

Watershed Planning Policy and Action Recommendations

Cameron Run - Excerpted from Watershed Management Plan Adopted by Board of Supervisors on Aug. 6, 2007

Educate the public on ways to reduce the amount of pollutants in stormwater runoff. This can include, but is not limited to, storm drain stenciling, providing 'doggie mitts' in public parks, brochures, advertising, and working with community groups. Provide materials on natural landscaping, using native plants, and reducing use of chemicals and fertilizers.

Increase the frequency of inspection for private BMPs with maintenance agreements from approximately once every three-to-five years to annually and provide education, including written materials, to owners to ensure proper maintenance.

Encourage application of bioengineering and natural stream channel design approaches to stabilize streambanks and improve stream habitat conditions.

Conduct frequent inspections during the building process to ensure compliance with permit conditions pertaining to landscaping requirements and adequate prevention of stormwater runoff. Rigorous fines and Stop Work Orders should be employed for noncompliance.

Consider providing incentives for developers, redevelopers, builders, and remodelers to reduce runoff, through zoning incentives or an expedited review process for developers who include conservation design techniques and LID components in their site plans.

Plant buffers using native vegetation and trees adjacent to the stream in areas identified as good candidates for riparian buffer restoration. Monitor the condition of restored and existing riparian buffers for at least five years with annual stream walks.

Require restoration of vegetation in the riparian buffer for development or redevelopment sites within the RPA that do not have existing buffer vegetation. Native vegetation mixes, suitable for local habitats, should be mandated in a BMP document identifying specific plants and trees that meet this definition.

Facilitate the acquisition by and donation of conservation easements to community groups and land trust organizations for protection of streams and riparian buffers, as well as provision of public/private open space, for the environmental quality corridors described in the Fairfax County Comprehensive Plan and not adequately protected through the zoning process.

Purchase private land, designate public land, or acquire easements for land conservation of critical wetland habitat areas as identified in the wetlands functions-and-values survey.

Identify stream corridors for purchase or acquisition of easements for public access and environmentally friendly recreation.

Working with local communities, construct and restore wetlands at suitable locations in the watershed as identified by the wetlands functions-and-values survey.

Allocate sufficient dedicated funding to adequately staff, educate, and otherwise support county inspection and enforcement related to preventing the removal of native mature trees and landscape or requiring restorative landscaping in accordance with permits.

Enforce the solid waste ordinance and the erosion and sedimentation control ordinance prohibitions against illegal dumping. Target locations experiencing frequent dumping of trash and identify private, potentially illegal dumpsites located in the watershed. Impose fines on persons caught dumping illegally, take legal action against the property owners who create or knowingly allow illegal dumpsites, and require restoration of the sites. Consider fencing or lighting on chronic dumping sites on both public and private land, where they would not cause adverse environmental impacts.

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Provide additional staff and resources to the county to inspect development projects and apply necessary penalties to ensure compliance with land disturbance prohibitions (and applicable erosion and sediment requirements) under the Chesapeake Bay Preservation Ordinance. Impose fines on persons or companies not complying with the requirements, and require restoration of the sites. Strengthen the current erosion and sediment control laws, policies, and regulations (e.g., Chapter 104 of the Fairfax County Code) to provide the penalties and restoration requirements described above.

Provide additional staff and resources to the county for review and inspection of privately owned and county-owned BMPs.

Evaluate the county's current list of recommended BMPs (dated October 2, 2001) to determine their effectiveness based on current literature. Expand the list to include newer practices such as porous pavement, bioretention, and green rooftops. These practices are currently in use in the county and a number of LID practices have recently been incorporated into the Public Facilities Manual. The county will consider adoption of additional LID measures in the future. Adding them to the recommended list will make it easier for developers to include these in their site plans for review. Allow for the siting of integrated LID management practices on individual residential lots. Prepare materials to give to builders, remodelers, and developers to educate them about these LID practices and the county's preference for them. Adopt a policy preferring these practices where they are effective.

Retrofit and upgrade existing stormwater management facilities and BMPs, where feasible, to make them more effective in managing stormwater runoff. Construct new public BMPs including LID practices to detain the runoff from surrounding development that does not currently have stormwater management controls. Construct LID demonstration projects at publicly owned locations such as schools, parks, and other county properties.

Enact a new policy to more stringently require all land disturbance, remodeling, building, and redevelopment to retain on-site all runoff that would normally infiltrate (on natural landscapes), and prevent it from flowing onto adjacent properties, unless an exception is granted (e.g., property is next to a stream or natural area). Do not grant final residency permits until stormwater controls are properly installed and tested.

Fairfax County should not grant waivers of water quality controls for nonbonded lots exceeding 18 percent imperviousness. Nonbonded lots refer to existing lots (new construction, redevelopment, expansion, or renovation) that were created as part of an older development project for which the performance bond has been released.

Encourage approval of LID facilities as acceptable stormwater management and adopt a policy preferring LID projects where they are effective.

Amend the Fairfax County Erosion and Sedimentation Control Ordinance, Chesapeake Bay Preservation Ordinance, and other applicable ordinances to require that commercial and residential redevelopment of sites demonstrate a 10 percent net decrease in runoff if possible. Adopt graduated incentives for projects that exceed the 10 percent minimum, and do not allow residency permits until the site owners demonstrate that this has been achieved.

Amend zoning regulations or plans to encourage better design of new development (both public and private) to reduce or eliminate post-development runoff.

Limit removal of mature trees and native vegetation in any new development, redevelopment, or renovation of commercial and residential sites by making associated permits contingent on landscape requirements directed by the county.

Facilitate, through technical assistance, financial support, and other incentives, the construction and use of LID practices such as rain gardens, cisterns, and rain barrels throughout the watershed, initially targeting areas near the headwaters of streams to detain the runoff from developments that do not have stormwater management controls. The county should investigate mini grants, county tax abatements, or county property tax credits to facilitate implementation of LID practices.

Amend the county's tree cover policy to expand existing woodland habitat and prevent further deforestation. Conduct an inventory of significant native trees in the county. Strengthen the requirements of building permits and site plans to preserve native trees.

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Determine the current level of mature tree canopy coverage existing in each subwatershed. Establish a reforestation goal, ensuring new native tree planting throughout each subwatershed to increase its canopy coverage by a minimum of 5 percent in five years.

New reforestation targets should be adopted every five to seven years.

Adopt a county policy of implementing natural and water conserving landscaping approaches at all of its facilities in the watershed, implementing these beneficial watershed management approaches as models for future development.

Provide additional staff and dedicated funding to the county to ensure protection of riparian buffers and adequate review of waivers under the Chesapeake Bay RPA Ordinance. Ensure that county personnel are adequately trained with respect to the requirements of the RPA Ordinance and encourage strict enforcement of such requirements. Grant waivers very judiciously.

Perform a wetlands functions-and-values survey to identify the location, size, owner, type, and quality of existing wetlands in the watershed to determine the baseline information.

In coordination with VDOT, require that road widening projects be designed to control the runoff from existing paved areas that do not have stormwater management controls and reduce the existing peak runoff rate by a minimum of 5 percent.

Involve the public early in the planning of watershed projects and maintain transparency between the county and the public throughout the process. Improve coordination with and early notification of affected residents at both the study and implementation stages of proposed stormwater projects and notify affected civic associations.

Coordinate county stormwater management activities with those of neighboring jurisdictions and review this coordination annually.

Strengthen enforcement of the "pooper scooper" regulation by instituting a \$100 fine for violators.

Reduce the amount of county-applied deicing materials such as sand and/or chemicals entering surface waters of the watershed, and require that excess de-icing materials be swept up in a timely manner to prevent them from reaching surface waters and causing sedimentation or impacting water quality. Limit the use of de-icing materials that impair water quality and recommend products and practices that will be specified in the county review and update of BMPs. Coordinate with VDOT to achieve the above goals on state roadways within the county.

Create and distribute outreach materials that inform the public about the value and benefit of wetlands, the permits required for activities in wetlands, and the Wetlands Board's preference for LID techniques and "living shorelines."

Notify property owners of steps they could take to improve water quality in their streams (e.g., by providing information on reducing chemicals and fertilizers on lawns, using native plants, and performing natural landscaping).

Provide educational and technical assistance, including written materials, to owners of property with tidal shoreline and land adjacent to streams to help them manage existing buffers, including information about Virginia's wetlands' laws and the county's

The county and the Virginia Department of Transportation (VDOT) should develop an inspection protocol; inspect BMPs, ditches, pipes, and outfalls within the watershed every five years; and make repairs as necessary. Establish a hotline for citizens to report problems, and fund projects that address citizen-reported problems. Support legislation that provides incentives for VDOT to use LID techniques in its projects and replace grass with more native trees and vegetation along highways. Adopt the same policies for any county-owned roads.

In coordination with VDOT, replace grasses on medians and sides of roadway with native trees and vegetation where possible.

Monitor and report on the condition of streams by performing a stream physical assessment every five years to track the improvement or degradation of streams from the baseline condition.

Install signage at public facilities to explain the reasons and benefits of rain gardens, green roofs, porous pavement, increased mature tree canopy coverage, and other LID features. Include this information in mailings to park users. Identify sources for interested citizens to obtain more information about these types of BMPs.

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Identify sources of fecal coliform in the watershed (i.e., from humans, domesticated animals, or wildlife) and prepare an action plan to reduce the amount of fecal coliform.

Increase fines for noncompliance with BMP or LID requirements.

Strengthen county policy and ordinances, in the event that impacts to wetlands are unavoidable, to require mitigation such as buying into a wetlands bank or creating compensatory wetlands. Wetland banks used for mitigation should be approved by state and federal regulatory agencies.

Perform additional water quality monitoring that includes a macroinvertebrate and aquatic plant survey of Cameron Run and its tributaries, and report the results to the public. Prepare an action plan based on the results.

Identify and investigate illicit discharges in the watershed from commercial and residential activities such as car repair and painting. Take enforcement actions to stop such illicit discharges.

Develop a master plan for increased environmentally friendly recreational opportunities along the Cameron Run mainstem and major tributaries.

Evaluate, through a literature review or formal study, the effectiveness of public education programs for watershed stewardship. This could result in an addendum to this plan that identifies mechanisms for reaching watershed residents (e.g., through public and private schools, clubs, civic groups, service organizations, foreign-language communities). This addendum would also include the best methods for changing individual behaviors for better watershed stewardship. It would also include methods for monitoring the effectiveness of these methods, and adapting public education programs for success.

Place containers at all public and other high traffic facilities that have openings for recycling paper, glass, and aluminum with signs requesting sorting of trash and stating fines for littering.

Conduct a vigorous public information campaign, including installing signs throughout the watershed and coordinating with community groups, to deter littering and the dumping of trash.

Work with community groups to clean up trash, woody debris that impedes stream flow, and dumpsites throughout the watershed.

Encourage all lawn management companies to participate in the Virginia Water Quality Improvement Program, and sign agreements requiring them to apply nutrients within established criteria to better control application rates and timing, thus creating a "green label" for lawn and landscaping companies. Provide a list of these companies to residential and commercial property owners and homeowners associations. Use only those companies on county-owned properties.

Post signage that publicizes the existence of RPAs and their importance for stream protection and environmentally sensitive recreation.

Cub Run and Bull Run - Excerpted from Watersheds Management Plan Adopted by Board of Supervisors on Feb. 26, 2007

Provide public information on correct application procedures and rates for fertilizers and pesticides. This effort should be coordinated with existing programs developed by the Virginia Department of Conservation and Recreation, Northern Virginia Soil and Water Conservation District, U.S. Environmental Protection Agency, and other state and local agencies, and professional societies.

Provide readily accessible information about stormwater, water quality and watershed issues to the public on the county's watershed Web site, and what they can do to reduce nonpoint source pollution on their property and elsewhere in the watershed.

Work with the Northern Virginia Regional Park Authority to implement watershed education activities and displays at the Bull Run Regional Park, and incorporate these programs into the park's existing environmental education programs.

Eliminate vehicle access to and place signs at active and historical dumping sites. The signs should state that dumping is illegal, describe the fines and other penalties for illegal dumping, and provide a hotline number that residents can call to report it.

Eliminate existing dump sites within the watershed.

Work with lawn maintenance companies to minimize runoff of nutrients and pesticides. The Virginia Department of Conservation and Recreation (DCR) maintains a list of lawn-care operators that have voluntarily entered into an agreement with the state to protect and improve Virginia's surface and ground waters.

Collaborate with golf courses, office parks, parks and similar facilities with large areas of turf to educate managers on environmentally friendly practices that will limit impacts on the watershed. Protection and restoration of stream buffers within these areas should also be encouraged.

Partner with public and private golf courses to review and enhance, if necessary, their turf management programs and ensure the application of best management practices for the handling and use of fertilizers, pesticides and other chemicals.

Prepare and provide design guidance and construction cost estimates for LID retrofit projects to encourage implementation by property owners and ensure that the projects are properly constructed and maintained. This action should include coordination and the use of existing information from local, state and federal agencies. This action should be directed to both residential and non-residential properties.

Address non-native and invasive species when they affect the watershed, promote volunteer efforts or undertake other activities regarding invasive species and restore conditions using native species where appropriate.

Develop materials promoting LID retrofits on existing property and their effectiveness in addressing drainage issues and minimizing impacts from stormwater runoff. In addition to this promotional literature, design specifications, cost estimates and maintenance requirements for commonly used LID techniques should be developed and provided through the county Web site, as well as coordinated with other outreach and education programs.

Provide locations within or near the watershed where residents can dispose of large trash items at no charge or for a minimal fee, or, alternatively, schedule and promote neighborhood clean-up days where the county will collect large items. Deposits should be required for tires and other large items that often end up in illegal dumps.

Conduct outreach and education to builders and developers to communicate and promote the benefits of implementing LID in addition to or instead of standard stormwater controls. LID features should be promoted as positive amenities that property owners can find both aesthetically pleasing and functional.

Place trash receptacles at locations where trash is likely to be generated (e.g., bus stops).

Work with the Fairfax County Park Authority to identify opportunities for watershed education activities and displays at the Eleanor C. Lawrence Park and new facilities identified in the Sully Woodlands Master Plan. These activities and displays should be incorporated into the environmental education center and other facilities at the park.

Maintain and develop a system of interconnected hiking and biking trails throughout the watershed. Fairfax County maintains an extensive trail system and manages a countywide trails plan. Additional trails are needed in the stream valleys. Construction of new trails to connect to existing trails should be included in association with new development and Virginia Department of Transportation road improvement projects. The impact of trails on the streams and stream valleys should be minimized.

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Provide outreach and education to the property owners and managers of commercial and industrial facilities that handle hazardous materials, paints, chemicals and fertilizers regarding stormwater control requirements for their properties and their importance in protecting watersheds streams and water supply.

Create and distribute a fact sheet of common stormwater problems and solutions, as well as available Fairfax County resources and contact information.

Notify homeowner associations, civic associations and private property owners of the watershed planning effort and provide resources, including contacts and Web site addresses, that can provide additional information. Direct mailings can be used to distribute this information to the public, when appropriate. Development of a speakers bureau and articles for community newsletters would improve outreach through these organizations and associations.

Place signs reminding pet owners to properly dispose of pet wastes and provide bags and trash receptacles in high-use areas.

Use the one-year, 24-hour storm as the "adequate outfall" standard for erosion and sediment control. Portions of the Fairfax County Public Facilities Manual concerning the adequate outfall requirement were updated in early 2006.

Recognize that stormwater and watershed issues do not stop at political boundaries and stress inter-jurisdictional cooperation to protect watershed health and public water supplies.

Create and staff a watershed and stormwater issues ombudsman position to provide a single contact on these issues for county residents. This position may cover several county watersheds.

Perform an inventory of and describe conditions related to commercial and industrial sites such as existing and former gas stations, automobile repair shops, dry cleaners, junk yards, equipment storage yards, quarries and other former commercial and industrial sites that may contain surface or underground contamination.

Perform regular inspections and water quality sampling at privately owned and maintained stormwater management facilities and/or stormwater outfalls serving facilities that regularly use hazardous materials to ensure they are functioning properly and are not discharging contaminants to the county streams.

Take inventory of commercial and industrial establishments that regularly work with or store hazardous materials, and therefore could contaminate the streams.

Regularly inspect privately owned and maintained stormwater facilities to verify they are properly constructed and maintained, and take appropriate actions where issues are identified.

Implement a policy in which persons caught dumping or littering will be prosecuted to the maximum extent of the law.

Increase fines and penalties, and enforce existing laws prohibiting dumping and littering.

Require that development site plans provide sufficient space for proper stormwater management.

Before bonds are released, inspect stormwater controls constructed by developers to ensure they are constructed correctly and meet county standards and requirements.

Request that the Fairfax County Board of Supervisors present the Cub Run and Bull Run Watershed Plan to the Loudoun County Board of Supervisors and seek concurrence on the actions included in the plan.

Promote and encourage alternatives to paved surfaces for sidewalks, driveways and parking areas (gravel, permeable pavers, etc.). Evaluate incentives to reduce paved areas and review the Public Facilities Manual to ensure it adequately addresses alternatives to impervious pavement. Review and potentially revise policy to allow pervious paving to offset up to 50 percent of the interior landscaping requirements.

Continue to work with the jurisdictions in the watershed to ensure that stormwater regulations adequately protect streams from the impacts of existing and future development, and other human activities.

Design and build highway and road improvement projects that minimize watershed impacts and include innovative stormwater management controls when feasible.

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Promote those alternatives for the Tri-County Parkway and Battlefield Bypass that have the least impact on county watersheds. The Commonwealth Transportation Board selected the Tri-County Parkway alternative that lies entirely outside the Cub Run and Bull Run watersheds.

Continue to work with the Metropolitan Washington Airport Authority (MWAA) to ensure that the Dulles Airport expansion effectively prevents negative environmental and other impacts on Cub Run and Bull Run streams, and on residents near these streams. Continue coordinating with the MWAA and its consultants to advance this goal. Resolve and address issues related to the potential impacts of development on the Federal Emergency Management Authority (FEMA) 100-year flood plain.

Work with the Fairfax County Park Authority, Northern Virginia Regional Park Authority and National Park Service to incorporate watershed plan objectives into planning and development initiatives for Sully Woodlands Parkland, Bull Run Regional Park and Manassas National Battlefield Park, respectively.

Work with the Northern Virginia Conservation Trust, other area land trusts, the Northern Virginia Park Authority, Fairfax County Park Authority, state agencies and community organizations to identify opportunities and funding sources for preserving open space, and associated natural and cultural resources.

Active involvement of the Fairfax County Stormwater Planning Division in the planning, evaluation and design of major transportation projects will help ensure that these projects are performed so they are sensitive to the county's watersheds.

Continue to work with the Metropolitan Washington Airports Authority (MWAA) to ensure that the Dulles Airport expansion meets minimum Fairfax County and Loudoun County stormwater requirements for new development. Implementation of additional controls should be encouraged to further protect the Cub Run streams and prevent flooding.

Track stormwater controls used in development projects and stormwater management requirements in upstream jurisdictions, monitor water quality and streambank conditions of Fairfax County streams downstream from these jurisdictions, and establish back-up plans to address stormwater impacts on Fairfax County streams if the stormwater controls in these upstream streams do not provide adequate protection.

Coordinate with the Fairfax County Park Authority and Northern Virginia Regional Park Authority in developing the Sully Woodlands Regional Master Plan and other site-specific plans for new and existing parks, to ensure that development has minimal impact on county streams and to improve watershed health when possible. Park development plans and maintenance procedures will need to be reviewed periodically to identify opportunities for restoration and additional protection of stream buffers.

Set up a hotline that residents can call to report a hazardous spill. This action should be coordinated with the direct number for the watershed ombudsman identified.

Coordinate with the Fairfax County Animal Shelter to educate the public about the impact pet wastes have on streams (coliform bacteria and nutrients) and the importance of properly disposing of these wastes.

Coordinate with the Fairfax County Division of Solid Waste to promote existing information on environmental problems associated with trash and dumping. Partnering with private waste-hauling companies will further educate residents about bagging and disposing of trash properly, and placing it in approved garbage cans to prevent spreading into the environment.

Create watershed education areas within the Chantilly and Centreville Fairfax County public libraries and make watersheds part of the standard library educational programs.

Install signs with stream and watershed names at major road crossings and watershed boundaries. This action would increase residents' awareness of the streams in the county as well as in the watershed in which they live. The signs within the Cub Run and Bull Run watersheds should also state that these streams drain to the Occoquan Reservoir water supply.

Develop educational and other public information materials in languages other than English to address the multicultural character of Fairfax County.

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Create and provide community education programs that describe watershed issues in Fairfax County and the simple steps that residents, businesses and organizations can take to improve conditions in their backyard streams.

Encourage maintenance and restoration of stream buffers throughout the watershed by educating the public and businesses on the importance of healthy stream buffers, and steps to maintain and restore stream buffers on their property and along local streams.

Educate homeowners, citizens and schoolchildren that, in the Cub Run and Bull Run watersheds, stormwater runoff eventually drains to one of Northern Virginia's primary drinking water sources, the Occoquan Reservoir. Actions to be taken include storm drain marking and signs that inform the people they are in a water supply watershed.

Increase the frequency of inspections of county-owned stormwater management facilities.

Create an open space plan to guide the county's efforts to preserve open space, and natural and cultural resources.

Coordinate with the Fairfax County Division of Solid Waste to promote existing information on the proper disposal of hazardous household materials, including fertilizer, chemicals, motor oil and paint. Information should include the locations where these materials can be disposed of safely.

Improve coordination and reporting of water quality, benthic and other sampling in the streams by the county and volunteers, and develop a central database where these data can be stored, accessed and analyzed.

Work with appropriate local and state agencies to create an effective policy to remove the carcasses of animals killed by automobiles more rapidly to avoid stream contamination. Telephone numbers that citizens can use to report dead animals should be established and/or publicized.

Coordinate with the Fairfax County Health Department to promote control of mosquitoes on private property through elimination of standing water. Future education should also point out that healthy stream, lake and wetland ecosystems are not major sources of West-Nile carrying mosquitoes and should explain the natural features that prevent excessive mosquito populations in healthy water bodies.

Develop and distribute reference sources for building and retrofitting sites using LID techniques, including information on maintaining LID facilities. Reference sources previously developed by local, county, state and federal agencies should be used.

Evaluate and potentially update county policies regarding tax and other incentives to establish conservation easements on privately owned property to preserve undeveloped land. These evaluations will consider whether Fairfax County has the authority to implement such incentives.

Evaluate county funding for the preservation of undeveloped open space identified in the Sully Woodlands Regional Master Plan or other areas, and make adjustments as necessary.

Evaluate alternatives to provide monetary incentives for LID implementation by residents and businesses on private property. Private property owners will be more willing to implement and maintain LID on their property if there are incentives. Possibilities include grants, no-interest or low-interest loans, matching grants, materials subsidies and/or tax breaks. Opportunities to provide a tax break if an approved LID project is implemented by a property owner should be evaluated. If a stormwater fee is implemented, opportunities should be identified to reduce the fee for homeowners who implement approved LID techniques. The evaluation should include assurance that the projects will be properly installed and maintained.

Develop incentives to promote stream and wetland mitigation for roadway, airport and other major transportation projects within the same watershed in which the disturbance occurs and as close to the disturbance as possible. Mitigation should reflect the most current science and the evolving understanding of where habitat and water quality mitigation has the most impact. A list of stream and wetland improvement projects in the Cub Run and Bull Run watersheds should be maintained for consideration as mitigation sites. Decisions regarding wetland and stream mitigation locations ultimately rest with federal and state authorities.

Cub Run and Bull Run - Excerpted from Watersheds Management Plan Adopted by Board of Supervisors on Feb. 26, 2007

Identify and promote procedures and incentives to encourage developers to implement stormwater controls that exceed the minimum required by the Public Facilities Manual and other policies. This should include overall guidelines and best management practices for onsite stormwater management and specific incentives that the developer may consider during site plan development. Flexibility is needed by county staff to approve deviations of up to 10 percent of building setback requirements in return for the use of contiguous areas to implement LID best practices that do not displace natural areas within the RPA, floodplains or stream channels. This recommendation would require an amendment to the zoning ordinance through the zoning amendment work program to allow for modifications to setback requirements.

Promote the Virginia Department of Conservation and Recreation's Adopt-a-Stream program to encourage and actively recruit residents, businesses, student groups and other organizations to adopt stream segments and, thereby, promote watershed stewardship both in Cub Run and Bull Run watersheds and throughout the county.

Develop and implement criteria to quantify tradeoffs between LID stormwater management techniques and conventional stormwater controls.

Encourage and require more tree plantings in stream buffers and around new dry ponds.

Make funds available for LID retrofit, stream restoration and buffer restoration projects by community groups such as homeowner associations, businesses and churches. These projects are more likely to be constructed if costs can be offset by county funds or grants. Possibilities include grants, no-interest or low-interest loans, matching grants, materials subsidies and/or tax breaks. The evaluation should include assurance that the facilities will be properly installed and maintained.

Identify and provide to Fairfax County public schools educational programs and SOL-based curricula regarding watershed issues.

Given the large areas of undeveloped, privately owned land used as common areas for apartments, condominiums, townhouses and homeowner associations, review county policies regarding management and maintenance of these areas, and their impact on watershed health. Policies should encourage maintenance of these privately owned open areas that protect watershed health through the creation of no-mow zones, planting of native species, and removal of non-native species. Construction of LID facilities such as bioretention and grassed swales should be encouraged to reduce the impacts of adjacent paved and developed areas.

Identify, evaluate and (if appropriate) implement alternative stormwater management pond designs to provide better stormwater protection for county streams. Based on the conditions found in the Cub Run Watershed, evidence indicates that the current peak flow control and extended draw-down dry pond design does not totally protect the county's streams. Alternative, state-of-the-art stormwater ponds that store the flow of the one-year storm and release it over 24 to 48 hours should be evaluated. These alternative designs should be used when they improve stream protection and do not present other implementation problems.

Prepare reports (every two to three years) that summarize the results of water quality, benthic and other sampling, and describe overall stream conditions in the county. These reports should be publicized and distributed to the public. Parameters tested, monitoring results, interpretation of these results and identification of trends should be documented so it is easily understood by the public and elected officials.

Support state total maximum daily load (TMDL) limits and local programs to meet the state water quality standards for bacteria and allow safe primary contact recreation in all watershed streams.

Expedite the updating of the county Public Facilities Manual to include specific LID strategies. Developers will be better able to implement LID and other innovative controls when these controls are included in the Public Facilities Manual.

Develop a checklist or other tool that would help ensure that the county accepts stormwater control plans that include LID without delaying the project or causing the property owners and/or developers to incur additional costs. Disincentives to using LID should be removed through a technical, pre-review process to ensure that proposed plans are workable and potentially acceptable to the county. A pre-review meeting or process involving technical review staff and developers can expedite the permitting and approval process, and remove uncertainty associated with proposing and implementing LID.

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Work with appropriate local authorities, including the Fairfax County Animal Control Division, to develop a consistent and humane strategy for addressing issues created by native wildlife, including deer and geese.

Encourage stormwater treatment using smaller facilities located further up in the stream headwater areas. Stormwater management programs should intercept problems before they enter the streams. The solutions should be as far upstream in the watershed and as close to the source of stormwater runoff as possible. Ponds should be a last resort and located off-channel when possible. Alternatives to ponds, including smaller upstream stormwater controls and more natural controls such as wetlands, should be considered.

Prevent deforestation and other vegetation removal during and after development of land in the watershed; create incentives to encourage tree preservation by developers; and require tree planting and creation of "no mow" zones in environmentally sensitive areas near streams, floodplains and stream valleys. Such actions should be consistent with Resource Protection Area requirements and the Environmental Corridor policy, and may require better enforcement of these policies or strategies to address existing conditions.

Implement a strategy to review stormwater management design more consistently for new development projects, especially regarding LID implementation.

Perform a study to identify significant historic, cultural and ecological resources within the stream valleys and protect these resources where invasive species, active stream erosion, frequent flooding, sedimentation or other stormwater-related issues are threatening these resources.

Design new stormwater management facilities to provide opportunities for educational and recreational uses. The past and current county policies generally discourage recreation and access primarily due to public safety and liability concerns. These policies should be reconsidered and rewritten to make stormwater management facilities an amenity to the community while at the same time protecting county interests.

Support the completion and implementation of Fairfax Water's Source Water Protection Study.

Create observation platforms, interpretive signs and benches to promote passive recreation at new and existing stormwater management facilities.

Create fishing opportunities in existing and proposed wet ponds in the watershed where appropriate.

Difficult Run - Excerpted from Watershed Management Plan Adopted by Board of Supervisors on Feb. 26, 2007

Remove dumpsites from stream corridors.

Carry out preliminary engineering, design, and construction of new pond projects.

Develop an enhanced illicit discharge and sewer infiltration / inflow removal program to eliminate potential sewer leaks, overflows and illegal cross-connections.

Restore riparian buffers.

Remove fish passage obstructions.

Education and outreach for proper lawn care.

Remove obstructions from stream corridors.

Repair utility crossings.

Evaluate and implement incentives that could be applied locally to encourage lawn care companies in Fairfax to enroll in the Virginia Water Quality Improvement Program.

Carry out preliminary engineering, design, and construction of stream restoration and drainage retrofit projects.

Golf course nutrient management. Work with golf course managers within the watershed to evaluate turf management practices.

Enhance SWM inspection, maintenance, and enforcement programs.

Enhance inspections of all outfalls and other interfaces between the man-made and natural drainage systems for scour and erosion and make repairs as necessary.

Conduct a drainage study and develop an improvement plan for the right fork of Dog Run.

In partnership with the Town of Vienna, conduct a drainage study and develop an improvement plan to reduce flooding in Vienna near Echols Street.

Evaluate requesting road construction projects to manage the whole roadway, not just the added lane widths.

Carry out preliminary engineering, design, and construction of culvert retrofit and pond retrofit projects.

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Carry out preliminary engineering, design, and construction of stream restoration projects.

Carry out preliminary engineering, design, and construction of buffer restoration projects.

Evaluate and implement incentives into County ordinances to consider establishing more stringent stormwater quality control standards for redevelopment.

Evaluate and implement incentives where appropriate for the use of pavers or porous pavement for seasonal or overflow parking.

Carry out preliminary engineering, design, and construction of LID retrofit projects.

Continue and enhance the volunteer monitoring program.

Continue efforts to obtain develop a forest conservation ordinance that would preserve existing woodlands.

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Evaluate revising land development regulations to set a maximum impervious percentage for each type of development.

Continue efforts to add LID design criteria and keep PFM up to date.

Update and improve the County's database of all public and private SWM facilities.

Little Hunting Creek - Excerpted from Watershed Management Plan Adopted by Board of Supervisors on Feb. 7, 2005

Perform a hydrographic survey in the future to determine the existing depths in South Little Hunting Creek and initiate a study to determine where dredging may be feasible to restore the navigation channel in the tidal portion of the creek and access from the shorelines.

Monitor the condition of the streams by performing a stream physical assessment every five years in the future to track the improvement or degradation of streams from the baseline condition.

Perform additional water quality monitoring and conduct a macroinvertebrate and aquatic plant survey of South Little Hunting Creek, such as where it discharges into the Potomac and other locations in the main stem of Little Hunting Creek, in the future to get more information concerning the water quality in the tidal portion of the creek.

Perform a wetlands function and value survey to identify the location, size, owner, type, and quality of existing wetlands in the watershed to determine the baseline information.

Fairfax County staff should not grant waivers of water quality controls for nonbonded lots exceeding 18 percent imperviousness. Non-bonded lots refer to existing lots that were created with an older development project for which the performance bond has already been released.

Require restoration of vegetation in the riparian buffer for development or redevelopment sites within the RPA that do not have existing buffer vegetation. Native vegetation mixes, suitable for local habitat, should be used.

Evaluate the enforcement and application of the Chesapeake Bay Preservation Ordinance, including the granting of waivers or exceptions, to determine if riparian buffers are being adequately preserved and protected. Changes should be made to the Chesapeake Bay Preservation Ordinance if the intent of the ordinance is not being carried out.

All impacts to wetlands shall have mitigation such as buying into a wetlands bank or creating compensatory wetlands. Wetland banks used for mitigation shall be deemed appropriate by state regulatory agencies.

Increase the frequency of inspection for private BMPs with maintenance agreements from approximately once every three to five years to annually, and provide education to ensure proper maintenance by owners. For those private sites without maintenance agreements, provide education for owners on why and how to provide adequate maintenance. County-owned BMPs are currently inspected once a year and are not included in this action.

The county and the Virginia Department of Transportation (VDOT) should institute an inspection protocol and perform more frequent assessments of ditches, pipes, and outfalls within the watershed every five years and make repairs as necessary.

Create and distribute brochures to describe the Little Hunting Creek Watershed Management Plan and explain what homeowners and businesses in the watershed can do to improve the streams in the watershed.

Construct and restore wetlands at suitable locations in the watershed as identified by the wetlands function and value survey in.

Expand existing county monitoring programs to identify the sources of fecal coliform in the watershed that may be from humans, domesticated animals, or wildlife, and prepare an action plan to address the reduction of fecal coliform bacteria contamination.

Identify and investigate locations of possible illicit discharges from commercial and residential activities such as car repair and painting. Take enforcement actions to stop the identified illicit discharges.

The county, community groups, and commercial property owners should sweep up sand used for traction control on Richmond Highway and other major streets and parking areas in the watershed during the winter to prevent it from reaching the creek. Limit the use of certain de-icing materials, especially those that greatly impair water quality.

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Evaluate the current list of recommended BMPs and integrated BMPs (dated October 2, 2001) to determine their effectiveness based on current literature, and revise this list to go beyond those found in the Virginia Stormwater Management Handbook. Porous pavement is permitted for stormwater detention in the county and could be added to the recommended BMP list. Green rooftops could also be added. Details on the applicability and use of porous pavement were distributed to the engineering and development community in a county letter to industry, dated March 2004.

Require all lawn management companies to participate in the Virginia Water Quality Improvement Program and sign agreements to apply nutrients within established criteria, to better control application rates and timing. Hire companies that have signed these agreements for work at county facilities. Provide a list of these companies to residential and commercial property owners and homeowner associations.

Adopt a policy of implementing natural landscaping including native trees and vegetation and green building approaches at all county facilities in the watershed. The county should be a model for implementing these beneficial watershed management approaches so it can set the example for current and future development.

Amend the county erosion and sedimentation control ordinance, Chesapeake Bay Preservation Ordinance, and other applicable ordinances to require that commercial and residential redevelopment of sites demonstrate a 10 percent net decrease in runoff.

Provide zoning incentives for developers to reduce imperviousness.

Provide a new, expedited review process for developers who include conservation design techniques and low-impact development features in their site plans. This expedited review process should be a separate expedited track from the current process.

Construct new public BMPs, including LID practices, to detain the runoff from existing surrounding development that does not currently have stormwater management controls.

Install BMPs or enhance the performance of existing BMPs at selected locations to reduce the nitrogen and phosphorous pollutant loading from existing developments that currently have no water quality treatment.

Adopt a comprehensive methodology to quantify the detention and retention achieved for integrated BMPs to enable developers and DPZ/OSDS review staff to consistently and quickly calculate whether adequate stormwater control is achieved. Methods such as those described in Prince George's County Low Impact Development Design Strategies: An Integrated Design Approach and the credit system developed by Center for Watershed Protection for the Maryland Stormwater Design Manual are recommended based on their documented evaluation and support by the regulatory and engineering communities.

Strengthen enforcement of the "pooper scooper" regulation by instituting a fine for violators.

Create and administer a new small grant program to sponsor volunteer community groups in watershed stewardship and restoration activities.

Conduct a vigorous public information campaign including installing signs throughout the watershed and coordinating with community groups to deter littering and trash dumping. Signs could indicate stream names, watershed boundaries, public access areas to creeks, and areas where dumping is prohibited. They should also encourage and support recycling and storm drain marking. The information campaign should also inform the public on the proper disposal of litter and trash and consequences of violating county ordinances.

The county and community groups should partner to clean up trash, woody debris that impairs stream flow, and dumpsites at several locations in the watershed.

The county and community groups should educate the public on ways to reduce the amount of pollutants in stormwater runoff.

Create and distribute a brochure or other materials that inform the public about the value and benefit of wetlands.

Little Hunting Creek - Excerpted from Watershed Management Plan Adopted by Board of Supervisors on Feb. 7, 2005

Purchase private land, designate public land, or acquire easements for land conservation of critical wetland habitat areas as identified in the wetlands function and value survey.

Facilitate the acquisition and donation of conservation easements by community groups for riparian buffer and stream protection and public/private open space for the environmental quality corridors described in the Fairfax County Comprehensive Plan.

The county and community groups should provide educational and technical assistance to property owners with tidal shoreline and land adjacent to streams to help them manage existing buffers. Technical and educational assistance may include information about the benefits of riparian buffers, planting of native vegetation, identification and removal of invasive species, healthy pruning, limiting the use and correct application of fertilizers and herbicides, pet waste management, waste disposal, and proper disposal of leaves and grass clippings.

Implement a watershed-wide rain barrel sale project.

Facilitate and provide technical assistance for the construction of LID practices, such as rain gardens, cisterns, and rain barrels, throughout the watershed, initially targeting areas near the headwaters of streams to detain the runoff from residential developments without existing stormwater management controls.

Monitor the condition of restored and existing riparian buffer with annual stream walks to evaluate the condition and areas needing improvement.

Allow for the siting of integrated LID management practices, such as bioretention, on individual residential lots. Currently, they are only allowed on non-residential lots if they service more than one lot.

Establish a county liaison to help coordinate watershed education in schools and encourage school participation in developing and caring for county restoration projects.

Plant buffers using native vegetation and trees adjacent to the stream for areas identified as good candidates for buffer restoration.

Promote the use of natural shorelines instead of hardened shorelines such as bulkheads or riprap as described in the Wetlands Guidelines prepared for the Virginia Marine Resources Commission (reprinted in September 1993). The construction of replacement bulkheads should go through the wetland permitting process.

The county and community should engage the U.S. Army Corps of Engineers, Virginia Marine Resources Commission, and Virginia DEQ to investigate the extent and concentrations of chlordane and PCB contamination and to aid in the restoration of water quality for the tidal portions of Little Hunting Creek. The feasibility of recommendation will be evaluated, and at a minimum, activities that may suspend the contaminants will be restricted.

The county and community groups should perform stream restoration projects in the areas identified as good candidates for these types of projects.

Retrofit suitable existing stormwater management facilities and BMPs to make them more effective.

Require that road widening projects be designed to control the runoff from existing paved areas that do not have any existing stormwater management controls and reduce the existing peak runoff rate by 5 percent.

Construct LID demonstration projects at publicly owned locations such as schools, parks, and other county properties. This action has been incorporated into the plan at the request of citizens as part of the Community Watershed Forum process.

The Little Hunting Creek Steering Committee should help in forming a community organization for the Little Hunting Creek Watershed.

Amend the county's Chesapeake Bay Preservation Ordinance, storm drainage ordinance, and other applicable ordinances to give the county the authority to require property owners to maintain privately owned BMPs and allow the county to inspect the BMPs for compliance with those ordinances.

Little Hunting Creek - Excerpted from Watershed Management Plan Adopted by Board of Supervisors on Feb. 7, 2005

Enforce the solid waste ordinance and erosion and sedimentation control ordinance prohibition against illegal dumping. Target the locations experiencing frequent dumping of trash and waste and identify private, potentially illegal dumpsites located in the watershed. Take legal action against the property owners of illegal dumpsites and require restoration of the sites.

Middle Potomac Watersheds - Excerpted from Watersheds Management Plan Adopted by Board of Supervisors on May 5, 2008

Encourage voluntary donation of trail and conservation easements.

Establish wildlife or environmental quality corridors where possible.

Restore vegetated buffers along streams especially at public sites such as schools, parks, and municipal facilities.

Increase enforcement of stream buffer violations.

Protect stream buffer areas from development.

Utilize environmentally-sensitive trail design to reduce stormwater impacts where possible.

Require all public facilities to use LID to the 'maximum extent practicable'.

Require developers to use LID to the 'maximum extent practicable'.

Reconnect the floodplains to stream channels to provide floodwater storage and treatment.

Remove detrimental channel obstructions.

Stabilize eroding stream banks using bioengineering methods.

Remove invasive species from stream buffer areas and replant with native plants.

Utilize bioengineering to restore and stabilize stream banks, restore natural stream geometries, and remove concrete from stream banks and beds.

Provide a list of desirable LID projects so that developers considering the use of proffers can easily find where projects are needed.

Provide incentives for individual residential or commercial landowners and leading edge developers to encourage the use and adoption of LID on existing developed land. Incentives for LID are necessary to encourage the immediate and short term voluntary adoption of LID, while the longer term process for formally understanding and implementing LID becomes standard practice in the county.

Strategy to reduce cumulative impacts of infill development.

Identify the sources of fecal coliform bacteria in the watersheds and seek to reduce controllable sources.

Create a program to certify citizens to inspect rain gardens and other LID measures. Ensure that maintenance agreements are recorded on HOA deeds and that the maintenance responsibility transfers with property title changes.

Middle Potomac Watersheds - Excerpted from Watersheds Management Plan Adopted by Board of Supervisors on May 5, 2008

Contact supply companies that could carry LID materials (such as biofilter soils and plants or pervious pavers) and encourage them to stock those items so that construction companies, landscaping companies and homeowners will have easy access to them. Provide a list of stores that carry LID supplies.

Improve enforcement of anti-dumping regulations, e.g., install anti-dumping signage with a phone number for reporting violations.

Construct new BMPs including Low Impact Development (LID) practices.

Form a volunteer community organization to aid in the stewardship of the Middle Potomac Watersheds and to coordinate watershed plan implementation activities with county staff.

Post signage at stream crossings and watershed divides identifying the waterway to increase public awareness of watershed boundaries.

Inspire landowners to use LID measures by demonstrating LID benefits via recognition programs for businesses and neighborhoods that implement LID measures voluntarily. Provide an awards program for businesses that achieve impressive LID applications. Businesses can use this as a marketing tool for clients.

Demonstrate that LID can increase property values (e.g. a realtor can market the value of an aesthetically pleasing and ecologically beneficial rain garden). Provide case examples of this and publish them. Develop detailed case studies of successful LID projects and provide financial evidence of economic successes (e.g. sold lots for higher prices, sold development parcels faster, spent less on LID than conventional methods).

Promote annual or semiannual cleanup projects for streams.

Provide a training and certification program for landscaping companies to learn LID installation and maintenance methods. Provide materials in multiple languages such as English, Spanish, Korean, etc.

Provide homeowner brochures about proper yard compost practices and damage done to streams by improper disposal of yard wastes. It would also be helpful to work with the Northern Virginia Soil and Water Conservation District and the Virginia Department of Conservation and Recreation to provide information about appropriate lawn care companies.

Stock educational brochures about LID practices for homeowners at hardware stores, home improvement stores, and nurseries. Consider asking a major store chain to print the brochures.

Encourage Fairfax County Department of Transportation (FCDOT) and the Virginia Department of Transportation (VDOT) road widening projects to control runoff from both newly paved areas and existing pavement which may not have any existing stormwater management controls or have poorly functioning controls in place.

HOAs should post signs identifying locations of LID measures in order to prevent inadvertent damage. A universal common symbol (e.g. a bucket with plants coming out of it) should be developed and posted near LID measures.

Implement the Tysons Corner stormwater management strategy in conjunction with the redevelopment due to the new Metro rail stations.

If a stormwater utility is established, provide opportunities for landowners to lower their utility fees by installing LID measures on their properties. If such an arrangement is reached, ensure that the LID is noted on the deed and transfers with the property to prevent loss of the LID measures under new ownership.

Integrate the watershed management plan with existing state and local government planning efforts such as Capital Improvement Project planning, the County Comprehensive Plan, Area Plans, the Virginia Department of Transportation Six Year Plans, road standards and mitigation projects.

Provide marketing ideas to showcase properties using extensive LID methods and publicize environmental and social benefits. For example, provide marketing of eco-office parks, healthy landscapes, safer and more environmentally sensitive and attractive developments, and more beautiful environments to attract clients and employees.

Middle Potomac Watersheds - Excerpted from Watersheds Management Plan Adopted by Board of Supervisors on May 5, 2008

Conduct a detailed inventory of existing wetlands in order to identify areas for protection or restoration.

Retrofit existing stormwater management facilities and BMPs.

Improve the existing stormwater infrastructure to prevent negative impacts to the stream.

The county should work with the appropriate permitting agencies to encourage mitigation for wetland losses resulting from development to be mitigated within the same hydrologic area (same local watershed).

Improve the existing stormwater infrastructure to prevent flooding of roadways and property.

If a stormwater utility is established and it entails billings to individual properties, include educational messages about reducing stormwater runoff (and incentives for doing so) in any mailings.

Construct LID practices in neighborhoods in the public rights-of-way and encourage LID practices on private property.

Create a watershed planning slide show with watershed basics that can be shown to civic groups, watershed associations, businesses, realtors and other interested groups. Provide the slide show on the Web and on CD. Include explanatory text and timing so that the show can be run automatically.

Retrofit existing stormwater management facilities and BMPs.

Construct new BMPs including LID methods.

Protect structures located in the Middle Potomac 100-year flood limit from flooding.

Provide landowner education about the importance of stream buffers and how to manage and protect them (through coordination, brochures, and workshops).

Establish an on-going relationship with civics and science teachers at middle schools and high schools who need to provide their students with opportunities for service credits or hands-on projects. Students could attend watershed workshops and engage in taking care of LID measures at their schools as well as stream cleanups and other conservation activities. Provide activities and suggestions for student science fair projects.

Write and distribute a watershed planning fact sheet and lesson plan for teachers that incorporate Standard of Learning which deals with watershed protection. Provide specific information about the Middle Potomac Watersheds Management Plan.

Consolidate existing educational materials that describe the value of the watersheds and make them accessible through one county contact. Provide downloadable educational materials on the watershed program Web site and create materials that target the different stakeholders with messages that will resonate with each group's interest.

Popes Head Creek - Excerpted from Watersheds Management Plan Adopted by Board of Supervisors on Jan. 23, 2006

Enforce the solid waste ordinance and the erosion and sedimentation control ordinance prohibition against illegal dumping.

Replace road crossings that overtop and flood.

Establish a group of volunteer stream monitors and monitoring sites.

Develop a watershed stewardship message specifically for Fairfax County Public Schools and George Mason University.

Encourage all lawn management companies to participate in the Virginia Department of Conservation and Recreation's (DCR) Virginia Water Quality Improvement Program and to sign agreements to apply nutrients within established criteria, to better control application rates and timing. Investigate the feasibility of requiring companies selected for work at County facilities to have signed such agreements.

Retrofit existing road culverts to reduce stormwater runoff into streams.

Monitor the condition of restored and existing riparian buffer with annual stream walks to evaluate the condition and areas needing improvement.

Program to facilitate and encourage homeowners and developers to disconnect impervious areas.

Manage large existing areas of lawn at institutional and commercial properties to minimize nutrient loading in streams.

Develop and distribute educational materials that describe the benefits of wildlife, such as beavers, in the watershed.

Develop and distribute educational materials for proper ATV usage in the watershed.

Distribute educational materials to private pond owners that describe proper maintenance.

Develop and distribute educational materials about appropriate horse care and grazing management in the Resource Protection Area.

Develop and distribute educational materials that describe beneficial landscaping techniques to landscaping companies and suppliers.

Develop and distribute educational materials that describe beneficial landscaping techniques for homeowners.

Support the formation of a "Friends of Popes Head Creek" group composed of local citizens.

Preserve large blocks of forest to prevent further fragmentation.

Conserve land and water ecosystems to provide high quality habitat for wildlife.

Coordinate with the Fairfax County Police to target areas with significant ATV impacts for enforcement of existing laws and ordinances (e.g. trespassing and environmental regulations).

Post official County signage that publicizes the existence of the Resource Protection Areas (RPAs) and states that ATV and other usages that destroy vegetation and cause erosion are not permitted in the RPA.

Install new BMP and LID facilities in areas that do not have existing stormwater management facilities, or in areas where retrofitting existing facilities is not feasible.

Monthly street sweeping program for parking lots in the watershed and residential streets in the Fairfax Villa subdivision.

The county and community groups will perform stream restoration projects in the areas identified as good candidates.

Maintain a dedicated funding mechanism, such as a stormwater utility fee, to address water quality and stormwater related issues in Fairfax County.

Popes Head Creek - Excerpted from Watersheds Management Plan Adopted by Board of Supervisors on Jan. 23, 2006

Regulate the use of All Terrain Vehicles (ATVs) to prevent watershed damage.

Remove dump sites and obstructions from stream corridors.

Establish a program to facilitate and encourage the use of porous pavement in commercial and institutional development in the Popes Head Creek watershed.

Retrofit suitable existing stormwater management facilities and BMPs to make them more effective.

Plant native vegetation next to streams in areas that are identified as good candidates for buffer restoration.

Install BMPs or enhance the performance of existing stormwater management facilities to reduce sediment and phosphorus loading in stormwater runoff.

Encourage replanting efforts within degraded RPA buffer areas of sites undergoing redevelopment. Native vegetation mixes, suitable for local habitat, will be used.

Adopt a policy of implementing natural landscaping and green building approaches at County facilities, such as public schools, libraries, fire stations, and other public facilities in the watershed. The County will be a model for implementing these beneficial watershed management approaches, so they can set the example for future development.

Expand the allowed placement of integrated LID management practices, such as bioretention, on individual residential lots in new developments. Currently, these practices are only allowed on outlots or non-residential lots if they provide service for more than one lot.

Periodically evaluate and revise the current list of recommended BMPs to enhance the level of stormwater service.

Institute an inspection protocol and perform more frequent assessment of ditches, pipes, and outfalls within the watershed every five years and make repairs as necessary (County and Virginia Department of Transportation (VDOT)).

Increase the frequency of inspection for private BMPs with maintenance agreements from approximately once every three to five years to annually, and provide education to ensure proper maintenance by owners. County owned BMPs are currently inspected once a year and are not included in this action.

Facilitate the acquisition and donation of conservation easements by community groups for riparian buffer and stream protection, and public/private open space for the environmental quality corridors described in the Fairfax County Comprehensive Plan.