

# ARCHEOLOGICAL OVERVIEW, ASSESSMENT, IDENTIFICATION, AND EVALUATION STUDY OF GEORGE WASHINGTON MEMORIAL PARKWAY

Virginia

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VOLUME I

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## **ABSTRACT**

On behalf of the National Park Service (NPS), National Capital Region and the George Washington Memorial Parkway (GWMP), Louis Berger carried out a three-year Archeological Overview, Assessment, Identification, and Evaluation Study of the GWMP north of Alexandria. This document presents the findings of the study in two volumes. Volume I contains a narrative of the history and archeology of the park, written to be accessible to park interpreters and the public; it does not contain sensitive information, such as the locations of archeological sites. Volume II contains the detailed archeological findings, organized geographically by site and survey area, along with detailed maps and other sensitive data. The study covers parts of GWMP-administered lands in Arlington and Fairfax counties and the City of Alexandria, all in Virginia. Arlington House and Arlington Ridge Park were excluded from field survey, as were sites like Fort Marcy and Claude Moore Colonial Farm. Theodore Roosevelt Island, which is in Washington, D.C., was covered in the documentary research phase, but the island was excluded from the field portion of the project and will be investigated further under a separate work order. The project area encompasses about 2,100 acres, of which approximately 70.75 acres received intensive field investigations.

The main goals of the study were to document what has already been learned about the archeological resources of the park, to assess the archeological potential of both known sites and unexplored areas, to explore more of the park through field survey, and to carry out additional testing of selected sites to evaluate their significance. The project will assist the NPS in complying with Section 110 of the National Historic Preservation Act (NHPA), Executive Order 11593, and the Archeological Resources Protection Act. This project does not constitute NHPA Section 106-level survey of the entire project area. The GWMP's Cultural Resource Manager or other qualified personnel may decide that the survey reported here is adequate for Section 106 historic property identification responsibilities in certain locations for certain projects, but that determination must be made on a case-by-case basis.

The project area has a history of investigations that goes back to the nineteenth century, and at least 79 archeological sites had already been recorded. The important sites that had been recorded in the project area were mainly prehistoric and Civil War sites; with the exception of the Mason house on Theodore Roosevelt Island, the historic domestic sites identified in the park date mainly to the late nineteenth and twentieth centuries. The prehistoric record is remarkable, with dozens of sites indicating intensive use of the Potomac Gorge area from the Terminal Archaic through Middle Woodland periods, with some use in the Early, Middle, and Late Archaic and the Late Woodland periods. The Civil War record includes forts, especially Fort Marcy; lesser earthworks; barracks areas for the forts' defenders; and a camp of the U.S. Colored Troops on Theodore Roosevelt Island.

During this three-year study 35 new archeological sites were identified, 47 previously recorded sites were revisited, and much was learned about the archeology and history of the GWMP.





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## I. INTRODUCTION

The George Washington Memorial Parkway (GWMP) stretches across Virginia for 28 miles, from Mount Vernon to the American Legion Bridge. The GWMP follows the Potomac River, and much of it is within a stone's throw of the shore. Because the river has been a focus of human settlement since very ancient times, the park has a fascinating history and a rich archeological record.

The GWMP is owned and managed by the National Park Service (NPS). Part of the mission of the NPS is to preserve the nation's historical legacy. As part of this mission, the NPS carries out or commissions surveys of the historic properties and archeological sites on its land; it is hard to plan for the preservation of something without knowing about it. The NPS therefore contracted Louis Berger U.S., Inc. (Louis Berger) to carry out a three-year archeological survey of the GWMP north of Alexandria, Virginia (Figure 1). Technically this was an Overview, Assessment, Identification, and Evaluation Study. *Overview* and *Assessment* mean delving into what is already known about the archeology and history of the park in question and assessing the potential for further discoveries. *Identification* means finding new archeological sites. *Evaluation* means exploring archeological sites to determining whether they are eligible for inclusion in the National Register of Historic Places (NRHP), the government's official list of important historic properties. This document is Volume I of a two-volume report describing the results of this study. Volume I is written for a popular audience and does not include sensitive information on the exact locations of archeological sites. Volume II contains a detailed description of the methods and results of the study along with detailed maps.

The section of the GWMP covered by this study stretches about 12 miles. Arlington House, Arlington Ridge Park, Theodore Roosevelt Island, and sites like Fort Marcy and Claude Moore Colonial Farm were excluded from the fieldwork part of the study because they either have been or will be covered by separate studies. Along some stretches the GWMP encompasses only a narrow corridor around the roadway, but in others it expands to take in a substantial swath of undeveloped land. The total area included in the study (the project area) is about 2,100 acres, of which approximately 70.75 acres received intensive field investigations.

Archeologists have been investigating the project area for more than a century, and at least 79 archeological sites had already been recorded when the study began. Many of the sites had been discovered and investigated by amateurs, so it was hard to know how much to trust their reported findings. Some of the sites have been destroyed, at least in part, by the construction of I-395, I-495, the GWMP itself, and other development, and it was not known how much of these sites survived. One of the major goals of the study was therefore to revisit those recorded sites and determine what remained of them.

The previously known archeological sites along the GWMP were mostly either ancient Indian camps or remnant features of the Civil War. The GWMP cuts across the fortifications built to defend Washington from possible Confederate attack, and it includes one very well-preserved fort, Fort Marcy. The named forts were surrounded by smaller earthworks, and the soldiers who manned the forts built barracks and other structures close by. The park therefore has a particularly rich Civil War legacy.

Fieldwork for this study was carried out in 2015, 2016, and 2017, in each case for three to five weeks in the fall. Taking the three field seasons together, Louis Berger carefully surveyed 70.75 acres of the park, revisited 47 previously identified sites, and discovered 35 new sites. The new sites include prehistoric camps, domestic sites dating to the nineteenth and twentieth centuries, and historic-era quarries.



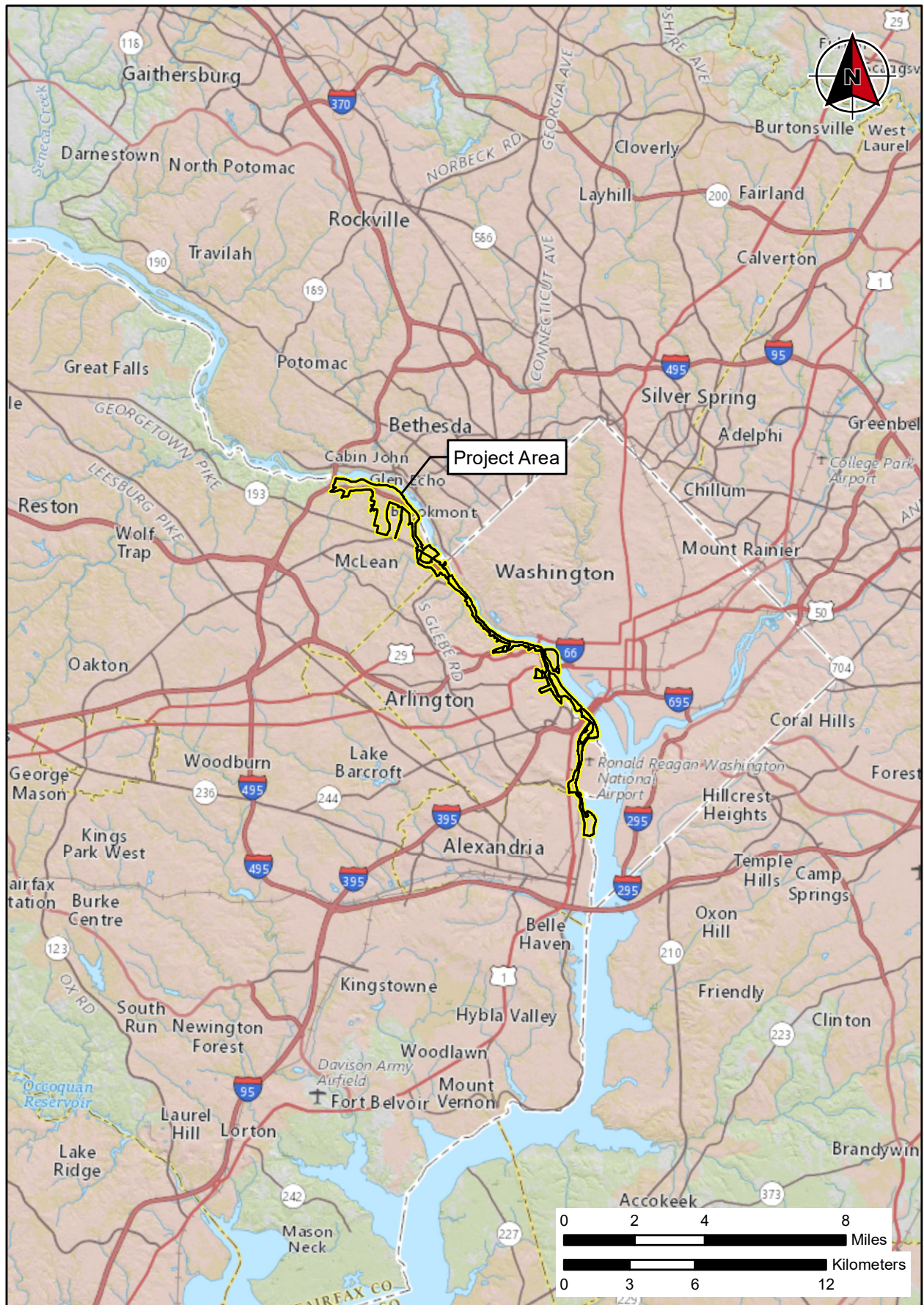


FIGURE 1: Location of the Project Area (ESRI USA Topo Maps 2018)

## **II. GORGE AND PLAIN**

The dominant feature of the landscape is the river. Just over 400 miles long, the Potomac drains an area measuring 14,679 square miles, most of that in the Appalachian highlands. Its average flow at Washington, D.C., is 85,000 gallons per second, its maximum flow nearly 40 times as much. The river long served as a great highway from the coast west into the mountains. With a few portages Indians and then European traders could paddle canoes all the way to Cumberland, which was within a few days' walk of rivers that led to the Ohio and thus to North America's great interior.

The project area spans two very different landscapes (Figures 2 and 3). Downstream from the Key Bridge, the hills shrink and the land opens up into the gently rolling Coastal Plain. The river broadens and becomes sluggish and tidal. Upriver from the bridge, the river flows through the steep, tree-covered bluffs of the Potomac Gorge, which rise about 150 feet above the water. Several small tributaries enter the river along the gorge. Tributaries on the Virginia side include Dead Run, Turkey Run, Pimmit Run, Gulf Branch, Donaldson Run, Windy Run, and Spout Run; one that has no name on United States Geological Survey (USGS) maps is known to locals, and archeologists, as Marcey Creek. Some of those tributaries have their own small valleys where Indians might have camped or Europeans settled.

The Coastal Plain landscape has been extensively modified by filling, dredging, and the construction of Ronald Reagan National Airport, I-95, Memorial Bridge, rail lines, more highways, and much else besides. Well-preserved areas do remain, but careful comparison of nineteenth-century and modern maps is necessary to determine which areas might contain archeological sites and which were created or massively modified by twentieth-century development. Digitizing historical maps was therefore an important element of the study for these areas. The sandy soils of the Coastal Plain were good for agriculture, and the area was divided into plantations early in colonial times. Indians also camped along the river here, although no sites have been found as large and rich as those along the Anacostia or the lower Potomac.

Up in the Potomac Gorge, the landscape can be divided into three types: bluff tops, steep slopes, and low-lying terraces along the Potomac and other streams. Most of the land in this area that is level enough for people to live on lies on top of the bluffs, and many archeological sites are found in those locations. However, those bluff tops have certain problems from an archeological point of view. Sites located on hilltops have generally been plowed, and they may be deflated and eroded. This means that, although they contain artifacts, everything from the past 12,000 years will be in the same soil layer, which greatly limits the usefulness of the material. At sites located on river and stream terraces, artifacts of different ages may be separated by the steady accumulation of soil, but even when there is no clear stratigraphy in these settings, they may still preserve features (such as hearth, pits, postholes, or foundations) that may have been destroyed by plowing or erosion on upland sites. The study therefore included careful investigation of low-lying terraces along the Potomac and other streams to search for locations where archeological deposits might be better preserved.

The river is navigable by boat as far upstream as Fletcher's Boat House, and a determined paddler can get a canoe up to Little Falls in the right conditions. In colonial days small sailing ships reached Georgetown. This passage was never easy, however, and was always threatened by silt, sandbars, and other obstacles, which is one reason that the more reliably accessible anchorage at Alexandria overtook Georgetown as a hub of trade. After a portage around Little Falls, Indian canoeists could paddle to Great Falls, and after a second portage there, they could reach far into the Appalachians. Henry Fleet reported in 1632 that his brother and a party of Indians traveled more than a hundred miles upriver from the Falls in a journey of 12 days (seven up and five back), reaching Indian villages somewhere in the interior. This was not an easy passage, however, especially going upriver. In the eighteenth century Euro-American boatmen sometimes





FIGURE 2: The Tidal Potomac at Washington (NPS 2018)



FIGURE 3: The Potomac Gorge



sailed down the river from Cumberland to Georgetown, then sold their boats and goods for lumber and walked back upriver (Achenbach 2004). Shipping continued into Georgetown in the nineteenth and twentieth centuries. The tantalizing potential of the Potomac for trade drove the dreams of canal builders, chief among them George Washington, who believed that with a little effort and ingenuity, they could create a clear-water path to the west.

The river was also a great source of food in the form of fish and eels. Shad and herring ran by the millions up to Little Falls, spawning in all the clear-running streams that branched off from the river. Young eels did even better and somehow slithered their way past both Little and Great Falls to become one of the dominant organisms of the middle and upper Potomac; by some estimates half the animal biomass of the river was eels. Huge sturgeon used to congregate below the Falls, where Henry Fleet saw Indians taking 30 in a single night. Prehistoric fish weirs have been found in the tidal Potomac, along the Potomac River north of Great Falls and in the Potomac Gorge (Ebright 2011; Engineering Science, Inc. 1993; Lutins 1992). Fishing stations were established in colonial times at numerous places along the river, and fishing remained a major industry into the nineteenth century.

Dozens of archeological sites in this region preserve an amazing record of this history. During this study many were explored, many artifacts were found, and much was learned about this fascinating corner of the world.



### **III. FIRST PEOPLES**

#### **A. HUNTERS AND GATHERERS IN A THINLY PEOPLED LAND, CA. 11,500 TO 7500 BC**

People have lived in the Washington, D.C., area for around 13,000 years. Archeologists divide the human past into named periods, as shown in Table 1. Native Americans have been gathering at the Falls of the Potomac for at least the past 10,000 years, and the hills overlooking the Falls were once covered with ancient artifacts. The landscape looked quite different so long ago. When the first humans arrived, the great glaciers still covered the land just a few hundred miles to the north. Sea level was much lower, and the Potomac below the Key Bridge would have been much narrower and swifter-flowing than it is today.

Genetic evidence has recently confirmed the long-held assumption that the ancestors of American Indians originated in central Siberia. One leading theory is that they probably crossed Beringia into Alaska during a period of warming climate about 14,500 to 14,000 years ago. The oldest known archeological sites in Alaska have been dated to about 12,000 to 11,500 BC. As the melting of the Canadian ice sheets continued, a passage opened between them—an “ice-free corridor.” The Alaskan Paleoindians often trapped and ate swans, geese, and ducks. As they watched these birds fly south through the corridor when the winter cold approached, they must have speculated that there were lakes teeming with waterfowl somewhere to the south. Possibly in response to local climate changes brought on by the gradual submergence of Beringia as the glaciers retreated, a band of these Paleoindian hunters finally decided to explore the corridor, about 13,700 years ago.

Some 1,200 miles to the south they found themselves in a new world. This was a land filled with monstrous animals (“megafauna”) that had never seen a human being before—elephant-like mammoths and mastodons, giant ground-dwelling sloths, beavers the size of bears, giant long-horned bison, native wild horses, lions, saber-toothed and cheetah-like cats, and short-faced bears bigger and faster than modern grizzlies. In all, about 30 kinds of giant mammals, which had thrived in North America for millions of years, became extinct in North America within 1,000 years after the arrival of humans. Few smaller mammals died out, but some species of birds did become extinct. Was the disappearance of the megafauna caused by the sudden climate changes of this period? The climate had changed many times, with similar severity, over the preceding two million years of the ice age, so there must have been something special about that time. And curiously, the die-off occurred after several thousand years of warming, just as the climate was suddenly becoming colder again. At 10,900 BC, in a matter of decades, the northern hemisphere became very cold, and it stayed cold for the next 1,300 years—a period known as the Younger Dryas. Why would cold weather be fatal for big-bodied mammals whose ancestors had survived many millennia under similar conditions?

It is hard to avoid the conclusion that human hunting played an important part in the die-off. There is unambiguous archeological evidence that Paleoindians in the Great Plains hunted mammoths around 13,000 years ago, using a distinctive form of stone spearpoint—the fluted “lanceolate” Clovis point. Very similar points have been found across the whole of North America, with a noticeable concentration in the mid-South. A few years ago one turned up during the excavation of a historic cemetery in Alexandria (City of Alexandria 2018). Along with these points a typical Paleoindian toolkit also included chipped stone scrapers (with rounded edges) and graters (with small sharp prongs) for working hides, bones, and wood (Figure 4). East of the Mississippi no Paleoindian kill sites have yet been found, potentially because sites were inundated as a result of melting glaciers and sea level rise. Radiocarbon dates show that mastodons and other megafauna coexisted with humans for a few hundred years. Bone is usually very poorly preserved on Eastern Paleoindian sites; the few odd bits of heavily burned bone that have been recovered indicate hunting of caribou by the more northern bands; deer may have been a staple in the diet of more southern groups. The Paleoindians who camped at the Shawnee-Minisink Site in the upper Delaware River valley ate fish as well as berries and fruits (McNett 1985).



FIGURE 4: Clovis Artifacts from Maryland

TABLE 1

MIDDLE ATLANTIC REGION, CULTURAL AND ENVIRONMENTAL CHRONOLOGY

DATES AD/BC	CLIMATE/ENVIRONMENT CHANGES	CULTURAL PERIODS	CULTURAL EVENTS AND ARTIFACT TYPES
AD 1500	Little Ice Age onset (AD 1350); dry (AD 1320-1400)	Late Woodland	Palisaded villages (1300 AD)
1000	Medieval Climatic Optimum; dry (AD 800-1200)	900 AD	Maize (900 AD) Bow and arrow (AD 700) Algonquian migrations
500	Ice-rafting event (AD 600) pollen change (AD 300)	Middle Woodland	
AD 1	Dry (200 BC-AD 300)	500 BC	Delmarva Adena (400 BC) Piscataway points (500 BC)
500 BC	Ice-rafting event (800 BC) Pollen change (850 BC)		
1000		Early Woodland	Pottery (1200 BC)
1500			
2000	Pollen change (2100 BC) Megadrought (2200 BC) Ice-rafting event (2000 BC)	Terminal Archaic	Fishtail points (1500 BC) Stone bowls, grooved axes, Broadspear points (2200 BC)
2500			
3000	Mid-Late Holocene transition (3250 BC)		
3500			
4000	Drought; Ice-rafting event (3900 BC)	Late Archaic	Lamoka points (3500 BC)
4500			
5000	Pollen change (4700 BC) More severe El Niño events (5000 BC)	5000 BC	Halifax points (4500 BC) Brewerton points (4500 BC) Otter Creek points (5000-4500 BC)
5500			
6000	Chesapeake becomes salty estuary (5800 BC)	Middle Archaic	Morrow Mountain points (6000 BC)
6500	Ice-rafting event (6200 BC cold event); drought; Hypsithermal (warm, dry) begins		Stanly points (6500 BC)
7000	More rainfall in Southeast (7000 BC)		
7500	Ice-rafting event (7400 BC)	7500 BC	Bifurcate base points (7500 BC)
8000			
8500 BC	Pollen change (8200 BC) Ice-rafting event (8300 BC)	Early Archaic	Kirk, Palmer corner-notched points (9000 BC)
9000	Pre-Boreal Oscillation cold event (9300 BC)		
9500	End of Younger Dryas; Holocene (modern era) begins (9500 BC)	9500 BC	Side-notched points
10,000			
10,500			
11,000	Younger Dryas onset (cold) (11,000 BC)	Paleoindian	Extinction of megafauna (10,700 BC)
11,500	Intra-Alleröd cold period (11,400-11,200 BC)	11,500 BC	Clovis fluted points
12,000	[warming]		Earliest sites in Alaska (12,000 BC)
12,500	Bölling-Alleröd warming onset (12,700 BC)		

After 9500 BC the lifeways of Native people changed significantly as the climate warmed abruptly. A warming climate and melting glaciers resulted in new environments and broader rivers, including the formation of the Chesapeake Bay. People lived in more diverse environments and exploited a larger variety of fish, shellfish, game, and plant resources (Custer 1990). Fluted points disappeared from site assemblages at that time and were replaced by a diverse set of corner-notched and side-notched point types, possibly indicating the hunting of different sorts of animals from those of the Paleoindian period. The transition around 9500 BC divides the Paleoindian period from the Early Archaic.

Early Archaic sites frequently occur on large river terraces, as Paleoindian sites do, but Early Archaic sites are more numerous than Paleoindian sites (Johnson 1986); however, population density remained low. A comparison with the recent Native hunting peoples living in a similar environment in present-day northeastern Canada suggests that the territory of a single band of perhaps 150 to 250 people might have stretched from the Chesapeake Bay to the Blue Ridge, covering as much as half the state of Virginia (Custer 1990). Although special, high-quality stone such as chert or jasper was still preferred for points and other tools, Early Archaic groups also began to exploit lower-quality local stones (Custer 1989). Diagnostic points of the period include corner-notched Palmer points, which date to ca. 9500 to 9000 cal BC, and corner-notched Charleston, Kirk, and Amos types, dating to about 9000 to 8000 cal BC.<sup>1</sup> Only occasional artifacts from this period have been found in the vicinity of Washington. These include Kirk points from sites on the Anacostia, the Fletcher's Boathouse Site (Barse 2002), and the Donaldson Site (Deppe 1972), as well as Palmer points from the Spring Branch Site (McNett 1975) (Figure 5).

## **B. A WARMING WORLD, 7500 TO 5000 BC**

The Middle Archaic cultural period began around 7500 BC and roughly corresponds to the Hypsithermal, a climatic episode marked by rising temperatures, decreasing precipitation, and the development of a more seasonally variable climate. The warmest temperatures of the entire Holocene actually occurred at the beginning of this period, around 7500 BC. An oak-pine-hemlock forest dominated the region (Yuan 1995), and deer became the dominant large mammal.

The growing population changed its subsistence-settlement patterns. Sites are larger and more numerous, and a more diverse toolkit implies a broader range of subsistence activities than in the Early Archaic. During the Middle Archaic people began to occupy locations that had been previously ignored, such as upland swamps and interior ridgetops (Gardner 1987); however, base camps were still located primarily in the floodplains of major rivers and streams. The appearance of new tool types specifically designed for woodworking, seed-grinding, and nut-cracking (e.g., axes and adzes, mauls, grinding slabs, and nutting stones) and the location of sites in previously unused areas indicate an increasing reliance on gathered plants for food and other necessities.

Diagnostic Middle Archaic points include, from the earlier portion of the period, bifurcate-base point types (LeCroy, St. Albans, Kanawha), Kirk Stemmed, Kirk Serrated, and Stanly points, and from the later portion (after 6200 cal BC), Morrow Mountain, Guilford, Otter Creek, and Lobate points. Non-diagnostic triangular points have also been recovered from Middle Archaic contexts. During the Middle Archaic period it was no longer necessary to settle near high-quality lithic material; most recovered artifacts were manufactured from locally available stone (Dent 1995:176). Instead, occupations focused on boundaries between different environmental zones, such as the edges of wetlands.

Bifurcate points are fairly common in the region, much more so than earlier types (Figure 6). They have been reported from the Gulf Branch Site, which is in Arlington just outside the GWMP, and the Potomac Avenue Site on the other side of the river (Fiedel et al. 2008:128; Johnson 2001). Bifurcate points are generally made of local stone, quartz in the Coastal Plain but rhyolite or chert in the mountains. Sites of

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<sup>1</sup> "Cal" refers to calibrated years, adjusted to accommodate information from radiocarbon dating and tree rings.

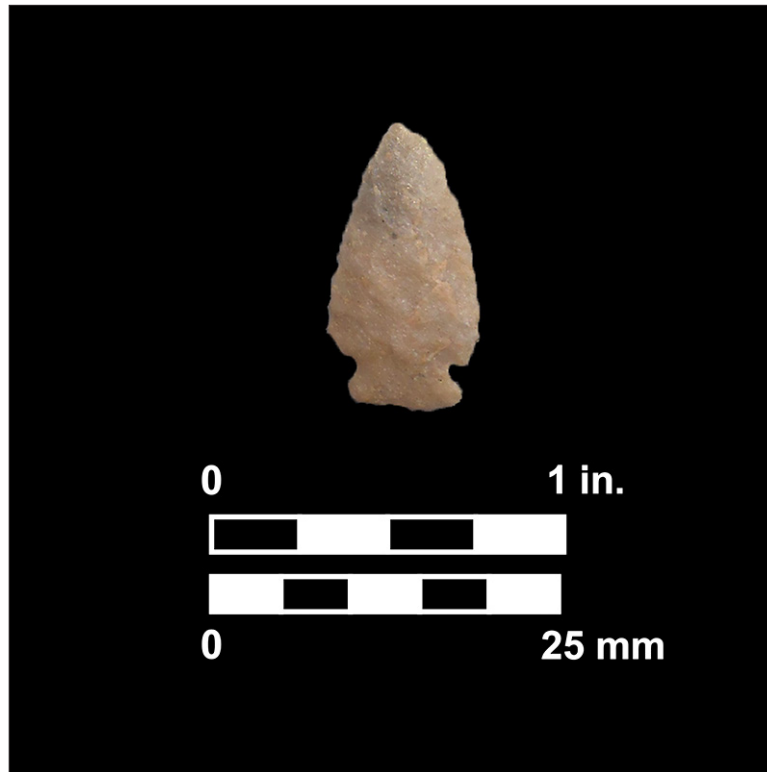


FIGURE 5: Early Archaic Palmer Point from the George Washington Memorial Parkway (GWMP)



FIGURE 6: Bifurcate Points from a Site in Maryland (Fiedel et al. 2005)

this period are mostly small, with only a few points found at each location. This pattern probably represents short-term camping by small, mobile bands or hunting parties.

### C. A LATE ARCHAIC MIGRATION? CA. 5000 BC

Having divided the past into periods, archeologists immediately began to argue among themselves about where the temporal boundaries ought to be set. The boundary between the Middle and Late Archaic periods is particularly contentious, with experts arguing for dates 1,500 years apart. The scheme used here sets the boundary around 5000 BC, when a different assortment of stone tools appears in the region. The points called Otter Creek and Brewerton are quite distinctive. They developed first around the Great Lakes, and archeologists have long speculated that their appearance in New England and the Middle Atlantic was the result of a major migration of peoples.

One of the sites along the GWMP produced interesting evidence of this migration. The Spring Branch Site on the Potomac Bluffs in Arlington was discovered by an avocational archeologist named Scott Silsby in 1961. It was then partially destroyed when the GWMP was built across it. In the 1970s Silsby showed his artifacts to Charles McNett, an archeology professor at American University. McNett was intrigued and took some of his students to excavate several 5x5-foot test units on what remained of the site. Silsby gave his artifacts from the site to McNett, and McNett wrote up his and Silsby's work. Most of the material from the site comes from Silsby's collection, not McNett's excavation, but McNett and his students did find enough material similar to Silsby's to confirm that his collection probably came from this site.

The Spring Branch Site was visited by ancient Indians for a long time, from 5000 BC until at least AD 500. Many of the artifacts are what archeologists would expect from a site in the region. But when he viewed Silsby's collection, McNett immediately realized that one group of stone tools does not fit at all. These are mostly Otter Creek and Brewerton points, made of a very dark type of rhyolite not like that found in the Blue Ridge Mountains (Figure 7). These tools resemble artifacts from western Pennsylvania or Ohio. These artifacts therefore support the old theory that the people who used Otter Creek and Brewerton points in Maryland and Virginia were migrants from the northwest.

Just as intriguing are two objects of uncertain function. The steatite object in Figure 8 might have been a fishing weight or something less utilitarian, but at any rate it resembles similar objects reported from the Ohio Valley (Purtill 2002). The object in Figure 9 appears to be a pendant, carefully made from very hard stone and therefore no doubt once of great value. Such finds are rare in camp sites like this one, and these objects therefore confirm that Spring Branch was a special sort of site.

### D. THE UBIQUITOUS HALIFAX FOLK, 4000 TO 3000 BC

During the Late Archaic period a series of thriving cultures developed throughout eastern North America. These cultures had higher population densities than anything seen before, based, it seems, on great expertise in exploiting the forest environment. The Otter Creek/Brewerton culture discussed above is one of them, dominant in the Appalachians from West Virginia northward into New England. But the Late Archaic culture most commonly found around Washington is called Halifax. The culture is named from the Halifax point, perhaps the most common types of stone tool found across the Piedmont of Virginia and Maryland (Figure 10). These were attached to spears or the kind of darts thrown with an atlatl, but they were probably also used for cutting. They are about an inch and a half long and have notches on each side where they were attached to the shaft. The blade has straight sides. Viewed on-end, they have a diamond-shaped cross section; at least, that is what the better-made specimens look like. One problem with trying to understand ancient cultures based on their tools is that some stone workers very carefully crafted points with a particular shape that archeologists can recognize, while others seem not to have cared as long as the result was sharp. Other points were resharpened so many times that they lost their distinctive shape.





FIGURE 7: Otter Creek and Brewerton Points from Spring Branch

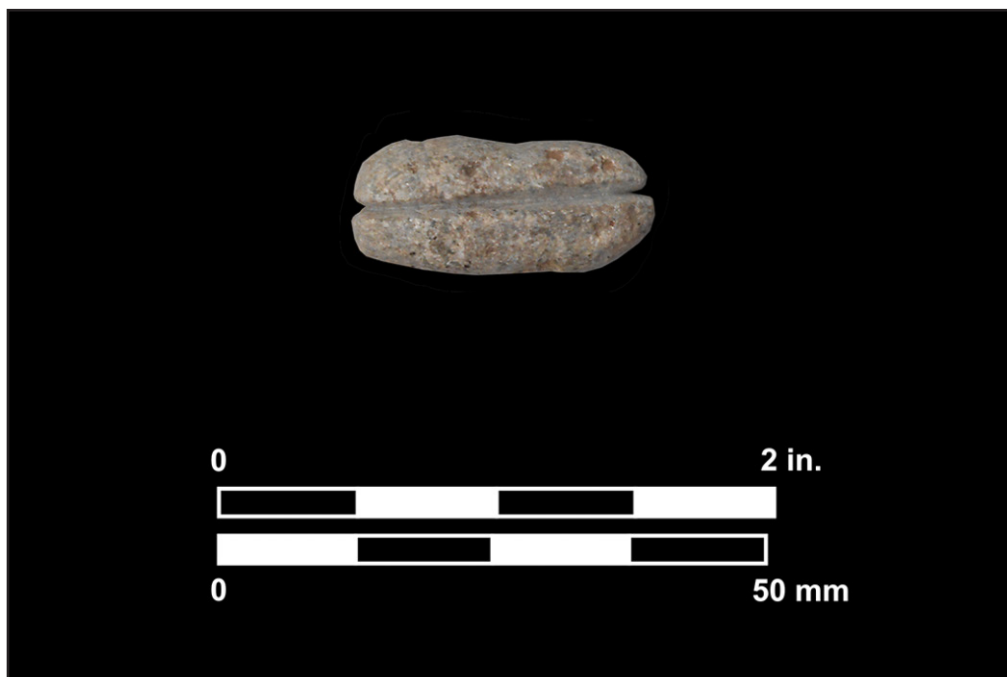


FIGURE 8: Steatite "Netsinker" or "Plummet" from Spring Branch



FIGURE 9: Pendant from Spring Branch

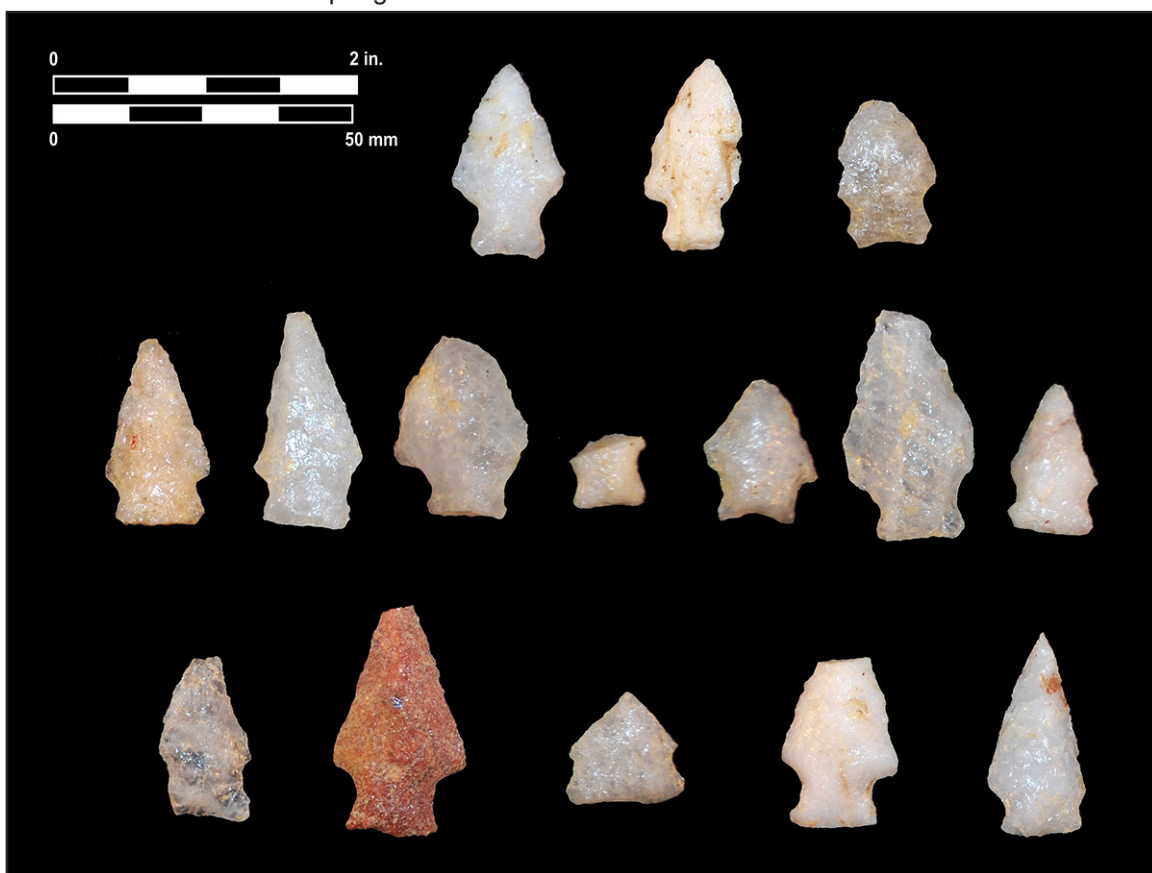


FIGURE 10: Halifax Points from MCB Quantico

The most striking thing about Halifax people is how widely they ranged across the landscape. Most Halifax points have been found in small, upland sites, and often they are the only points found in such sites. Halifax points have also been found along large rivers and in wetlands, but not in great numbers. The greatest numbers of Halifax points have been reported in the western Piedmont, near the foot of the mountains, where sites are found along streams and rivers of every size and are usually associated with good soil for nut-bearing trees (Holland 1978; Mouer 1991). At those sites Halifax points seem to be associated with crude scrapers and chipped stone axes made from large quartz cobbles. The preference of Halifax people for making tools out of quartz may be related to their wandering ways; quartz was available just about everywhere within their range, so they never had to carry around extra stone for tool-making or leave off hunting to make a special trip to the quarries. Halifax points have been found at surface quartz quarries around Langley, Virginia, Silver Spring, Maryland, and Quantico, Virginia (Katz et al. 2015)

Recent excavations at the Chopawamsic Creek Site at Marine Corps Base Quantico provided an opportunity to study a Halifax occupation in a roughly stratified context (Bedell et al. 2014). Such opportunities are rare. Apart from the typical quartz points, the finds from the Halifax levels at Chopawamsic Creek include pit features, large amounts of fire-cracked rock (FCR), and several small formal scrapers. Five radiocarbon dates were obtained, all between 3800 and 3600 cal BC. Large “platform hearths” made of cobbles have been attributed to the smoking of fish caught in annual runs of herring or eels, so the finds at Chopawamsic Creek suggest that the reliance on this annual bounty began in Late Archaic times.

Wood charcoal shows that when Halifax people lived along Chopawamsic Creek, the local forest was dominated by oaks and hickories, and the Halifax residents certainly collected hickory nuts. In fact the origin and spread of the Halifax adaptation may be related to the appearance of the oak-hickory and oak-chestnut forests in Virginia and Maryland. Before 4000 cal BC, this region was dominated by oak-pine-hemlock forests, which were noticeably less productive from the point of view of human hunter-gatherers. Sometime between 4000 and 3500 cal BC, the climate grew warmer and drier. Hemlocks and pines declined, and the weakened hemlocks suffered an abrupt die-off (Bennett and Fuller 2002; Haas and McAndrews 2000; Yuan 1995). Oaks increased and hickories first became a significant part of the picture. In the mountains chestnuts multiplied. The effects of the drier climate and the changed forests on humans may have been profound. Historic-period Indians made great use of forest nuts, and their favorite game animals (deer and turkeys) also relied on nut mast to sustain them through the winter.

The appearance of the Halifax culture around the same time as the development of oak-hickory and oak-chestnut forests may not be a coincidence. Not only was their culture apparently built around exploiting the new riches of their changing environment, the rise of the oak-hickory forest may have been partly caused by human activity. Data from Dan’s Bog in Greenbelt, Maryland, and other sites show an increase in burning in this period (Yuan 1995). The burning might have been caused solely by the drier climate, but humans may have played a role. Human-set fires have a habit of getting out of control in dry, windy conditions and spreading to the surrounding forest, so the simple presence of more people usually leads to more fires. It is known that historic-period Indians also set large fires intentionally when they were driving game in large communal hunts. Fires favor oak and hickory trees over evergreens, so more frequent fires helped maintain the oak-hickory forest. Some Indian groups may have set fires as a way of intentionally changing their environments. From Halifax times onward, Indians and the oak-hickory forest may have existed in a symbiosis, each benefiting the other.

Along the Potomac Gorge, Late Archaic points have been found at sites in Great Falls Park, at the Fletcher’s Boathouse Site, and at the Donaldson Site, and more were found during the current study (Figure 11). Only a few points have been reported from each location, however, nothing like the large Halifax sites reported just 25 miles to the south at Quantico and Chopawamsic creeks.

The radiocarbon dates for the Halifax culture mainly fall into the 4000 to 3000 BC period. What came after the Halifax tradition is obscure and much disputed. In some parts of the Middle Atlantic, stemmed points resembling the Lamoka points of New York are found; work at the Puncheon Run Site in Delaware led to the recovery of several stemmed points associated with radiocarbon dates of 3085 to 2035 BC (LeeDecker et al. 2005). At the Slade Site in southeastern Virginia, Lamoka-like points were found in a stratum just above the Halifax levels; no radiocarbon dates were obtained but the excavators estimated the date of this horizon as 3000 to 2500 BC (Egloff and McAvoy 1990:74). Similar points have been reported from several sites in the Fall Zone, including the Gulf Branch Site (44AR0005), the Maddox Branch Complex (Sites 51NW158, 51NW171, 51NW196), and the Fletcher's Boathouse Site (51NW013) (Barse 2002). During the current study roughly made stemmed points were found at several sites both above and below Little Falls (Figure 12).



FIGURE 11: Halifax Point from a Site Along the GWMP

#### E. THE SAVANNAH RIVER INVADERS, 2400 TO 2000 BC

Around 2400 BC the cultures of the Chesapeake region changed dramatically. The narrow-bladed points of the Late Archaic were replaced by broad-bladed projectile points, initiating what is called the Terminal Archaic period (2400 to 1400 cal BC). The broad-bladed point types include Savannah River, Susquehanna, and Perkiomen types (Figure 13). Over several centuries the Susquehanna broadspears were transformed into narrower points: Dry Brook and Orient Fishtail (ca. 1400 to 800 cal BC). These large, broad-bladed stemmed points are typically made of quartzite (in the Coastal Plain) or rhyolite (in the Piedmont and mountains). It is not certain if they were used as projectile points or as specialized knives for fish-processing or some other task (McLearen 1991). Although broadspear points are sometimes found in ritual mortuary contexts, they were apparently utilitarian objects, as shown by occasional breakage and edge attrition (Custer 1991). Along the Potomac these points were usually made of quartzite, and since Savannah River people used more quartzite than any other culture of this region, quartzite flakes are often a sign of their presence.

The way people lived also changed. The small, widely dispersed settlements of the Halifax and similar peoples were replaced by a smaller number of larger sites, almost all of which are adjacent to rivers or other major bodies of water. Sites can be quite large, particularly in the Coastal Plain. The number of small sites in the uplands greatly decreased (Bedell et al. 2014; Mouer 1991). The pattern of sites suggests that people were spending much of the year in these riverside base camps and moving much less often, and also that they preferred to move about by canoe. The broadspear culture is so different from preceding cultures in the region that some archeologists think it was brought into the Middle Atlantic by invaders from the south. Wherever they came from, the Savannah River people were very successful around the Chesapeake, and the area probably had a higher population than it would again until Middle or Late Woodland times.

Archeologists have identified a large group of rich Savannah River sites along the lower Anacostia and adjacent parts of the Potomac, such as Joint Base Anacostia-Bolling (Bedell et al. 2013; Katz et al. 2016). Up toward Little Falls the Savannah River record is thinner. There are Savannah River sites in the Gorge, including Gulf Branch (Johnson 2001) and Marcey Creek (Manson 1948), as well as the Maddox Branch Complex sites on the northern shore (Fiedel et al. 2008). However, several other sites in the area failed to



FIGURE 12: Bare Island Point from Along the GWMP



FIGURE 13: Savannah River Points from Maddox Branch (Fiedel et al. 2008)

produce Savannah River artifacts or quartzite debitage. The absence of Savannah River material from many sites must be related to their relative pickiness about where to live, and their corresponding habit of returning again and again to the same spots.

Radiocarbon dates for Savannah River sites cluster in the period between 2400 and 2000 BC. Far fewer radiocarbon dates for the Chesapeake Coastal Plain fall into the period between 2000 and 1400 cal BC. In the mountains and the Piedmont, that period was the heyday of the Susquehanna Broadspear tradition, which seems to have been an offshoot of the Savannah River, adapted to upland conditions. Susquehanna Broadspears have been reported from the Fall Zone, including Site 44AR0038, just outside the project area, and a major cache in northwest Washington, D.C. (Fiedel et al. 2008). In the Coastal Plain, Savannah River broadspears seem to have been replaced with points that are similar but narrower, often called Holmes points, and also fishtailed points like the Orient Fishtail of New York. However, few radiocarbon dates are associated with either one of these types in the Chesapeake region. At the Pig Point Site in Maryland, the dominant type in the latter part of the Terminal Archaic seems to have been Piscataway points, which are more commonly associated with the succeeding Early Woodland period (Luckenbach et al. 2010).

A noteworthy development in the Terminal Archaic period is the use of carved soapstone (steatite) bowls. Soapstone was quarried during this period in the Piedmont of Virginia, Maryland, and Pennsylvania, including sites in the current project area. W.H. Holmes (1897) recorded a number of soapstone quarries in Washington, D.C., and nearby. Vessels were apparently carved at the quarries and transported in finished form, probably by canoe (Dent 1995:182-184). Excavations at the Gulf Branch Site in Arlington County showed that some soapstone vessels were finished away from quarries at nearby camps (Johnson 2001). Soapstone pots were clearly used for cooking, but it is not yet known what foods they were used to process (fish, meat, seeds, tubers, or nuts).

Savannah River people introduced a way of life that endured in the region for 3,000 years, until agriculture was introduced in the Late Woodland period. The large sites of the Early and Middle Woodland are in the same kinds of locations as Savannah River sites, and most of them were occupied in Savannah River times. The same pattern of occupation, with the focus on large sites near rivers and fewer sites in the uplands, persisted throughout this long period. This is not always true, as several sites along the GWMP show, but it is the usual pattern. A new site with this same long occupation period was found in the GWMP during this study (Figure 14). The Cruikshank Branch Site extends for more than 100 yards along a terrace of the Potomac River. Testing there produced a Savannah River point, Early and Middle Woodland pottery, a quartzite triangular point dating to the Middle or Late Woodland, and a smaller triangular point that most likely dates to Late Woodland times (Figure 15). Quite a bit of FCR was found at the site, indicating that fires were built there, perhaps for smoking fish. If so, this may indicate that rich seasonal runs of herring and eels began around 4,000 or 3,500 years ago. The Cruikshank Branch Site actually may be much larger than was shown during the recent testing because both up- and downstream were other terraces buried by so much historic-era sediment that the prehistoric surface could not be reached by shovel testing.

## F. POTTERY AND EARLY WOODLAND, 1400 TO 700 BC

The Early Woodland period began around 1400 BC with the introduction of pottery. The earliest vessels, known in this region as Marcey Creek ware, imitated the form of flat-bottomed soapstone pots, including lug handles, and were tempered with bits of soapstone (Egloff and Potter 1982). This ceramic type was first defined at the Marcey Creek Site, which is within the GWMP (Manson 1948). Researchers believe that people became more sedentary during the Early Woodland, inhabiting sites for longer periods of the year. Larger sites are common on the Potomac's tributaries both above and below the Falls, with smaller resource-extraction sites in a wide variety of environmental settings. The Native diet probably focused on fish, shellfish, and nuts, but deer, turkey, and plant seeds were also important parts of the diet (Mouer 1991).





FIGURE 14: Shovel Testing at the Cruikshank Branch Site



FIGURE 15: Artifacts from the Cruikshank Branch Site

Diagnostic ceramic wares include Marcey Creek, mentioned above; Selden Island; and Accokeek. Selden Island vessels, although steatite-tempered like Marcey Creek ware, were conoidal (bag-shaped), cordmarked, and constructed by coiling rather than from slabs. Accokeek pottery is a thin-walled, cordmarked ware, with quartz particles and sand added to the clay as temper; vessels were conical or round-bottomed (Egloff and Potter 1982). Large Accokeek sites are common on the Anacostia River and the nearby Potomac (Bedell et al. 2013), and Accokeek pottery has been reported from sites in the GWMP, in particular the Donaldson and Gulf Branch sites (Deppe 1972; Fiedel et al. 2008; Holland 1959; Johnson 2001). During this study Accokeek pottery was found at several sites below Little Falls and one or two farther upriver (Figure 16). Part of an Accokeek pot said to come from a site in the GWMP near Pimmit Run is shown in Figure 17. Less common are a variety of experimental wares with varying tempers and surface treatment that are thought to date to the beginning of the Early Woodland period (Mouer 1991). Bushnell ware is one of the early experimental wares from the lower Potomac, first identified in Westmoreland County, Virginia (Waselkov 1982).

One reason ceramics are important to archeologists is that among historic-era Indians, pottery was mainly used by women, whereas stone spear and arrow points were mostly used by men. These patterns were probably ancient. The appearance of pottery in the archeological record therefore provides a new way to track the activities of women. A site with stone hunting tools but no pottery may have been mainly used by all-male hunting parties, whereas a site with pottery but few stone tools may have been mainly a women's work area. A site with large amounts of both pottery and stone points was probably occupied by family groups.

Point types associated with the Early Woodland include Orient, Calvert, Rossville/Piscataway, and teardrop or ovoid points (Dent 1995). Rossville and Piscataway are such similar types that some archeologists do not distinguish them, although some do; the points typed as teardrop or ovoid may in fact be Piscataways, although this designation is usually applied to less well-made specimens. Piscataway and related points are particularly common in the Fall Zone sites of the GWMP, particularly the Donaldson Site, and also at the Fletcher's Boathouse Site (Figure 18).

#### G. MIDDLE WOODLAND PERIOD, 700 BC TO AD 1000,

During the earlier part of the Middle Woodland period, the population may have severely declined, as sites of this period are comparatively rare. Later, after AD 1, populations began to rise. In this period bands became more sedentary and participated in regional exchange networks. There is continuity in site locations between the Early and Middle Woodland periods, implying that earlier ways of life persisted. Middle Woodland groups in the lower Potomac River basin appear to have been mobile, exploiting diverse and dispersed resources but focusing on riverine environments. The Fall Zone and eastern Piedmont may have been used seasonally as part of the settlement round of groups based in the Coastal Plain (Johnson 2001; Stewart 1992).

Based primarily on ceramic chronology, researchers have recognized two phases of the Middle Woodland period. The earlier is characterized by Popes Creek and related ceramics (700 cal BC to cal AD 300), and the later by Mockley ware (cal AD 300 to 1000) (Stewart 1992). Popes Creek is a thick-bodied ware with sand temper that is usually net-impressed. Mockley ware is shell-tempered and has a variety of surface treatments; it is usually thick-bodied and is often very roughly made. Albemarle ware was contemporaneous with Popes Creek but has crushed-rock temper. The Popes Creek ceramic type takes its name from the shell midden site of that name, which was located on the Potomac River bank in the Coastal Plain of Maryland (Egloff and Potter 1982). Both Popes Creek and Mockley pottery were recovered from the Fletcher's Boathouse Site, the Gulf Branch Site, and the Maddox Branch Complex sites.





FIGURE 16: Accokeek Pottery from the Donaldson Site



FIGURE 17: Part of an Accokeek Pot Reportedly Collected from the Donaldson Site

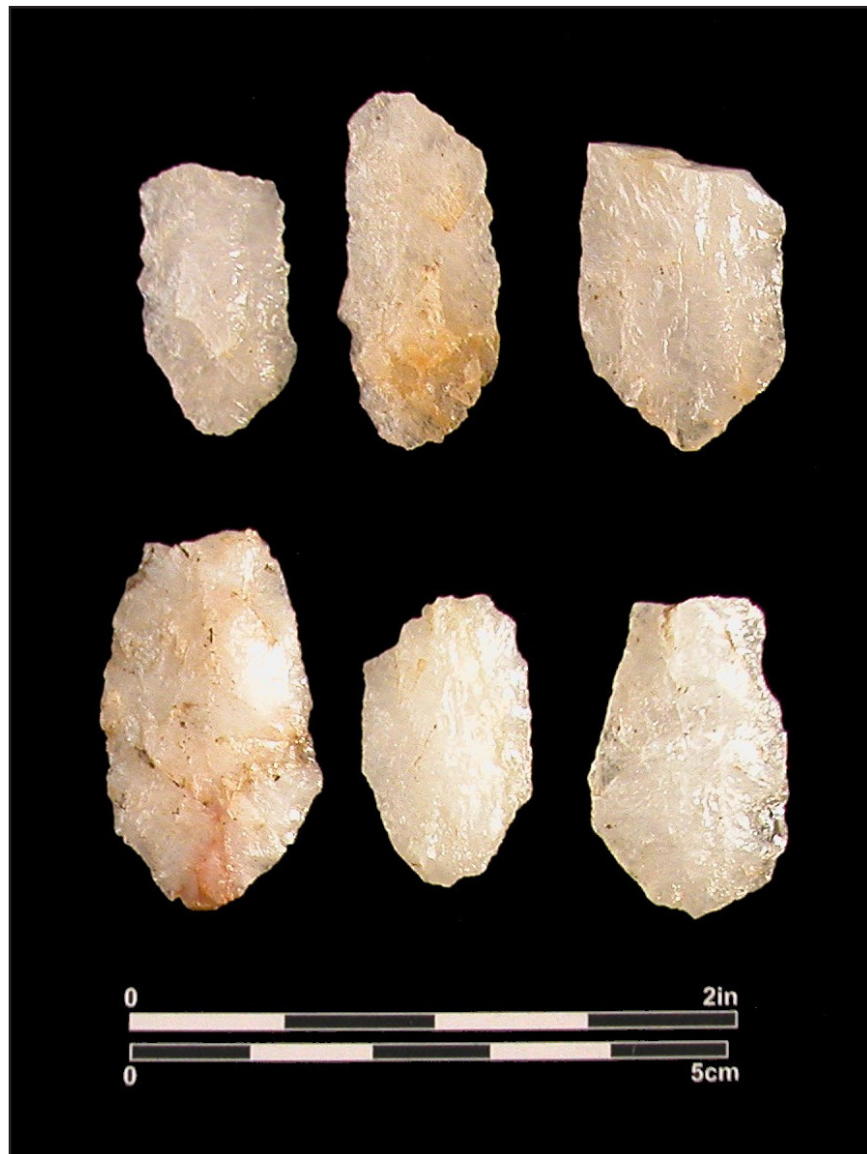


FIGURE 18: Piscataway Points from a Site in Washington, D.C.  
(Bedell et al. 2013)

Diagnostic Middle Woodland point types include Fox Creek-Selby Bay points, which are often associated with Mockley pottery. Potts, Nomini, and Jack's Reef corner-notched points are found in relatively later Middle Woodland components. Rossville/Piscataway and Calvert points, which appeared during the Early Woodland period, may have carried over to the Middle Woodland and have been found on sites with Popes Creek ware (Waselkov 1982). Numerous Fox Creek-Selby Bay points have been recovered from sites along tributary streams of the Potomac in the project area (Fiedel et al. 2008) (Figure 19). At the Pig Point Site on Maryland's Western Shore, the most common points in the Middle Woodland levels were rather poorly made side-notched forms hard to distinguish from the cruder examples of earlier types (Luckenbach et al. 2010). The lithic materials exploited during the Middle Woodland shifted to higher-quality stone and stone from non-local sources, including rhyolite (Stewart 1989, 1992). Archeologists see this shift in the pattern of stone use as evidence of the development of regional trade networks.

Exchange networks and social interaction spheres extended out of the Middle Atlantic region during the Middle Woodland period. In the Ohio Valley the Adena complex (regarded by archeologists in that area as Early Woodland) flourished between ca. 600 and 100 cal BC. The construction of burial mounds, characteristic of this complex, did not spread to the peoples of the Atlantic coast. Nevertheless, sustained cultural contact with the Adena complex is demonstrated by massive caches of typical Adena artifacts (lobate-stemmed points, tubular pipes made of Ohio fireclay, shale and slate gorgets, etc.) found in cremation burials on the Delmarva Peninsula and on Maryland's Western Shore. Radiocarbon dates as late as cal AD 300 and distinctive artifact types indicate that Delmarva Adena was partially contemporaneous with the Hopewell culture that followed Adena in the Ohio Valley (Luckenbach 2013).

A later, post-Hopewellian exchange network is evident in mortuary contexts in Virginia, Delaware (the Island Field Site), and the District of Columbia. A cremation burial dated to about cal AD 750 was discovered in 1996 beside the Whitehurst Freeway in Washington, D.C.; it contained a comb made of elk antler, fossil shark teeth, and a polished stone gorget (Figure 20) (Knepper et al. 2006). Similar artifacts were associated with late Middle Woodland burials at the Hand Site (44SN0022) in Southampton County, Virginia, and are thought to relate to a cultural horizon known as the Kipp Island Phase in New York State (Ritchie 1965; Ritchie and Funk 1973) and the Intrusive Mound Complex in Ohio (Seeman 1992). High percentages of exotic lithic materials, especially Maryland and Pennsylvania rhyolite, are typically found in Middle Woodland assemblages. This widespread interaction network may be connected with the spread of Algonquian languages eastward from an original homeland in the Great Lakes region. When first contacted by Europeans in the sixteenth century, all the Native peoples of the Atlantic seaboard from North Carolina to Nova Scotia spoke related (but not mutually intelligible) Algonquian languages. These languages probably diverged from a common ancestor within the past 2,500 years.

## **H. LATE WOODLAND: VILLAGES AND FIELDS, CA. 1000 TO 1600**

Around cal AD 1000 many Native groups in the Middle Atlantic region started growing maize—a cultivated plant of Mexican origin. Some came to rely on maize more than others; but they all continued to include fish, game, and gathered plants in their diet. A dramatic increase in the number of sites—typically located in river and creek floodplains and adjacent to high-yield agricultural soils—coincides with the onset of maize farming, marking the beginning of the Late Woodland period.

A maize-based diet fueled the peak of social/political development in eastern North America at Cahokia in the lower Illinois Valley at AD 1050 to 1100. Cahokia was a complex, socially stratified chiefdom with a town-dwelling population in the thousands, massive earthen temple mounds, and specialized craft production. The “Mississippian” tradition spread out in all directions from this core area by a mixture of colonization, trade, and diffusion of ideas. The Late Woodland groups on the Mississippian periphery were transformed to varying degrees by this expansion. Looking eastward, the Mississippian influences are clear in the burial mounds, palisaded villages, and decorated pottery of the Fort Ancient culture of southern Ohio,



FIGURE 19: Selby Bay Points from a Site in the Potomac Gorge  
(Fiedel et al. 2008)



FIGURE 20: Artifacts from a Middle Woodland Burial at the Whitehurst Freeway  
(Knepper et al. 2006)

Indiana, northern Kentucky, and western West Virginia. Farther up the Ohio drainage, Mississippian cultural influence is barely evident in the Monongahela culture that emerged after AD 1000 in the southwestern corner of Pennsylvania. This Late Woodland culture is characterized by palisaded villages of circular houses. Monongahela pottery was generally tempered with mussel shell, like Mississippian pots, but it was not shaped or decorated in the same ways. Still farther east, archeologists can discern only faint ripples of the cultural domino effect radiating outward from Cahokia.

After AD 1100 three distinct maize-growing groups, each with its own characteristic pottery, appeared in the mid-Potomac Valley above the Falls, either at the same time or in very rapid succession. The Montgomery people made collared, cordmarked, quartz-tempered Shepard pottery; the Mason Island people made limestone-tempered Page ware; and the Luray people made shell-tempered pottery (called Keyser ware after the Keyser Farm Site in the Shenandoah Valley). Each of these cultures seems to have related to different external groups. The Montgomery culture's pottery bears some resemblance to that of the Owasco culture of New York and the Shenks Ferry culture of Pennsylvania. The limestone-tempered Page pottery resembles pottery of the upper Ohio and western Pennsylvania but also seems to be connected with pottery that spread north through the Shenandoah Valley. Not just the shell-tempered pottery but other aspects of the Luray culture appear to connect it to the Monongahela people of western Pennsylvania.

These immigrant populations were jostling for access to the best farmlands along the river at a time when rainfall and temperatures were becoming unpredictable as a result of climate change, and conflict was inevitable. After AD 1200 villages throughout the region were protected by stockades. Palisaded Late Woodland villages have been excavated both on the lower Potomac (such as Piscataway Creek and Patawomecke, on Potomac Creek in Stafford County, Virginia) and on the mid-Potomac (including the Gore, Shepard Barracks, and Hughes sites in Montgomery County, Maryland).

The Late Woodland palisades were designed to fend off attacks by warriors armed with bows and arrows. The bow seems to have been adopted in the Middle Atlantic region after about AD 800, replacing the spearthrower and dart. The triangular stone points of the Late Woodland period were the first "arrowheads" that were actually used as arrow tips.

East of the Falls, on the lower Potomac, the Late Woodland pottery made from about AD 900 to 1400 is thin-walled and shell-tempered; exterior surfaces were fabric-impressed and often incised with complex geometric designs. This pottery is called Rappahannock or Townsend Fabric-Impressed or Incised (Figure 21). Very similar pottery has been found all along the Coastal Plain from North Carolina to New York; its distribution corresponds quite closely to that of eastern Algonquian-speaking groups at the time of European contact.

A new pottery type became prevalent south of the Potomac Fall Zone after AD 1300. Potomac Creek pottery is tempered with crushed quartz and usually has cord-impressed designs on the neck. This pottery type was first identified at Patawomecke, where a circular palisaded village was suddenly constructed about AD 1300. This pottery somewhat resembles the earlier quartz-tempered Shepard ware found at sites beyond the Falls in Montgomery County; however, it is even more similar to Owasco pottery from central New York and could represent an intrusive population from that area. Despite the regional evidence of a booming Late Woodland population, archeological remains in the Potomac Fall Zone suggest that this area was less intensely occupied in this period than earlier. Few Late Woodland artifacts were recovered from the Fletcher's Boathouse Site or Gulf Branch Site, in stark contrast to the large amounts of Early and Middle Woodland material. Ethnohistoric evidence suggests that in the sixteenth century the Fall Zone was a buffer between groups of different ethnicities, with Algonquian speakers dominant in the Coastal Plain and other groups (mostly Siouan speakers, distantly related to the Plains tribes) in the Piedmont. However, Rappahannock Incised pottery was recovered from the Pimmit Run Site (44AR0004) and the Maddox Branch Complex on the north bank, so there was certainly *some* Late Woodland occupation. Perhaps





FIGURE 21: Rappahannock Incised Sherd from a Site in the Potomac Gorge (Fiedel et al. 2008)

intermittent use of these sites during the Late Woodland was related to fishing, as observed by Henry Fleet in 1632.

## I. SEARCHING FOR SITES ABOVE LITTLE FALLS

The famous prehistoric sites along the GWMP, the ones that had been known since the 1960s and earlier, were all discovered below Little Falls (Figure 22). The area above the Falls had been explored and some sites found, but none had the richness of those downriver, and none were as well known. Looking at a map, however, there appeared to be many fine spots for Native American camps above the Falls. One of the main goals of the fieldwork for this study was to locate sites in the upriver part of the park.

### 1. *High Tech: LiDAR*

One of the tools used to search for sites was LiDAR (Light Detection and Ranging). LiDAR is a new form of aerial mapping done with lasers that can be used to make a very detailed model of the landscape. In fact, LiDAR generates so much information that often the biggest problem with using it is figuring out how to display all that data in a form that humans can take in. A major advantage of LiDAR imaging in the eastern United States is that it can penetrate to the surface through dense vegetation. Figure 23 shows a map made with LiDAR of a portion of the project area along the Potomac. The bright colors indicate the higher terrain of the bluffs. Lower-lying areas along the river show as blue-green. Within the blue-green lowlands a small stream cutting across the floodplain is clearly visible; a sort of notch along the west side of the stream marks the location of an early twentieth-century mill. The road that once ran to the mill is also clearly visible as it cuts through the bluffs alongside the stream.

More subtle features are also visible. Low rises both east and west of the stream are an ancient terrace built by the river thousands of years ago, just the sort of place where Indians often camped and archeological sites can be found. Other low rises at either end of the low ground, where ravines cut through the bluffs, are alluvial fans, places that were built up by eroded soil washing down from high ground. Alluvial fans were often used as camp sites, especially when the surrounding floodplain was swampy. Armed with this data, the archeologists had a much better idea of where to search for sites.

### 2. *Geology*

To further explore these river terraces, geologist Dr. Daniel Wagner was brought in, along with his auger and trained eye (Figure 24). Dr. Wagner focused on trying to date the soils. When European settlers began to clear land and plow fields, they caused a great increase in soil erosion throughout eastern North America. So much silt washed into the rivers that former ports like Quantico, Virginia, and Bladensburg, Maryland, were stranded hundreds of yards inland, cut off from any water that could float a boat by acres of mudflats. That eroded soil also piled up on the ancient terraces where Indians once camped, burying their sites under soil that can now be several feet deep. The first thing Wagner's exploration showed was that the blanket of historic-era sediment had smoothed out the floodplain, filling areas that had been low-lying swamps in prehistoric times. On top of the old river terraces, this blanket varied in thickness. In places it was only inches deep, whereas in others it was as much as 5 feet. This meant that only parts of the old terraces could be reached using the relatively inexpensive manual testing methods used during this study.

### 3. *Shovel Testing*

Once Wagner had identified likely locations where sites might be found, the archeologists went to work. The survey was done by shovel testing, digging round holes and sifting the soil through a screen to search for artifacts (Figure 25). This led to the discovery of several new sites. But, again, the shovel can only reach to a depth of about 3 feet, so many sites may be present that were not found in this study because they are simply buried too deep.



FIGURE 22: Little Falls (NPS 2018)



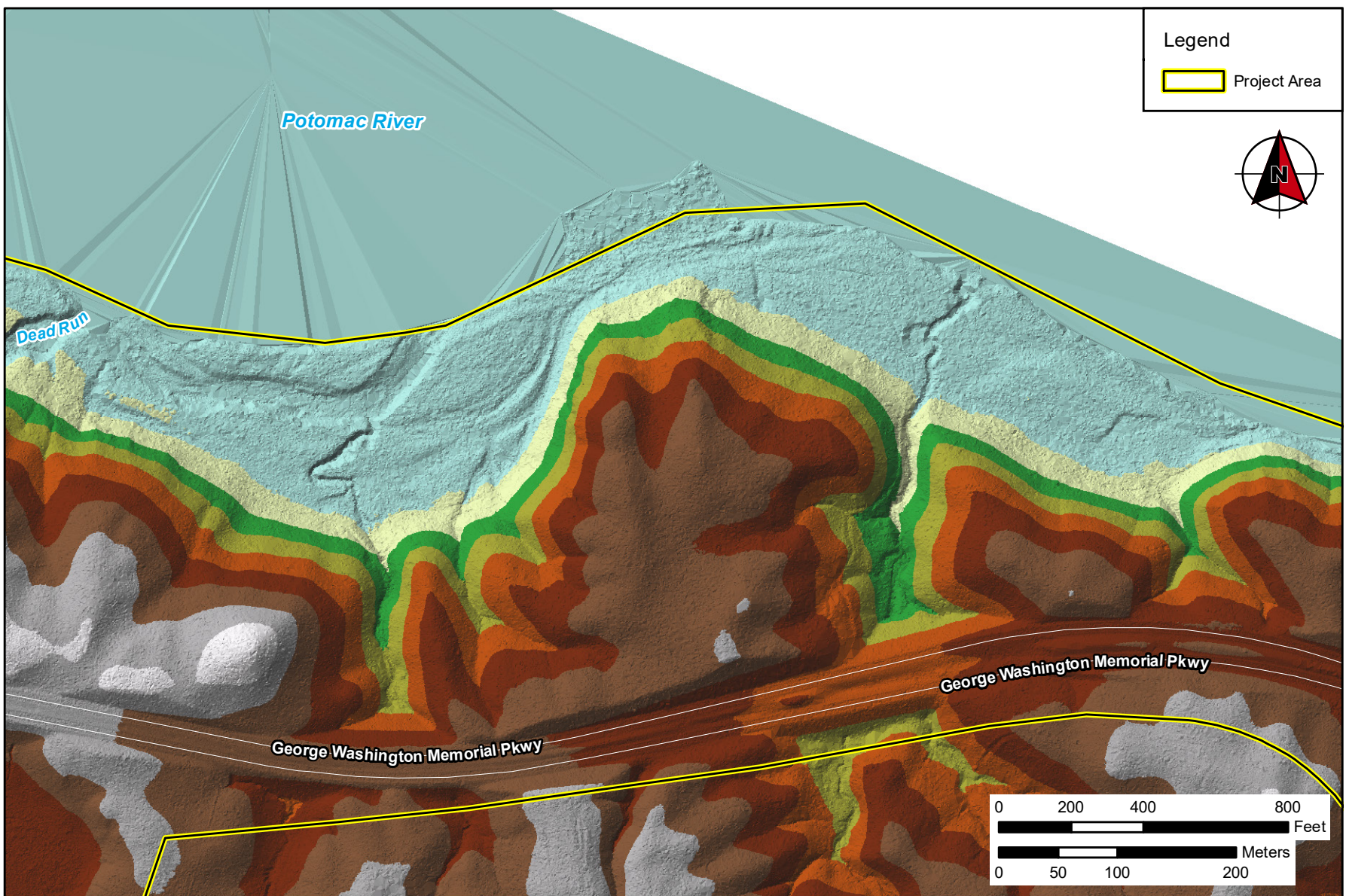


FIGURE23: LiDAR Image of Terraces Along the Potomac





FIGURE 24: Dr. Daniel Wagner Augering near the Potomac



FIGURE 25: Shovel Testing near Dead Run



The sites in the northern part of the GWMP, around Turkey Run and Dead Run, were rather different from those lower down. They were generally smaller and contained fewer artifacts. In particular they contained fewer artifacts from the Terminal Archaic, Early Woodland, and Middle Woodland periods that dominate around Little Falls and below. At most sites the only artifacts were quartz flakes from making stone tools (Figure 26). Several stone tools were found, all made of quartz; most of these seemed to date to the Late Archaic period. Very little pottery was found.

The dramatic difference between the archeology of the Little Falls area and areas higher up the river must be related to the environment. Little Falls and the lower part of the Potomac Gorge seem to have been much used by the people of Terminal Archaic, Early Woodland, and Middle Woodland times. People of those eras spent much more time living on a few sites than those who came before them. Halifax and other Late Archaic people trekked continually across the whole landscape, and as a result they left many small sites in many places. Later people followed a different strategy; they camped for longer periods at carefully chosen locations and dispatched small task groups to hunt animals or collect plant foods and other necessities. This subsistence strategy resulted in fewer but larger archeological sites. The lower Potomac Gorge met the criteria of those more settled people, so they left a very rich record of their presence. The area above the Falls did not interest them much, so their small task groups visited only on occasion.

Why did people of the Savannah River and later cultures camp below the Falls? The obvious resource in that location would be fish from the river, like the sturgeon Henry Fleet saw Indians catching in 1632. However, there is not much evidence of fishing or smoking fish in the archeological record. The Cruikshank Branch Site does have the look of a fishing camp, since it is low down by the river and produced FCR from carefully built fires. Other sites along the Gorge are harder to interpret as related to fishing. For one thing many are on top of steep bluffs 150 feet above the water, and it is hard to imagine people wanting to haul all of their fish up those slopes to smoke them. Also, they did not produce much FCR. So what the ancient Indians were actually doing in their camps along the Potomac Gorge remains something of a mystery.



FIGURE 26: Quartz Flakes from a Site Above Little Falls



## **IV. TRADERS AND SETTLERS**

### **A. EXPLORATION AND SETTLEMENT**

Several European explorers, beginning with Giovanni da Verrazzano, probably sighted the mouth of the Chesapeake Bay between the 1520s and 1560s. In 1570 Spanish Jesuits attempted to establish a mission at “Ajacan,” possibly on the York River, but two years later they were murdered by the local Indians. In the 1580s the English settled their first colony in “Virginia” (now North Carolina) at Roanoke, which failed. Their colony at Jamestown, established in 1607, proved more successful. In the summer of 1608, Capt. John Smith set out from Jamestown on two voyages to explore the Chesapeake. On the first expedition, he sailed up the lower Potomac as far as the Falls (Smith 1624). The Potomac beyond the Falls was first explored by English traders in 1632, and interior portions of today’s Fairfax and Arlington counties were first explored in the late seventeenth century as settlement expanded outward from major streams.

Captain Smith’s map (first published in 1612) indicates that there were a number of Native villages on the Virginia side of the Potomac between the mouths of Aquia Creek and the Anacostia River. From south to north, they were Pamacocack, Tauxenent, Namassingakent, Assaomeck, and Namoraughquend. Tauxenent was the only settlement that Smith denoted with the longhouse symbol he reserved for “kings” residences. Tauxenent was located on the north bank of the Occoquan River, near its mouth, in the vicinity of modern day Colchester, Virginia. The tribes were members of the Powhatan chiefdom, a political amalgamation of Algonquian-speaking Native people who inhabited the Coastal Plain and Tidewater regions of Virginia (Potter 1993).

Captain Smith’s map depicted the Indian town of Nacotchtanck (a corrupted transcription of the Algonquian name) on the eastern side of the Anacostia River in what is now Washington, D.C. Beyond Nacotchtanck, Smith observed and later depicted the river bank, including an inlet that is probably the mouth of Rock Creek (Figure 27). The map also depicts the location of Namoraughquend on the west (Virginia) shore of the Potomac River. Although the actual location of the Namoraughquend is not confirmed, probable locations have been postulated, including the Pentagon/Arlington Cemetery area, in the general vicinity of Theodore Roosevelt Island, and on Alexander’s Island (Cissna 1990:27). In 1632 Englishman Henry Fleet sailed to the Falls of the Potomac and sent a party upriver in search of furs. The party reported no villages within 140 miles upriver of the Falls. The upriver section of the Potomac had been replete with villages in the Late Woodland period, but it had become largely desolate by 1632, possibly because of warfare among Indian groups triggered by the early fur trade (Fiedel et al. 2005).

Interactions between the members of the Powhatan chiefdom and the colonists were complex. Both sides initially worked the relationship for perceived benefits to themselves. The colonists were working to gain foodstuffs, knowledge, wealth, and control of lands, while the Powhatan worked to increase their influence and gain high-status trade goods (Potter 1993). The relationship ebbed and flowed, with periods of conflict, including major Indian uprisings in 1622 and 1644.

A peace treaty between the Powhatan chiefdom and the English colonial government was signed in Virginia in 1646. Terms of the treaty required the Powhatan groups to stay outside colonial settlement areas and to pay an annual tribute to the colonial government. This treaty marked a major shift in power from Virginia’s Indians to the colonial government, and was a watershed moment in Virginia’s Indian-Colonial English relations (Potter 1993). By the 1650s the local Indian population had sold off much of their river land to the colonists and found themselves without access to resources. Diaspora communities that formed along the frontiers, particularly along the major waterways, were typically short-lived (Bedell et al. 2011).



FIGURE 27: Capt. John Smith's Map (Smith 1624)



In 1649 then-exiled King Charles II granted his loyal supporters land within the Northern Neck Proprietary. The Proprietary consisted of nearly 5.3 million acres located between the Potomac River and the Rappahannock River. After King Charles was restored to the English throne in 1660, the original patentees renewed efforts to claim the land. By 1681 Thomas, Lord Culpeper had acquired all rights to the land, and in 1688 the land was confirmed to him by patent. A year later Thomas died, and his interest passed to his daughter, Catherine, who married Thomas, Lord Fairfax. The Council confirmed their rights in 1694, and the proprietary remained in the hands of the Fairfax family for another 90 years (Weisiger 2002).

In 1648 Northumberland County was established, which encompassed the Northern Neck of Virginia. In 1653 Northumberland County was subdivided and the northern section was renamed Westmoreland County. In 1664 part of Westmoreland County, including what would become Fairfax and Arlington, was transferred to Stafford County (Cissna 1990:33). Fairfax County was established in 1742. The county was named in honor of Thomas, sixth Lord Fairfax. At that time Fairfax County included the land extending from the Potomac and Occoquan rivers to the Blue Ridge Mountains and encompassed present-day Arlington County and the City of Alexandria (Figure 28). In 1749 the Town of Alexandria was officially established within Fairfax County.

The seventeenth- and eighteenth-century settlement pattern along the lower Potomac River reflected land grants on the colony's frontiers in large blocks of 1,000 acres or more to wealthy, well-connected "gentlemen farmers." They in turn usually tried to lease their lands to tenants, retaining a single plantation where they resided themselves. Most of the lands along the Potomac had been surveyed and patented by about 1720, but settlements remained few and far between. The low population and the fear of Indian attacks kept most Europeans below the Anacostia until after the Treaty of Albany in 1722. The settlers who came to the frontier were tenants, many of whom were probably freed indentured servants. Once released from service, these men generally did not have the means to set up their own plantations so they became tenant farmers. The landlords supplied their tenants with seed and tools to start their work. The tenants lived in shacks never intended to be permanent, and they did not invest much in their farms. Instead of broad vistas of cleared fields, each shack may have only been surrounded by a relatively small patch of intensely cultivated tobacco and corn. Instead of using the long rotation system like landowners, these tenants may simply have farmed around their dwellings until the soil was exhausted and then pulled up stakes and moved on. Well-made houses and well-appointed farms would be found only on the few owner-occupied plantations.

The settlers coming into Fairfax County were a mixed group. Some had been born and raised in the Virginia Tidewater. More, however, were recent immigrants, many of them Scots-Irish Presbyterians or English Quakers. A few of these immigrants eventually became landowners, either by their own grants or by purchasing land from the big planters. The landscape that developed therefore included small, owner-occupied farms, tenancies, and a few large plantations with grand houses. The first two classes of farms were each considerably more numerous than the last category (Chittenden et al. 1988; Netherton et al. 1978).

The dominant cash crop was tobacco, which was packed into large barrels for shipment from the plantations to the English markets. In the early eighteenth century small hamlets and a few towns developed around the official tobacco warehouses and ports established along the river. One such warehouse was built by Thomas Lee at the mouth of Pimmit Run in the early 1740s (Dongarra and Harris 2006:23). The warehouse was at the same location as a ferry and inn that Lee had built sometime between the 1720s and 1730s. This same spot was later the location of a nineteenth-century mill, the southern end of Chain Bridge, and other structures. Lee's warehouse was likely of frame construction, without impressive foundations, and construction of the nineteenth-century mill may have destroyed its remains. Certainly no evidence of eighteenth-century occupation has been found on this spot despite determined searching (Cheek et al. 1983). In fact, no pre-1750 archeological sites have been found anywhere along the GWMP north of Alexandria. The historic record demonstrates that people did live and work along this stretch of the river, but they seem to have left few archeological traces of themselves.

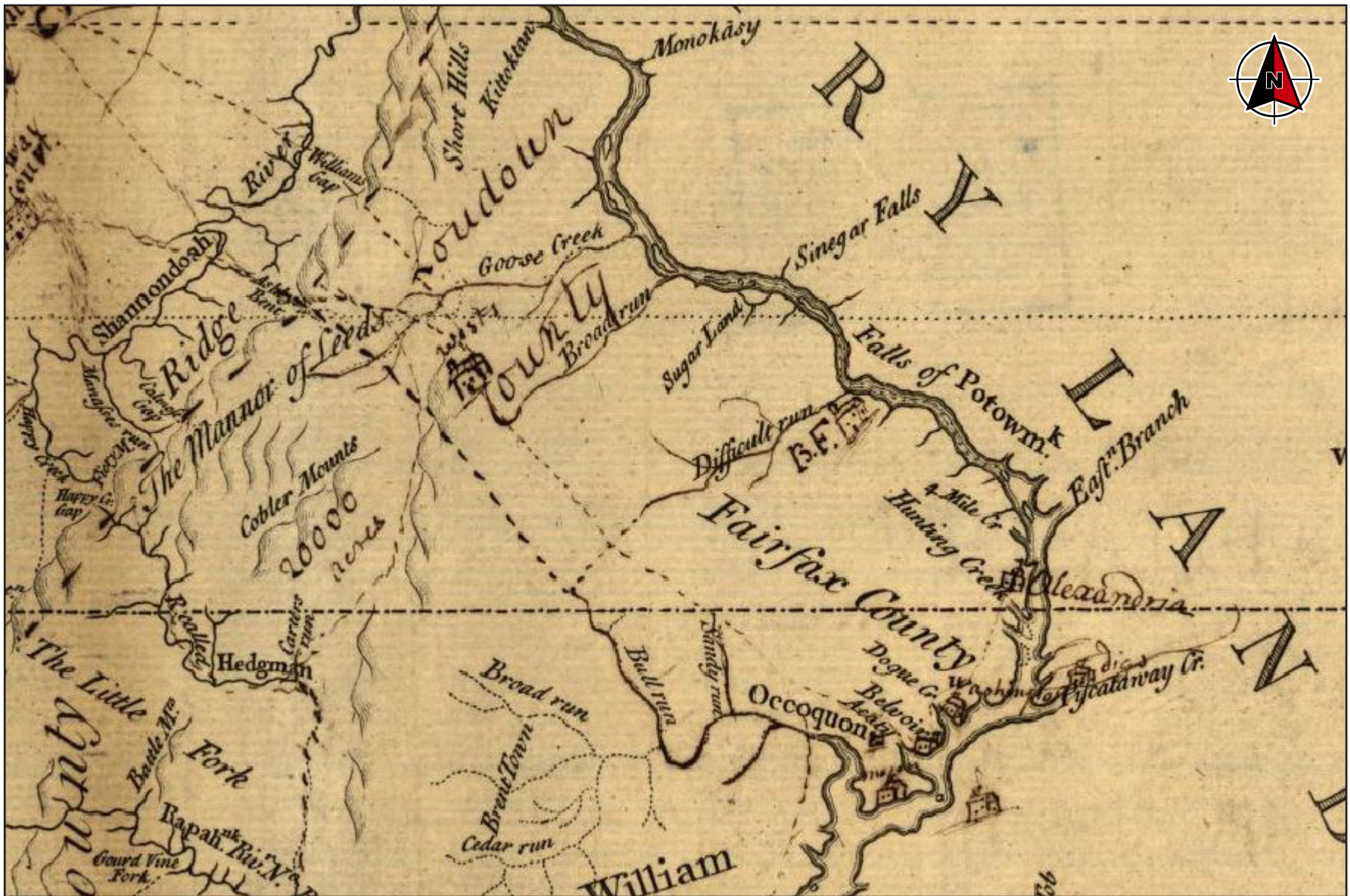


FIGURE 28: The Northern Neck in 1737 (Warner 1737)

Tobacco cultivation was profitable in the short term, but it proved difficult to sustain over the long term. Market prices fluctuated dramatically, tobacco depleted the soil of nutrients, and cultivation was labor-intensive. When the supply of indentured servants from Britain dried up in the late 1600s, the planters turned increasingly to African slaves. To maintain profitability, more and more acreage was needed to increase production, and more slaves were needed to work the expanded fields, but the prices for slaves were also climbing. Some tobacco farmers turned to alternative crops, such as hemp, flax, or cotton, and grains such as wheat and corn, and raised cattle and swine (Rose 1976:42). Prices for these crops were more stable than tobacco prices (Isaac 1975). New mills were built to process the grains; Chubb's mill on Four Mile Creek was already operating before 1719 (Harrison 1924).

Early transportation in the region focused on navigable waterways, with the Potomac River and its major tributaries serving as arteries for moving people, goods, and information (Netherton et al. 1978). Land routes followed Indian trails, including a major trail that followed the west bank of the Potomac. Some of these trails eventually evolved into "rolling" roads, which merchants used to roll barrels of tobacco from their plantations to warehouses along the Potomac River. One major road during this period was the Vestal Gap Road, also known as the Upper Church Road. This road became the primary route to Leesburg and across the Blue Ridge Mountains to Winchester (National Park Service 1994), and eventually evolved into the present-day State Route 7. Two lesser mid-eighteenth-century roads developed from the tobacco warehouse established by Thomas Lee at the mouth of Pimmit Run. The Falls Rolling Road ascended the ravine north of Pimmit Run before doubling back to join the Vestal Gap Road at Falls Church. The other road was the Sugarlands Rolling Road, which extended from Pimmit Run northwest to Daniel McCarty's Sugar Land plantation, west of Great Falls. The Sugarlands Rolling Road merged with the Vestal Gap Road at Difficult Run. In the early nineteenth century Sugarlands Rolling Road became part of Georgetown Pike.

## **B. FARMS AND MILLS**

Agriculture was the center of economic life in Fairfax County from the time of colonial settlement until the twentieth century (Chittenden et al. 1988; Netherton et al. 1978). Timbering had some significance and there were a few tanneries, but farming always dominated. After 1740 the focus gradually shifted from tobacco to wheat, which was by far the leading cash crop by the time of the Revolution. Besides wheat and tobacco, farmers raised mainly corn, potatoes, apples, and livestock (Chittenden et al. 1988). In the eighteenth century the population of the county grew rapidly, and population growth was accompanied by a steady expansion of roads and the building of mills, churches, and stores. At least a third of the people were enslaved Africans. The years between 1750 and 1775 were a boom time for the county. Ferry crossings were established across the Potomac, including one just north of Theodore Roosevelt Island and another at Alexandria. The archeological record of the region becomes much more substantial after 1750, and artifacts from this period have been found from numerous sites, including Abingdon at Ronald Reagan National Airport (see below).

Around 1760 most of the land in the project area belonged to just three men: George Mason, Philip Ludwell Lee, and John Turbeville, none of whom lived on these estates (Mitchell 1987). There are few surviving leases from this period for any part of Virginia, but there are hints of tenant farms in the records. For example, a deed of 1808 references a farm leased by T.C. Scott "lying on the south or southeast side of the road leading from the town of Turbeville to the Little Falls of the Potomac" (Anderson 1979:9). Turbeville was an abortive "town" planned by John Turbeville lying well to the west of Little Falls, so the road mentioned is the one that evolved into the Georgetown Pike. This could put Scott's residence somewhere near Langley Crossroads.

Alexandria was chartered as a town in 1749. Its founders were Scottish merchants who profited from exporting tobacco and wheat. The merchants built their warehouses and Georgian-style brick mansions on the Alexandria waterfront. During the second half of the eighteenth century, Alexandria and the rival port

town of Georgetown (established in 1751) both prospered, attracting trading ships that crossed the Atlantic, visited the ports of the American East Coast, and sailed on to the West Indies (Netherton and Netherton 1987:30). Not only the tobacco merchants profited from Alexandria's port status; the town also provided an urban market for the wheat and corn crops produced by rural farmers as far off as the Shenandoah Valley. The port was also advantageous for millers, who would receive grain to process before it was sold at the port (Netherton and Netherton 1987:30).

The French and Indian War of 1754 to 1763 caused great destruction in frontier areas, but it actually benefited some towns that were a safe distance from the fighting, including Alexandria. These towns hosted many refugees from the frontier and also served as staging posts for military campaigns. When British General Braddock arrived in America in 1755, he made his headquarters in Alexandria, and it was from Alexandria that he planned and organized his doomed campaign to take Fort Duquesne (at the site of modern Pittsburgh). His men improved the road that ran westward from Alexandria toward the upper Potomac and built new stretches of this road farther west, and the route came to be known as Braddock Road.

Although the Revolution spared Fairfax County and Alexandria, the post-Revolutionary depression hit the area hard. Long-established trading ties to Britain were disrupted, credit was withdrawn, and many planters went bankrupt. The soils had been depleted by intensive farming, and with prices low and economic conditions generally bad, hundreds of Fairfax residents headed west to Kentucky and Tennessee (Chittenden et al. 1988; Netherton et al. 1978). From the other direction a relatively small number of migrants, mostly genteel young landowners from the Tidewater region, began coming into the area. They consolidated large tracts owned by their families and formerly occupied by many long-term tenant farmers into unified plantations devoted largely to export grain cultivation. Most of these plantations were not very successful at first, but they did become profitable again in the nineteenth century.



## **V. THE YOUNG NATION**

### **A. THE NEW CAPITAL**

After the war and following the ratification of the Constitution in June 1788, the 10-mile-square National Capital district was designated by George Washington in 1791 (Arlington Historical Commission 2001; Netherton and Netherton 1987:46). Boundary stones were placed at 1-mile intervals demarcating the new capital. Fourteen boundary stones were placed in Virginia, many of which are still standing. Congress required the new federal government to spend the first 10 years in Philadelphia, however, and the government did not move to the District of Columbia until late in 1800 (Netherton and Netherton 1987:46). This move permanently severed the area that eventually became Alexandria and Arlington from Fairfax County.

In 1801 the federal government placed the new city of Washington along with the cities of Georgetown and Alexandria, all within the District, under the exclusive control of Congress. The unincorporated territory within the District was organized into two counties: the County of Washington east of the Potomac and the County of Alexandria west of the Potomac. The County of Alexandria included all of modern-day Arlington County and part of the modern city of Alexandria (Figure 29). The Town of Alexandria remained the county seat and the commercial and social center while the remaining sections of the county retained their rural agricultural character. The area outside the port city contained a few relatively large plantations, including Abingdon, Green Valley, and Arlington, along with a number of small farms operated by tenants or yeoman farmers (Rose 1976:66).

The economy of Fairfax and Alexandria counties experienced significant ups and downs in this period. The post-Revolutionary depression gripped the region throughout the early 1800s, until about 1840. The population of Fairfax County declined by a third as thousands of people headed west. Some of the big planters sold off their land in small pieces, often to the tenants who had been working it. By 1840 much of the land in Fairfax County was no longer cultivated, and many properties were seized for non-payment of taxes (Netherton et al. 1978). During the following two decades, however, the economy of the county began to recover, partly because of improvements in agricultural practices and transportation methods as well as economic diversification. Some of these improving farmers were young immigrants from New York, Pennsylvania, and New Jersey who came to Fairfax between 1837 and 1860 in response to the low asking prices for depressed farmsteads. So many came that, for a time, parts of eastern Fairfax and Prince William counties were referred to as the “Jersey Country” (Chittenden et al. 1988; Netherton et al. 1978). Fishing became a major enterprise with the use of large seines along the Potomac River. The construction of the Manassas Gap and the Orange and Alexandria railroads in the 1850s greatly reduced the cost and time required to get goods and raw materials to market and brought an influx of new residents into the county. Small communities began to develop along the railroad lines, and already established communities continued to grow.

### **B. ABINGDON**

The site of Abingdon Plantation is now within Ronald Reagan National Airport, and the airport terminal houses a small exhibit about Abingdon (Figure 30). The plantation was part of an 8,000-acre patent originally claimed by Capt. Robert Howsing or Howson but soon purchased from him by John Alexander, of the Scottish family for which Alexandria was named. The property stretched along the Potomac for more than 2 miles, from Hunting Creek at the southern boundary of Alexandria to the far end of Arlington National Cemetery. By 1746 one of John Alexander’s grandsons, Gerrard, was living on the northern part of the property.

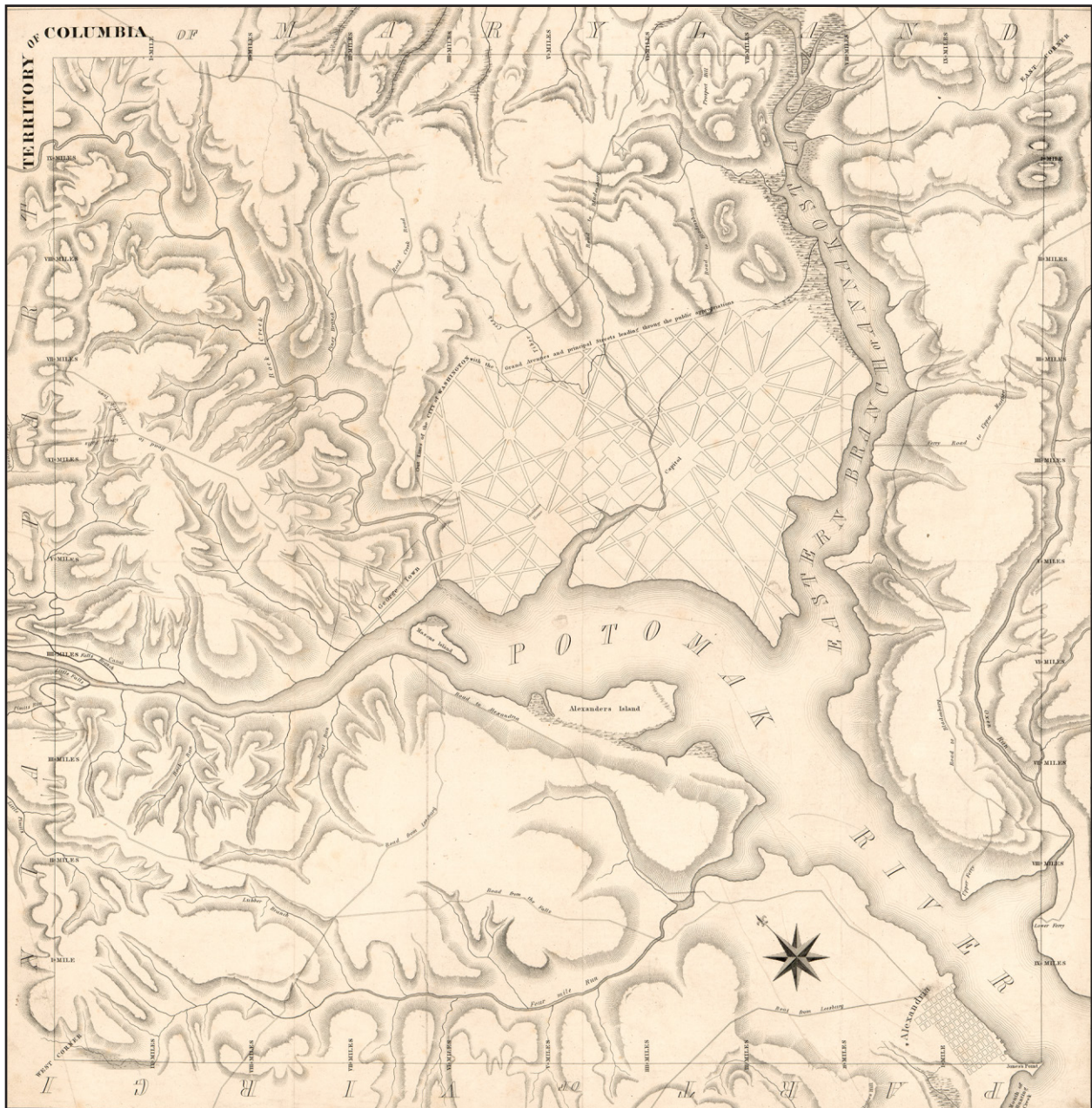


FIGURE 29: Map of the Federal District in 1793 (Ellicott 1793)





FIGURE 30: The Site of Abingdon Plantation (Chung 2013)

In 1778 John Parke Custis, George Washington's stepson, purchased the 1,000-acre Abingdon property from Robert Alexander, one of Gerrard's sons. But Custis made a mess of the financial deal, and after his death from a fever contracted at the 1781 siege of Yorktown, the administrators of his estate were enmeshed in a 10-year lawsuit with Robert Alexander that ended with the property reverting to Alexander in 1792. Custis had also purchased another 900-acre tract from the Alexanders, and his heirs managed to hold onto that. Arlington House would later be built on that tract.

The Alexanders eventually sold the Abingdon property to "General" Alexander Hunter, a descendant of the Alexander family. His honorary military rank came from his service at the Battle of Bladensburg during the War of 1812, when he was Adjutant of the District of Columbia Regiment of Volunteers. Hunter was a close friend of President Andrew Jackson, a frequent guest at Abingdon, and also hosted Presidents John Tyler and James Polk. He spent lavishly to beautify the estate. The General died in 1849. His will left the estate to his nephew, Alexander Hunter; however, Alexander was a minor, and the property was entrusted to his father, and the general's brother, Bushrod Washington Hunter, until Alexander reached his majority. The Hunters remained in residence at Abingdon until the property was occupied by Union troops at the outbreak of the Civil War.

Alexander Hunter (1905) wrote this description of the plantation in his Civil War memoir:

We lived on a splendid estate of 650 acres, lying on the Potomac, between Alexandria and Washington. I doubt whether in the whole Southland there had existed a finer country seat; the house was built solidly, as if to defy time itself, with its beautiful trees, fine orchards, its terraced lawns, graveled walks leading to the river a quarter of a mile away; the splendid barns, the stables with fine horses (for which my father, a retired naval officer, had a special fondness), the servants quarters, where dwelt the old family retainers and their offspring, some fifty or more. . . .

The Abingdon house stood, much modified, until 1930, when it burned down (Figure 31). The site was chosen just a few years later for Washington's airport, but the ruins of the plantation were preserved in a small park. Then in the 1980s the airport embarked on a major expansion, and the original plan called for building a parking garage on the plantation site. This sparked a major dispute between the airport and preservationists that eventually involved the Governor of Virginia and the Secretary of the Interior. The current situation of the site was the result of a compromise reached after prolonged negotiations. A 1-acre property around the mansion foundations was protected, the foundations of the house and the kitchen were rebuilt to mark the site, and the airport also funded a major archeological excavation (Greenhorn & O'Mara 1999).

Those excavations recovered more than 35,000 artifacts. A fair number of ancient Indian objects were found, including a groundstone axe and potsherds dating to Late Woodland times. Most of the artifacts date to between about 1780 and 1900. They include luxury goods such as you would expect Custis and the Hunters to have owned: Chinese porcelain, painted English ceramics, brass cufflinks, and so on. The finds also include many objects associated with the many enslaved Africans who lived and worked on the estate. Among these artifacts are sherds of a rough, handmade (not wheel-thrown) earthenware pottery that archeologists call Colonoware. Most archeologists believe that Colonoware was made by slaves who had been born

in Africa, using African methods, and that it was used exclusively by African-Americans. Historians working from written records never suspected its existence, and it hints that perhaps there was a semi-clandestine economy involving slaves who made or grew products that they traded among themselves.



FIGURE 31: Abingdon House ca. 1932 (Anonymous 1930)

The oldest European material dated to the mid-1700s, perhaps 1740. This makes Abingdon the oldest colonial site yet documented along the GWMP and one of the oldest in the Washington, D.C., area. Even though historians know people lived along this stretch of the Potomac by the 1670s, it has proved very difficult for archeologists to document their presence. This may be in part because the first settlers in the region were short-term tenants, as already noted, who put little work into their homes and had few possessions. But whatever the reason, the archeological record of Europeans in the greater Washington area essentially begins in the mid-1700s.

### C. ARLINGTON HOUSE

Between 1802 and 1818, George Washington Parke Custis, son of John Parke Custis, grandson of Martha Washington, and adopted grandson of George Washington, began building Arlington House at present-day Arlington. On the eastern edge of the 1,100-acre property, along the banks of the Potomac River, there was a large farm. Arlington Farm had a pasture, fields for crops, a market garden, and a fishery, and at various times a blacksmith, a wheelwright's shop, a carriage shop, a saddlery, a pump house, a granary, a poultry yard, and a large feeding barn (Hanna 2001:41). In addition, the several dwellings of slaves (approximately 50 at any one time) were located in the area; some slave quarters were located among the farm buildings, and two were known to be located along the road that led from Arlington Spring at the edge of the Potomac to the main gate of the estate (Hanna 2001:41). There may have also been a slave cemetery in the area of the quarters and the farm. As mentioned in the introduction, Arlington House, including Arlington Farm, was excluded from the current study.

Other parts of the 900-acre Arlington property were part of the study. East of the Arlington Farm, G.W.P. Custis developed a day resort where people went to picnic, dance, and be regaled with stories told by Custis. "Arlington Spring," as it came to be known, was a fenced 8-acre parcel (Figure 32). There was a wood wharf where ferries docked, bringing visitors from the area. The spring was located near a large oak tree in a rocky outcropping. Starting in 1811, Custis held sheep-shearings at Arlington Spring to publicize his





FIGURE 32: View of Washington from Arlington House, Showing Arlington Spring (Anderson 1838)



FIGURE 33: Map of Arlington House and Arlington Spring in 1865 (Barnard 1865)

breed of native sheep (Hanna 2001:43). Figure 33 shows the location of Arlington Spring relative to the house and farm, and depicts later nineteenth-century structures built at the spring and the Alexandria Canal. By the mid-nineteenth century the Arlington Spring complex contained a dance pavilion, kitchen, dining hall, and store house.

#### D. CHAIN BRIDGE

Beginning in the early nineteenth century, the old ferries across the Potomac—Magee’s, Aubrey’s, and Mason’s—began to be replaced by bridges. One of the first bridges across the river was built by Georgetown merchants in 1797, attracting trade coming from the south away from Alexandria to Georgetown. The original bridge at Little Falls was carried away by floods in 1804, and a few years later a flood destroyed its replacement. In 1808 the Georgetown merchants sponsored a high chain suspension bridge that was considered a marvel of engineering at that time (Arlington Historical Commission 2001). The chain bridge was replaced by a steel suspension bridge in 1853; however, it is still referred to today as the “Chain Bridge.”

The chain bridge is shown in an illustration published in 1838 (Figure 34). The view is from the Georgetown side, and it also shows a mill that stood at the mouth of Pimmit Run. That mill, which was in ruins by the Civil War, may be the Fendall-Hopkins gristmill. Although no map depicts it, various bits of deeds and other evidence suggest that John Mason built a mill at the mouth of Spout Run in the early 1800s (Cissna 1990:51). Sources indicate that Samuel Adams had two mills on Pimmit Run: the “Upper Mill” (or “Coopers Mill”) was built on the upper run in 1781, and the “Lower Mill” (or “Rocks Mill”) was located downstream (Dongarra and Harris 2006:24). It is possible that one of those mills was the one where the Declaration of Independence and the U.S. Constitution were purportedly hidden in 1814 when the British seized Washington. These mills later belonged to Edgar Patterson, who advertised the property for sale in 1821 as “Two manufactures, paper mill, flour mill, wool factory, stone quarries, and land for sale.” He described the flour mill as a large three-story stone building with “three runs of buhrstones and all necessary machinery to manufacture flour.” He called the property “the most profitable milling establishment in this part of the county” (Lundegard 2009:23).

Georgetown merchants also financed the improvement of the old Sugarlands Rolling Road into the Georgetown Pike, starting in 1813. After improvements were finished in the 1820s, the road and toll houses extended 17 miles from Dranesville to the chain bridge. Alexandria merchants responded by funding construction of the Leesburg Turnpike.

#### E. LONG BRIDGE

The next Potomac crossing was the Long Bridge, a mile-long wood pile bridge with two draw spans that allowed ships to access the port of Georgetown (see Figure 32). Built despite the objections of Georgetown merchants, this bridge opened in 1809; the first person to cross it was President James Madison. This bridge had a great impact on the southern portion of the project area, leading to many schemes for its development, some of which eventually bore fruit (Lee-Thorp 2006).

The bridge was burned during the British invasion in 1814; according to contemporary accounts, the Americans burned the southern end because they feared attack by the British, while the British burned the northern end to prevent any sortie by the Americans (Lee-Thorp 2006). The bridge was rebuilt by 1816. It was damaged in 1831 and again in 1840 by spring floods, in both cases remaining closed for more than a year. By 1857 it had been retrofitted with rail lines, but since it was not strong enough for locomotives, the cars had to be pulled across by horses.

In 1861 Union troops marched across the bridge to occupy Alexandria (Figure 35). The bridge became an important link in Union supply lines, so by 1864 a new, stronger bridge had been built parallel to the old one, capable of carrying locomotives. There have been bridges in this approximate location ever since.





FIGURE 34: Chain Bridge in the 1830s (Kollner 1839)

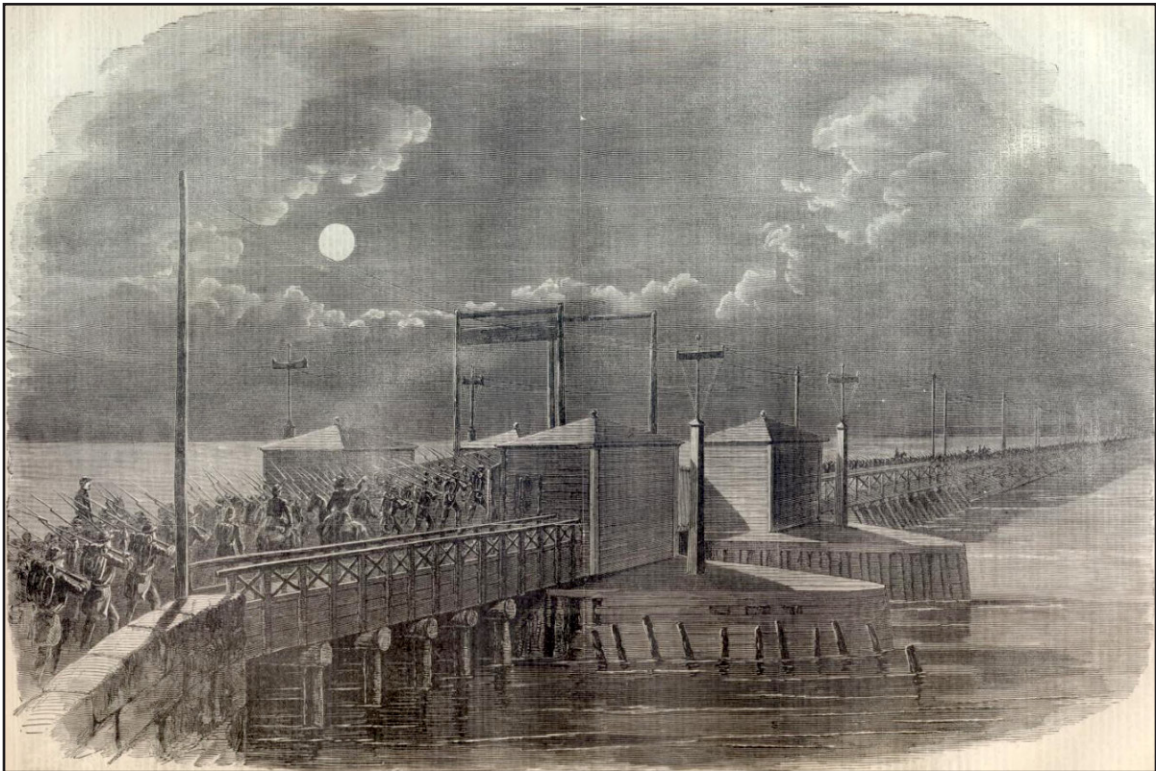


FIGURE 35: Union Soldiers Crossing the Long Bridge (*Harper's Weekly* 1861)

## F. THE ALEXANDRIA CANAL

A third bridge spanning the Potomac, the Aqueduct Bridge, was completed in 1843 as part of the Alexandria Canal (Figure 36). Various canal projects had been promoted for decades to foster trade in the county. George Washington, along with other prominent leaders, had formed the Patowmack Canal Company to improve navigation on the Potomac. The Patowmack Company eventually completed canals with locks at both Little and Great Falls, as well as other improvements farther upriver, but this was at best a partial solution. In 1828 construction therefore began on a more modern canal, the Chesapeake & Ohio. The C&O Canal was to wind along the northern shore of the Potomac from the Tidewater westward. Alexandrians wanted to extend this canal to their city and formed the Alexandria Canal Company for this purpose. The canal and Aqueduct Bridge were built from 1833 to 1843. The Aqueduct Bridge was designed to carry barges of the C&O Canal from the Maryland shore over the Potomac, connecting to the canal on the Virginia bank that ran through the county south to Alexandria. The bridge included a wooden trough set upon stone piers with a narrow towpath to one side (Netherton and Netherton 1987:46). A map of the canal route shows the project area from the Aqueduct south to Four Mile Run (Figure 37); however, the map depicts only the grandest plantations and no doubt omits many lesser dwellings and structures. In the 1840s G.W.P. Custis further developed his Arlington Spring public recreational area, and built a kitchen and dining room up against the berm of the Alexandria Canal, which separated Arlington Spring from the farm.

The construction of the Aqueduct Bridge and the Alexandria Canal proved more costly than had been anticipated. Receiving minimal support from the federal government, the Alexandria Canal Company turned to the Commonwealth of Virginia, which could not subsidize a canal project in the District. As a result the county petitioned Congress for retrocession to Virginia (Arlington Historical Commission 2001). Believing that the federal government would never have any need for land and jurisdiction in Alexandria County, Congress was willing to return the county to the Commonwealth of Virginia. The county voted in favor of retrocession in 1846, and Alexandria was separated from the District of Columbia and returned to Virginia in 1847 as a separate county. The population of Alexandria at that time was 10,000 persons, of whom 8,700 lived in the town of Alexandria and 1,300 in the rural area (Arlington Historical Commission 2001). Over half of those living outside Alexandria were either enslaved or free African-Americans.

During the current archeological survey, attempts were made to find either the canal itself or the rail line that was later built along the same right-of-way. One of the places checked was the promising depression shown in Figure 38. However, everything within reach of a shovel in that location proved to be twentieth-century fill, so if remains of the canal do survive there, they are deeply buried.

Another attempt to find remains of the Alexandria Canal was made in 2005. The canal cut across the road that ran down to the causeway to Mason's Island. To preserve access to the island, a brick culvert was built under the canal. This culvert was maintained for more than a century after the canal was converted to a rail line and remained open into the twentieth century. Since the culvert was depicted on plans for new highways in Rosslyn as recently as the 1950s, a concerted effort was made to pinpoint its location. This proved impossible to do precisely, because the building of U.S. 50 and I-66 changed the landscape so much, but an approximation was worked out. A deep backhoe trench was dug in that location; however, that trench struck a modern concrete structure, possibly sewer-related, more than 10 feet below the surface. If the culvert survives it is even deeper than that (Fiedel and Rupnik 2005; Liccese-Torres and Liebertz 2014).

## G. THE DUEL

One of the odder events that apparently took place along the present route of the GWMP was a famous duel, fought in 1826 between two American statesmen, Secretary of State Henry Clay of Kentucky and Senator John Randolph of Virginia (Figures 39 and 40). The event became famous partly because opponents of dueling used it to illustrate the strange states of mind that sometimes overtook gentlemen obsessed with defending their honor (Swain 2013). As one of Randolph's fellow Senators wrote,



FIGURE 36: Aqueduct Bridge, 1879-1888 (Library of Congress)



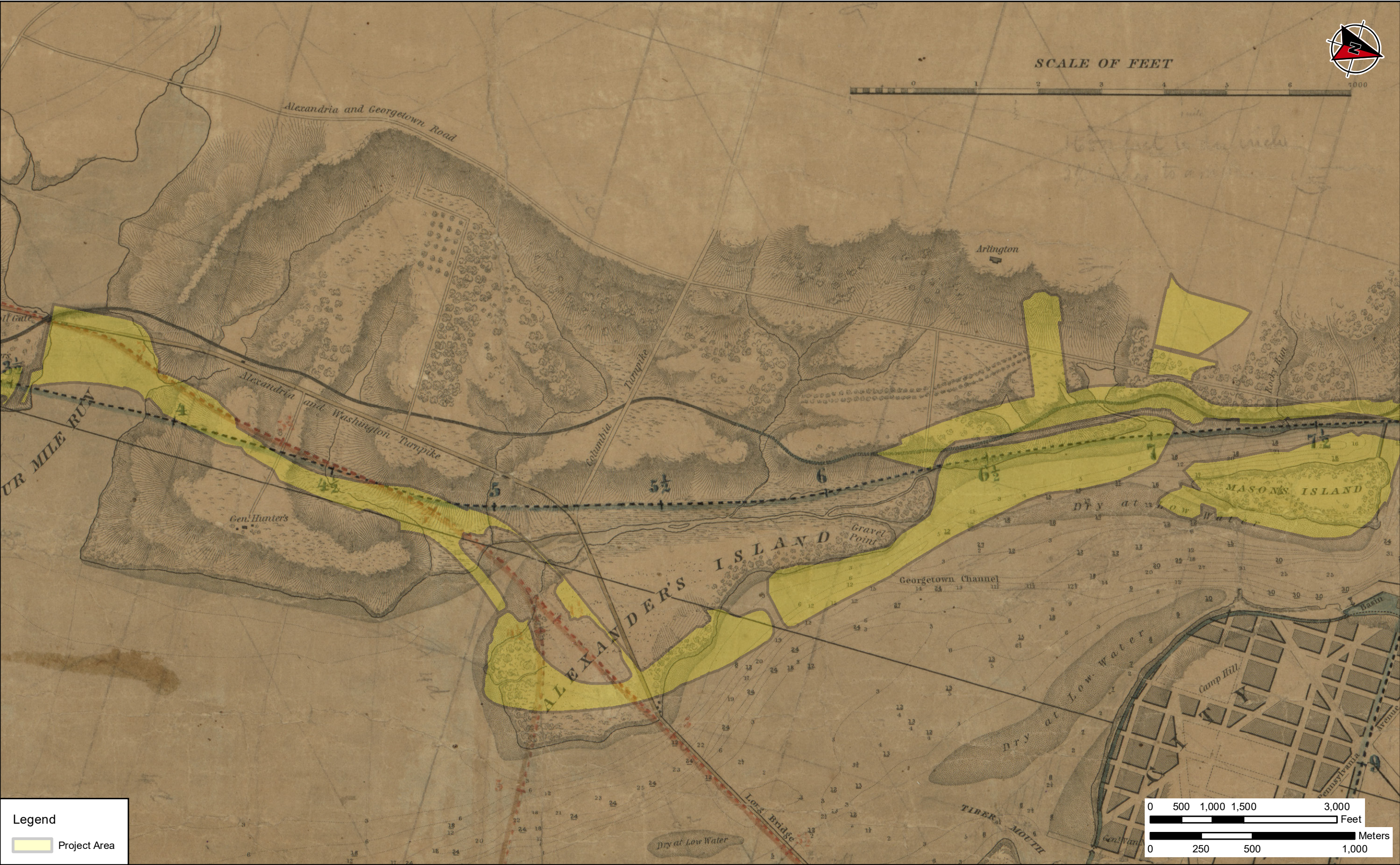


FIGURE 37: Route of the Alexandria Canal, Showing the Project Area in 1838 (Kearney et al. 1838)









FIGURE 38: Depression Investigated as a Possible Remnant of the Alexandria Canal



FIGURE 39: Henry Clay in 1818, by Matthew Harris Jouett (Swain 2013)



FIGURE 40: John Randolph in 1811, by John Wesley Jarvis (Swain 2013)

Never, in my judgment, has the utter, unconditional absurdity and folly of dueling been so perfectly demonstrated as in the case before us. These two great men – unlike as they were – loved one another, even in the hour of meeting in mortal combat. But in the sudden fusion of political parties, and in events which followed, they had become alienated, and nothing but the magic influence of pistols – strangely enough – could induce them to confess their love, either to themselves or to the world [*The New York Times* 1856].

The affair started with a speech that Randolph gave on the Senate floor, in which he called both President Adams and Secretary of State Clay “Puritans with blackleg,” blackleg being a nasty disease of sheep. Because of the need for government business to be conducted in safety, speeches in the Senate were generally exempt from challenge, but Clay believed that Randolph had explicitly waived this protection. So he immediately sent Randolph a note demanding satisfaction. When Randolph received Clay’s challenge, he could have simply replied that he had not waived Senatorial immunity, but he seems to have found that course ignoble. Instead he accepted the challenge. In fact he tried to send his acceptance back with Clay’s own messenger, Gen. James Hamilton, but Hamilton refused to take it, saying that he was honor-bound to insist that Randolph consult his own friends before replying.

Both men appointed seconds, who met and attempted to find some verbal compromise that would avert the duel. But Randolph stuck by his words, and Clay insisted they were a mortal insult, so the duel was set for April 8. Most Washington duels were held in Maryland, where authorities were more lax about that sort of thing. Yet Randolph insisted that it be held in Virginia, so that if he fell his blood would soak his native soil. So the parties rode in their carriages across Chain Bridge and found a level spot on the shore of the river, near a gravel bank. Randolph had lately been insisting that he would not fire, since he could not bear either to make Clay’s wife a widow nor hold the laws of Virginia in mockery, yet when the time came, fire he did. Both men missed their first shots. Clay then insisted on a second shot, and Randolph, despite the pleading of Hamilton, accepted. But after they took their positions Randolph fired dramatically into the air and cried out, “I do not fire at you, Mr. Clay.” He then extended his hand and walked toward his opponent. Clay dropped his own pistol and went forward, and the two shook hands in the center of what might have been the ground of their deaths. A few days later the men exchanged cards and “social relations were formally and courteously restored.”

## **VI. THE CIVIL WAR**

Running as it does along the boundary between the North and the South, the land that is now the GWMP was much involved in the Civil War. Defense of the capital was key to Union strategy, so the city was heavily fortified. Among the most important historic sites along the GWMP are those forts and other remains of the Civil War.

In response to Lincoln's call for troops, a large number of federal regiments arrived in the district in May 1861. On May 23 and 24, Union soldiers marched across the Potomac via the Long Bridge, located at the foot of 14th Street in the District, and seized Alexandria without a battle (CEHP, Inc. 2004:4-4). Immediately following the seizure, these regiments and others that followed were ordered to begin constructing Forts Corcoran, Haggerty, Bennett, Runyon, and Ellsworth. A few of these initial forts were placed in low-lying areas where they could not command the surrounding terrain, limiting their usefulness (Cooling and Owen 1988:5).

A complete fortification system was not considered until after the First Battle of Bull Run or Manassas in July 1861. The unexpected Confederate victory shocked the Union. Protecting the capital as well as the port of Alexandria became an immediate concern and "the necessity of the thorough fortifying of Washington ceased to be doubtful" following the embarrassing loss (Barnard 1871:10). Figure 41 shows the forts eventually constructed on the west side of the Potomac.

Maj. Gen. George B. McClellan was put in command of the Washington area's troops on July 27, 1861. In his first official order he required the army to construct a viable defense system around the District of Columbia (CEHP, Inc. 2004:4-7). In August 1861 McClellan placed Maj. John Gross Barnard of the Corps of Engineers in charge of construction of the Washington defenses (Cooling and Owen 1988:16).

Traces of forts and earthworks can be found in several parts of the GWMP property; Figure 42 shows a rifle trench that was part of the defenses around Chain Bridge (CRGIS 2014).

### **A. FORT MARCY**

One largely intact fort, Fort Marcy, still stands on GWMP property. The fort site is near the location of the famous but bloodless duel between Henry Clay and John Randolph in 1826. Fort Marcy and nearby Fort Ethan Allen, as well as other batteries on the north bank of the Potomac River, were built to protect the Georgetown and Leesburg Turnpike and Chain Bridge (Figure 43).

The hill on which the fort is located was known as Prospect Hill. Originally the fort was called Fort Baldy Smith after Gen. William F. "Baldy" Smith, whose troops began construction of the fort. His division crossed Chain Bridge on the night of September 24, 1861, and immediately commenced construction of Fort Marcy and Fort Ethan Allen. The 79th New York Highlanders, the 141st Pennsylvania, and the "Iron Brigade" helped complete the work in the fall of 1862. A force of about 500 contrabands was also employed. The 152nd New York worked on the entrenchments. When the fort was completed, it had a perimeter of 338 feet and mounted 18 guns, a 10-inch mortar, and two 24-pounder Coehorn mortars.

The fort was re-named in honor of Randolph B. Marcy of Massachusetts, General McClellan's Chief of Staff. Detachments of the 4th New York Heavy Artillery, 3rd Pennsylvania Heavy Artillery, and the 130th Pennsylvania Infantry were among the troops stationed there during the war. It is noteworthy that the famous Iron Brigade was created here in the summer of 1861. It was composed of the 19th Indiana and the 2nd, 6th, and 7th Wisconsin Regiments. The 24th Michigan was added to the brigade soon after the battle of South Mountain. These regulars remained together until the close of the war.



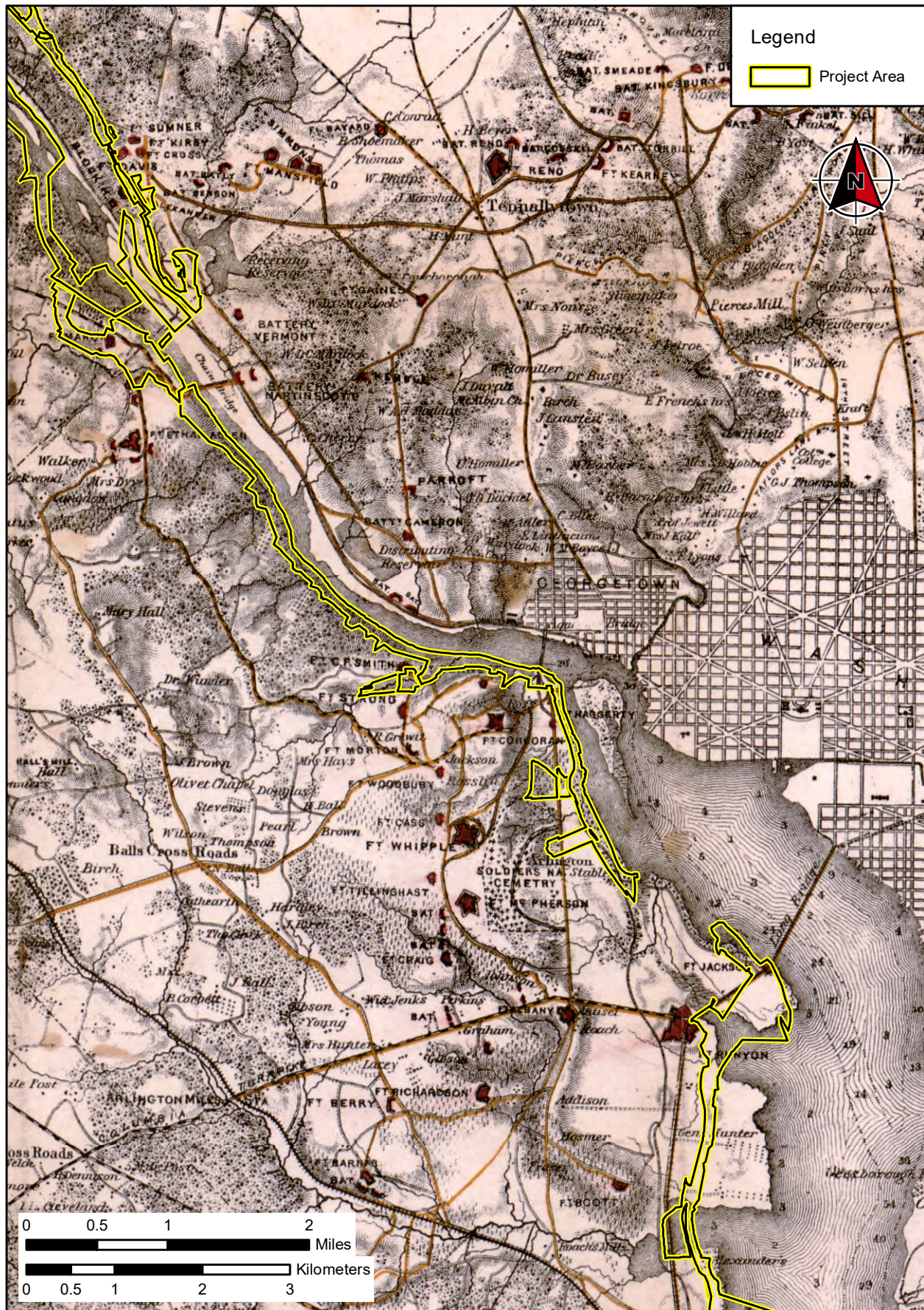


FIGURE 41: Plan of Civil War Forts South of the Potomac (War Department 1865)





FIGURE 42: Civil War Earthwork near Pimmit Run



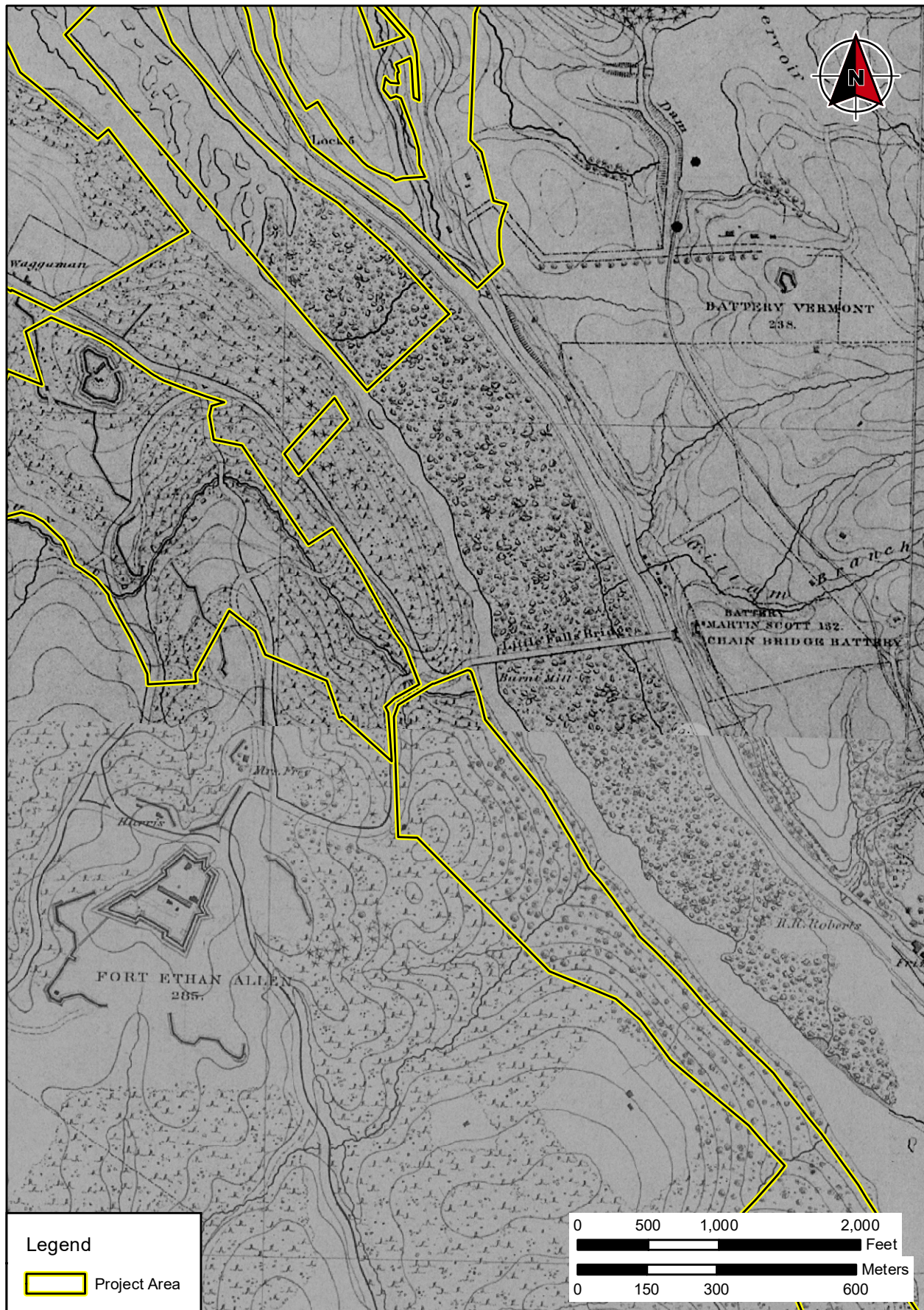


FIGURE 43: Plan of the Civil War Defenses near Chain Bridge (War Department 1864)

Fort Marcy was built on land of the Vanderwerken family, who also loaned their house to the cause to serve as a hospital. After the Civil War ended, the land returned to their possession. Among other enterprises, the Vanderwerkens operated horse-drawn street cars in Washington. They held this land until after World War II, when it was sold to investors.

In 1994 and 1995, Fort Marcy was subjected to a very unusual archeological investigation. On July 20, 1993, the body of Vincent Foster, friend of President Bill Clinton and Hillary Clinton and White House Counsel for the first six months of the Clinton administration, was found at the fort. The police concluded that he committed suicide; however, there were widespread rumors that he had been killed, possibly because of corruption allegations surrounding Bill Clinton's time as governor of Arkansas. So when special prosecutors — first Robert Fiske and then Kenneth Starr — carried out their wide-ranging probes into those and other allegations against the President, they re-opened the investigation into Foster's death. One of the loose ends in the original police case was that the bullet that killed Foster had never been found. The FBI and the NPS worked together to carry out a very thorough metal detector search of the surrounding area, which included all of Fort Marcy, searching for the bullet. The special prosecutors retained three modern .38-caliber slugs that they found (none of which killed Foster) but handed over the Civil War-related artifacts they found to the NPS. These included “over 60 bullets in a wide variety of calibers and designs, eating utensils, uniform parts, buttons, and fragments of shovels used by laborers who helped build the fort” (Sonderman 2001:74).

## B. CAMP PIERPONT

### 1. *Soldiers for the Union*

In the fall of 1861 and winter of 1862, the Langley area was the location of Camp Pierpont. Camp Pierpont served as the winter quarters for Union Maj. Gen. George A. McCall and the 10,000 men of the Pennsylvania Reserves. They arrived on October 9, 1861, and departed the following March. The camp was named in honor of the Loyal Governor of Virginia. General McCall made his headquarters at the Langley Ordinary, located at the intersection of Georgetown Pike and Lewinsville Road. One of the Robert Sneden maps shows a cavalry outpost in this location earlier in 1861, near “Langleys Plantation” (Figure 44). Although their exact locations are not known, it appears that most of the regimental camps that made up Camp Pierpont were west and southwest of Langley Crossroads. At least one was adjacent to the Potomac River, somewhere in the general area of the American Legion Bridge. Some Civil War artifacts were found when the CIA Headquarters building was constructed, but their actual origin is not known and an association with Camp Pierpont is only conjecture (Central Intelligence Agency [CIA] 2013).

At the start of the war, when Lincoln called for 75,000 troops to defend the Union, far more Pennsylvanians volunteered than were needed to fill the state's quota. Unwilling to send these eager men home, the governor organized them into 13 regiments of the Pennsylvania Reserves. After the Union defeat at Bull Run in July 1861, when Lincoln called for 200,000 more men, the Pennsylvania Reserves were activated as part of the Union army and sent to Washington. The Pennsylvania Reserves produced several of the Union's most famous officers, including George Gordon Meade, Winfield Scott Hancock, and John F. Reynolds.

In August 1861 the Reserves moved from Harrisburg, Pennsylvania, to Washington, camping around Tenallytown in Maryland. This was a citizen army, and all NCOs and officers up to the regimental commanders were elected from the ranks. A history of the reserves written just after the war gives a feel for what life was like in the first year of the war for these volunteer soldiers:

At Tenallytown, General McCall established his command in pleasant camps, and instructed the field officers to use all possible diligence in familiarizing their regiments with the battalion drill, and to teach the men the manual and the use of arms. The officers organized classes for mutual instruction in military tactics and army regulations. In these, all questions pertaining to military



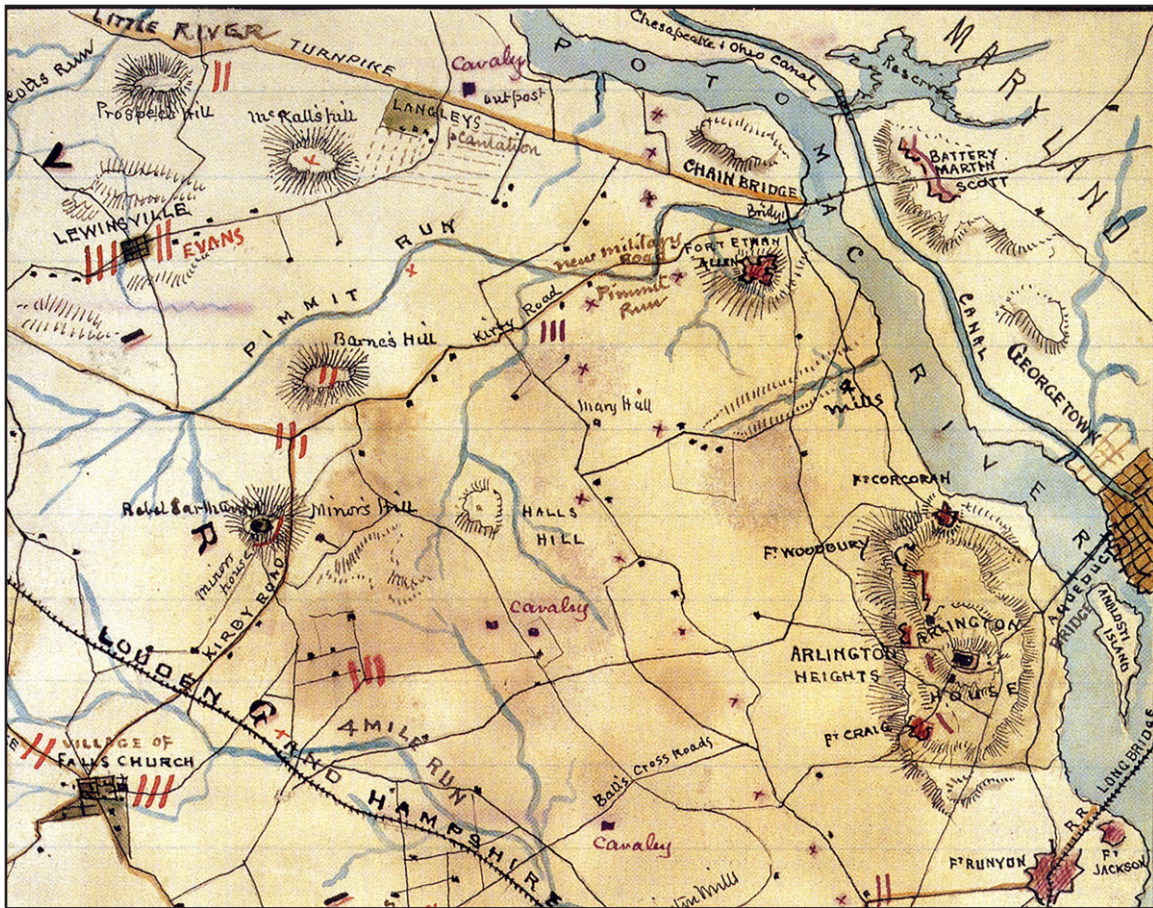


FIGURE 44: Sneden's Map (Sneden 2001)



science were freely discussed, and points in doubt were referred to the officers who had graduated in the military academy at West Point, or to the commanding general. The zeal to acquire a knowledge of military duties and movements manifested by the officers, was equalled only by their efforts to instruct their men in the drills, the duties and the conduct of a soldier. Never, perhaps, was there so general a diffusion of intelligence, extending through all the companies of a division of an army, as was the case in the Reserve Corps. A large number of students from colleges, academics, normal and high schools, many teachers in the public schools and in the higher institutions of learning, professional students, physicians, lawyers and preachers, were found, not only as officers, but in the ranks, associated with young men of equal intelligence. There were sergeants who, but for their uniforms, might have been mistaken for generals, and privates fit to command brigades. To make soldiers of citizens like these was not a difficult task. To command companies, regiments, brigades and divisions composed of men of so much intelligence, required officers possessing much executive ability and a thorough knowledge of the rights, privileges and duties of both officers and privates [Sypher 1865:107].

In October the Reserves crossed the Potomac via the Chain Bridge to the vicinity of Langley. Pvt. Lyman Hamlin (1861) of the 3rd Regiment described their new situation:

We are in the midst of a fine region. White farm houses are seated upon the hills, and fields of ripened corn, in part, bound the view, but this is all that reminds us of peaceful pursuits. Thousands of armed men, camp after camp of canvass huts, multitudes of white covered army wagons, and horses, cavalry galloping past with clanking sabers, the booming of cannon, and sound of drums constantly force upon us the all-parading idea of grim-visaged war. It seems quite natural after gradual schooling, but it is odd to imagine how such a scene would have struck one a few months since, had it suddenly burst upon him [Hamlin 1861].

There is one known image of Camp Pierpont, a sketch showing tents in an open field, with a road in the foreground (Figure 45). Leaves on the trees suggest that this was drawn fairly early in the fall. The sketch of the camp is currently in a private collection and cannot be authenticated.

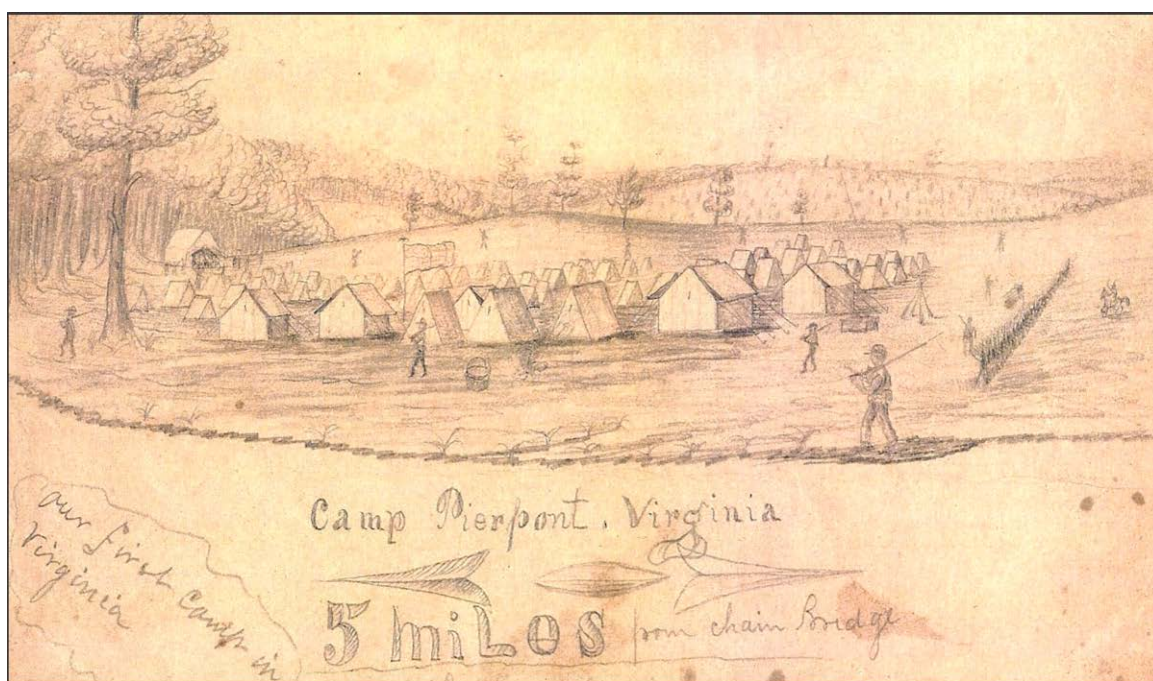


FIGURE 45: Soldier's Sketch of Part of Camp Pierpont (Snedden 2001)

While at Camp Pierpont, the Pennsylvania Reserves saw action on numerous occasions. On October 11, 1861, members of the Reserves engaged Confederate soldiers under the command of General Beauregard, who was attempting to determine the extent of the new lines occupied by the Army of the Potomac. On October 18 the Reserves were ordered to Dranesville to conduct reconnaissance and map the roads and topography of the area. McCall was assured that the Confederate Army had left Leesburg and he need not fear attack from that end; however, the Confederates were in Centreville and might attack him from there. The Reserves did not engage any Confederate positions during the reconnaissance and completed their mission.

On December 20, 1861, the 10,000 men of the Pennsylvania Reserves returned to Dranesville under the command of Edward Otho Cresap Ord. There they engaged pickets of Gen. J.E.B. Stuart's cavalry. Over the next three hours the two armies fought a small battle that was at times quite hot, resulting in the withdrawal by Stuart and the capture of Confederate wagons by the Pennsylvania Reserves. The following day Stuart returned with reinforcements but found that the Reserves had returned to Camp Pierpont during the night.

Following the Battle of Dranesville, the Pennsylvania reserves set up winter quarters at Camp Pierpont. They constructed cabins of log and earth and covered them with army tents. The success at Dranesville made the Pennsylvania Reserves celebrities of a sort, since their victory was a rare success for Union forces in the east. Politicians, dignitaries, and Washington elites all crossed the Chain Bridge to meet the soldiers of the Pennsylvania Reserves.

The remainder of the time spent at Camp Pierpont was mostly uneventful for the soldiers of the Pennsylvania Reserves. During the winter there, 89 soldiers died at the camp, mostly from sickness and the cold, although "accidents" were listed as the cause of death for a few.

In March the Pennsylvania Reserves abandoned Camp Pierpont and joined with the rest of the Army of the Potomac. From 1862 until the end of the war in 1865, the Pennsylvania Reserves went on to participate in many of the war's most famous and bloody battles, including Antietam and Gettysburg.

## *2. Life in Camp*

A large amount of material related to the Pennsylvania Reserves has been collected and posted online by the PRVC Historical Society. The posted material includes numerous letters from soldiers and officers, allowing many insights into their wartime lives. This letter from Samuel T. Cassatt, dated February 4, 1862, focuses on things important to the soldiers' daily lives: the weather, the mud, and packages from home.

I take my pen in hand to answer your Last letter which I recieved Jan 17th I have been sick for about two weeks but I am able to Report fit for duty this morning again it looks a little winter like here this morning there was a nice little snow fell last night but it is more acceptable than the mud this is what they call the Sacred Soil of Virginia but I should call it nothing but a perfect mud Hole we have not had much cold wether here yet but a great (d)eal of wet we keep pretty close quarters for the last month we have not drilled for some time on account of the wether not allowing it the camp as a general matter is healthy and our boys are in good Spirits John Hamilton was Sick about two months shortly after he came to war but he is engoying good health now I recieved them articles from the ordly Sargent I got 2 shirts one pair of drawers and some thred and pins I did not get any Stockings he said he did not remember any of them for me if there was any please describe them in your next letter and if you forgot them you need not send any as I do not stand much in need of them now [Cassatt 1862].

At least two descriptions of the soldiers' accommodations survive from Camp Pierpont. One was penned by Robert Strickby in a letter home dated November 28, 1861:

We have our tent built up 3 1/2 feet with poles and then dug down 1 1/2 feet in the ground and our tent set on poles and banked up around the poles with dirt and then a fire place in the bank and one bunk in the floor for 2 to sleep and one above for 2 more to sleep [Strickby 1861].

The other description comes from a book published after the war by reporter George Townsend (1866):

[I] examined the huts in which the Reserves had passed the winter. They were built of logs, plastered with mud, and the roofs of some were thatched with straw. Each cabin was pierced for two or more windows; the beds were simply shelves or berths; a rough fireplace of stones and clay communicated with the wooden chimney; and the floors were in most cases damp and bare. Streets, fancifully designated, divided the settlement irregularly; but the tenements were now all deserted save one, where I found a whole family of “contrabands” or fugitive slaves.

The Reserves spent Christmas 1861 at Camp Pierpont, and several letters mention their attempts at festivities:

I had a very nice dinner on Christmas day. One of my friends had a box sent to him by express containing 4 large Shanghi roosters stuffed, a number of pound cakes, and pies, pickles and apples. You may be sure I did them all justice [Bright 1861].

Some of the boys . . . had Santa Claus, with a full-rigged suit of Secesh Clothes, stuck up in a tree. One of the guards, being put on post, and not knowing of the aforesaid gentleman being in the neighborhood, while walking his lonely beat, cast his eye that way, and, seeing Mr. Man, came to the conclusion that it was one of the men of J. Davis & Co. . . . He determined to make a hero of himself and fired, putting a ball through our Christmas friend, when the rest of the boys jumped up, exclaiming “Guard house, Guard House” [Newsboy 1861].

## C. REFUGEES

During the Civil War many African-Americans fled Southern plantations for the North, seeking the protection of the Union Army. By 1863 more than 1,800 “contrabands” had reached Union-occupied Alexandria, touching off a refugee crisis. Some found housing with relatives or were taken in by abolitionists, but many were settled in camps or “villages” set up by the government. Military maps show at least two “Freedman Villages” along or near the GWMP. One was on Theodore Roosevelt Island, in barracks built for the U.S. Colored Infantry. The other was on Robert E. Lee’s Arlington House property (Figure 46). Another group of freedmen settled around Fort Ward in Alexandria, where they established an African-American community that has endured to the present day. Because so many freedmen died in and around Alexandria, the government set up a special cemetery for them. Some 1,800 people were buried here between 1864 and 1869. The cemetery has been relocated and studied in recent years (City of Alexandria 2018).





FIGURE 46: Location of a Freedmen's Village near Arlington House (Barnard and Boschke 1865?)



## VII. RECONSTRUCTION AND GROWTH

### A. RECOVERY

Following the Civil War, Fairfax County remained mostly a farming community. Reconstruction in Fairfax County was swift compared to other parts of the state, and by 1870 the economy had substantially recovered from the effects of the war. Dairy, livestock, and poultry farming, flour milling, and the cultivation of fruit, vegetables, and flowers became the economic backbone of the region. Some manufacturing enterprises also developed, often associated with agriculture (e.g., tomato canning factories). There was also an influx of new settlers, mainly from the north. Fairfax County was considered an attractive locale for several reasons, including cheap land prices, proximity to Washington, D.C., and a relatively mild climate. The population grew throughout the later 1800s (Netherton and Netherton 1992).

The African-American community in Fairfax County also grew in the post-Civil War years. In 1860 blacks constituted about 32 percent of the county's total population, and as the county grew this percentage remained roughly constant (Chittenden et al. 1988). The growth in population was largely caused by the influx of refugees from the areas farther south, who were also drawn to the county's proximity to Washington, D.C.

Several fairly large African-American settlements developed in Fairfax County. They generally grew up around areas with job opportunities, large tracts of land owned by blacks, or as sub-communities of established white settlements. Census data indicate that the majority of black residents continued working as farm laborers, sometimes on the same plantations where they had been slaves (Wolf 1975).

Between 1900 and 1910, the county's population increased to 20,536. During the first part of the twentieth century, the number of farms increased dramatically, with the largest increase occurring in farms of less than 50 acres (Netherton and Netherton 1992). The 1910 census shows that 71.6 percent of the land in the county was farmland, with an average acreage of 82.3 acres per farm (Netherton et al. 1978). There were 2,320 farms in the county at that time. White farmers operated 1,894 of these, and black farmers operated only 317.

Directly across the Potomac from Washington, several areas developed as centers of entertainment and (according to contemporaries) vice. It seems that government was less intrusive and burdensome south of the river than in the District of Columbia, so businessmen who wanted less scrutiny moved to Virginia. A racetrack constructed at the southern end of the Long Bridge before the Civil War operated for many years afterward. This area came to be known as Jackson City (Fiedel and Rupnik 2005). Rosslyn, just beginning to develop in the 1870s, had an equally bad reputation; a low-lying area just upstream from the Aqueduct Bridge was known as Dead Man's Hollow, a place where deaths were a weekly occurrence (Cissna 1990:50).

The *Atlas of 15 Miles around Washington* (Hopkins 1879) provides a detailed look at the project area in this period. In Jackson City (Figure 47) it shows a hotel, railroad station, and fishery. Archeological excavation conducted at the southern end of the 14th Street Bridge disclosed part of a stone and brick foundation, which is probably attributable to the late nineteenth-century occupation of Jackson City (Fiedel and Rupnik 2005:114). Just to the south, the map depicts no less than five brick works, producing the millions of bricks needed for the building boom in Washington. Hopkins mapped only nine structures in Rosslyn (Figure 48), but the more extensive grid of streets shows that the town's developers were marketing themselves in every direction, and the place continued to grow rapidly. Farther west, Edward Woody's Store is shown at the southern end of Chain Bridge. The Fairfax County portion of the map shows the same pattern of development, with many houses and farms along the Georgetown Pike but very few closer to the river.

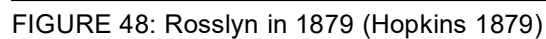
The increasing population of the area is reflected in the archeological record. Numerous small domestic sites were found along the GWMP dating to after the Civil War, but none that could reliably be dated to before 1850. Artifacts from the post-Civil War period were fairly common (Figures 49 and 50).





FIGURE 47: Jackson City and Alexandria in 1879 (Hopkins 1879)





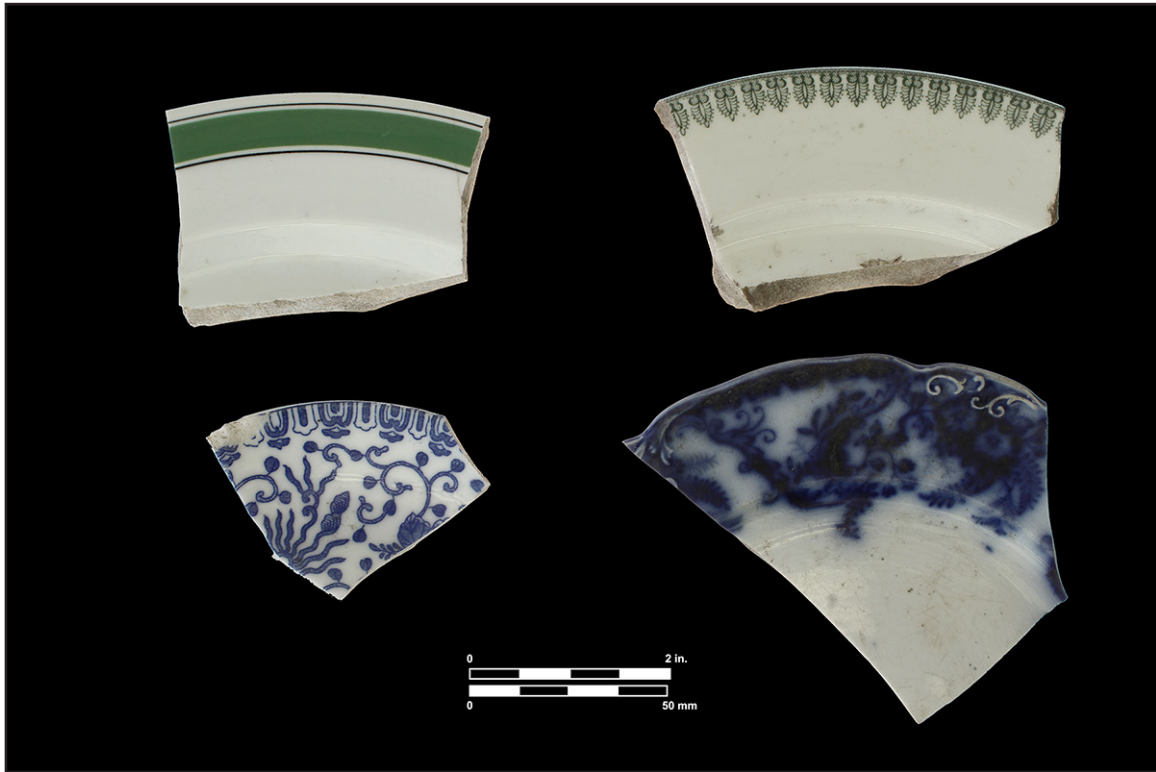


FIGURE 49: Nineteenth- or Early Twentieth-Century Ceramics from the GWMP



FIGURE 50: Late Nineteenth- or Early Twentieth-Century  
Artifacts from the GWMP



## B. THE SHIPWRECK

Because its land borders the Potomac, the GWMP included the homes of people who made their livings on the water: boatmen, fishermen, canal operators, sailors. However, maritime archeology, the fascinating study of shipwrecks and other artifacts lost on the bottom of rivers, lakes, and the sea, has not been a major part of archeology done so far in the park.

There is, however, at least one shipwreck on GWMP property, resting on the mudflats and exposed at low tide (Figure 51). This wreck was investigated by archeologists in 2013 (Shellenhamer 2014). The surviving portion of the vessel is approximately 30.5 feet long and 14 feet wide. It was likely a work boat or small transport vessel dating to the late nineteenth or early twentieth century. The vessel seems to have been stripped and intentionally burned to the water line after its abandonment in a muddy back channel. It was therefore impossible to be more specific about the type or actual use of the vessel. But it was an important reminder that along the river, many people worked or otherwise spent a lot of time on boats, which were a big part of their lives.

## C. THE NEW DOMINION

In the 1920s the rural character of Fairfax County began to change. In the 20 years following the 1910 census, the number of farms in the county dropped from 2,320 to 1,244, with an average size of 99 acres. In 1940 only 22 percent of all dwellings in Fairfax County were categorized as farm dwellings. One reason for the change was that by the early twentieth century the federal government in Washington had experienced tremendous growth that provided new employment opportunities to residents of the surrounding counties. Government growth continued as America entered World War II, and employment increased as the federal bureaucracy expanded during the war effort. This led to an increase in population for Fairfax County and surrounding areas, and the farms of Fairfax County were replaced by suburbs (Dongarra et al. 2006). Expanding transportation infrastructure included trolley lines and many new roads. One way this development affected the GWMP was through the building of sewer lines, which ran through many



FIGURE 51: The Roaches Run Shipwreck  
(Shellenhamer 2014)

stream valleys and disturbed many archeological sites. A small power station was built on the site of the old mills at the mouth of Pimmit Run, and its ruins are still visible (Figure 52).

#### D. THE QUARRIES

One important development of the early twentieth century was the intensification of quarrying along the Potomac, which had already begun before the Civil War. The Strum map of Alexandria County, dated 1900, shows a long stretch of the river shore from Rosslyn to Chain Bridge as the property of the Potomac Stone Company (Figure 53). Stone quarried along the river was used for the Pentagon and many other projects. Some of the quarry workers were Italian immigrants who lived in cabins along the river, in the ravine of the Potomac tributary locally known as Marcey Creek, between Donaldson Run and Windy Run. A small community is shown in the area on the 1936 Sanborn Fire Insurance map (Figure 54). The community was known as Little Italy or “Talleytown” by the locals (Cissna 1990:55, 63; Palus 2015). Cissna also records the presence of another late nineteenth- and early twentieth-century community called “Sandy Beach” that “clung close to the Potomac River shore, starting just upriver of Rosslyn and continuing beyond Spout Run” (Cissna 1990:56). Ethnographic and mapping evidence indicates the presence of a settlement of frame houses as early as 1900, and probably earlier; these cabins are shown on the Sanborn (1936) and USGS (1945) quadrangle maps (Figures 55 and 56).

Evidence of quarrying is visible all along the Potomac Heritage Trail west of the Key Bridge. Quarried rock faces like the one in Figure 57 are common. Other remains include stray blocks of cut stone and old bits of machinery (Figure 58).

#### E. THE LEITER ESTATE

Hidden in the woods not far from the GWMP’s headquarters building are the remains of a once grand house (Figures 59 and 60). This mansion was built by Joseph Leiter (1868-1932) as a weekend retreat and hunting lodge. Leiter was heir to a great Chicago fortune built up by his father Levi Leiter, who rose from store clerk to become one of the founders of the retail empire later known as Marshall Field. The elder Leiter sold out his interest in the retail firm and from then on lived on his investments. For better hobnobbing with the rest of the American elite, Leiter built a grand mansion on New Hampshire Avenue near Dupont Circle in Washington, the same neighborhood where Theodore Roosevelt and William Howard Taft lived. That mansion was torn down in 1947, but wonderfully detailed pictures of its heyday survive (Figures 61 and 62). Note the paintings above the mantle in the dining room; one of them is one of two versions of *Phaedre* painted by nineteenth-century French artist Alexandre Cabanel (Figure 63). The other version is in a French museum; that one disappeared when the Leiter collection was sold at auction in 1934, and its current whereabouts are unknown (Moskey 2017).

Levi Leiter is best known to local history buffs as the builder of a bizarre tomb in Rock Creek Cemetery. Not long before Leiter died, the body of another American retail magnate, Alexander Stewart, had been stolen from its grave by robbers who demanded a \$250,000 ransom for its return. After two years of negotiations and missed rendezvous, Stewart’s widow eventually paid \$20,000 for a satchel full of bones that may or may not have been those of her late husband. Leiter was determined to spare his family this fate:

It was the wish of Mr. Leiter that . . . precautions be taken against disturbance of his body,” wrote the New York Times after the interment. The precautions included digging a hole 12 feet square in the plot purchased at Rock Creek Cemetery. Two feet of concrete was poured in. This was covered over with a grid of steel beams with space left for a casket. This was lowered into the recess. More steel beams were bolted across the casket before the chamber was filled with concrete. It was as if the mortal remains of Levi Z. Leiter were encased in solid rock.

“Only an earthquake or heavy charges of explosives could move the mass,” wrote the Times [Kelly 2013].



FIGURE 52: Pimmit Run Power Station (Palus 2015)





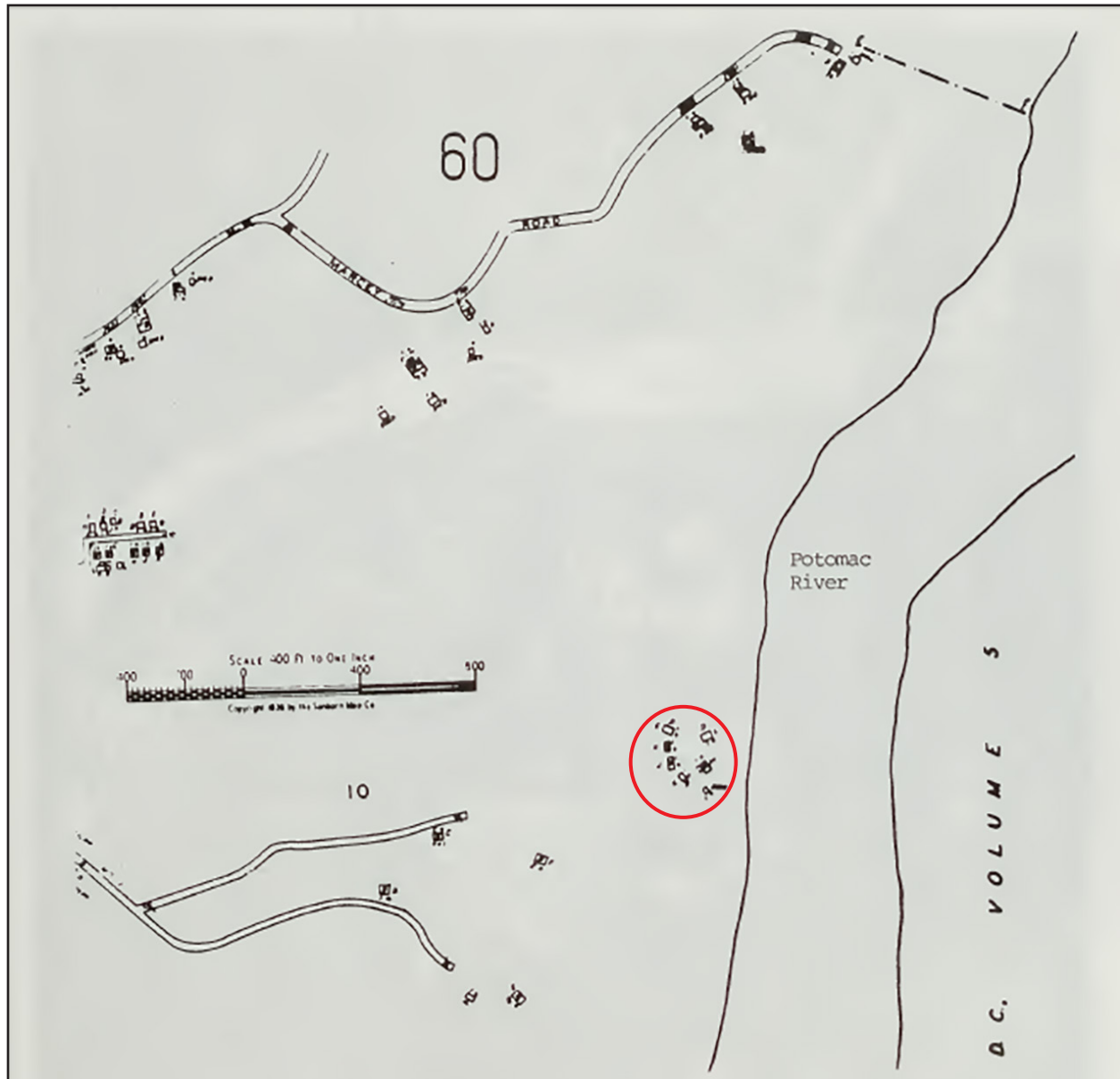


FIGURE 54: Little Italy or Talleytown Mapped in 1936 (Cissna 1990)





FIGURE 55: "Sandy Beach" in 1936 (Cissna 1990)





FIGURE 56: "Sandy Beach" in 1945 (USGS Washington West 1945)





FIGURE 57: Quarried Rock Face Along the Parkway



FIGURE 58: Remnants of Quarrying Along the Parkway





FIGURE 59: Ruins of the Leiter Estate



FIGURE 60: Decorative Tile at the Leiter Estate





FIGURE 61: Leiter Mansion in Dupont Circle (Moskey 2017)



FIGURE 62: Paintings in the Leiter Dining Room (Moskey 2017)



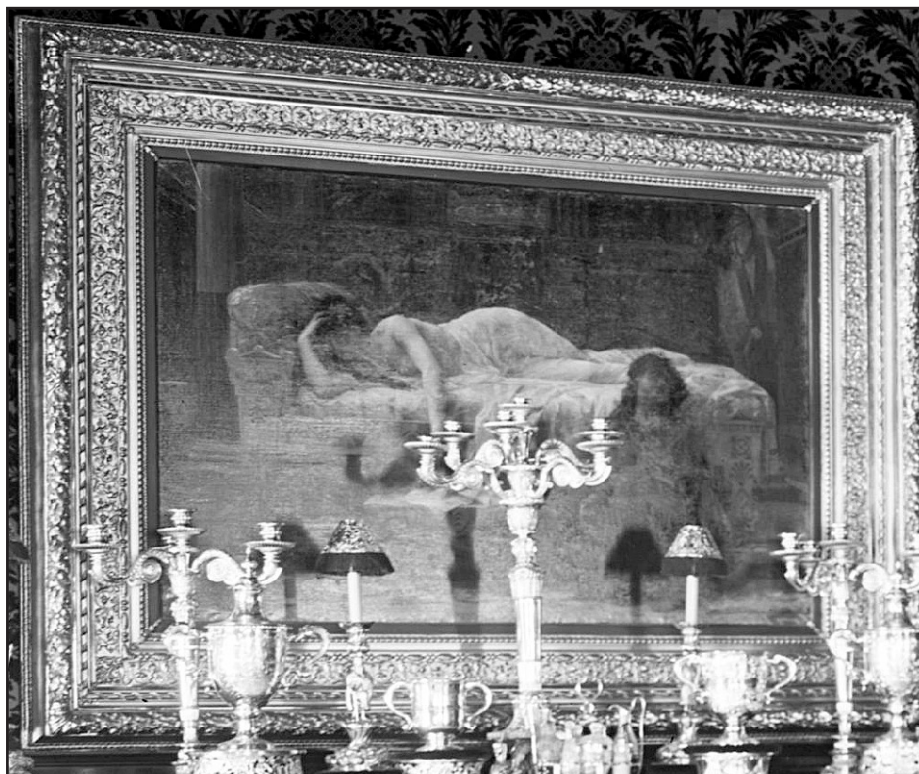


FIGURE 63: *Phaedre* by Alexandre Cabanel in the Leiter Dining Room  
(Moskey 2017)



FIGURE 64: Lady Curzon (Mary Leiter) in the  
Peacock Gown She Wore as  
Vicereine of India (CIA 2015)

Levi Leiter had one son and three daughters. The eldest daughter, Mary, married a British aristocrat named Lord George Curzon in 1895. George became the first Marquis of Curzon and was appointed Viceroy of India. Mary thus became the Vicereine of India, the highest position an American woman had ever held in the British Empire. In this role she attended the Delhi Durbar in 1903, wearing the “Peacock Gown” she displays in Figure 64. So many American heiresses married into the British nobility in those years that a name was coined for them, the “dollar princesses.” If Mary Leiter’s career and background sound familiar, that is probably because the *Downton Abbey* character of Lady Cora Grantham was partly based on her (CIA 2015).

Levi Leiter’s only son was Joseph Leiter. Joseph began acting as his father’s agent in the 1890s. Among other things he founded a coal company, Zeigler (his grandmother’s maiden name and Levi’s middle name), and built the company town of Zeigler, Illinois, for his miners. For a while he chaired the board of directors of the Washington Gas Company. In 1897 he made one of the boldest plays in the history of commodity speculation, attempting to corner the market in wheat. For a few months he may have owned a larger share of all the wheat in the world than anyone else in history. It took a concerted effort by other traders, quietly backed by the U.S. Treasury, to break Leiter’s position, at which point he lost \$10 million in a single day.

After Levi Leiter’s death in 1904, Joseph Leiter inherited the Dupont Circle mansion. But he was an avid outdoorsman who chafed at city life, so he sought out a rural property within easy reach of Washington for weekend escapes. In 1911 he purchased 520 acres in Langley, Virginia, including the locations of the GWMP headquarters and the headquarters of the CIA. On this estate he built a large house that came to be known as the Glass Palace (Figure 65). He also built several small cabins on the property, four of which were documented during the recent archeological survey (Figure 66). To reach the house, he built a mile-long driveway from the front door out to the Georgetown Pike, and he paid to blacktop the Pike from the Arlington-Fairfax line to his driveway.

The investments on which the Leiters’ fortunes were based did not do particularly well. This led to a dramatic lawsuit between Lord Curzon and Joseph Leiter, which dragged on for years and in the end benefited only their lawyers, who were said to have pocketed more than a million dollars in fees. After 1922 Leiter fell behind on his taxes, and he never caught up. After his death in 1932, the Langley mansion was abandoned, and in 1935 the house and 167 acres of land were deeded to the U.S. government in lieu of \$70,000 in unpaid taxes (CIA 2015). The government purchased the remaining 400 acres of the estate in 1940. The house, which was standing vacant, was destroyed by fire in 1945 (CIA 2015).

One interesting remnant of the Leiter estate is the flood gauge that looms over the Potomac Heritage Trail near the spur that leads up to GWMP headquarters (Figure 67). This concrete structure was still in use in the 1950s, but it has since been replaced by electronic equipment.





FIGURE 65: The Leiter House in Langley (CIA 2015)



FIGURE 66 Recording the Location of One of the Leiter Cabins





FIGURE 67: The Leiter Flood Gauge

## **VIII. THE GEORGE WASHINGTON MEMORIAL PARKWAY**

### **A. PATRIOTIC HIGHWAY**

One of the most important historical acts to shape the landscape of the GWMP was the building of the GWMP itself (Figure 68). This act was both destructive and protective; it damaged the land over which it was built, but because of its construction and designation as a National Park, much land around it was protected from development and some developed land was restored to a more natural state. The following account of the GWMP's history and significance comes largely from Kuhn et al. (2017).

The GWMP was planned as a memorial to our first president, George Washington. The notion of a commemorative road from Washington to Mount Vernon originated in the 1870s, before there were even cars to drive on it. America saw a surge of commemorative spirit around the national centennial celebration of 1876. A great Exposition was held in Philadelphia, countless memorial trees were planted, streets and parks were dedicated, and pageants and ceremonies were held. Washington's uniform, tent, and other relics were displayed at the centennial, and interest in his memory was very strong. The first plans for the GWMP were made just a few years later.

The actual construction of the GWMP coincided with another milestone, the 200th anniversary of Washington's birth in 1732. The desire to complete the GWMP by the bicentennial helped create pressure to provide the funding and get construction under way. There were many commemorations at the time, but the GWMP to Mount Vernon was touted as the "most appropriate" and "perhaps the only bicentennial memorial that will endure." The road was lined with other sorts of monuments to the first president, especially memorial groves. The northern section of the GWMP was originally planned to reach Great Falls, where George Washington's Patowmack Company built a canal that serves as a monument to another part of his career.

### **B. THE PLAN**

The GWMP is not one of those roads that sprang up almost by accident because people kept taking the same route from point A to point B until they wore ruts into the ground. On the contrary it is a triumph of planning. The GWMP as we know it is the result of decades of thinking by citizens and professionals about how to preserve the natural beauty of the Potomac Valley, make the nation's capital a special place, and memorialize its famous leaders and heroic citizens.

The city of Washington has seen two major episodes of planning. The first was the L'Enfant Plan of 1791, made when the city was first laid out as the nation's capital. It took until after the Civil War for the city to grow beyond that first great plan. As houses spilled across the boundaries of the original street grid and space grew scarce in the city's core, a new plan was needed to guide the city's future. At that time many Americans had grown dissatisfied with the environment in the nation's rapidly growing cities, disgusted that coal smoke and ever taller buildings were blocking views of the sky, cutting people off from the natural world. The result was a new movement, sometimes called the City Beautiful Movement, dedicated to reshaping cities to make them more livable and attractive. Many of these reformers believed that improving the urban environment would also improve the moral character of the inhabitants, which they thought was degraded by ugliness and disorder.

One of the first great designs to put the principles of the City Beautiful movement into practice was a new plan for Washington, D.C. This was the 1901 Senate Park Commission Report, more often called the McMillan Plan (Figure 69). This plan sprang from a small-scale improvement project, but under Senator





FIGURE 68: The George Washington Parkway in the 1960s (Kuhn et al. 2017)

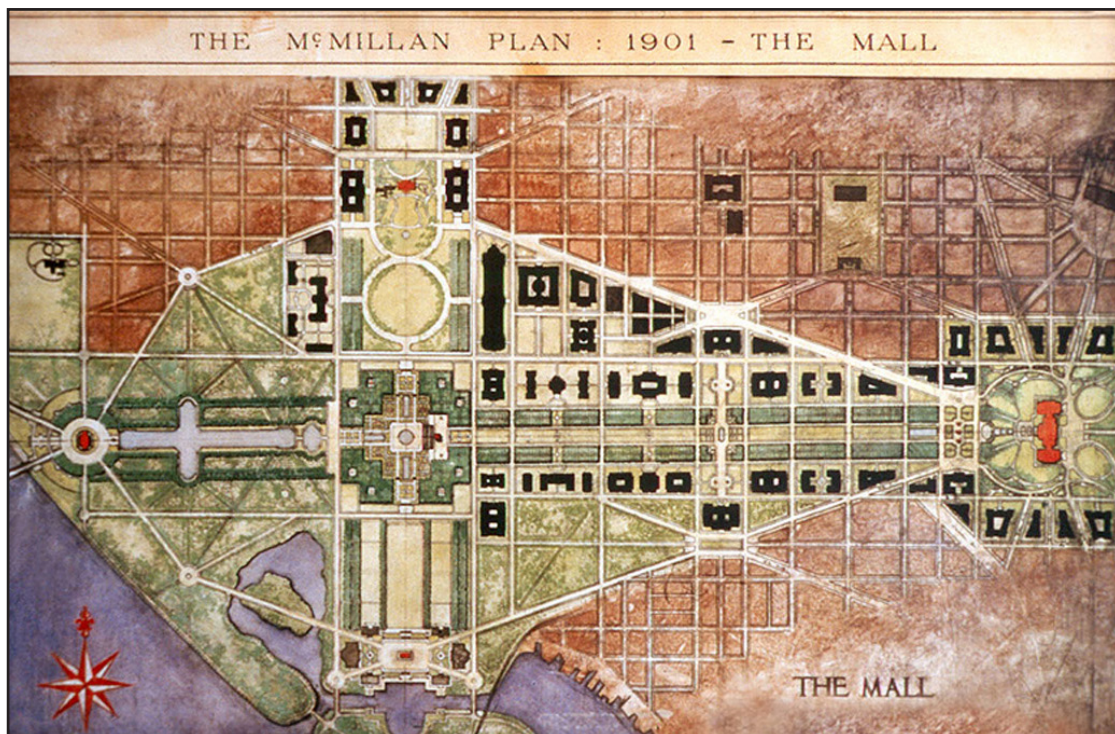


FIGURE 69: Part of the McMillan Plan Showing the Mall (Kuhn et al. 2017)

James McMillan's direction it escalated into a city-wide plan for Washington, D.C. McMillan convened a committee of four City Beautiful enthusiasts to guide the plan: Daniel Burnham, architect and city planner; sculptor Augustus Saint-Gaudens; architect Charles McKim; and landscape architect Frederick Law Olmsted, Jr.

The McMillan Plan had a great influence on the city, and it continues to influence planning in and around Washington today. The plan called for narrowing the Mall and building rows of museums and other public buildings along either side, a design that has come to fruition with the completion of the many museums that stand there today, including the most recent, the National Museum of African American History and Culture. The McMillan Plan specified the locations of the Lincoln Memorial and Union Station, projected another major monument in the general area of the Jefferson Memorial, and called for the creation of numerous new parks and roads. In particular the McMillan Plan endorsed the old idea of a parkway to Mount Vernon, and they suggested that the Mount Vernon roadway could connect to the Arlington Memorial Bridge via a traffic circle at the bridge's southern end.

The McMillan Commission also recommended a parkway running in the opposite direction from Memorial Bridge, from Washington to Great Falls. The Commission promoted this Potomac Drive as a tool for both recreation and conservation, drawing attention to the uniqueness of Great Falls, the beauty of views along the Potomac Gorge, and the already encroaching development that would only continue in the future:

The falls form one of the greatest cataracts of our Atlantic watershed, and while they themselves can not be injured, yet the great trees that once clothed their banks have been cut, and in private hands the surroundings may be so injured as to detract greatly from the beauty and grandeur of the scene. Without interfering with the future utilization of the water power, the surroundings of the Great Falls on both sides of the river should, in our opinion, be converted into a national park, to be connected with the city by a continuous river drive.

The beauty of the scenery along the route of this proposed noble river-size improvement is so rare and, in the minds of the Commission, of so great value not only to all Washington, but to all visitors, American and foreign, that it should be safeguarded in every way. No building should be allowed between the drives and the river [cited in Kuhn et al. 2017].

The George Washington Memorial Parkway as we know it today sprang from this plan. The vision of a parkway extending from Mount Vernon to Great Falls was never entirely realized, just like many other parts of the McMillan Plan. But that vision has shaped how people around Washington have lived for a century and, because other cities copied parts of the plan, how millions of other Americans have lived.

## C. ENGINEERING THE GWMP

The modern limited-access highways we are now used to driving on — broad, smooth, gently curving, with clear shoulders, grassy medians, no private driveways, and many intersections turned into overpasses — did not spring into existence of their own accord. They were invented by a group of forward-thinking highway designers who had to work hard to convince politicians and the public that these were good ideas. The GWMP was one of the first roads built in America to these new standards and it helped to spread awareness of them throughout the country.

In the 1920s the United States was paving and improving roads at a furious pace to support Americans' new love for the automobile. Most of this work was done on existing roads and streets, which had been built to handle horse-drawn carts and pedestrians. As cars got faster and more common, the problems with putting so many of these newfangled vehicles onto old-fashioned roads grew ever more obvious: traffic jams, conflicts between drivers and pedestrians, deadly crashes.

The inventors of the modern parkway tried to solve or at least manage these problems by creating a different kind of road. The word *parkway* had once meant simply a road through a park, but in the twentieth century it came to describe a road planned from the beginning for the safety, convenience, and pleasure of drivers. The parkway fused new ways of engineering highways with landscape architecture to create a new way of experiencing the beauty of both natural scenery and the designed beauty of city parks.

The first of these new parkways built in the United States was the Bronx River Parkway in New York, completed in 1923. Overpasses were used to eliminate cross traffic from the road, and the broad right-of-way sealed the parkway off from private driveways. Access was limited to widely spaced, carefully controlled access points. There were no stop signs, and left turns were almost completely eliminated. The result was a smoother, safer, more pleasant journey, and the road was widely praised.

The designers of the GWMP built on this achievement. The Bureau of Public Roads, the forerunner of the Federal Highway Administration, saw the project as a way to advertise advances in highway design. They incorporated the improvements made in the Bronx River Parkway and added more. For example, whereas most of the Bronx River Parkway was only 40 feet wide, with nothing to separate the two directions of traffic, key sections of the GWMP have separate roadways for each direction, separated by a median strip. Short extra lanes called “safety flares” were constructed to protect drivers making left turns. The cloverleaf intersection at the Fourteenth Street Bridge was the first such intersection built by the federal government. These new highway design features were integrated with the program of landscape architecture to create a roadway that was safer and faster than an old-style road, but also more pleasant to drive on and more beautiful. When the GWMP was extended north from Memorial Bridge, careful attention was paid to protecting the scenery of the Potomac Gorge and providing views for motorists.

#### D. A MONUMENTAL HIGHWAY

From its beginning the GWMP was imagined as a route for patriotic pilgrims. The need to create a road equal to the dignity and high purpose of the journey to Mount Vernon was central to the road’s planning and design. In the 1920s the existing automobile route went along U.S. Route 1, past billboards, shops, and other commercial development that the GWMP’s planners considered tawdry. It was also a frustrating battle against traffic and other obstacles, not the dignified trip into history and national purpose that the planners envisaged. The GWMP was therefore sealed off from commercialism both by landscaping and by purchasing restrictive covenants on adjacent properties, and its limited access design helped to keep traffic moving smoothly. The GWMP served as a model for how to build other roads with such high purposes.

The GWMP runs through the landscape of commemoration that surrounds the capital, meeting Arlington Memorial Bridge at a traffic circle that also connects to Arlington National Cemetery. Some of the vistas created along the GWMP open views toward other monuments. The GWMP has always been part of this broader landscape of patriotic geometry and it is therefore an obvious place for additional monuments. The first monument within the GWMP not associated with George Washington was the Navy-Marine Memorial, placed on Columbia Island in 1934 (Figure 70). The next was the Lyndon Baines Johnson Grove, dedicated in 1976. Others may follow, since the GWMP is designated as a possible site for monuments in the Memorials and Museums Master Plan and the 1986 Commemorative Works Act.

#### E. THE CIVILIAN CONSERVATION CORPS IN THE PARK

During the Depression the government tried many ways to get people back to work, creating the famous “alphabet soup” of agencies and programs. One of these was the Civilian Conservation Corps. The CCC enrolled young men aged 17 to 23, housed them in camps, and put them to work on construction projects and promoting conservation. Many worked in the National Parks, including the parks in and around Washington, D.C. Twelve CCC camps were constructed in the National Capital Region, beginning in



October 1933 with Camp No. NP-6-VA at Fort Hunt, Virginia. Each camp housed 150 to 200 men. Camp NP-8-VA was opened in 1934 at Arlington Farm, just north of the Memorial Bridge. As with most New Deal programs, the CCC was segregated; nine of the Washington area camps were for whites and three for blacks. Both the Fort Hunt and Arlington Farm camps were white. Projects carried out by the CCC included development of the Roaches Run Waterfowl Sanctuary, archeology on Theodore Roosevelt Island, and construction of trails and picnic areas on the old Leiter Estate within the GWMP (Pfueller and Jacobs 2004).



FIGURE 70: Navy and Marine Memorial Dedicated to Americans Lost at Sea (Kuhn et al. 2017)

## **IX. CONCLUSION**

During this study much of the park was explored by archeologists searching for the remains left by those long-ago people. Over 70 acres were investigated in detail, and 35 new archeological sites were found. The oldest datable artifact found during the survey was a Middle Archaic point dating to around 6000 BC; the most recent had been dropped within the past few years. The remains of these various periods overlap: flakes of stone left by prehistoric tool makers were found while exploring Civil War earthworks, and an early twentieth-century building along Pimmit Run turned out to have been built on an ancient stream terrace that preserves remains from 4000 to 3000 BC. The Alexandria Canal was filled in to build a railroad, which was then buried to build a highway.

From ancient hunter-gatherers to the designers of our modern highways, the George Washington Memorial Parkway preserves a remarkable record of the past. Even where the landscape seems most disturbed, traces of long-ago lives remain, as with Abingdon Plantation on the grounds of Ronald Reagan National Airport and prehistoric camps by the shoulders of a busy highway. Walking the Potomac Heritage trail and other footpaths, it is possible to forget that you are in the midst of a great city and cast your mind back to the past, when ancient Indians, European settlers, and Civil War soldiers passed through these lands.





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