

Acknowledgements

The Accotink Creek Watershed Management Plan was initiated by the Fairfax County Department of Public Works and Environmental Services (DPWES). The Project Team consists of the following County staff, Watershed Advisory Group members, and consultants:

Fairfax County Staff:

Danielle Wynne, Ecologist, DPWES, Stormwater Planning Division
Fred Rose, Branch Chief, DPWES, Stormwater Planning Division
Russell Smith, Engineer, DPWES, Stormwater Planning Division

Watershed Advisory Group:

John Casana, Willow Woods Community Association
Melissa Choate, Central Fairfax Chamber of Commerce
Jim Dewing, Riverbend Park
Patty Dietz, Watershed Resident
Johna Gagnon, EQAC Member, Lee District
Michael Gallo, Fairfax County, Utilities Design Branch
Susan Jewell, Friends of Accotink Creek
Chris Jones, George Mason University, Department of Environmental Science and Policy
Susan Jones, Virginia Department of Transportation
Robert Iosco, Virginia Department of Transportation
Christopher Landgraf, U.S. Army Garrison Fort Belvoir
Philip Latasa, Friends of Accotink Creek
Paul Makowski, Watershed Resident
Jim McGlone, Virginia Department of Forestry
Julie Melear, Daventry HOA
Peter Millard, City of Fairfax
Duane Murphy, Friends of Accotink Creek
Donald Waye, EPA - NPS Control Branch

KCI Technologies, Inc:

Ryan Burdette, PE, Water Resources Engineer
Megan Crunkleton, Environmental Scientist
Manasa Damera, Water Resources Engineer
Nathan Drescher, Environmental Scientist
Anna Epperly, Environmental Technician
Bill Frost, PE, Project Manager
Kristen Goddard, AICP, Planner
Jackie Krayenvenger, PE, Water Resources Engineer
William Medina, Water Resources Engineer
Mandy O'Shea, GISP, GIS Analyst
Andrea Poling, Environmental Scientist
Chuck Ruzicka, PLS, Surveys Chief
Matthew Snyder, PE, Water Resources Engineer
James Tomlinson, PE, Water Resources Engineer

CENTER FOR WATERSHED PROTECTION

Deb Caraco, PE, Senior Watershed Engineer
Kelly Collins, EIT, Water Resources Engineer
Sadie Drescher, Watershed Planner
Lisa Fraley-McNeal, Research Specialist
Greg Hoffman, PE, Program Director
Hye Yeong Kwon, Executive Director
Neely Law, PhD, Senior Research Analyst
Cecilia Lane, Watershed Technician
Lori Lilly, Watershed Ecologist
Chris Swann, Watershed Planner

RESOLVE, INC.

Juliana Birkhoff, Senior Mediator
Jason Gershowitz, Project Assistant
Debbie Lee, Program Associate

POSITIVE FORCE CONSULTING

Jennifer Hicks, Principal

TETRA TECH, INC.

Clint Boschen, Project Manager
Rachel Wiese, Environmental Scientist
Guoshun Zhang, PhD, Water Resources Engineer
Tham Saravanapavan, PE, Principal Environmental Engineer
Mustafa Faizullahoy, PE, Senior Environmental Engineer
Peter Cada, Environmental Scientist
Heather Fisher, AICP, Environmental Planner

Table of Contents

Executive Summary	i
1 Introduction to Watersheds	1-1
2 Watershed Planning Process	2-1
2.1 Watershed Goals and Objectives	2-1
2.2 Indicators	2-2
2.3 Subwatershed Ranking	2-5
2.4 Stormwater Modeling	2-5
2.5 Public Involvement Plan	2-7
3 Summary of Watershed Conditions	3-1
3.1 Watershed Land Use	3-7
3.2 Watershed Imperviousness	3-7
3.3 Stream Monitoring	3-11
3.4 Stream Habitat and Geomorphology	3-12
3.5 Water Quality	3-12
3.6 Field Reconnaissance and Investigations	3-15
3.7 Subwatershed Ranking	3-16
4 Watershed Restoration Strategies	4-1
4.1 Subwatershed Strategies	4-1
4.2 Description of Watershed Restoration Practices	4-4
4.3 Status of Regional Ponds	4-21
4.4 Summary of Proposed Projects	4-23
5 WMA Restoration Strategies	5-1
5.1 Bear Branch	5-1
5.2 Crook Branch	5-7
5.3 Hunters Branch	5-13
5.4 Long Branch Central	5-19
5.5 Long Branch North	5-31
5.6 Long Branch South	5-39
5.7 Accotink Mainstem 1	5-51
5.8 Accotink Mainstem 2	5-59
5.9 Accotink Mainstem 3	5-65
5.10 Accotink Mainstem 4	5-77
5.11 Accotink Mainstem 5	5-85
5.12 Accotink Mainstem 6	5-93
5.13 Accotink Mainstem 7	5-99
5.14 Accotink Mainstem 8	5-107
5.15 Project Fact Sheets	5-113
6 Benefits of Plan Implementation	6-1
6.1 Introduction	6-1

6.2	Models and Scenarios	6-1
6.3	Hydrology	6-2
6.4	Hydraulics	6-2
6.5	Pollutant Loading	6-3
6.6	Plan Cost and Benefits	6-3
7	Glossary and Acronyms	7-1
8	References	8-1

Tables

Table ES-1: Summary of Watershed Strategies	v
Table 2-1: Countywide Objectives	2-1
Table 2-2: Watershed Impact Indicators	2-3
Table 2-3: Modeling Rationale	2-6
Table 3-1: Accotink Area and Stream Length by WMA	3-1
Table 3-2: WMA Imperviousness	3-7
Table 3-3: Stream Protection Strategy Baseline Data Summary	3-12
Table 3-4: Impaired Water Bodies	3-13
Table 3-5: Accotink Creek Watershed HSI/NSA Results	3-15
Table 4-1: Non-structural Project Prioritization	4-21
Table 4-2: Regional Ponds in Accotink Creek	4-21
Table 4-3: Master Project List	4-25
Table 5-1: Bear Branch Projects	5-4
Table 5-2: Crook Branch Projects	5-10
Table 5-3: Hunters Branch Projects	5-15
Table 5-4: Long Branch Central Projects	5-25
Table 5-5: Long Branch North Projects	5-34
Table 5-6: Long Branch South Projects	5-45
Table 5-7: Mainstem 1 Projects	5-54
Table 5-8: Mainstem 2 Projects	5-61
Table 5-9: Mainstem 3 Projects	5-72
Table 5-10: Mainstem 4 Projects	5-80
Table 5-11: Mainstem 5 Projects	5-88
Table 5-12: Mainstem 6 Projects	5-95
Table 5-13: Mainstem 7 Projects	5-102
Table 5-14: Mainstem 8 Projects	5-109
Table 6-1: Pollutant Loading and Flow Reduction by Watershed	6-4
Table 6-2: Pollutant Loading and Flow Reduction by WMA	6-4

Figures

Figure 1-1: Diagram of a watershed	1-1
Figure 1-2: The Chesapeake Bay watershed	1-1
Figure 1-3: Watershed planning groups in Fairfax County.....	1-3
Figure 3-1: SPS and Volunteer Monitoring Locations.....	3-11
Figure 4-1: Stormwater Management wet pond (Source: Fairfax County)	4-5
Figure 4-2: Engineered stormwater wetland (Source: Fairfax County)	4-5
Figure 4-3: Stormwater dry pond retrofit (Source: Fairfax County)	4-6
Figure 4-4: Stream restoration (Source: Fairfax County).....	4-7
Figure 4-5: Culvert retrofit control structure, flow left to right (Source: KCI)	4-8
Figure 4-6: Culvert retrofit, flow right to left (Source: Center for Watershed Protection).....	4-8
Figure 4-7: Parking lot bioretention (Source: Fairfax County)	4-9
Figure 4-8: Vegetated swale (Source: Fairfax County).....	4-9
Figure 4-9: Tree box filter (Source: Fairfax County)	4-9
Figure 4-10: Green roof on a parking building (Source: Fairfax County).....	4-10
Figure 4-11: Sand filter along MD355(Source: KCI)	4-10
Figure 4-12: Residential rain garden (Source: Fairfax County).....	4-10
Figure 4-13: Vegetated swale for roadside drainage (Source: KCI).....	4-11
Figure 4-14: Inlet filter (Source: Ultra-Tech Int'l).....	4-11
Figure 4-15: Obsolete culvert (Source: KCI).....	4-12
Figure 4-16: New replacement culvert (Source: KCI)	4-12
Figure 4-17: Outfall improvement (Source: Fairfax County).....	4-13
Figure 4-18: Buffer restoration project in Fairfax County (Source: Fairfax County).....	4-15
Figure 4-19: Rain barrel (Source: Project Clean Water)	4-16
Figure 4-20: Disconnecting a downspout (Source: City of Toronto).....	4-16
Figure 4-21: Permeable pavement blocks in a parking lot (Source: Fairfax County).....	4-16
Figure 4-22: High and medium maintenance lawns (Source: KCI)	4-17
Figure 4-23: Pet waste sign in common area (Source: KCI)	4-17
Figure 4-24: Fairfax County storm drain label (Source: Fairfax County, label produced by Das Manufacturing, Inc.)	4-17
Figure 4-25: Improperly stored outdoor materials (Source: Center for Watershed Protection).....	4-18
Figure 4-26: Improper dumpster maintenance (Source: Center for Watershed Protection) ...	4-18
Figure 4-27: Street sweeper (Source: Tymco, Inc.).....	4-19
Figure 4-28: Catch basin (Source: Fairfax County)	4-19

Maps

Map 3-1: Accotink Creek Watershed Location	3-3
Map 3-2: Accotink Creek North WMA Map	3-5
Map 3-3: Accotink Creek South WMA Map	3-6
Map 3-4: Accotink Creek North Land Use Map	3-9
Map 3-5: Accotink Creek South Land Use Map	3-10
Map 3-6: Subwatershed Ranking Map	3-17
Map 4-1: Priority Subwatershed Restoration Areas	4-3
Map 4-2: Proposed Projects in Supervisor Districts	4-24
Map 5-1: WMA: Bear Branch – Proposed Projects	5-5
Map 5-2: WMA: Crook Branch – Proposed Projects	5-11
Map 5-3: WMA: Hunters Branch – Proposed Projects	5-17
Map 5-4: WMA: Long Branch Central – Proposed Projects	5-29
Map 5-5: WMA: Long Branch North – Proposed Projects	5-37
Map 5-6: WMA: Long Branch South – Proposed Projects	5-49
Map 5-7: WMA: Mainstem 1 – Proposed Projects	5-57
Map 5-8: WMA: Mainstem 2 – Proposed Projects	5-63
Map 5-9: WMA: Mainstem 3 – Proposed Projects	5-75
Map 5-10: WMA: Mainstem 4 – Proposed Projects	5-83
Map 5-11: WMA: Mainstem 5 – Proposed Projects	5-91
Map 5-12: WMA: Mainstem 6 – Proposed Projects	5-97
Map 5-13: WMA: Mainstem 7 – Proposed Projects	5-105
Map 5-14: WMA: Mainstem 8 – Proposed Projects	5-111

Executive Summary

The *Accotink Creek Watershed Management Plan* provides a summary of the existing and future conditions of the Accotink Creek watershed in Fairfax County, Virginia and presents a strategy for restoring and preserving its natural resources. The plan was initiated by Fairfax County as part of a multi-year, multi-objective program to preserve and restore the County's natural environment and aquatic resources, and is consistent with the Fairfax County Board of Supervisors' Environmental Agenda adopted in June 2004. It has been prepared as part of the process of compliance with state and federal laws and mandates, including Virginia's Chesapeake Bay Initiatives and the federal Clean Water Act.

Fairfax County has a long history of planning at the watershed scale. The County's first series of watershed plans was completed in the 1970s. Since that time, land use has changed significantly and there have been many advances in the fields of stormwater management and ecological restoration. These advances have been reflected in the countywide goals for the program, which are consistent across all County watershed plans. These include:

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

Accotink Creek is approximately 52 square miles and is the second largest watershed in the County. It is a long, narrow watershed located in the center of the County and drains to Accotink Bay, and then into Gunston Cove and the Potomac River. To facilitate data management and promote local awareness of the streams, the watershed was subdivided into 16 Watershed Management Areas (WMAs) each approximately four square miles in size. These include seven major tributaries: Bear Branch, Crook Branch, Daniels Run, Hunters Branch, Long Branch Central, Long Branch North and Long Branch South. Because of long, narrow shape of the watershed, the remaining areas that drain directly to Accotink Creek mainstem were subdivided into eight WMAs: Mainstem 1 through 8. Finally, the area of land draining to tidewater was designated as the Potomac WMA.

The WMAs were further divided into subwatersheds with a target area of 100 to 300 acres. The subwatershed represents the smallest assessment unit for the watershed plan.

Approximately 11.7 square miles (23 percent) of the watershed are located in areas outside of the County jurisdiction and are not included in this plan. Because of this, the planning effort focused on only 14 of the 16 WMAs identified since the Potomac WMA is entirely within Fort Belvoir Military Reservation and the Daniels Run WMA is within the City of Fairfax.

Lake Accotink is located in the center of the watershed. It has a surface area of 68 acres and exerts significant influence on the drainage characteristics of the watershed.

Watershed Planning Process

The watershed planning process consisted of the following six steps:

1. Review and synthesis of previous studies and data compilation
2. Public involvement to gain input, provide education and build community support

3. Evaluation of current watershed conditions and evaluation of stormwater runoff and other impacts from present and ultimate development conditions
4. Development of non-structural and structural watershed improvement projects
5. Development of preliminary cost estimates, cost/benefit analysis and prioritization of capital projects
6. Adoption of the final watershed management plan by the Board of Supervisors

Previous Studies and Data Compilation

The 1970s watershed plans provided useful background information for land use changes, problems previously identified in the watershed and proposed solutions. The County's land use and parcel mapping data were used to determine the pattern of development. GIS layers were also used as the basis for developing watershed models. Indicators were used to determine the health of each subwatershed and determine the cause of any impairment. Monitoring results provided much of the data needed for the indicators, including information from the County's ongoing bioassessment program, the Stream Physical Assessment conducted in 2002 and water quality sampling results from the County stream monitoring programs and Virginia Department of Environmental Quality.

Public Involvement

The watershed plan development process was supported by two levels of public involvement. The first level consisted of two meetings open to the public: the Introductory and Issues Scoping Forum, held at West Springfield High School in October 2008, and the Draft Plan Review Workshop, held at Fairfax High School in September 2010. The second level of public involvement was provided by the Watershed Advisory Group (WAG), which met five times over the course of the process. The WAG was made up of local stakeholders who advised the planning team about community outreach opportunities, key issues affecting the watersheds and feedback on potential projects.

Existing Watershed Conditions

Current land-use mapping shows that the watershed is 87 percent developed, with 13 percent remaining as either open space (primarily along stream corridors) or water. The watershed is essentially built out with only four percent of the land use expected to change through redevelopment and conversion of open space to high-intensity commercial land use.

Overall, the watershed is 27 percent impervious. Imperviousness among the WMAs in the watershed ranges from three percent in the Potomac WMA to 41 percent impervious in the Long Branch North WMA. Imperviousness across the watershed is expected to increase by approximately 1.5 percent from future development.

Results of the 2002 Stream Physical Assessment ranked the watershed in the lower middle range of habitat quality when compared to other watersheds in the County. Ninety-one percent of stream channels were classified as unstable and experiencing severe bank erosion.

A set of measurable indicators was applied to develop a consistent project identification and prioritization process across the watershed. The indicators were grouped into the following categories:

- *Watershed Impact Indicators* – Measure the extent that reversal or prevention of a particular watershed impact, sought by the goals and objectives, has been achieved (“What’s there now, and how is it doing?”).
- *Source Indicators* – Quantify the presence of a potential stressor or pollutant source (“Is there a problem, and what’s causing it?”).
- *Programmatic Indicators* – After the plans are adopted, these will assess outcomes of resource protection and restoration activities (“What’s the County doing about the problem, and how is it doing?”).

The indicators were the key measures by which the condition of the watershed was assessed – comparing conditions at the subwatershed level and ranking them from best condition to worst. They provided a quantifiable method to determine why a particular subwatershed was in poor condition, whether from stream impacts, flooding, lack of buffers, forest, or wetlands, or high levels of stormwater pollution. This ranking helped to identify appropriate improvement projects and provided a method of measuring and prioritizing which projects would be most effective.

The subwatershed ranking analysis identified at least one impaired subwatershed in each of the 14 WMAs included in the analysis. Impairments included runoff impacts, flooding hazards, poor habitat health and water quality degradation. A majority of the subwatersheds in Daniels Run, Hunters Branch, Long Branch Central, Mainstem 4, Mainstem 5 and Mainstem 6 WMAs were in good condition. This is due to the influence of forested or undeveloped parcels, parks, golf courses and undeveloped areas within Fort Belvoir.

The remaining WMAs had a higher number of impaired subwatersheds. A subwatershed in the southwestern corner of the Long Branch North WMA was among the poorest quality overall due to low forest cover and high levels of impervious cover. Mainstem 3 had 11 of the lowest quality subwatersheds in the project and Mainstem 7 had six subwatersheds in industrial areas which scored poorly for water quality. Subwatersheds that scored poorly in the subwatershed ranking analysis were labeled as high priority subwatersheds because they represent the areas with the most need of restoration.

Watershed Restoration Strategies

Development of watershed restoration strategies involved two elements: determine where to prioritize restoration and preservation efforts and identify the specific practices and locations where improvements could be made.

The overall strategy for restoring and protecting the Accotink Creek watershed was developed with the assistance and input of the WAG. Group members contributed the following approaches for subwatershed prioritization:

- Preserve pristine areas from development or degradation
- Restore areas with limited impairment to expand wildlife populations
- Restore areas that are highly impaired due to specific and treatable factors

These recommendations highlight that targeting improvements only in the most impaired areas may not be the best watershed restoration method, and that other approaches to targeting improvements may work better. They also recognized that preventing impairments through preservation is more cost-effective than trying to restore an impaired system.

Specific restoration practices proposed for improvements were categorized as structural or non-structural. Structural practices are physical structures which are generally budgeted through the County's Capital Improvement Plan and involve engineering, design and construction. Non-structural practices are more programmatic in nature and usually focus on controlling stormwater runoff at the source.

Structural practices included:

- New Stormwater Management Ponds or Stormwater Pond Retrofits
- Stream Restoration
- Area-Wide Drainage Improvements
- Culvert Retrofits
- New BMP/LID or BMP/LID Retrofits
- Flood Protection Mitigation
- Outfall Improvements

Non-structural practices included:

- Buffer restoration
- Rain barrel and impervious disconnection programs
- Dumpsite and obstruction removals
- Community outreach and public education
- Land conservation coordination projects
- Inspection and enforcement projects
- Street sweeping programs
- Studies, surveys and assessments

To find potential project locations, a desktop assessment was first conducted to identify sites for structural projects. This initial assessment focused on sites for storage retrofits, which reduce or modify storm event peak flows, and onsite retrofits primarily to provide water quality improvements. Existing ponds and drainage areas above culverts were identified for storage retrofit. Onsite retrofit sites ranged from parking lots, rooftops, outfalls to inlets. Potential projects for stream restoration, flood mitigation and buffer restoration also were identified. In all, over 513 potential project sites were flagged for follow-up.

Non-structural projects were identified from field assessment of potential pollutant sources in a sampling of residential and commercial areas.

Candidate sites for stormwater retrofits and stream restoration were subsequently assessed in the field to identify any site constraints that would prevent improvements from being implemented or to note potential opportunities that would make improvements more likely to be successful. The result of the field assessment was either a rough concept for the improvement or a decision that the project was either not feasible or the constraints outweighed the potential benefits. Planning-level cost estimates were developed for the feasible projects and smaller projects were grouped together based on cost and location.

Prioritization, Benefits and Costs of Plan Implementation

Projects were prioritized for implementation using a score based upon the weighted average of the indicators and other factors: impact indicators (30 percent), source indicators (30 percent), location in a priority subwatershed (10 percent), upstream/downstream sequencing (20 percent)

and implementability (10 percent). Each project’s final score was used to determine whether the project fell into a high or low priority phase. Projects in the high priority phase would be constructed in the 0 to 10 year timeframe, and low priority projects in an 11 to 25 year timeframe.

This plan identified 120 high priority projects (subsequently called 10–year projects) for concept design and cost estimation. A project fact sheet was created for each of the high priority projects and provides a description of the project, benefits and constraints, a schematic design and a cost estimate, and can be found in Section 5. An additional 109 lower priority projects were identified for the 25-yr plan. These projects do not have individual project fact sheets, but information can be found under their individual WMA in Section 5. Finally, 20 non-structural projects were identified.

In order to assess the benefits of the Accotink Creek Watershed Management Plan, hydrologic, hydraulic and pollutant loading modeling was conducted for existing conditions and future conditions with and without the proposed projects. All projects were modeled for pollutant loading reductions. Only the 10-year projects were modeled for hydrologic and hydraulic benefits.

The benefits of the plan include eliminating the overtopping of at least one road crossing, reducing flooding potential, restoration of twelve miles of streams and one mile of stream buffers. Pollutant loads would be reduced by as much as 3,032 tons per year of sediment, 9,914 pounds per year of nitrogen and 2,758 pounds per year of phosphorus for the 10-yr implementation plan. The full 25-yr plan implementation would reduce pollutant loading by 3,149 tons per year of sediment, 12,376 pounds per year of nitrogen and 3,244 pounds per year of phosphorous. These benefits will help meet the County’s goals for water quality and stream improvements and provide a positive impact on the residents and conditions of the watersheds.

The total estimated cost for the structural projects for the 10-year plan is \$75 million. Full plan implementation of structural projects is \$87 million. All proposed projects are presented in the table below.

Table ES-1: Summary of Watershed Strategies

Priority Structural Projects (Ten Year Implementation Plan)				
Project #	Project Type	WMA	Location	Cost
AC9101	Stormwater Pond Retrofit	Mainstem 8	Village of Mount Air neighborhood	\$90,000
AC9102	Stormwater Pond Retrofit	Long Branch South	Intersection of Telegraph Rd and Fairfax County Pkwy	\$256,000
AC9105	Stormwater Pond Retrofit	Long Branch South	Pinewood Station neighborhood	\$168,000
AC9106	Stormwater Pond Retrofit	Long Branch South	Backlick Rd and Cinder Bed Rd	\$195,000
AC9110	Stormwater Pond Retrofit	Long Branch South	Amberleigh neighborhood	\$227,000
AC9111	Stormwater Pond Retrofit	Long Branch South	Amberleigh neighborhood	\$75,000
AC9112	Stormwater Pond Retrofit	Long Branch South	Springfield Industrial Park	\$305,000
AC9113	Stormwater Pond Retrofit	Long Branch South	Springfield Industrial Park	\$161,000
AC9114	Stormwater Pond Retrofit	Long Branch South	Springfield Industrial Park	\$732,000

Priority Structural Projects (Ten Year Implementation Plan)				
Project #	Project Type	WMA	Location	Cost
AC9120	Stormwater Pond Retrofit	Long Branch South	Franconia/Springfield Metro	\$1,753,000
AC9123	Stormwater Pond Retrofit	Mainstem 7	Gateway 95 Business Park	\$62,000
AC9126	Stormwater Pond Retrofit	Mainstem 7	Alban Industrial Center	\$126,000
AC9133	Stormwater Pond Retrofit	Mainstem 6	Hunter Village neighborhood	\$107,000
AC9136	Stormwater Pond Retrofit	Mainstem 6	Kenwood Oaks neighborhood	\$111,000
AC9139	Stormwater Pond Retrofit	Mainstem 5	Westhaven neighborhood	\$63,000
AC9144	New Stormwater Pond	Long Branch Central	Lake Accotink Park	\$879,000
AC9147	New Stormwater Pond	Long Branch Central	Kings Park Shopping Ctr	\$248,000
AC9148	New Stormwater Pond	Long Branch Central	Long Branch Stream Valley Park	\$823,000
AC9161	Stormwater Pond Retrofit	Mainstem 3	Patriot Village neighborhood	\$86,000
AC9162	Stormwater Pond Retrofit	Mainstem 3	Patriot Village neighborhood	\$79,000
AC9172	New Stormwater Pond	Mainstem 2	End of Libeau Ln	\$989,000
AC9175	Stormwater Pond Retrofit	Crook Branch	Hunters Glen and Ridgelea Hills neighborhoods and Bethlehem Lutheran Church	\$211,000
AC9178	Stormwater Pond Retrofit	Mainstem 2	Prosperity Heights neighborhood	\$401,000
AC9181	Stormwater Pond Retrofit	Long Branch North	Prosperity Business Campus	\$249,000
AC9182	Stormwater Pond Retrofit	Bear Branch	Mantua Park	\$54,000
AC9183	New Stormwater Pond	Bear Branch	Kena Shriners Temple	\$274,000
AC9195	Stormwater Pond Retrofit	Mainstem 1	Oakton Village neighborhood	\$67,000
AC9196	Stormwater Pond Retrofit	Mainstem 1	Four Winds at Oakton Condominium	\$176,000
AC9199	Stormwater Pond Retrofit	Mainstem 1	Rosehaven Estates	\$64,000
AC9200	Stream Restoration	Mainstem 6	Downstream from Greeley Blvd / Hunter Village Park	\$643,000
AC9201	Stream Restoration	Mainstem 5	Accotink Stream Valley Park	\$707,000
AC9202	Stream Restoration	Mainstem 5	Charlestown neighborhood	\$822,000
AC9203	Stream Restoration	Mainstem 5	Lake Accotink Park	\$193,000
AC9204	Stream Restoration	Mainstem 5	Lake Accotink Park	\$1,317,000
AC9205	Stream Restoration	Mainstem 4	Lake Accotink Park	\$1,343,000
AC9206	Stream Restoration	Mainstem 4	Kings Park neighborhood	\$875,000
AC9207	Stream Restoration	Mainstem 4	Kings Park	\$527,000
AC9208	Stream Restoration	Long Branch Central	Long Branch Falls Park	\$600,000
AC9209	Stream Restoration	Long Branch Central	Long Branch Stream Valley Park	\$1,476,000
AC9210	Stream Restoration	Mainstem 3	Wakefield Park neighborhood	\$1,441,000

Priority Structural Projects (Ten Year Implementation Plan)				
Project #	Project Type	WMA	Location	Cost
AC9211	Stream Restoration	Mainstem 3	Truro neighborhood	\$179,000
AC9212	Stream Restoration	Mainstem 3	Truro neighborhood	\$754,000
AC9213	Stream Restoration	Mainstem 3	Truro neighborhood	\$1,011,000
AC9214	Stream Restoration	Mainstem 3	Wakefield Park	\$621,000
AC9215	Stream Restoration	Mainstem 3	Mill Creek neighborhood	\$345,000
AC9216	Stream Restoration	Mainstem 3	Lafayette Forest neighborhood	\$811,000
AC9217	Stream Restoration	Mainstem 3	Lafayette Forest neighborhood	\$903,000
AC9218	Stream Restoration	Mainstem 3	Pleasant Ridge neighborhood	\$651,000
AC9219	Stream Restoration	Mainstem 2	Pine Ridge Park	\$1,664,000
AC9220	Stream Restoration	Crook Branch	Ridgelea Hills neighborhood	\$234,000
AC9221	Stream Restoration	Crook Branch	Mantua and Ridgelea Hills neighborhoods	\$1,801,000
AC9222	Stream Restoration	Crook Branch	Mantua Hills and Stockbridge neighborhoods	\$829,000
AC9223	Stream Restoration	Mainstem 2	Pine Ridge neighborhood	\$958,000
AC9224	Stream Restoration	Long Branch North	I-66 and Prosperity Ave	\$257,000
AC9225	Stream Restoration	Bear Branch	South Side Park	\$3,273,000
AC9226	Stream Restoration	Long Branch South	Windsor Estates	\$608,000
AC9227	Stream Restoration	Long Branch South	Windsor Estates	\$675,000
AC9229	Stream Restoration	Mainstem 4	Flag Run Park, Lake Accotink Park / I-495	\$1,383,000
AC9230	Stream Restoration	Mainstem 3	Wakefield Park	\$748,000
AC9231	Stream Restoration	Mainstem 3	Wakefield Park	\$781,000
AC9232	Stream Restoration	Mainstem 3	Wakefield Park	\$697,000
AC9233	Stream Restoration	Mainstem 3	Wakefield Park	\$703,000
AC9234	Stream Restoration	Long Branch North	Sutton Place and Mantua Woods neighborhoods	\$1,026,000
AC9235	Stream Restoration	Long Branch North	Sutton Place and Copeland Pond neighborhoods	\$1,035,000
AC9236	Stream Restoration	Long Branch North	Merrifield View neighborhood	\$1,016,000
AC9237	Stream Restoration	Long Branch North	Fairhill on the Boulevard neighborhood	\$624,000
AC9238	Stream Restoration	Long Branch North	Dunn Loring Woods neighborhood and Prosperity Business Campus	\$2,736,000
AC9239	Stream Restoration	Bear Branch	Covington / Villa Lee Park, Arrowhead Park	\$3,225,000
AC9240	Stream Restoration	Bear Branch	South Side Park neighborhood	\$2,241,000
AC9241	Stream Restoration	Hunters Branch	Stonehurst / Eakin Community Park	\$2,176,000
AC9242	Stream Restoration	Hunters Branch	Lee Hwy and Hermosa Dr	\$389,000

Priority Structural Projects (Ten Year Implementation Plan)				
Project #	Project Type	WMA	Location	Cost
AC9300	Area-Wide Drainage Improvements	Mainstem 7	Pohick Estates neighborhood	\$799,000
AC9301	Area-Wide Drainage Improvements	Long Branch South	Windsor Park	\$1,040,000
AC9302	Area-Wide Drainage Improvements	Mainstem 4	Ravensworth neighborhood	\$731,000
AC9303	Area-Wide Drainage Improvements	Mainstem 4	Kings Park neighborhood	\$1,475,000
AC9304	Area-Wide Drainage Improvements	Mainstem 3	Ravensworth Park and Bristow neighborhoods	\$1,681,000
AC9305	Area-Wide Drainage Improvements	Long Branch Central	Canterbury Woods neighborhood	\$1,647,000
AC9306	Area-Wide Drainage Improvements	Long Branch Central	Willow Woods neighborhood	\$757,000
AC9307	Area-Wide Drainage Improvements	Long Branch Central	Woodland Forest neighborhood	\$528,000
AC9308	Area-Wide Drainage Improvements	Long Branch Central	Canterbury Woods and Long Branch neighborhoods	\$358,000
AC9309	Area-Wide Drainage Improvements	Long Branch Central	Springbrook Forest, Willow Woods and Woods of Ilda neighborhoods	\$1,117,000
AC9310	Area-Wide Drainage Improvements	Long Branch Central	Springbrook Forest and Rutherford neighborhoods	\$1,885,000
AC9311	Area-Wide Drainage Improvements	Mainstem 3	Ramblewood neighborhood	\$422,000
AC9312	Area-Wide Drainage Improvements	Crook Branch	Westchester and Briars of Westchester neighborhoods	\$1,191,000
AC9313	Area-Wide Drainage Improvements	Crook Branch	Langhorne Acres neighborhood	\$718,000
AC9314	Area-Wide Drainage Improvements	Long Branch North	Dunn Loring Village neighborhood	\$467,000
AC9315	Area-Wide Drainage Improvements	Bear Branch	Hideaway Park neighborhood	\$283,000
AC9316	Area-Wide Drainage Improvements	Mainstem 1	Hawthorne Village Apts, Five Oaks Place and Cedar Grove Park neighborhoods	\$1,039,000
AC9400	Culvert Retrofit	Mainstem 4	Queensberry Ave	\$74,000
AC9401	Culvert Retrofit	Mainstem 4	I-495	\$84,000
AC9405	Culvert Retrofit	Long Branch Central	Old Forge Park	\$29,000
AC9406	Culvert Retrofit	Long Branch Central	Long Branch Park	\$84,000
AC9409	Culvert Retrofit	Mainstem 1	Oakton High School	\$65,000
AC9501	BMP/LID	Long Branch South	Newington Industrial Park	\$59,000
AC9502	BMP/LID	Long Branch South	Newington Rd	\$102,000
AC9503	BMP/LID	Long Branch South	Franconia/Springfield Metro	\$100,000
AC9505	BMP/LID	Long Branch South	Francis Scott Key Middle School	\$132,000
AC9506	BMP/LID	Long Branch South	Commercial Parking Lot	\$114,000

Priority Structural Projects (Ten Year Implementation Plan)				
Project #	Project Type	WMA	Location	Cost
AC9508	BMP/LID	Long Branch South	Robert E. Lee High School	\$176,000
AC9509	BMP/LID	Mainstem 7	Lockport Industrial Park	\$213,000
AC9510	BMP/LID	Mainstem 7	Lockport Industrial Park	\$723,000
AC9511	BMP/LID	Mainstem 7	Deer Park parking lot	\$63,000
AC9512	BMP/LID	Mainstem 7	HRM Automotive	\$106,000
AC9514	BMP/LID	Mainstem 6	Cardinal Forest Plaza	\$142,000
AC9515	BMP/LID	Mainstem 6	Old Keene Mill Shopping Center	\$204,000
AC9529	BMP/LID	Long Branch Central	Canterbury Woods Elementary School	\$44,000
AC9535	BMP/LID	Mainstem 3	Wakefield Chapel Estates	\$188,000
AC9538	BMP/LID	Mainstem 3	Northern Virginia Community College parking lot	\$388,000
AC9539	BMP/LID	Mainstem 3	Annandale Terrace Elementary School	\$118,000
AC9541	BMP/LID	Mainstem 3	Little River Shopping Center	\$100,000
AC9545	BMP/LID	Mainstem 2	Eakin Park and Byzantine Church parking lot	\$79,000
AC9546	BMP/LID	Crook Branch	Mantua Elementary School	\$109,000
AC9547	BMP/LID	Crook Branch	Providence Presbyterian Church and Pixie Ct	\$95,000
AC9548	BMP/LID	Crook Branch	Ridgelea Hills neighborhood	\$398,000
AC9550	BMP/LID	Long Branch North	Industry Lane and Lee Hwy	\$364,000
AC9551	BMP/LID	Long Branch North	Stenwood Elementary School	\$50,000
AC9553	BMP/LID	Hunters Branch	Pan Am Shopping Center	\$304,000
AC9558	BMP/LID	Mainstem 1	Mosby Woods Elementary School	\$100,000
AC9562	BMP/LID	Mainstem 1	AT&T office building	\$328,000
AC9600	Flood Protection/Mitigation	Long Branch South	Culvert under railroad behind Industrial Park	\$450,000
Total Cost				\$75,052,000

Long Term Structural Projects (25 Year Implementation Plan)			
Project #	Project Type	WMA	Location
AC9100	Stormwater Pond Retrofit	Mainstem 8	Landsdowne neighborhood
AC9103	Stormwater Pond Retrofit	Long Branch South	Gateway 95 Business Park
AC9104	Stormwater Pond Retrofit	Long Branch South	Shirley Industrial Complex
AC9107	Stormwater Pond Retrofit	Long Branch South	Landsdowne neighborhood
AC9108	Stormwater Pond Retrofit	Long Branch South	Amberleigh Park
AC9109	Stormwater Pond Retrofit	Long Branch South	Island Creek Park
AC9115	Stormwater Pond Retrofit	Long Branch South	Next to Assembly of God Church

Long Term Structural Projects (25 Year Implementation Plan)			
Project #	Project Type	WMA	Location
AC9116	Stormwater Pond Retrofit	Long Branch South	Devonshire Townhomes
AC9117	Stormwater Pond Retrofit	Long Branch South	Walker Lane Condo
AC9118	Stormwater Pond Retrofit	Long Branch South	Fleet Industrial Park
AC9119	Stormwater Pond Retrofit	Long Branch South	Behind Gilders St
AC9121	Stormwater Pond Retrofit	Long Branch South	Sunrise Assisted Living
AC9122	New Stormwater Pond	Long Branch South	I-95 and Franconia Rd Interchange
AC9124	Stormwater Pond Retrofit	Mainstem 7	Newington Commerce Center
AC9125	Stormwater Pond Retrofit	Mainstem 7	Terra Grande neighborhood
AC9127	Stormwater Pond Retrofit	Mainstem 7	Alban Industrial Center
AC9128	Stormwater Pond Retrofit	Mainstem 7	Terra Grande
AC9129	Stormwater Pond Retrofit	Mainstem 7	VA 95 Industrial Park
AC9130	New Stormwater Pond	Mainstem 7	Alban Road
AC9131	Stormwater Pond Retrofit	Mainstem 6	Bonniemill Acres neighborhood
AC9132	Stormwater Pond Retrofit	Mainstem 6	Shirley Springs neighborhood
AC9134	Stormwater Pond Retrofit	Mainstem 6	Rolling Forest neighborhood
AC9135	Stormwater Pond Retrofit	Mainstem 6	Bethnal Pl and Caton Woods Ct
AC9137	Stormwater Pond Retrofit	Mainstem 5	Behind Villa Park Rd
AC9138	Stormwater Pond Retrofit	Mainstem 5	Toyota Dealership on Amherst Ave
AC9140	Stormwater Pond Retrofit	Mainstem 5	Brookfield Park
AC9141	Stormwater Pond Retrofit	Mainstem 5	Highland Business Park
AC9142	New Stormwater Pond	Mainstem 4	Behind Morrissette Dr
AC9145	New Stormwater Pond	Long Branch Central	Canterbury Woods Swim Club
AC9146	Stormwater Pond Retrofit	Long Branch Central	Woodland Forest neighborhood
AC9149	Stormwater Pond Retrofit	Long Branch Central	Dunleigh neighborhood
AC9150	Stormwater Pond Retrofit	Long Branch Central	Burke Professional Center
AC9151	Stormwater Pond Retrofit	Long Branch Central	Long Branch Swim and Racquet Club
AC9152	Stormwater Pond Retrofit	Long Branch Central	Chestnut Hills West neighborhood
AC9153	Stormwater Pond Retrofit	Long Branch Central	Behind Wrought Iron Ct
AC9154	Stormwater Pond Retrofit	Long Branch Central	Lee Meadows neighborhood
AC9155	New Stormwater Pond	Long Branch Central	Sweet Briar Forest neighborhood
AC9156	Stormwater Pond Retrofit	Long Branch Central	Korean Presbyterian Church
AC9157	Stormwater Pond Retrofit	Long Branch Central	George Mason Park
AC9158	Stormwater Pond Retrofit	Long Branch Central	Somerset South neighborhood
AC9159	New Stormwater Pond	Mainstem 3	Howery Field Park
AC9160	Stormwater Pond Retrofit	Mainstem 3	Chapel Lake
AC9165	Stormwater Pond Retrofit	Mainstem 3	Camelot Greens
AC9166	Stormwater Pond Retrofit	Mainstem 3	Lafayette Forest

Long Term Structural Projects (25 Year Implementation Plan)			
Project #	Project Type	WMA	Location
AC9167	Stormwater Pond Retrofit	Mainstem 3	Lafayette Park West
AC9168	Stormwater Pond Retrofit	Mainstem 3	Adams Walk
AC9169	Stormwater Pond Retrofit	Mainstem 3	Wachovia Building on Woodland Rd
AC9170	Stormwater Pond Retrofit	Mainstem 3	Lafayette Village
AC9171	Stormwater Pond Retrofit	Mainstem 2	Holmes Run Village neighborhood
AC9173	Stormwater Pond Retrofit	Mainstem 2	Silk Vision and Surgery Center
AC9174	Stormwater Pond Retrofit	Crook Branch	Greater Washington Jewish Community Foundation
AC9176	Stormwater Pond Retrofit	Crook Branch	Briars at Westchester neighborhood
AC9179	Stormwater Pond Retrofit	Long Branch North	Luther Jackson Middle School
AC9184	Stormwater Pond Retrofit	Bear Branch	Behind Barkley Gate Ln and Armistead Park neighborhood
AC9185	New Stormwater Pond	Bear Branch	Covington neighborhood
AC9186	New Stormwater Pond	Hunters Branch	Vienna Moose Lodge
AC9187	Stormwater Pond Retrofit	Mainstem 1	Behind Blake Park Ct
AC9188	Stormwater Pond Retrofit	Mainstem 1	Country Creek neighborhood
AC9189	New Stormwater Pond	Mainstem 1	East Blake Lane Park
AC9190	Stormwater Pond Retrofit	Mainstem 1	Behind Oakton Pond Ct
AC9191	Stormwater Pond Retrofit	Mainstem 1	Behind Cyrandall Pl
AC9192	Stormwater Pond Retrofit	Mainstem 1	Edgemoore neighborhood
AC9193	Stormwater Pond Retrofit	Mainstem 1	Oakdale Woods Ct
AC9194	Stormwater Pond Retrofit	Mainstem 1	Behind Miles Stone Ct
AC9197	Stormwater Pond Retrofit	Mainstem 1	Borge St and Oakton Meadows
AC9198	Stormwater Pond Retrofit	Mainstem 1	Silver Stone Ct and While Flint Ct
AC9402	Culvert Retrofit	Mainstem 4	Lake Accotink Park
AC9403	Culvert Retrofit	Mainstem 4	Lake Accotink Park
AC9404	Culvert Retrofit	Long Branch Central	Red Fox Dr
AC9407	Culvert Retrofit	Mainstem 3	Between Private Ln and Queen Elizabeth Blvd
AC9408	Culvert Retrofit	Bear Branch	South Side Park
AC9500	BMP/LID	Mainstem 8	Pohick Industrial Park
AC9504	BMP/LID	Long Branch South	Shopping area opposite Springfield Mall
AC9507	BMP/LID	Long Branch South	Springfield Mall
AC9513	BMP/LID	Mainstem 6	West Springfield Elementary School
AC9516	BMP/LID	Mainstem 5	Lee Valley Apts
AC9517	BMP/LID	Mainstem 5	Garfield Elementary School
AC9518	BMP/LID	Mainstem 5	Springfield United Methodist Church
AC9519	BMP/LID	Mainstem 5	Springfield Plaza
AC9520	BMP/LID	Mainstem 5	Springfield Plaza
AC9521	BMP/LID	Mainstem 5	Saint Bernadette Church and School
AC9522	BMP/LID	Mainstem 5	Grace Presbyterian Church
AC9523	BMP/LID	Mainstem 4	North Springfield Elementary School
AC9524	BMP/LID	Mainstem 4	Church of Jesus Christ and behind Rexford Ct
AC9525	BMP/LID	Mainstem 4	Tivoli Condominiums

Long Term Structural Projects (25 Year Implementation Plan)			
Project #	Project Type	WMA	Location
AC9526	BMP/LID	Mainstem 4	West Springfield Business Center
AC9527	BMP/LID	Mainstem 4	Kings Park Elementary School
AC9528	BMP/LID	Long Branch Central	Holy Spirit Catholic Church and Canterbury Woods Swim Club
AC9530	BMP/LID	Long Branch Central	Long Branch Swim and Racquet Club Parking Lot and St. Stephens United Methodist Church
AC9531	BMP/LID	Long Branch Central	Rutherford Area Swim Club
AC9532	BMP/LID	Long Branch Central	Rutherford Park
AC9533	BMP/LID	Long Branch Central	Rutherford Park
AC9534	BMP/LID	Mainstem 3	Annandale District Govt Center
AC9536	BMP/LID	Mainstem 3	Wakefield Forest Elementary School
AC9537	BMP/LID	Mainstem 3	Wakefield Chapel Park
AC9543	BMP/LID	Mainstem 2	Camelot Elementary School / Pine Ridge Park
AC9544	BMP/LID	Mainstem 2	Silk Vision and Surgery Center
AC9549	BMP/LID	Mainstem 2	Arlington Blvd & Williams Dr
AC9552	BMP/LID	Long Branch North	Thoreau Middle School and Stenwood Elementary School
AC9554	BMP/LID	Hunters Branch	Vienna Metro Station parking lot
AC9555	BMP/LID	Hunters Branch	Nottoway Park
AC9556	BMP/LID	Hunters Branch	Vienna Moose Lodge
AC9557	BMP/LID	Hunters Branch	Madison High School
AC9559	BMP/LID	Mainstem 1	End of Bickley Ct
AC9560	BMP/LID	Mainstem 1	Behind Courthouse Wood Ct
AC9561	BMP/LID	Mainstem 1	Vistas Condominiums
AC9700	Outfall Improvement	Mainstem 3	Wakefield Park
AC9701	Outfall Improvement	Mainstem 3	Wakefield Park
AC9702	Outfall Improvement	Mainstem 4	Lake Accotink Park

Non-Structural Projects			
Project #	Project Type	WMA	Location
AC9800	Buffer Restoration	Long Branch South	Intersection of Telegraph Rd and Fairfax County Pkwy
AC9801	Buffer Restoration	Long Branch South	Springfield Industrial Center
AC9802	Buffer Restoration	Mainstem 2	Accotink Stream Valley Park
AC9803	Buffer Restoration	Crook Branch	Upstream of Prosperity Ave / Lake Accotink Park
AC9804	Buffer Restoration	Crook Branch	Downstream of Prosperity Ave
AC9805	Buffer Restoration	Mainstem 2	Eakin Community Park
AC9806	Buffer Restoration	Long Branch North	Behind Amberley Ln
AC9900	Community Outreach/Public Education - Storm Drain Marking	Multiple	Watershed-wide
AC9902	Inspection/Enforcement Enhancement Project - Vehicle Maintenance	Multiple	Watershed-wide

Non-Structural Projects			
Project #	Project Type	WMA	Location
AC9903	Inspection/Enforcement Enhancement Project - Outdoor Materials Storage	Multiple	Watershed-wide
AC9904	Rain Barrels	Multiple	Watershed-wide
AC9906	Inspection/Enforcement Enhancement Project	Multiple	Watershed-wide
AC9907	Community Outreach/Public Education - Lawn Care Outreach	Multiple	Watershed-wide
AC9908	Inspection/Enforcement Enhancement Project - Dumpster Maintenance	Multiple	Watershed-wide
AC9909	Rain Barrels	Multiple	Watershed-wide
AC9910	Street Sweeping Program	Multiple	Watershed-wide
AC9913	Dumpsite/Obstruction Removal	Multiple	Watershed-wide
AC9914	Community Outreach/Public Education - Turf Management	Multiple	Watershed-wide
AC9935	Community Outreach/Public Education	Multiple	Watershed-wide
AC9936	Studies and Assessments – Floatables Control	Multiple	Watershed-wide

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