanning 2001:8–6).

Construction of a raised boardwalk along the Swamp Trail was begun by the Youth Conservation Corps in 1996; the work, however, proved too difficult for them. A major flood in January 1997 damaged the 100 feet or so that had been completed. TR Island received disaster recovery funding and a staff architect designed the current boardwalk, which was completed in 1998. The boardwalk, made of recycled plastic, follows the same alignment as the previous trail, except for the addition of the spur, or overlook, extending into the marsh, and the wider areas where benches are situated, which reflect the widening of the original trail made by visitors walking around mud. A wooden A-frame ranger station had been built adjacent to the pump vault at the memorial plaza sometime before the early 1970s, though it later burned; a second one was built sometime after 1986, following the same design, but was destroyed or removed by 2015. A larger wooden shed was built just northeast of the memorial, probably in the 1980s, to provide storage for equipment and supplies (Fanning 2001:8–62).

From March to May, 2017 the parking lot was rebuilt and the MVT alignment reconfigured along this section. A small plaza was also constructed at the base of the pedestrian bridge.

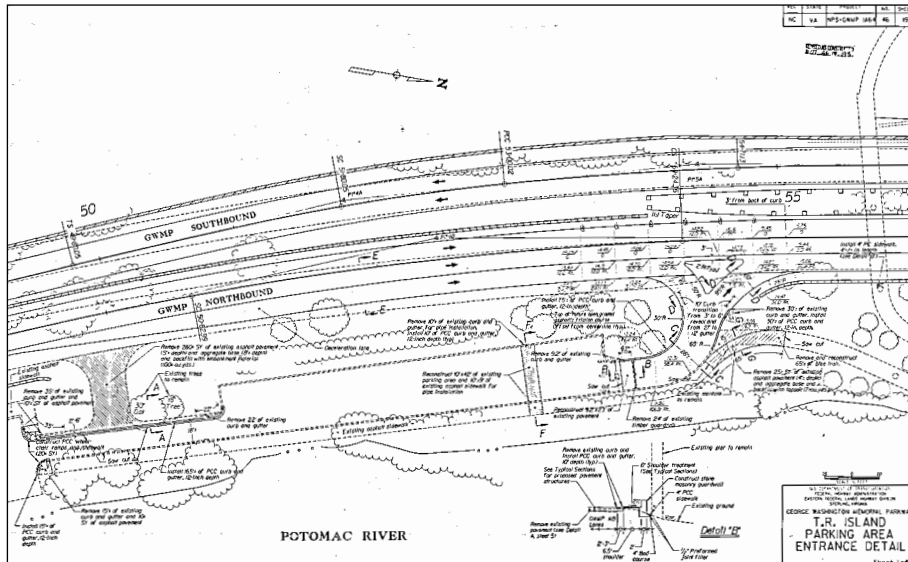


Figure 57. Reconstruction of GWMP As Constructed Drawings, 1993. (NPS 850/41924A)

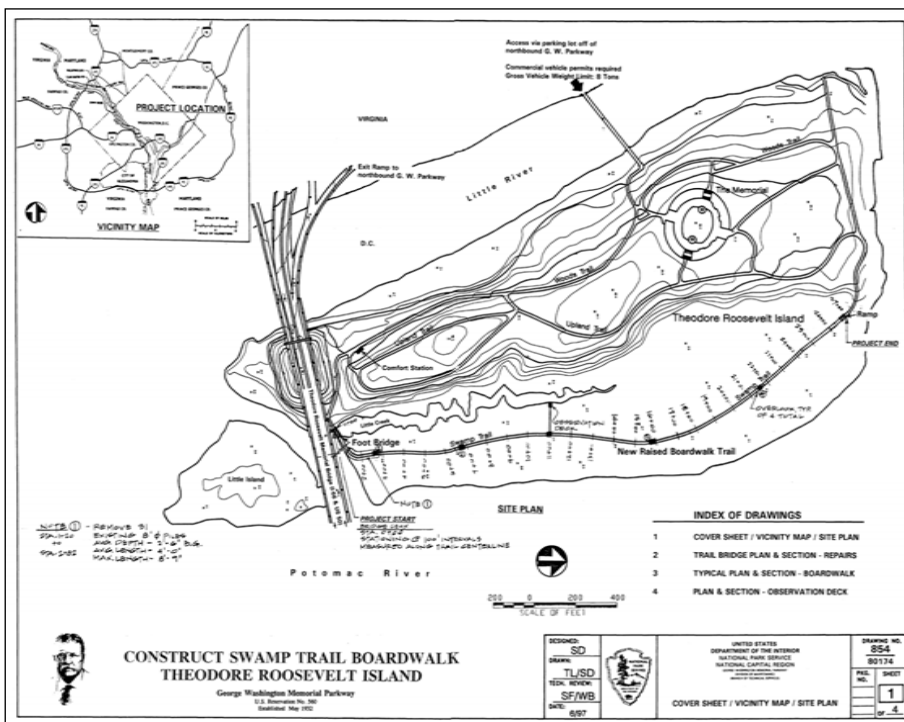


Figure 58. Plan for Swamp Trail Boardwalk, 1997. (NPS 854/80174)



CHAPTER 3: EXISTING CONDITIONS AND AFFECTED ENVIRONMENT

CHAPTER 3: EXISTING CONDITION AND AFFECTED ENVIRONMENT

The processes and physical forms that characterize the appearance of a landscape and aid in understanding its cultural value are called landscape characteristics (Page, Gilbert, and Dolan 1998a). This chapter will describe the existing conditions of these characteristics within the study area, as observed during the summer and fall of 2016. This will provide a context for the analysis and evaluation of integrity of the characteristics in Chapter 4. This chapter also describes the affected environment or resource topics (identified in Chapter 1) potentially impacted by the treatment alternatives.

The existing condition of the landscape was evaluated using the following criteria, modified from *A Guide to Cultural Landscape Reports* (Page, Gilbert, and Dolan 1998b:67):

Good: Those features of the landscape that do not require intervention. Only minor or routine maintenance is needed at this time.

Fair: Some deterioration, decline, or damage is noticeable; the feature may require immediate intervention. If intervention is deferred, the feature will require extensive attention in a few years.

Poor: Deterioration, decline, or damage is serious; the feature is seriously deteriorated or damaged, or presents a hazardous condition. Due to the level of deterioration, damage or danger, the feature requires extensive and immediate attention.

Unknown: Not enough information is available to make an evaluation.

Cover photo caption: Aerial View of TR Bridge and Island looking north, 1994. (HAER VA-69-76)

ARCHEOLOGY AND ARCHEOLOGICAL SITES

Limited archeological investigations have been undertaken on the island to date. The probability for significant archeological features throughout the island is high due to the site's constant use since the American Indian period. Archeological investigations are necessary to determine the quantity and location of features. The NPS will undertake a multi-year archeological investigation of the site starting in Fall 2018.

Overall, the archeology and archeological sites on the island are in UNKNOWN condition.

MASON HOUSE RUINS

The Mason House, once the main structure on the island, is no longer extant as a standing structure. Site investigations undertaken for this report revealed very little evidence of the house. As shown in Figure 59, pieces of brick and cut stone are visible in the vicinity of where the Mason House once stood. Two raised mounds may indicate the limits of the former house foundation area.



Figure 59. General site of former Mason House, 2016. (JMT)

MASON ICE HOUSE RUINS

The Mason Ice House ruins are also located in the south plateau area, northwest of where the mansion once stood. The ice house is a roughly square foundation measuring 18' 2" by 18' 2" and set approximately 5' 6" into the earth (NPS LCS). The walls are constructed of random rubble fieldstone (see Figure 60). Figure 61 provides a detailed view of one of the dry laid stone walls. The careful selection and shaping of the larger stones to create extremely tight butt joints, in addition to the chinking of remaining joint openings with smaller stones, resulted in high

quality, structurally sound walls that have led to the structure's longevity. Dirt and debris have been pushed in, obscuring one of the corners of the foundation; however, it still reads as a square, stone walled depression that functioned as an ice house. Near the ice house ruins are additional masonry remnants, likely from other outbuildings or walks connecting them.



Figure 60. Extant stone walls and foundation of the Mason ice house, 2016. (JMT)



Figure 61. Detail of the ice house stone walls, 2016. (JMT)

CAUSEWAY REMNANTS

Remnants of the concrete service road, constructed in the 1950s by NPS, are visible at the western most terminus of the North Transverse Trail. The remnants present as a deteriorating concrete slab cantilevered over the shoreline into Little River (see Figure 62 and Figure 63). Masonry remnants, potentially dating to the Mason-era causeway, are visible within the eroded tread of the trail on the

approach to the shoreline. Additional remnants from the Mason causeway may lie beneath the concrete slab but additional investigation is required.

Figure 62. Concrete and stone causeway remnants. Severe erosion caused by tree root growth and people walking visible, 2016. (JMT)



Figure 63. View towards Little River showing concrete slab and stone causeway remnants, 2016. (JMT)



WHARF RUINS

Evidence of the island's past use as a ferry landing are still visible today, such as roughly sawn timbers and cut stone. The largest of these is likely an old ferry wharf or pier, shown in Figure 64. The remains of the wharf consist of transverse wooden deck planking supported on the underside by longitudinal beams fastened together by iron nails. The structure, measuring approximately 57.2 feet in length, is overturned with its beams exposed and situated above the decking. It is estimated between 10 and 15 feet wide. The deck planks are uniformly square cut, measuring approximately 1 foot in width, but their height or thickness varied

between 1.5 inches to 2.4 inches, the variance of which is likely due to the tides and the daily cycle of being submerged and drying out (i.e., warping). Many of the planks are in disrepair and show signs of splitting, cracking, and surface delamination. The fasteners are square cut iron nails with an approximate length of 5 inches. Nails and empty nail holes are located all along the southern end of the deck planking, suggesting there was either a longitudinal beam or other support member (now missing). Based on the construction characteristics and the condition of the materials, this dock structure likely dates from the end of the Civil War through the turn of the 20th century.



Figure 64. Wharf ruins on north shore, 2016. (JMT)



Figure 65. Detail wharf ruins on north shore, 2016. (JMT)

The remnants of the wharf structure are currently in a ruined state and it is neither intact nor whole. The structure appears fragmented and upside down, with its longitudinal support beams exposed, lying parallel to the island's shore. It is not known if this is the original location where the structure once stood or if it has been deposited here due to storm action and flooding events. The structure is within the tidal zone of the river and subjected to constant wetting and drying, the result of which is the degradation of the wooden elements, as evidenced by its weathered and deformed members. These conditions, along with sun exposure, will eventually contribute to the loss of this composite structure.

FERRY LANDING RUINS

A number of features remain from the ferry activities amongst the large rock outcropping at the northeast corner of the island. These elements include braided metal cables with nut and bolt loop fasteners, iron eye hooks embedded in the rock, concrete slabs, and holes bored in the rock, which at one time may have held anchors or other hardware (See Figure 66, Figure 67, and Figure 68).



Figure 66. Extant metal cables visible on rock outcrop, 2017. (JMT)



Figure 67. Extant metal cables looped around rock outcrop and wood protruding from water, 2017. (JMT)

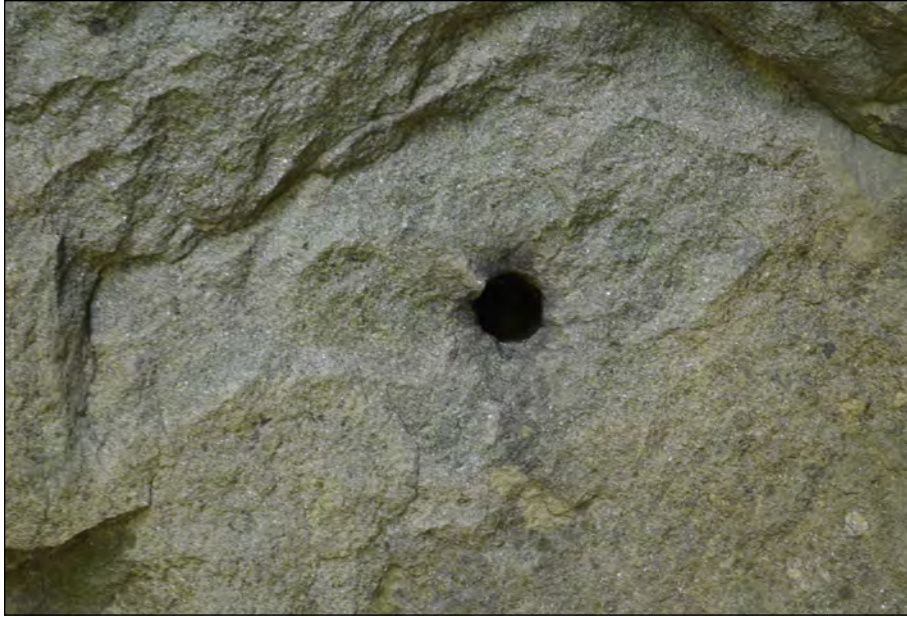


Figure 68. Drilled hole remaining from ferry wharf, 2016. (JMT)

The remaining features of the ferry landing are in a fair state. Some of these structures are within the tidal zone of the river and subjected to constant wetting and drying, while other are constantly exposed above water. The stone and concrete features are more durable than their iron counterparts, which are subject to rust and corrosion. These conditions, along with sun exposure, will eventually contribute to the loss of these features.



Figure 69. Spit of rocks with 1950s concrete ferry landing remnants looking northwest today, 2016. (Matthew Virta, NPS)

NATURAL SYSTEMS AND FEATURES

Natural systems and features are those aspects of nature that typically comprise and influence the materials and evolution of a landscape. These include:

- Geomorphology: the large-scale patterns of land forms
- Geology: the surficial characteristics of the earth
- Hydrology: the system of surface and subsurface water
- Ecology: the interrelationship among living organisms and their environment
- Climate: temperature, wind velocity, and precipitation
- Native vegetation: indigenous plant communities and indigenous aggregate and individual plant features

Overall, the Natural Systems and Features of TR Island are in GOOD condition.

The Potomac River shapes the landscape armature of TR Island, widening as it passes through the Potomac Gorge and from the hard Piedmont bedrock to the west onto the softer, sandy Atlantic Coastal Plain to the east. It meanders as a broad river from below TR Island to the Chesapeake Bay. TR Island is the last bedrock island along the river above its wide course to the bay. The island thus marks the Fall Line with bedrock exposures on the northern shoreline (Piedmont) and swamp and tidal marshes on the southern shoreline (Atlantic Coastal Plain). Upon reaching the island, the river forms two channels. The narrow channel to the west is commonly known as the Little River while the larger channel to the east remains the Potomac River and is sometimes referred to as the Georgetown Channel. The island itself is an outcropping of micaceous schist covered with sedimentary soils. A raised plateau extends lengthwise across the island, tapering at the north and south ends.

TR Island can be further divided into four distinct landscape areas, determined on the basis of topography, historical use, and the Olmsted plans: the north (including the Theodore Roosevelt Memorial) and south portions of the plateau, marsh and swamp, and Little Island (see Map 2 on page 1-7). The swamp occupies the peninsula located on the island's east side, originating in the northeast corner and extending south. A narrow tidal inlet separates this peninsula from the main body of the island. Little Island is a discrete island of approximately 1.5 acres located immediately southeast of the larger island. Although an island itself, it is included within the legal boundaries of Theodore Roosevelt Island.

TR Island is located in the northern extent of the Subtropical Division - Outer Coastal Plain Mixed Forest Province ecological zone typical of the Atlantic Coastal areas of the United States. This ecological zone is characterized by

relatively flat topography that leads down to the ocean. The climate is temperate, with average annual temperatures in the range of 60-70 degrees Fahrenheit with abundant rainfall throughout the year.

Naturally occurring vegetation in this area is called the temperate evergreen forest or laurel forest. Trees typical of this ecological zone include evergreen oaks as well as plants from the laurel and magnolia families. Coastal marshes and interior swamps, as found on TR Island, are not uncommon in this ecosystem. Soils of the island are sandy with some areas of heavy clay to gravel. Animals seen on the island include white tailed deer, squirrels, and rabbits. It is also likely home to a number of other ground-dwelling rodents. This area is also rich in bird life, especially within the Marsh and Swamp LCA, which is home to herons, egrets, ducks and other water fowl, dragon flies, and other insects associated with wetland environments (See Figure 70 and Figure 71).



Figure 70. Red Tailed Hawk, 2016. (JMT)



Figure 71. Deer, 2016. (JMT)

VEGETATION

The overall vegetation is in FAIR condition.

TR Island vegetation is characterized by dense, primarily deciduous woods, riparian areas, and swamp.

NATURAL/SEMI-NATURAL VEGETATION

There are 10 natural and semi-natural vegetation communities present on the island, as shown in Map 3:

- Ash - Swamp Blackgum Freshwater Tidal Swamp
- Box-elder Floodplain Forest
- Freshwater Tidal Mixed High Marsh
- Freshwater Tidal Swamp
- Mid-Atlantic Terrace Hardwood Floodplain Forest
- Northern Coastal Plain/Piedmont Basic Mesic Hardwood Forest
- Northern Piedmont / Central Appalachian Maple-Ash Swamp Forest
- Piedmont / Central Appalachian Silver Maple Forest
- Successional Mixed Deciduous Forest
- Successional Vine-Shrubland

The majority of the island vegetation is naturalistic, with the only formal plantings confined to the memorial plaza. Exotic vegetation, such as perennials and vines, can be found climbing trees, covering shrubs, and creating a dense ground cover on the site. Some of the most persistent exotic vines and perennials on the site include English ivy (*Hedera helix*), periwinkle (*Vinca minor*), Japanese honeysuckle (*Lonicera japonica*), bush honeysuckle (*Lonicera mackii*), and fig buttercup (*Ranunculus ficaria*). Invasive vine growth has negatively impacted the shrub and tree layers and ground plane on the island. Additionally, the fens within the Marsh and Swamp LCA boast many species of wetland plants. Little Island vegetation is similar to that of the main island. It is characterized by a mature tree canopy and understory plants.

On the Virginia mainland, mature trees are situated between the edge of the parking area and the shoreline. Mature trees are also located in the lawn area to the west of the parking area. The mature tree canopy provides needed shade from the sun and heat in the summer and enhances the sense of place and arrival to the site. Shrub plantings are interspersed among the trees as an enhancement to the setting. A well-maintained lawn occupies the remainder of the area and contributes to the overall ambience.

During the summer of 2017, over 200 dead ash trees (*Fraxinus sp.*) were felled on TR Island. The loss of these trees is due to the emerald ash borer (EAB; *Agrilus planipennis*), an invasive Asian beetle that targets ash tree species. It kills trees by destroying tissues that transport water and sugar within the tree and is nearly 100% fatal. In a forest stand, most ash trees succumb to the effects of the beetle within three to six years (Matthews, Nortrup, and Schmitt 2017).

TR Island also contains multiple wetlands as illustrated on Map 4 and described on page 3-52.

MEMORIAL LANDSCAPE

The memorial plaza is circumscribed by ring of 40 willow oaks, 36 at 6-8" caliper and four at 8-10" caliper in size. Four, 6-8" willow oaks are missing from this exterior ring. An inner ring is planted with 29 willow oaks, 18 at 6-8" and 11 at 8-10". One, 8-10" willow oak is missing from the inner ring. Some of the willow oaks appear to be replacement trees, as they are much smaller in appearance.

Boxwood shrubs are also incorporated into the memorial plaza. Four raised planting beds, or parterres, at the center of the plaza are planted with three different sizes of common boxwoods, which are overgrown and appear unmanicured. Six planting beds, situated beside the inscription panels, feature dwarf boxwoods.

A detailed list of the vegetation and its location on the island, based on the inventory in the National Register nomination, is provided in Table 1.



Map 3. Vegetative Communities on TR Island

Table 1. List of Vegetation on TR Island (Adapted from NR Nomination; See also Steury, B.W. 2011 and the GWMP Rare Plant database for more information.)

TYPE	CATEGORY	SPECIES	NATIVE	GENERAL	N. PLATEAU	S. PLATEAU	S. PLATEAU - EAST SLOPE	MARSH & SWAMP	LITTLE ISLAND	MEMORIAL
Groundcover		Vinca minor (periwinkle)		x		x				
Plants	Herbaceous	"pragamites" (probably "phragmites")						x		
		"squaw weed" (possibly ragwort [Senecio sp.] or other species)	?					x		
		Actaea sp.	Y			x				
		Aquilegia sp. (columbine, native)	Y		x					
		Claytonia sp. (spring beauty)	Y			x			x	
		Cornus sp. (silky cornel)	Y		x					
		Dicentra cucullaria (Dutchman's breeches)	Y			x				
		Erythronium sp.	Y			x	x			
		Hibiscus sp. (mallow)	Y					x		
		Hydrophyllum sp. (waterleaf)	Y			x				
		Iris pseudacorus (water iris)						x		
		Lilium canadense	Y						x	
		Matteuccia (ostrich fern)	Y		x	x			x	
		Mertensia sp. (mertensia)	Y		x	x	x			
		Myosotis sp. (forget-me-not)						x		
		Osmunda sp. (osmunda)	Y		x				x	
		Peltandra sp.	Y					x		
		Phlox divaricata (wild blue phlox)	Y						x	
		Podophyllum peltatum (mandrake; mayapple)	Y			x	x		x	
		Polygonatum sp. (Solomon's seal)	Y		x		x		x	
		Polypodiacea sp. (fern, various species)	Y		x			x		
		Polystichum acrostichoides (Christmas fern)	Y			x	x			
		Saxifraga sp. (saxifrage, native)	Y		x					
		Thalictrum sp.	Y		x		x		x	
		Trillium sp.	?				x			
		Typha sp. (cattail)	Y					x		
		Uvularia (bellwort)	Y		x					
Shrubs	Deciduous	Alnus incana (speckled alder)		x						
		Alnus sp. (alder)	?					x		
		Cephalanthus (buttonbush)	Y					x		
		Cornus amomum (silky or red willow dogwood)	Y	x						
		Cornus sp. (silky cornel)	Y			x		x		
		Hydrangea arborescens (smooth hydrangea)	Y	x						
		Lindera benzoin (spicebush)	Y			x			x	x
		Lindera benzoin aestivale (spicebush)	Y	x		x				
		Rhododendron nudiflorum (downy pinxterbloom)	Y	x						
		Sambucus canadensis (American elder)	Y							x
		Sambucus sp. (elder)	Y					x	x	
		Staphylea sp. (bladdernut)	Y			x				
		Symphoricarpos vulgaris (coralberry)	Y	x						

TYPE	CATEGORY	SPECIES	NATIVE	GENERAL	N. PLATEAU	S. PLATEAU	S. PLATEAU - EAST SLOPE	MARSH & SWAMP	LITTLE ISLAND	MEMORIAL
Shrubs	Deciduous	Viburnum lentago (viburnum, black haw)	Y			x				
		Viburnum opulus (European cranberry bush)		x						
		Viburnum prunifolium	Y			x				
		Viburnum sp.	Y	x					x	
	Evergreen	Buxus sempervirens (Boxwood)								x
		Buxus sempervirens ‘Suffruticosa’ (True dwarf boxwood)								x
		Kalmia latifolia (mountain laurel)	Y	x						
Trees	Deciduous	Acer negundo (box elder)	Y					x		
		Acer saccharinum (silver maple)	Y		x	x		x	x	
		Acer sp. (maple)		x					x	
		Asimina triloba (pawpaw)	Y		x					
		Betula nigra (river birch)	Y	x	x			x	x	x
		Carpinus carolinia (American hornbeam)	Y							x
		Carpinus sp. (hornbeam)	Y			x				
		Carya cordiformis (bitternut)	Y			x			x	
		Carya sp. (hickory)	Y	x						
		Catalpa sp. (catalpa)				x				
		Celtis sp. (hackberry)	Y	x						
		Cercis canadensis (redbud)	Y	x						
		Cornus florida (flowering dogwood)	Y	x						
		Cornus sp. (dogwood)	Y			x				
		Diospyros virginiana (persimmon)	Y	x						
		Fagus sp. (beech)	Y			x				
		Fraxinus americana (white ash)	Y					x		
		Fraxinus sp.(ash)	Y	x	x	x		x	x	
		Gleditsia (honey locust)	Y		x	x				
		Gymnocladus dioica (Kentucky coffee tree)				x				
		Juglans nigra (black walnut)	Y			x				
		Liquidambar styraciflua (sweetgum)	Y	x						
		Liriodendron tulipifera (tulip poplar)	Y	x	x	x				
		Maclura pomifera (Osage orange)	Y	x						
		Magnolia glauca (or Magnolia virginiana; sweetbay magnolia)	Y	x						
		Morus sp. (mulberry)		x						
		Paulownia tomentosa (paulownia)				x				
		Platanus occidentalis (sycamore)	Y		x			x	x	x
		Platanus sp. (plane)		x						
		Prunus serotina (black cherry)	Y			x				x
		Quercus alba (white oak)	Y			x				x
Trees	Deciduous	Quercus muehlenbergii (yellow chestnut oak)	Y			x				
		Quercus phellos (willow oak)	Y							x
		Quercus prinus (basket oak)	Y					x		
		Quercus rubra (red oak)	Y			x				

TYPE	CATEGORY	SPECIES	NATIVE	GENERAL	N. PLATEAU	S. PLATEAU	S. PLATEAU - EAST SLOPE	MARSH & SWAMP	LITTLE ISLAND	MEMORIAL
Trees	Deciduous	Quercus sp. (oaks, both white and black)	Y	x						
		Robinia sp. (locust)		x						
		Salix sp. (willow)	Y					x	x	
		Sassafras albidum (sassafras)	Y	x						
		Sassafras albidum "officinale" (sassafras)	Y							x
		Taxodium distichum (bald cypress)	Y					x		
		Ulmus sp. (elm)	Y	x	x			x	x	
	Evergreen	Cedrus sp. or Juniperus virginiana (cedar)	Y				x			
		Ilex opaca (American holly)	Y	x						
		Juniperus virginiana (red cedar)	Y	x						
		Magnolia grandiflora (evergreen or Southern magnolia)	Y	x						
		Pinus echinata (short-leafed pine)	Y				x			
		Pinus sp. (pine)		x						
		Pinus strobus (white pine)	Y				x			
		Pinus virginiana (Virginia pine)	Y				x			
		Tsuga canadensis (Canada hemlock)	Y	x						
		Tsuga sp. (hemlock)		x		x	x			
Vines	Deciduous	Campsis radicans (trumpet vines)	Y	x						
		Vitis sp. (grape)	Y	x						
	Evergreen	Hedera helix (English ivy)		x		x				x



Map 4. Wetlands on TR Island

SPATIAL ORGANIZATION

Spatial organization is described as the arrangement of elements creating the ground, vertical, and overhead planes that define and create spaces (Page 1998: 53). TR Island is organized primarily by the trail network traversing diverse upland and aquatic vegetative zones as envisioned by Olmsted Jr. with limited built zones, which include the Memorial Plaza and Comfort Station (see Maps 3-8).

The park is composed of six major LCAs that create its spatial organization, defined in Chapter 1: North Plateau, South Plateau, West Terrace, Marsh and Swamp, Little Island, and GWMP.

TR Island comprises two sections: the land based portion of the park, situated on the Virginia mainland (GWMP LCA); and two islands (TR Island and Little Island). The Virginia component functions primarily as an orientation and staging area for the island visitor experience, providing parking, walkways, and signage as an introduction to the memorial proper.



Figure 72. Aerial photo of TR Island, 2016. (DC Octo Oblique Viewer)

The Virginia area of the park includes two contiguous parking bays with paved and unpaved walkways that are enhanced by mature tree canopies, numerous shrub plantings, and lawn areas. This site, approximately 3.3 acres, is a narrow parcel of land situated between the GWMP and Little River. Trees and shrubs lining the shoreline and open areas provide a tree canopy buffering views of the GWMP.

The largest portion of TR Island consists of two islands located across Little River from the Virginia mainland: Theodore Roosevelt Island (North Plateau, South Plateau, West Terrace, and Marsh and Swamp LCAs) to the north and Little Island (Little Island LCA) to the south. TR Island is a 90-acre island that, to the untrained eye, appears as a forested, naturally vegetated environment with a mature tree



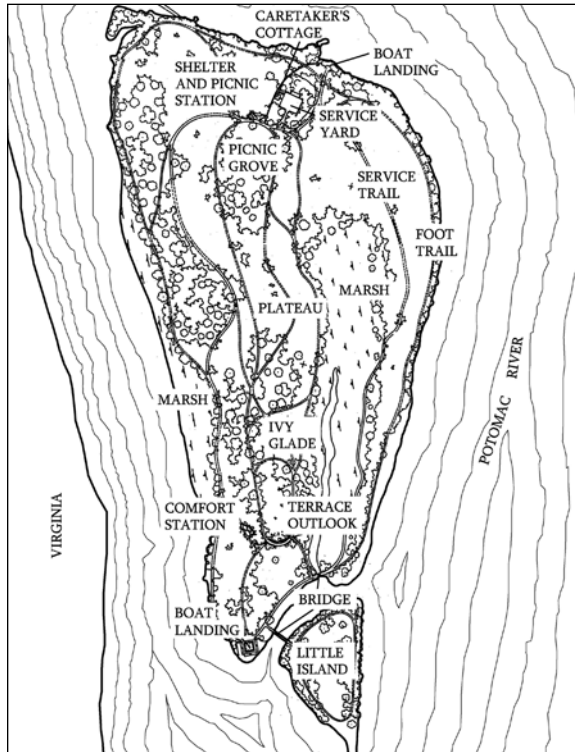
Figure 73. Aerial photo of memorial plaza, 2016. (Google Earth)

canopy and understory plants. Little Island is south of TR Island and separated from it by a narrow waterway. Little Island is similarly vegetated. Pedestrian access to TR Island is via a pedestrian bridge from the Virginia side parking area.

The organization of the park stems from the extensive trail system and the Memorial Plaza. The naturalistic trails meander through mature woodlands and marshes, which provide a stark contrast to the large Memorial Plaza with statuary and water features dedicated to the life and accomplishments of Theodore Roosevelt. The plaza is the only formal designed feature on the island. It is a vast clearing encircled by dense foliage within the North Plateau.

LAND USE

Land Use is defined as the organization, form, and shape of the landscape in response to the function of the site (Page 1998: 53). The primary use of the



park is as a memorial to President Theodore Roosevelt. TR Island is significant as the national presidential memorial commemorating Theodore Roosevelt, emphasizing his role as a leader in national conservation policy. Both the island itself, designed as a representative native woodland, and the architectural monument located on its northern part constitute the Theodore Roosevelt Memorial today (Fanning 2001: 8-29, 30).

Figure 74. Olmsted Jr.'s vision for the island included a caretaker's cottage, a boat landing, a terrace outlook, and a bridge connection to Little Island south of Roosevelt Island, 1945. (Pliska 2008: Sheet 2)

The TR Memorial Plaza is a formal landscape

expression that contrasts greatly with the wild character of the larger park. The Memorial is a hardened landscape consisting of an oval paved plaza incorporating two moats with arched bridges and fountains as water features. Statuary and monolithic panels provide vertical elements. Plaza plant beds are simple mass plantings of American boxwood (*Buxus sempervirens*) and bounded in outside rings of willow oaks (*Quercus phellos*).

Nature experience, especially the marsh experience, is another major use. The raised boardwalk section of the Swamp Trail provides access through the marsh so visitors have the opportunity to view and interact with this unique ecosystem. Mature forest is found throughout much of the island, juxtaposed with a swampy wetland, all surrounded by the waters of the Potomac River. A variety of plant and animal species may be found on the island, some non-native plants along with those native to the geomorphological environment. Deer and other small animals, as well as a rich diversity of birds, make their home on the island.

Transportation and recreation are secondary uses of TR Island. The MVT is used as a commuter trail for bicyclists into and out of Washington, DC and the entire site is used for recreational purposes. Bikes are not allowed on TR Island.

CIRCULATION

Vehicular access to and from TR Island is via the GWMP, northbound lanes. A short off ramp leads to the parking area. Additionally, an elevated walkway over the GWMP provides pedestrian and bicycle access to TR Island from Lee Highway in Rosslyn.

ROADS, PARKING, AND REGIONAL TRAILS

TR Island is connected to two trail systems within the greater Washington metropolitan area: the 18-mile Mount Vernon Trail (MVT), which begins at the

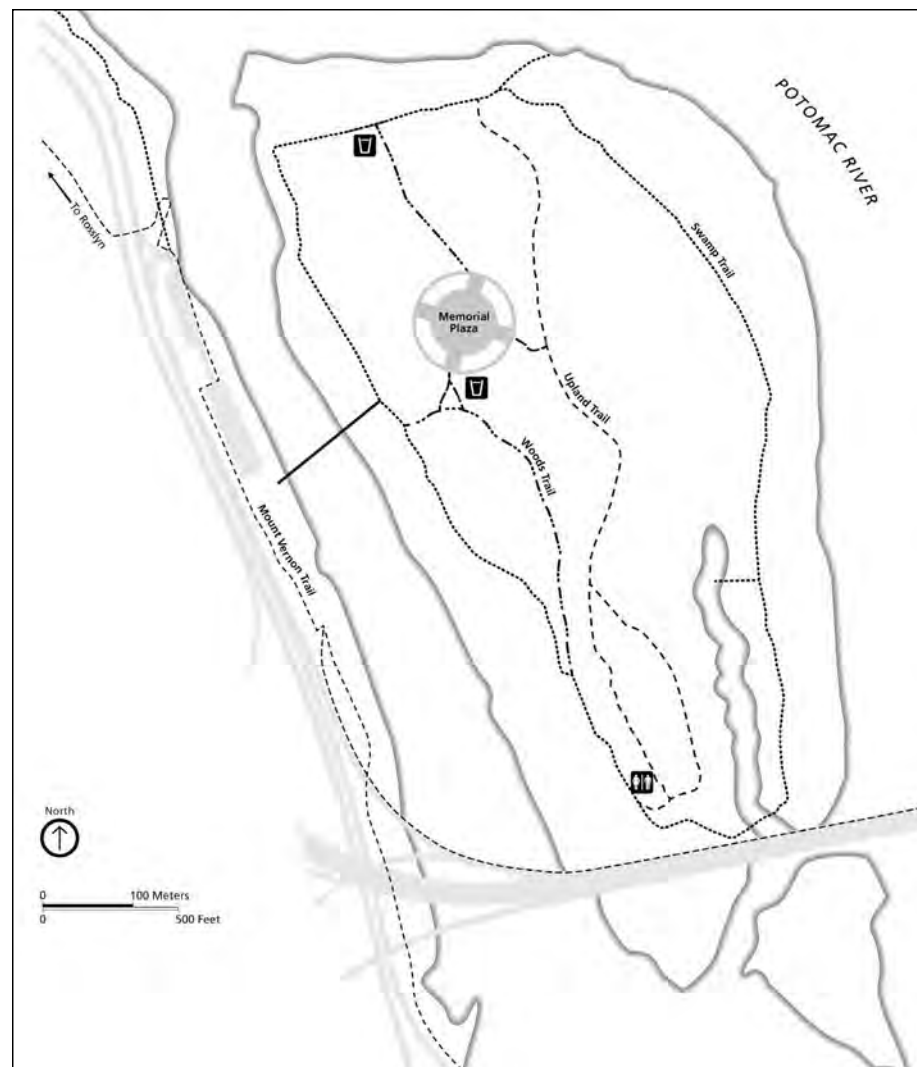


Figure 75. Current trails map, 2010.
(NPS)



Figure 76. Map showing the 1945 Olmsted Jr. trail plan. Many changes are due to the Theodore Roosevelt Memorial Bridge and the construction of the Theodore Roosevelt monument plaza, 1945. (NPS 854/80053)

north end of the TR Island parking lot and runs southward between the GWMP roadway and the shoreline. The heavily-used trail functions as a daily commuter route for many cyclists traveling into the city. It is also used by recreational bikers and pedestrians. To the north of the parking lot lies the trailhead of the Potomac Heritage Trail.

The asphalt paved parking area appears as two separate sections—the northern section is single loaded with parking on the west side of the drive lane, while the southern section is a double loaded parking bay. Total parking capacity is 102 automobiles, including six spaces allocated for Architectural Barriers Act (ABA)-compliant parking. A narrow two-way section of road connects the north and south parking areas. No parking is provided for recreation vehicles or buses. Parallel with the GWMP, the MVT runs through the site as an asphalt paved walk and bikeway (striped for separating use types) along the east side of the northern bay and then crosses over to the west side of the southern bay. The most direct walkway route to the island pedestrian bridge continues along the eastern edge of the southern parking bay and has a gravel surface.

At the northeast end of the parking, the MVT becomes the Potomac Heritage Trail. This narrow trail is gravel covered beneath the Rosslyn elevated walkway and transitions to tightly packed earth as it continues north paralleling the GWMP. The connection to this trail is not physically obvious nor well signed. Bikes are not allowed on the MVT.

Upon leaving the vicinity of the parking area, the MVT continues south where it passes over interconnected steel and wood bridges and splits. One leg continues south paralleling the parkway, while the other turns east and crosses the Potomac River via the TR Bridge. The bridge, MVT Bridge 31, is the subject of a condition assessment study being conducted by the Federal Highway Administration (FHWA). The study will evaluate the structural integrity of Bridge 31 and assess safety and circulation issues. This cultural landscape report will also consider issues associated with the bridge.

The deck of Bridge 31 is elevated between 30' and 40' above the ground and is constructed of steel supports with wood decking. Railings consist of metal vertical posts with chain railings. The intersection of the two routes is abrupt and poorly signed. Both legs of the trail have a sense of enclosure created by the dense vegetation on the sides of the path. The vegetation is primarily non-native and invasive. The surface wood decking is old and absorbs moisture from rain, snow, mist, and other moisture. Little sunlight penetrates the overhanging tree canopy, causing the decking to remain wet and slippery for long periods.

From the Virginia side, a pedestrian-only bridge provides the only sanctioned means of access to the island. Vehicular access to TR Island is prohibited except for park maintenance and operational needs. While visitors do access the island via watercraft, this is not an approved method of access. Once across the bridge on the island, four NPS trails are located within the park: Woods Trail, North Transverse Trail, Upland Trail, and Swamp Trail.

Many social trails have also been created over time. Social trails (also known as volunteer trails or desire paths/lines) are places where visitors have veered from the established trails and created unofficial trails. These trails are characterized by narrow, uneven paths where vegetation has been trampled. Some social trails are likely the result of people taking shortcuts between the wider main trails. Other social trails exist where trails were historically located. Most of these social trails can be found along the west and north shorelines, as well at the southern tip of the island. Social trails cause damage to island vegetation and any archeological resources that may lie beneath the trails.

Overall, circulation is in FAIR condition.

WOODS TRAIL



Figure 77. Woods Trail, 2016. (JMT)

This trail provides the most direct route from the island's pedestrian access bridge to the monument. The trail material is well-compacted gravel, which was slightly re-graded and improved in Spring of 2017. This short section of trail has a curvilinear alignment and a slight gain in elevation as it reaches the memorial plaza. As the trail rises, the monument is revealed to visitors; at first only the stone

monolith supporting the Roosevelt statue can be seen. Upon approach, the entire statue becomes visible.

NORTH TRANSVERSE TRAIL

The North Transverse Trail runs east to west at the northern end of TR Island. It is a broad, flat, relatively open trail with a well compacted gravel, road base type surface. The trail edges are vegetated with grass and other ground cover plant materials. Large mature trees also help delineate the trail boundaries (See Figure 78). The trail begins at the west shoreline adjacent to the historic causeway remnants beneath the remnants of an NPS service road. On the east, the trail terminates at the spit of rocks where a ferry wharf was historically located. Manhole covers and a water fountain are located within the North Transverse alignment.



Figure 78. Typical appearance of North Transverse trail, 2016. (JMT)

UPLAND TRAIL

The Upland Trail, shown in Figure 79, runs along the high ridge that runs north to south and separates the forest on the west from the marsh and swamp on the east. At the south end, the trail loops around the site of the former Mason House. This trail shares many of the same characteristics as the North Transverse Trail in terms of width, surface material, and overall feel.



Figure 79. Eroded condition of Upland Trail, 2016. (JMT)

SWAMP TRAIL, EARTH

The Earth Swamp Trail is a fairly broad, open walkway similar to the Upland and Woods Trails. The earthen trail tread is typical of the other island trails and runs on grade. It is a relatively level, well-compacted coarse gravel that has worn thin over the years in some areas, exposing compacted soil and larger aggregate remaining from the gravel tread. Tree and shrub plantings line both sides of the trail, at times providing an overhead canopy that shades walkers from the sun and gives a partial sense of enclosure. Along the trail are occasional breaks in vegetation where the tree canopy opens and allow sunlight to penetrate.

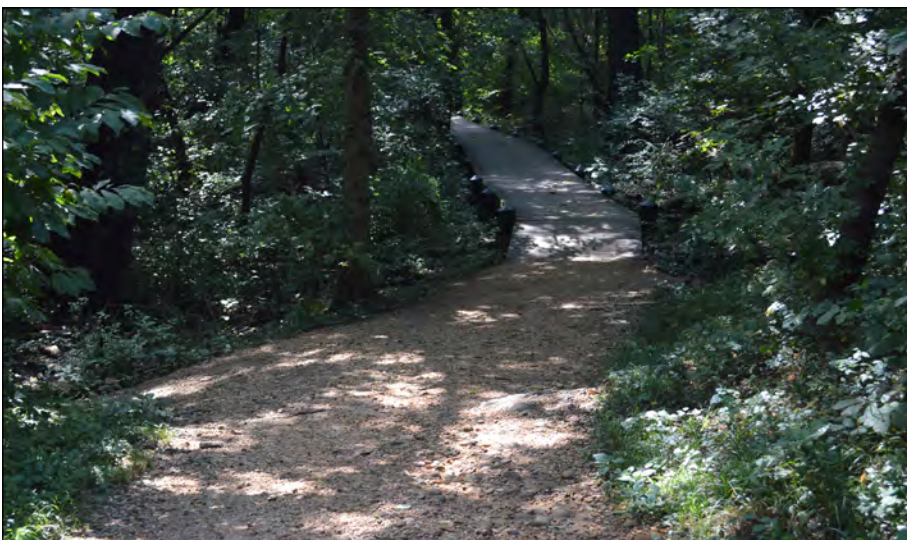


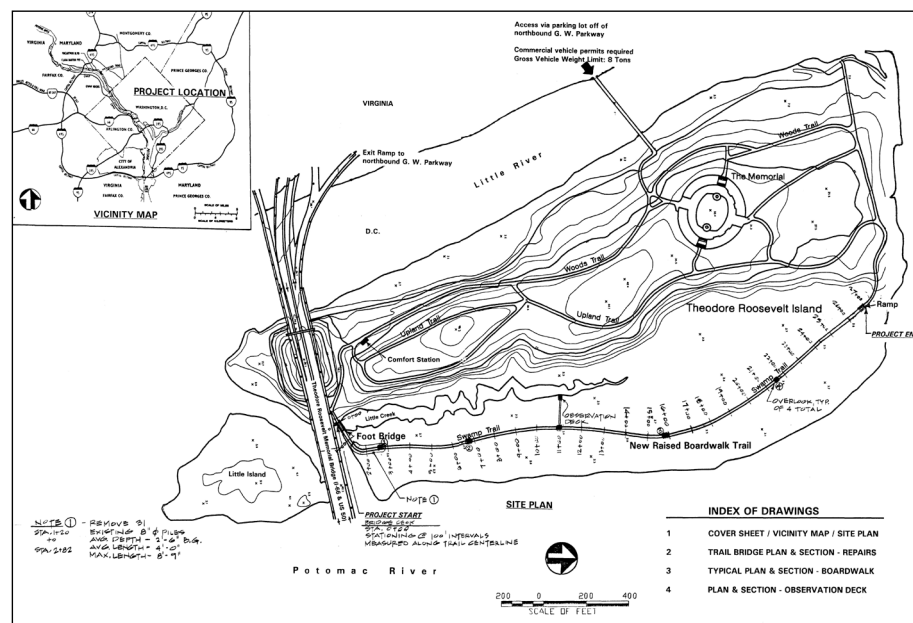
Figure 80. Swamp Trail as it transitions from earth to boardwalk, 2016. (JMT)

The trail forms a rough oval and circumscribes the island, incorporating the North Transverse Trail. As the trail turns southeast from the North Transverse Trail,

however, it narrows and becomes steeper as it descends to meet the northernmost edge of the Boardwalk Swamp Trail. The Earthen Swamp Trail also abuts the elevated Boardwalk Trail northeast of the TR Bridge.

SWAMP TRAIL, BOARDWALK

The elevated boardwalk section of the Swamp Trail is unique to the trails on TR Island. The trail runs primarily north to south with a small section running east to west and crossing an inlet on the southern portion of the island.



The Swamp Trail boardwalk is 8' in width and elevated above the ground and water level, approximately 3-4'. It is constructed of pressure treated wood under

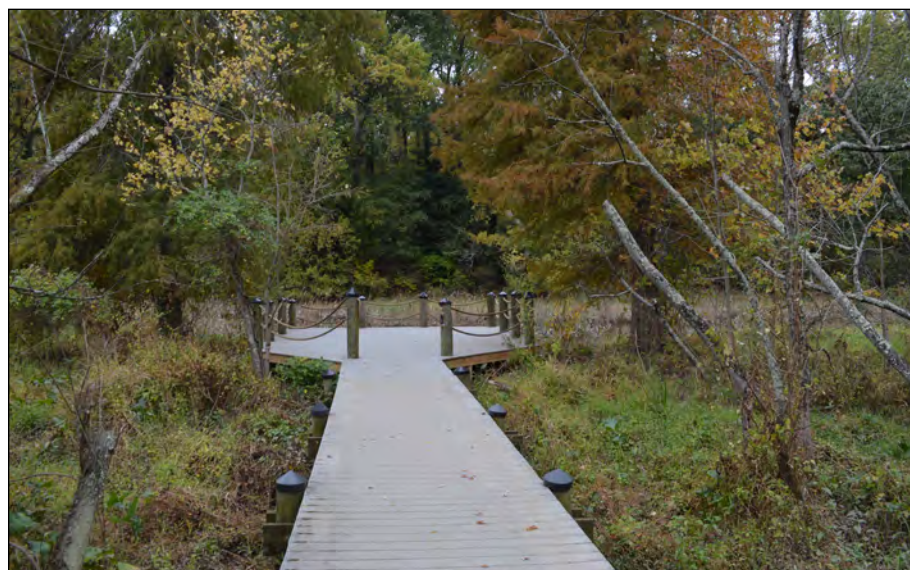


Figure 82. Observation platform projecting westerly into the wetland providing views of the vegetation and wildlife, 2016. (JMT)

framing and piers, with composite plastic wood decking, making it distinctly different from all other trails on the island. Patched areas feature pressure treated wood replacement decking. The boardwalk is edged with timber piers capped with plastic covers to minimize weather deterioration. Spread out along the boardwalk are trapezoidal turnouts that project symmetrically to either side of the trail to create octagonal platforms. The turnouts are bounded by timber and rope railings, many of which are deteriorating. These viewing or rest areas generally have at least once bench for visitors to sit. A short perpendicular section of boardwalk projects west from the main trail and leads to a viewing platform in the marsh area (see Figure 82).

OLMSTED WEST SHORELINE TRAIL

Branching off from the Swamp Trail between the memorial and the comfort station is a narrow length of informal trail, referred to in this report as the Olmsted West Shoreline Trail (OWST). In contrast to the NPS trails on the island, the OWST is much narrower, allowing only one person to walk abreast. The trail tread is compacted soil with the occasional exposed root or field stone (See Figure 83). Dense shrub plantings and the tree canopy provide a sense of partial enclosure.



Figure 83. OWST with stone retaining wall, 2016. (JMT)

SOCIAL TRAILS

The social trails found throughout the island are most likely the result of visitor exploration and shortcut creation: they often provide linkages between the island's main trails. Use has compacted the earthen surfaces, effectively institutionalizing many of the trails. Some of the trails that are now categorized as social trails were, at one point, formal, either as service or foot paths. Some social trails occur where the terrain is naturally well drained, while others occur in low shoreline areas subject to puddling and periodic inundation from the river.

Figure 84. Typical condition and character of social trails found throughout TR Island. Note the bare earth trail tread, irregular surface configuration, roots and branches scattered on the trail tread, and irregular trail width, 2016. (JMT)



WATER CIRCULATION

The Potomac River is a highly-trafficked waterway, used by a variety of watercraft for recreational and athletic pursuits. Boathouses along the eastern shoreline of the Potomac, such as Thompson’s Boat Center and Key Bridge Boathouse, offer kayak and stand-up paddle board rentals. Small and large motorized watercraft travel north and south on the Georgetown Channel as well. Little River is typically navigated only by kayaks and small motorized boats. While launching and docking are not sanctioned activities on the Virginia mainland, TR Island, or Little Island, people frequently dock in all locations.

BUILDINGS AND STRUCTURES

Buildings and Structures are defined to be those built three-dimensional elements comprised of such items as administrative/office buildings, houses, maintenance enclosures, garages, bridges, and memorials (Page 1998: 53).

THEODORE ROOSEVELT MEMORIAL

The TR Memorial is accessed by a circuitous trail from the pedestrian bridge however it is not universally accessible. The approaching trail has been aligned, horizontally and vertically, to provide a sense of intrigue and discovery as one approaches the memorial. The 17’-tall statue of Theodore Roosevelt slowly becomes visible upon approach (Figure 85).

Passing through the two outer rings of willow oaks, visitors then enter the formal setting of the memorial plaza. This description is adapted from the detailed description of the monument plaza from the National Register nomination (Fanning 2001: 7-8).



Figure 85. View from the Woods Trail approaching the memorial from the southwest, 2016. (JMT)

The large, slightly crowned oval plaza, 240' x 260', is paved with gray granite blocks set within a grid formed by strips of a lighter granite. The main axis runs south to north, terminating at Paul Manship's statue of Theodore Roosevelt. A cross-axis runs at right angles to the main axis, between two bridges which span the flanking moats. To either side along this cross-axis is a round pool surrounded by square granite curbing; in the center of each pool stands a large, almost hemispherical granite fountain basin supported on four granite balls, each of which bears the presidential seal in bas-relief. The plaza descends around the fountains in three low, curved steps, leading to a decomposed granite walk encircling the plaza area inside the moats.



Figure 86. View upon arrival at the memorial from the southwest, 2016. (JMT)

[illegible]

On the plaza are four raised planting beds, or parterres, one in each quadrant; molded granite curbing surrounds each bed, which are planted with boxwood shrubs (see Figure 91). Because the shrubs are overgrown, it is difficult to see the four monoliths from most areas of the plaza and impossible to read all at once.



Figure 91. Planting bed and stone benches in plaza, 2016. (JMT)

Sixteen granite benches are found within the plaza, adjacent to the plant beds. Eight benches are on the main axis of the plaza; four are placed on the cross axis in the direction of the fountains, and two are situated on each bridge. The benches are fabricated from a granite slab with rounded edges and supported with a pair of granite leg supports carved with a classical scroll pattern.

A wide decomposed granite walk encircles the plaza and is bound by two 40'-wide moats edged with low granite walls. The areas of moat near the four inscribed granite monolithic panels have raised planting beds with molded granite curbs. The raised beds are planted with a dwarf variety of boxwood shrubs.

Two bridges span the moats (on opposite sides of the plaza) leading to an unpaved circumferential trail of decomposed granite. The relatively short and fairly steep bridges are heavily detailed. At both ends of each bridge is a steep ramp formed of severely angled steps and paved in a fan pattern of granite blocks. On the sides of the bridges are solid granite balustrades that rise at the crown and terminate in plinths.

The main elements of the monument plaza are all fabricated from thick granite slabs that convey a strong sense of permanence and reflect traditional monument design. This may have been an attempt to symbolically highlight the importance of Roosevelt's presidency to the culture and people of the nation. Although in sharp contrast to its forest setting, the Memorial successfully blends into the island, in large part due to the contouring of the space and the double row of mature willow oaks that provide an effective transition to the forest vegetation.

COMFORT STATION

The existing comfort station is located at the southern end of the island and houses men's and women's toilet facilities. The original Olmstead Jr. plan called for the construction of the Comfort Station near the memorial plaza, however this was not realized. The Comfort Station was later constructed at its current location, approximately 1/3 mile from the Memorial Plaza towards the north end of the TRI. The restroom facility is open annually from April through September or October and is complete with running water and flush toilets. This one-story, wood frame building sits on a concrete slab foundation. It is faced with clapboard siding and is capped by a Dutch gable roof covered with asphalt shingles.

Women's and men's toilet rooms are located at either end of the building, flanking a central utility room. The interior walls are finished in painted plaster and tile; floors are tiled as well. Wood louvres in the gable ends provide ventilation for the structure. There is a central maintenance space that provides access to the water and waste pipes. The roof is drained by a system of gutters and downspouts. The building does not meet current ABA requirements.



Figure 92. Comfort station west elevation with adjacent drinking fountain, 2016. (JMT)



Figure 93. Comfort station southeast corner and east elevation showing access to men's room, 2016. (JMT)



Figure 94. Northeast corner of comfort station showing access to women's room; note the missing roof support pier, 2016. (JMT)

Figure 95. Interior wall, floor, and ceiling finishes, 2016. (JMT)



Figure 96. Recess for the trash receptacle and storage, 2016. (JMT)



Figure 97. The women's room (seen here) has two regular stalls and one accessible stall. The men's room has one regular and one accessible toilet stall, as well as two floor-mounted urinals, 2016. (JMT)



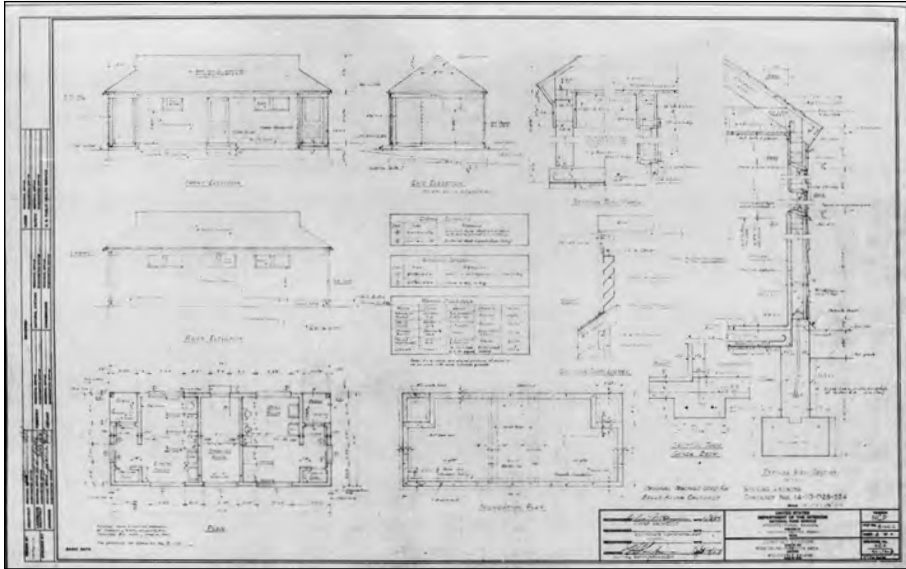


Figure 98. Original construction drawing of the comfort station, 1954. (NPS: 854/80073)



Figure 99. Missing roof support pier at entrance to women's room of comfort station, 2016. (JMT)



Figure 100. Damage to gutters, downspouts, and siding of comfort station, 2016. (JMT)

PEDESTRIAN BRIDGE

A concrete bridge connects the Virginia mainland to the island roughly at its midpoint. The bridge is a seven [span] pre-stressed concrete structure resting on reinforced concrete piers and abutments. Wing walls are stone faced. Six reinforced concrete single piers are 3' in diameter and support twin pre-stressed girders. The overall length is 491' with a maximum span of 72'. The concrete deck is 12.3' wide (Nolin, Kucher, and Wentzien 1994). Square wood balusters topped by wood handrails flank the bridge on either side. The bridge surface and balustrades show signs of weathering and vegetative growth. The bridge is not universally accessible.



Figure 101. Pedestrian bridge connecting the parking lot the TR Island, 2016. (JMT)

SHED ROOF STORAGE BUILDING

Adjacent to the Memorial sited at the edge of the forest is a small maintenance/storage building. This simple one-story, wood-frame, shed-roof structure houses interpretive materials used by interpretive staff and volunteers who conduct visitor services on TR Island. The structure is clad in prefinished wood panels and a wide, double wood door on the southwest elevation provides entry. The shed is located north of the memorial and highly visible from within the memorial plan. The Shed is in poor condition.



Figure 102. Storage building south elevation, 2016. (JMT)



Figure 103. Storage building northwest corner, 2016. (JMT)



Figure 104. Storage building roof fascia board showing peeling paint and wood rot, 2016. (JMT)



Figure 105. Water damage at the base of the storage building, 2016. (JMT)

STONE RETAINING WALLS

Portions of a stone retaining wall are located within the area of the former Mason estate. This retaining wall ran along the west edge of the outbuilding and well area. These remnants are overgrown with vegetation and are not clearly visible.

Two sections of dry laid stone retaining walls are located in the southern portion of the island (see Figure 106). In both locations, the walls appear to retain adjacent trails. The trail associated with southernmost retaining wall, however, has largely been obliterated by colonizing vegetation.

The stone wall adjacent to the OWST appears to be discontinuous; however, site investigation revealed that the original wall may have been a continuous structure of approximately 100' in length. The apparent discontinuity is likely the result of degradation due to aging and weathering. This wall functions to



Figure 106. Dry laid stone retaining wall on the south end of the island, 2016. (JMT)



Figure 107. Dry laid stone retaining wall on the south end of the island, 2016. (JMT)

retain an embankment of approximately 1' to 3' of elevation change from the trail tread down to the river shoreline. The southern wall is of similar length and is configured in a curvilinear alignment. It retains as an embankment of 4' to 5' in height.

These walls are heavily overgrown with vegetation, much of it poison ivy, and they have not been carefully examined nor their extent identified. The stone found in both retaining walls is Piedmont metamorphic rock typical of the region. The individual stones do not generally appear to be cut but some may have been manually shaped to make a tight-fitting wall. Of the two walls, the southern wall appears to be in better condition largely as a result of its more remote location and vegetative overgrowth. Both walls show signs of deterioration and decomposition, as shown in Figure 106 and Figure 107.

CONSTRUCTED WATER FEATURES

Two types of constructed water features exist on TR Island, both within the memorial plaza. There are two shallow round granite pools located on the east and west ends of the plaza. At the center of the pools stand a large, elliptical granite fountain basin supported by four structural steel columns, each of which is surrounded by a painted metal sphere designed to simulate stone (Figure 108 and Figure 109). Two large moats or reflecting pools are also located on both the east and west sides of the memorial plaza (Figure 110).

The constructed water features are in good condition with minor repairs needed on the moat and the fountain pedestals. Wildlife egress from the moats continues to be an issue as wildlife will access the moats and is then unable to exit causing multiple animal fatalities.



Figure 108. Northwest memorial fountain looking west, 2016. (JMT)



Figure 109. Fountain pedestal with presidential seal, 2016. (JMT)



Figure 110. View showing moat, stone panels, and bridge bounded by an allee of willow oaks. Plant beds situated between the monolithic panels contain a smaller variety of boxwood shrubs, 2016. (JMT).

VIEWS AND VISTAS

Views and vistas are the prospect created by a range of vision in the landscape, conferred by the composition of other landscape characteristics and associated features. Views and vistas are distinguished as follows (NPS 1998:10):

- Views are the expansive or panoramic prospect of a broad range of vision, which may be naturally occurring or deliberately contrived.
- Vistas are the controlled prospect of a discrete, linear range of vision, which is deliberately contrived.

Many historic and monumental buildings and structures are sited along or near the shores of the Potomac River, which serves as the gateway to the city. Views and vistas of the island from adjacent shorelines, monuments, and cultural institutions, and vice versa, are important components of the visitor experience.

TR Island's location in the middle of the Potomac River grants numerous opportunities for views and vistas in all directions, each unique depending on adjacent development and natural screening. Many of the views from the island outwards, however, are only visible from the shoreline, which is largely accessible only by social trails.

Historic views exist along the North Transverse Trail. From the causeway remnants at the west end, the view up and down the river, as well as to the Virginia side, is in good condition. At the location of the former ferry landing on the east end of the North Transverse Trail, similar views up and down the river, as well as across to Georgetown, are in good condition.



Figure 111. View of the Washington Harbour, 2016. (JMT).

Views farther south than the Kennedy Center are largely impeded by the TR Bridge. To take advantage of southern views today, visitors must pass under the TR Bridge and use social trails to reach the southern tip of the island. From there, the historic view to Little Island, Arlington Memorial Bridge, Mount Vernon

Memorial Highway, and more is visible. The Woods Trail leading from the Swamp Trail to the memorial plaza offers a vista to the TR Memorial upon approach.

Once within the plaza, its axial character directs views towards the oval fountains and beyond to the bridges spanning the moats, directing visitors' lines of sight out into the natural landscape beyond the plaza. The DC shoreline opposite TR Island is mostly low-scale and provides uninterrupted views of TR Island from Key Bridge at the north to the Arlington Memorial Bridge at the south. The Rock Creek Park trail jogs along Georgetown Waterfront Park, regularly used by pedestrians and bicyclists. From these places, broad views up and down the Potomac and across to TR Island and Virginia beyond highlight the scenic and naturalistic qualities of the island. The Washington Harbour project (see Figure 111) and the Thompson Boat Center collectively house commercial offices, restaurants, and recreational facilities. At the Thompson Boat Center, people can rent kayaks, canoes, and rowing shells. Once on the water, the views and vistas once reserved for ferry riders are now available to the boat users.

There are several locations offering excellent views of TR Island and its environs. These include the roof of the Watergate Hotel and residences, roof terrace of the Kennedy Center, Lincoln Memorial, and observation deck of the Washington Monument. However, due to the dense island vegetation, almost nothing of the island's interior is visible.



Figure 112. View of TR Island from the roof terrace of the Kennedy Center, 2016. (JMT).

Views and vistas are available from numerous locations along the Virginia portion of the GWMP, although the east side of the site has a dense mass of tree and shrub vegetation visually separating the site from the surrounding environment. Most views to Little River are partially screened and framed by the trees.

Views and vistas to the Virginia portion of the park are primarily from the GWMP, Little River (for boat users), TR Island, the Potomac River and, to a lesser degree, the Georgetown waterfront, and highway bridges located both north and south of the park. However, due to the vegetation lining the shoreline and the large trees in the lawn area west of the parking lot, views into the site tend to be limited.

The best views are from the pedestrian bridge to the island. From this vantage point, views up and down the Virginia shoreline with high rise office and apartment buildings projecting above provide a strong reminder of the urban context of TR Island. Other views are of TR Island, the Georgetown shoreline with its dense urban development, and the bridges north and south of the site.

There are breaks in the mature vegetation lining the boardwalk during the late fall and winter, allowing for glimpses of the Georgetown waterfront, the John F. Kennedy Center for the Performing Arts, and the Washington Monument.

TOPOGRAPHY

The topography of the approximately 90-acre TR Island (main island) rises from river water to a high point elevation of approximately 36' above Mean Sea Level. The highest ground on the island is formed by a central ridge that runs north-south for much of the length of the western two-thirds of the island. In total, the island has approximately 2.5 miles of shoreline. The highest portion of the island is the site on which the TR Memorial was constructed. The ridge broadens in the north and occupies much of the island's width. Moving southward, the ridge narrows and eventually terminates somewhat steeply at the southern shoreline. Along the northern shore are a number of bedrocks of metamorphic Piedmont rock, reflecting the island's location on the Piedmont Plateau.

The eastern third of the island is a low wetland with sections of open water. Due to the low elevation of this area, it is evident that frequents periods of inundation occur. The island's shoreline is subject to the tidal actions of the Potomac River.



Figure 113. Ridge of North Plateau at left seen from Swamp Trail boardwalk, looking north, 2016. (JMT).

To the south of TR Island across a narrow waterway lies Little Island. Little Island is approximately six acres in size and appears to be relatively flat, rising only about 10' above water level at its highest point. Little Island was not accessible and was not physically investigated.

The topography throughout the Virginia area is relatively flat. Water drains from north to south with a low point on the east side of the northern parking bay. A culvert with a stone headwall facing the river allows water to drain away from the paved areas. The grade rises up to the south, providing a smooth access to the pedestrian bridge across to TR Island. There are a few drainage structures associated with the parking area that collect and remove water from the site. These include inlets and at least one culvert with a stone headwall. All drainage water appears to daylight into Little River without the benefit of any type of oil water separator.

SMALL SCALE FEATURES

There are a variety of small-scale elements found along the social trails, particularly in the northern and southern sections of the island. These elements not only provide direct evidence of the island's history, but they serve as interesting discovery elements for visitors venturing off the primary trails. Interpretive signs are installed at various locations along the boardwalk, describing the flora and fauna. The signs are 24" x 18" etched metal, constructed of weather resistant materials and typically include a small graphic of the discussion topic. Text is written in both English and Spanish. Originally installed in the late 1960s, the signs are outdated and in poor condition. Former wood trail markers are also scattered amongst the island and are out of date.

Three historic diamond-shaped metal signs atop metal posts are located on the eastern shore of the island. These signs served as aids to navigation as either range markers or dayboards. They feature a bold vertical line down the middle (Figure 114). They are set into concrete bases and are severely deteriorated.



Figure 114. Historic diamond-shaped metal signs, 2016. (JMT).

Three National Geodetic Survey markers were identified on the island (Figure 115). The National Geodetic Survey map indicates that two additional markers are located in the vicinity of the island, but they were not found. The three markers are convex copper survey disks with the marker “Public Buildings & Public Parks.” They are standard United States Elevation Disks (U.S.E.D.s) monumented in 1932. The two on the north end of the island are horizontal control marks set in cast-iron pipes filled with concrete; the disk on the south end of the island is a topographic station bench mark leaded into a 1-inch drill hole in the top of a large boulder (National Geodetic Survey Data Explorer).



Figure 115. National Geodetic Survey marker, 2016. (JMT).

Manhole covers are scattered throughout the island and two water fountains are also located on the island.

On the Virginia mainland, informational and regulatory signs are placed throughout the parking area. A newly-installed bicycle rack is located to the north of the pedestrian bridge approach.

AFFECTED ENVIRONMENT

This section describes the resources or conditions potentially impacted by the treatment alternatives presented in Chapter 6 of this CLR/EA. According to the National Environmental Policy Act (NEPA) the “affected environment” is the existing biological, physical, and social conditions of an area that are subject to change, both directly, and indirectly as a result of a proposed human action. Any resources that are not likely to be affected by the treatment alternatives are not part of the affected environment. See Chapter 1 for clarification of why each resource topic was either retained for further analysis or dismissed.

This section is organized by resource topic and includes: Cultural Resources, Wetlands, Views and Vistas, and Visitor Experience. Where applicable and to avoid redundancy, reference to previous sections of this CLR/EA will be made when describing the affected environment resource topics.

CULTURAL RESOURCES

Cultural resources include archeological resources, built resources, and landscape elements.

TR Island is listed on the NRHP as a historic district with 27 contributing resources. It was listed in 1967, and the nomination was updated in 2001 to provide a thorough description and historic overview of the park. Contributing elements include landscape features or areas, structures, sites, and objects. Previous sections of this chapter provide further details on cultural resources in the project area (beginning on Page 3-15). The GWMP, located on the Virginia side of the project area, is also a Cultural Resource and is listed in the NRHP.

WETLANDS

The USFWS maintains a national database of wetland resources called the National Wetlands Inventory (NWI). NWI maps depict the general location, type, and configuration of wetlands that can be identified through conventional aerial photo interpretation techniques. These resources do not identify the jurisdictional limits of protected wetland resources but rather are provided to aid in natural resource planning and conservation.

No formal wetland delineation has been completed at TR Island. Therefore, wetland types and general locations are based off the NWI maps and site visit observations. The NWI map for TR Island shows four main wetland types within the project area:

- PFO1S – Palustrine, Forested, Broad-Leaved, Deciduous, Temporary-Tidal wetlands. This wetland type is located at the northeastern tip of TR Island and extends south, following the eastern shore, to the southeastern

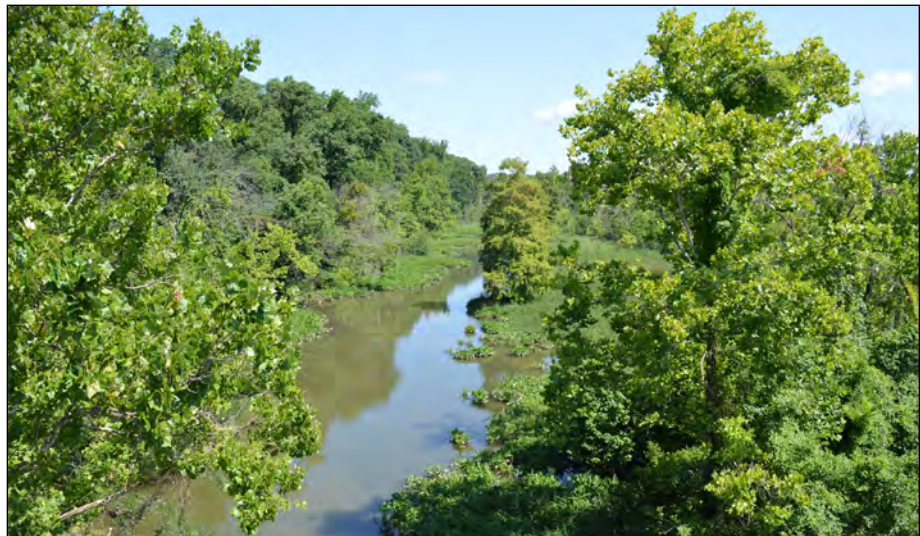


Figure 116. Plateau to left, marsh and swamp to right, looking north from TR Bridge, 2017. (JMT).

tip. PFO1S wetlands are also located at the northwest coast of the island and extends to the south, with some non-wetland areas between the wetland complexes.

- PFO1R – Palustrine, Forested, Broad-Leaved, Deciduous, Seasonal-Tidal wetlands. This wetland type is located just south of the northern tip of the island, west of, and adjacent to the PFO1S wetlands, and extends to the southern end of the island. The southwest corner of the island is also classified as a PFO1R as is Little Island.
- PEM1R – Palustrine, Emergent, Persistent, Seasonal-Tidal wetlands. This wetland type is in the south-central section of the island, west of, and adjacent to the PFO1R wetlands, and extends to the southeast/south-central tip of the island.
- Riverine wetlands – to include R1UBV (Riverine, Tidal, Unconsolidated Bottom, Permanent-Tidal), R1UBQ (no description available, but Riverine, Tidal), and R5UB (Riverine, Unknown Perennial, Unconsolidated Bottom, Permanently Flooded). The majority of the Potomac River is noted as an R1UBV, with pockets of R1USQ along the southern and northeastern shorelines of TR Island, and long the southern shoreline of Arlington. R5UB is located across the Potomac River on the Georgetown shoreline.

See Map 4: Wetlands.

VIEWS AND VISTAS

TR Island offers many views and vistas both to the island from neighboring Arlington to the west, Georgetown to the east, and the surrounding Potomac River; and from the island to Arlington, Georgetown, and the Potomac, as well as within the island itself. Most of the views and vistas from the island to neighboring communities are through unofficial viewpoints along social trails at the island, and the pedestrian bridge. Views and vistas are described in detail previously in this chapter (Chapter 3: Existing Conditions and Affected Environment) .

VISITOR EXPERIENCE

TR Island is approximately 90 acres and provides visitors with opportunities for recreation; reflecting and relaxing along the open areas provided at the memorial plaza; bird and wildlife viewing/watching; as well as enjoying and enhancing one's understanding of the various historic attributes of TR Island. In addition, NPS-run programs are available such as guided tours, and activity guides for children online that they can bring with them and participate in to enhance their understanding and enjoyment of TR Island. The primary visitor experience at the park is centered around the memorial plaza and recreational sports such as hiking and running. In addition, the GWMP and the associated MVT provide additional hiking, cycling and running opportunities. The trail stretches 18 miles from Mount Vernon to TR Island.



CHAPTER 4: ANALYSIS AND EVALUATION

CHAPTER 4: ANALYSIS AND EVALUATION

The following section provides an analysis and evaluation of the defining landscape characteristics that still exist at TR Island and describes the features that should be preserved or restored. The National Register nomination (Fanning 2001), HALS recordation (Pliska 2008), and Cultural Landscape Inventory (Moss 2010) evaluated the historic character of the island landscape by examining the site's defining characteristics. These reports, however, did not include evaluation of the associated Virginia mainland characteristics. This updated analysis of landscape characteristics, both of TR Island and the Virginia portion of the park, through 1979 provides the most current and complete foundation for this cultural landscape report.

The landscape analysis compares the existing conditions to the historic conditions, and identifies landscape characteristics that retain integrity and contribute to the significance of the landscape. The analysis evaluates the significance and integrity of the cultural landscape by assessing each characteristic within the context of the landscape as a whole. This is accomplished by evaluating the 2016 conditions against the condition of the landscape at the appropriate time period. The analysis and evaluation were undertaken to understand the cultural landscape, to document individual features that contribute to its significance, and to determine those qualities that contribute to its historic character.

HISTORIC SIGNIFICANCE SUMMARY

TR Island is significant primarily as a national memorial to Theodore Roosevelt and his devotion to the conservation of America's natural resources. The site has a rich history, however, and is significant for several additional aspects. Throughout its evolution, topography and geology have always mandated settlement patterns on and the development of the island landscape. The significance section has been adapted from the National Register nomination (Fanning 2001).

HISTORIC DESIGNED LANDSCAPE AND PRESIDENTIAL MEMORIAL

TR Island is significant as a cultural landscape designed by famed landscape architect Frederick Law Olmsted, Jr. and his associate, Henry V. Hubbard. It is an important addition to the landscape setting of the National Mall as one of the final—and integral—portions of the plan for the comprehensive development of a regional park system for Washington, DC to be completed. The comprehensive

Cover photo caption: Olmsted Bros.
Plan for TR Island, 1945. (NPS)

plan was produced in 1902 by the Senate Park Commission (popularly known as the McMillan Commission), of which Olmsted was the landscape architect member. TR Island represents one of the most complete expressions of Olmsted's ideals on scenic preservation through his attempt to recreate the island's presumed former appearance to facilitate its natural evolution to a stable, "climax" forest (Fanning 2001: 8-29).

The memorial plaza on the island is also important as a collaborative work of architect Eric Gugler and sculptor Paul Manship. It represents their development of a modern idiom of an established type of presidential memorial, and forms a link between such standard Beaux-Arts monuments as the Lincoln Memorial and contemporary memorial designs, such as the Franklin Delano Roosevelt Memorial (Fanning 2001: 8-29, 30).

The island is also important as the national presidential memorial commemorating Theodore Roosevelt, emphasizing his role as a leader in national conservation policy. Both the island itself, designed as a representative native woodland, and the architectural monument located on its northern part constitute the Theodore Roosevelt Memorial today. TR Island is unique among presidential memorials in its commemoration of a specific area of presidential achievement and in its development primarily as a living landscape memorial (Fanning 2001: 8-29, 30).

This qualifies TR Island for significance under National Register Criterion C: the property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction. Criteria Consideration F is also met: A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own historical significance. TR Island is also potentially eligible under Criterion D, for its potential to yield significant information through future investigations (archeology).

PREVIOUS HISTORIC EVENTS

TR Island played a significant role in the colonial and early federal period of Georgetown and Washington, DC. It served as a major link in an important transportation route beginning in 1748 with the establishment of Mason's Ferry, one of the earliest colonial routes directly connecting Georgetown with Northern Virginia. In the 1790s, local civic and business leader John Mason developed one of the largest and most elaborate estates within the city's boundaries on the island, and added a causeway across the Little River to the Virginia shore in 1807.

Remnants of Mason's estate, as well as the causeway, ferry wharves, and the historic road that connected them, still exist.

The island was also the location for a variety of Union Army activities during the Civil War: the historic road and ferry served as a transportation route for troop movements, and barracks and training grounds were constructed on the island. Most importantly, the barracks sheltered the 1st USCT, the first regiment of black soldiers to be formally mustered into federal service.

The site has at least two important African American connections. During John Mason's tenure, his estate was almost certainly run by slave labor during the Civil War and the 1st USCT encamped there for a brief time. TR Island is one of the very few remaining sites in the country with any significant USCT association.

These historical associations qualify TR Island for significance under NR Criterion A: A property associated with events that have made a significant contribution to the broad patterns of our history. Additionally, TR Island is significant under Criterion D: a property that has yielded, or may be likely to yield, information important in prehistory or history. With the exception of the marsh and swamp, the island possesses the likelihood of having a significant number of archeological sites from nearly all periods of significance.

HISTORIC PERIODS OF SIGNIFICANCE

AMERICAN INDIAN PERIOD (TO 1717)

Archeological evidence shows that the island was in use by American Indian peoples from prehistory until the early 18th century. The fishing village of Namoraughquend (meaning "place where fish are caught") may have been located on the island. Namoraughquend was settled by a tribal grouping of Piscataway people, known alternately as Nacotchtanke, Necostin, or Anacostin, from which the first name of the island, Analostan, derived. Site excavations in 1967 uncovered large quantities of pottery sherds, projectile points, animal bones, and similar artifacts, giving tangible proof of a substantial, and most likely long-lived, American Indian presence on the island (Sprouse 1967).

MASON SETTLEMENT (1748-1833)

In 1717, George Mason III acquired the island from the Hammersley family. Upon his death in 1735, his property holdings (including TRI) transferred to his eldest son, George Mason IV of Gunston Hall. George Mason established a ferry on the island in 1748, which provided the first direct connection between Northern Virginia and Georgetown, facilitating trade and promoting the success of the

young town of Georgetown and, later, the developing nation's capital founded in 1790: Washington, DC. George Mason IV's son, John, developed the island as a plantation estate with a large Classical Revival-style mansion, also named Analostan. He also built a causeway connecting the northwest corner of the island with the Virginia coast, further facilitating access to and from Georgetown. The alternate historical name, Mason's Island, stems from this association.

CIVIL WAR OCCUPATION (1861-1865)

During the Civil War, the island supported a variety of functions. Union Army activities took place on the island throughout the war, including use of the historic north transverse road as a transportation route for the movement of troops. For a short period in the summer of 1863, the island served as the site of barracks and training grounds for the 1st USCT, a regiment composed of free black men and escaped slaves. The island is one of only a few intact sites in the nation that retains a USCT connection. After army troops vacated the island in the spring of 1864, it was turned over for use as a temporary refugee camp to serve the increasing numbers of black refugees arriving in Washington, DC. It functioned as a freedmen's camp until June of 1865.

PRESIDENTIAL MEMORIAL (1931-1979)

Island as Memorial: The Olmsted Brothers and Civilian Conservation Corps (1931-1938)

Following a long period of transient ownership, short-term tenancy, and disuse, the RMA purchased the island in 1931 as a national memorial to the former president. The following year the RMA gave the island to the federal government, but maintained planting and development rights. From 1932-47 the RMA retained renowned landscape architect Frederick Law Olmsted, Jr. to replant the island as a planned wilderness "to be preserved as nearly as possible as in its natural state" (House Approves Analostan Plan 1932). This concept of designed nature forced people to rethink the human relationship with the natural world, pushing them to examine what truly constitutes nature. Less abstractly, the planting plan, carried out by CCC workers represents one of the most complete expressions of Olmsted's ideals on scenic preservation through his attempt to recreate the island's presumed former appearance so that it could continue its natural evolution to a stable, "climax" forest.

Designed Memorial: Eric Gugler and Paul Manship (1960-1979)

The monument plaza itself, completed in 1967, is important as a collaborative work of architect Eric Gugler and sculptor Paul Manship. It represents their development of a modern idiom of an established type of presidential memorial, and forms a link between such standard Beaux-Arts monuments as the Lincoln

Memorial and contemporary memorial designs such as the Franklin Delano Roosevelt Memorial. The idea for a pedestrian bridge that provides access to the island from Virginia was developed by Olmsted in the 1930s but was only completed in 1979.

INTEGRITY

The cultural landscape of TR Island retains integrity of location, design, setting, materials, workmanship, feeling, and association in its totality as a resource. In addition, each specific landscape characteristic, as evaluated under each Period of Significance, retains integrity specific to that Period of Significance. The seven aspects of integrity, as defined by the National Park Service, are:

Location: The place where the historic property was constructed or the place where the historic event took place. Integrity of location refers to whether the property has been moved or relocated since its construction. TR Island has integrity of location. Although natural and human forces have led to changes in the size of the island, the location of the island has remained constant.

Design: The composition of elements that constitute the form, plan, space, structure, and style of a property. The island has integrity of design relating to the Presidential Memorial period of significance (1931-1979). This is evident in the design intent of both the living environment and the built memorial, which are still readily discernible.

Setting: The physical environment of a historic property that illustrates the character of the place. Integrity of setting remains when the surroundings have not been subjected to radical change. The Island retains its integrity of setting on the Island, however portions of the setting have been compromised by the surrounding development. According to the National Register Nomination: “The setting to the west, along the Virginia shore, had some commercial development in the 1930s, which has since been removed for the George Washington Memorial Parkway; the setting to the east has been changed, with new park, commercial, and residential development along the Georgetown shore. The setting has been compromised by the construction of the Theodore Roosevelt Bridge and by now being in the flight path of planes departing from and arriving at National Airport” (Fanning 2001: 8-30).

Materials: The physical elements of a particular period, including construction materials, paving, plants and other landscape features. Integrity of materials determines whether or not an authentic historic resource still exists. The original

species that Olmsted used to create the character of vegetation on the island, and the materials used to build the monument still exist today. Integrity of material on site exists and relates to the 1931-1979 period of significance.

Workmanship: The physical evidence of the crafts of a particular culture or people during any given period of history. The vegetation on the island primarily derives from the Olmsted planting plan and the workmanship that went into the construction of the plaza is still extant in the modern landscape.

Feeling: The quality that a historic property has in evoking the aesthetic or historic sense of a past period of time. Although it is itself intangible, feeling is dependent upon the significant physical characteristics that convey a property's historic qualities. "The island possesses the atmosphere of a primeval native woodland, mysterious, wild, and remote" (Fanning 2001: 8-30). The feeling of grandeur, used to express significance on a presidential scale, is evident upon entering the plaza area and it is unlike the feeling of wildness that can be felt upon the rest of the island.

Association: The direct link between a property and the event or person for which the property is significant. The site maintains its association with Theodore Roosevelt as the conservationist president.

LANDSCAPE CHARACTERISTICS: ANALYSIS AND EVALUATION

ARCHEOLOGY AND ARCHEOLOGICAL SITES

Limited archeological investigations have been undertaken on TR Island; however, the history of the island clearly illustrate the significance of archeology and archeological sites to TR Island and the Periods of Significance.

American Indian occupation at TR Island was very likely, due to its location. It lies at the intersection of the Coastal Plain and Piedmont ecozones, which offers a wide variety of flora and fauna from both provinces (Cissna 1990: 7). Evidence from the adjacent Virginia shoreline indicates that there was dense, extended prehistoric occupation along the Potomac River (Bromberg 1988: 29). According to previous documentation for the island, two prehistoric sites were previously identified on the island; however, neither is well documented or recorded (Cissna 1990: 8).

Archeological data pertaining to the Mason period (1748-1833) is only slightly more extensive than that of the pre-1717 era. Structures of uncertain origin in

the vicinity of the Mason Estate were extant as late as the 1930s. It has been conjectured that these buildings were part of the original estate, or perhaps remained from the Civil War era (Pliska 2008: 132).

Archeological investigations on the island have focused largely on the Mason House; however, much of the work was done randomly, under considerable time constraints, and by groups untrained in proper archeological methodologies and protocols (Fanning 2001: 16). Consequently, many questions remain as to the exact size, functions, and historical contents of the estate's various structures. The excerpt below from the TR Island HALS study describes the dearth of information regarding the archeological investigations of the Mason House, as well as other archeological sites on the island:

Archeological research on the Mason mansion, DC site 51NW19, is, if anything, even less complete than that of the island's two prehistoric sites. As Olmsted and the RMA gave NPS staff little time to react to the pending demolition of the surviving above-ground ruins, a hasty twelve week excavation was undertaken immediately prior to this work during the summer of 1936 (Pliska 2008: 132).

According to the archeological report prepared by Stuart Barnette in 1937, the full Mason Estate is believed to have consisted of the main house and several outbuildings, including three "dependencies," which housed quarters or an office, general storage, fuel storage, and an ice house, as shown in the Plot Plan and Survey Grid in Figure 117. A well, retaining walls, and walks were

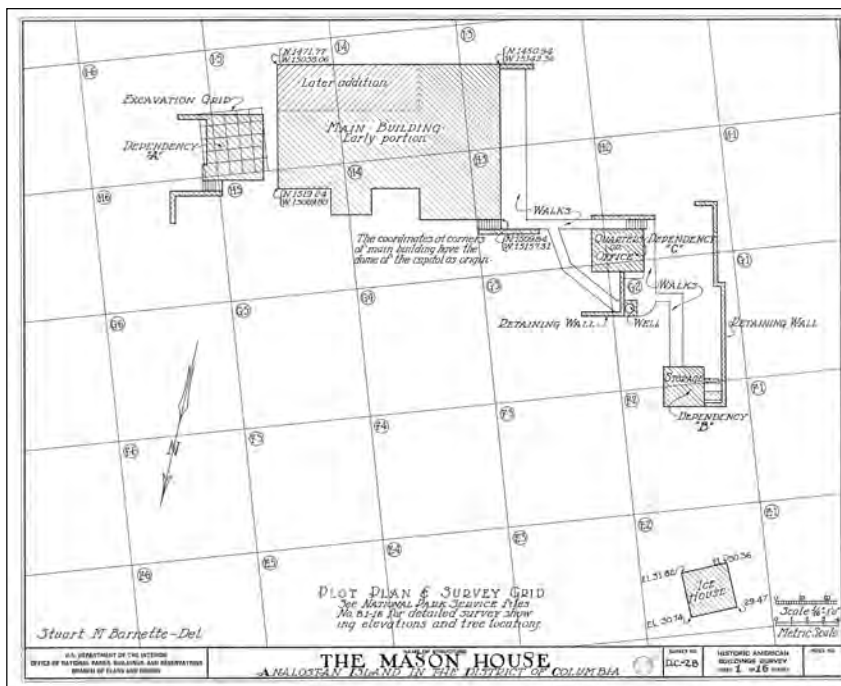


Figure 117. Plot plan and survey grid showing the layout of the Mason House and associated outbuildings, 1936. (Barnetts: sheet 1)

also documented. The true function of each outbuilding, however, could not be definitively determined due to the small quantity of artifacts excavated. Additionally, the few artifacts discovered during at that time “were reburied. . .(sic) in a concrete vault. . .on site” of unknown location (Fanning 2001: 116).

Attempts have been made to survey the property using metal detectors, but no artifacts of any significance were located; only scattered nails and tins. A later study completed in 1970 by a class in the American Studies Program of the Smithsonian Institution revealed a collection of artifacts including household items such as china and glassware. According to Historian Mary E. Curry:

A great variety of objects was discovered. Fragments of an earthenware plate made in Alexandria by Henry Piercy between 1790 and 1800 were found. A Mediterranean import of earthenware with a yellowish-green glaze, a two pronged fork and one half of its bone handle, and many fragments of pearlware, creamware, porcelain, nails, glass, and stoneware were uncovered. One stoneware fragment had what may be an “M” on it. The artifacts date from the late 18th Century to the middle 19th Century. (Curry 1973: 32)

A selected inventory of excavated items was produced when 65 artifacts were loaned to George Mason IV’s Gunston Hall for a temporary exhibit in 1971 (McNulty 1970). These artifacts remain in the collection of the Smithsonian Institution today (Pliska 2008: 134).

As described above, the estate and its associated buildings appear to have been almost completely demolished, with one exception (the Ice House Ruins).

There are no formally registered archeological sites dating to the Civil War on TR Island. However, limited archeological investigations by NPS staff since 2008 have encountered material cultural dating to this Period of Significance. Additionally, historical data, such as historic maps and photographs, provide further clues regarding the location of the Civil War encampment and associated activities.(as illustrated in Figure 118).

As described in Chapter 2, Site History, the northwest shoreline was the location of a causeway connecting the island to the Virginia mainland during the Mason era and again during the 1950s and 1960s when a service road was built to facilitate access for construction of the TR Memorial.

This area has likely remained devoid of vegetation as a result of the manner in which the site was left when the causeway was demolished after completion of the memorial. The causeway remnants from the 1950s are in poor condition, and



Figure 118. "Washington, D.C. Guards at ferry landing on Mason's Island examining a pass," 1861-1865. (Library of Congress cwpb-00930)

any remains of the causeway constructed by Mason in the 19th century, while not visible, may be intact beneath the NPS service road slab remnants.

After demolition of the NPS service road, the site began experiencing erosion, resulting in the bare earth seen today. Visitor use likely contributes to this site's current condition, as it is a popular spot for people to sit by the river, fish, and watch kayakers and other boaters. It is also a convenient place for boaters to land on the island. The survival of these features is threatened by weathering, vegetation root growth, and ongoing visitor use.

Ice House Ruins

The Ice House ruins are the only partially extant outbuilding from the Mason Settlement Period of Significance. Little precise information is known about the ice house ruins, other than it is likely the foundation and/or walls from an outbuilding of the main house that was used for ice storage. This feature is in fair condition. It has undergone some deterioration since the time of its use. Continued weathering and encroachment by plant roots may eventually result in the complete loss of integrity in the walls.

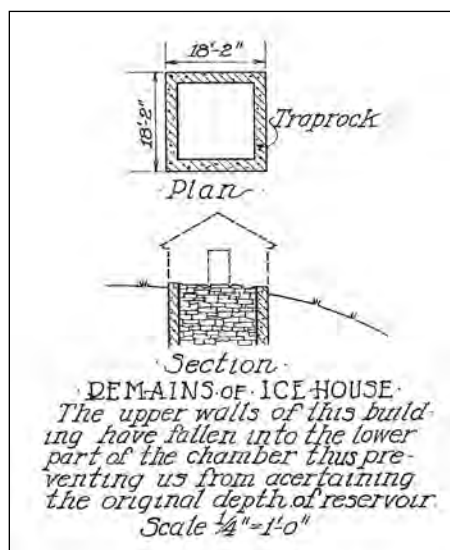


Figure 119. Plan and section of ice house, 1936. (HABS DC-28-14)

Causeway Remnants

As previously noted, the northwest shoreline of TR Island was the location of a causeway connecting the island to the Virginia mainland during the Mason era and again during the 1950s and 1960s when construction access was needed for work on the TR Memorial (Figure 120-Figure 121). The causeway from the 1950s is in poor condition. Remains of the 1950s causeway are extant on the island. Archeology work conducted for the Arlington Boathouse project suggests that evidence of mined rocks and bounders in Little River could be remnants of the causeway. Additionally, a deep compacted layer within the terrestrial fill on the Virginia shoreline may also be evidence.

Figure 120. Two women seated on causeway, 1906. (American Geographical Society Library, <http://collections.lib.uwm.edu/digital/collection/agsnorth/id/3215>)



Figure 121. Remnants of causeway beneath NPS concrete road looking north, 2016.



Ferry Landing Ruins

As part of the infrastructure for the historic ferries on the island, a natural rock outcrop was used as a wharf or docking structure. Ferry use was evident during Mason's time. Several ferry landings were constructed along the shoreline during the Civil War. The images in Figure 122 and Figure 123 depict the rock outcrop at the northeast corner of the island as it is seen today and during the Civil War period.



Figure 122. "Washington, D.C. Georgetown ferry-boat carrying wagons, and Aqueduct bridge beyond, from rocks on Mason's Island," 1860-1865. (Library of Congress cwpb-00932)



Figure 123. Spit of rocks, looking northwest, 2016. Matthew Virta, NPS.

Figure 124. Stone and wood ruins of wharf looking southwest from southwest point of island, 1961. (Historical Society of Washington)



This location was also used in the 1950s for an NPS ferry landing. The concrete slab and metal remnants of this landing, from the Presidential Memorial period, are partially visible above and below the water line.

Underwater investigation is necessary to determine the dates of the ruins at the rock outcropping.

The tidal action of the river causes erosion and contributes to the constant wet/dry condition of the elements. These conditions, along with sun exposure, will hasten the loss of this contributing feature.

Shipwrecks

The dates of the approximately four shipwrecks along the north shore are unknown; however, it is likely that at least one dates to the Mason Settlement Period of Significance.

A 1932 survey located the wreckage of six additional boats or scows off the island's eastern shore. The dates of the shipwrecks are unknown; however, it is possible that one or more date to the Civil War Occupation and Presidential Memorial Periods of Significance.

Stone Wharf

A 1932 survey located the remnants of a stone wharf on the southwest side of the island, evidenced in photographs and maps from the 19th and 20th centuries.

Contributing Archeology and Archeological Sites by Period of Significance***American Indian Period (to 1717)***

- Two prehistoric sites

Mason Settlement (1748-1833)

- Mansion Ruins
- Ice House
- Causeway remnants
- Ferry Landing Ruins
- Shipwrecks

Civil War Occupation (1861-1865)

- Ferry Landing Ruins
- Shipwrecks

Presidential Memorial (1931-1979)

- Service road remnants
- Shipwrecks



Figure 125. Flooding on TR Island, March 1936. (Todd Aerial Mapping Service via Olmsted Archive, Frederick Law Olmsted NHS)

Significance and Integrity of Archeology and Archeological Sites

The known presence of archeological sites – beginning with the pre-1717 Period of Significance and extending to the Presidential Memorial period – illustrate the significance of the archeological record at TR Island. The archeological sites have the potential to contribute significantly to our understanding of each period of significance on the Island. The unknown (potential) archeological sites retain integrity of materials, workmanship, design, setting, feeling, association, and location until proven otherwise through documentation and/or archeological excavations.

The documentation of archeological resources, and the preservation of those resources, is key to the successful rehabilitation of TR Island. At the present time, certain extant visible historical features lie unprotected and continue to deteriorate. A conservation plan, including archeological investigation, is critical. NPS will be conducting an archeological overview and assessment of the island starting in late 2018.

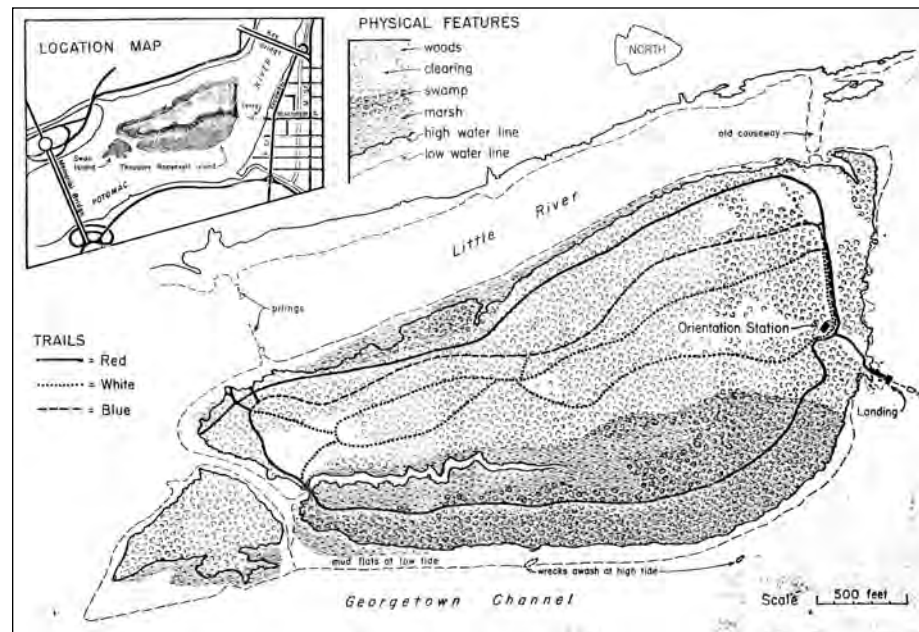


Figure 126. 1953 Map showing physical features of TR Island. (NPS)

NATURAL SYSTEMS AND FEATURES

Natural Systems and Features are those aspects of the natural environment that have influenced the design and development of TR Island. Perhaps most significant to TR Island is the Potomac River, which creates the overall framework for the island, affecting the formation, evolution, and use of the island throughout its Periods of Significance. The river continues to affect the island today with the increased concerns regarding climate change and sea-level rise.

Other natural features and systems include the vegetative zones that are present on the island, such as the deciduous forest and the marsh/swamp areas. The overall geomorphologic foundation of the island, the geology and hydrology, the climate, fauna, and the ecology also constitute natural systems.

Coastal marshes and interior swamps, as found on TR Island, are not uncommon in this ecosystem. Soils of the island are sandy with some areas of heavy clay to gravel. Animals seen on the island include white tailed deer, squirrels, and rabbits. It is also likely home to a number of other ground-dwelling rodents. This area is also rich in birdlife, especially within the Marsh and Swamp LCA, which is home to herons, egrets, ducks and other water fowl, dragon flies, and other insects associated with wetland environments.

Contributing Natural Systems and Features by Period of Significance

The natural systems—aside from the vegetation, which is discussed separately—are consistent across the Periods of Significant for the island. While minor changes have occurred due to sea level rise, climate change, erosion, etc., the overall natural systems have not changed. Therefore, the Natural Systems and Features consistently contribute to all the Periods of Significance. The contributing Natural Systems and Features include:

- The Potomac River and the river channel
- General geology of the island
- Four landscape areas:



Figure 127. Clearing undergrowth, 1935. (Olmsted Archive, Frederick Law Olmsted NHS)

- The north and south portions of the plateau
- The marsh area
- The swamp area
- Little Island
- Fauna
- Soils and hydrology

Significance and Integrity of Natural Systems and Features

Overall, the natural systems and features of TR Island are in good condition. Minor changes have occurred, especially to the shorelines, due to erosion and damage from people utilizing the shore for boat landings and hiking. Judging from



Figure 128. Marsh with park ranger, ca. 1952. (Theodore Roosevelt Digital Archive, Dickinson State University)



Figure 129. Marsh looking NE, 2016 (JMT).

water flow and shoreline configuration, it appears that soil deposition is occurring from north to south causing a slow increase in the length of Little Island and partial siltation of the waterway between TR Island and Little Island. Changes to the vegetation have been the most severe and those are described in the next section.

VEGETATION

Throughout its history, TR Island has experienced changes in its vegetative cover. During the Mason and the Civil War eras, large portions of the island were cleared (Pliska 2008: 2). In Mason's time (1748-1833), land was cleared to make way for crops and grazing (Figure 7 on page 2-6). During the years prior to the Civil War, as indicated by the 1861 map (Figure 9 on page 2-8), large portions of the island appear to be cleared and open land. During the Civil War, the island functioned as a military base, freedman's camp, and military training camp for former slaves, which required clearing of vegetation to make way for buildings and training grounds (Pliska 2008: 16-17).

The most extensive changes to the vegetation—and the ones that are reflected today—stem from the landscape designed by the Olmsted Brothers and implemented by the CCC in the 1930s (see Figure 35 and Figure 36 on page 2-32). The vegetation condition generally conforms to a natural area left to normal ecological changes.

The Olmsted Brothers prepared their design for the island beginning in 1935. In order to implement the design, land was cleared to accommodate buildings and tents in which to house the crews and run the project. After the Civil War, the island likely experienced a degree of natural revegetation because, in order to prepare the island for the intensive planting desired by Olmsted, the CCC crews had to clear large areas of undergrowth.

Olmsted's plans significantly changed the appearance of the island. The CCC crews planted or transplanted over 35,000 native species of trees, shrubs, ferns, and variety of smaller plants (see full plant list in Table 1 on page 3-29). The aim of the reforestation was threefold:

- Support and enhance the quality of the plants that remained after all the initial clearing was completed;
- Use a diverse palette of plants that people would find interesting; and
- Create an understory typical of the active heathy forest ecosystem.

Olmsted described this plan for plantings as follows:

Broadly speaking, the purposes of the planting now proposed are these: first, to fill in with young trees of large-growing forest species appropriate to the locality, the numerous spaces, some small and some very large, between the existing remnants of old woodland and among and under the scattered trees which have sprung up as volunteers in the old clearings between these woodlands since the abandonment of cultivation on the Island during the 19th Century; second, to add flowering dogwoods and other small-growing native forest trees for enrichment and diversification; third, in limited areas, to add forest undergrowth shrubs where desirable for obtaining the appearance of intricacy characteristic of natural forests in this region and for limiting the sweep of views in undesirable directions. To avoid an appearance of artificial monotony for many years to come it is proposed to plant trees of various sizes, some as large as are ordinarily used in street tree planting, the rest of smaller and cheaper sizes. (Olmsted Jr. June 1935)

Olmsted identified several species of trees that he felt were necessary for the development of this forest. This included tulip poplar, oak, river birch, maples, and ash trees, among others. He also noted several “worthy existing trees” that should be preserved, including mulberry, osage orange, and hackberry. He also recommended keeping grapevines, trumpet vines, English Ivy, and periwinkle (Fanning 2001: 10).

Olmsted was also concerned with removing certain undesirable species from the island due to their potentially damaging effects on the smaller young plants and the burgeoning forest. These species included native as well as exotic species such as blackberry (*Rubus sp.*), sumac (*Rhus sp.*), honeysuckle (*Lonicera japonica*) and poison ivy (*Toxicodendron radicans*). Surprisingly, he chose to leave certain other non-native plants remaining from the Mason Era such as English ivy (*Hedera helix*) and periwinkle (*Vinca sp.*). There have been various efforts to control the proliferation of honeysuckle, and English ivy over the years, but these plants have continued to survive and, at times, thrive. Problematically, the construction of the TR Memorial included the planting of English ivy as ground cover in the boxwood shrub plant beds. All of the vegetation that remains on the island is linked to the Olmsted plan and the creation of the memorial. No significant elements of the vegetation from earlier periods of significance remain.

Virginia Mainland Vegetation

In addition to the plants installed as part of the parking area construction, natural propagation of plants has occurred in the strip of land between the east edge of the parking area and the water. The vegetation is generally in good condition. The more formal landscaping, located on the west side of the parking area, contrasts with natural character east of the parking area.

Memorial Plaza

Plantings around the memorial have occasionally been replaced. A tree crew routinely “limbs up” trees, particularly the willow oaks (*Quercus phellos*) circling the memorial, which were intentionally planted close together in order to give a dense effect for the monument’s dedication in 1967.

The memorial plaza is circumscribed on the exterior by a ring of 40 willow oaks, 36 at 6-8” caliper and four at 8-10” caliper in size. Four, 6-8” willow oaks are missing from this exterior ring. An inner ring is planted with 29 willow oaks, 18 at 6-8” and 11 at 8-10”. One, 8-10” willow oak is missing from the inner ring. Some of the willow oaks appear to be replacement trees, as they are much smaller in appearance.

The following table shows the change in number of willow oaks between planting circa 1967 and today.

Table 2. Change in Willow Oak Quantities, 1967-2017

RING	ORIGINAL OAK CALIPER	ORIGINAL QUANTITY	CURRENT QUANTITY	QUANTITY MISSING
Outer	6-8”	40	36	4
Outer	8-10”	4	4	0
Outer Total		44	40	4
Inner	6-8”	18	18	0
Inner	8-10”	12	11	1
Inner Total		30	29	1
Total		74	69	5



Figure 130. Memorial Plaza plantings looking east, 1973. (Historical Society of Washington)

Figure 131. Memorial Plaza plantings looking east, 2016. (JMT)



The four boxwood (*Buxus sempervirens*) planting beds are also still present, although the integrity of their arrangements has been compromised. These beds, while still generally conforming to the naturalistic planting arrangements, do not contain shrubs of historically accurate sizes. Where three different sizes of plants were originally called for to create a varied, staggered appearance in both height and massing, as seen in the annotated plan for the plaza in Figure 162 on page 5-9, older boxwoods have become overgrown, reaching heights of 10' or more, and their tops have been uniformly trimmed. In some places, the shrubs have grown so large that they appear as one continuous hedge. Where shrubs have died, extremely small boxwoods have been planted as replacements. Approximately the size of the dwarf boxwood shrubs (*Buxus sempervirens* “*Suffruticosa*”) adjacent to the monoliths, these new plantings are also historically inaccurate and particularly out of place given the extreme size of their surviving neighbors.

Figure 132. Habitat and Successional Map, 1955. (Thomas Figure 27)



Additionally, all English ivy (*Hedera helix*) has been removed from the memorial in accordance with the ongoing management program. The current conditions of the boxwood planting beds are therefore not representative of the original design for the TR Memorial.

Contributing Vegetation by Period of Significance***Presidential Memorial (1931-1979)***

- Memorial Plaza vegetation
- Plants associated with Olmsted Plan
- Tree canopy

Significance and Integrity of Vegetation

Throughout the island, some of the mature trees have been lost either due to aging or weather, some plants have died, and others have become established by natural succession or natural propagation. Most recently, TR Island has seen forest damage caused by the emerald ash borer, described in Chapter 3, which required the park to remove over 200 trees from TR Island in 2017. It is anticipated that the ash trees that remain on the Island will also die off as a result of the emerald ash borer infestation, requiring additional removals.

The memorial plaza landscape still reflects the design intent of the 1965-1967 plan.

An active program aimed at controlling the spread of English ivy is currently underway, as the vine poses a significant threat to young hardwood trees by choking them out and preventing them from growing beneath older trees. This effort is the only major management program in place on the island at the present time; otherwise the NPS has generally allowed the vegetation and other natural resources to develop naturally (Pliska 2008: 117).

SPATIAL ORGANIZATION

The current sense of spatial organization—the variety of spaces, vertical elements, and built facilities—are the result of changes during the 20th century. These impacts manipulated the ground plane and vegetation. The spatial organization of TR Island creates a unique visitor experience within the greater Washington, DC area and provides an effective setting for a park that is removed from the urban nature of the surrounding areas. Its trails provide a natural setting for the joggers and walkers who utilize the island on a regular basis.

The spatial organization of the island is directly linked to the Olmsted plan and the creation of the presidential memorial. No significant elements of the spatial organization from earlier periods of significance remain.

Contributing Spatial Organization Components by Period of Significance***Presidential Memorial (1931-1979)***

- The Olmsted plan and its execution

- The memorial plaza

Significance and Integrity of Spatial Organization

The spatial organization of the island still reflects the design intent of the Olmsted Brothers for the overall island and Gugler/Manship for the memorial plaza. While the construction of the TR Bridge in the 1960s virtually cut off access to the southern tip of the island and Little Island, the overall spatial organization of the island from the 1930s remains intact.

LAND USE

As described in Chapters 1 and 2, this site has experienced many changes over time. The island has been transformed with each successive period of use, eliminating most if not all evidence of previous activity. Early land use included the use of the island by Native Americans, followed by the agricultural development of a portion of the island during the Mason Period of Significance. That was followed by the Civil War use as a training ground and encampment. In the modern era, the island uses reflect the changes that occurred in the 20th century with the NPS oversight: dedicating this place to the life and accomplishments of President Theodore Roosevelt and his love for the outdoors.

The use of the island today stems from the extensive trail system and the Memorial Plaza. The naturalistic trails meander through mature woodlands and marshes, which provide a stark contrast to the large Memorial Plaza with statuary and water features dedicated to the life and accomplishments of Theodore Roosevelt. The plaza is the only formal designed feature on the island. It is a large clearing encircled by dense foliage within the North Plateau.

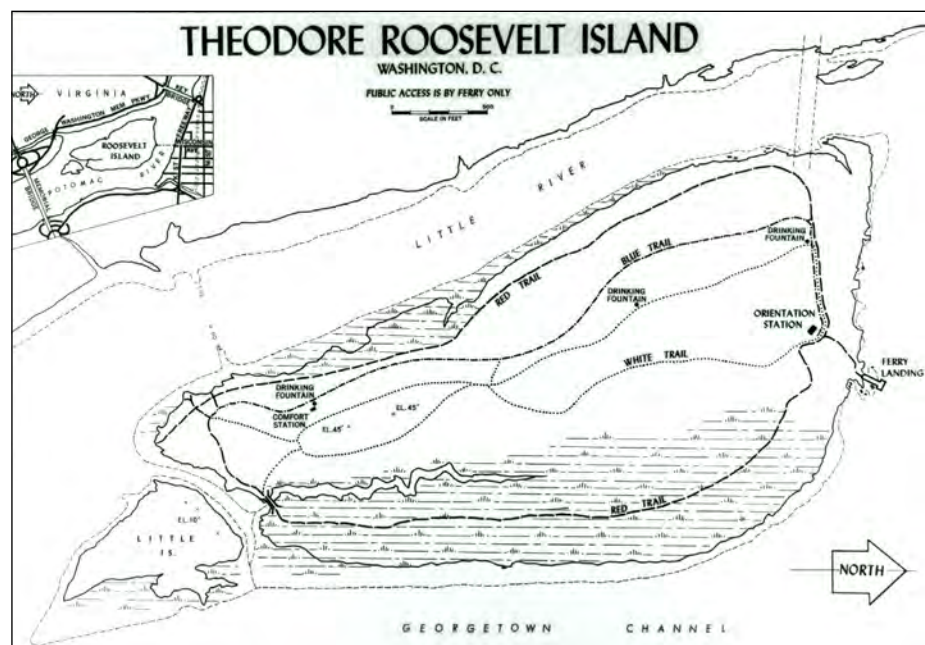


Figure 133. 1957 Trail Map showing the implemented portions of the Olmsted Plan. (NPS)

The Cultural Landscape Inventory for the island describes the island as follows:

Olmsted Jr.'s vision for the site imagined visual connections to surrounding memorials, the feeling of sanctuary, the lack of vehicular traffic, a singular access point via a pedestrian bridge, natural topography, meandering paths and an architectural memorial which would serve as a unifying point on the island.

(Pliska 2008: 21)

Contributing Land Uses by Period of Significance

Presidential Memorial (1931-1979)

- Presidential memorial
- Nature experience

Significance and Integrity of Land Use

The memorial remains a key attraction of the island, creating a tranquil setting for visitors. The memorial retains its integrity for the Presidential Memorial period of significance.

There are certain aspects of TR Island, however, that detract from the quality of the visitor experience; namely, the visual and aural impacts of the surrounding urban area. The noise of aircraft arriving and departing from Reagan National Airport, helicopters flying overhead, and vehicular traffic on the TR Bridge and GWMP diminish the contemplative experience typical of wilderness settings. Although TR Island is surrounded by urban infrastructure, it still retains a strong naturalistic feeling.

The natural setting of the park and the formal memorial collectively commemorate the life and philosophy of Theodore Roosevelt, the 26th President of the United States. This use of the island is in keeping with the continuing American tradition of honoring presidents with a memorial dedicated to conveying their significance and history to the American people, as well as international visitors.

CIRCULATION

TR Island has historically been a hub of both water and land circulation. Until 1807 when a causeway was constructed from the Virginia shore across Little River to the northwest corner of the island, travelers typically arrived by ferry from Georgetown and those traveling on to Virginia were forced to charter private craft to carry them across Little River. Access to the island by water was available intermittently during the 19th century via numerous small landings, and the NPS operated a ferry dock on the northeast corner of the island from the 1950s to the 1970s. Since then, access to the island via watercraft has not been sanctioned; however, people continue to dock non-motorized water craft along the shoreline.



Map 5. Historic and Current Trail Comparison

Since the Civil War, numerous temporary bridges have been constructed to connect the island to the Virginia and Georgetown mainland. Connections to Georgetown at the northeast corner existed during the Civil War and World War II; bridges to Virginia existed at the northwest and southwest corners of the island in the 1930s and during World War II.

The extant land trails on the island reflect a simplified version of the Olmsted plan from the 1930s, implemented by CCC workers from 1935-1938; however, alterations were made during the 1950s and 1960s to accommodate the TR Bridge and the TR Memorial. Additional trail modifications have occurred over time, as reflected in the map on page 4-25, which depicts historical trail alignments overlaid with the current configurations (Map 5). Portions of the NPS trails have been widened over time, as visitors walk along the path edges to avoid muddy or uneven trail tread.

Olmsted's overall goal for the park circulation was to minimize the impact of the trails themselves and allow visitors to feel that they were simply strolling through nature. Olmsted fashioned the trails on TR Island according to new design precepts, using a stone and gravel foundation to provide support for an approximately 4" deep top layer composed mainly of sandy loam (Pliska 2008: 107). In Olmsted's report to the RMA on 15 June 1934, he wrote that "in general the ultimate appearance of the foot-trails and bridle paths is intended to resemble much more nearly that of foot-worn forest trails, somewhat irregular in width and alignment and surface, than that of the formal paths usual in urban parks" (Olmsted 1935a). He also envisioned small plants encroaching on the trails, creating "a slightly irregular and ragged edge to the trails . . . which come into existence solely by the movements of people and animals along them" (Olmsted 1935b).

Today, certain trails generally conform to the original Olmsted layout: the outer perimeter trails (though to the north the transverse trail has been moved slightly south), the path circling the former Outlook Plateau area at the southern end, and the trail through the marsh. The complex of trails in the northern and southern parts of the island has been more substantially altered. The current map distributed on TR Island shows an even simpler system, with three main trails named "Woods," "Upland," and "Swamp."

North Transverse

The North Transverse Trail may be the oldest alignment on the island, dating back to as early as the establishment of Mason's Ferry in 1748. While it was formalized slightly to the south of its original location in the 1930s, the alignment follows the

general path that connected the causeway to Virginia on the west side of the island (1807) to the ferry to Georgetown on the east (1748).

Woods Trail

The Woods Trail was historically known as the Blue Trail and dates from the 1935 Olmsted plan implemented in 1936; the trail was modified to accommodate the TR Memorial in 1967.

Figure 134. (L) "West Walk," 1935. (Olmsted Archive, Frederick Law Olmsted NHS)

Figure 135. (R) OWST looking south, 2016. (JMT)



This approach to trail design was a conscious one—new methodologies at the time directed that trail improvements incorporate natural curvilinear lines and, according to NPS historian Linda Flint McClelland, “at once followed nature and blended inconspicuously with the natural setting” (McClelland 1993: 137).

Upland Trail

Originally known as the White Trail (NPS 1953), much of the Upland Trail remains from the work of Olmsted and the CCC. A comparison of the Olmsted Trail Plan with the location of the current Upland Trail shows the similar alignments (See Map 5).

Swamp Trail

This trail was historically known as the Red Trail (NPS 1953) and represents a simplified version of the perimeter trail from the Olmsted Plan. The CCC cleared the paths for this trail from 1935 to 1936.

The boardwalk was designed and constructed from 1997 to 1998 in the location of the historic Red Trail (Swamp Trail). Repairs have occurred over the years,

including reconstruction of most of the decking of the observation platform in the summer and fall of 2016.

Olmsted West Shoreline Trail

The southwestern most trail on the island, identified in the CLI as a social trail, appears to have been created as a service trail in the 1930s, according to the Olmsted Plan. When the TR Bridge was constructed from 1960 to 1964, this portion of trail was likely abandoned and a new alignment laid, looping around the comfort station.

The rough dry laid field stone retaining walls along the OWST, described in more detail under Buildings and Structures, support the hypothesis that this was an original Olmsted trail alignment. While earlier documentation identified this trail as a social trail, it is unlikely that a social trail would have retaining walls. By definition, social trails are ad hoc, made by casual use. The construction of



Figure 136. Aerial view looking NW to TR Island and Rosslyn, ca. 1964. (DDOT Historic Collections 78)

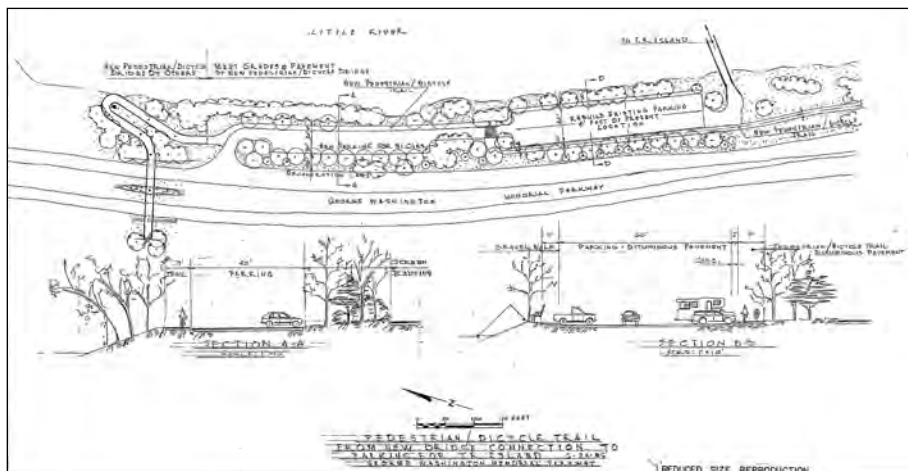


Figure 137. Plan for parking lot and pedestrian/ bicycle trail, 1986. (NPS 850/41043)

a retaining wall implies design intent, something not found with social trails. Portions of the OWST clearly indicate cut-fill cross section construction, a method typical of trail and roadway construction employed when fitting a horizontal surface into a slope.

Social Trails

Some of the trails that are now categorized as social trails were at one point part of the official trail network, either as service or foot paths. These would date to the Presidential Memorial Period of Significance. Other social trails have developed within the last decade or so.

Virginia Circulation

Beginning with the construction of the GWMP, the Virginia portion of the park has experienced considerable changes over the last century. The portion of the GWMP from Arlington Memorial Bridge to the Key Bridge, running parallel to TR Island, was completed in 1941. Fill from Little River was dredged to create an area wide enough to accommodate the roadway (Leach 1993: 152-153).

In 1955, an NPS causeway containing utilities was constructed in the general location of the historic Mason causeway; in 1957, it was realigned and widened to be used as a service road for construction of the new memorial on the island.

Construction of the TR Bridge from 1960 to 1964 also heavily impacted the area. Between 1962 and 1963, Little River was again dredged to create fill to serve as construction staging for the eastern portion of the bridge; that area later became the site of the foundation and sub-structure of the western portion of the bridge and associated ramps to Virginia.

As construction of the memorial on the island progressed from 1964 to 1967, a parking area (now the south bay) was constructed to accommodate visitors. While a pedestrian bridge connecting the mainland to the island was approved in 1964, funding was not available and a temporary causeway was constructed in 1967 to facilitate the movement of visitors to the island for the Roosevelt memorial dedication on October 27, 1967 (Myer 1992: 34). What is now the southern parking bay was complete at that time, providing vehicular access to and from the northbound GWMP at the north end. The northern parking area was completed in 1987 along with the Mount Vernon hiker/biker trail. The entrance and exit remained in the center of the two parking bays until the GWMP was widened and reconfigured in 1994. Located along the Mount Vernon hiker/biker trail (the Mount Vernon Trail) is Bridge 31 which was constructed in 1987.

The existing pedestrian bridge to TR Island was built in 1978 and replaced the earlier temporary causeway that connected the island with the Virginia shore.

The GWMP pedestrian/bicycle overpass from Rosslyn was constructed by the NPS and the Virginia Division of Parks and Recreation in 1988 (Leach 1994: 186). It opened on June 11 of that year (Washington Post 1988).

Contributing Circulation Components by Period of Significance

Mason Settlement (1748-1833)

- Causeway
- North Transverse Trail
- Ferry landing

Civil War Occupation (1861-1865)

- Ferry landing

Presidential Memorial (1931-1978)

- Olmsted Trails
- Woods Trail
- Upland Trail
- Swamp Trail
- Olmsted West Shoreline Trail
- Some social Trails
- Service road remnants
- Pedestrian Bridge

SIGNIFICANCE AND INTEGRITY OF CIRCULATION

- The extant contributing circulation features convey the history of the island as an important center of transportation over three Periods of Significance: Mason Settlement (1748-1833), Civil War Occupation (1861-1865), and Presidential Memorial (1931-1978). The existing trails, while simplified, reflect the intent of the Olmsted plan.
- While the parking lot on the Virginia mainland was originally constructed in 1967, within the Presidential Memorial period, it has since been altered and expanded so that it no longer retains its integrity. Additionally, the multi-modal Virginia trails fall outside the periods of significance as well.

BUILDINGS AND STRUCTURES

Relatively few structures have ever been built on Roosevelt Island. None are known to have been built before John Mason commenced his farming activities, though it is possible that there might have been some structure built in connection with the ferry. At least one ferry house stood in the 19th century on the northeast shore above the prominent spit of rocks.

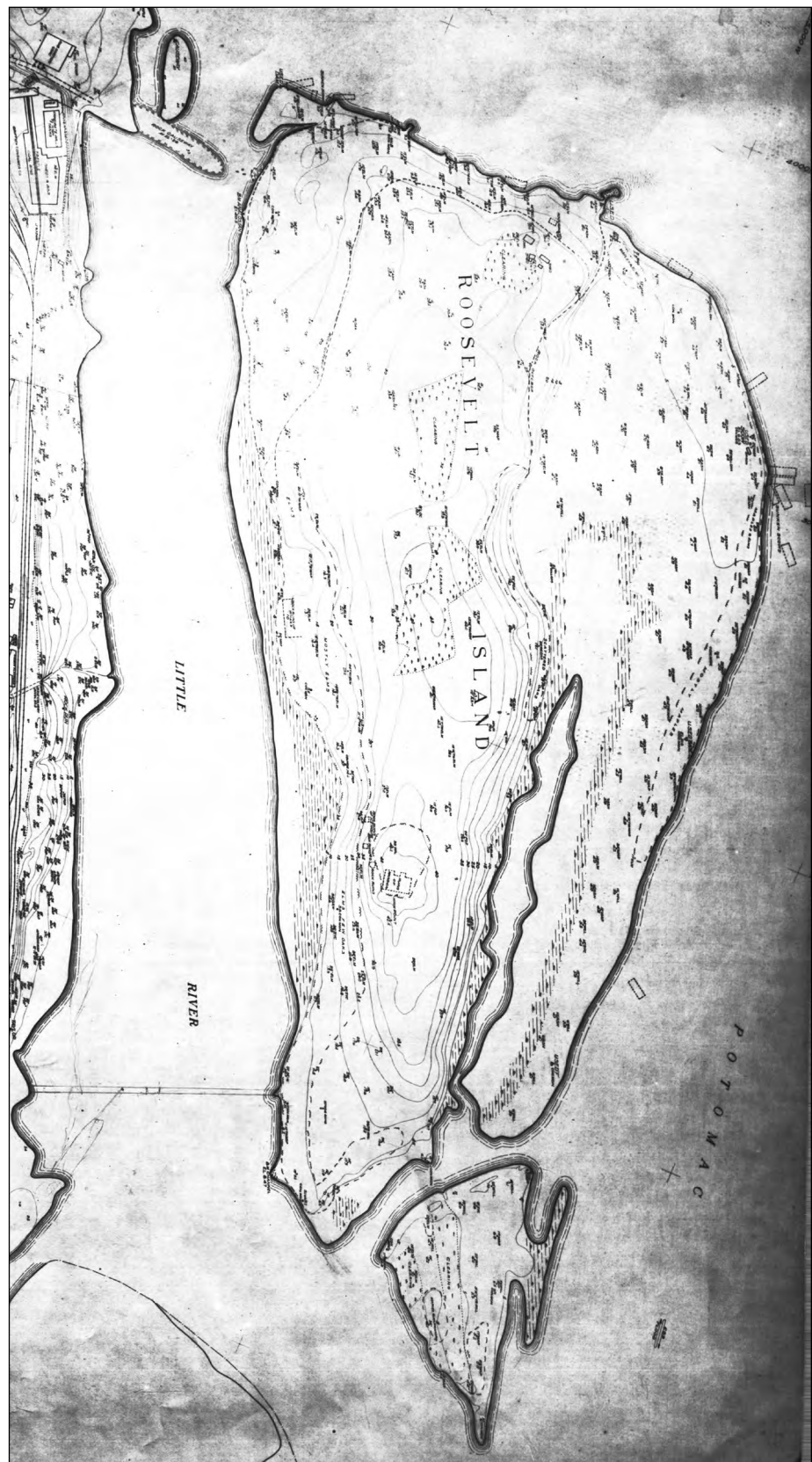


Figure 138. Topographical Survey, 1932. (NPS 854/80008)

The focal point of Mason's plantation was his mansion, a neoclassical structure possibly designed by architect George Hadfield. Around this were grouped various outbuildings, most of which had disappeared by the 1930s. Numerous documents and maps refer to three Mason outbuildings, which survived into the 20th century and were located a short distance northwest of house, on the brow of the slope leading down to Little River; these included an icehouse, a storage house, and a building which may have contained slave quarters. A few accounts from the early 19th century also refer to other small outbuildings located to the south of the Mason house, probably connected with slave activities. A summerhouse stood in the gardens directly south of the house.

After the Mason period, the house was still used as a dwelling. There was extensive construction on the island during the Civil War, primarily along the North Transverse road, where more than 20 frame structures were built, including barracks and a hospital. The Union Army reused many of the Mason structures. In the later 19th century, the Mason house may have been adapted for use as a dancehall and clubhouse. Buildings and sport venues were constructed by the Columbia Athletic Club in the 1890s, but none of them are extant.

In the 1930s, topographic maps prepared for the Olmsted project note a "rock wharf" located about midway down the western shore, above the Little River, and a small dwelling, surrounded by a few smaller outbuildings (see Figure 138) at the north end.

Olmsted planned for several new structures: most importantly, the Outlook Plateau at the south end of the island, which was partially constructed in the 1930s and remnants of which may still exist. A shelter at the northwest corner of the island was constructed but was no longer extant by 2001. The sole building to have been completed according to the original Olmsted scheme is the comfort station built in 1955 at the southern end of the plateau.

Today, the major structure on the island is the Theodore Roosevelt Memorial.

TR Memorial

After the construction of the TR Bridge rendered the original location selected for the memorial at the southern end of the island unviable, the focus was redirected to the northern end. The new site was selected because it had been previously disturbed. Historically, this open space was used for recreational purposes; after the Civil War, it was the site of jousting tournaments, and later the location of athletic races. The Olmsted plan had called for the site to become a picnic area, the creation of which required the removal of many trees, planting of ground

cover, and erection of a picnic shelter. It appears that some of this work may have been completed prior to the selection of the site for the monument. In 1960, Congress appropriated \$1.4 million for the design and construction of the memorial. The design of the memorial was the result of collaboration between architect Eric Gugler and artist Paul Manship, the two of whom worked together on many projects throughout their lifetimes. Construction began in 1960 and was completed in 1967. The president at the time, Lyndon B. Johnson, dedicated the memorial at a ceremony on Roosevelt's 109th birthday, October 27, 1967.

The construction included extensive grading and planting to blend the monument with the surrounding landscape, contours, and vegetation. Following the memorial dedication, Manship's statue faced irregular maintenance and improper treatment. In 1978, however, the statue was appropriately cleaned and a conservation program was implemented (Pliska 2008:93).

Figure 139. Memorial plaza looking NW, 1967. (Theodore Roosevelt Digital Archive, Dickinson State University)



Figure 140. Plaza looking NW, 2016 (JMT).



The park received funding from the American Recovery and Reinvestment Act of 2009 (ARRA) for repairs and improvements to the memorial. The work was completed in 2010 and many of the problems and deficiencies were eliminated. There were insufficient funds, however, to adequately address and resolve every maintenance and operational concern.

Comfort Station

The comfort station was designed by Boston architect Charles R. Wait and built in 1955. Wait closely followed plans that had been drawn up by the Olmsted office. This is the only building on the island constructed according to the Olmsted Brothers site plan. The roof of the structure was originally designed to include a central cupola for venting, but this feature was omitted prior to construction. The simple, utilitarian building reflects Frederick Law Olmsted, Jr.'s objective of keeping all man-made elements in the landscape inconspicuous and subordinate to the island's overall concept of a native climax forest (Pliska 2008: 128). The form of the comfort station has not been altered since its construction.



Figure 141. Comfort station east elevation, looking west from Upland Trail from "The Dream and the Reality," 1957. (*Washington Post*)



Figure 142. Comfort station east elevation, looking west from Upland Trail, 2016. (JMT)

Pedestrian Bridge

A pedestrian bridge for access to the island from the Virginia mainland was envisioned in 1930s in the Olmsted plan. In the 1960s, the bridge was again discussed in conjunction with the memorial plaza proposal. A design by NPS architect Thomas F. Herr in 1964 was lauded as “one of the Potomac’s most interesting projected structures” (Myer 1992: 34). While it was approved by the Commission of Fine Arts, it was never funded and was “postponed indefinitely” (Myer 1992: 34). Herr designed a 400-foot, single-span, orthotropic steel structure that would be the first of its kind in the world.

The structure, completed in 1978, replaced an earlier temporary pedestrian causeway in the same approximate location. It is of prestressed concrete resting on reinforced concrete piers and abutments. While wood members have been replaced over the years, the bridge reflects the original design intent.

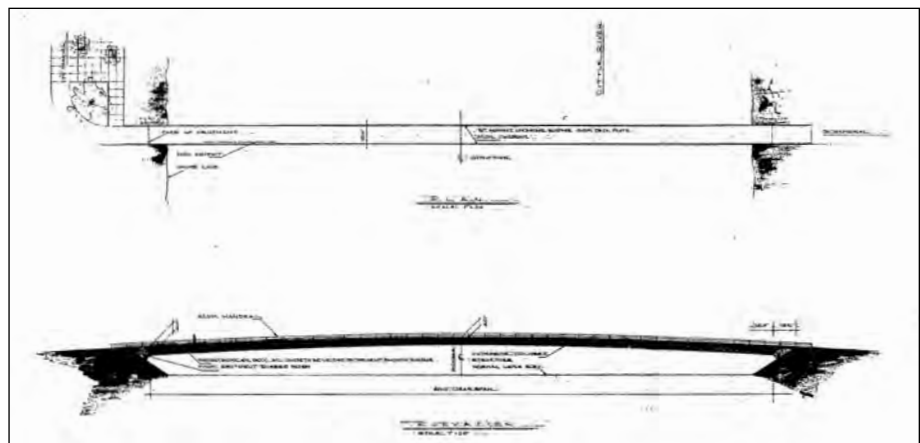


Figure 143. Drawings for footbridge, 1964. (NPS 854/80133)



Figure 144. Pedestrian bridge looking NW, 2016. (JMT)

Shed Roof Storage Building

The structure was built in the 1980s, according to previous documentation (Fanning 2001: 8-62). It is the only storage facility for tools and equipment utilized by NPS staff designated with maintaining the island and memorial.

Stone Retaining Walls

The stone wall locations coincide with trails from the Olmsted plan. The southern wall appears to be a component of the Outlook Plateau. The National Register nomination describes the retaining walls:

Along the western and southern shores of the island are two visible sections of low rough-faced stone retaining walls. They may date from the Mason era, but could also be the result of the Olmsted work (An article concerning the anticipated CCC work mentions the plan of building “several small seawalls” to keep water off the island; “Roosevelt Island to Become Theodore Roosevelt Island Park,” Washington Star 6 February 1934). These walls are heavily overgrown with vegetation, much of it poison ivy, and they have not been carefully examined nor their extent identified. (Fanning 2001: 7-9)

An examination of the development for the island shown on Robert King’s 1818 map of Washington, DC (Figure 7 on page 2-6) during the years it was used by Mason shows that the broad open space on the island’s southern tip does not correspond to the location and curvilinear shape of the extant stone wall in this vicinity. Without extensive archeological investigation, it is not possible to determine the origin of this particular dry laid stone wall; however, historical maps strongly suggest that the walls date from the Olmsted period rather than the earlier Mason period.

The stone found in both retaining walls is Piedmont metamorphic rock typical of the region. The individual stones do not generally appear to be cut but some may have been manually shaped to make a tight-fitting wall. Of the two walls, the southern wall appears to be in better condition largely as a result of its more remote location and vegetative overgrowth. Both walls show signs of deterioration and decomposition.

The stone wall adjacent to the western shore trail appears discontinuous; however, site investigation revealed that the original wall may have been a continuous structure of approximately 100’ in length. The apparent discontinuity is likely the result of degradation due to aging and weathering.

Contributing Buildings and Structures***Presidential Memorial (1931-1978)***

- Memorial plaza
- Comfort station

- Pedestrian bridge
- Stone retaining walls

Significance and Integrity

Contributing features such as the comfort station and the TR Memorial reflect the Presidential Memorial period of significance. They contribute to the historic character of buildings and structures on the site.

CONSTRUCTED WATER FEATURES

As part of the memorial plaza designed by Eric Gugler, two types of constructed water features were constructed on the island: the two shallow round granite pools located on the east and west ends of the plaza, each with a large granite fountain basin at the center; and two large C-shaped reflecting pools on the east and west sides of the memorial plaza. The water features were constructed from 1961-1967 as part of the memorial plaza. Drainage swales on the periphery of the memorial were also constructed.

Contributing Water Features***Presidential Memorial (1931-1978)***

- Round memorial plaza pools with fountains
- Memorial plaza reflecting pools

Significance and Integrity

The pools and fountains within the memorial plaza retain a high level of integrity and contribute to the 1931-1978 period of significance.

VIEWS AND VISTAS

The importance of views, particularly from the island to its surroundings, has been central to TR Island since the Mason era. The architect of the Mason house paid careful attention to the siting of his buildings on the landscape. The house



Figure 145. Glimpse of Lincoln Memorial from “East Walk,” 1935. (Olmsted Archive, Frederick Law Olmsted NHS)

was “built atop the island’s highest point to provide views of Georgetown and downtown Washington, D.C.” (Pliska 2008: 50).

Olmsted Jr. also had a great appreciation for the views from the island. Under Olmsted’s direction, CCC crews cleared vegetation to offer views to appealing scenes on the mainland (Pliska 2008: 58). Olmsted specified that views from the north edge of the island should be limited to glimpses of water under overhanging branches, as the Georgetown and Rosslyn shorelines at the time were industrial and unsightly (Fanning 2001: 7-13).



Figure 146. Looking SE to Little Island and Arlington Memorial Bridge, 1936. (Olmsted Archive, Frederick Law Olmsted NHS)



Figure 147. Looking SE to Little Island and Arlington Memorial Bridge, 2016. (JMT)

Olmsted designed an overlook on the southern end of the island to take advantage of the views and vistas available from that location. While this outlook was partially completed, it was demolished during the construction of the TR Bridge in the 1960s.

The chosen location for the bridge, spanning the southern end of TR Island, eradicated most views and eliminated easy access to the southern tip of the island. As a result of the bridge construction, Olmsted's design concept and chosen location for the memorial had to be revised.

Many views and vistas from TR Island to the surrounding river can be spectacular but, due to the heavy forest and understory vegetation, are often difficult to access. Given the dense forest cover, most of the views can only be seen from the island shoreline. From the interior, even from the island's high point, most views are quite limited, particularly during the spring and summer months when foliage is thickest.

The quality of the views across and within the memorial plaza have been largely preserved; however, the high, untrimmed boxwood shrubs obstruct some horizontal views. Additionally, the loss of boxwood shrubs and the replanting with smaller plant material create openings within the plant beds inappropriately drawing the eye towards these voids.

Views and vistas are limited and could be enhanced through selective clearing. Those views that existed in the 1960s have since been lost as a result of the maturation and colonization of the shoreline, as well as plantings adjacent to the parking area and trails.



Figure 148. View east across marsh and swamp from SE point of Upland Trail look, 2016. (JMT)

Contributing Views and Vistas by Period of Significance***Mason Settlement (1748-1833)***

- From causeway to Virginia
- East and west along North Transverse Trail
- From ferry landing to Georgetown and vice versa
- Southern viewpoint

Civil War Occupation (1861-1865)

- From ferry landing to Georgetown and vice versa

Presidential Memorial (1931-1978)

- Southern viewpoint
- East over marsh and swamp from southeast corner of Upland Trail
- Within and across memorial plaza

Significance and Integrity

The known historic views retain integrity to their respective periods of significance; however, many of the views are currently obscured by overgrown vegetation. The southern viewpoint is also difficult to access due to the lack of maintenance and overgrowth of the trails to the southern tip of the island.

TOPOGRAPHY

TR Island has grown by about 20 acres of alluvial soil over the past 200 years. Most of the accumulation has taken place along the island's east side, as the moderately slow movement of the Potomac River has allowed deposits to build up. The faster moving Little River, however, has had the opposite effect, scouring a deeper channel between the island and the Virginia coast.

The swamp, already part of the island's landscape during the Mason era, has been greatly enlarged through this action, changing from a relatively small feature confined to the northeast coastline, to a much larger expanse dominating the entire east side of the island through the formation of the peninsula. Likewise, Little Island also appears to have been built up through this gradual siltation, emerging above the waterline in the late 19th century. Evidence suggests that all of TR Island may have been formed in this manner.

At present, the island has two high points, both 44' above sea level, one located on the north plateau and the other on the south at the former site of the Mason mansion. The elevation descends from these two points outward to the island's

perimeter, meeting the water with sandy beaches in some locations and ending several feet above the waterline in others.

John Mason made alterations to the topography in creating his plantations and pleasure gardens. The majority of the site was taken up by carefully laid-out fields of neatly planted, ordered rows of crops, roughly divided between the smaller, private grounds south of the house, and the larger, more public grounds to the north. The creation of the North Transverse between the causeway and ferry landing would also have changed the topography at the northern end of the island.

During the Civil War, alterations may have been undertaken for construction of the Union Army camp and, later, the Freedmen's camp; however, if any alterations occurred, they are undocumented.

Olmsted undertook very few alterations to the island's grade, preferring to maintain the existing conditions wherever visitor use would allow. Grading changes did take place where stone retaining walls were constructed to support trails and the outlook at the southern end of the island.

The most significant alteration to the island's topography came with the construction of the TR Bridge. The bridge foundation and abutments essentially cut off the southern tip of the island and Little Island from the north. Grading around the bridge foundation created large, steep embankments.

The creation of TR Memorial in the 1960s also caused topographical changes to the island. Trails were reconfigured to provide access to the site and drainage swales on the periphery of the memorial were constructed. Installation of the water features also required excavation and regrading.

Little Island has not been developed. Olmsted proposed pedestrian connections to the island with a periphery trail along the shoreline, but they were never implemented due to construction of the TR Bridge.

The Virginia mainland topography was configured during the construction of the GWMP and TR Bridge, as described in detail in the circulation section.

Contributing Topography by Period of Significance

American Indian Period (to 1717)

- General topography

Mason Settlement (1748-1833)

- Topography relating to plantation

Civil War Occupation (1861-1865)

- Topography relating to Union Army Camp

Presidential Memorial (1931-1978)

- Topography relating to Olmsted
- Topography relating to Memorial Plaza
- Topography relating to GWMP

Significance and Integrity

The topography of TR Island dates to all four periods of significance. The topography relating to the Presidential Memorial period, however, retains the highest degree of integrity.

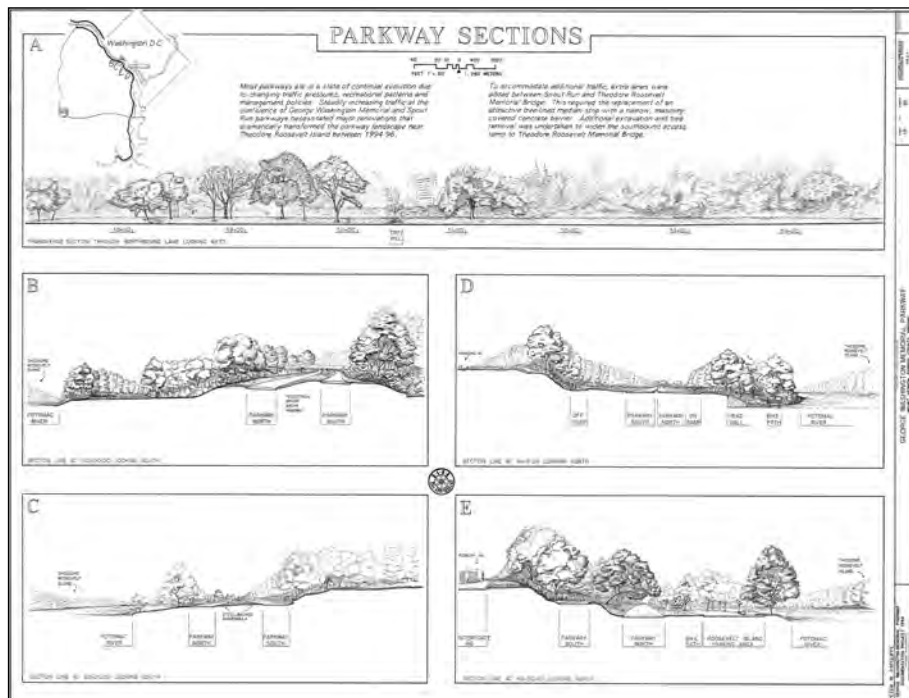


Figure 149. Sections showing GWMP topography across Little River from TR Island, 1994. (HAER VA-69 Sheet 18)

SMALL SCALE FEATURES

The most prominent small-scale features at TR Island were installed as part of past development programs, likely between 1955 and 1978. These elements responded to specific needs for information, interpretation, and safety. Features from this period include three metal range marker navigation signs related to ferry activities, a high-water marker, metal interpretive signs, and numbered wood posts. A wood information/bulletin board is located at the island terminus of the pedestrian

bridge (to TR Island, along with a modern children's interpretation sign and a mobile plastic trash can. Metal manhole covers dating from the 1950s and 1960s are also located within the trail tread.

In 1932, in conjunction with a survey of the island before Olmsted implemented his plan, National Geodetic Markers were placed on the island. While five markers were originally installed around the perimeter of the island, only three were identified during site investigations.

Visitor amenities such as the sixteen granite benches within the memorial plaza were installed in 1967. Six "Washington" benches composed of square cedar timbers were located on the island at one point, but have all been removed. Two water fountains currently exist on the island but are not original to the Olmsted design.

In 1996-1998, the boardwalk through the marsh and swamp was constructed. This boardwalk includes eight cast iron and wood benches of the type developed for the National Mall placed at turnouts on the trail. Metal signs providing interpretation of the flora and fauna are also scattered along the boardwalk.

On the Virginia mainland, small scale features largely consist of regulatory and wayfinding signage. Many signs were replaced in 2017 during the alterations of the parking lot. Rounded metal bicycle racks are also located near the Pedestrian Bridge approach. A water fountain was also installed within the pedestrian bridge approach plaza in 2017.

Contributing Small Scale Features by Period of Significance

Presidential Memorial (1931-1978)

- National Geodetic Survey markers
- Granite memorial plaza benches
- Range markers and high-water marker

Significance and Integrity

The extant small-scale features date to the Presidential Memorial period of significance. The survey markers and benches retain a high degree of integrity, but the warning signs and high-water marker have experienced deterioration due to exposure.

The existing conditions of TR Island and the cultural landscape were evaluated within the framework of Landscape Character Areas (LCA). Documented

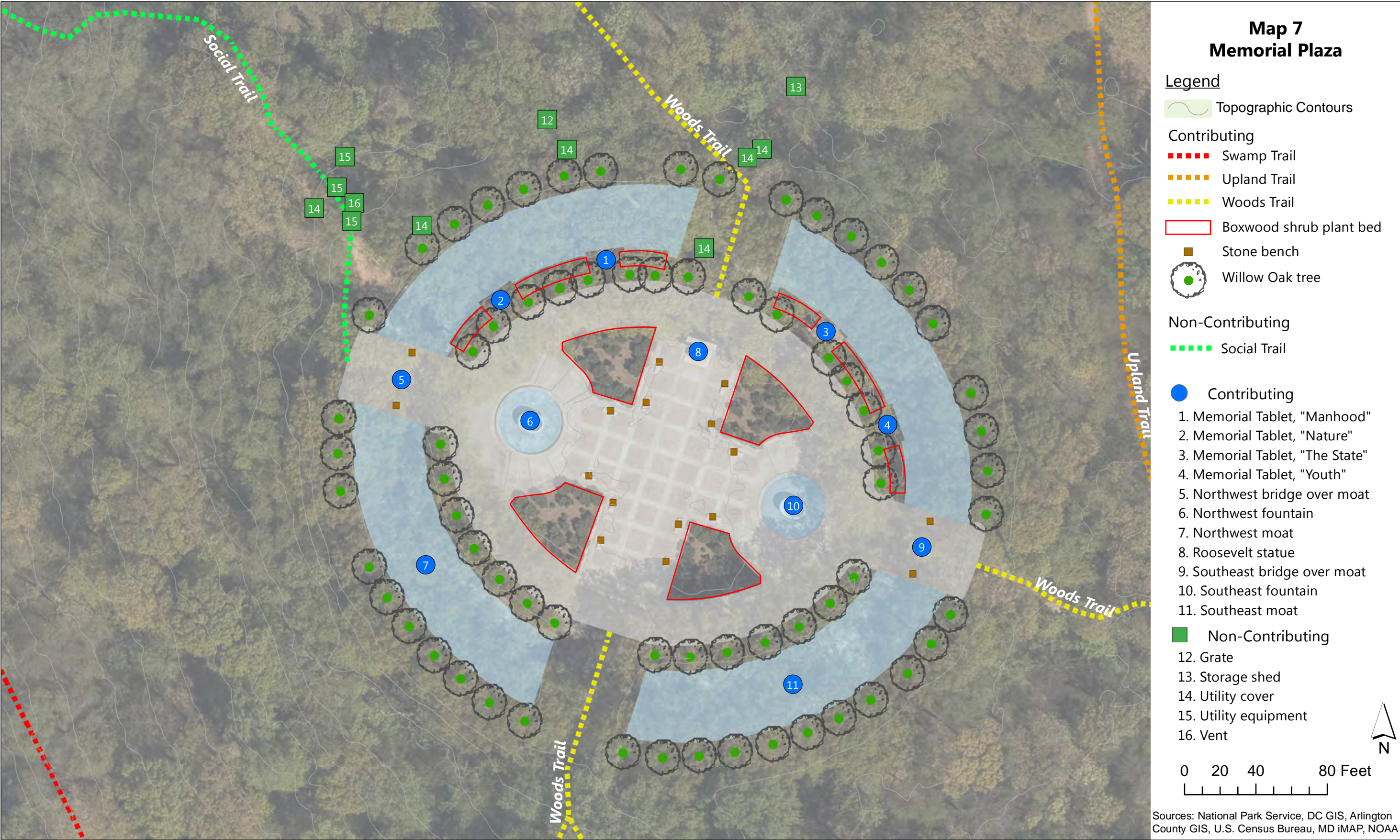
contributing and non-contributing features are recorded for each LCA. The LCA's include:

- North Plateau
- Memorial Plaza
- West Terrace
- Marsh & Swamp
- GW Memorial Parkway
- South Plateau

The LCA's are illustrated on the following maps. Archeological sites are not depicted due to their sensitive nature.



Map 6. Existing Conditions: North Plateau LCA

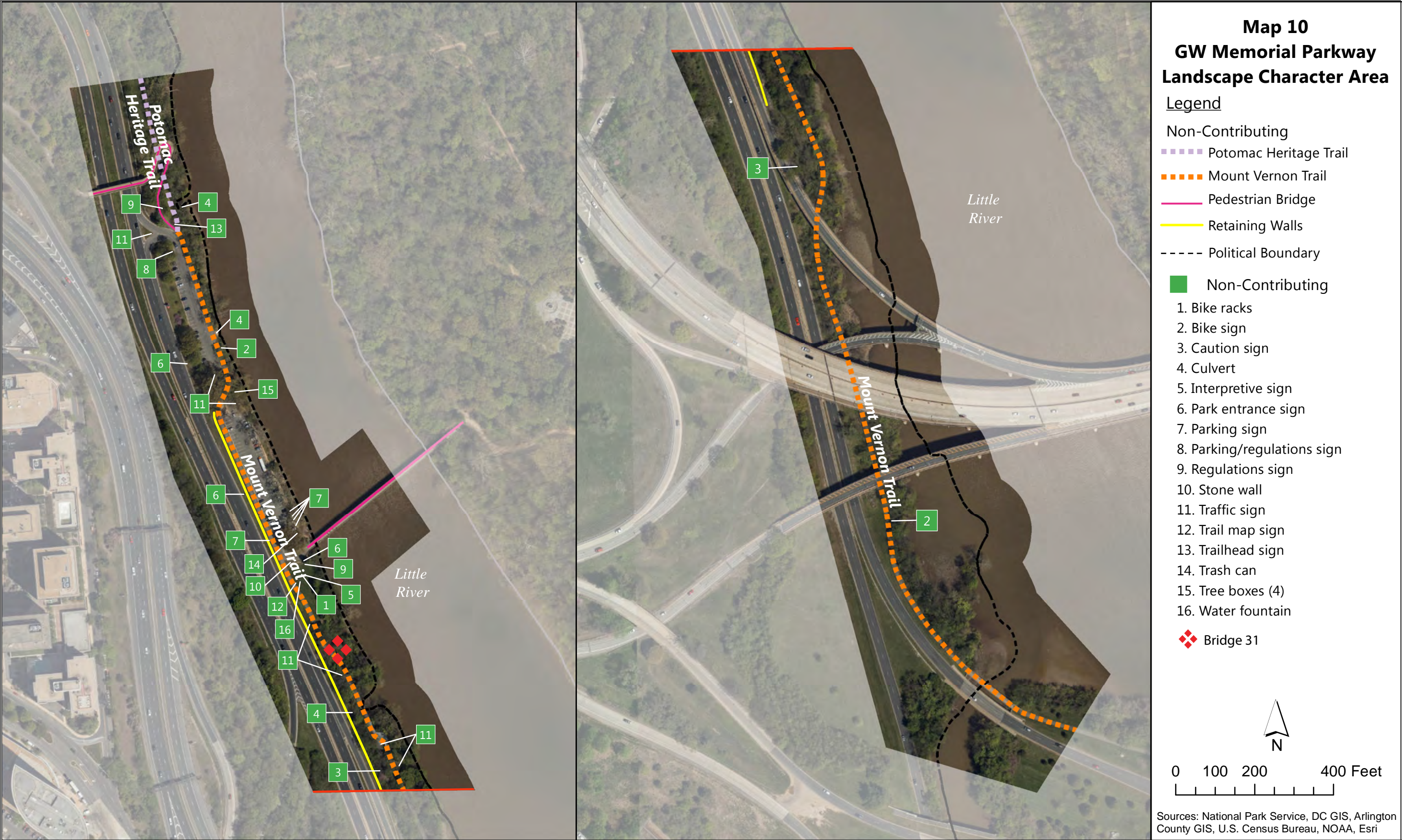


Map 7. Existing Conditions: Memorial Plaza Detail



Map 8. Existing Conditions: West Terrace LCA





Map 10. Existing Conditions: GWMP LCA



Map 11. Existing Conditions: South Plateau LCA



CHAPTER 5: TREATMENT PLAN AND GUIDELINES

CHAPTER 5: TREATMENT PLAN AND GUIDELINES

This document presents the Cultural Landscape Report and Environmental Assessment (CLR/EA) for Theodore Roosevelt Island (TR Island). This CLR/EA provides documentation of the historical development, an evaluation of existing conditions, analysis of landscape characteristics, an assessment of contributing features and integrity, and treatment recommendations. The recommended treatment approach that adheres to the Secretary of the Interior's Standards for the Treatment of Historic Properties for TR Island is Rehabilitation: "making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical or cultural values" (Weeks 1995: 61). Rehabilitation provides the range and flexibility needed to adequately address issues at TR Island now and in the future.

TR Island provides a memorial to President Theodore Roosevelt in the nation's capital and serves as a natural park for the recreation and enjoyment of the public (NPS 2014:26). The overall management philosophy for TR Island is to preserve and maintain the natural environment and historic features while providing public access, education, interpretation, and other low impact uses that are compatible with the cultural landscape and natural surroundings. The selection of rehabilitation as the treatment approach is in keeping with the management philosophy for TR Island.

CULTURAL LANDSCAPE TREATMENT APPROACH

The Secretary of the Interior's Standard outline four accepted treatment approaches for cultural landscapes including preservation, rehabilitation, restoration, and reconstruction. Each treatment option was considered based on TR Island's Cultural Landscape condition and the significance of TR Island. The National Park Service's "Guidelines for the Treatment of Cultural Landscapes" outlines the four treatment approaches:

- **Preservation:** This treatment approach focuses on the retention of the landscape's existing form, materials, and features and calls for actions that will not further degrade the landscape's conditions or that will impact historic resources. Preservation focuses on maintaining the historic features and materials and stabilizing and conserving them.

Cover photo caption: Memorial statue being cleaned, 1967. (Theodore Roosevelt Digital Library, Dickinson State University)

Limited replacement of extensively deteriorated historic features may be acceptable if the replacement is done with in-kind materials.

- **Rehabilitation:** This treatment approach focuses on the process of creating a compatible use for the landscape through repair, alterations, and additions while also preserving the aspects of the landscape that convey its history, cultural, and/or architecture. Rehabilitation allows a resource to be convey a complex history from multiple periods of significance.
- **Restoration:** This treatment approach calls for the accurate depiction of the form, features, and materials of the landscape at a specific period of time. It calls for the removal of features from other periods of history and the reconstruction of missing elements from the restoration period.
- **Reconstruction:** This treatment approach is used to depict vanished, or non-extant, portion sofa property through the reconstruction and replication of those features. The reconstruction is based on documentary and physical evidence.

Of the four treatment approaches, Rehabilitation best fits the purpose and needs of this project. It allows for the compatible use of a property through repair, alterations, and additions while preserving those characteristics and features which convey its cultural significance and value. This approach allows for modifications that provide safe and sustainable options for visitor use including trails, restroom facilities, and universal access.

TR Island is significant primarily as a national memorial to Theodore Roosevelt and his devotion to the conservation of America's natural resources. The site has a rich history, however, and is significant for several additional aspects. Throughout its evolution, topography and geology have always mandated settlement patterns on and the development of the island landscape.

This CLR/EA recommends rehabilitation for the Theodore Roosevelt Island landscape. The rehabilitation approach provides a framework for the treatment of the landscape that preserves historic resources in their multilayered context. While the landscape conditions at Theodore Roosevelt Island strongly evoke the site's memorial character, the CLR/EA also recommends enhanced interpretation of the earlier historic themes. Treatment focuses on the protection of important prehistoric and historic resources and enhanced accessibility for the landscape so that visitors may continue to enjoy this unique cultural landscape.

MANAGEMENT ISSUES AND GENERAL RECOMMENDATIONS

The following issues address the management and preservation of the significant cultural landscape features of Theodore Roosevelt Island. These issues provide the framework for the development of a treatment approach and encompass a wide range of program areas. Properly addressing and following the general

recommendations will protect sensitive archeological resources; improve access; enhance interpretation; and maintain the vegetative character (note that Issues and Impact Topics are discussed in Introduction page 31).

- Archeological Sensitivity
 - Management Issue: Land and underwater archeological resources are not fully documented for Theodore Roosevelt Island. The probability for significant archeological features throughout the island is high due to the constant use of the island by multiple groups over thousands of years because of the island's location at the intersection of the Coastal Plain and Piedmont ecoregions.
 - General Recommendations: Document the island's rich archeological resources, inclusive of all periods of significance. Any ground disturbing activities may require further documentation and protection to preserve the sensitive resources and will employ nondestructive methods to the maximum extent possible.
- Access and Circulation
 - Management Issue: A pedestrian-only bridge provides the only official access to the island. Once on the island, four NPS trails provide access to various locations including the Woods Trail, North Transverse Trail, Upland Trail, and Swamp Trail. Many social trails have also been created over time mostly along the shorelines along the west and north ends, as well as the southern tip causing damage to the island vegetation and archeological resources. Some of these social trails are related to recreational watercraft accessing the island from the Potomac River and creating social trails from the landings. In addition the TR Island trail system is not currently universally accessible.
 - General Recommendation: To provide enhanced access to TR Island, where possible, design an accessible route using the existing trail alignments, following the guidelines for the Architectural Barriers Act, with specific guidance for recreation areas and trails provided in the Guidelines for Outdoor Developed Areas (ABA, Outdoor Developed Areas). Consider formalizing some of the social trails and developing an official water access areas to reduce impacts to sensitive resources.
- Interpretation
 - Management Issue: There is no interpretation regarding the significance of the island as a presidential memorial. The minimal and outdated waysides that are on the island are focused on the natural history.
 - General Recommendations: Update and broaden the interpretation on TR Island to emphasize the Presidential Memorial and other significant events that occurred on the island. Develop a comprehensive interpretive plan.
- Memorial Landscape
- Vegetation
 - Management Issue: The diverse native plant communities mostly introduced by Olmsted Brothers landscape plan from the 1930s,

thrives on the island. Recent pest infestation of emerald ash bore is responsible for the killing of over 200 ash trees in 2017. Invasive vines run rampant in the understory layer and sometimes shroud mature trees. Some of these vines originated from the earlier settlement on the island in the 18th and 19th centuries and were planted as part of the 1960s memorial plaza planting plan.

- General Recommendations: Inventory and document the plant species and vegetation condition of TR Island's various native plant communities or ecological zones, and develop vegetation management plans accordingly. Develop invasive plant removal strategies that do not adversely impact archeological resources.
- Visitor Amenities
 - Management Issue – When the public arrives on the TR Island from the official entrance on the pedestrian bridge or unofficially by watercraft on the river, there is limited wayfinding available to direct them to the island trail network, the memorial plaza and comfort station. The few signs that are available, are outdated and hard to read. Although there is a comfort station on the island, it is only open seasonally from April to October during normal park operational hours, which might influence seasonal visitorship.
 - General Recommendations: Improve wayfinding by installing updated signs as appropriate to provide directional information and expand the operational hours and seasonal time frame for the comfort station is opened to make it more accessible to a larger subset of the visitors throughout the year.

Table 3. Treatment Recommendation Summary







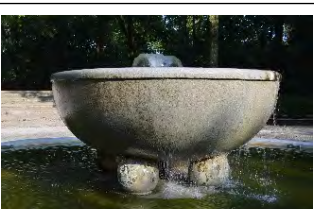



IMAGE	LANDSCAPE CHARACTERISTIC	TREATMENT RECOMMENDATION SUMMARY
	Archeology	<ul style="list-style-type: none">• Conserve, protect, and manage.• Land and water archeological resources may require further documentation and preservation plan.• Island wide archeology study slated for 2018, inclusive of all periods of significance .
	Natural Systems & Features	<ul style="list-style-type: none">• Preserve and protect the Potomac River, river edge, diverse island ecosystems, and terrestrial and aquatic species.• Monitor sea level rise and climate change effects to the shoreline.
	Vegetation	<ul style="list-style-type: none">• Document, protect, and enhance the 11 diverse island vegetation zones.• Restore tree canopy damaged by the emerald ash borer with replanting of native tree species.• Rehabilitate the Memorial plaza landscape through replacement of key plantings and pruning of existing shrubs and trees.
	Spatial Organization & Land Use	<ul style="list-style-type: none">• Preserve spatial relationships of natural areas and forest areas to built areas.• Preserve the existing relationship of built features (Memorial Plaza, mason estate, comfort station, former ferry landing, and causeway) to natural systems such as the forest, the wetlands, topography, and views.• Maintain the existing land use as a Presidential Memorial focused on visitor education, interpretation, and passive recreation.
	Circulation	<ul style="list-style-type: none">• Preserve or enhance land trails and make portions of trails universally accessible.• Rehabilitate Bridge 31 of Mount Vernon Trail.• Install soft water landing(s) and one floating dock for small non-motorized watercraft on north and south ends of island.• Preserve and enhance trails to the northern and southern ends of the island.• Maintain the viable sections of the Olmsted trail circuit.

IMAGE	LANDSCAPE CHARACTERISTIC	TREATMENT RECOMMENDATION SUMMARY
	Buildings & Structures	<ul style="list-style-type: none">• Preserve and rehabilitate existing historic structures.• Rehabilitate existing historic Comfort Station as a universally accessible restroom open year-round.• Rehabilitate historic memorial plaza landscape restoring vegetation, restoring full circle memorial experience, and relocating non-contributing features and structures. Incorporate universal access to the Theodore Roosevelt statue in a manner that is consistent with the existing architecture.
	Constructed Water Features	<ul style="list-style-type: none">• Repair and maintain pools and fountains at plaza.• Develop design for more effective wildlife crossings that is compatible with the historic pools and fountains.
	Views & Vistas	<ul style="list-style-type: none">• Undertake select view and vista clearing; reinstate natural southern viewpoint.• Reinstall key historic viewpoints on both north and south island points, especially occurring in locations of the new soft water landings.• Maintain historic land/water views (e.g. between north TR Island and Virginia mainland or Georgetown).• Maintain historically planned views across the memorial plaza.
	Topography	<ul style="list-style-type: none">• Preserve existing topography, which establishes the framework for the natural vegetation systems and built structures and features.• Preserve the existing shoreline bathymetry .
	Small Scale Features	<ul style="list-style-type: none">• Protect and preserve small scale features such as water fountains.

TREATMENT RECOMMENDATIONS BY LANDSCAPE CHARACTERISTIC



Figure 150. Bulletin board and children's interpretive sign, 2016. (JMT)

The treatment recommendations were evaluated and developed according to the framework of Cultural Landscape Characteristics, which are:

- Archeology and Archeological Sites
- Natural Systems and Features
- Vegetation
- Spatial Organization and Land Use
- Circulation
- Buildings and Structures
- Constructed Water Features
- Views and Vistas
- Topography
- Small Scale Features

These Cultural Landscape Characteristics were ordered roughly in order of magnitude of their contributions to the integrity of the cultural landscape of TR Island.

ARCHEOLOGY AND ARCHEOLOGICAL SITES

Archeological potential on the overall Island is high, with several known archeological sites – beginning with the pre-1717 Period of Significance (American Indian Usage) and extending to the Presidential Memorial period. The presence of these sites – and the potential for multiple additional sites - illustrates the

significance of the archeological record at TR Island. The archeological sites have the potential to contribute significantly to our understanding of each period of significance on the Island.

- Ensure that archeological resources, both on land and underwater, are conserved, protected, and managed to prevent the impairment of archeological resources or their values.
- Conduct island wide archeological survey of both land and water resources including the use of ground penetrating radar, statistical sampling, and other measures to determine the types and extent of existing archeological resources. Island wide investigations are slated for 2018-2019.
- Identify and develop a preservation plan for the known sunken and partially exposed maritime resources along the north and east shorelines.
- Consider condition/status of the archeological remains and features vis a vis visitor safety.
- Conduct underwater investigation to locate extant remnants of the causeway dating from the Mason period. If material exists, evaluate and prepare preservation plan to prevent loss of additional historic fabric.
- Incorporate information about archeological resources within the park into interpretation.
- Execute exotic vegetation removal strategies that effectively eradicate invasive, non-native species while protecting archeological resources.
- Coordinate with appropriate outside constituency groups and tribes relating to each historic period of significance.
- Contact Gunston Hall to ascertain the status of the artifacts that were loaned in the 1970s. If possible, create exhibits on the island to showcase artifacts or reproductions.

MASON HOUSE RUINS

- Develop a preservation strategy based on the findings of the archeological investigation.
- Provide more comprehensive interpretation of this non-extant feature.

Figure 151. Interpretive sign for the Mason Mansion, 2016. (JMT)



MASON ICE HOUSE RUINS

- Conduct an archeological investigation and document the resource.
- Develop a preservation strategy.
- Preserve existing elements of this feature by controlling

Figure 152. Interpretive sign, 2016. (JMT)



invasive vegetation.

- Add protective fencing, or enhance vegetative screening and/or signage to deter visitors from accessing this feature.
- Provide more comprehensive interpretation.

CAUSEWAY REMNANTS

- Install a geogrid-type system, filling the area adjacent to the concrete causeway remnant to minimize future erosion.
- Build up over the remnants as a protective measure and stabilize the embankment.
- Conduct underwater investigations to locate extant artifacts of the causeway dating from the Mason period. If features exist, determine if a program of evaluation and preservation is needed to prevent loss of additional historic fabric.

FERRY LANDING

- Provide interpretive signage for this area, including extant ferry signs.
- Clean up debris in the area.
- Construct a small soft watercraft landing adjacent to ferry landing.

NATURAL SYSTEMS AND FEATURES

Natural Systems and Features are those aspects of the natural environment that have influenced the design and development of TR Island. These natural systems and features include the Potomac River, the eleven vegetative zones, the overall geomorphological foundation of the island, the climate, and ecology.



Figure 153. Potomac River, 2016.
(JMT)

- Preserve and protect the Potomac River, the river edge, and diverse island ecosystems including sandy beaches, rocky boulders, and vegetation. Rehabilitation actions include water quality improvements, storm water erosion control, vegetation rehabilitation, and selective shoreline restoration.
- Protect or enhance the diverse ecosystems and terrestrial and aquatic species found in and around the site.
- Conduct a survey and document natural systems and cultural resources on Little Island.

Figure 154. Deer grazing, 2016.
(JMT)

- Monitor tidal changes and its affect on natural systems.
- Monitor tree health and restore tree.
- Reinstate physical and visual access to the river edge (soft boat landings and floating dock).
- Preserve the island topography and geomorphology.
- Enhance passive recreational, interpretive, and environmental opportunities along the Virginia and island shorelines while protecting natural systems and features.



Figure 155. Great Blue Heron, 2016.
(JMT)



Figure 156. TR Island beach, 2016.
(JMT)



VEGETATION

Throughout its history, TR Island has experienced changes in its vegetative cover. The most extensive changes to the vegetation—and the ones that are reflected today—stem from the landscape designed by the Olmsted Brothers and implemented by the CCC in the 1930s. The vegetation condition generally conforms to a natural area left to normal ecological changes.

The vegetation can be divided into two sections: Natural/Semi-Natural vegetation and the Memorial Plaza.

NATURAL/SEMI-NATURAL

- Protect and enhance the eleven diverse vegetation zones present on the island, including deciduous forest, wetlands, and designed landscape zones.
- Conduct a vegetation inventory of Little Island.

- Implement shoreline vegetation restoration projects as appropriate.
- Document, maintain, and plan for future replacement needs of historic trees and remnant vegetation dating from historic periods such as Mason era.
- Eliminate invasive and non-native species, as appropriate using current management strategies that effectively eradicate the vegetation while protecting sensitive archeological resources.
- Management Plans
 - Prepare new vegetation management plan that will maintain/improve the health of the forest ecosystem.
 - Prepare landscape preservation maintenance plan that is tailored to the eleven specific vegetation zones.
- Monitor tree health and restore tree canopy impacted by the emerald ash borer.
 - As ash tree mortality rises due to the effects of the emerald ash borer (EAB), prepare a removal plan for dead trees and replace with species appropriate to the plant community in each ecological zone.



Figure 157. (L) Removed oak tree, 2016. (JMT)

Figure 158. (R) Oak trees associated with original plaza plan, 2016. (JMT)

- Evaluate all trail edge vegetation. Remove hazard trees/shrubs and poison ivy along trail edge. Clear overgrown vegetation and re-establish the Olmsted trails south of TR Bridge.

MEMORIAL PLAZA

- Rehabilitate historic landscape at the Memorial (see Map 13: Annotated planting plan).
 - Willow oaks (*Quercus phellos*)
 - Maintain and replace any missing willow oaks on exterior and interior rings of plaza to preserve character of canopy tree planting for the Presidential Memorial.
 - Conduct an arboriculture evaluation of the willow oaks, provide treatment recommendations, and prune or rejuvenate trees for health and vitality.
 - Conduct selective pruning to allow light in.
 - Boxwoods (*Buxus sempervirens*)
 - Restore existing boxwoods to match historic design plans, which called for naturalistic arrangements of 26 common boxwood shrubs in each of the four plant beds: two at 8' tall with a 6' spread, nine at 6' x 5', and fifteen at 4' x 4'.



Figure 159. Boxwood planting bed, 2016. (JMT)

- If the boxwoods need to be replaced due to poor health, consider a substitution that matches the same size, habit, and design intent, such as inkberry (*Ilex glabra*).
- Replant appropriate groundcover in boxwood planting beds, such as a low growing, non-invasive, broadleaf evergreen.
- Management Plans
 - Prepare new vegetation management plan that will maintain/improve the health of the forest ecosystem.
 - Prepare landscape management plan for the Memorial Plaza.

SPATIAL ORGANIZATION AND LAND USE

The spatial organization of the island is directly linked to the Olmsted plan and the creation of the presidential memorial. Elements of the spatial organization from earlier periods of significance remain primarily in the archeological record.

- Restrict building activities to existing developed historic zones and preserve existing natural areas.
- Preserve the existing spatial relationship of the natural areas to built areas.
- Preserve the existing spatial relationship of the Memorial Plaza, former Mason estate, comfort station, former ferry landing, and causeway to other landscape features, such as topography, vegetation, and views.
- Preserve general existing historic vegetation patterns within the property, such as the Olmsted-designed landscape and forest.
- Maintain cultural landscape features associated with historic land use and historic periods of significance.
- Maintain land uses as Presidential Memorial, passive recreation, visitor use, and interpretation.
- Plan any future use of the historic buildings and landscape to be compatible with the historic context and character of the property.



Map 12. Tree Removals due to Emerald Ash Borer

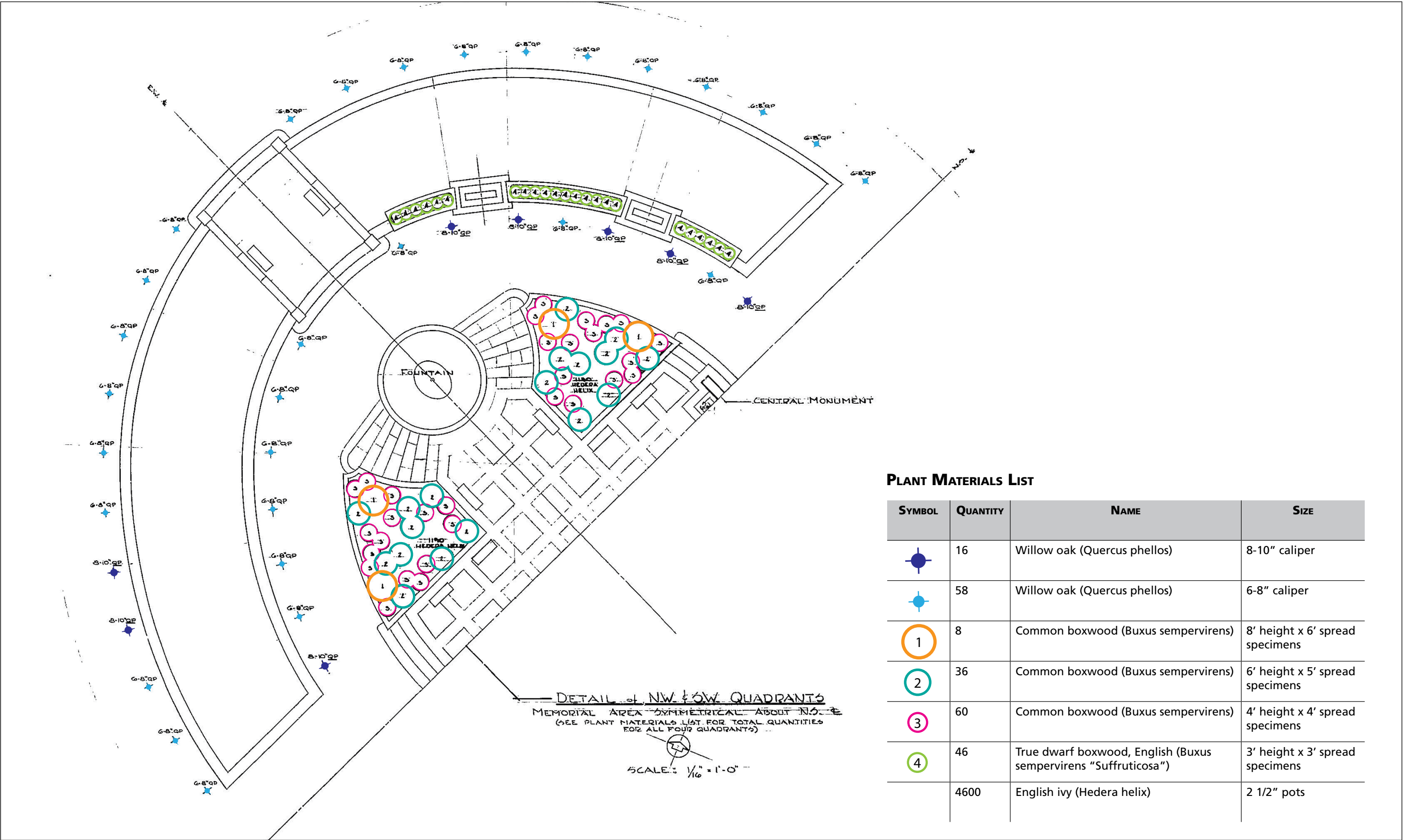


Figure 160. Annotated Plaza Planting Plan, 1965. (NPS 854/80151A)

- Establish shoreline access by establishing beach landings and one floating dock to accommodate non-motorized water access (further recommendations included in Water Circulation section).

CIRCULATION

While the trail system is obviously a circulation network, it is important to study the connections of the trail systems, the types of trails, and the interaction of the trails with other landscape characteristics. TR Island has historically been a hub of both aquatic and terrestrial circulation. The extant contributing circulation features convey the history of the island as an important center of transportation as well as its later use as a Presidential Memorial. The existing trails, while simplified, reflect the intent of the Olmsted plan.

ON ISLAND TRAILS

- Develop clear trail hierarchy with appearance, character, and treatment styles. Revise trail map accordingly.
 - Given the relatively gentle terrain of the trails on the island and the quality of most trail surfaces, it is not necessary to use recreational trail rating systems such as what the United States Forest Service (USFS) has developed; however, signage should provide a brief description of the areas where gradients may exceed typical Architectural Barriers Act (ABA) & Uniform Federal Accessibility Standards (UFAS) recommendations.
 - Consider which social trails should be retained, if any, and which ones should be eliminated and re-vegetated. These trails presently contain safety hazards such as roots, uneven trail tread, etc. (See Chapter 6 for details).
- Regrade and/or redesign select sloped areas of trails to meet ABA requirements.
 - Trail from pedestrian bridge terminus on island side to Memorial Plaza (400 feet).
 - Trail from pedestrian bridge terminus on island side to Comfort Station (2000 feet).
- Re-establish select Olmsted trails and features.
 - Re-establish viewpoint at southern tip of island and trails to access viewpoint.
 - Formalize trail at south-west edge of island traveling beneath TR Bridge.
 - Design access points for northern shoreline to minimize impacts to the rest of the shore.
 - Apply Olmsted criteria for trail hierarchy including trail width and vegetation.
- On sloped trail sections, use a subgrade stabilizer such as a geogrid-type product to provide better drainage, minimize or eliminate future erosion, extend life of trail tread, and minimize maintenance.

- In areas where the trails typically experience long periods of inundation, fill trail tread. Provide adequate base, subsurface drainage, and a base stabilizer such as a geogrid-type product.
- Evaluate all trail edge vegetation. Remove hazard trees/shrubs and poison ivy along trail edge.
- Improve Landscape under the TR Bridge to define a trail connector to the southern end of the island.
- Repair the Swamp Trail Boardwalk as needed.

PEDESTRIAN BRIDGE

- Evaluate pedestrian bridge for universal access design.
- Repair all broken balusters on the pedestrian bridge.

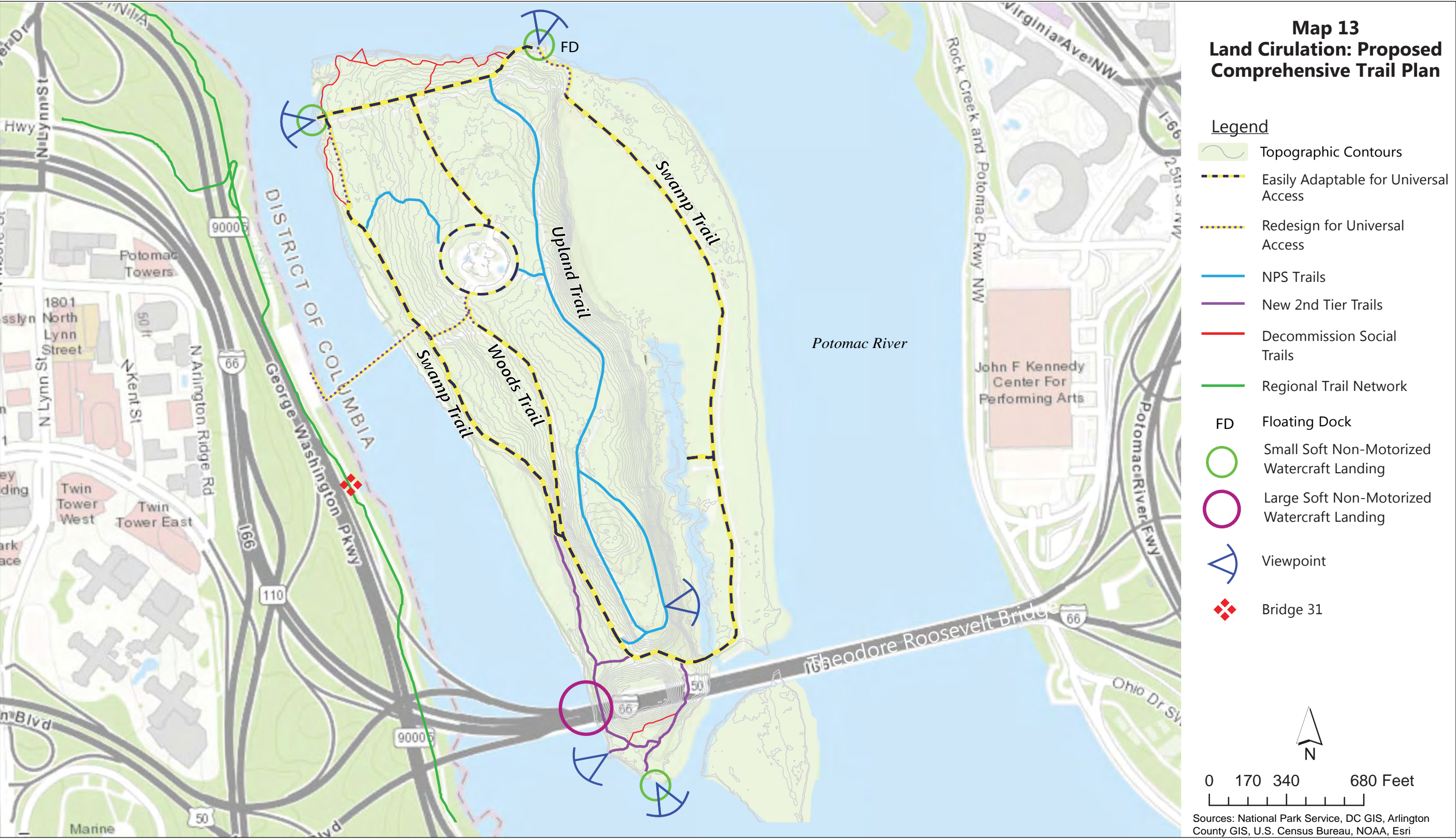


Figure 161. Pedestrian bridge connecting the parking lot to TR Island, 2016. (JMT)

- Sand and seal the railing caps on pedestrian bridge or provide a plastic-wood or other type of non-splintering material as a cover.
- Replace small, newly-installed regulation sign south of pedestrian bridge approach on Virginia side with a larger, more readable sign meeting NPS sign standards.
- Install a second regulation sign on north side of pedestrian bridge approach.
- Improve signage on island side pedestrian bridge terminus.

OFF ISLAND TRAILS

- Maintain regional trail connectivity (Mount Vernon Trail and Potomac Heritage Trail).
- Replace newly-installed small brown wayfinding signs with larger signs with larger text meeting NPS sign standards.
- Formalize trail access and signage to provide greater identity for the Potomac Heritage Trail trailhead at the north end of the parking area.
- Strengthen connectivity of the two trail systems and provide a trail map of the Potomac Heritage Trail.



MOUNT VERNON TRAIL BRIDGE 31

- Repair and realign the Mount Vernon Trail Bridge 31 at the trail juncture, located south of the parking area (See Figure 162).
- Replace and widen the bridge decking with non-weathering, textured, and well drained surfacing.
- Install Mount Vernon Trail standard railings along all elevated portions of the Trail.
- Clear the vegetation edge to improve sight distance. Improve wayfinding to give cyclists and pedestrians more advance warning on trail.



Figure 162. Mount Vernon Trail Bridge 31, 2016. (JMT)

WATER ACCESS

- Design and installing a non-motorized soft boat landing on TR Island for small craft such as canoes, kayaks, and row boats.
- Four potential locations have been identified on the north and south ends of the Island for non-motorized soft boat landings; one additional location has been identified for a floating dock. All of these locations are evaluated in Chapters 6 and 7 of this report. These potential locations are (Figure 163):
 - Small soft landing at the northeast corner of the island
 - Small soft landing at the northwest corner of the island
 - Small soft landing at the southern point of the island
 - Large soft land at the southwest point under the TR Bridge
 - Floating Dock – northeast corner of the island
- Create shoreline access points for both water traffic and pedestrians on island.

BUILDINGS AND STRUCTURES

Relatively few structures have ever been built on Roosevelt Island; the main structures that are extant today are those associated with Island as a Presidential Memorial and an Olmsted designed landscape (the Memorial Plaza, the comfort station, formal trail, etc.).

PRESIDENTIAL MEMORIAL

- Restore full-circle memorial experience by minimizing “back of house” areas.

- Remove abandoned utilities.
- Relocate or screen view of mechanical equipment and shed on northeast side of memorial.
- Relocate utility hatches from main memorial axes where possible.
- Regrade around utility hatches within memorial to minimize appearance and reduce tripping hazards.



Figure 163. Utility hatch and mechanical equipment, 2016. (JMT)

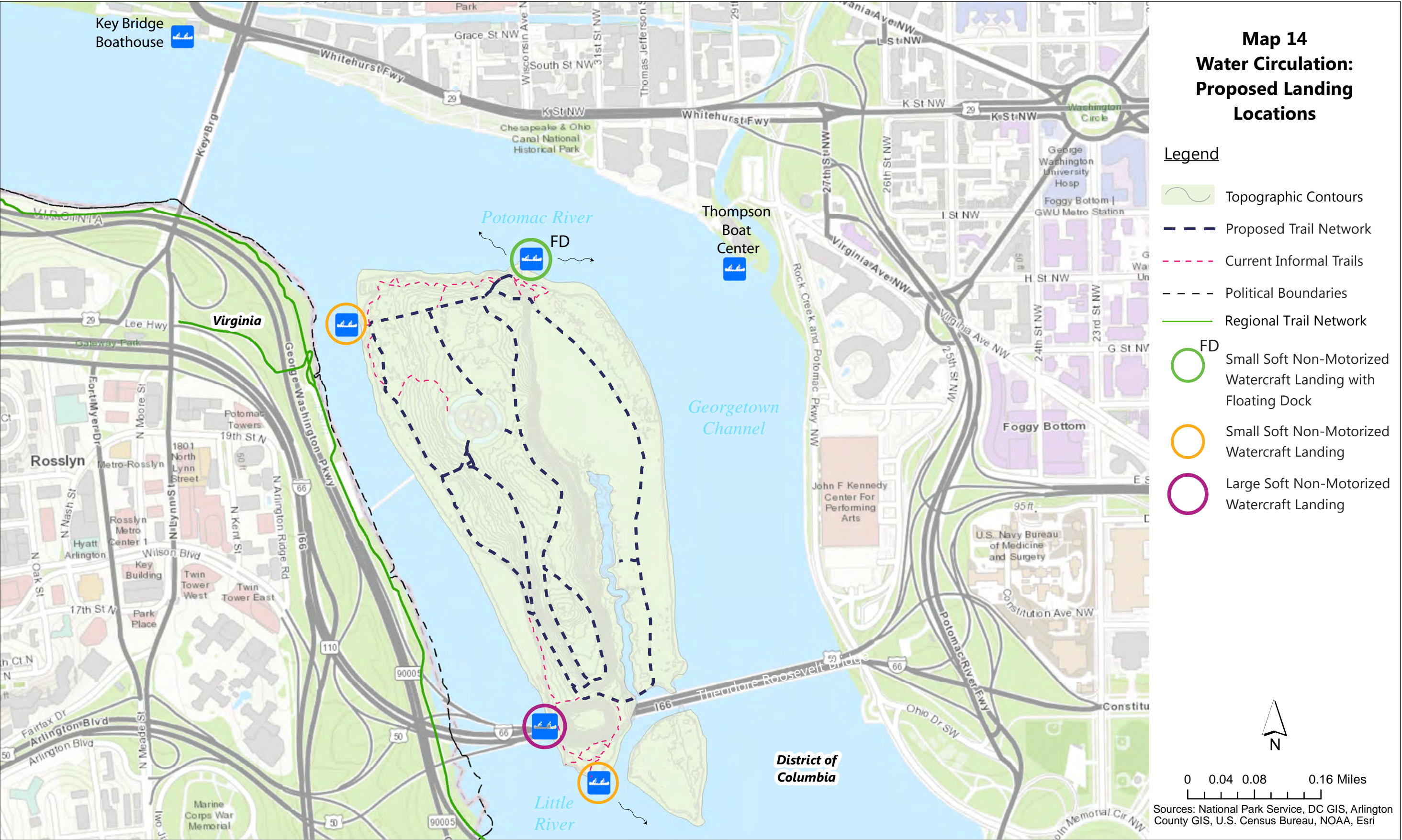


Figure 164. Utility hatch and electrical box, 2016. (JMT)

- Improve drainage at the periphery of the plaza to minimize clogging of drain inlets.
- Stabilize areas of decomposed granite gravel paving with a soil stabilizer or binder.
- Address drainage problems outside outer ring of willow oaks.
- Install a French drain system and drain to daylight or drywell as appropriate.
- Regrade to provide positive drainage.



Figure 165. Resulting pooling from clogged drains, 2016. (JMT)



Map 14. Proposed Landing Locations



Figure 166. Ponding outside outer ring of willow oaks, 2016. (JMT)



Figure 167. Steps adjacent to southeast fountain, 2016. (JMT)

- Install a universally accessible ramp on north or south steps of southeast fountain.
- Repair or replace broken granite bench.
- Establish regular statuary conservation program.



Figure 168. Damage on one of the granite benches within the plaza, 2016. (JMT)

- Assess effectiveness of wildlife egress ramps in moats. Possibly relocate to more accessible location that does not negatively impact the design of the memorial or design more compatible ramps.



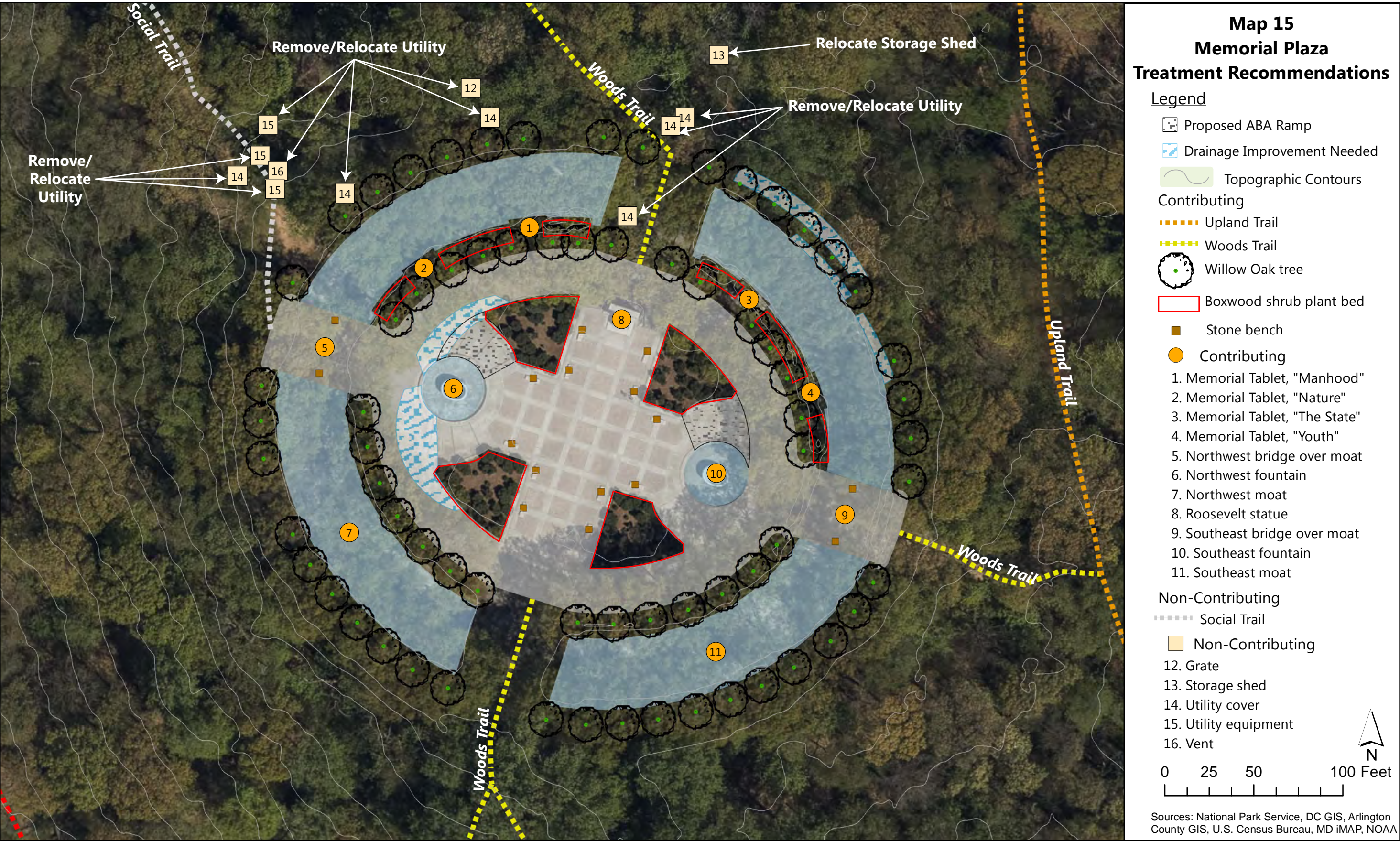
Figure 169. Wildlife egress ramp, 2016. (JMT)

SHED-ROOF STORAGE BUILDING

- Replace existing maintenance shed with a compatible modern shed in a more appropriate location out of direct view from the memorial plaza.
- If replacement is chosen, relocate shed off main memorial axis so it is not as visible from the memorial. New location will be selected appropriately to avoid impacting other locales and resources.
- If replacement is not possible, repair the existing shed.
 - Replace exterior siding, fascia boards, and roofing as needed.
 - Provide concrete slab on grade or concrete curbing to create clearance between wood members and ground.
 - Regrade surrounding areas to provide positive drainage away from the structure.
- Screen view of shed building from plaza.



Figure 170. Shed roof storage building, 2016. (JMT)



COMFORT STATION

- Rehabilitate existing historic comfort station building and surroundings for functionality and universal accessibility per desired use of structure per park management.
- Perform complete condition assessment and repair all deficiencies in accordance with the desired use of the structure per park management (including assessment of current holding tank condition and capacity).
- Consider year-round use of the comfort station (this is being addressed in the EA portion of the report).

TR BRIDGE (NON-CONTRIBUTING)

Figure 171. Graffiti on substructure of TR Bridge, 2016. (JMT)

- Coordinate with DDOT to develop and implement a plan to eradicate graffiti on substructure of TR Bridge.
- Coordinate with DDOT to discuss removal of chain-link fencing to the north and south of TR Bridge. If removal is not possible, minimize the extent of fencing or replacing with a more appropriate material to the cultural landscape.

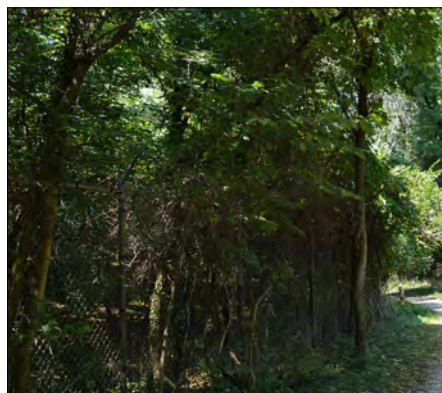


Figure 172. Chain link fencing, 2016. (JMT)

CONSTRUCTED WATER FEATURES

As part of the memorial plaza designed by Eric Gugler, two types of constructed water features were constructed on the island, both located within the Memorial Plaza: the two shallow round granite pools located on the east and west ends of the plaza and two large C-shaped reflecting pools on the east and west sides of the memorial plaza.



Figure 173. Fountain pedestal with presidential seal, 2016. (JMT)

- Repaint and reseal oval fountain pedestals.
- Address repair items on moat and fountain operation/maintenance.
- Follow sustainable water features guidelines.
- Prepare landscape preservation maintenance plan for water features.

VIEWS AND VISTAS

The importance of views, particularly from the island to its surroundings, has been central to TR Island since the Mason era, when the Mason house was carefully situated at the island's highest point (Pliska 2008:50). The significance of the views continued with the Olmsted design as Olmsted specified that certain views (from the north end of the island) be limited to glimpses of water so that the Georgetown and Rosslyn shorelines were hidden (Fanning 2001: 13).

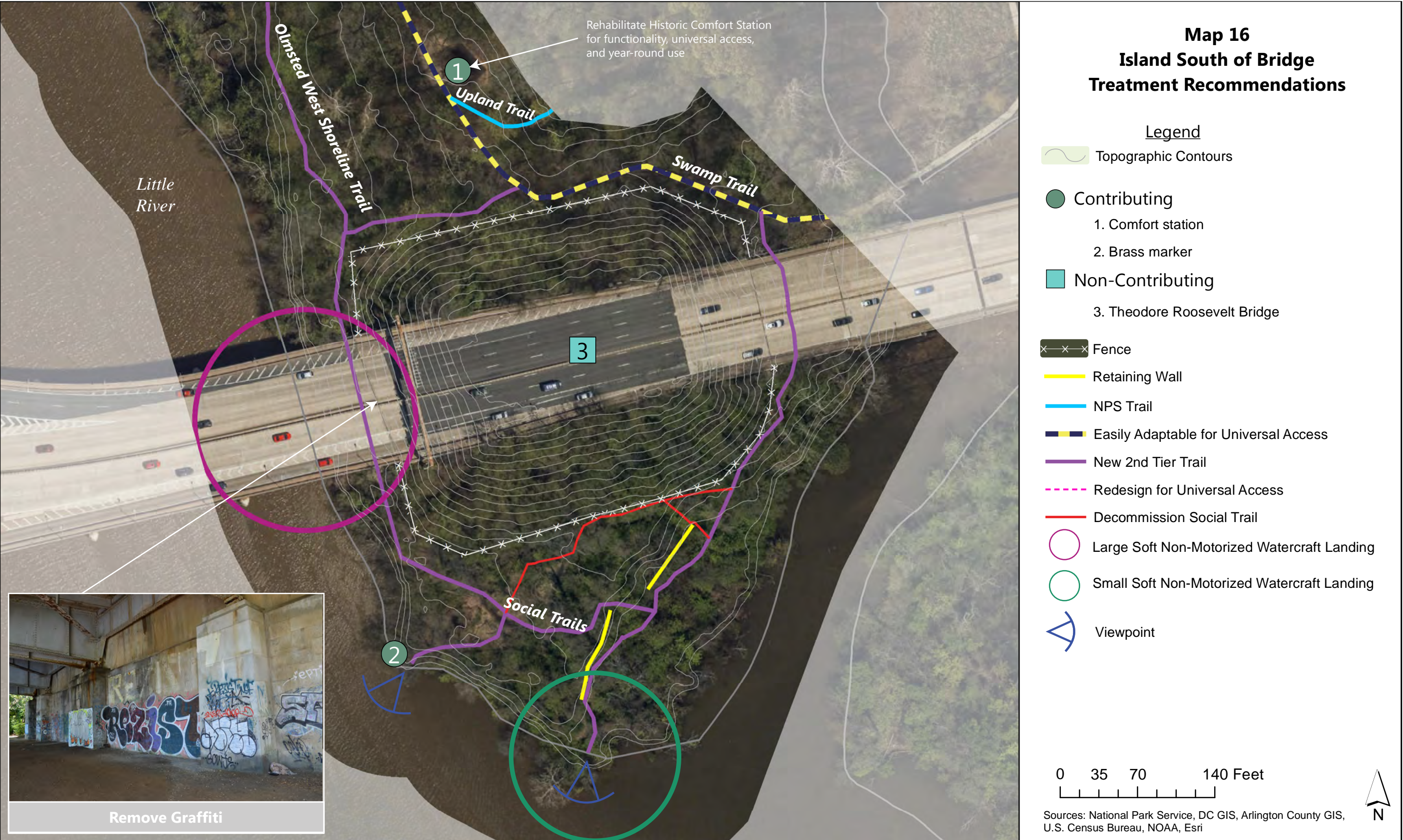
- Undertake select view and vista clearing to highlight major points of interest in Washington, DC, Virginia, Little Island, and the river landscape to the south (see Map 12).



Figure 174. View from causeway, 2016. (JMT)



Figure 175. View looking towards Virginia from causeway, 2016. (JMT)



Map 16. Island South of Bridge Treatment Recommendations

- Re-instate natural viewpoint at southern tip of island.
- Better emphasize and highlight the views/vistas at the sites of the historic causeway and ferry landing.

Figure 176. View looking southwest towards Virginia, 2016. (JMT)



Figure 177. View looking towards Georgetown, 2016. (JMT)



TOPOGRAPHY

Topography refers to the three-dimensional configuration of the landscape surface and includes both natural and man-made alterations.

- Preserve or enhance site topography, including shoreline edge, north-south ridge, etc.

SMALL SCALE FEATURES

Small scale features are those elements that provide detail and diversity for both function reasons and aesthetic requirements within the landscape. This can include walls, pedestrian furniture (i.e. benches), water fountains, etc.

- Preserve Dry Laid Stone Walls.
- Restore/preserve extant stone retaining walls supporting historic trails.
- Repair/improve adjacent trail tread as described under Circulation: Island Trail System.
- Protect and preserve brass USGS survey markers. Highlight these features in interpretation.
- Maintain or repair non-historic water fountains.
- Establish wayfinding program and install appropriate signage throughout the island and Virginia mainland. See Circulation section for additional details.

- Place compatible benches in select locations throughout the island, possibly in previous locations of Washington-style benches that are no longer extant.
- Install bench at pedestrian bridge terminus on island side.

INTERPRETIVE AMENITIES

Interpretation is not a traditional component of a Cultural Landscape Report. Current educational programming and landscape interpretation at TR Island are minimal. While minimalistic interpretive elements are recommended to preserve the naturalistic atmosphere, a more cohesive, robust interpretation program is needed at TR Island. A full Interpretation Plan should be prepared for TR Island that focuses on the four Historic Periods of Significance and that interprets each of these periods appropriately. The periods of significance are:

- American Indian Period (to 1717)
- Mason Settlement (1748-1833)
- Civil War Occupation (1861-1865)
- Presidential Memorial (1931-1979)

In November 2015 the NPS held a workshop for Site Interpretation and Visitor Experience Planning at TR Island. The results of this workshop included a variety of interpretive approaches including specific options and recommendations for five specific areas:

- Recommendations for On-Line Experiences
- Recommendations for Parking Lot Area Experiences
- Recommendations for Experiences on the Footbridge
- Recommendations for Experiences on the Island (off the Memorial Plaza)
- Recommendations for Experiences on the Island (at the Memorial Plaza)

Multiple Interpretive Amenities are being proposed for TR Island through both the Treatment Recommendations and the Treatment Alternatives. All of these are proposed as a means of enhancing the visitors experience through increased landscape immersion. These amenities are clearly outlined in Chapters 6 and 7, and include:

- Shoreline Access
- Rehabilitate existing Comfort Station
- Trail Access
- Universally accessible trails

- Adding shoreline access
- Reinstating historic views and vistas
- Wayfinding Signage to the Memorial Plaza

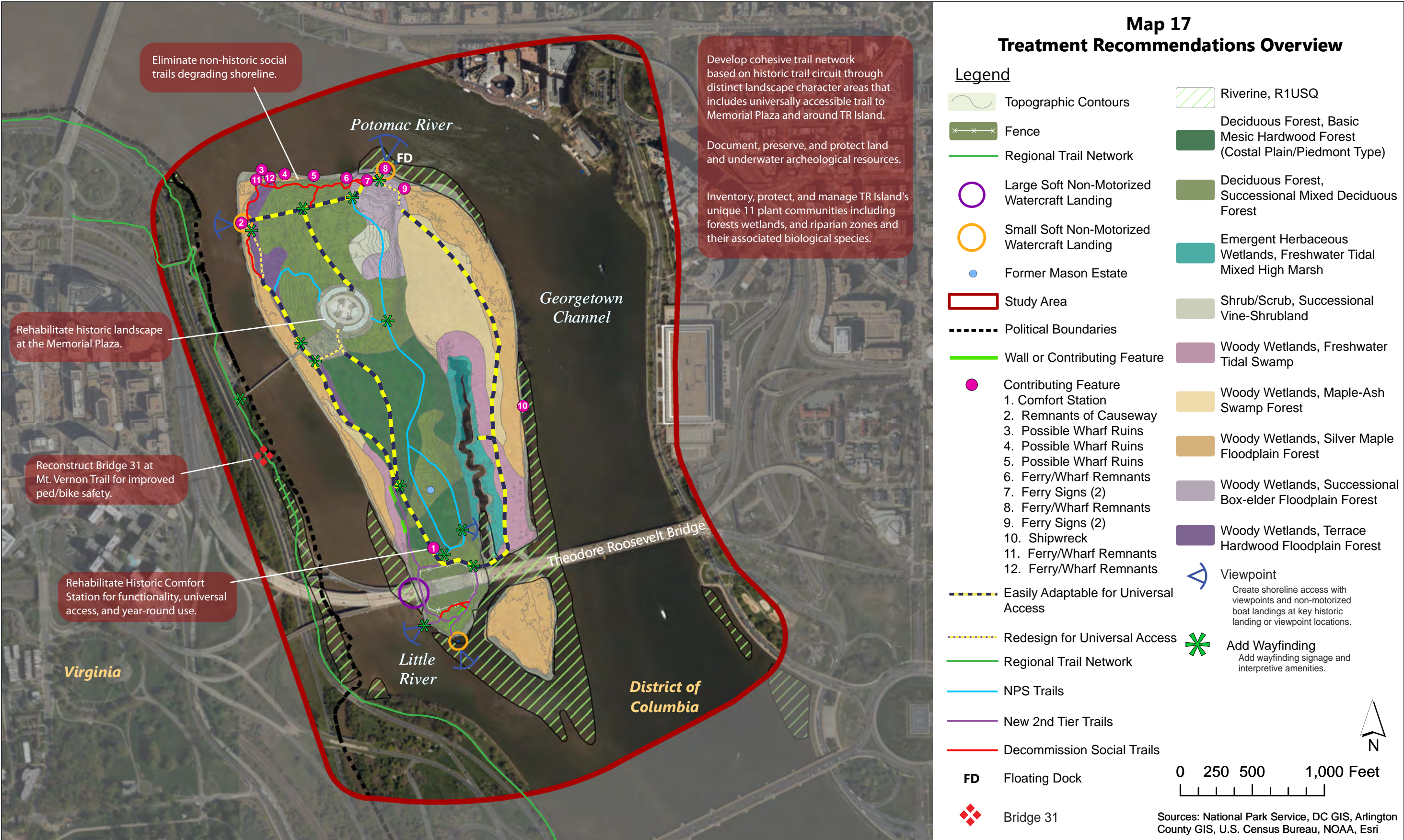
TREATMENT RECOMMENDATIONS BY LANDSCAPE CHARACTER AREA

In addition to applying treatment recommendations by individual cultural landscape characteristics, e.g. “Vegetation” or “Circulation” across the entire TR Island, treatment of TR Island’s cultural landscape may also be organized geographically by the Landscape Character Areas. See Map 2 - Overview of Landscape Character Areas.

For example, cultural landscape treatment of the Memorial Plaza may be undertaken as a targeted treatment focus. Treatment would include preservation and rehabilitation of all the relevant landscape characteristics, including the historic structure (entire plaza site), constructed water features, circulation paths, vegetation, views/vistas, and small-scale features contained within that Landscape Character Area.

The Landscape Character Areas for TR Island Cultural Landscape are identified as the following areas:

- North Plateau (see North Plateau Map 6, Comprehensive Trail Plan Map 13, and Vegetation Map 3)
- Memorial Plaza (see Memorial Plaza Map 7, Comprehensive Trail Plan Map 13, and Vegetation Map 3)
- West Terrace (see West Terrace Map 8, Comprehensive Trail Plan Map 13, and Vegetation Map 3)
- Marsh and Swamp (see Marsh and Swamp, Comprehensive Trail Plan Map 13, Vegetation Map 3, Wetlands Map 4)
- South Plateau (see South Plateau Map 11, Comprehensive Trail Plan Map 13, Vegetation Map 3, Wetlands Map 4)
- GW Memorial Parkway (see GW Memorial Parkway Map 10, Comprehensive Trail Plan Map 13)





CHAPTER 6: TREATMENT ALTERNATIVES

CHAPTER 6: TREATMENT ALTERNATIVES

This chapter presents the alternatives that were considered to meet the purpose and need, as well as the goals of accommodating passive recreation, visitor experience, education, and future preservation, while protecting and managing the cultural landscape of TR Island. The purpose of the project is to provide guidance for preserving the cultural landscape of TR Island and the adjacent portion of the GWMP (see Chapter 1 for details.) These alternatives should not be confused with the Treatment Recommendations, which are presented as the conclusion to the CLR portion of this project in Chapter 5.

These alternatives were developed over several months in cooperation with NPS and with input from consulting parties, state and federal agencies, and public scoping. These alternatives are being evaluated as an EA pursuant to NEPA (42 U.S.C 4321 et seq.), the CEQ Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (CEQ 2005), Director's Order 12: Conservation Planning, Environmental Impact Analysis, and Decision-Making (NPS 2011), and the 2015 NPS NEPA Handbook (NPS 2015). The purpose of this evaluation is to determine, in conjunction with the CLR, viable concepts and the potential impacts of each to the environmental and cultural landscape.

Two alternatives are being considered as part of this project – the No Action and the Action Alternatives. Within these two alternatives are three Treatment Recommendations that are being carried forward from Chapter 5 (Treatment Recommendations) as actions that are critical to the mission and purpose of the park. These Treatment Recommendations are:

- Comfort Station
- Land Circulation
- Water Circulation

The No Action Alternative presented under each of the treatments provides a basis for comparison with the Action Alternatives. Under each of the No Action Alternatives, the present level of use, management, interpretation, and operations would continue.

The Action Alternative was developed to address the recreation, education, visitor experience, and preservation goals of this project, while striving to preserve the

Cover photo caption: Swamp with park ranger, ca. 1952. (Theodore Roosevelt Digital Library, Dickinson State University)

known landscape characteristics that have existed through the various periods of significance outlined in the CLR.

ALTERNATIVE 1 – NO ACTION

The following information describes the three Treatment Recommendations from Chapter 5 that have been carried forward into the EA section of this project.

COMFORT STATION

The comfort station is located at the southern end of TR Island. Designed by architect Charles R. Wait and built in 1955, this is the only building on the island completed according to the Olmsted Brothers' plan. It is a contributing resource to the NRHP listing for TR Island.

The comfort station is only open seasonally from April to October or November (weather dependent) during normal park operational hours (6am to 9pm). Although the park is open year-round, the comfort station cannot remain open during the winter months because the plumbing utilities do not sufficiently operate during very cold temperatures. Additionally, because the comfort station is not operational during the winter months, this may influence seasonal visitorship.

An assessment of the comfort station was undertaken to determine its condition and general maintenance necessities. The gutter and downspout system are in poor condition and in need of replacement. The roof does not appear to be leaking, but is at the end of its useful life and should be replaced. The siding and wood trim are in good condition, with some areas of damage that should be repaired. The windows are in acceptable condition, and the exterior doors and hardware should be replaced.

The current toilet rooms are in usable and functional condition; however, the plumbing fixtures are not compliant with contemporary code.

Under the No Action Alternative, the comfort station would be maintained in its current condition and functionality. The building would remain deficient in meeting ABA requirements and only minor repairs and routine maintenance would be made, as needed, to keep the building functioning. Visitors would continue to have access to the comfort station from April to October.

LAND CIRCULATION

TR Island contains a network of trails that provides access to, from, and within the park. The pedestrian trails on the island include the Woods Trail, North Traverse Trail, Upland Trail, Swamp Trail, Olmsted West Shoreline Trail, and various social trails. Social trails, by definition, are those trails found throughout the island that were created as a result of visitor exploration and shortcut creation. The island pedestrian trails are supplemented by parking areas, pedestrian bridges, and trails on the Virginia side of the park, including the MVT and Bridge 31. While some of the trails and features noted above were part of the Olmsted Brothers' site plan (with modifications over time), other trails were established before the Olmsted Brothers' plan was implemented, or were created organically by visitor use. The trails range in condition and level of accessibility. While portions of the Swamp Trail and the entire Woods Trail can be considered universally accessible, no other trails are universally accessible. Social trails range in accessibility and condition from poor to good. The use and/or creation of social trails may endanger sensitive natural resources and potential archeological resources on the island.

The Off Island Trail alternatives, outlined below, pertain to MVT Bridge 31, the elevated, decked portion of the MVT that begins approximately 200 feet south of the Virginia approach to the pedestrian bridge. According to a field inspection and preliminary analysis performed by the Eastern Federal Lands Highway Division (EFLHD) for the NPS, Bridge 31 is in good condition but exceeds the AASHTO allowable deflection criteria.

On Island Trails

Under the No Action Alternative, the NPS trails would be maintained in their existing condition. No clearing of trails for additional accessibility would occur nor would any new trails, access points, or viewpoints established. The social trails would also remain in their current locations and conditions.

Off Island Trails

Under the No Action Alternative, the bridge would be maintained in its existing condition.

WATER CIRCULATION

Currently, there are no formalized water access points or landings on the island. Boaters and kayakers anchor or beach their non-motorized watercraft on unmarked areas along the shoreline. This practice impacts natural and archeological resources and has the potential to expose boaters and kayakers to underwater hazards in shoreline areas.

Under the No Action Alternative, no formal water access or landings would be created or maintained on the island. Boaters and kayakers would continue to shore or anchor their boats where it seems most accessible.

ALTERNATIVE 2 – ACTION ALTERNATIVE

COMFORT STATION

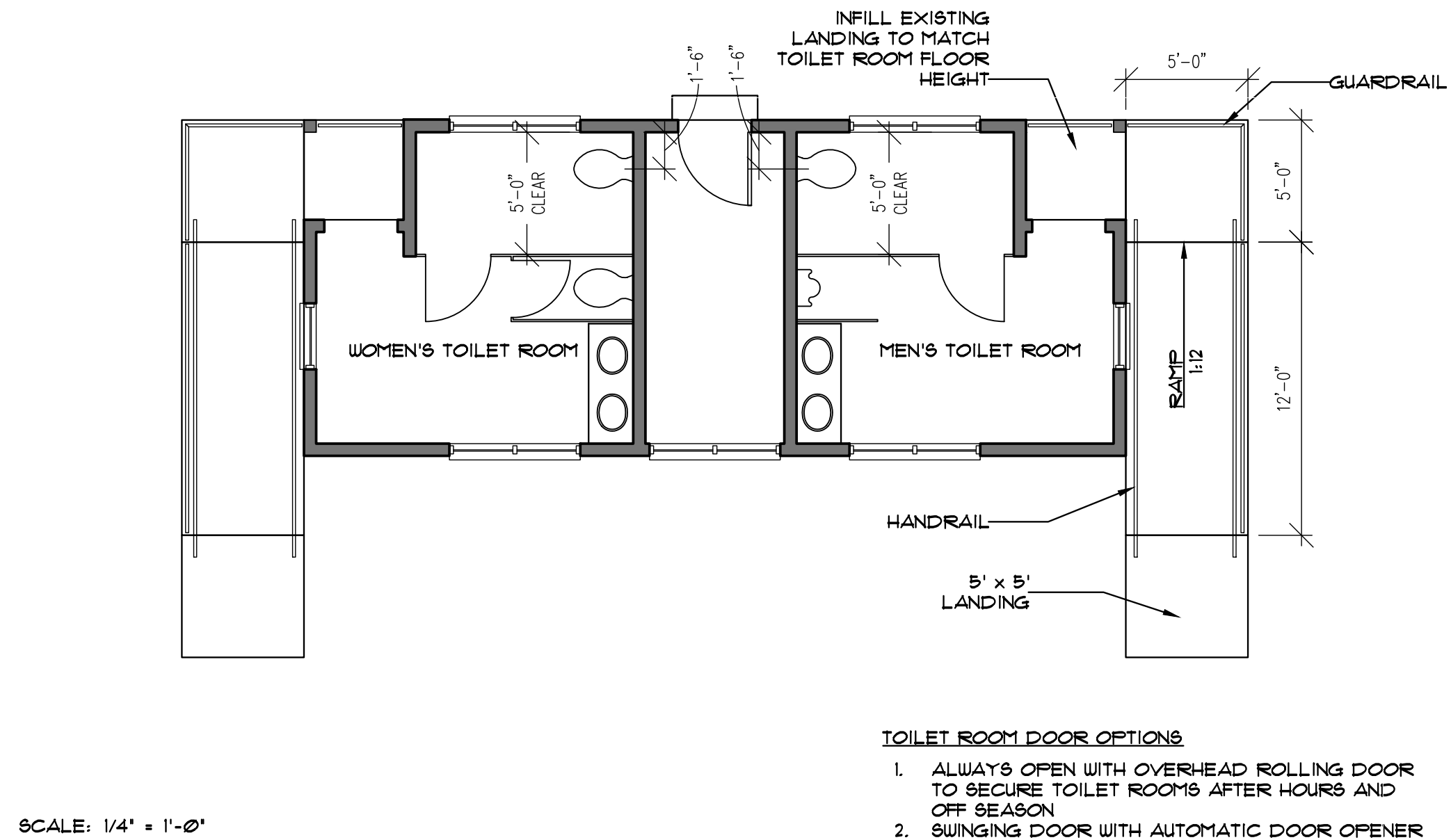
Option 1: Rehabilitation Treatment – Preferred

Under the Rehabilitation Treatment Option, the comfort station would be rehabilitated as a year-round, fully functional, universally accessible comfort station in its current location and footprint (Figure 180). The rehabilitation would maintain the integrity of the comfort station by implementing updates compliant with the SOI Standards. Exterior improvements would include replacement of the roof, gutters and downspouts and repairs to siding and wood trim where applicable.

No method of cooling or exhaust is currently present in the building; these systems would be installed under this treatment alternative. Heating is currently provided by electric baseboards in the toilet rooms and a radiant heater in the utility space. These systems would be replaced by a heat source from the ceiling. Plumbing fixtures would be replaced, and exposed light bulb fixtures would be replaced with surface-mounted LED fixtures. There are currently no light switches in the toilet rooms and existing equipment is controlled through breakers. Switches with occupancy sensors to control lighting and mechanical equipment in the toilet rooms would be added, as well as GFCI outlets.

The comfort station would be made fully ABA Compliant per the Architectural Barriers Act (ABA). To make the comfort station ABA compliant, the concrete landing and step up to the toilet room floor on both sides—a change in elevation of 10” to 12”—would require infilling and regrading or the addition of ramps. The ground adjacent to the toilet rooms could be regraded, and new sidewalks added to the areas adjacent to the building. Alternatively, ramps 3’ wide by 10’ to 12’ long with a 5’ by 5’ landing at the top and bottom could be added. Ramps would also require handrails and guardrails.

Entry doors would be removed and replaced with one of two options: an overhead rolling door that would be left open during park hours and would be used to secure the toilet rooms after hours and in the off season; or swinging doors equipped with automatic door openers (Figure 179 and Figure 180).




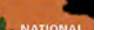



	Mark	Sheet	REVISION	Date	Initial		UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE - NATIONAL CAPITAL REGION DESIGN AND PROJECT MANAGEMENT	 DESIGNED  DRAWN  CHECKED
FLOOR PLAN – PROPOSED						PREFERRED ALTERNATIVE REHABILITATION OF EXISTING COMFORT STATION THEODORE ROOSEVELT ISLAND		
TITLE OF DRAWING						DATE: 10/20/17 SHEET 1 of 1		

Figure 178. Comfort Station Alternative 2: Option 1



Figure 179. Overhead rolling door.



Figure 180. Automatic door opener.

The toilet rooms are large enough to accommodate an ABA compliant renovation; however, due to increased toilet stall size and clear floor space requirements, the ABA compliant toilet rooms would have fewer water closets/urinals and lavatories. During the peak season the existing holding tank is pumped out every three weeks. Replacement of the tank would increase efficiency and reduce maintenance needs.

Toilet Room	Fixture	Current #	Proposed #
Women's	Toilets	3	2
	Sinks	2	2
Men's	Toilets	2	1
	Urinals	2	1
	Sinks	2	2

Option 2: Adaptive Reuse and Construction Treatment

Under the Adaptive Reuse and Construction Treatment Option, the exiting comfort station would be rehabilitated for a purpose other than as a comfort station, and new restroom facilities would be built on NPS property on the Virginia mainland, adjacent to TR Island. The rehabilitation efforts of the existing comfort station would depend upon the new purpose of the structure; however, the rehabilitation would be in keeping with the SOI Standards for Rehabilitation. Additionally, any alteration of the comfort station would require that it comply with ABA standards, so the concrete landing and step up to the toilet room floor on both sides—a change in elevation of 10” to 12”—would require infilling and regrading or the addition of ramps, as described in the Rehabilitation Treatment Option.

The new mainland structure would be a year-round, fully functional, and universally accessible structure located in the south end of the parking lot that would comply with the NPS Accessibility and Universal Design Standards. Two structure types were reviewed for this Option. The first is a comfort station (Figure 181). The building footprint would be approximately 220 square feet. This comfort station would contain two ABA compliant unisex stalls/ restrooms. Each stall would accommodate an infant changing station. A storage area and service sink for custodial operations would be included. Due to the location of the proposed comfort station, additional infrastructure would be needed to make this alternative viable. Because there is no public water or sewer available, a holding tank would need to be installed. This tank would be placed adjacent to the comfort station in an easily accessible location so that pump trucks could access it for cleanout and maintenance.

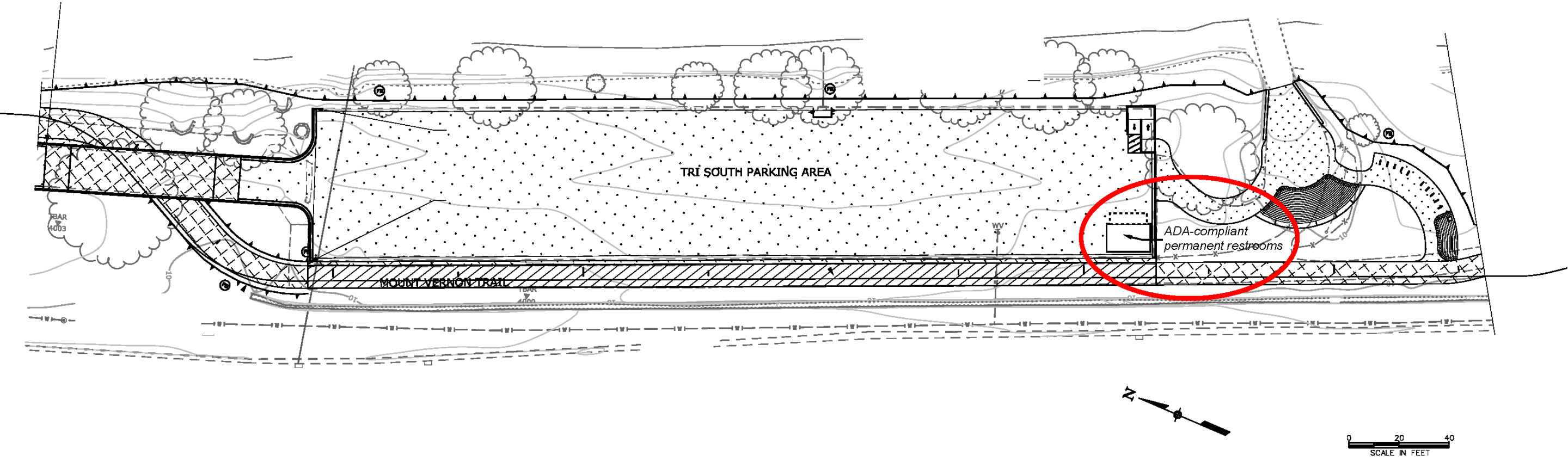


Figure 181. Comfort Station Alternative 1: Options 2 & 3

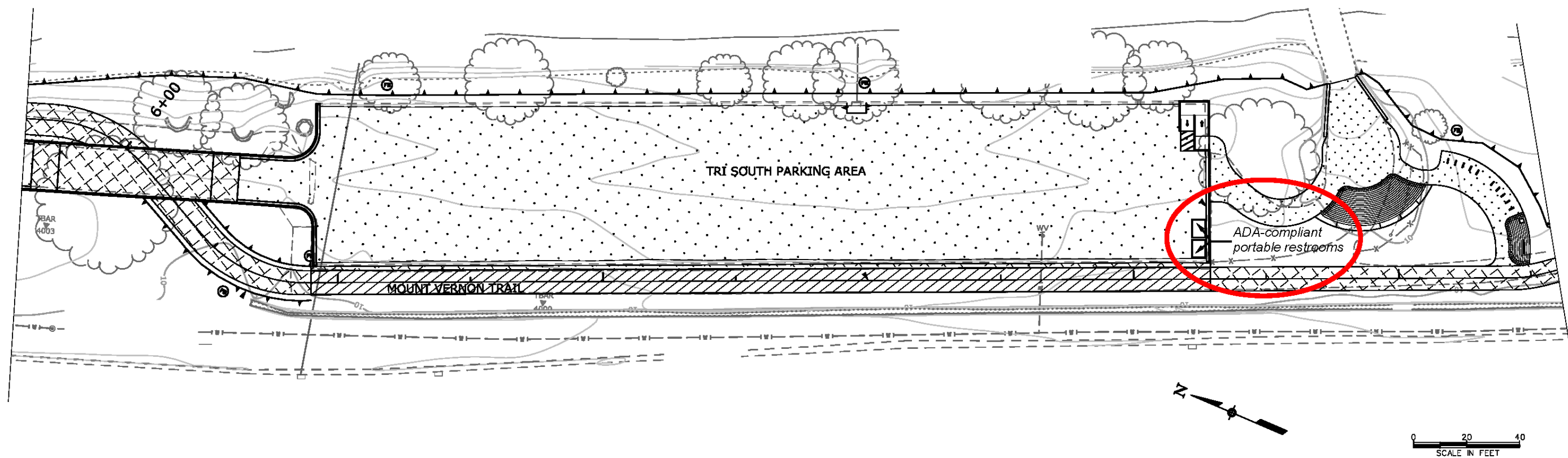


Figure 182. Comfort Station Alternative 1: Options 2 & 3

The second option for a new mainland facility is the installation of two solar powered portable toilets to be located at the south end of the parking lot (Figure 182). These non-permanent structures would be placed in the parking lot and could be used on a seasonal basis. The location of the portable toilets would provide easy access for regular maintenance—roughly every week—during the period of use. There will be no ground disturbance associated with the installation of portable toilets.

Option 3: Rehabilitation and Construction Treatment

Under the Rehabilitation and Construction Treatment Option, the existing comfort station would be rehabilitated as a universally accessible year-round facility and a new facility would be built on NPS property on the Virginia mainland in addition. The existing comfort station would be rehabilitated as described under the Rehabilitation Treatment Option, and the new mainland structure would be constructed as described in the Adaptive Reuse and Construction Treatment Option.

LAND CIRCULATION**ON ISLAND TRAILS**

Two options were considered for the Treatment of the On Island Trails. See Chapter 4 for a complete description of the trails and associated conditions of the land circulation attributes of TR Island. The first option is to decommission all existing social trails and restore the vegetation along these trails. The second is a more comprehensive Treatment Option that includes formalizing some select social trails, decommissioning others, establishing select interpretive viewpoints/nodes along the trails, and introducing consistent wayfinding along the trails to aid visitors in finding and utilizing specific amenities. Map 17 provides a graphic illustrating the existing trails and proposed treatments options. Further details for both options are found below.

Option 1: Social Trail Decommissioning and Vegetation Restoration

Under Option 1, the existing social trails would be decommissioned (Map 18). These social trails often provide linkages between the island's main trails where no formal connection exists. Continuous use of the social trails has compacted the earthen surfaces, effectively formalizing many of the trails. Some social trails exist where the terrain is naturally well drained, while others are located in low shoreline areas that are subject to puddling and periodic inundation from the river. These trails all contain safety hazards such as roots and uneven trail tread.

The social trails would be decommissioned, and the areas would be revegetated with limited plantings. Where feasible, the areas would be allowed to naturally revegetate. Where social trails intersect with NPS trails, vegetation would be planted to eliminate the intersection and to ensure that the social trails are not reestablished. Temporary barriers will be installed at these intersections to prevent users from re-establishing the social trails. No excavation will be needed to decommission the social trails; where necessary, fill will be added to raise the elevation of the decommissioned social trails to match the surrounding elevations. The complete restoration of these areas is anticipated to take between five and ten years.

Approximately 5,319 feet (approximately 1 mile) of social trails will be decommissioned (Map 18).

Option 2: Trail Improvements and Viewpoint/Wayfinding Creation – Preferred

Under Option 2, existing trails would be improved. Continued maintenance of the portions of the trails with existing universal access (portions of the Swamp Trail, North Transverse Trail, and Woods Trail) would occur under this treatment alternative, as well as improvements to other trails and interpretive amenities. Improvements would include:

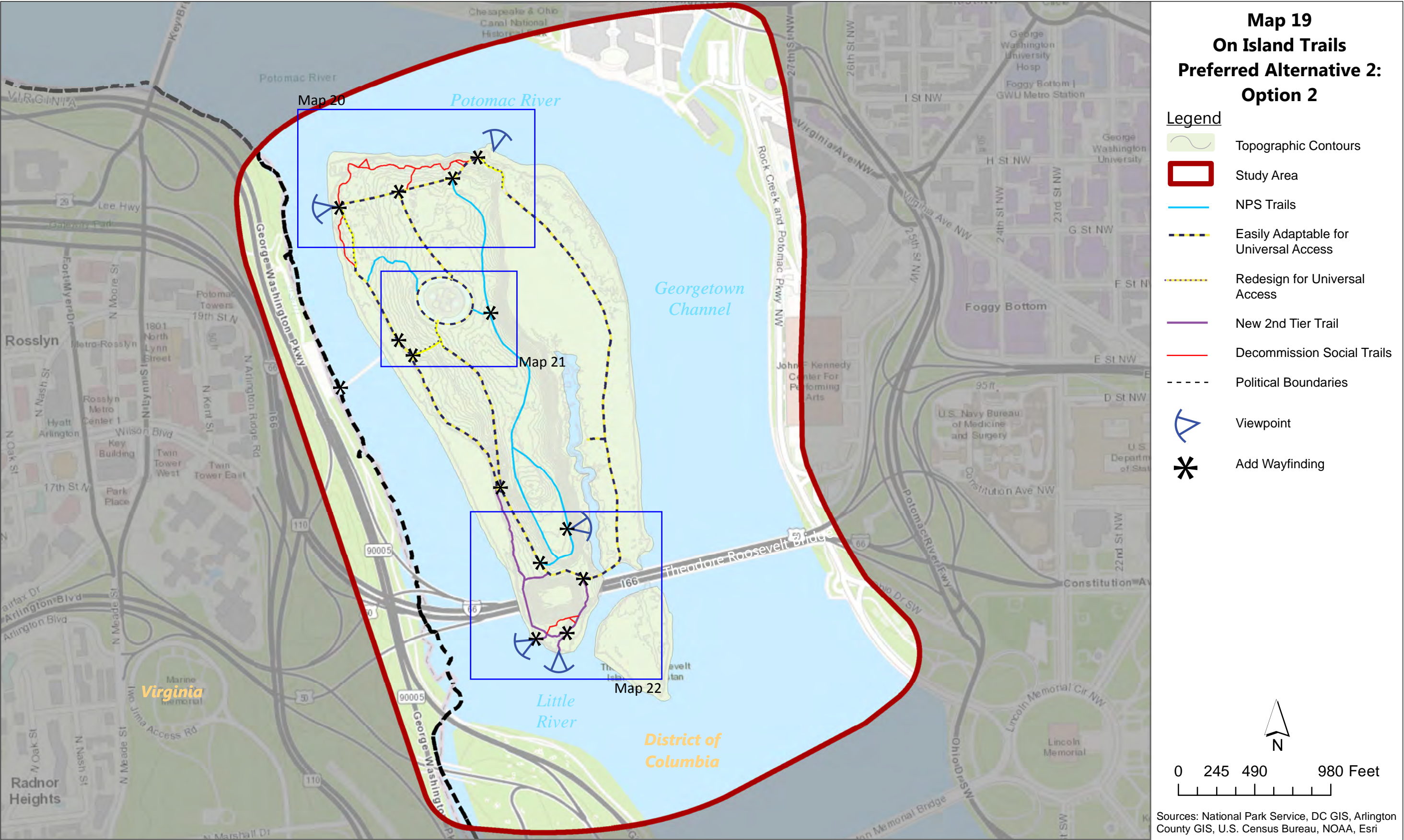
- Creating universal access from the island terminus of the pedestrian bridge to the Memorial Plaza;
- Creating universal access to the entire Swamp Trail, including access to the comfort station;
- Correction of grades to allow tie-ins to existing trails;
- Addition of wheel stops to the boardwalk on the Swamp Trail;
- Decommissioning the social trail along the north shoreline by revegetating and constructing temporary fencing (2,287 feet (0.43 miles) of trail);
- Decommissioning other social trails south of the TR Bridge (290 feet of trail);
- Coordinating with DDOT to modify or relocate the chain link fence at the TR Bridge abutments.
- Select social trails will be formalized.

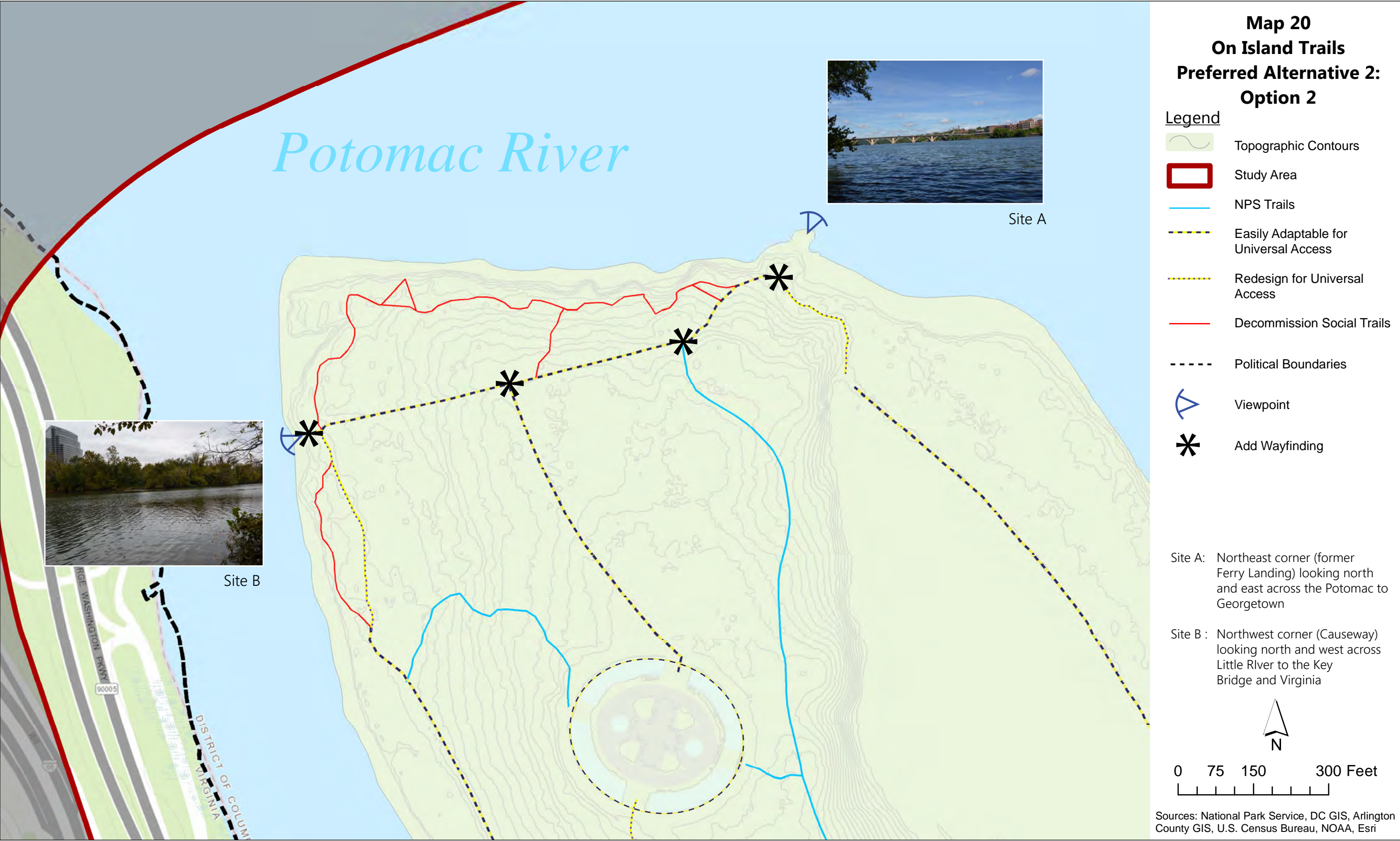
In addition, this treatment alternative proposes the creation of passive interpretive viewpoints/nodes at one or more of the following locations on the island (see Map 19, Map 20, Map 21, and Map 22):

- Northeast corner (former Ferry Landing) looking north and east across the Potomac to Georgetown;
- Northwest corner (Causeway) looking north and west across Little River

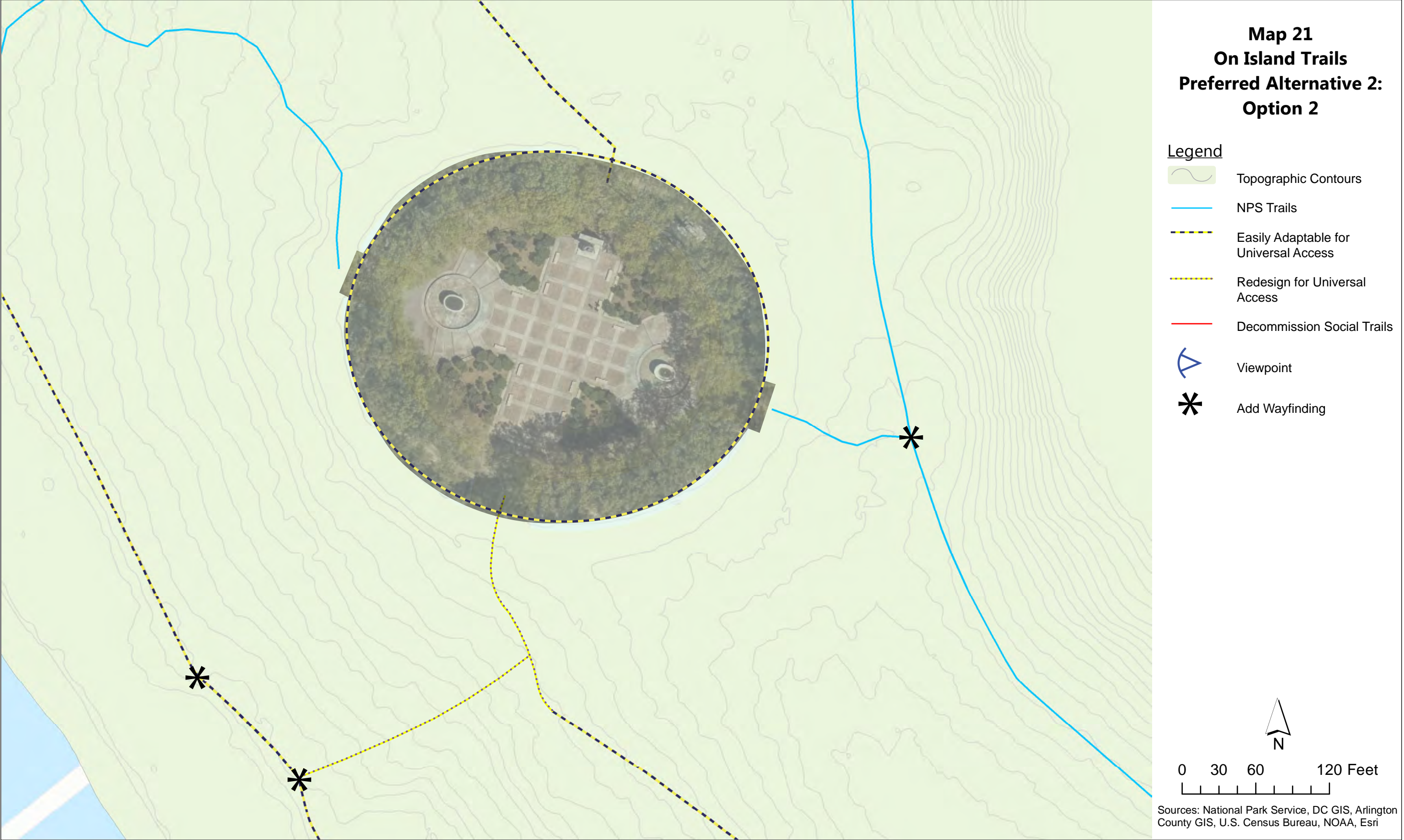


Map 18. On Island Trails Alternative 2: Option 1





Map 20. On Island Trails Alternative 2: Option 2



Map 21. On Island Trails Alternative 2: Option 2



Map 22. On Island Trails Alternative 2: Option 2

to the Key Bridge and Virginia;

- Southeastern point of the Upland Trail looking east across the marsh and swamp;
- Southern tip looking south to the Arlington Memorial Bridge and Virginia; and
- Southwest corner looking south and west to the Arlington Memorial Bridge and Virginia.

These interpretive viewpoints/nodes would be created through selective pruning and cutting back limbs around the viewpoints. Neither heavy removal of vegetation nor clearing and grubbing are anticipated.

The final component of this option is the introduction of wayfinding amenities to help enhance the land circulation on TR Island. This focuses on signage to aid in the overall visitor experience. This wayfinding will be non-intrusive and compatible with the landscape and NPS sign standards. The locations and potential content proposed for wayfinding signage, illustrated in Maps 17 - 20, are listed below:

- Virginia terminus of the pedestrian bridge
 - Including an introduction to TR Island
 - Including statement prohibiting bicycles on the island
- Island terminus of the pedestrian bridge
 - Including map of the island that highlights:
 - Location of the Memorial Plaza
 - Location of the comfort station
 - Location of the drinking fountain(s)
 - Location and length of trails, including condition and accessibility
- Trailhead to the Memorial Plaza (along the Woods Trail)
- Trailhead to the comfort station (along the Swamp Trail)

Additional wayfinding signage could include directions to areas that recall key aspects of the Periods of Significance, including:

- Mason House Ruins
- Former Wharf
- Ferry Landing
- Civil War Encampment

OFF ISLAND TRAILS

The Treatment Options for the Off Island Trails pertain specifically to Bridge 31, the elevated, decked portion of the MVT that beings approximately 200 feet south of the Virginia approach to the TR Island pedestrian bridge. Four options were identified for the rehabilitation of Bridge 31 to specifically address safety concerns at the current intersection on the bridge. All alternatives would include horizontal realignment of the north end of Bridge 31, replacement of the bridge deck and railing to provide a smoother riding surface, improve signage, and additional structure reinforcement to eliminate deck deflection. In each instance, northbound and southbound MVT users would have free flow conditions through the intersection. In addition, the non-native invasive vegetation that hovers against and over the trail bridge will be managed to provide a clear line of site. Whichever alternative chosen, the wooden piles supporting the bridge will see ground disturbance equivalent to 0.349 square feet per pile. So, for alternative 3 with 5 piles, total area of piles is $0.349 \times 5 = 1.745$ square feet.

Option 1: Bridge 31 Realignment with One New Pile

Free flow traffic conditions will exist on the Northbound and Southbound Mount Vernon Trail for users through the intersection. A new left turn lane would be marked with dotted pavement markings and stop line on the deck for users to make the left turn at the intersection. The alignment curves are all well above the minimum required, with the curves being as gentle as possible and still fit with the existing footprint of the bridge. No delineation other than a single 4 inch solid yellow or dotted yellow pavement marking separates the opposing directions of traffic through this intersection. The expansion of the deck is minimized, and only one new pile is required for the expansion. The deck across the length of the bridge will be widened from 10ft to 12 or 14 feet utilizing the existing piles. Trail widening where the bridge meets the land is not needed to tie in (Figure 183).

Option 2: Bridge 31 Realignment with Three New Piles

Free flow traffic conditions will exist on the Northbound and Southbound Mount Vernon Trail for users through the intersection. A new left turn lane would be marked with dotted pavement markings and stop line on the deck for users to make the left turn at the intersection. In addition, the left turn bay is wider than in Alternative one (1) and small painted island separates the through traffic from the left turning traffic. The alignment curves are all well above the minimum required, with the curves being as gentle as possible and still fit with the existing footprint of the bridge. No delineation other than a single 4 inch solid yellow or dotted yellow pavement marking separates the opposing directions of traffic through this intersection. The expansion of the deck is maximized to fill the entire gore

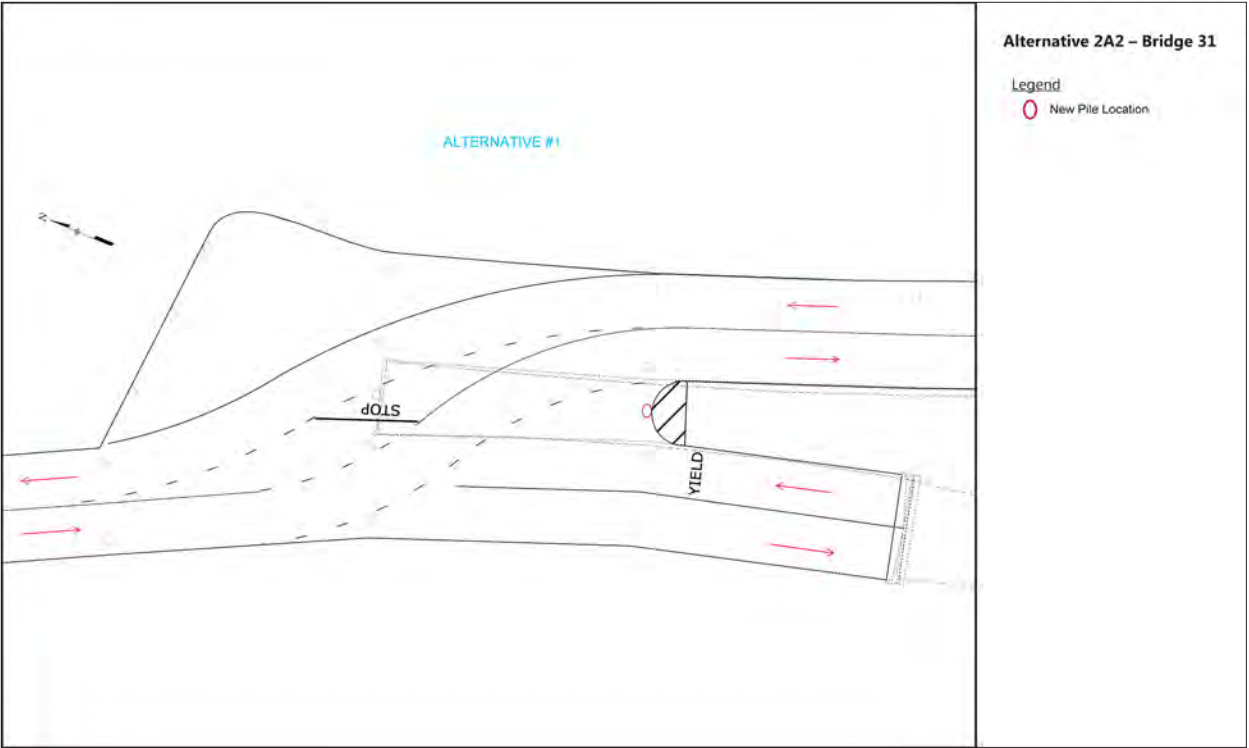


Figure 183. Off Island Trails
Alternative 2: Option 1

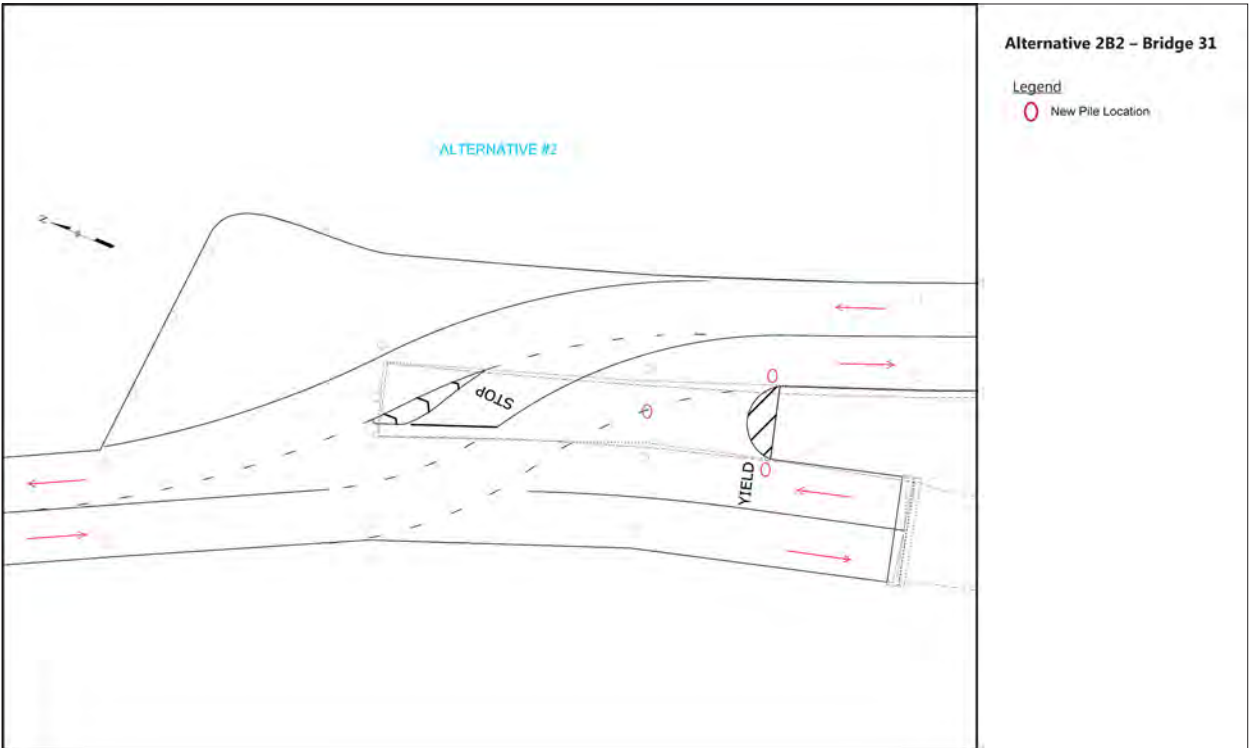


Figure 184. Off Island Trails
Alternative 2: Option 2

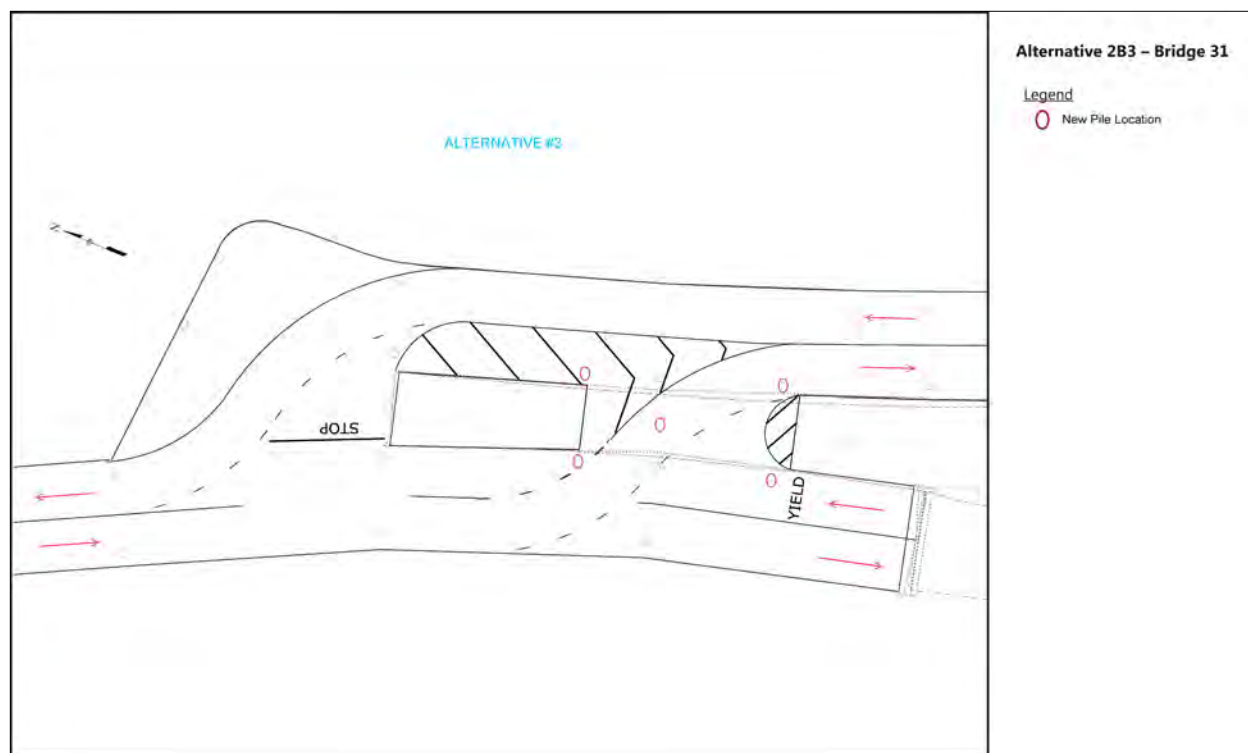


Figure 185. Off Island Trails
Alternative 2: Option 3

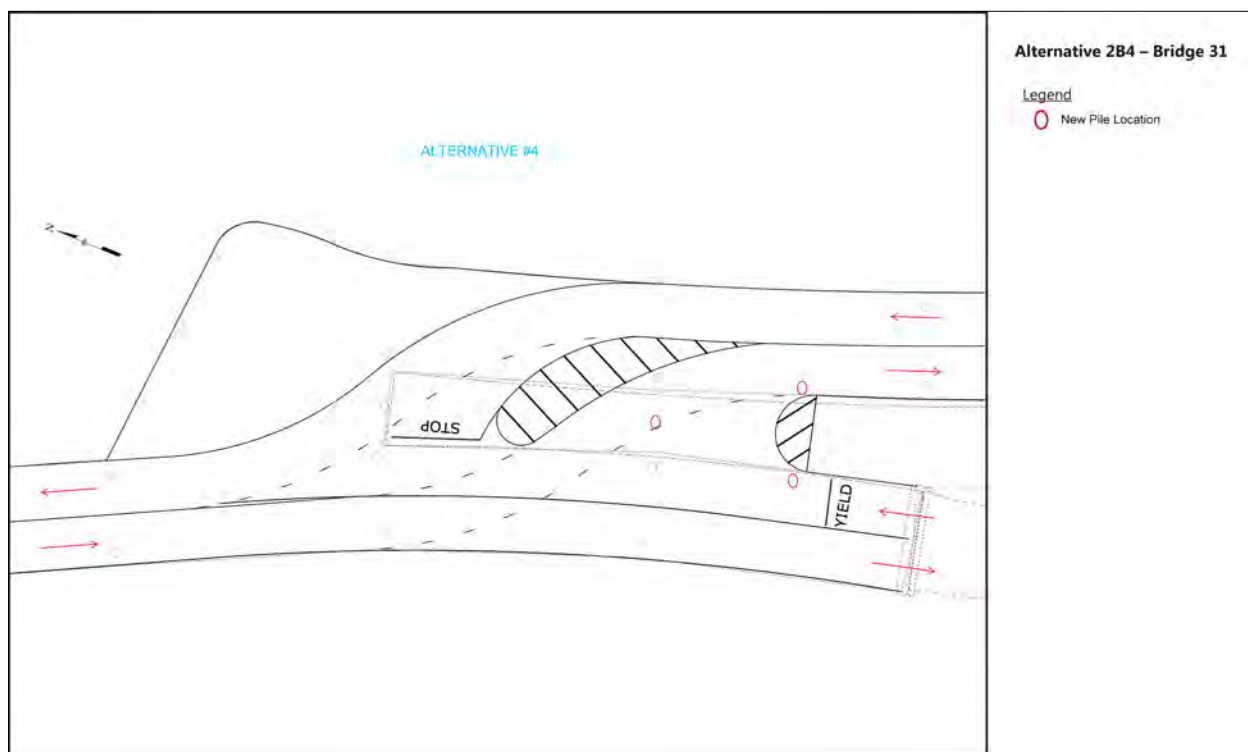


Figure 186. Off Island Trails
Preferred Alternative 2:
Option 4

area that is currently open in the deck at the intersection, and three new piles are required for the expansion. The remaining deck would be widened up to two feet on each side across the length of the deck (14 feet wide) utilizing existing piles. Trail widening where the bridge meets the land is not needed to tie in (Figure 184).

Option 3: Bridge 31 Realignment with Five New Piles

In this option, Northbound and Southbound Mount Vernon Trail users still have free flow conditions through the intersection. However, the opposing directions of traffic would be separated by a physical gap in the bridge deck (surrounded by bridge railing), acting as a barrier between the conflicting movements at this intersection. A new left turn lane would be marked with dotted pavement markings and stop line on the deck for users to make the left turn. In addition, the left turn bay is wider than in Alternative 1. In this option, the alignment curves are all below the minimum required in the AASHTO Bicycle Facilities guide, so design exceptions are required. The guide recommends a minimum radius of 42 feet for this class of multimodal trail given the speed and volume of user traffic it experiences. Several of the curves in this option are closer to 25 feet in radius. However, this is still an improvement over the existing condition since through traffic does not have to stop and the merging trail only has to contend with crossing one direction of traffic at a time, reducing the likelihood of conflicts. The expansion of the deck is maximized to fill the entire gore that is currently open in the deck at the intersection area while maintaining a separation island, and five new piles are required for the expansion. The remaining deck would be widened up to two feet on each side across the length of the deck (14ft wide) utilizing existing piles. Trail widening where the bridge meets the land is not needed to tie in (Figure 185).

Option 4: Bridge 31 Realignment with Three New Piles – preferred

Northbound and Southbound Mount Vernon Trail users would have free flow conditions through the intersection. A new left turn lane would be marked with dotted pavement markings and stop line on the deck for users to make the left turn. In addition, the left turn bay is wider than in Alternative 1 and large painted island separates the opposing directions of traffic, providing benefits similar to Alternative 3. The alignment curves are designed to meet the required in the AASHTO Bicycle Facilities guide (42 feet), so they meet the standard but are not as gentle as the curves in alternatives 1 and 2. The expansion of the deck is maximized to fill the entire gore area that is currently open in the deck at the intersection, and three new piles are required for the expansion. The remaining deck would be widened up to two feet on each side across the length of the deck (14ft wide) utilizing existing piles. Trail widening where the bridge meets the land is not needed to tie in (Figure 186).

WATER CIRCULATION

Two options for improved water circulation are proposed. The first is the establishment of soft non-motorized boat landings at specific locations on TR Island. The second option is the installation of a floating dock at a specific location in addition to soft landings described in option 1.

Option 1: Establish Soft Landings for Non-Motorized Watercraft

Under Option 1, water circulation and access would be re-established on the island. This would be achieved by creating formal soft landings or launches for small non-motorized watercraft in locations that were historically utilized for this purpose. See Map 23 for a graphic of the proposed boat landing/launch locations. Work associated with the reestablishment of these landings would include minor clearing of large rocks and debris, and pruning and cutting back of overgrown vegetation. No heavy excavation or clearing and grubbing would occur.

Non-motorized watercraft landings must meet the general needs of the public using the facilities. According to the 2004 publication, *Logical Lasting Launches: Design Guidance for Canoe and Kayak Launches* (National Park Service: Rivers, Trails & Conservation Assistance Program), the following general recommendations apply to landings:

- Height should be between 9 inches and 2 feet above highest expected water level
- Should be at least 5 feet wide, preferably 6 feet to 12 feet
- Should be at least 25 feet to allow paddlers “dry” access to entire length of their boats
- Slope should not exceed 8.33% whenever possible for ABA compliance and a slope exceeding 15% would make transition from land to water difficult for any paddler
- Handrails or other support structures, including step-down designs or ropes, help paddlers balance their weight during put-in and take-out
- Should ideally be located in areas without heavy flow, erosion, exposure to elements, heavy boat traffic, or fragile riparian habitats

The publication also recommends that canoe and kayak launches be environmentally sensitive, compliant, and sustainable. Soft landings at TR Island would comply with these recommendations and would be sited in one or more of the following locations:

- Site A: Small soft landing at the northeast corner of the island (at the former ferry landing site)
- Site B: Small soft landing at the northwest corner of the island
- Site C: Small soft landing at the southern tip of the island.



Map 23. Water Circulation Alternative 2

- Site D: Large soft landing at the southwest point under the TR Bridge.

There are two types of landings proposed – three small soft landings and one large soft landings. The small soft landings will be approximately 12 feet wide at the water line and will provide access for approximately 2-3 kayaks/canoes. The large soft landings will be approximately 20 feet wide at the water line and will provide access for approximately 4-5 kayaks/canoes.

Option 2: Floating Dock and Soft Water Landings - Preferred

In addition to the soft water landings, one floating dock for non-motorized watercraft would be installed in Option 2. Floating launches are described as:

Structures that provide access while floating on the water. Typically composed of a deck, frame, and floats, they are anchored to the shore. Paddlers launch from the deck, which is supported by the frame, while the floats beneath the frame provide buoyancy. Anchoring devices help to stabilize the launch and protect it from the elements. Pile guides are often used, permitting launches to adjust to changing water levels while keeping their decks horizontal and steady. When floating launches attach to connecting structures with varying heights (e.g., gangways), pile guides can help to maintain a relatively small cross slope, making launches more likely to be accessible to paddlers with disabilities (NPS 2004: 35). Pile guides will be post driven in to allow the dock to move up and down with the tide.

The floating dock would be placed at the northeast corner of the island, which is the site of a historic ferry landing and a later floating dock. The dock would be approximately 100 feet in length. Either a small soft landing or a floating dock would be constructed at this location. Minor clearing of large rocks and debris and pruning and cutting back of over grown vegetation would be required. No heavy excavation or clearing and grubbing would occur. The installation of a floating dock could require piles, which would necessitate drilling.

RATIONALE FOR PREFERRED ALTERNATIVE

The selected Alternative (Alternative 2 – Action Alternative) and the Options within the Alternative meet the purpose and need of the project while minimizing impacts to the Island. This Alternative was developed to address the recreation, education, visitor experience, and preservation goals of this project, while striving to preserve the known landscape characteristics that have existed through the various periods of significance outlined in the CLR.

Alternative 2 (Build Alternative) improves and modernizes certain visitor amenities, such as the comfort station and universal trail access, while preserving

the park's historically significant features. This alternative further meets the overall purpose of Theodore Roosevelt Island (NPS 2014: 26) as a memorial to President Theodore Roosevelt and as a natural park that is for the recreation and enjoyment of the public. The Island's significance is based on four key factors (NPS 2014: 26-27; NPS 2005:121):

- Designed by renowned landscape architects Frederick Law Olmsted, Jr. and Henry Vincent Hubbard, Theodore Roosevelt Island's woodland landscape reflects Roosevelt's conservation ethic and love of nature.
- Theodore Roosevelt Memorial Plaza is the only monument honoring the 26th president of the United States in Washington, DC.
- Theodore Roosevelt Island offers a rare opportunity for solitude and diverse outdoor recreation within the dense urban setting of our nation's capital.
- Many people, including American Indians, the Mason family, the U.S. military, and diverse visitors, have utilized the island for centuries.

The preferred alternative is in keeping with these four factors, preserving the integrity of the Island while rehabilitating infrastructure (i.e. trails) and adding additional visitor amenities that promote the recreation and enjoyment of the island (comfort station, trails, soft water landings).

MITIGATION MEASURES

The following mitigation measures will be used to minimize and mitigate the potential effects of the preferred alternative on the Island.

1. Archeological investigations will be undertaken, as necessary, in any areas that will be disturbed. Wherever possible potential archeological sites will be preserved and protected through the introduction of fill (as opposed to excavation) and/or the use of geotextiles. Specifically:
 - a. In areas where the social trails will be decommissioned, fill will be placed on top of the existing social trails to infill them (to align with the adjacent ground). No excavation will be done on the social trails therefore protecting any extant archeological sites.
 - b. The proposed soft kayak landings are predominantly in areas that have archeological potential (both terrestrial and maritime). The areas selected will need only minor work including clearing large rocks and debris and pruning vegetation. No heavy excavation or clearing and grubbing will be necessary.
 - c. One floating dock is proposed. The installation of this floating dock will require archeological investigations to ensure that the proposed location will not disturb any existing maritime archeological sites.
2. The rehabilitation of the existing comfort station will be in keeping with the Secretary of the Interior's Standards for Rehabilitation and will require only minor alterations to the exterior of the existing building.

An ABA accessible ramp will be installed leading to the two entrances to the comfort station, however extensive excavation is not needed for the construction of the ramp. In addition, the existing comfort station doors will be replaced to comply with ABA standards. The existing doors are not original to the building and their replacement will be sympathetic to the existing fabric of the building.

ALTERNATIVES/OPTIONS CONSIDERED BUT DISMISSED

Several Options were considered and dismissed as part of Alternative 2 (Action Alternative).

SECOND ON-ISLAND COMFORT STATION

One option considered was the construction of a second comfort station on the Island. This new comfort station would either be a replacement of the existing or would be in addition too it. This option was dismissed due to several factors, the main factor being the impact and affect that the construction of a new facility would have on the Island. The primary focus of the Island is as a presidential memorial and a designed landscape. The construction of a new building would impact this. Engineering challenges associated with constructing a new comfort station include logistics regarding transportation of materials and equipment over both pedestrian bridge and the on-island trails, the need for a new holding tank at a new location, and challenges of bringing fresh water to a second location on the Island.

Impacts from this option would include potential archeological impacts due to the needed excavation for piping and for a new holding tank. In addition, a new building would introduce a new visual element to the Island which was not part of the original Olmsted designed landscape. Therefore, this option was dismissed.

REPLACING THE PEDESTRIAN BRIDGE TO BE ABA COMPLIANT

The existing pedestrian bridge providing access to the Island is not ABA compliant. One option considered as part of the on-island trails was the replacement of the existing pedestrian bridge with a new, ABA compliant, bridge. This work falls outside the scope of this project and was therefore dismissed.

LAUNCH AREAS FROM THE MAINLINE TO THE ISLAND

Launch areas from the mainland were discussed as an option to help increase and moderate the water circulation and water landings at the Island. This option is outside the scope of this project as it mainly pertains to activities on the Potomac River and is only tangentially associated with the Island. In addition, a launch area on the mainland would increase pressure on the existing TR Island parking lot and would detract from the ability of users of the Island to utilize the parking lot.



CHAPTER 7: AFFECTED ENVIRONMENT/ ENVIRONMENTAL CONSEQUENCES

CHAPTER 7: AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

In accordance with the CEQ's Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (2005), direct, indirect, and cumulative impacts are described in this chapter (40 CFR 1508.25), and the environmental impacts are evaluated in terms of context and intensity (40 CFR 1508.27). Where appropriate, NPS-identified mitigation measures that may reduce or eliminate potentially negative effects from implementing the action alternatives are discussed in accordance with 40 CFR 1500.2(f). Section 106 of the National Historic Preservation Act (NHPA), as amended, is a separate (parallel) process. An Assessment of Effects (AOE) will be developed.

CUMULATIVE IMPACTS EVALUATION METHOD

The CEQ regulations require a cumulative impact assessment for proposed major Federal actions. A cumulative impact is defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period” (40 CFR 1508.7).

PAST, PRESENT, AND REASONABLY FORESEEABLE FUTURE ACTIONS

The following projects may result in cumulative impacts, when considered along with the proposed action and alternatives for this project.

MOUNT VERNON TRAIL (MVT) AND TR ISLAND PARKING UPGRADES

The project was an undertaking of the NPS and included upgrades to the TR Island parking lot; rehabilitation of the MVT along the updated parking lot; and the construction of the new plaza in the approach to the pedestrian bridge to TR Island. The upgrades allow improved parking, trail safety and mobility, and access. The project was completed in the summer of 2017. Impacts of the project included the addition of impervious pavement, the loss of one 14 inch diameter tree, and loss of parking spaces.

Cover photo caption: TR Island after flood, 1936. (NPS, Frederick Law Olmsted NHS)

THE KENNEDY CENTER FOR THE PERFORMING ARTS (KENNEDY CENTER) EXPANSION PROJECT

The Kennedy Center expansion project is located in Washington, DC near the eastern shore of the Potomac River. The NCPC and the NPS, acting as co-lead agencies in cooperation with the Kennedy Center, proposed the Kennedy Center expansion project. The project partially falls within the Rock Creek and Potomac Parkway (RCPP), which is under the jurisdiction of the NPS and managed by the National Mall and Memorial Parks. Under the proposal, the Kennedy Center would expand the south side of the current building. The project includes two pavilions located on the south side of the Kennedy Center and would connect with the existing building underground and at grade via the main plaza. A FONSI was signed in October 2015, and the project is currently under construction. Impacts of the project include negative impacts to views and vistas of historic properties, and beneficial impacts to visitor use and experience.

THE KENNEDY CENTER EXPANSION CONNECTION PROJECT

In addition to the Kennedy Center expansion project, the NCPC, NPS, and the Kennedy Center propose the development of a safe pedestrian and bicycle connection between the Kennedy Center and the Rock Creek Multi-Use Trail. They also propose improved access and the creation of a public waterfront link to and from the Kennedy Center, the National Mall and Memorial Parks, the Rock Creek Multi-Use Trail, the Potomac River waterfront, and the surrounding vicinity. The proposed connection would be located on a site bounded by F Street, NW, to the north, the Potomac River Freeway and ramp to TR Bridge on the east and southeast, and the Potomac River on the west. Impacts of the project include negative impacts to views and vistas of historic properties, and beneficial impacts to visitor use and experience and traffic and transportation. A FONSI was signed in June 2016, and the project is anticipated to be completed in conjunction with the expansion project.

GEORGETOWN NONMOTORIZED BOATHOUSE ZONE DEVELOPMENT PLAN

The NPS signed the FONSI in February 2017 for the Georgetown Nonmotorized Boathouse Zone Development Plan. The plan is for the development of non-motorized boating facilities and related park improvements along the DC side of the Potomac River in the Georgetown area. The project includes two new facilities east of the aqueduct; an expanded kayak rental facility; proposed reconfiguration of the streetscape to improve connections to the Capital Crescent Trail and Georgetown Waterfront Park; and access to the private properties in the boathouse zone. The NPS is working with a variety of partners to implement the plan, but a timetable for constructions has not been determined. Impacts of the project includes negative impacts to water resources, historic resources, land use,

transportation, and visitor use and experience. However, the NPS determined that the selected alternative can be implemented without significant negative effect to these resources.

ARLINGTON BOATHOUSE AT GWMP PROJECT

The Arlington Boathouse Project proposes the establishment of a new nonmotorized boathouse at the GWMP on the Potomac River along the Arlington Shoreline in Arlington, Virginia. The boathouse will enhance public waterfront access in the proximity of Arlington County; increase access along the Virginia shoreline for nonmotorized water-based recreational activities on the Potomac River; and alleviate pressure on other boathouses in the area. The project is in the planning phases and no date has been set for construction. Information on impacts as a result of the implementation of this project were not available. The NEPA process is underway for this project and an Environmental Assessment is being developed for the process.

THEODORE ROOSEVELT BRIDGE

The Theodore Roosevelt Bridge Rehabilitation Project is being undertaken by the District of Columbia Department of Transportation (DDOT). The bridge carries I-66/US Route 50 over the Potomac River and over TR Island. The project will include the rehabilitation of the main spans and ramps, including pedestrian and bicyclist safety improvements. The project will also widen the sidewalks and a connection for the downstream sidewalk to Virginia.

OVERALL IMPACTS OF CULTURAL LANDSCAPE TREATMENT PLAN RECOMMENDATIONS

Each Treatment Recommendation (detailed in Chapter 5) involves the rehabilitation of the Cultural Landscape at TR Island. Those landscape characteristics that are essential components of TR Island, as described in Chapter 3 and 4, would be preserved and rehabilitated. Several Treatment Recommendations are common to all of the action alternatives. These are summarized below but are not repeated in the individual descriptions of each alternative. The Treatment Recommendations are summarized by Landscape Characteristic.

ARCHEOLOGY AND ARCHEOLOGICAL SITES

The proposed archeology and Archeological Sites Treatment Recommendations ensure that archeological resources, both on land and underwater, are conserved, protected, and managed to prevent impacts to archeological resources or their values. The Treatment Recommendations will have a beneficial impact on TR

Island as they will identify and document the archeological record within the Island and will allow for future work to be carried out in a manner sympathetic and appropriate to archeology resources.

NATURAL SYSTEMS AND FEATURES

The Treatment Recommendations associated with the Natural Systems and Features include improving water quality, addressing storm water erosion, vegetation rehabilitation, monitoring sea level rise and climate change, and restoring the tree canopy that was impacted by the emerald ash borer. The Treatment Recommendations will have a beneficial impact through the rehabilitation of key natural features on the Island.

VEGETATION

Treatment Recommendations associated with this Landscape Characteristic are broken into two sections – Natural/Semi-Natural and the Memorial Plaza:

- Natural/Semi-Natural: Recommendations include multiple inventories related to vegetation resulting in a series of management plans for shoreline restoration, forest system ecosystem rehabilitation, landscape preservation maintenance tied to the eleven specific vegetative zones, trail edge vegetation, and the removal of trees impacted by the emerald ash borer and a subsequent replanting plan. Each of these management plans will beneficially impact the island by proactively managing the vegetation.
- Memorial Plaza: The vegetation at the Memorial Plaza requires maintenance and rehabilitation. This will include replacing historic vegetation (including willow oaks and boxwoods). This will restore the Memorial Plaza vegetation appropriate to the historic planned landscape. This will beneficially impact the Memorial Plaza by rehabilitating the vegetation appropriate to the original planned landscape.

SPATIAL ORGANIZATION AND LAND USE

Treatment Recommendations for the Spatial Organization and Land Use Landscape Characteristic are passive activities that include restricting new building activities, preservation spatial relationship, and maintaining the Cultural Landscape features of the Island. The one action treatment recommendation is to establish shoreline access for island user approaching the island via non-motorized watercraft and for users approaching the shoreline from on the island. These treatment recommendations were carried forward as a formal Alternative and are described later in this chapter.

CIRCULATION

The Treatment Recommendations for the Circulation Landscape Characteristic were predominantly carried forward into Chapters 6 and 7 of this report. This includes designing a trail network that meets the needs and abilities of all users

while maintaining its compatibility with the historic landscape. This also includes improving trail conditions and establishing interpretive viewpoints/nodes at key locations on the island. These treatment recommendations were carried forward as a formal Alternative and are described later in this chapter.

BUILDINGS AND STRUCTURES

The main buildings and structures are extant on TR Island today are those associated with the Presidential Memorial and the Olmsted designed landscape (the Memorial Plaza, the comfort station, formal trail, etc.). Treatment Recommendations were outlined in Chapter 5 specific to the Presidential Memorial, the non-contributing storage building, the Comfort Station, and the TR Bridge.

- **Presidential Memorial:** Rehabilitation recommendations for the memorial focus on restoring the memorial to its designed full-circle experience through the removal and/or relocation of abandoned utilities and mechanical equipment, improvements to the drainage, providing universal access, general repairs and maintenance, and wildlife mortality issues within the moats. The treatment recommendations are all in keeping with the Secretary of the Interior's Standard for Rehabilitation and are beneficial to the continued use of the Memorial Plaza.
- **Shed Roof Storage Building:** The existing modern shed is located in full view of the memorial plaza from the north side. The treatment recommendations focus on replacing or moving the shed or appropriately screening it from view if relocation is not possible. The proposed treatment of this building will aid in promoting visitor use of the memorial and will beneficially impact the views and vistas and visitor experience on the Island.
- **Comfort Station:** Treatment recommendations for the Comfort Station are discussed later in this chapter.
- **TR Bridge:** Treatment recommendations for the vehicular TR Bridge will require coordination with DDOT to develop and implement a plan to eradicate graffiti on the substructure and to more appropriately fence the north and south sides of the bridge (on the Island). These recommendations will beneficially impact the Island by improving the views and vistas and visitor experience.

CONSTRUCTED WATER FEATURES

Treatment Recommendations for the constructed water features focus on the water features at the Memorial Plaza and their maintenance and repair. This includes preparing a preservation maintenance plan for the water features that would include an assessment of the current wildlife egress ramps in the moats. These recommendations will beneficially impact the Island by appropriately rehabilitating the historic Memorial Plaza.

VIEWS AND VISTAS

Treatment Recommendations for the Views and Vistas are described in detail later in this chapter. They are discussed in detail as part of Alternative 2 (Build Alternative) On Island Trails Options and Water Circulation Options.

TOPOGRAPHY

Treatment Recommendations for the Topography Landscape Characteristic are incorporated into the recommendations for the other Landscape Characteristics (Vegetation, Circulation, and Spatial Organization and Land Use).

SMALL SCALE FEATURES

Treatment Recommendations for the Small Scale Features include rehabilitating the existing extant features (stone retaining walls, USGS survey markers, benches, etc.). Small scale features are those elements that provide detail and diversity for both function reasons and aesthetic requirements within the landscape. Recommendations also include establishing a wayfinding program and install appropriate wayfinding signage on the Island. Many of these treatment recommendations are described later in this chapter. The recommendations for this Landscape Characteristic will beneficially impact the Island through the improvement of circulation, visitor use, and park operations.

CULTURAL RESOURCES – INTRODUCTION

Potential effects on cultural resources were evaluated based on the presence and condition of the above and below-grade resources within the project area. The following analysis of cultural resources is based on three specific site types – historic structures, archeological sites, and the cultural landscape. The impacts on cultural resources (of any type) are only considered for historic properties or those cultural resources that are listed in or eligible for listing in the NRHP. The analysis of effects on cultural resources that are presented in this section respond to the requirements of NEPA. An assessment of effects under Section 106 is being conducted separately, but concurrently, with the NEPA effort.

In addition to TR Island there are several cultural resources located within the project area including the George Washington Memorial Parkway (GWMP), the John F. Kennedy Center for the Performing Arts (Kennedy Center), and the Rock Creek and Potomac Parkway (RCPP).

HISTORIC STRUCTURES AFFECTED ENVIRONMENT

The existing Comfort Station was constructed in 1955 and is the only building on the island that was completed according to the Olmsted plan. The Comfort Station is a contributing element to TRI and is the only historic building on the Island. The comfort station is open seasonally from April to October or November and cannot remain open year-round due to plumbing issues during very cold temperature. The gutter and downspout system are in poor condition and in need of replacement. The roof does not appear to be leaking but is at the end of its useful life and should be replaced. The siding and wood trim are in good condition, with some areas of damage that should be repaired. The windows are in acceptable condition, and the exterior doors and hardware should be replaced. The current toilet rooms are in usable and functional condition; however, the plumbing fixtures are not compliant with contemporary code.

There will be no impacts to historic structures associated with the GWMP, the Kennedy Center, or the RCPP.

No historic structures are present at, or associated with, the alternatives outside of Alternative 2 (Action Alternative), Comfort Station Options.

ENVIRONMENTAL CONSEQUENCES METHODOLOGY

Factors considered when determining the impact on Historic Structures include the extent to which the implementation of the action alternative would result in an impact on a historic structure.

ALTERNATIVE 1 NO ACTION

Under the No Action Alternative, the comfort station would remain in its current condition. General maintenance of the facility would continue, and the comfort station would remain seasonally open. No alterations would be made to the building and the structure would continue to be non-compliant with current universal accessibility requirements. Alternative 1 would have no impact on historic structures.

ALTERNATIVE 2 (ACTION ALTERNATIVE)**COMFORT STATION*****Option 1 Rehabilitation Treatment (Preferred)***

Under Alternative 2 Option 1, as described in detail in Chapter 6, exterior improvements to the comfort station would include a new roof, gutters and downspouts, repairs to the siding and wood trim where applicable. The comfort station would be made universally accessible via the replacement of the existing doors and the installation of a ramp leading to both doorways. Interior upgrades

would be made to heating, cooling, and electrical components. The rehabilitation efforts will be compliant with the Secretary of the Interior's Standards for Rehabilitation and would retain the characteristics and integrity of the comfort station that makes it a contributing resource to the NRHP-listed property. Alternative 2 Option 1 would have a beneficial impact on historic structures as it will help to preserve the historic comfort station.

Option 2 Adaptive Reuse and Construction Treatment

Under the Adaptive Reuse and Construction Treatment Option, the existing comfort station would be rehabilitated for a purpose other than as a comfort station (i.e. an interpretive center, ranger station, storage), and new restroom facilities would be built on NPS property on the Virginia mainland, adjacent to the TR Island pedestrian bridge. The rehabilitation efforts of the existing comfort station would depend upon the new purpose of the structure. The rehabilitation efforts will be compliant with the Secretary of the Interior's Standards for Rehabilitation and would retain the characteristics and integrity of the comfort station that makes it a contributing resource to the NRHP-listed property. Alternative 2 Option 2 would have a beneficial impact on historic structures as it will help to preserve the historic comfort station.

All improvements off island under Alternative 2 Option 2 are within the existing paved, parking facility within the GWMP. While the proposed new comfort station would be constructed within the boundary of the GWMP it would be within an existing modern parking lot. The new comfort station would be designed appropriately for the setting. Alternative 2 Option 2 would have no impact on the GWMP.

Option 3 Rehabilitation and Construction Treatment

Under this option the existing comfort station would be rehabilitated as a universally accessible year-round facility and a new facility would be built on NPS property on the Virginia mainland. The existing comfort station would be rehabilitated as described under the Rehabilitation Treatment Option, and the new mainland structure would be constructed as described in the Adaptive Reuse and Construction Treatment Option.

Alternative 2 Option 3 combines the Rehabilitation Treatment Alternative (Option 2) with the New Comfort Station Off Island (Option 2). Alternative 2 Option 3 would have beneficial impacts on historic structures as it will rehabilitate the existing historic Comfort Station.

CUMULATIVE IMPACTS

No cumulative impacts would occur to historic structures as a result of the preferred Options under Alternative 2 – Action Alternative, specifically: The Comfort Station Option 1; Land Circulation On-Island Trails Option 2; Land Circulation Off-Island Trails Option 4; and Water Circulation Option 2. No incremental impacts are anticipated when taking into consideration the impacts as a result of the past, present and reasonably foreseeable future actions identified previously in this Chapter, in conjunction with impacts as a result of the preferred actions proposed in this EA.

CONCLUSION

The Preferred Alternative (Alternative 2) consists of the three preferred options: Comfort Station Option 1, Land Circulation On Island Trails Option 2; Land Circulation Off-Island Trails Option 4; and Water Circulation Option 2. Under the Preferred Alternative Options long-term, beneficial impacts to historic structures would occur as a result of the Comfort Station Options 1. No impacts to historic structures, beneficial or negative, would occur under the Land Circulation On Island Trails Option 2; Land Circulation Off-Island Trails Option 4; and Water Circulation Option 2.

ARCHEOLOGY AFFECTED ENVIRONMENT

Archeological resources have not been fully identified at TR Island however, due to the historic context of the island, the probability for archeological resources is high throughout the Island. A detailed archeology study is scheduled for TR Island in 2018. A discussion of the archeological potential on TR Island can be found in Chapter 3. Determination of impacts are based on the expected disturbance to archeological resources.

No archeological resources are present at, or associated with, the Land Circulation – Off-Island Trails (Bridge 31).

METHODOLOGY

Factors considered when determining the impact on archeology include the extent to which the implementation of the action alternative would require any ground disturbing activities that may impact an archeological site or that would have an impact on an archeological site or potential archeological site.

ALTERNATIVE 1 NO ACTION

Under the No Action Alternative, no changes to the comfort station, on or off island trail system, or water circulation would occur. Visitors would continue to

utilize these features as they currently exist. Without improvements, social trails would continue to degrade the trail beds and surrounding areas, and boaters and kayakers would continue to pull their boats ashore at undefined locations, utilizing multiple locations along the shoreline. This would lead to the continued degradation of archeological resources at these locations on TR Island and would negatively impact any existing archeological sites at the same locations.

ALTERNATIVE 2 (ACTION ALTERNATIVE)

COMFORT STATION

Option 1 Rehabilitation Treatment (Preferred)

Under Alternative 2 Option 1, as described in detail in Chapter 6, exterior improvements to the comfort station would include a new roof, gutters and downspouts, repairs to the siding and wood trim where applicable. A ramp would be added to the front of the Comfort Station to provide access to both entrances. The construction of the ramp would result in minor ground disturbance immediately adjacent to the comfort station. Potential enlargement of the holding tank would require ground disturbance within the existing disturbed soils. Based on the limited excavations necessary, and the disturbances that occurred during the construction of the existing Comfort Station, archeological potential is low. If the tank would require enlargement into areas beyond the current foot print and disturbed areas, archeological investigation would occur prior to ground disturbing activities. Alternative 2 Option 1 would have no impacts on archeology.

Option 2 Adaptive Reuse and Construction Treatment

Under the Adaptive Reuse and Construction Treatment Option, the existing comfort station would be rehabilitated, and new restroom facilities would be built on NPS property on the Virginia mainland, adjacent to TR Island. A ramp will be added to the front of the existing Comfort Station to provide access to both entrances. The construction of the ramp will result in minor ground disturbance immediately adjacent to the comfort station. Prior to any ground disturbing activity, the area would be cleared for archeology.

The construction of a new facility on the mainland would require ground disturbing activities within the existing TR Island Parking lot, which is located within the GWMP. These disturbances would include excavation for the construction of a new underground holding tank, piping from the tank to the new building, and excavation for the new building.

Archeological testing would be required prior to the construction of the new building and holding tank. Substantial amounts of fill material were added to the Virginia shoreline in the 1940s to carry the GWMP northward past TR Island. A

portion of this made-land was then altered in the 1960s for the construction of the TR Island parking lot. Therefore, the potential for archeological resources to exist within the parking lot is low. Under this option, archeological investigations will be undertaken to confirm past disturbances and to determine what, if any, impact construction of a new facility would have on potential resources. Therefore, this Option may impact archeology if archeological resources are present at this location.

Option 3 Rehabilitation and Construction Treatment

Under this option the existing comfort station would be rehabilitated as a universally accessible year-round facility and a new facility would be built on NPS property on the Virginia mainland. The existing comfort station would be rehabilitated as described under the Rehabilitation Option, and the new mainland structure would be constructed as described in the Adaptive Reuse and Construction Option.

Alternative 2 Option 3 combines the Rehabilitation Option 2 with the New Comfort Station Off Island Option 2. Alternative 2 Option 3 may have negative impacts on archeological resources and would require archeological investigations at the site of the new facility on the mainland.

LAND CIRCULATION – ON ISLAND TRAILS

Option 1 Social Trail Decommissioning and Vegetation Restoration

Long-term, beneficial impacts to archeology would occur under Option 1. Under this Option, the existing social trails on TR Island will be decommissioned and the areas will be revegetated. Where social trails intersect with NPS trails, vegetation would be planted to eliminate the intersection and to ensure that the social trails are not re-established. Temporary barriers will be installed at these intersections to prevent users from re-establishing the social trails. No excavation will be needed to decommission the social trails; where necessary, fill will be added to raise the elevation of the decommissioned social trails to match the surrounding elevations.

Social trails are unplanned trails created by users of the Island. The social trail can negatively impact archeological resources on TR Island by trampling and eroding undisturbed soils that may contain physical evidence of past cultural activity. Decommissioning the social trails will positively impact archeology resources by removing unplanned trails and filling the trail beds.

Option 2 Trail Improvements and Viewpoint/Wayfinding Creation – Preferred

Under the Land Circulation On Island Option 2 Treatment Recommendation, existing trails would be improved and social trails will be decommissioned. Continued maintenance of the portions of the trails with existing universal access (portions of the Swamp Trail, North Transverse Trail, and Woods Trail) would occur, as well as improvements to other trails and interpretive amenities (see Chapter 6 for details).

In addition, this alternative proposes the creation of passive interpretive viewpoints/nodes at one or more locations on the island, including: the northeast corner, the northwest corner, the southeastern point of the Upland Trail, the southern tip, and the southwest corner. These viewpoints/nodes would be created through selective pruning and cutting back limbs around the viewpoints/nodes. Neither heavy removal of vegetation nor clearing and grubbing are anticipated. Formalizing of trails will include building up the trail bed for leveling of the trails. Cut and fill of these areas would be avoided.

The final component of this option is the introduction of wayfinding amenities to help enhance the land circulation on TR Island. This focuses on signage to aid in the overall visitor experience. This wayfinding will be non-intrusive and compatible with the landscape. Ground disturbing activities could be required for installation of the wayfinding elements. Archeological investigations will be undertaken where needed to avoid or minimize impacts.

Long-term, beneficial impacts to archeology resources would occur under Option 2. The beneficial impacts of decommissioning social trails are the same as those described in Option 1. The addition of passive interpretive viewpoints/nodes, universally accessible trails, and wayfinding amenities lead Island visitors to specific, planned, locations. With planned (and signed) visitor amenities visitors will no longer create their own access points, viewpoints/nodes, and social trails, therefore limiting the unplanned disturbance of archeological resources. This Option will have a beneficial impact on archeological resources.

ALTERNATIVE 2 (ACTION ALTERNATIVE)**WATER CIRCULATION*****Option 1 Establish Soft Landings for Non-Motorized Watercraft***

Under Option 1, water circulation and access would be re-established on the island. This would be achieved by creating formal soft landings or launches for small non-motorized watercraft in locations that were historically utilized for this purpose. Work associated with the creation of these landings would include minor

clearing of large rocks and debris and pruning and cutting back of overgrown vegetation. No heavy excavation or clearing and grubbing would occur.

Archeological resources are known to be extant throughout TR Island, including at these locations (one of which is the site of the former ferry landing). archeological investigations would be required prior to the installation of any soft landing to ensure that archeological resources are appropriately identified, documented, and protected. This Option has the potential to negatively impact archeological resources at these locations.

Option 2 Floating Dock and Soft Water Landings preferred

The floating dock would be placed at the northeast corner of the island, which is the site of a historic ferry landing and a later floating dock. A floating dock would be constructed at this location. Minor clearing of large rocks and debris and pruning and cutting back of over grown vegetation would be required. No heavy excavation or clearing and grubbing would occur. The installation of a floating dock could require piles, which would necessitate drilling.

Archeological resources are known to be extant throughout TR Island, including at these locations (one of which is the site of the former ferry landing). Archeological investigations would be required prior to the installation of any soft landing to ensure that archeological resources are appropriately documented and protected. This Option would negatively impact archeological resources at these locations.

CUMULATIVE IMPACTS

No cumulative impacts would occur to archeology as a result of the preferred Options under Alternative 2 – Action Alternative, specifically: the Comfort Station Option 1; and Land Circulation Off-Island Trails Option 4. Alternative 2, On Island Trails Option 2 would result in beneficial impacts to archeological resources by limiting the unplanned disturbance of archeological resources through the addition of NPS trails, decommissioning of social trails, and establishment of viewpoints/nodes. The Alternative 2 Water Circulation Option 2 would negatively impact archeological resources as known resources are present in areas where proposed soft landings and floating docks are proposed. No incremental impacts are anticipated when taking into consideration the impacts as a result of the past, present and reasonably foreseeable future actions identified previously in this Chapter, in conjunction with impacts as a result of the preferred actions proposed in this EA.

MITIGATION

The planned archeological study of TR Island will aid in determining locations of important archeological resources at TR Island. It would be beneficial to prioritize archeological studies to those areas potentially impacted by proposed actions in this EA. Archeological monitoring and discoveries plan would aid in reducing and avoiding impacts to archeological resources during construction, if the island wide study is not complete in the vicinity prior to the implementation of improvements under this treatment alternative.

CONCLUSION

The Preferred Alternative (Alternative 2) consists of the three preferred options: Comfort Station Option 1, Land Circulation On Island Trails Option 2; Land Circulation Off-Island Trails Option 4; and Water Circulation Option 2. Under the Preferred Alternative Options long-term, no impacts to archeology resources would occur as a result of the Comfort Station Option 1. No impacts to archeology, beneficial or negative, would occur under the Land Circulation Off-Island Trails Option 4. Negative Impacts would occur as a result of the On-Island Trails Option 1 and 2, and the Water Circulation Options 1 and 2.

CULTURAL LANDSCAPE AFFECTED ENVIRONMENT METHODOLOGY

Factors considered when determining the impact on the Cultural Landscape include the extent to which the implementation of the action alternative would result in an impact on a Cultural Landscape or that would have an impact on any Landscape Characteristic that is part of the overall Cultural Landscape.

ALTERNATIVE 1 NO ACTION

Under the No Action Alternative, no changes to the comfort station, on or off island trail system, or water circulation would occur. Visitors would continue to utilize these features as they currently exist. Without improvements, social trails would continue to degrade the trail beds and surrounding areas, and boaters and kayakers would continue to pull their boats ashore at will, utilizing various locations along the shoreline. This would lead to the continued degradation of key landscape characteristics associated with the Cultural Landscape TR Island (i.e. archeological resources, stone retaining walls, etc.) and would negatively impact the cultural landscape. See Chapter 3, Existing Conditions, for details.

ALTERNATIVE 2 (ACTION ALTERNATIVE)**COMFORT STATION*****Option 1 Rehabilitation Treatment (Preferred)***

Under Alternative 2 Option 1, as described in detail in Chapter 6, improvements to the comfort station would include a new roof, gutters and downspouts, repairs to the siding and wood trim where applicable. A ramp will be added to the front of the Comfort Station to provide access to both entrances. Interior upgrades would be made to create a year-round, universally accessible facility. The building would remain in the current location and would continue to be utilized for its historic function. The introduction of a new visual element (the ramps) would result in a change to the surrounding landscape and would negatively impact the cultural landscape.

Option 2 Adaptive Reuse and Construction Treatment

Under the Adaptive Reuse and Construction Treatment Option, the exiting comfort station would be rehabilitated for a purpose other than as a comfort station, and new restroom facilities would be built on NPS property on the Virginia mainland, adjacent to TR Island. The introduction of a new visual element (the new comfort station) would result in a change to the surrounding landscape. While the proposed new comfort station would be constructed within the boundary of the GWMP it would be within an existing modern parking lot. The new comfort station would be designed appropriately for the setting. Alternative 2 Option 2 would have no impact on the GWMP cultural landscape.

Option 3 Rehabilitation and Construction Treatment

Under this option the existing comfort station would be rehabilitated as a universally accessible year-round facility and a new facility would be built on NPS property on the Virginia mainland. The existing comfort station would be rehabilitated as described under the Rehabilitation Option, and the new mainland structure would be constructed as described in the Adaptive Reuse and Construction Option.

Alternative 2 Option 3 combines the Rehabilitation Option 2 with the New Comfort Station Off Island Option 2. Alternative 2 Option 3 will negatively impact the cultural landscape.

LAND CIRCULATION – ON ISLAND TRAILS***Option 1 Social Trail Decommissioning and Vegetation Restoration***

Long-term, beneficial impacts to the Cultural Landscape would occur under Option 1. Under this Option, the existing social trails on TR Island will be decommissioned and the areas will be revegetated. Where social trails intersect

with NPS trails, vegetation would be planted to eliminate the intersection and to ensure that the social trails are not re-established. Temporary barriers will be installed at these intersections to prevent users from re-establishing the social trails. No excavation will be needed to decommission the social trails; where necessary, fill will be added to raise the elevation of the decommissioned social trails to match the surrounding elevations.

Social trails are unplanned trails created by users of the Island. The social trails negatively impact the Cultural Landscape by introducing new elements that alter the Landscape Characteristics that are key components of the cultural landscape. Social trails disrupt the historic, or planned, circulation routes and can disrupt or damage other key landscape characteristics. Decommissioning the social trails will positively impact the Cultural Landscape by removing unplanned trails and rehabilitating the landscape to its historically appropriate configuration.

Option 2 Trail Improvements and Viewpoint/Wayfinding Creation – Preferred

Under the Land Circulation On Island Option 2 Treatment Recommendation, existing trails would be improved. Continued maintenance of the portions of the trails with existing universal access (portions of the Swamp Trail, North Transverse Trail, and Woods Trail) would occur, as well as improvements to other trails and interpretive amenities, including:

- Creating universal access from the island terminus of the pedestrian bridge to the Memorial Plaza.
- Creating universal access to the entire Swamp Trail, including access to the comfort station.
- Correction of grades to allow tie-ins to existing trails.
- Decommissioning the social trail along the north shoreline by revegetating and constructing temporary fencing.
- Decommissioning other social trails south of the TR Bridge.
- Formalizing specific social trails at the southern end of TR Island (see Figure 186).
- Coordinating with DDOT to modify or relocate the chain link fence at the TR Bridge abutments.

In addition, this alternative proposes the creation of passive interpretive viewpoints/nodes at one or more locations on the island, including: the northeast corner, the northwest corner, the southeastern point of the Upland Trail, the southern tip, and the southwest corner. These viewpoints/nodes would be created through selective pruning and cutting back limbs around the viewpoints/nodes. Neither heavy removal of vegetation nor clearing and grubbing are anticipated.

The final component of this option is the introduction of wayfinding amenities to help enhance the land circulation on TR Island. This focuses on signage to aid in the overall visitor experience. This wayfinding will be non-intrusive, compatible with the landscape, and will not encroach on project area wetlands.

Long-term, beneficial impacts to the Cultural Landscape would occur under Option 2. The beneficial impacts of decommissioning social trails are the same as those described in Option 1. The addition of passive viewpoints/nodes, universally accessible trails, and wayfinding amenities all add value to the user experience of the cultural landscape, thereby beneficially impacting it.

LAND CIRCULATION – OFF-ISLAND TRAILS

Options 1-4 Bridge 31

The MVT at Bridge 31 is not located within the TR Island Cultural Landscape, nor is it visible from TR Island. No impacts to the TR Island Cultural Landscape will occur under this Option. The MVT is located within the GWMP. Options 1-4 include the replacement of the bridge deck and railing and the realignment of the north end of the Bridge. Alternative 2, Options 1-4, will have no impact on the GWMP cultural landscape. The proposed work is a bridge rehabilitation with a deck replacement.

WATER CIRCULATION

Option 1 Establish Soft Landings for Non-Motorized Watercraft

Under Option 1, water circulation and access would be re-established on the island. This would be achieved by creating formal soft landings or launches for small non-motorized watercraft. Work associated with the re-establishment of these landings would include minor clearing of large rocks and debris and pruning and cutting back of overgrown vegetation. No heavy excavation or clearing and grubbing would occur.

The addition of soft landings will create new access points to the island and will ensure that user access is controlled, reducing the use of unofficial boat landings and the creation of social trails to serve those landings. The long-term impact to the TR Island Cultural Landscape is beneficial as this Option will reduce physical impacts to resources and key landscape characteristics caused by unplanned, water-based visitor access and usage.

Option 2 Floating Dock and Soft Water Landings Preferred

The floating dock would be placed at the northeast corner of the island, which is the site of a historic ferry landing and a later floating dock. A floating dock would be constructed at this location. Minor clearing of large rocks and debris and

pruning and cutting back of over grown vegetation would be required. No heavy excavation or clearing and grubbing would occur. The installation of a floating dock could require piles, which would necessitate drilling

The addition of soft landings along with a floating dock will have similar impacts to Option 1. It will create new access points to the island and will ensure that user access is controlled, reducing the use of unofficial boat landings and the creation of social trails to serve those landings. The long-term impact to the Cultural Landscape is beneficial as this Option will reduce impacts to the Cultural Landscape caused by unplanned visitor usage.

CUMULATIVE IMPACTS

No cumulative impacts would occur to the Cultural Landscape as a result of the preferred Options under Alternative 2 – Action Alternative, specifically: the Comfort Station Option 1; Land Circulation On-Island Trails Option 2; Land Circulation Off-Island Trails Option 4; and Water Circulation Option 2. No incremental impacts are anticipated when taking into consideration the impacts as a result of the past, present and reasonably foreseeable future actions identified previously in this Chapter, in conjunction with impacts as a result of the preferred actions proposed in this EA.

CONCLUSION

The Preferred Alternative (Alternative 2) consists of the three preferred options: Comfort Station Option 1, Land Circulation On Island Trails Option 2; Land Circulation Off-Island Trails Option 4; and Water Circulation Option 2. The Comfort Station Option 1 would result in changes to the TR Island Cultural Landscape and would negatively impact the Cultural Landscape. Long-term, beneficial impacts to the Cultural Landscape would occur as a result of the Land Circulation On-Island Trails Option 2 and the Water Circulation Option 2. Decommissioning and revegetating portions of social trails, the implementation of official designated boat launch and landing areas, as well as the addition of a floating dock will deter visitors from utilizing unofficial trails and accessing the island from unofficial boat landings/launches damaging the landscape.

WETLANDS

AFFECTED ENVIRONMENT

No formal wetland delineation has been completed on TR Island; additional wetland studies may be necessary for the completion of the alternatives.

Therefore, wetland types and general locations are based off the NWI maps and site visit observations. The NWI map for TR Island shows four main wetland types within the project area:

- PFO1S – Palustrine, Forested, Broad-Leaved, Deciduous, Temporary Tidal wetlands. This wetland type is located at the northeastern tip of TR Island and extends south, following the eastern shore, to the southeastern tip. PFO1S wetlands are also located at the northwest coast of the island and extends to the south, with some non-wetland areas between the wetland complexes.
- PFO1R – Palustrine, Forested, Broad-Leaved, Deciduous, Seasonal-Tidal wetlands. This wetland type is located just south of the northern tip of the island, west of, and adjacent to the PFO1S wetlands, and extends to the southern end of the island. The southwest corner of the island is also classified as a PFO1R as is Little Island.
- PEM1R – Palustrine, Emergent, Persistent, Seasonal-Tidal wetlands. This wetland type is in the south-central section of the island, west of, and adjacent to the PFO1R wetlands, and extends to the southeast/southcentral tip of the island.
- Riverine wetlands – to include R1UBV (Riverine, Tidal, Unconsolidated Bottom, Permanent-Tidal), R1UBQ (no description available, but Riverine, Tidal), and R5UB (Riverine, Unknown Perennial, Unconsolidated Bottom, Permanently Flooded). The majority of the Potomac River is noted as an R1UBV, with pockets of R1USQ along the southern and northeastern shorelines of TR Island, and long the southern shoreline of Arlington. R5UB is located across the Potomac River on the Georgetown shoreline.

A wetland identification and delineation investigation was completed on October 24, 2017 for the TR Island CLR/EA Project in the vicinity of Bridge 31 on the MVT, during which two (2) wetlands based on the FGDC wetlands Classification Standard were identified. WET-1 is a riverine (R1UBV) wetland that flows east beneath Bridge 31 prior to its confluence with the Little River channel in the Potomac River system. WET-1 would also be classified as a perennial watercourse and jurisdictional Waters of the U.S. WET-A is a depressional, palustrine forested (PFO1C) wetland that lies adjacent to the Little River channel in the Potomac River system. WET-A would also be treated as a jurisdictional PFO wetland.

ENVIRONMENTAL CONSEQUENCES METHODOLOGY

A formal wetland delineation for entire the island was not conducted for this project. Therefore, the identification of wetlands in areas that are outside the footprint of Bridge 31 are based on existing data such as National Wetland Inventory Mapping and historical data. High-level assumptions can be made in order to determine potential impacts to wetlands.

ALTERNATIVE 1 – NO ACTION

Under the No Action Alternative, no changes to the comfort station, on or off island trail system, or water circulation would occur. Visitors would continue to utilize these features as they currently exist. Without improvements, social trails through wetlands would continue, and boaters and kayakers would continue to

pull their boats ashore at will, utilizing various locations along the shoreline. This would lead to the continued degradation of wetland resources at TR Island.

ALTERNATIVE 2 – ACTION ALTERNATIVE COMFORT STATION

Options 1, 2, and 3

Wetlands are not present within the immediate vicinity of the existing comfort station. No impacts to wetlands will occur under the Comfort Station Option 1, 2, or 3.

LAND CIRCULATION – ON ISLAND TRAILS

Option 1 Social Trail Decommissioning and Vegetation Restoration

Under the Land Circulation On Island Option 1, the existing social trails would be decommissioned, and the areas would be revegetated with limited plantings. Where feasible the areas would be allowed to naturally revegetate. Where social trails intersect with NPS trails, vegetation would be planted to eliminate the intersection and to ensure that the social trails are not re-established. Temporary barriers will be installed at these intersections to prevent users from re-establishing the social trails. No excavation will be needed to decommission the social trails; where necessary, fill will be added to raise the elevation of the decommissioned social trails to match the surrounding elevations. Option 1 does not implement any changes or upgrades to existing formalized trails. Existing formalized trails would continue to be maintained and utilized as they are currently.

Long-term, beneficial impacts to project area wetlands would occur under Option 1. Decommissioning and revegetating the social trails at the southern tip and the northeast corner of the island would allow the re-establishment of wetlands and improved wetland quality and wetland function(s) where social trails currently exist. In addition, Option 1 would direct visitors to utilize the NPS trails, thereby reducing additional social trails being formed through wetland areas.

Option 2 Trail Improvements and Viewpoint/Wayfinding Creation – Preferred

Under the Land Circulation On Island Option 2 Treatment Recommendation, existing trails would be improved. Continued maintenance of the portions of the trails with existing universal access (portions of the Swamp Trail, North Transverse Trail, and Woods Trail) would occur, as well as improvements to other trails and interpretive amenities, including:

- Creating universal access from the island terminus of the pedestrian bridge to the Memorial Plaza.
- Creating universal access to the entire Swamp Trail, including access to

the comfort station.

- Correction of grades to allow tie-ins to existing trails.
- Addition of wheel stops to the boardwalk on the Swamp Trail.
- Decommissioning the social trail along the north shoreline by revegetating and constructing temporary fencing.
- Decommissioning other social trails south of the TR Bridge.
- Coordinating with DDOT to modify or relocate the chain link fence at the TR Bridge abutments.

In addition, this alternative proposes the creation of passive interpretive viewpoints/nodes at one or more locations on the island, including: the northeast corner, the northwest corner, the southeastern point of the Upland Trail, the southern tip, and the southwest corner. These viewpoints/nodes would be created through selective pruning and cutting back limbs around the viewpoints/nodes. Neither heavy removal of vegetation nor clearing and grubbing are anticipated.

The final component of this option is the introduction of wayfinding amenities to help enhance the land circulation on TR Island. This focuses on signage to aid in the overall visitor experience. This wayfinding will be non-intrusive, compatible with the landscape, and will not encroach on project area wetlands.

Long-term, beneficial impacts to project area wetlands would occur under Option 1. While the establishment of the viewpoints/nodes, and some trail maintenance and grade corrections would take place within the NWI identified PFO1S wetland complex in the northeastern portion of the island, and within the NWI identified PFO1R wetland at the southern tip of the island, no permanent, negative impacts to wetlands will occur. Wetland protection measures such as the placement of protective fencing and the use of bio mats where applicable during implementation of the planned improvements would avoid impacts to wetlands. In addition, no new trails are proposed within wetland areas, and no clearing or grubbing is proposed for the viewpoints/nodes.

Overall, the Land Circulation On-Island Option 2 Treatment Recommendation, would have the same long-term, beneficial impacts to wetlands as described in Option 1, with the slight increase in wetland benefits due to the establishment of official viewpoints deterring the creation of additional volunteer viewpoints/nodes through shoreline wetlands, and allowing damaged wetlands from unofficial viewpoint use to re-establish overtime.

LAND CIRCULATION – OFF-ISLAND TRAILS

Options 1-4 Bridge 31

Under the Land Circulation Off-Island Options 1-4, all proposed work is located in uplands. No impacts to wetlands will occur as a result of Options 1-4.

WATER CIRCULATION

Option 1 Establish Soft Landings for Non-Motorized Watercraft

Under the Water Circulation Option 1, minor clearing of large rocks and debris, and pruning and cutting back of overgrown vegetation would be required to re-establish soft landings/launches for small non-motorized watercraft at one or more location on island including a small landing at the northeast corner, a small landing at the northwest corner, a small landing at the southern tip, and a large landing at the southwest point under the TR Bridge. No heavy excavation or clearing and grubbing would occur.

The implementation of official, designated boat launch/landing areas will deter visitors from accessing the island through unofficial landings damaging shoreline wetlands. In addition, wetlands previously damaged by unofficial landings and launches would be restored naturally overtime. Option 1 would have a beneficial impact to wetlands.

Option 2 Floating Dock and Soft Water Landings – Preferred

The Water Circulation Option 2 Treatment Recommendation provides the same soft water landings as described in Option 1, but also proposes the installation of one floating dock for non-motorized watercraft at the northeast corner of the island, which is the site of a historic ferry landing and a later floating dock. Similar to that of Option 1 minor clearing of large rock and debris and pruning of overgrown vegetation would be required. The installation of the floating dock could require piles, which would necessitate drilling. However, no heavy excavation or clearing and grubbing would occur.

Long-term, beneficial impacts to area wetlands would occur under the Water Circulation Option 2 Treatment Recommendation as described in Option 1. No additional wetland impacts will occur as a result of the construction or use of the proposed floating dock. The implementation of official, designated boat launch/landing areas, and the addition of a floating dock will deter visitors from accessing the island through unofficial landings damaging shoreline wetlands. In addition, wetlands previously damaged by unofficial landings and launches would be restored naturally overtime.

CUMULATIVE IMPACTS

No cumulative impacts would occur to wetlands as a result of the preferred treatment recommendations under Alternative 2 – Action Alternative, specifically: the Comfort Station Option 1; Land Circulation On-Island Trails Option 2; Land Circulation Off-Island Trails Option 4; and Water Circulation Option 2. No incremental impacts are anticipated when taking into consideration the impacts as a result of the past, present and reasonably foreseeable future actions identified previously in this Chapter, in conjunction with impacts as a result of the preferred actions proposed in this EA.

CONCLUSION

The Preferred Alternative (Alternative 2) consists of the three preferred options: Comfort Station Option 1, Land Circulation On Island Trails Option 2; Land Circulation Off-Island Trails Option 4; and Water Circulation Option 2. Long-term, beneficial impacts to wetlands would occur as a result of the Land Circulation On-Island Trails Option 2 and the Water Circulation Option 2 under the Action Alternative, Alternative 2. No impacts to wetlands, beneficial or negative, would occur under the Comfort Station Option 1 or the Land Circulation Off-Island Trails Option 4.

VIEWS AND VISTAS AFFECTED ENVIRONMENT

TR Island's location in the middle of the Potomac River grants numerous opportunities for views and vistas in all directions, each unique depending on adjacent development and natural screening. Many of the views from the island outwards to neighboring communities are through unofficial viewpoints along social trails at the island, and the pedestrian bridge. Views and vistas are described in detail in Chapter 3.

METHODOLOGY

Impacts on views and vistas were evaluated based on potential changes to the visual landscape from the visitor's perspective. Views and vistas include views to the island from the Potomac River and shores, from the island to the river and shores, and within the island.

ALTERNATIVE 1 - NO ACTION

Under the No Action Alternative, no changes to the comfort station, on or off-island trail system (including the re-establishment of viewpoints/nodes), or water circulation would occur. All views and vistas would remain unchanged from their current location and conditions.

ALTERNATIVE 2 – ACTION ALTERNATIVE

COMFORT STATION

Option 1

Impacts to views and vistas will not occur under the Comfort Station, Options

1. The project area views and vistas will remain as they are currently within the project area.

Options 2 and 3

Impacts to views and vistas for TR Island will not occur under the Comfort Station, Options 2-3. The project area views and vistas will remain as they are currently TR Island. Options 2 and 3 call for the construction of a new comfort station on the Virginia mainland within the TR Island parking lot and within the GWMP. The construction of a new comfort station has the potential to impact the views and vistas of the GWMP, including the view from the GWMP to TR Island. The new comfort station will be located with the existing parking lot, and will be designed appropriately to the setting. Options 2 and 3 will have no impact to the GWMP views and vistas.

LAND CIRCULATION – ON-ISLAND TRAILS

Option 1 Social Trail Decommissioning and Vegetation Restoration

Impacts to views and vistas will not occur under the Land Circulation, On-Island, Option 1. The project area views and vistas will remain as they are currently within the project area.

Option 2 Trail Improvements and Viewpoint/Wayfinding Creation - Preferred

There will be minor vegetation clearing, invasive plant removal, and tree plantings, all of which will be visible from various locations on TR Island. These improvements will improve visitor experience through the improvement of existing trails, the decommissioning of social trails, the formalizing of social trails at the southern end of TR Island and the introduction of wayfinding. Long-term, beneficial impacts to views and vistas would occur under the Land Circulation, On-Island, Option 2 Treatment Recommendation.

Option 2, along with trail improvements and wayfinding, proposes the establishment of formalized viewpoints/nodes at up to five locations on the island including: the northeast corner (former Ferry Landing) looking north and east across the Potomac to Georgetown; the northwest corner (Causeway) looking north and west across Little River to the Key Bridge and Virginia; the southeast portion of the Upland Trail looking east across the marsh and swamp; the southern tip looking south to Arlington Memorial Bridge and Virginia; and the southwest corner looking south and west to the Arlington Memorial Bridge

and Virginia. The addition of established viewpoints/nodes will provide expanded views from TR Island to the surrounding communities, as well as improved interpretation of the historic setting of the island; furthermore, trail maintenance and upgrades will improve historic sightlines in areas such as the marsh and swamp.

LAND CIRCULATION – OFF-ISLAND TRAILS

Options 1-4

No impacts to views or vistas would occur under the Land Circulation, Off-Island, Options 1-4. All project area views and vistas would remain unchanged from their current state.

WATER CIRCULATION

Option 1 Establish Soft Landings for Non-Motorized Watercraft

Under the Water Circulation, Option 1, long-term, beneficial impacts views and vistas would occur. The establishment of official boat launch/landing areas are proposed within the same vicinity as three of the viewpoint recommended locations including the northeast corner, the northwest corner, the southwest corner of the island. In addition, a large landing at the southwest point under the TR Bridge is proposed. The establishment of the boat launches would allow improved interpretation of the historic setting of the island as well as improved views and vistas to and from TR Island. This would include views to TR Island from both the RCPP and the Kennedy Center.

Option 2 Floating Dock – Preferred

Under the Water Circulation Option 2, the same long-term, beneficial impacts views and vistas would occur as described in the Water Circulation Option 1.

CUMULATIVE IMPACTS

No cumulative impacts would occur to views and vistas as a result of the preferred treatment recommendations under Alternative 2 – Action Alternative, specifically: the Comfort Station Option 1; Land Circulation On-Island Trails Option 2; Land Circulation Off-Island Trails Option 4; and Water Circulation Option 2. No incremental impacts are anticipated when taking into consideration the impacts as a result of the past, present and reasonably foreseeable future actions identified previously in this Chapter, in conjunction with impacts as a result of the preferred actions proposed in this EA.

CONCLUSION

The Preferred Alternative (Alternative 2) consists of the three preferred options: Comfort Station Option 1, Land Circulation On Island Trails Option 2; Land

Circulation Off-Island Trails Option 4; and Water Circulation Option 2. Long-term, beneficial impacts to views and vistas will occur as a result of the Land Circulation On-Island Trails Option 2 and the Water Circulation Option 2 under the Action Alternative, Alternative 2. The formalization of viewpoints/nodes and the re-establishment of boat launch/landing areas allows for expanded views from TR Island to the Virginia coastline of the Potomac River, Georgetown coastline of the Potomac River, and to the Potomac River. No impacts to views and vistas, beneficial or negative, would occur under the Comfort Station Option 1 or the Land Circulation Off-Island Trails Option 4 under Alternative 2.

VISITOR EXPERIENCE

AFFECTED ENVIRONMENT

TR Island is approximately 90 acres and provides visitors with opportunities for recreation; reflecting and relaxing along the open areas provided at the memorial plaza; bird and wildlife viewing/watching; as well as enjoying and enhancing one's understanding of the various historic attributes of TR Island. In addition, NPS-run programs are available such as guided tours, and activity guides for children online that they can bring with them and participate in to enhance their understanding and enjoyment of TR Island. The primary visitor experience at the park is centered around memorial plaza and recreational sports such as hiking and running. In addition, the George Washington Memorial Parkway (GWMP) and the associated Mount Vernon Trail (MVT) provide additional hiking, cycling and running opportunities.

METHODOLOGY

Impacts to visitor experience were evaluated by considering the effect of the proposed treatment alternatives on the overall experience of visitors to TR Island. Factors considered in determining impacts included recreational opportunities (circulation) and educational opportunities (interpretation).

ALTERNATIVE 1 – NO ACTION

Under the No Action Alternative visitors would continue to experience TR Island as they currently do. Recreational and educational opportunities within the project area would remain unchanged. Visitors would continue to utilize both social and NPS trails as well as unofficial boat launch and landing areas around the shoreline and would continue to have access to and experience the comfort station, memorial plaza, and MVT Bridge 31 in their current locations and condition. There would be no impact to Visitor Experience under this Alternative.

ALTERNATIVE 2 – ACTION ALTERNATIVE**COMFORT STATION*****Option 1 Rehabilitation Treatment – Preferred***

Under the Comfort Station Option 1, the rehabilitation of the comfort station would provide a year-round, fully functional, universally accessible facility in its current location and footprint. The rehabilitation would maintain the integrity of the comfort station by implementing updates compliant with the SOI Standards.

Under Option 1, long-term, beneficial impacts to visitor experience would occur. Visitors would continue to utilize the island comfort station as they currently do, but with an upgraded, universally accessible facility. Visitors would also continue to make use of the comfort station as historically planned and designed by the Olmsted Brothers.

Option 2 Adaptive Reuse and Construction Treatment

The Comfort Station Option 2, proposes the rehabilitation of the existing comfort station for a purpose other than a comfort station, and new restroom facilities (either a new restroom facility, or placement of portable toilets) would be located on NPS property on the Virginia mainland, adjacent to TR Island, (see Chapter 6 for details regarding Option 2). The rehabilitation efforts of the existing comfort station would depend upon the new purpose of the structure; however, the rehabilitation would keep within the SOI Standards for Rehabilitation and would comply with ABA standards.

Under Option 2, visitors would also continue to make use of the comfort station as historically planned and designed by the Olmsted Brothers, but visitors would not be able to utilize it as a restroom due to its planned reuse. However, with the proposed construction of a new facility, or placement of portable toilets on the mainland, visitors will still have the ability to utilize a comfort station within the project area. Overall, long-term, beneficial impacts to visitor experience are anticipated as a result of Option 2.

Option 3 Rehabilitation and Construction Treatment

Impacts to visitor experience under the Comfort Station Option 3 will be the same as described previously in Option 1 for the rehabilitation of the comfort station on-island, and as described in Option 2 for the off-island options. Overall, long term, beneficial impacts to visitor experience are anticipated.

LAND CIRCULATION – ON-ISLAND TRAILS***Option 1 Social Trail Decommissioning and Vegetation Restoration***

Under the Land Circulation On-Island Option 1, visitors would not be able to access the social trails as they do currently, which would be perceived as having less trail options at the island; however, some of the social trails exist where the terrain is naturally well drained, while others are located in low shoreline areas that are subject to puddling and periodic inundation from the river. These trails all contain safety hazards such as roots and uneven trail tread. Decommissioning social trails would allow visitors to experience an improved (more formalized), maintained, and safer trail network. The implementation of Land Circulation Option 1 will have an overall long-term, beneficial impact to visitor experience by allowing for better circulation throughout the island, and an increase in visitor safety.

Option 2 Trail Improvements and Viewpoint/Wayfinding Creation – Preferred

Under the Land Circulation On-Island Option 2, as previously described in the Wetlands Section of this Chapter, existing trails would be improved. Continued maintenance of the portions of the trails with existing universal access would occur, as well as improvements to other trails and interpretive amenities. In addition, this treatment alternative proposes the creation of passive interpretive viewpoints/nodes at one or more locations on the island, and the introduction of wayfinding amenities. Wayfinding amenities would help enhance the land circulation on TR Island and focuses on signage to aid in the overall visitor experience. The locations and potential content proposed for wayfinding signage, include (but would not be limited too):

- Virginia terminus of the pedestrian bridge
 - Including an introduction to TR Island
 - Including statement prohibiting bicycles on the island
- Island terminus of the pedestrian bridge
 - Including map of the island that highlights
- Location of the Memorial Plaza
- Location of the comfort station
- Location of the drinking fountain(s)
- Location and length of trails, including condition and accessibility
- Trailheads leading to interpretive viewpoints/nodes, soft boat landings, and the floating dock
- Soft boat landings and the floating dock to the Memorial Plaza, the Comfort Station, and the drinking fountains

Additional wayfinding signage could include directions to areas that recall key aspects of the Periods of Significance, including:

- Mason House Ruins
- Former wharf
- Ferry Landing
- Civil War Encampment

These changes will allow better circulation through the island, improved interpretation of the historic setting of the island, and an increase in visitor safety. Overall, long-term beneficial impacts would occur under the Land Circulation On-Island Option 2.

LAND CIRCULATION – OFF-ISLAND TRAILS

The Treatment Options for the Off-Island Trails pertain specifically to MVT Bridge 31, the elevated, decked portion of the MVT that beings approximately 200 feet south of the Virginia approach to the TR Island pedestrian bridge. Four options were identified for the rehabilitation of Bridge 31. All alternatives would include horizontal realignment of the north end of Bridge 31, replacement of the bridge deck and railing to provide a smoother riding surface, and additional structure reinforcement to eliminate deck deflection.

Option 1 Bridge 31 Realignment with One New Pile

Under the Land Circulation, Off-Island, Option 1, free flow traffic conditions will exist on the Northbound and Southbound Mount Vernon Trail for users through the intersection. A new left turn lane would be marked with dotted pavement markings and stop line on the deck for users to make the left turn. The alignment curves are all well above the minimum required, with the curves being as gentle as possible and still fit with the existing footprint of the bridge. No delineation other than a single 4-inch solid yellow or dotted yellow pavement marking separates the opposing directions of traffic through this intersection. Option 1 would result in, long-term, beneficial impacts to visitor experience, creating a new left turn lane, and installing pavement markings. These improvements will allow safer passage on MVT Bridge 31 and access to TR Island.

Option 2 Bridge 31 Realignment with Three New Piles

Under the Land Circulation, Off-Island, Option 2, free flow traffic conditions will exist on the Northbound and Southbound Mount Vernon Trail for users through the intersection. A new left turn lane would be marked with dotted pavement markings and stop line on the deck for users to make the left turn. In addition, the left turn bay is wider than in Option 1 and small painted island separates the through traffic from the left turning traffic. The alignment curves are all well above the minimum required, with the curves being as gentle as possible and still fit with the existing footprint of the bridge. No delineation other than a single 4-inch solid yellow or dotted yellow pavement marking separates the opposing directions

of traffic through this intersection. The expansion of the deck is maximized to fill the entire gore area, and three new piles are required for the expansion. The remaining deck would be widened up to two feet on each side across the length of the deck utilizing existing piles.

Similar impacts as described in the Land Circulation, Off-Island, Option 1, will occur under the Land Circulation, Off-Island, Option 2, however Option 2 provides increased safety improvements as a result of increasing the size of the left turn bay to allow more room for safer passage.

Option 3 Bridge 31 Realignment with Five New Piles

Under the Land Circulation, Off-Island, Option 3, Northbound and Southbound Mount Vernon Trail users still have free flow conditions through the intersection. However, the opposing directions of traffic would be separated by a physical gap in the bridge deck (surrounded by bridge railing), acting as a barrier between the conflicting movements at this intersection. A new left turn lane would be marked with dotted pavement markings and stop line on the deck for users to make the left turn. In addition, the left turn bay is wider than in Option 1. In this option, the alignment curves are all below the minimum required in the AASHTO Bicycle Facilities guide. This is an improvement over the existing condition since through traffic does not have to stop and the merging trail only has to contend with crossing one direction of traffic at a time, reducing conflicts. The expansion of the deck is maximized to fill the entire gore area while maintaining a separation island, and five new piles are required for the expansion. The remaining deck would be widened up to two feet on each side across the length of the deck utilizing existing piles.

Impacts on visitor experience under the Land Circulation, Off-Island, Option 3 are similar to that of the Land Circulation, Off-Island, Options 1 and 2; however, Option 3 provides increased safety features for pedestrian and cyclist use as a result of the separation gap for opposing lanes of traffic. This would allow visitors to only contend with one lane of pedestrian/cyclist traffic.

Option 4 Bridge 31 Realignment with Three New Piles – Preferred

Under the Land Circulation, Off-Island, Option 4, Northbound and Southbound Mount Vernon Trail users would have free flow conditions through the intersection. A new left turn lane would be marked with dotted pavement markings and stop line on the deck for users to make the left turn. In addition, the left turn bay is wider than in Option 1 and large painted island separates the opposing directions of traffic, providing benefits similar to Option 3. The alignment curves are designed to meet the minimum required in the AASHTO

Bicycle Facilities guide, so they meet the standard but are not as gentle as the curves in Options 1 and 2. The expansion of the deck is maximized to fill the entire gore area, and three new piles are required for the expansion. The remaining deck would be widened up to two feet on each side across the length of the deck utilizing existing piles.

Impacts on visitor experience under the Land Circulation, Off-Island, Option 4 are similar to that of the Land Circulation, Off-Island, Options 13; however, Option 4 provides an even safer passage through the project area by upgrading alignment curves to meet the minimum required for bicycle facilities under AASHTO.

WATER CIRCULATION

Option 1 Establish Soft Landings for Non-Motorized Watercraft

Under the Water Circulation Option 1, water circulation and access would be reestablished on the island. This would be achieved by creating formal soft landings or launches for small non-motorized watercraft in locations that were historically utilized for this purpose, as described in Chapter 6 and previously in this Chapter. Long-term, beneficial impacts to visitor experience would occur. Through the reestablishment of boat launches/landing areas in locations where they historically existed, visitors can experience improved interpretation of the cultural setting and historic viewsheds of the island, as well as utilize designated shoreline access to the island, improving visitor safety.

Option 2 Floating Dock – Preferred

Under the Water Circulation Option 1, in addition to the soft water landings proposed in Option 1, one floating dock for non-motorized watercraft would be installed in the northeast corner of the island, which is the site of a historic ferry landing and a later floating dock.

Impacts on visitor experience under the Water Circulation Option 2 are similar to that of Option 1; however, Option 2 provides additional visitor experience benefits due to the installation of a floating dock. The dock would provide visitors additional options for launching/landing non-motorized watercraft and access to and from the island, as well as enhanced interpretation of the cultural setting due to the placement of the dock at the historic former ferry landing.

CUMULATIVE IMPACTS

No cumulative impacts to visitor experience would occur as a result of the preferred treatment recommendations under Alternative 2 – Action Alternative, specifically: the Comfort Station Option 1; Land Circulation On-Island Trails

Option 2; Land Circulation Off-Island Trails Option 4; and Water Circulation Option 2. No incremental impacts are anticipated when taking into consideration the impacts as a result of the past, present and reasonably foreseeable future actions

CONCLUSION

The Preferred Alternative (Alternative 2) consists of the three preferred options: Comfort Station Option 1, Land Circulation On Island Trails Option 2; Land Circulation Off-Island Trails Option 4; and Water Circulation Option 2. Long-term, beneficial impacts to visitor experience will occur as a result of all the preferred treatment recommendations under Alternative 2; specifically, the Comfort Station Option 1; the Land Circulation On-Island Trails Option 2, the Land Circulation Off-Island Trails Option 4, and the Water Circulation Option 2. Visitors would experience an upgraded, universally compliant comfort station facility; an improved (more formalized), maintained and safer trail network and boat launching and landing areas; improved interpretation of the historic setting of the island; and safer passage on Mount Vernon Trail Bridge 31.

Table 4. Impacts Summary

Alternatives		Historic Structures	Archeological Resources	Cultural Landscapes	Wetlands	View and Vistas	Visitor Experience
Alternative 1 - No Action Alternative		No Impact	Negative Impact: Continued degradation of archeological resources.	Negative impact; Continued degradation of key landscape characteristics (archeology, views and vistas, etc.) through the informal use of social trails and soft boat landings	Negative impact; Continued degradation of area wetlands	No Impact	No Impact
Alternative 2 - Action Alternative (Comfort Station, Land Circulation, Water Circulation, See below)							
Comfort Station	Option 1 - Rehabilitation Treatment - Preferred	Long term, beneficial impacts through the rehabilitation of the historic building.	No Impact	Adverse Impact; the Comfort Station is a contributing element of the Cultural Landscape.	No Impact	No Impact	Long term, beneficial impacts. Provides an upgraded, universally accessible facility on-site, as well as maintains the historic importance of the facility.
	Option 2- Adaptive Reuse and Construction Treatment	Long term, beneficial impacts through the rehabilitation of the historic building.	May negatively Impact archaeological resources	No Impact	No Impact	No Impact	Long term, beneficial impacts. Maintains the historic importance of the comfort station, but does not provide for on-site toilet amenities. Toilet amenities would be off-site.
	Option 3 - Rehabilitation and Construction Treatment	Long term, beneficial impacts through the rehabilitation of the historic building.	May negatively Impact archaeological resources	Adverse Impact; the Comfort Station is a contributing element of the Cultural Landscape.	No Impact	No Impact	Long term, beneficial impacts, similar to that of Option 1 for the onsite facility and Option 2 for the off-site facility.
Land Circulation - On-Island Trails	Option 1 - Social Trail Decommissioning and Vegetation Restoration	No Impact	Long term, Beneficial Impacts. Will infill existing social trails, protecting archeological resources in those areas.	Beneficial Impacts to archaeology resources, which is a landscape characteristic of the Cultural Landscape.	Long term, Beneficial Impacts. Allows the reestablishment of damaged wetlands, and avoidance of future impacts from volunteer trails.	No Impact	Long term, beneficial impacts. Allows better circulation and an increase in visitor safety.

Alternatives		Historic Structures	Archeological Resources	Cultural Landscapes	Wetlands	View and Vistas	Visitor Experience
	Option 2 - Trail Improvements and Viewpoint/Wayfinding Creation - Preferred	No Impact	Long term, Beneficial Impacts. Will infill existing social trails, protecting archeological resources in those areas.	Beneficial Impacts to archaeology resources, which is a landscape characteristic of the Cultural Landscape.	Long term, Beneficial Impacts. Allows the same benefits as Option 1 with the addition of avoidance of future impacts from volunteer viewpoints.	Long term, beneficial impacts. Provides expanded views from TR Island to the surrounding communities, improved historic setting, and historic sightlines within the island.	Long term, beneficial impacts. Allows better circulation, and an increase in visitor safety, as well as improved interpretation of the historic setting compared to Option 1.
Land Circulation - Off-Island Trails	Option 1 - Bridge 31 Realignment with One New Pile	No Impact	No Impact	No Impact	No Impact	No Impact	Long term, beneficial impacts. Allows safer passage on the bridge.
	Option 2 - Bridge 31 Realignment with Three New Piles	No Impact	No Impact	No Impact	No Impact	No Impact	Long term, beneficial impacts. Allows increased safety measures compared to Option 1.
	Option 3 - Bridge 31 Realignment with Five New Piles	No Impact	No Impact	No Impact	No Impact	No Impact	Long term, beneficial impacts. Allows increased safety measures compared to Options 1 and 2.
	Option 4 - Bridge 31 Realignment with Three New Piles – Preferred	No Impact	No Impact	No Impact	No Impact	No Impact	Long term, beneficial impacts. Allows increased safety measures compared to Options 1 - 3.
Water Circulation	Option 1 - Establish Soft Landings for Non-Motorized Watercraft	No Impact	Negative Impact; known archeological resources are located at the proposed soft kayak landings.	Long term, Beneficial impacts. Eliminates unofficial soft-landings which are negatively impacting the cultural landscape	Long term, Beneficial Impacts. Allows the reestablishment of damaged wetlands, and avoidance of future impacts from volunteer boat launches and landings.	Long term, beneficial impacts. Allows improved interpretation of the historic setting of the island, and improved views and vistas to and from TR Island.	Long term, beneficial impacts. Provides improved interpretation of the cultural setting and historic viewsheds of the island, and improved visitor safety.
	Option 2 - Floating Dock – Preferred	No Impact	Negative Impact; known archeological resources are located at the proposed soft kayak landings and floating dock location.	Long term, Beneficial impacts. Eliminates unofficial soft-landings which are negatively impacting the cultural landscape	Long term, Beneficial Impacts. Same impacts as described in Option 1.	Long term, Beneficial Impacts. Same impacts as described in Option 1.	Long term, beneficial impacts similar to Option 1, but provides additional visitor recreational benefits and historic interpretation through the installation of the dock.



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APPENDICES

APPENDIX A

CONSULTATION AND COORDINATION

NHPA SECTION 106 CONSULTATION

Agencies that have direct or indirect jurisdiction over historic properties are required by section 106 of the NHPA to take into account the effect of any undertaking on properties listed in, or eligible for listing in, the NRHP. The NPS has documented compliance with the requirements of both NEPA and Section 106 of the NHPA pursuant to 36 CFR Part 800.8(c) within this CLR/EA.

Agency coordination for the CLR/EA began with initiation letters sent to the DC Historic Preservation Office (DC SHPO) and Virginia Department of Historic Resources (VDHR, acting as SHPO) on June 9, 2017. Consulting party invitation letters were sent to the below organizations to solicit input. The first consulting parties meeting was held on July 13, 2017. The list of attendees (in person and via telephone) is included below.

INVITED CONSULTING PARTIES

- Advisory Council on Historic Preservation
- American Society of Landscape Architects
- Arlington County Department of Community Planning, Housing & Development
- Arlington Historical Society
- Commission of Fine Arts
- Committee of 100
- DC Preservation League
- Friends of Theodore Roosevelt Island
- George Mason University
- Gunston Hall
- Historical Society of Washington, DC
- John F. Kennedy Center for the Performing Arts
- National Association of Olmsted Parks
- National Capital Planning Commission
- National Trust for Historic Preservation
- Preservation Arlington
- Theodore Roosevelt Association
- Virginia Historical Society

ATTENDEES

- American Society of Landscape Architects
- Commission of Fine Arts
- Friends of Theodore Roosevelt Island
- George Mason University
- John F. Kennedy Center for the Performing Arts
- Theodore Roosevelt Association
- VDHR
- JMT
- NPS - GWMP

- NPS - NCR
- NPS - WASO

NEPA COORDINATION

Park Staff and resource officials from the NPS National Capital Region conducted internal and public scoping. The interdisciplinary process defined the purpose and need, identified the potential actions to address the need, and helped define to project issues and impact topics. Public scoping letters were sent to the invited consulting parties, as well as additional recipients listed below, on July 31, 2017. The public scoping period was from July 31, 2017 to September 8, 2017. A Public Scoping Open House was held on site at TR Island on August 3, 2017. Additionally, Facebook live events were held on August 14 and September 7, 2017. Written suggestions, comments and concerns were accepted through September 8, 2017.

Scoping is an early and open process to determine the breadth of issues and alternatives to be addressed in an environmental assessment. Park Staff and resource officials from the NPS National Capital Region conducted internal and public scoping. The interdisciplinary process defined the purpose and need, identified the potential actions to address the need, and helped define to project “issues” and impact topics. The public scoping period was from July 31, 2017 to September 8, 2017.

- American Institute of Architects, Northern Virginia Chapter
- Arlington Bicycle Advisory Committee
- Arlington County Department of Environmental Services
- Arlington County Department of Parks & Recreation
- Arlington Committee of 100
- Arlington Ridge Civic Association
- Citizens Association of Georgetown
- DC Department of Energy and Environment
- DC Road Runners
- District Department of Transportation
- District of Columbia Council
- Fletcher’s Boathouse
- Georgetown Business Improvement District
- Key Bridge Boathouse
- National Marine Fisheries Service
- North Rosslyn Civic Association
- NPS - Chesapeake Bay Office
- Potomac Conservancy
- Potomac Pedalers
- Preservation Action
- Radnor/Fort Myer Heights Civic Association
- Rosslyn Business Improvement District

- Sierra Club - DC Chapter
- The Cultural Landscape Foundation
- Thompson Boat Center
- USACE Baltimore District
- U.S. House of Representatives
- U.S. Coast Guard, 5th Coast Guard District
- VA Department of Conservation & Recreation
- VA Department of Environmental Quality
- VA Dept. of Game and Inland Fisheries
- Virginia Bicycling Federation
- Washington Area Bicyclist Association

CONSULTATION WITH AMERICAN INDIAN TRIBES

The park initiated consultation with the following American Indian groups: Catawaba Nation, Delaware Nation, and the Pamunkey Indian Tribe. Letters were sent on July 31, 2017 informing them of the proposed project and soliciting comments. Of the three tribes contacted, the Delaware Nation and the Pamunkey Indian Tribe agreed to participate. Information from the tribes also was requested to determine if any ethnographic resources are in the project area and if the tribes wanted to be involved in the environmental compliance process. American Indian tribes traditionally associated with the lands of the park will also have an opportunity to review and comment on this CLR/EA. The NPS will continue to consult with the tribes throughout implementation.

U.S. FISH AND WILDLIFE SERVICE, SECTION 7 CONSULTATION

In accordance with Section 7 of the Endangered Species Act, the park initiated consultation with the below agencies. In letters dated August 28, 2017, information was requested regarding the presence or absence of any threatened, endangered, proposed and candidate species, as well as proposed and final designated habitat that may occur within the project study area. Responses were received from the Chesapeake Bay and the Virginia Ecological Services Field Offices of the U.S. Fish and Wildlife Services. Letters, species lists, and agency responses are attached hereafter.

- D.C. Department of Energy and Environment, Fisheries and Wildlife Division
- National Park Service, Center for Urban Ecology
- U.S. Fish and Wildlife Services, Chesapeake Bay Ecological Services Field Office
- U.S. Fish and Wildlife Services, Virginia Ecological Services Field Office
- Virginia Department of Game and Inland Fisheries

COMPLIANCE WITH FEDERAL AND STATE REGULATIONS

The NPS would comply with all applicable federal and state regulations when implementing the preferred alternative. Permitting and regulatory requirements for the preferred alternative are listed in introduction.



United States Department of the Interior

NATIONAL PARK SERVICE
700 George Washington Memorial Parkway
McLean, Virginia 22101

IN REPLY REFER TO:
1.A.2 (GWMP_TRI)

AUG 28 2017

D.C. Department of Energy and Environment
Fisheries and Wildlife Division
1200 First Street NE
Washington D.C., 20002
Attn: Mr. Bryan King

Dear Mr. King,

The National Park Service (NPS) is preparing a Cultural Landscape Report/ Environmental Assessment and Assessment of Effect (CLR/EA) for Theodore Roosevelt Island (TR Island), a park site administered by the George Washington Memorial Parkway (GWMP), in Washington, D.C. and Rosslyn, Virginia. For more information on the history of this project and project details, a scoping newsletter is available at the NPS Planning, Environment and Public Comment website (PEPC), http://parkplanning.nps.gov/tri_clr_ea.

The purpose of the Cultural Landscape Report is to provide guidance for preserving the cultural landscape of TR Island and the adjacent portion of the GWMP. This CLR will identify and document landscape characteristics, patterns, and features that convey the historical significance of the cultural landscape. This project will also guide the long-term stewardship of TR Island and a portion of GWMP by recommending a treatment approach that adheres to the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, and provides a framework for NPS to appropriately apply preservation measures when planning site improvements. NPS seeks to ensure that the planning process properly considers the significance of the cultural landscape and historic features of these sites, so that the historic context may be preserved while promoting an enhanced visitor experience.

This letter constitutes a formal request to initiate coordination with your agency regarding flora and fauna of concern within the project study area, in accordance with Section 7 of the Endangered Species Act of 1973 (as amended).

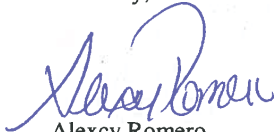
The proposed project is located on an island in the Potomac River situated between Georgetown in Washington, D.C., and the unincorporated section of Arlington County, Virginia, known as Rosslyn. The project area includes the main island (approximately 90 acres), Little Island to the south (approximately 6 acres), and the area of the Virginia mainland from the north end of the parking lot to the Theodore Roosevelt Bridge, within which a section of the Potomac Heritage Trail/ Mount Vernon Trail runs parallel to the island. The center of the island is located at 38°53'47.82" N and 77°03'46.84" W.

The proposed action is the initial NPS proposal to address the project purpose and need for taking action. It represents alternatives that will be considered during the EA process. In addition to the proposed action, the NPS will consider the no-action alternative. Elements of the proposed action may include alterations to trails, viewpoints, and soft landing(s) for small non-motorized watercraft, which are not covered under the current park management plan.

Consultation is requested to ensure that the proposed project will not adversely affect any species or resource of special concern under your agency's jurisdiction. We have enclosed a location map for your reference.

Should you have any questions regarding this correspondence, please contact Brenda Wasler, GWMP Environmental Protection Specialist, at 703-289-2540 or brenda_wasler@nps.gov.

Sincerely,



Alexcy Romero
Superintendent
George Washington Memorial Parkway

Enclosures: Project Site Map

cc: Simone Monteleone, NPS-GWMP
Matthew Virta, NPS-GWMP
Brenda Wasler, NPS-GWMP
René Senos, NPS-NCR



United States Department of the Interior

NATIONAL PARK SERVICE
700 George Washington Memorial Parkway
McLean, Virginia 22101

IN REPLY REFER TO:
1.A.2 (GWMP_TRI)

AUG 28 2017

National Park Service
Center for Urban Ecology
4598 MacArthur Blvd NW
Washington, D.C. 20007
Attn: Ms. Diane Pavék, Research Coordinator

Dear Ms. Pavék,

The National Park Service, National Capital Region (NPS-NCR) is preparing a Cultural Landscape Report/ Environmental Assessment and Assessment of Effect (CLR/EA) for Theodore Roosevelt Island (TR Island), a park site administered by the George Washington Memorial Parkway (GWMP), in Washington, D.C. and Rosslyn, Virginia. For more information on the history of this project and project details, a scoping newsletter is available at the NPS Planning, Environment and Public Comment website (PEPC), http://parkplanning.nps.gov/tri_clr_ea.

The purpose of the Cultural Landscape Report is to provide guidance for preserving the cultural landscape of TR Island and the adjacent portion of the GWMP. This CLR will identify and document landscape characteristics, patterns, and features that convey the historical significance of the cultural landscape. This project will also guide the long-term stewardship of TR Island and a portion of GWMP by recommending a treatment approach that adheres to the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, and provides a framework for NPS to appropriately apply preservation measures when planning site improvements. NPS seeks to ensure that the planning process properly considers the significance of the cultural landscape and historic features of these sites, so that the historic context may be preserved while promoting an enhanced visitor experience.

This letter constitutes a formal request to initiate coordination with your department regarding flora and fauna of concern within the project study area, in accordance with Section 7 of the Endangered Species Act of 1973 (as amended).

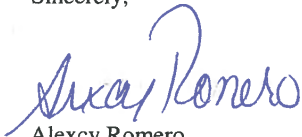
The proposed project is located on an island in the Potomac River situated between Georgetown in Washington, D.C., and the unincorporated section of Arlington County, Virginia, known as Rosslyn. The project area includes the main island (approximately 90 acres), Little Island to the south (approximately 6 acres), and the area of the Virginia mainland from the north end of the parking lot to the Theodore Roosevelt Bridge, within which a section of the Potomac Heritage Trail/ Mount Vernon Trail runs parallel to the island. The center of the island is located at 38°53'47.82" N and 77°03'46.84" W.

The proposed action is the initial NPS proposal to address the project purpose and need for taking action. It represents alternatives that will be considered during the EA process. In addition to the proposed action, the NPS will consider the no-action alternative. Elements of the proposed action may include alterations to trails, viewpoints, and soft landing(s) for small non-motorized watercraft, which are not covered under the current park management plan.

Consultation is requested to ensure that the proposed project will not adversely affect any species or resource of special concern under your department's jurisdiction. We have enclosed a location map for your reference.

Should you have any questions regarding this correspondence, please contact Brenda Wasler, GWMP Environmental Protection Specialist, at 703-289-2540 or brenda_wasler@nps.gov.

Sincerely,



Alexcy Romero
Superintendent
George Washington Memorial Parkway

Enclosures: Project Site Map

cc: Simone Monteleone, NPS-GWMP
Matthew Virta, NPS-GWMP
Brenda Wasler, NPS-GWMP
René Senos, NPS-NCR



United States Department of the Interior

NATIONAL PARK SERVICE
700 George Washington Memorial Parkway
McLean, Virginia 22101

IN REPLY REFER TO:
1.A.2 (GWMP_TR1)

AUG 28 2017

U.S. Fish and Wildlife Service
Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Dr.
Annapolis, MD 24401-7307
Attn: Ms. Genevieve LaRouche

Consultant Code: 05E2CB00-2017-SLI-1051

Dear Ms. LaRouche,

The National Park Service (NPS) is preparing a Cultural Landscape Report/ Environmental Assessment and Assessment of Effect (CLR/EA) for Theodore Roosevelt Island (TR Island), a park site administered by the George Washington Memorial Parkway (GWMP), in Washington, D.C. and Rosslyn, Virginia. For more information on the history of this project and project details, a scoping newsletter is available at the NPS Planning, Environment and Public Comment website (PEPC), http://parkplanning.nps.gov/tri_clr_ea.

The purpose of the Cultural Landscape Report is to provide guidance for preserving the cultural landscape of TR Island and the adjacent portion of the GWMP. This CLR will identify and document landscape characteristics, patterns, and features that convey the historical significance of the cultural landscape. This project will also guide the long-term stewardship of TR Island and a portion of GWMP by recommending a treatment approach that adheres to the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, and provides a framework for NPS to appropriately apply preservation measures when planning site improvements. NPS seeks to ensure that the planning process properly considers the significance of the cultural landscape and historic features of these sites, so that the historic context may be preserved while promoting an enhanced visitor experience.

This letter constitutes a formal request to obtain updated information regarding the presence or absence of any threatened, endangered, proposed and candidate species, as well as proposed and final designated habitat that may occur within the project study area. This action is performed in accordance with Section 7 of the Endangered Species Act of 1973 (as amended).

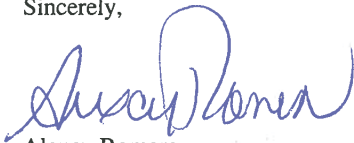
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Consultation is requested to ensure that the proposed project will not adversely affect any species or resource of special concern under your agency's jurisdiction. We have enclosed a location map and the IPAC Resource Memo/List dated August 2, 2017.

Should you have any questions regarding this correspondence, please contact Brenda Wasler, GWMP Environmental Protection Specialist, at 703-289-2540 or brenda_wasler@nps.gov.

Sincerely,



Alexcy Romero
Superintendent
George Washington Memorial Parkway

Enclosures: Project Site Map
Preliminary IPAC Resource List

cc: Simone Monteleone, NPS-GWMP
Matthew Virta, NPS-GWMP
Brenda Wasler, NPS-GWMP
René Senos, NPS-NCR



United States Department of the Interior

NATIONAL PARK SERVICE
700 George Washington Memorial Parkway
McLean, Virginia 22101

IN REPLY REFER TO:
1.A.2 (GWMP_TRI)

AUG 28 2017

U.S. Fish and Wildlife Service
Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410

Consultant Code: 05E2VA00-2017-SLI-2370

Dear Sir or Ma'am,

The National Park Service (NPS) is preparing a Cultural Landscape Report/ Environmental Assessment and Assessment of Effect (CLR/EA) for Theodore Roosevelt Island (TR Island), a park site administered by the George Washington Memorial Parkway (GWMP), in Washington, D.C. and Rosslyn, Virginia. For more information on the history of this project and project details, a scoping newsletter is available at the NPS Planning, Environment and Public Comment website (PEPC), http://parkplanning.nps.gov/tri_clr_ea.

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This letter constitutes a formal request to obtain updated information regarding the presence or absence of any threatened, endangered, proposed and candidate species, as well as proposed and final designated habitat that may occur within the project study area. This action is performed in accordance with Section 7 of the Endangered Species Act of 1973 (as amended).

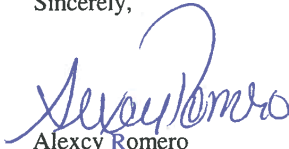
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Should you have any questions regarding this correspondence, please contact Brenda Wasler, GWMP Environmental Protection Specialist, at 703-289-2540 or brenda_wasler@nps.gov.

Sincerely,



Alexcy Romero
Superintendent
George Washington Memorial Parkway

Enclosures: Project Site Map
Preliminary IPAC Resource List

cc: Simone Monteleone, NPS-GWMP
Matthew Virta, NPS-GWMP
Brenda Wasler, NPS-GWMP
René Senos, NPS-NCR



United States Department of the Interior

NATIONAL PARK SERVICE
700 George Washington Memorial Parkway
McLean, Virginia 22101

IN REPLY REFER TO:
I.A.2 (GWMP_TRI)

AUG 28 2017

Virginia Department of Game and Inland Fisheries
PO BOX 90778
Henrico, VA 23228-0778

Dear Sir or Ma'am,

The National Park Service (NPS) is preparing a Cultural Landscape Report/ Environmental Assessment and Assessment of Effect (CLR/EA) for Theodore Roosevelt Island (TR Island), a park site administered by the George Washington Memorial Parkway (GWMP), in Washington, D.C. and Rosslyn, Virginia. For more information on the history of this project and project details, a scoping newsletter is available at the NPS Planning, Environment and Public Comment website (PEPC), http://parkplanning.nps.gov/tri_clr_ea.

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Sincerely,



Alexcy Romero
Superintendent
George Washington Memorial Parkway

Enclosure: Project Site Map

cc: Simone Monteleone, NPS-GWMP
Matthew Virta, NPS-GWMP
Brenda Wasler, NPS-GWMP
René Senos, NPS-NCR



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
Phone: (410) 573-4599 Fax: (410) 266-9127



<http://www.fws.gov/chesapeakebay/>
<http://www.fws.gov/chesapeakebay/endsppweb/ProjectReview/Index.html>

In Reply Refer To:

August 02, 2017

Consultation Code: 05E2CB00-2017-SLI-1051

Event Code: 05E2CB00-2017-E-03612

Project Name: TRI CLR/EA

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. This species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having

similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Chesapeake Bay Ecological Services Field Office

177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
(410) 573-4599

This project's location is within the jurisdiction of multiple offices. Expect additional species list documents from the following office, and expect that the species and critical habitats in each document reflect only those that fall in the office's jurisdiction:

Virginia Ecological Services Field Office

6669 Short Lane
Gloucester, VA 23061-4410
(804) 693-6694

08/02/2017

Event Code: 05E2CB00-2017-E-03612

2

Project Summary

Consultation Code: 05E2CB00-2017-SLI-1051

Event Code: 05E2CB00-2017-E-03612

Project Name: TRI CLR/EA

Project Type: LAND - PRESERVATION

Project Description: Theodore Roosevelt Island CLR/EA

Project Location:

Approximate location of the project can be viewed in Google Maps:

<https://www.google.com/maps/place/38.895113759446524N77.0616496932036W>



Counties: District of Columbia, DC | Arlington, VA

Endangered Species Act Species

There is a total of 0 threatened, endangered, or candidate species on this species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

Critical habitats

There are no critical habitats within your project area under this office's jurisdiction.

USFWS National Wildlife Refuges And Fish Hatcheries

Any activity proposed on [National Wildlife Refuge](#) lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuges or fish hatcheries within your project area.

Wetlands

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

FRESHWATER EMERGENT WETLAND

- [PEM1R](#)

FRESHWATER FORESTED/SHRUB WETLAND

- [PFO1R](#)
- [PFO1S](#)

RIVERINE

- [R1UBV](#)
- [R1USN](#)



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Virginia Ecological Services Field Office
6669 Short Lane
Gloucester, VA 23061-4410
Phone: (804) 693-6694 Fax: (804) 693-9032
<http://www.fws.gov/northeast/virginiafield/>



In Reply Refer To:
Consultation Code: 05E2VA00-2017-SLI-2370
Event Code: 05E2VA00-2017-E-09553
Project Name: TRI CLR/EA

August 02, 2017

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to

08/02/2017

Event Code: 05E2VA00-2017-E-09553

2

utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

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Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>;

<http://www.towerkill.com>; and

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We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

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Virginia Ecological Services Field Office

6669 Short Lane
Gloucester, VA 23061-4410
(804) 693-6694

This project's location is within the jurisdiction of multiple offices. Expect additional species list documents from the following office, and expect that the species and critical habitats in each document reflect only those that fall in the office's jurisdiction:

Chesapeake Bay Ecological Services Field Office

177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
(410) 573-4599

08/02/2017

Event Code: 05E2VA00-2017-E-09553

2

Project Summary

Consultation Code: 05E2VA00-2017-SLI-2370

Event Code: 05E2VA00-2017-E-09553

Project Name: TRI CLR/EA

Project Type: LAND - PRESERVATION

Project Description: Theodore Roosevelt Island CLR/EA

Project Location:

Approximate location of the project can be viewed in Google Maps:

<https://www.google.com/maps/place/38.895113759446524N77.0616496932036W>



Counties: District of Columbia, DC | Arlington, VA

Endangered Species Act Species

There is a total of 0 threatened, endangered, or candidate species on this species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

Critical habitats

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There are no refuges or fish hatcheries within your project area.

Molly Joseph Ward
Secretary of Natural Resources

Clyde E. Cristman
Director



COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

Rochelle Altholz
*Deputy Director of
Administration and Finance*

David C. Dowling
*Deputy Director of
Soil and Water Conservation
and Dam Safety*

Thomas L. Smith
Deputy Director of Operations

September 6, 2017

Brenda Wasler
National Park Service
George Washington Memorial Parkway Headquarters
700 George Washington Memorial Parkway
McLean, VA 22101

Re: TR Island CLR-EA

Dear Ms. Wasler:

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

DCR does not maintain data of natural heritage resources for Theodore Roosevelt Island in Maryland. DCR recommends contacting the Maryland Natural Heritage Program for information about natural heritage resources within the project area.

There are no State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

New and updated information is continually added to Biotics. Please re-submit project information and map for an update on this natural heritage information if the scope of the project changes and/or six months has passed before it is utilized.

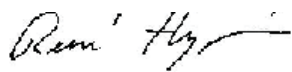
The Virginia Department of Game and Inland Fisheries (VDGIF) maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain information not documented in this letter. Their database may be accessed from <http://vafwis.org/fwis/> or contact Ernie Aschenbach at 804-367-2733 or Ernie.Aschenbach@dgif.virginia.gov.

Should you have any questions or concerns, feel free to contact me at 804-371-2708. Thank you for the opportunity to comment on this project.

600 East Main Street, 24th Floor | Richmond, Virginia 23219 | 804-786-6124

***State Parks • Soil and Water Conservation • Outdoor Recreation Planning
Natural Heritage • Dam Safety and Floodplain Management • Land Conservation***

Sincerely,

A handwritten signature in black ink, appearing to read "S. Rene' Hypes", with a stylized flourish extending from the end.

S. Rene' Hypes
Project Review Coordinator

From: **Sriperambudur, Anu (DGIF)** <Anu.Sriperambudur@dgif.virginia.gov>
Date: Thu, Aug 10, 2017 at 4:28 PM
Subject: TR Island CLR/EA
To: "brenda_wasler@nps.gov" <brenda_wasler@nps.gov>
Cc: "ProjectReview (DGIF)" <ProjectReview@dgif.virginia.gov>

Good afternoon,

We appreciate that you submitted your project(s) for review by VDGIF to ensure the protection of sensitive wildlife resources during project development. Due to current staffing limitations within our Fish and Wildlife Information Services (FWIS) and Environmental Services sections, we are unable to review and provide comments on projects that are not currently involved in one of the regulatory review processes for which we are a consultative agency (see <http://www.dgif.virginia.gov/environmental-programs/environmental-services-section.asp>).

Please note that no response from VDGIF does not constitute “no comment” nor does it imply support of the project or associated activities. It simply means VDGIF has not been able to respond to your request.

To assist you in determining which, if any, wildlife resources under our jurisdiction, including threatened and endangered wildlife, may be present on or near your project site, we recommend that you access the Virginia Fish and Wildlife Information System (VAFWIS) at <http://vafwis.org/fwis/>.

If you should have further questions or need additional information about VDGIF’s Environmental Programs, please visit: <http://www.dgif.virginia.gov/environmental-programs/>

Please feel free to attach a copy of this correspondence and any reports from VAFWIS with your project paper work to document your correspondence with us regarding this project.

Thank you,

Anu Sriperambudur

Bureau Of Wildlife Resources

Virginia Department of Game & Inland Fisheries |

7870 Villa Park Dr, Ste 400, Henrico, VA 23228