

## Executive Summary

The *Pohick Creek Watershed Management Plan* illustrates an approach for improving the water resources, natural habitat and overall health of the watershed. The plan was initiated by Fairfax County with participation from local residents and is part of the comprehensive, countywide watershed planning effort. The previous watershed plans were developed in the mid-1970s and intended to span a 25-year period. Since then the practice of stormwater/watershed management has rapidly evolved to include newer technologies and innovative techniques. Also within this time period, there have been many regulatory changes governing water quality at the local, state and federal levels. This plan is intended as a management tool to be used over the next 25 years and fulfills Fairfax County's commitment to the multi-jurisdictional effort of improving water quality in the Chesapeake Bay.

The *Pohick Creek Watershed Management Plan* was developed to meet the following countywide watershed planning goals established by the County through intensive stakeholder and resident input:

1. Improve and maintain watershed functions in Fairfax County, including water quality, habitat and hydrology.
2. Protect human health, safety and property by reducing stormwater impacts.
3. Involve stakeholders in the protection, maintenance and restoration of County watersheds.

### Background

The Pohick Creek watershed makes up more than 9 percent of Fairfax County and covers more than 36 square miles, which makes it one of the largest watersheds in the County. Approximately 3.2 square miles lie outside Fairfax County, either in the city of Fairfax or Fort Belvoir. The watershed is located in the central and southern part of the County. It is oriented northwest to southeast and is a tributary to the Potomac River. The watershed falls 460 feet in elevation from the highest point near the city of Fairfax in the northeast section to sea level at the southeast point (Flood Plain report, 1977).

According to the 2001 National Land Cover dataset, less than 40% of the Pohick Creek watershed is forested, with approximately 25 percent of the watershed serving low-density residential uses. Fairfax County's population is expected to grow more than 37 percent over the next 20 years. The Pohick Creek watershed is considered built-out, and future large-scale development is not anticipated outside of the Laurel Hill redevelopment (formerly District of Columbia Department of Corrections Facility, located in Lorton). A separate stormwater management plan for the Laurel Hill property is concurrently being developed by the County. The *Pohick Creek Watershed Management Plan* is a tool used to respond to the effects of past rapid growth and to proactively respond to the future growth within the watershed.

### Watershed Management Areas

Pohick Creek watershed is divided into 10 smaller watershed management areas (WMAs). A WMA is a small area, approximately 4 square miles, which drains to a specific stream or tributary. Each WMA is then divided into smaller subwatersheds, typically 100 to 300 acres. The purpose of these areas is to identify specific projects or opportunities to enhance the overall stream conditions, as well as to serve the basic units for watershed modeling and other

evaluations. Pohick Creek's 10 watershed management areas are Rabbit Branch, Sideburn Branch, Upper South Run, Middle South Run, Lower South Run, Middle Run, Upper, Middle, Lower, and Potomac.

### **Watershed Planning Process**

In general the watershed management planning process consists of the following steps:

1. Review and synthesize previous studies and compile data.
2. Involve public to gain input, provide education and build community support.
3. Evaluate current watershed conditions and project stormwater runoff from present and ultimate development conditions.
4. Develop candidate non-structural and structural watershed improvement projects.
5. Develop preliminary cost estimates, cost/benefit analysis and prioritization of capital projects.
6. Gain adoption of the final watershed management plan by the Board of Supervisors.

Several indicators were identified to detect changes in the watershed. The main categories of indicators are watershed impact indicators, watershed source indicators and programmatic indicators. These indicators were first used to assess the existing conditions and the future conditions without plan implementation in the watershed. Next they were used to identify management needs and problem areas during subwatershed ranking. Finally, the indicators were used to prioritize projects, along with cost and feasibility.

The subwatersheds were ranked by the following procedure:

1. Using the watershed impact overall composite scores to identify subwatersheds that were potential problem areas under existing and future conditions.
2. Applying individual source indicator scores to identify potential sources of impacts in downstream problem areas.
3. Using the programmatic indicator data inventory to identify subwatersheds where management is most needed.
4. Consulting available field data throughout the previous steps to confirm the results.

### **Summary of Existing Watershed Conditions**

Overall the County stream habitats were rated by the 2001 SPS as "fair." Pohick Creek watershed had an average length-weighted total habitat score of 95 out of 200, which is slightly below the county average of 104. Within the Pohick Creek watershed, 0 percent of stream length was categorized as "excellent," 14.63 percent as "good," 53.88 percent as "fair," 28.08 percent as "poor," and 3.41 percent as "very poor." A complete summary of watershed conditions may be found in Appendix A

The County's Chesapeake Bay Preservation Ordinance establishes Resource Protection Areas (RPA) to improve the quality of streams and water draining to local waterways and, ultimately, the Chesapeake Bay. These RPAs include buffers that protect sensitive areas adjacent to or within proximity to streams, rivers and other waterways. More than 75 percent of the streams within Pohick Creek lie within an RPA. Many of the smaller headwater streams have had natural channels replaced by pipes as the watershed developed over the last several decades.

There are six PL-566 lakes in the watershed, constructed for flood control; these are Woodglen, Royal, Braddock, Barton, Huntsman and Mercer Lakes. To meet the standards of the Clean Water Act, the County and Virginia Department of Environmental Quality regularly monitor water quality at various locations throughout the watershed. Results of this monitoring show that streams in the upper watershed can generally be classified as “fair” while those areas lower in the watershed, downstream of the lakes, are impaired by one or more measures of water quality. This degradation of the water quality is due to compounding of the pollutants as the water flows downstream. These lakes receive large amounts of sediment from upstream sources. Also, due to the silted nature of the lakes, their conditions may negatively impact water quality (e.g. E. coli from water fowl). For these reasons, these facilities were identified as areas for further studies to determine possible management opportunities to improve water quality. These studies would investigate the benefits of dredging these lakes, installing sediment forebays, and other practices.

The 2005 Fairfax County Stream Physical Assessment (2005 SPA) found that nearly 75 percent of the stream channels in Pohick Creek watershed show signs of heavy erosion. This erosion has caused, steep banks, bank failures, channel widening and deepening. The channel evolution model (CEM) (Schumm et al. 1984) classifies streams with these characteristics as Stage III for stream morphology. Stage III streams are the most unstable and typically generate the most issues.

### **Project Selection**

Several types of both structural and non-structural projects were selected for this watershed restoration plan. The structural projects include but may not be limited to stream restorations, pipe daylighting, stormwater pond retrofits, outfall improvements, swale restorations, bioswales, bioretention areas, BMP inlet inserts and pervious pavement. The non-structural projects include but may not be limited to rain barrels/cisterns, street sweeping, obstruction/dumpsite removal and buffer restorations.

Projects were proposed throughout the watershed that would help meet the County’s goals and objectives. Projects to improve watershed functions were proposed in subwatersheds with the worst indicator scores. Additional projects were proposed throughout the watershed that would increase stewardship and maintain important watershed functions. Projects were selected by comparing the lowest scoring impact indicators to the types of proposed projects to ensure projects would provide the most benefit within each subwatershed. The proposed projects were then presented at the watershed advisory group (WAG) meetings for community input. This input was taken into consideration while finalizing project selection and during the score adjustment procedure.

All unconstructed regional ponds from the County’s current Regional Pond Program were evaluated to determine whether alternative projects could be implemented instead of constructing a new pond. Eight regional ponds were proposed for the portion of Pohick Creek that drains to Burke Lake. Of the eight projects, five have alternative projects proposed and two have been constructed. One is an active County project that is partially funded and, therefore, no alternative projects have been proposed.

Following preliminary project selection, field investigations were performed for the candidate project sites. The purpose of the field investigations was to document site conditions, check for feasibility and take photos. The information was then compiled in a database. The information was used for the prioritization and to support ranking modifications.

Cost estimates were generated for all project types except street sweeping, rain barrels and cisterns, because their costs can be widely variable. Smaller projects were grouped together into “suites,” based on cost and location, to allow their costs and benefits to be compared more evenly to other projects.

### **Project Prioritization**

The *Pohick Creek Watershed Management Plan* implementation is broken into two priority phases. The first phase has a 0 – 10-year timeframe and includes the top-ranked 90 structural projects. The second phase has an 11 – 25-year timeframe and includes all other viable structural projects (64 total). The structural projects were prioritized based on five factors: impact indicators, source indicators, priority subwatersheds, sequencing and implementability. These factors were used to create prioritization scores for each project so that they could then be ranked. Once the projects were quantitatively ranked, they were qualitatively reviewed. The qualitative review involved going through every project and considering factors that aren’t quantitatively considered, such as comments provided by the WAG, field observations and the ability for the project to meet the County’s goals. A best professional judgment adjustment is added to the initial score to determine the final score. The non-structural projects were similarly compared when possible.

A simplified cost-benefit analysis was performed on the structural projects in the 0 – 10-year implementation plan based on a project’s overall cost compared to its prioritization score (i.e., benefits). As a result the ranking changed and some projects dropped to the 11 – 25-year implementation plan. A best professional judgment adjustment based on the cost-benefit analysis was used to amend the rankings where necessary. This determined the final overall ranking of structural projects.

The 36 non-structural projects were ranked separately since they will be implemented concurrently with the capital improvement of the structural projects. The non-structural projects were ranked using a different more qualitative method than the structural project ranking scheme. A detailed description of the project selection and prioritization process can be found in Appendix B.

### **Project Fact Sheets**

For all structural projects that fall into the 0 - 10-year plan, a project fact sheet was created to provide basic information about location, existing conditions and proposed improvements. The project fact sheets also discuss the benefits and have itemized, planning-level cost estimates. They are illustrated with site photos as well as location maps. Projects that were grouped together, or put into a “suite,” are combined on one fact sheet.

### **Public Involvement**

A WAG was formed to help provide feedback from residents of the watershed. The group was assembled from a variety of organizations, including members of homeowners associations, affiliates of Fort Belvoir, George Mason University, and other public and private organizations. This group acted as proxy for their respective organizations and helped to disseminate information from the process. The group met with County staff and their consultants five times throughout the different stages of the process to provide feedback, which was an essential part of the planning and prioritization process.

Table ES-1-1 provides a list of all projects proposed within Pohick Creek watershed. This includes the 0 – 10- (10-year) and 11 – 25-year (25-year) structural project groups as well as the non-structural projects.

### Plan Costs and Benefits

The total cost of the 10-year plan (includes the 90 structural projects only) is \$48 million. If implemented, the benefits to the county are wide-ranging. The yearly total suspended sediment load will be reduced by 1,200 tons. The yearly load of nitrogen will be reduced by 3,000 pounds, and the yearly load of phosphorus will be reduced by 1,000 pounds. This represents a 15.2% reduction in suspended sediment, a 2.4% reduction in nitrogen, and a 4.6% reduction in phosphorus. If the 64 structural projects in the 11-25 year plan are implemented as well, at a cost of \$48 million, the suspended sediment load will be reduced by an additional 440 tons. The yearly load of nitrogen will be reduced by an additional 1,000 pounds, and the yearly load of phosphorus will be reduced by an additional 300 pounds. Implementation of the total group of 155 structural projects at a cost of \$96 million will yield reductions of 1,700 tons of suspended sediment, 4,000 pounds of nitrogen, and 1,300 pounds of phosphorus yearly. This represents a 20.6% reduction in sediment, a 3.3% reduction in nitrogen, and a 6.2% reduction in phosphorus. Additionally, the 41 non-structural projects will have water quality benefits as well, although the costs and benefits of these projects are less easily quantified. These benefits will help attain the goals set by the County to improve water quality in the Pohick Creek watershed.

The following provisions address the funding and implementation of projects and programs in Fairfax County watershed plans. These provisions as recommended by the Board were developed for the Popes Head Creek Watershed Management Plan in February 2006 and have been applied to the Pohick Creek Watershed Management Plan:

- i. Projects and programs (both structural and non-structural) will first undergo appropriate review by County staff and the Board (please see iii below) prior to implementation. Board adoption of the Watershed Management Plan will not set into motion automatic implementation of projects, programs or initiatives that have not first been subject to sufficient scrutiny to ensure that the projects that are funded give the County the greatest environmental benefit for the cost.
- ii. Road projects not related to protection of streambeds or banks or water quality will not be funded out of the stormwater and watershed budget.
- iii. The Watershed Management Plan provides a conceptual master-list of structural capital projects and a list of potential non-structural projects for the watershed. Staff will, on a fiscal year basis, prepare and submit to the Board a detailed work plan to include a description of proposed projects and an explanation of their ranking, based on specific criteria. Criteria used to assemble this list will include, but are not limited to, cost-effectiveness as compared to alternative projects, a clear public benefit, a need to protect public or private lands from erosion or flooding, a need to meet a specific watershed or water quality goal, and ability to be implemented within the same fiscal year that funding is provided. Staff also intends to track the progress of implementation and report back to the Board periodically.
- iv. Each project on the annual list of structural projects will be evaluated using basic value-engineering cost effectiveness principles before implementation and the consideration of alternative structural and non-structural means for accomplishing the purposes of the

project will be considered before implementation. This process will ensure the County's commitment to being a fiscally responsible public entity.

- v. Obstruction removal projects on private lands will be evaluated on a case-by-case basis for referral to the Zoning Administrator and/or County Attorney for action as public nuisances; and otherwise to determine appropriate cost-sharing by any parties responsible for the obstructions.
- vi. Stream restoration projects on private lands will be evaluated to determine means for cost-sharing by land owners directly responsible for degradation due to their land uses.

**Table ES-1-1: Project List - Executive Summary**

<b>Priority Structural Projects (Ten Year Implementation Plan)<sup>1</sup></b>				
<b>Project #</b>	<b>Project Type</b>	<b>WMA</b>	<b>Location</b>	<b>Cost</b>
PC9003	Regional Pond Alternative/Stormwater Pond Retrofit	Pohick-Upper South Run	Next to 6424 Lake Meadow Dr.	\$ 320,000
PC9004	Regional Pond Alternative/Stormwater Pond Retrofit Suite	Pohick-Upper South Run	10125 Lakehaven Ct.	\$ 1,330,000
PC9007	Regional Pond Alternative/Stormwater Pond Retrofit	Pohick-Upper South Run	Behind 6416 Lake Meadow Dr.	\$ 210,000
PC9008	Regional Pond Alternative/Stormwater Pond Retrofit	Pohick-Upper South Run	Next to 10995 Rice Field Pl.	\$ 610,000
PC9100	Stormwater Pond Retrofit	Pohick-Lower	9515 Richmond Hwy., Lorton Athletic Fields	\$ 300,000
PC9101	Stormwater Pond Retrofit	Pohick-Lower	9409 Lorton Market St., Lorton Marketplace Shopping Center	\$ 270,000
PC9102	Stormwater Pond Retrofit	Pohick-Lower	9399 Richmond Hwy., Norman M. Cole WWTP	\$ 180,000
PC9103	Stormwater Pond Retrofit	Pohick-Lower	7665 Lorton Rd., Gunston Shopping Plaza	\$ 120,000
PC9104	Stormwater Pond Retrofit	Pohick-Lower	7665 Lorton Rd., Gunston Shopping Plaza	\$ 120,000
PC9105	Stormwater Pond Retrofit	Pohick-Lower	Behind 7747 Milford Haven Ct.	\$ 310,000
PC9106	Stormwater Pond Retrofit	Pohick-Lower South Run	8501 Silverbrook Rd., South County Secondary School	\$ 450,000
PC9107	Stormwater Pond Retrofit	Pohick-Middle	8111 Northumberland Rd., Saratoga Elementary School	\$ 180,000
PC9109	Stormwater Pond Retrofit	Pohick-Middle Run	8750 Pohick Rd., St. Raymond's - Penafort Catholic Church	\$ 220,000
PC9110	Stormwater Pond Retrofit	Pohick-Middle South Run	9908 South Park Ci.	\$ 520,000
PC9114	Stormwater Pond Retrofit	Pohick-Middle Run	7420 Reservation Dr., Sangster Elementary School	\$ 120,000

<sup>1</sup> Only 10-yr structural projects will have associated project fact sheets at the end of section 5.

<b>Priority Structural Projects (Ten Year Implementation Plan)<sup>1</sup></b>				
<b>Project #</b>	<b>Project Type</b>	<b>WMA</b>	<b>Location</b>	<b>Cost</b>
PC9118	Stormwater Pond Retrofit	Pohick-Middle Run	Behind 9500 Shipwright Dr.	\$ 390,000
PC9120	Stormwater Pond Retrofit	Pohick-Middle Run	Behind 9505 Southern Cross La.	\$ 640,000
PC9121	Stormwater Pond Retrofit	Pohick-Upper South Run	9900 Old Keene Mill Rd. , Burke Community Church	\$ 170,000
PC9122	Stormwater Pond Retrofit	Pohick-Middle	Between Field Master Dr. & Huntsman Blvd.	\$ 390,000
PC9124	Stormwater Pond Retrofit	Pohick-Upper South Run	6401 Missionary La., Fairfax Baptist Temple Academy	\$ 600,000
PC9126	Stormwater Pond Retrofit	Pohick-Upper	16130 Shiplett Blvd., White Oaks Elementary School	\$ 170,000
PC9127	Stormwater Pond Retrofit	Pohick-Sideburn Branch	Next to 6000 Burke Centre Pky., near Terre Centre Elementary School	\$ 550,000
PC9128	Stormwater Pond Retrofit	Pohick-Sideburn Branch	6000 Burke Commons Rd., Wal-Mart Supercenter	\$ 240,000
PC9129	Stormwater Pond Retrofit	Pohick-Sideburn Branch	6000 Freds Oak Rd., Fairfax Co. Wastewater Collection	\$ 280,000
PC9130	Stormwater Pond Retrofit	Pohick-Sideburn Branch	10301 New Guinea Rd., Target shopping center	\$ 230,000
PC9131	Stormwater Pond Retrofit	Pohick-Sideburn Branch	Behind 10268 Colony Park Dr.	\$ 210,000
PC9132	Stormwater Pond Retrofit	Pohick-Upper	Behind 9713 Lakepointe Dr.	\$ 470,000
PC9133	Stormwater Pond Retrofit	Pohick-Upper	9200 Burke Lake Rd., Lake Braddock Secondary School	\$ 120,000
PC9135	Stormwater Pond Retrofit	Pohick-Rabbit Branch	Behind 5220 Nottinghill La., Pond along Roberts Rd.	\$ 540,000
PC9136	Stormwater Pond Retrofit	Pohick-Upper	Behind 5120 Dahlgreen Pl., Playground	\$ 190,000

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<b>Priority Structural Projects (Ten Year Implementation Plan)<sup>1</sup></b>				
<b>Project #</b>	<b>Project Type</b>	<b>WMA</b>	<b>Location</b>	<b>Cost</b>
PC9138	Stormwater Pond Retrofit	Pohick-Rabbit Branch	Behind 10305 Nantucket Ct.	\$ 140,000
PC9139	Stormwater Pond Retrofit	Pohick-Sideburn Branch	10697 Braddock Rd., University Mall Shopping Center	\$ 220,000
PC9140	Stormwater Pond Retrofit	Pohick-Rabbit Branch	Intersection of Mason Pond Dr. and Roanoke River La.	\$ 260,000
PC9142	New Stormwater Pond	Pohick-Rabbit Branch	Northwest of intersection of Roberts Road and Braddock Road	\$ 1,470,000
PC9201	Stream Restoration	Pohick-Middle	Behind 7756 Matisse Way	\$ 1,480,000
PC9202	Stream Restoration Suite	Pohick-Lower South Run	Behind 8181 Willowdale Ct., South Run Stream Valley Park	\$ 1,120,000
PC9203	Stream Restoration	Pohick-Middle	8100 Lake Pleasant Dr.	\$ 680,000
PC9204	Stream Restoration	Pohick-Lower South Run	Next to 8661 Rising Creek Ct.	\$ 180,000
PC9205	Stream Restoration	Pohick-Middle	Behind 8106 Kings Point Ct.	\$ 160,000
PC9206	Stream Restoration	Pohick-Middle	Next to 8021 Lake Pleasant Dr.	\$ 140,000
PC9210	Stream Restoration	Pohick-Middle South Run	Behind 7801 Preakness La.	\$ 1,380,000
PC9211	Stream Restoration Suite	Pohick-Middle	Near 8000 Middlewood Pl.	\$ 310,000
PC9214	Stream Restoration	Pohick-Middle Run	Behind 7309 Gist Ct.	\$ 700,000
PC9222	Stream Restoration	Pohick-Middle	Behind 8817 Bridle Wood Dr.	\$ 1,260,000
PC9223	Stream Restoration	Pohick-Upper South Run	Between Waterside Dr. & Burke Woods Dr.	\$ 530,000
PC9225	Stream Restoration	Pohick-Middle	Next to 6297 Kerrydale Dr.	\$ 940,000

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<b>Project #</b>	<b>Project Type</b>	<b>WMA</b>	<b>Location</b>	<b>Cost</b>
PC9226	Stream Restoration	Pohick-Middle	Behind 6321 Hillside Rd.	\$ 1,010,000
PC9227	Stream Restoration	Pohick-Upper	Behind 9500 Orion Ct.	\$ 90,000
PC9228	Stream Restoration Suite	Pohick-Upper	Behind 6300 Glenbard Rd.	\$ 1,560,000
PC9229	Stream Restoration Suite	Pohick-Middle	Behind 8901 Winding Hollow Way	\$ 1,680,000
PC9230	Stream Restoration	Pohick-Upper	Behind 9820 Rand Dr.	\$ 610,000
PC9234	Stream Restoration	Pohick-Upper	Behind 9840 Natick Rd.	\$ 1,270,000
PC9235	Stream Restoration	Pohick-Upper	Behind 5913 Veranda Dr.	\$ 130,000
PC9236	Stream Restoration	Pohick-Sideburn Branch	Across the street from 5901 Fred's Oak Rd.	\$ 190,000
PC9237	Stream Restoration	Pohick-Sideburn Branch	Behind 10550 Reeds Landing Ct.	\$ 580,000
PC9239	Stream Restoration	Pohick-Sideburn Branch	Next to 5914 Cove Landing Rd.	\$ 90,000
PC9240	Stream Restoration	Pohick-Sideburn Branch	Near 5901 Waters Edge Landing La.	\$ 860,000
PC9241	Stream Restoration	Pohick-Sideburn Branch	Behind 10734 Burr Oak Way	\$ 920,000
PC9242	Stream Restoration	Pohick-Upper	Behind 5753 Burke Towne Ct.	\$ 1,160,000
PC9245	Stream Restoration	Pohick-Upper	5621 Herbert's Crossing Dr.	\$ 860,000
PC9246	Stream Restoration	Pohick-Sideburn Branch	Behind 6001 Burke Commons Rd.	\$ 750,000
PC9247	Stream Restoration Suite	Pohick-Sideburn Branch	10400 Premier Ct.	\$ 540,000
PC9249	Stream Restoration	Pohick-Upper	Behind 5565 Queen Victoria Ct.	\$ 1,990,000

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<b>Priority Structural Projects (Ten Year Implementation Plan)<sup>1</sup></b>				
<b>Project #</b>	<b>Project Type</b>	<b>WMA</b>	<b>Location</b>	<b>Cost</b>
PC9250	Stream Restoration	Pohick-Sideburn Branch	Behind 10602 Goldeneye La.	\$ 1,000,000
PC9251	Stream Restoration	Pohick-Upper	Behind 9313 Winbourne Rd.	\$ 520,000
PC9252	Stream Restoration	Pohick-Upper	Next to 9535 Wallingford Dr.	\$ 380,000
PC9254	Stream Restoration	Pohick-Sideburn Branch	Behind 10757 John Turley Pl.	\$ 1,050,000
PC9256	Stream Restoration	Pohick-Rabbit Branch	Behind 5351 Brandon Ridge Way	\$ 1,100,000
PC9257	Stream Restoration	Pohick-Upper	Next to 9404 Fairleigh Ct.	\$ 340,000
PC9258	Stream Restoration	Pohick-Upper	Next to 5101 Dahlgreen Pl.	\$ 110,000
PC9259	Stream Restoration	Pohick-Rabbit Branch	Behind 5220 Nottinghill La.	\$ 800,000
PC9260	Stream Restoration	Pohick-Rabbit Branch	Near 9800 Commonwealth Blvd.	\$ 1,100,000
PC9261	Stream Restoration	Pohick-Sideburn Branch	Behind 5282 Beech Haven Ct.	\$ 720,000
PC9262	Stream Restoration	Pohick-Sideburn Branch	Behind 5214 Grinnell St.	\$ 1,520,000
PC9263	Stream Restoration	Pohick-Rabbit Branch	Behind 5802 Dequincey Dr.	\$ 800,000
PC9269	Stream Restoration	Pohick-Rabbit Branch	Next to 10159 Red Spruce Rd.	\$ 680,000
PC9515	BMP/LID Suite	Pohick-Middle Run	6820 Sydenstricker Rd., Orange Hunt Elementary School	\$ 260,000
PC9517	BMP/LID Suite	Pohick-Middle Run	9732 Ironmaster Dr., Cherry Run Elementary School	\$ 160,000

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<b>Priority Structural Projects (Ten Year Implementation Plan)<sup>1</sup></b>				
<b>Project #</b>	<b>Project Type</b>	<b>WMA</b>	<b>Location</b>	<b>Cost</b>
PC9525	BMP/LID	Pohick-Upper	9230 Old Keene Mill Rd., Rolling Valley Mall	\$ 180,000
PC9531	BMP/LID Suite	Pohick-Sideburn Branch	6000 Burke Centre Pkwy., Terra Centre Elementary School	\$ 120,000
PC9534	BMP/LID	Pohick-Sideburn Branch	6011 Burke Centre Pkwy., Giant Supermarket	\$ 140,000
PC9535	BMP/LID	Pohick-Sideburn Branch	6000 Freds Oak Rd., FFC Wastewater Collection Division Office Bldg.	\$ 130,000
PC9539	BMP/LID	Pohick-Sideburn Branch	5727 Burke Center Pkwy., Burke Center Shopping Center	\$ 120,000
PC9544	BMP/LID Suite	Pohick-Upper	9450 Lake Braddock Dr., Lake Braddock Park	\$ 120,000
PC9548	BMP/LID	Pohick-Rabbit Branch	9525 Braddock Rd., Twinbrooke Shopping Center	\$ 140,000
PC9701	Outfall Improvement	Pohick-Lower	7747 Milford Haven Ct.	\$ 80,000
PC9702	Outfall Improvement	Pohick-Sideburn Branch	5815 Ox Rd., Fairview Elementary	\$ 80,000
PC9703	Outfall Improvement	Pohick-Sideburn Branch	5637 Guinea Rd.	\$ 110,000
PC9704	Outfall Improvement	Pohick-Upper	Next to 9199 Lake Braddock Dr.	\$ 540,000
PC9705	Outfall Improvement	Pohick-Sideburn Branch	Next to pool at 5601 Snowy Owl Dr.	\$ 80,000
<b>Total Cost</b>				<b>\$48,090,000</b>
<b>Long-Term Structural Projects (25 Year Implementation Plan)<sup>1</sup></b>				
<b>Project #</b>	<b>Project Type</b>	<b>WMA</b>	<b>Location</b>	
PC9001	Regional Pond Alternative/Stormwater Pond Retrofit Suite	Pohick-Upper South Run	Across from 10503 Pohick Ct., Church of Latter Day Saints	
PC9108	Stormwater Pond Retrofit	Pohick-Middle South Run	Behind 7278 Lakeland Valley Dr.	

<sup>1</sup> Only 10-yr structural projects will have associated project fact sheets at the end of section 5.

<b>Long-Term Structural Projects (25 Year Implementation Plan)<sup>1</sup></b>			
<b>Project #</b>	<b>Project Type</b>	<b>WMA</b>	<b>Location</b>
PC9111	Stormwater Pond Retrofit	Pohick-Middle	8110 Deer Creek Pl.
PC9112	Stormwater Pond Retrofit	Pohick-Middle Run	Behind 8874 Eagle Rock La.
PC9113	Stormwater Pond Retrofit	Pohick-Middle	Behind 7439 Quincy Hall Ct.
PC9115	Stormwater Pond Retrofit	Pohick-Middle	Behind 8032 Bethelen Woods La.
PC9116	Stormwater Pond Retrofit	Pohick-Middle	Behind 73919 Walnut Knoll Dr.
PC9117	Stormwater Pond Retrofit	Pohick-Middle	Across from 7320 Gambrill Rd., Commuter lot
PC9119	Stormwater Pond Retrofit	Pohick-Middle	Behind 7106 Hadlow Ct.
PC9123	Stormwater Pond Retrofit	Pohick-Middle Run	6450 Sydenstricker Rd., near Pohick Regional Library
PC9125	Stormwater Pond Retrofit	Pohick-Upper	Behind 6301 Wilmington Dr.
PC9134	Stormwater Pond Retrofit	Pohick-Sideburn Branch	5222 Sideburn Rd., St. Mary's Church
PC9137	Stormwater Pond Retrofit	Pohick-Rabbit Branch	Behind 9463 Wenzel St.
PC9141	New Stormwater Pond	Pohick-Upper	Behind 5550 Queen Victoria Ct.
PC9200	Stream Restoration	Pohick-Middle	Behind 7800 Creekside View La.
PC9207	Stream Restoration	Pohick-Middle South Run	Along access road next to 7719 Wagon Trail La.
PC9208	Stream Restoration	Pohick-Middle South Run	Next to 9245 Northedge Dr.
PC9209	Stream Restoration	Pohick-Middle	Behind 8154 Ships Curve La.
PC9212	Stream Restoration	Pohick-Middle South Run	Behind 4312 South View Ct.
PC9213	Stream Restoration	Pohick-Middle	Behind 7500 Ridgebrook Dr.

<sup>1</sup> Only 10-yr structural projects will have associated project fact sheets at the end of section 5.

<b>Long-Term Structural Projects (25 Year Implementation Plan)<sup>1</sup></b>			
<b>Project #</b>	<b>Project Type</b>	<b>WMA</b>	<b>Location</b>
PC9215	Stream Restoration	Pohick-Middle Run	Behind 9111 Beachway La.
PC9216	Stream Restoration	Pohick-Middle	Behind 8098 Whitlers Creek Ct.
PC9217	Stream Restoration	Pohick-Middle	Behind 8084 Whitlers Creek Rd.
PC9218	Stream Restoration	Pohick-Middle	Behind 7211 Olde Lantern Way
PC9219	Stream Restoration	Pohick-Upper South Run	Northwest of Old Keene Mill Rd. & Fairfax Co. Pkwy.
PC9220	Stream Restoration	Pohick-Upper South Run	Behind 6803 Jeremiah Ct.
PC9221	Stream Restoration	Pohick-Upper South Run	Along Fairfax County Pkwy. behind Deckhand Dr.
PC9224	Stream Restoration	Pohick-Upper South Run	East of Ox Croft Ct.
PC9232	Stream Restoration	Pohick-Upper	Behind 9623 Woodedge Dr.
PC9233	Stream Restoration	Pohick-Upper	Near intersection of Burke Rd. and Heritage Square Rd.
PC9243	Stream Restoration	Pohick-Sideburn Branch	Behind 5832 First Landing Way
PC9248	Stream Restoration	Pohick-Rabbit Branch	Along RR tracks near 5610 Sandy Lewis Dr.
PC9255	Stream Restoration	Pohick-Upper	Behind 5208 Olley La.
PC9265	Stream Restoration	Pohick-Rabbit Branch	Behind 10156 Bessmer La.
PC9266	Stream Restoration	Pohick-Rabbit Branch	Behind 9733 Abington Ct.
PC9267	Stream Restoration	Pohick-Rabbit Branch	9911 Braddock Rd., near Braddock Rd. Hospital

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<b>Long-Term Structural Projects (25 Year Implementation Plan)<sup>1</sup></b>			
<b>Project #</b>	<b>Project Type</b>	<b>WMA</b>	<b>Location</b>
PC9268	Stream Restoration	Pohick-Rabbit Branch	Behind 4613 Tapestry Dr.
PC9500	BMP/LID	Pohick-Lower	9515 Richmond Hwy., Lorton Athletic Fields
PC9501	BMP/LID	Pohick-Lower	9399 Richmond Hwy., Norman M. Cole WWTP
PC9502	BMP/LID	Pohick-Lower	8101 Lorton Rd., Lorton Elementary School
PC9503	BMP/LID	Pohick-Lower	9290 Lewis Chapel Rd., Lorton Station Elementary School
PC9505	BMP/LID	Pohick-Lower	9290 Lewis Chapel Rd., Lorton Station Elementary School
PC9508	BMP/LID Suite	Pohick-Lower South Run	8001 Newington Forest Ave., Newington Forest Elementary School
PC9510	BMP/LID Suite	Pohick-Middle South Run	7549 Reservation Dr., South Run Recreation Center
PC9511	BMP/LID	Pohick-Middle Run	7500 Huntsman Blvd., Huntsman Square Shopping Center
PC9519	BMP/LID Suite	Pohick-Middle	6703 Barnack Dr., Rolling Valley Elementary School
PC9521	BMP/LID	Pohick-Middle	6703 Barnack Dr., Rolling Valley Elementary School
PC9522	BMP/LID	Pohick-Middle	8600 Bridle Wood Dr., Orange Hunt Pool
PC9524	BMP/LID	Pohick-Middle Run	6938 Nativity La., School of the Nativity (Church)
PC9526	BMP/LID	Pohick-Upper South Run	6401 Missionary La., Fairfax Baptist Temple Academy
PC9528	BMP/LID	Pohick-Upper	9654 Burke Lake Rd., Burke Center School
PC9529	BMP/LID	Pohick-Middle	6100 Rolling Rd., West Springfield High School
PC9532	BMP/LID	Pohick-Middle	6100 Rolling Rd., West Springfield High School
PC9536	BMP/LID Suite	Pohick-Sideburn Branch	6001 Cove Landing Rd., Landings Community Center

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<b>Long-Term Structural Projects (25 Year Implementation Plan)<sup>1</sup></b>			
<b>Project #</b>	<b>Project Type</b>	<b>WMA</b>	<b>Location</b>
PC9537	BMP/LID	Pohick-Upper	9016 Burke Rd., VA Railway Exp. - Rolling Rd. Station
PC9540	BMP/LID Suite	Pohick-Sideburn Branch	5240 Sideburn Rd., Bonnie Brae Elementary School
PC9542	BMP/LID Suite	Pohick-Upper	9200 Burke Lake Rd., Lake Braddock Secondary School
PC9543	BMP/LID	Pohick-Upper	9333 Lake Braddock Rd., Lakeside Pool - Lake Braddock C.A.
PC9546	BMP/LID Suite	Pohick-Rabbit Branch	10110 Commonwealth Blvd., Laurel Ridge Elementary School
PC9547	BMP/LID	Pohick-Rabbit Branch	5035 Sideburn Rd., Robinson Secondary School
PC9549	BMP/LID	Pohick-Rabbit Branch	5035 Sideburn Rd., Robinson Secondary School
PC9550	BMP/LID Suite	Pohick-Sideburn Branch	5004 Sideburn Rd., Oak View Elementary School
PC9553	BMP/LID	Pohick-Rabbit Branch	Intersection of Patriot Ci. and Sandy Creek Way, George Mason University Parking Garage
PC9554	BMP/LID	Pohick-Rabbit Branch	Between Mason Pond Dr. and George Mason Blvd. (Parking Garage)
PC9700	Outfall Improvement	Pohick-Lower	9298 Lewis Chapel Rd., Lorton Station Elementary School
<b>Non-Structural Projects<sup>1</sup></b>			
<b>Project #</b>	<b>Project Type</b>	<b>WMA</b>	<b>Location</b>
PC9504	BMP/LID	Pohick-Lower	9290 Lewis Chapel Rd., Lorton Station Elementary School
PC9507	BMP/LID	Pohick-Middle	8111 Northumberland Rd., Saratoga Elementary School
PC9509	BMP/LID	Pohick-Lower South Run	8001 Newington Forest Ave., Newington Forest Elementary School
PC9512	BMP/LID	Pohick-Middle Run	7420 Reservation Dr., Sangster Elementary School

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<b>Non-Structural Projects<sup>1</sup></b>			
<b>Project #</b>	<b>Project Type</b>	<b>WMA</b>	<b>Location</b>
PC9514	BMP/LID	Pohick-Middle	7107 Sydenstricker Rd., Hunt Valley Elementary School
PC9516	BMP/LID	Pohick-Middle	6820 Sydenstricker Rd., Orange Hunt Elementary School
PC9518	BMP/LID	Pohick-Middle Run	9732 Ironmaster Dr., Cherry Run Elementary School
PC9520	BMP/LID	Pohick-Middle	6703 Barnack Dr., Rolling Valley Elementary School
PC9527	BMP/LID	Pohick-Upper	16130 Shiplett Blvd., White Oaks Elementary School
PC9530	BMP/LID	Pohick-Upper	9645 Burke Lake Rd., Burke Center School
PC9538	BMP/LID	Pohick-Sideburn Branch	5815 Ox Rd., Fairview Elementary School
PC9541	BMP/LID	Pohick-Sideburn Branch	5240 Sideburn Rd., Bonnie Brae Elementary School
PC9551	BMP/LID	Pohick-Sideburn Branch	5004 Sideburn Rd., Oak View Elementary School
PC9800	Street Sweeping Program	Pohick-Lower	Timarand Dr. and Inverary Ct.
PC9801	Street Sweeping Program	Pohick-Lower	Lorton Station Blvd. & Stone Garden Dr.
PC9802	Dumpsite/ Obstruction Removal Suite	Pohick-Lower South Run	Behind 8412 Segoe Lilly Ct.
PC9803	Buffer Restoration	Pohick-Middle South Run	Behind 8104 Jeffrey Ct.
PC9804	Dumpsite/ Obstruction Removal	Pohick-Middle	Between Cliffside Ct. & Richfield Rd. (7927 Richfield Rd.)
PC9805	Dumpsite/ Obstruction Removal	Pohick-Middle South Run	Along Lee Chapel Rd., behind Stony Creek Ct.
PC9806	Dumpsite/ Obstruction Removal	Pohick-Middle South Run	Near 7528 Rambling Ridge Dr.

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<b>Non-Structural Projects<sup>1</sup></b>			
<b>Project #</b>	<b>Project Type</b>	<b>WMA</b>	<b>Location</b>
PC9807	Buffer Restoration	Pohick-Middle Run	Next to 8800 Shadowlake Way
PC9808	Dumpsite/ Obstruction Removal	Pohick-Middle Run	Northeast of intersection of Hooes Rd. & Fairfax County Pkwy.
PC9809	Buffer Restoration	Pohick-Middle Run	Behind 7410 Seabrook La.
PC9809	Buffer Restoration	Pohick-Middle Run	Behind 7410 Seabrook La.
PC9810	Dumpsite/ Obstruction Removal Suite	Pohick-Middle Run	Behind 8903 Gutman Ct. & 7000 Cottontail Ct.
PC9811	Dumpsite/ Obstruction Removal	Pohick-Upper	Near 6223 Rathlin Dr.
PC9813	Buffer Restoration	Pohick-Middle	Behind 8586 Beatrice Ct.
PC9814	Buffer Restoration	Pohick-Upper	Behind 6025 Bonnie Bern Ct.
PC9815	Street Sweeping Program	Pohick-Sideburn Branch	5907 Freds Oak Rd.
PC9816	Buffer Restoration	Pohick-Sideburn Branch	Behind 10708 Freds Oak Ct.
PC9817	Street Sweeping Program	Pohick-Sideburn Branch	Condominiums at Cove Landing Rd.
PC9818	Street Sweeping Program	Pohick-Sideburn Branch	5532 La Cross Ct.
PC9819	Buffer Restoration	Pohick-Sideburn Branch	South of 10125 Zion Dr.
PC9820	Street Sweeping Program	Pohick-Sideburn Branch	10614 John Ayres Rd.
PC9821	Buffer Restoration	Pohick-Rabbit Branch	Behind 5330 Gainsborough Dr.
PC9823	Lake Management for W.Q. Study	Pohick-Middle South Run	7720 Wagon Trail Ln.

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<b>Non-Structural Projects<sup>1</sup></b>			
<b>Project #</b>	<b>Project Type</b>	<b>WMA</b>	<b>Location</b>
PC9824	Lake Management for W.Q. Study	Pohick-Middle Run	7600 Modisto Ln.
PC9825	Lake Management for W.Q. Study	Pohick-Sideburn Branch	5738 Lakeside Oak Ln.
PC9826	Lake Management for W.Q. Study	Pohick-Upper	9408 Odyssey Ct.
PC9827	Lake Management for W.Q. Study	Pohick-Rabbit Branch	5344 Gainsborough Dr.
PC9828	Lake Management for W.Q. Study	Pohick-Sideburn Branch	Behind 5502 Fireside Ct.

<sup>1</sup> Only 10-yr structural projects will have associated project fact sheets at the end of section 5.