APPENDIX B: WETLANDS REPORT

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WETLAND DELINEATION REPORT

Washington County, MD – Sharpsburg Water Intake Upgrades
Along the Chesapeake and Ohio Canal at mile marker 74.3

Towpath at Mile 74.3

For
National Park Service
U.S. Department of the Interior

By
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TABLE OF CONTENTS

LIST OF FIGURES

1.0 INTRODUCTION

Frederick, Seibert & Associates, Inc. (FSA) has prepared this wetland delineation report for National Park Service U.S. Department of the Interior to document the locations and characteristics of any jurisdictional wetland habitats and "waters of the United States" that exist on the Chesapeake and Ohio Canal National Historical Park (C&O Canal NHP) near mile marker 74.3, the location of the proposed action to replace a water intake pipeline for the Washington County (Maryland) Department of Water Quality Control (DWQC). At this location there is an existing easement used by DWQC for the purpose of a water line that runs from the Potomac River across the canal property to a water treatment plant. This water line provides water for the Town of Sharpsburg, MD. Replacement of the water line within the existing easement is known as Alternative C. There is also a proposed right-of-way (ROW) for a new water line that would replace the existing water line easement. This proposed ROW is known as Alternative B. This delineation covers the Area of Potential Effect (APE) for both Alternatives B and C, as well as Alternative A, which is the No Action Alternative. The following information outlines the review of the published resource materials, existing site conditions, and results of the field investigation.

2.0 SITE DESCRIPTION

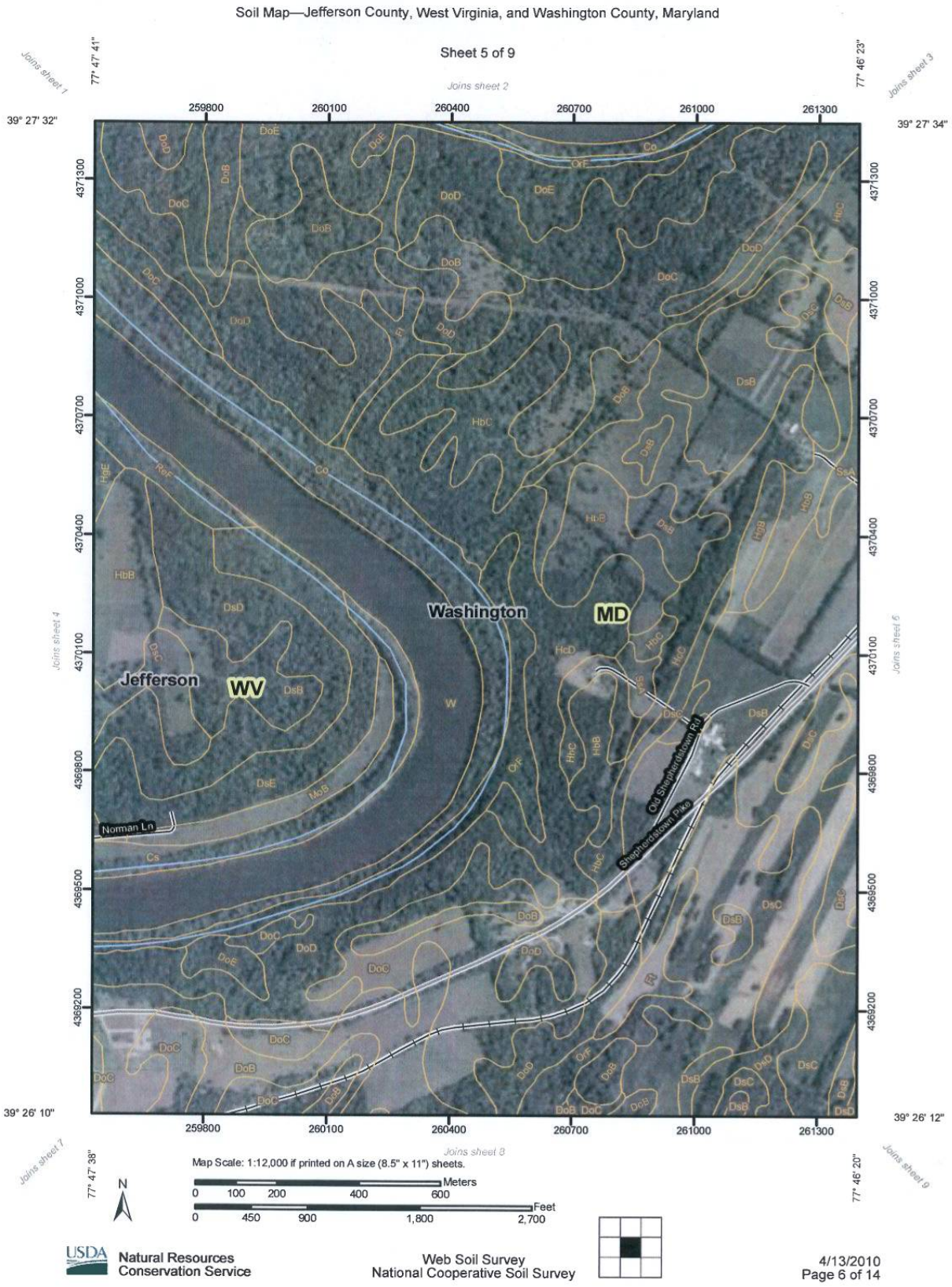
This site is located in Washington County, Maryland just southeast of Sharpsburg, Maryland and appears on the Shepherdstown, West Virginia - Maryland U.S. Geological Survey (USGS) 7.5 minute quadrangles (Latitude N 39°26' 55 " and Longitude W 77° 47' 03"). The area of investigation for the wetland delineation is concentrated along an existing easement over a water line that supplies the Town of Sharpsburg as well as a proposed ROW for a replacement water line. Vegetation consists of a mature forest in the over story and a nice mix of herbaceous cover on the ground. Alternative C crosses a small flowing stream and an intermittent stream. Alternative B and C both cross the prism of the C&O Canal, which is defined as a navigable water of the United States according to 33 CFR 329.9(a),

3.0 METHODS

FSA used the on-site routine criteria outlined in the *Corps of Engineers Wetland Delination Manual* (Environmental Laboratory 1987) in conjunction with the 1992 Regulatory Guidance Letter. The "Areas less than 5-acres in Size" methodology outlined in the 1987 Manual was utilized to document the wetland/watercourse boundaries on the site. This approach recognizes the three parameters of vegetation, soils, and hydrology to identify and delineate wetlands. Data on soils, vegetation, and hydrology were collected on April 21, 2010 during an on-site investigation conducted by a qualified wetland delineator. This methodology requires that this data be collected during the growing season. Dominant species were determined by visually estimating the percent cover of each species within a plot of approximately 30 ft. radius for trees, and a 5 ft. radius for shrubs and herbs and vines. Species nomenclature and wetland indicator status follows that of Woody Plants of Maryland (1972), Newcomb (1977), and Wildflowers (2006) were the major taxonomic references used to identify vegetation species. Hydrophytic species are those wetland plants with indicator statuses of OBL (obligate wetland), FACW (facultative wetland), or FAC (facultative). Species listed as FACU (facultative upland) are more indicative of upland areas and generally do not occur in wetlands. Some species are not considered to be reliable indicators of wetland or upland conditions; these are designated as NI (no indicator). A plus or minus sign indicates the species tend to be at the drier (-) or wetter (+) end of its status category. Soils were examined by using a shovel to a depth of 18 inches or refusal. Soil colors were determined using a Munsell Soil Color Chart. Hydric soils generally have chromas (the denominator of the fraction at the end of the soil color description) of 1 or 0 in unmottled soils or of 2 or less in mottled soils. Mottling or redoximorphic concentrations are the apparent accumulation of Fe and Mn oxides within the soil profile. This feature is usually an indication of periodically, seasonally or permanently saturated soil conditions. Indicators of wetland hydrology (saturated or inundated soils) along with signs of previous prolonged inundation during the growing season were also noted at each sampling location. All wetland habitats were classified according to the U.S. Fish and Wildlife Service, *Classification of Wetland and Deepwater Habitats*

Figure 1. Vicinity Map

Figure 2. Soil Map



of the United States (Cowardin et. al. 1979). Photographs of the non wetlands and adjacent areas are provided in Appendices A, B, and C.

4.0 REVIEW OF EXISTING CONDITIONS

4.1 Topography and Drainage

The site is comprised of flat to moderately sloping topography. Review of the Shepherdstown, West Virginia - Maryland, USGS 7.5-minute quadrangle maps revealed that the existing topography on the site ranges between 280 and 310 feet in elevation above mean sea level. All surface drainage comprised of direct rainfall and occasional flooding on the site is conveyed down slope in a westerly direction into the Potomac River.

4.2 Soil Survey

The Soil Survey of Washington County, MD indicates Combs fine sandy loam, 0-3% slopes (Co), as the soil mapped on the site (Figure 2). Combs Series consists of deep, well drained soils. Permeability is moderate or moderately rapid. These soils formed in recent alluvium eroded from sandstone, shale, siltstone, and limestone. They are on active flood plains along the Potomac River and its smaller tributaries. This soil survey does not list this soil as a hydric soil.

4.3 National Wetlands Inventory Map

A review of the U.S. Fish and Wildlife Service's National Wetland Inventory (NWI) Map for the Shepherdstown, West Virginia - Maryland USGS 7.5-minute quadrangles indicates that no previously identified wetlands are located on the Site. Note that NWI maps are designed for general planning purposes only and typically do not show all the wetland or watercourse resources within any given area.

4.4 Vegetation

The vegetation on the site is comprised primarily of mature trees in the over story, some young woody stems in the lower to mid story, and herbaceous plants on the forest floor. The most common herbaceous plants found on this site are stinging nettle (Urtica dioica), false nettle (Boehmeria cylindrical), Virginia bluebells (Mertensia virginica), catnip (Nepeta catarica), and sweet cicely (Osmorhiza claytonia). The most common trees found were silver maple (Acer saccharinum), Sycamore (Platanus occidentalis), and Box elder (Acer Negundo). The most common under story are Pawpaw (Asimina triloba) and Spicebush (Lindera Benzoin).

5.0 RESULTS AND DISCUSSION

FSA investigation determined that there are no wetlands in the easement area. There is hydrophytic vegetation, but there is no hydrology or hydric soils present in the effected area. This area is a typical floodplain of the Potomac River. The only time hydrology is present is from direct rainfall or an occasional flood. The soils are dark brown (10YR 3/3 to 4/4) down to a depth of 18" or deeper with no sign of hydric conditions. The canal has been drained for years it also has no evidence of wetlands in the area of the easement. (See Topo. Map for location of Soil Test Pits).

5.1 "Waters of the United States"

FSA investigation determined that one watercourse crosses the existing easement (Figure 3 for location and Appendix B for pictures). This stream is identified as "waters of the U.S." and consists of a jurisdictional stream channel that was flowing during the site visit. The C&O Canal is also considered a navigable water of the U. S. as it was navigable historically, but currently is filled with sediment for much of its length. There is another ephemeral channel located at the end of the existing easement (Figure 3 for location and Appendix C for pictures); however, this one is not considered to be a jurisdictional stream channel. There was no water flowing at the time of the site visit. This channel starts at the water treatment plant a flows down to the canal. When reaches the canal it disperse into the bottom of the canal and sheet flows up and down the canal. The water that goes up the canal travels a couple hundred feet then develops a small pool of water. The water that goes down the canal develops into a channel crosses the towpath 400 to 500' down the canal and then flows into the Potomac River. These features are located outside of the APE of the proposed action.

Figure 3. Topographic Map Not to Scale

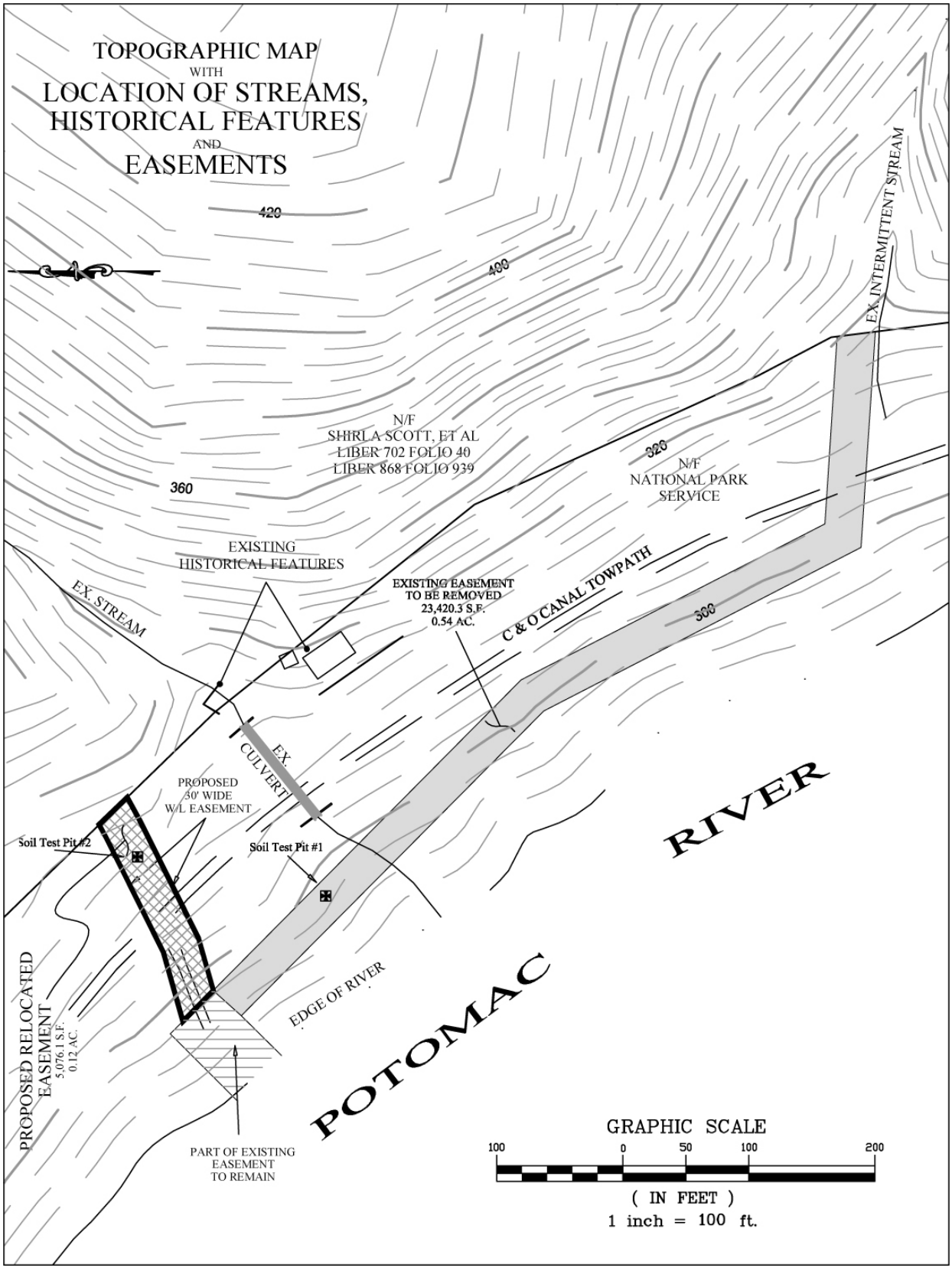


Figure 4: Bottom of Canal at proposed new ROW.

Figure 5: Standing beside utility tower looking south into existing easement.

Figure 6: Stream crossing existing easement.

Figure 7: Stream crossing existing easement.

Figure 8:Canal bottom where existing easement crosses Canal.

Figure 9: Intermittent stream that enters the canal close to existing easement.

Michelle Carter/CHOH/NPS
06/16/2011 07:32 PM

To Michelle Carter/CHOH/NPS@NPS
cc Kevin Noon/DENVER/NPS@NPS, Lynne Wigfield/CHOH/NPS@NPS
bcc
Subject Re: Fw: Statement of Findings for Wetlands - Sharpsburg Water intake project

History: This message has been replied to and forwarded.

Hi Lynne-

Last week Kevin and I spoke about the Sharpsburg Water Line EA. Because of the small area being impacted, and that the actions is replacing/renovating the water line in the same alignment as currently exists (not expanding), this would be considered an excepted action and would not require a Wetland SOF. If we need a specific reference, we can use Section 4.2.1g of the Procedural Manual.

I hope this will answer our question, and allow the project to move forward!

Let me know if you have any questions!
Michelle

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Michelle Carter Hi Kevin- 06/10/2011 08:29:46 AM

Michelle Carter/CHOH/NPS
06/10/2011 08:29 AM

To Kevin Noon/DENVER/NPS
cc Lynne Wigfield/CHOH/NPS@NPS
Subject Fw: Statement of Findings for Wetlands - Sharpsburg Water intake project

Hi Kevin-

We need to check with you on the need for a wetlands SOF for an EA the park is working on. Below you will see a response from our contractor, explaining the potential disturbance that is expected, as described in the EA. I have put the description of impacts in bold at the bottom, but suggest you read through the entire email for any background information. Our understanding is that the small impact we are expecting would not require an SOF, but we appreciate your review.

I'll be available by cell phone this morning if you have questions (301.491.2742) and back in the office this afternoon.

Thank you for your time!
Michelle

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