

## Chapter 5: Policy Recommendations

Structural and non-structural recommendations are described in Chapter 4 of the plan. The policy recommendations include various proposals that would typically involve amendments to the County Code and other supporting documents such as the *Public Facilities Manual*. These recommendations will need to be evaluated further in light of greater Countywide implications. The current planned approach for processing of the policy recommendations from the Popes Head Creek Watershed Plan is to compare these with similar recommendations that will be developed with the Little Hunting Creek, Cameron Run, Cub Run, and Difficult Run Watershed Management Plans starting in 2006. Specific ordinance amendments would then be crafted that factor in other County initiatives and address the common ground that can be established between the various policy recommendations.

The proposed goals and objectives from Chapter 4 are restated in this chapter to demonstrate the interaction of these recommendations with the structural and non-structural projects. All of the Policy Recommendations in this Chapter are summarized in Table 5.1.

### 5.1 Policy Recommendations

***Goal A: Protect and improve the ecological health of Popes Head Creek and its tributaries.***

***Objective A1: Increase the effectiveness and use of BMPs to reduce impacts from stormwater runoff.***

***Policy Recommendation A1.1:*** Increase the frequency of inspection for private BMPs with maintenance agreements from approximately once every three or 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.

***Strategy to Achieve Recommendation:*** Hire additional inspectors or a contractor to increase the frequency of inspection of private BMPs. Inform both residential and commercial property owners of private BMPs with existing maintenance agreements about the more frequent inspections. Tenants will also need to be notified. Educational materials and training will be developed and provided to residential and commercial property owners of all private BMPs and their tenants as needed. The educational materials will include checklists and schedules for maintenance actions for different types of BMPs and information about additional resources for proper maintenance of a BMP.

***Watershed Benefit:*** Routine inspection and proper maintenance of existing BMPs will help to ensure that they perform as intended. A typical dry detention BMP provides storage to manage runoff volumes to match predevelopment 2- and 10-year storm flow rates and may also provide water quality treatment for the first half inch of runoff from each rainfall event. Over a 24-hour period, the pollutant removal efficiency is approximately 75% for suspended solids, 45% for phosphorous, and 30% for nitrogen, for a properly functioning dry detention basin with a water quality component. This

action will help to maintain existing conditions and aid in preventing the further degradation of the watershed.

**Policy Recommendation A1.2:** Periodically evaluate and revise the current list of recommended BMPs to enhance the level of stormwater service.

*Strategy to Achieve Recommendation:* Periodically evaluate the current list of recommended BMPs and integrated BMPs (currently 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. The use of experimental BMPs should be allowed with a system for monitoring their effectiveness so as not to preclude innovation.

There is an effort currently underway to amend the County's Public Facilities Manual (PFM) to include six LID practices, with the potential for inclusion of additional practices in the future. The PFM provides guidelines for the design of public facilities which must be built to serve new development. The goal of the standard structures and construction methods specified in the PFM is to expedite construction and obtain economies through the use of methods that are familiar to local contractors and field inspection personnel. The addition of LID practices to the PFM will greatly facilitate the use of these innovative practices by developers. The six practices that are being considered as amendments to the PFM are bioretention filters and basins, bioretention swales, permeable paver blocks, vegetated roofs, tree box filters, and aforestation. These amendments are currently undergoing final review before they are presented to the Board of Supervisors early in 2006.

*Watershed Benefit:* Many of these practices are currently in use in Fairfax County, and adding them to the PFM and recommended BMP list will make it easier for developers to include them in their site plans for review by County personnel. As new stormwater management technologies become available in the future, they should also be evaluated and, if appropriate, added to the county's PFM and recommended list.

**Policy Recommendation A1.3:** 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.

*Strategy to Achieve Recommendation:* Proceed with the amendments to the Public Facilities Manual (PFM) to facilitate and encourage implementation of LID management practices and distribute an industry letter to ensure awareness of BMPs recommended by the County. These practices do not require large parcels of land and can easily be integrated into existing developments.

*Watershed Benefit:* As mentioned above, Fairfax County has begun to integrate stormwater management LID practices into the PFM. LID management practices will help to reduce nutrient and pollutant inputs into the streams, as well as reduce stormwater volume and velocity. Implementation of this recommendation will help

contribute to attaining the nutrient reduction goals of Virginia's Chesapeake Bay Nutrient and Sediment Reduction Tributary Strategy for the Shenandoah and Potomac River Basins (March 2005). It will also allow developers more flexibility in the selection and siting of the BMPs described in Actions A1.1 and A1.2. By allowing the implementation of LID management practices, stormwater runoff can often be treated more efficiently directly at the source. The typical LID practice treats the first half inch of runoff, which equals 1,815 cubic feet per acre. This policy action will provide developers and the County with consistency and efficiency during the site plan review process. It will also promote the use of effective BMPs to reduce runoff and nonpoint source pollution.

***Objective A2: Reduce and mitigate the impacts of impervious surface***

***Policy Recommendation A2.1:*** 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.

*Strategy to Achieve Recommendation:* Adopt a policy of implementing natural landscaping and green building approaches, as related to stormwater quality, at future County facilities. Land Development Services and Urban Forest Management of DPWES are currently developing a natural landscaping policy that will be forwarded to the Board of Supervisors for consideration by June 2006. Use guidelines developed in the County's pending Natural Landscaping policy and Environmental Protection Agency guidelines for green buildings.

*Watershed Benefit:* Natural landscaping promotes practices that help retain the essence of the surrounding natural environment and its features, and will help the landscapes at new facilities to maximize the delivery of ecological, environmental and socio-economic benefits, including improvements to water and air quality. Natural landscaping promotes the use of native species, which may not be currently present at County facilities. Green building technologies focus on practices that will provide improved water quality and reduce stormwater runoff, as well as air quality benefits and reduced energy use.

***Policy Recommendation A2.2:*** 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)).

*Strategy to Achieve Recommendation:* Based upon the planning team's and advisory committee's review of the watershed, there are numerous locations where road crossings normally flood due to obstructed culverts. Appropriate County or VDOT personnel will document these observations and develop maintenance plans to correct deficiencies. County or VDOT field crews will perform a condition assessment of these drainage conveyances and submit a report to the County and VDOT, to determine responsibility for correction of observed problems.

*Watershed Benefit:* Evaluating the condition of existing drainage systems will document the adequacy of those conveyances and prevent future drainage problems. This process will help the County and VDOT identify existing and potential future drainage

problems and allow them to develop a prioritized approach to correcting any existing inadequacies and schedule future maintenance projects.

***Policy Recommendation A2.3:*** Establish a program to facilitate and encourage the use of porous pavement in commercial and institutional development in the Popes Head Creek watershed.

*Strategy to Achieve Action:* Porous pavement is permitted for stormwater detention by Fairfax County; 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. In addition, porous pavement is one of the six LID practices currently being evaluated for inclusion in the PFM. Porous pavement is most appropriately used in low traffic volume areas, such as overflow parking areas and walkways, and in headwaters to reduce peak flows. It should not be used on heavily traveled roads or areas with potential for spills, such as gas stations.

*Watershed Benefit:* A reduction in impervious areas will decrease the amount of stormwater runoff within the watershed and allow infiltration of water into the subsurface.

***Objective A3: Preserve, maintain, and restore streams to benefit stream health and habitat.***

***Objective A4: Preserve, maintain, and restore riparian buffers to protect stream health and water quality.***

***Policy Recommendation A4.1:*** Encourage replanting efforts within degraded RPA buffer areas of sites undergoing redevelopment. Native vegetation mixes, suitable for local habitat, will be used.

*Strategy to Achieve Recommendation:* Review the Chesapeake Bay Preservation Ordinance amendment to determine if the planting of trees in the RPA riparian buffers is required in redevelopment sites that have few or no existing trees in the buffer. This ordinance amendment will also be reviewed against requirements detailed in the County's Public Facilities Manual and the manual will be revised if necessary. The planted trees will count towards the minimum tree cover requirements in the zoning ordinance, i.e. 10% tree coverage for commercial sites, 15% tree coverage for high-density residential sites, and 20% tree coverage for all other residential sites. Guidelines will need to be developed to describe the type of vegetation to be planted in the RPA. The minimum tree cover density in riparian buffer area immediately adjacent to the stream is recommended to be between 40% and 70%. The County Code Analysis Division and the Urban Forestry Division will need to be involved in this policy recommendation to determine if the existing structure of the ordinance is sufficient to address this recommendation and to help write the amendments to address the tree cover densities recommended in the riparian buffer area. The Urban Forestry Division will be consulted to make sure that sites meet all County codes when rezoned.

A future strategy, that may require more public support, could include a requirement for the planting of new and appropriate species mixes in the RPA riparian buffer in addition to the existing minimum tree cover requirements. This strategy will benefit water quality by providing more trees on development properties within the RPA.

*Watershed Benefit:* This action will benefit the watershed by providing the restoration of riparian buffers which will increase the amount of habitat area, protect the stream bank areas from erosion, and filter pollutants from runoff.

***Objective A5: Maintain the open space and pastoral quality of the watershed and preserve the aesthetic quality in both urban and rural areas.***

***Policy Recommendation A5.1:*** Enforce the solid waste ordinance and the erosion and sedimentation control ordinance prohibition against illegal dumping.

*Strategy to Achieve Recommendation:* Target the locations experiencing frequent dumping of trash and waste and identify private, potentially illegal dumpsites located in the watershed. Impose fines on persons caught dumping illegally, take legal action against the property owners of illegal dumpsites, and require restoration of the sites. Investigate methods for increasing the enforcement of illegal dumping in the watershed, perhaps by hiring more inspectors or a contractor to perform dumpsite monitoring and investigation of potential illegal dumpsites. One potential illegal dumpsite is located in the southern corner of Clifton, and contains leaking 55 gallon drums. The Department of Public Works and Environmental Services will coordinate with the Zoning Enforcement Branch of the Department of Planning and Zoning to achieve this recommendation.

*Watershed Benefit:* The watershed benefit will be less pollution as a result of illegal dumping. This action would help to improve the health and reduce the amount of pollutants in streams within the watershed.

***Objective A6: Develop water quality sensitive recreational opportunities.***

***Policy Recommendation A6.1:*** Regulate the use of All Terrain Vehicles (ATVs) to prevent watershed damage.

*Strategy to Achieve Recommendation:* The illegal use of ATVs in Popes Head Creek Watershed is causing significant stream bank erosion. The Code of Virginia presently precludes the operation of ATVs on another person's property without the written consent of the owner; however, this activity continues to occur. Many of the frequently used ATV trails pass through the RPAs, destroying vegetation that holds soil particles together; other trails cross the streams, resulting in erosion and sedimentation. Community members are very concerned about the illegal use of ATVs in sensitive riparian areas, and have suggested the following recommendations:

- Require licensure of ATVs. This would allow the County to track the use of ATVs and would provide a mechanism to collect fees for restoration. Licensure will require State enabling legislation before it can occur in Fairfax County. The fees could be earmarked for the restoration of areas damaged by ATVs and for the development of ATV recreation areas. This action will require coordination with the Fairfax County Police Department.
- Increase the severity of penalties for unlawful use of ATVs. For example, if a minor is apprehended for trespassing with an ATV, the penalty could result in the inability to obtain a driver's license until they are 18.

*Watershed Benefit:* This recommendation will aid in the reduction of illegal ATV use in the RPA. It will reduce erosion, sedimentation, and the destruction of vegetation caused

by ATVs. The Department of Public Works and Environmental Services will coordinate closely with the Fairfax County Police Department to ensure that all applicable laws are being enforced. Citizens and landowners will be consulted to identify areas that experience heavy ATV traffic.

***Objective A7: Maintain the diversity of wildlife in the watershed.***

***Goal B: Have a well informed community that is actively involved in watershed stewardship.***

***Objective B1: Achieve community sponsorship of the watershed.***

***Policy Recommendation B1.1:*** Develop a watershed stewardship message specifically for Fairfax County Public Schools and George Mason University.

*Strategy to Achieve Recommendation:* Develop an environmental stewardship learning module for children in the Fairfax County Public Schools system and for students, faculty, and staff at George Mason University. The module could include environmental education classes, volunteer stream walks and cleanups, or the construction of demonstration LID projects on school facility grounds. Detailed information regarding this non-structural project can be found in Appendix L.

*Watershed Benefit:* The children can take the environmental lessons they learn home to their families and discuss environmental issues. This will raise the level of environmental awareness for community. Demonstration LID projects will reduce stormwater runoff and filter pollutants; they will also serve as examples to encourage the development community to adopt innovative stormwater management controls.

As part of Phase II stormwater regulations, schools and other small municipal institutions are required to develop stormwater management plans. These plans must include six minimum control measures, including:

- Public Education and Outreach on Stormwater Impacts
- Public Involvement and Participation
- Pollution Prevention and Good Housekeeping for Facilities Operation and Maintenance.

The implementation of this policy recommendation will satisfy three of the six required minimum control measures, and will therefore contribute to a future required stormwater management plan.

***Objective B2: Develop and consolidate educational materials that describe the value of the watershed.***

***Goal C: Maintain the Occoquan Reservoir as a clean and sustainable source of potable water for Fairfax County.***

***Objective C.1: Reduce the amount of pollutants, such as fecal coliform, nitrogen, phosphorus, and sediment that enters the Occoquan Reservoir.***

***Policy Recommendation C1.1:*** 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. Encourage residential and commercial property owners and homeowners' associations to require nutrient application agreements as well.

**Strategy to Achieve Recommendation:** Implementation of this recommendation will begin with a determination of what legal authority, if any, the County has to require lawn care companies to participate in the DCR program. If legal authority is established, the County Code should be amended to implement this policy recommendation. The requirements for certification should include education of the lawn care retailer or company by the County in the proper application of fertilizer, followed by signing of an agreement with the DCR stating that the company will abide by the proper management methods. As of September 6, 2005, there were 67 contractors throughout the state that had agreed to safeguard the state's natural resources by following a Nutrient Management Plan approved by the DCR. Twenty-one of these contractors are located in Northern Virginia.

If legal authority is not in place for the County to require participation in the DCR program, the County should publicize the program and make the list of "Lawn Care Providers with Water Quality Agreements with the Virginia Department of Conservation and Recreation" available to homeowners and landowners so they can opt to use the services of environmentally-sensitive lawn care providers. This list can be found on DCR's Virginia Nutrient Management Program webpage<sup>1</sup> and could be converted into a brochure and distributed by various County agencies, such as the Stormwater Planning Division, Department of Planning and Zoning, and Fairfax County Park Authority.

*Watershed Benefit:* The requirements for enrollment in the Virginia Water Quality Improvement Program are minimal but the benefits to the watershed are very large in terms of nutrient management. In addition, knowledge that the program exists could foster greater stewardship by lawn care companies who are more educated about application rates and timing of the application. Based on the program's recent record of accomplishment, it appears to be successful and one that could provide a significant benefit to the watershed.

**Goal D: Implement watershed improvement projects County-wide to restore and maintain environmental health in the County.**

**Objective D.1: Provide a sustained source of funding for watershed improvement projects.**

**Policy Recommendation D1.1:** Maintain a dedicated funding mechanism, such as a stormwater utility fee, to address water quality and stormwater related issues in Fairfax County.

*Strategy to Achieve Recommendation:* Fairfax County recently considered the countywide implementation of a stormwater environmental utility fee, as noted in Chapter 4.4. Ultimately, the County elected to dedicate a fixed share of the real estate tax revenue for FY 2006 for implementation of the County's watershed management

---

<sup>1</sup> Virginia Nutrient Management Program: <http://www.dcr.state.va.us/sw/docs/wqagree.pdf>

plans and other stormwater management program elements. This dedicated funding should be continued in future years to ensure long range program implementation.

*Watershed Benefit:* This action would provide a dedicated source of funding for the Popes Head Creek Watershed Management Plan actions in future years. The dedicated funding sources will put Fairfax County on a path to:

- Achieve regulatory mandates for water quality protection;
- Achieve goals identified in the 2003 Fairfax Strategic Plan;
- Sustain the viability of the existing investment in infrastructure; and
- Achieve the goals established through the Watershed Management Plan initiative.

**Table 5.1: Summary of Policy Recommendations**

<b>Policy Recommendation</b>	<b>Description</b>	<b>Benefit</b>
A1.1	Increase the frequency of inspection for private BMPs with maintenance agreements	Ensures that BMPs perform as intended. Will help to maintain existing conditions and aid in preventing the further degradation of the watershed
A1.2	Evaluate and revise the current list of recommended BMPs	Will allow developers to utilize innovative BMPs and submit their site plans for review
A1.3	Expand the allowed placement of integrated LID on individual residential lots	More flexibility in the selection and siting of BMPs for developers. The implementation of LID management practices, will treat stormwater runoff more directly at the source
A2.1	Adopt a policy of implementing natural landscaping and green building approaches at County facilities	The implementation of more suitable landscaping materials and techniques for the watershed increase water quality and quantity benefits
A2.2	More frequent assessment and inspection of VDOT drainage systems	Identification of existing and potential future drainage problems and development of a prioritized approach to correcting any existing inadequacies and schedule future maintenance projects
A2.3	Encourage use of porous pavement	A reduction in impervious areas will decrease the amount of stormwater runoff within the watershed.
A4.1	Encourage replanting efforts within degraded RPA buffer areas of sites undergoing redevelopment.	Restoration of riparian buffers will increase the amount of habitat area, protect the stream bank areas from erosion, and provide filtering of pollutants from runoff



<b>Policy Recommendation</b>	<b>Description</b>	<b>Benefit</b>
A5.1	Enforce the solid waste ordinance and the erosion and sedimentation control ordinance prohibition against illegal dumping	Reduced pollution as a result of illegal dumping. This action would help to improve the health and reduce the amount of pollutants in streams within the watershed.
A6.1	Regulate the use of All Terrain Vehicles (ATVs)	Reduction of illegal ATV use in the RPA. It will reduce erosion, sedimentation, and the destruction of vegetation caused by ATVs.
B1.1	Develop a watershed stewardship message specifically for Fairfax County Public Schools and George Mason University	The children can take the environmental lessons they learn home to their families and discuss environmental issues
C1.1	Encourage all lawn management companies to participate in DCRs Virginia Water Quality Improvement Program	Nutrient management in the watershed. Increased awareness and education of watershed residents and lawn care companies who perform services within the watershed.
D1.1	Establish a dedicated funding mechanism	Proposed projects will not have to compete for funding from the Fairfax County General Fund. Evaluation of a dedicated funding source is being addressed as a countywide initiative

The total cost of the policy recommendations in Table 5.1 is estimated to be approximately \$1.3 Million. Over the plan’s lifespan of 25 years, this will require approximately 0.9 Fairfax County Staff Year Equivalents (SYE) for project management. These recommendations are not specific to only Popes Head Creek, but are intended to be implemented County-wide where applicable. The recommendations will be evaluated along with the recommendations from the other watershed management plans to determine their applicability in the County.

## **5.2 Benefits of Policy Recommendations**

The policy recommendations will provide many different benefits to the Popes Head Creek watershed. Policies that are implemented County-wide in conjunction with the other ongoing watershed management plans can have a much larger effect, resulting in improved environmental health for all citizens of Fairfax County and the surrounding region. Because these policy recommendations are non-structural in nature, it is difficult to quantitatively measure the benefits of implementation to the watershed.

The policy recommendations will help to improve the enforcement of existing regulations and laws and provide additional protection to areas that are environmentally valuable, but not necessarily located within a Resource Protection Area. The policy recommendation under Goal D can provide a dedicated revenue stream for stormwater management in the County. This is especially important because many regulatory requirements, such as TMDL implementation and Tributary Strategy compliance, are unfunded, placing the burden to pay on local governments.

### 5.3 Implementation of Policy Recommendations

The policy recommendations described in Section 5.1 will be reviewed by the County to evaluate County-wide implications and to compare with similar recommendations provided in other watershed management plans in the County. If ordinance amendments are needed, they will be developed to include other County initiatives and address the common ground that can be established between the various policy recommendations.

The first step in developing a logical and feasible implementation schedule was to prioritize the actions and evaluate how well they meet the Goals of the plan. A weighted set of five categories was used to prioritize each plan action. The following prioritization categories were used:

1. Board Adopted Stormwater Control Project Prioritization Categories (40%)
  - Projects that are mandated by state or federal regulations for immediate implementation and projects that address critical/emergency dam safety issues.
  - Projects that alleviate structures from damage by flood waters or by being undermined by severe erosion.
  - Projects that achieve stormwater quality improvement in specific conformance with the County's obligation under the Chesapeake Bay initiatives and/or the VPDES permit for storm sewer system discharges
  - Projects that alleviate severe streambank and channel erosion.
  - Projects that alleviate moderate and minor streambank and channel erosion.
  - Projects that alleviate yard flooding.
  - Projects that alleviate road flooding.
2. Direct Regulatory Contribution (10%)
  - Hybrid projects that accomplish multiple objectives.
  - Contributions directly to MS4 and Virginia Tributary Strategies compliance.
  - Contributions towards TMDL compliance.
  - Indirect water quality benefits.
  - Flood mitigation.
3. Public Support (10%)
  - Citizen's Advisory Committee support.
  - Support for projects by affected residents.
4. Effectiveness/Location (25%)
  - Quantity control projects are more desirable in "headwaters" areas that lack stormwater management controls.
  - Quality control projects are desirable in areas that previously lacked controls.
  - An indication of relative benefit of a project, such as pollutant reduction or efficiency, increased retrofit area, etc.
5. Ease of Implementation (15%)

- Project Complexity.
- Land acquisition.

The actions in the plan were scored 1 to 5 for each of the prioritization categories, with 5 as the best score and 1 as the worst score. The information used to score the actions was both quantitative and qualitative. The quantitative data that was used in the prioritization scoring included the amount of peak flow reduction, size of the existing or proposed drainage area.

The actions were ranked according to their total score, from highest to lowest. Table 5.1 shows the Prioritization of Policy Recommendations.

**Table 5.2: Prioritization of Policy Recommendations**

Policy Recommendation	Description	Board Adopted Categories	Direct Regulatory Contribution	Public Support	Effectiveness/ Location Rating	Ease of Implementation Rating	Total Score
	Weighting Factor	40%	10%	10%	25%	15%	
D1.1	Establish a dedicated funding mechanism	5	5	3	4	3	4.25
A4.1	Encourage replanting efforts within degraded RPA buffer areas of sites undergoing redevelopment.	3	4	5	4	3	3.55
A1.2	Periodically evaluate and revise the current list of recommended BMPs	2	4	3	3	3	2.7
A1.3	Expand the allowed placement of integrated LID on individual residential lots	2	4	3	3	3	2.7
C1.1	Encourage all lawn management companies to participate in DCRs Virginia Water Quality Improvement Program	2	4	3	3	2	2.55
A2.2	More frequent assessment and inspection of VDOT drainage systems	2	2	5	3	2	2.55

Policy Recommendation	Description	Board Adopted Categories	Direct Regulatory Contribution	Public Support	Effectiveness/ Location Rating	Ease of Implementation Rating	Total Score
	Weighting Factor	40%	10%	10%	25%	15%	
A6.1	Regulate the use of All Terrain Vehicles (ATVs)	1	2	5	3	3	2.3
A2.3	Encourage use of porous pavement	2	2	3	2	3	2.25
A5.1	Enforce the solid waste ordinance and the erosion and sedimentation control ordinance prohibition against illegal dumping	1	2	5	2	3	2.05
B1.1	Develop a watershed stewardship message specifically for Fairfax County Public Schools and George Mason University	1	2	5	2	3	2.05
A2.1	Adopt a policy of implementing natural landscaping and green building approaches at County facilities	1	2	3	2	3	1.85
A1.1	Increase the frequency of inspection for private BMPs.	1	2	3	2	3	1.85

## 5.4 Monitoring Plan

This section describes the monitoring actions and targets for determining the success or failure of the future policy recommendations. The monitoring will help to determine if the plan actions should be modified in the future because of a low success rate or as watershed conditions change.

**Policy Recommendation A1.1:** 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.

*Monitor:* Frequency of inspections.

*Target:* Inspect private facilities per maintenance agreement frequency.

***Policy Recommendation A1.2:*** Periodically evaluate and revise the current list of recommended BMPs to enhance the level of stormwater service.

*Monitor:* Observe emerging BMP and LID technology

*Target:* Revise the PFM as necessary to include new BMPs that are applicable to Fairfax County.

***Policy Recommendation A1.3:*** Expand the allowed placement of integrated LID management practices, such as bioretention, on individual residential lots. Currently, these practices are only allowed on outlots or non-residential lots if they provide service for more than one lot.

*Monitor:* Observe County policy on facility location.

*Target:* Revise the PFM to allow BMP facilities on residential lots with an executed maintenance agreement.

***Policy Recommendation A2.1:*** 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.

*Monitor:* Observe progress of Environmental Coordinating Committee.

*Target:* 50% of all County facilities that are built in the future will have natural landscaping and green building technology.

***Policy Recommendation A2.2:*** 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)).

*Monitor:* Track number of inspections.

*Target:* Establish an inspection protocol and inspect all County ditches, pipes, and outfalls annually. Establish database for all inspections and log maintenance actions.

***Policy Recommendation A2.3:*** Program to facilitate and encourage use of permeable pavers in commercial and institutional development in the Popes Head Creek watershed.

*Monitor:* Use of permeable pavers in site plan applications.

*Target:* Increase use of permeable pavers by 10% every five years.

**Policy Recommendation A4.1:** Encourage replanting efforts within degraded RPA buffer areas of sites undergoing redevelopment. Native vegetation mixes, suitable for local habitat, will be used.

*Monitor:* Number of new trees planted in redevelopment sites

*Target:* Increase tree coverage by 10% in redevelopment sites.

**Policy Recommendation A5.1:** Enforce the solid waste ordinance and the erosion and sedimentation control ordinance prohibitions against illegal dumping.

*Monitor:* Number of dumping violations and citations issued.

*Target:* Decrease dumping violations by 25% within two years.

**Policy Recommendation A6.1:** Regulate the use of All Terrain Vehicles (ATVs) to prevent watershed damage.

*Monitor:* Number of complaints related to ATV trespassing and damage.

*Target:* Reduce ATV-related complaints by 10% every year.

**Policy Recommendation B1.1:** Develop a watershed stewardship message specifically for Fairfax County Public Schools and George Mason University.

*Monitor:* Number of environmental classes and workshops requested and completed.

*Target:* Complete two environmental education workshops at each public school in the watershed every year.

**Policy Recommendation C1.1:** 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. 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 homeowners associations.

*Monitor:* Number of lawn care companies who sign Water Quality Improvement Program agreements.

*Target:* Increase participation in this program by 25% within five years and include company information in brochure to homeowners regarding lawn care and landscaping.

**Policy Recommendation D1.1:** Maintain a dedicated funding mechanism, such as a stormwater utility fee, to address water quality and stormwater related issues in Fairfax County.

*Monitor:* Budget, staff needs and projected CIP costs.

*Target:* Provide sufficient annual funding for all stormwater programs.