Section 5
Watershed Plan Policy Objectives and Recommendations

This section outlines the recommended changes to Fairfax County policy that will help improve watershed conditions, address watershed issues and meet the Cub Run and Bull Run Watershed Plan vision and goals. The recommendations were prepared by the Community Advisory Committee (CAC), developed as part of the public information program or identified by the project team.

The policy recommendations include proposals that may require amendments to the County Code and other supporting documents such as the Public Facilities Manual. These recommendations will be evaluated further concerning greater county-wide implications before they can be implemented. The policy recommendations from the Cub Run and Bull Run Watershed Plan will be compared with similar recommendations in the Little Hunting Creek, Popes Head Creek, Cameron Run, Difficult Run and other watershed management plans. Based on this review, ordinance amendments and other changes in policy will be developed that consider other county initiatives and policies, and address the similarities among the policy recommendations from completed watershed plans. Funds and staff resources will be required to implement these recommendations. These resources will be estimated at the time a policy recommendation is being evaluated for implementation as part of the annual budget process. Existing resources and partnerships will be used when available. The watershed plan recommends that the county implement the recommended changes in policy and allocate adequate funds as needed.

The watershed vision and goals, described in Section 1.3, provide the overall framework for the watershed plan. To ensure that the streams and stream valleys continue to be a valuable resource for the community, the plan must address changes to current policy and identify new policies, as well as provide structural stormwater controls and implement non-structural actions.

The policy recommendations are grouped into the following categories:

- A - Public Outreach and Education
- B - Interjurisdictional Cooperation
- C - Recreation
- D - Existing Development
- E - New and Infill Development
- F – Open Space

The same groupings were used for the non-structural actions described in Section 4. The framework provides specific recommendations to be considered in the watershed plan and allows evaluation of the plan's success in meeting the watershed vision and goals.

The following sections identify and describe the objectives and policy recommendations within each of these groups. The order in which they appear does not represent their respective order of importance or the order in which they will be implemented.

5.1 A - Public Outreach and Education

The following policy recommendations help develop a sense of pride in and ownership of the watershed and stream valleys, and promote personal stewardship. The actions of individuals can significantly affect the overall health of the watershed. These recommendations use outreach and education to promote actions to improve watershed health and discourage actions that negatively affect the watershed.

> **Recommendation A 1.1:** Showcase the innovative use of stormwater management techniques at all new county construction and expansion projects such as schools, recreation centers, office buildings, libraries, fire stations and parks. These projects should include demonstration projects for rain gardens, bioretention, green roofs, pervious pavement, reduced impervious area and other LID techniques. Interpretive signs and other public information and education materials should be placed at these sites.

5.2 B - Interjurisdictional Cooperation

Stream conditions in the Cub Run and Bull Run watersheds reflect the cumulative effects of changes in land use and development from several jurisdictions. Implementing the following policy recommendations will help improve cooperation among the various agencies responsible for stormwater and watershed management in the watersheds, including Fairfax County, Loudoun County, Prince William County, the Metropolitan Washington Airports Authority, the Federal Aviation Authority, the Upper Occoquan Sewage Authority and the Virginia Department of Transportation.

Non-structural actions under objective B 1 (Section 4.3) will be implemented to improve cooperation among these agencies. The watershed plan also recommends that interagency cooperation be promoted at the policy level through the following objectives and recommendations.

Objective B 1 – Continue coordination and cooperation among local, state and federal agencies concerning watershed issues and take steps to improve these efforts.

> **Recommendation B 1.1:** 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.

Recommendation B 1.2: Recognize that stormwater and watershed issues do not stop at political boundaries and stress interjurisdictional cooperation to protect watershed health and public water supplies.

Recommendation B 1.3: 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.

5.3 C - Recreation

This recommendation aims to create and promote appropriate recreational opportunities within the watershed to enhance public understanding and appreciation of healthy streams, stormwater management and other watershed issues. Appropriate recreational opportunities and facilities will get the public physically engaged and invested in the watershed, while increasing the personal commitment to watershed stewardship. These recommendations also will make stormwater management facilities more of an asset to watershed residents. Recreational uses must be appropriate for the watershed and the community, and be sensitive to stream health.

Objective C 1 - 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.

Recommendation C 1.1: Create fishing opportunities in existing and proposed wet ponds in the watershed where appropriate.

Recommendation C 1.2: Create observation platforms, interpretive signs and benches to promote passive recreation at new and existing stormwater management facilities.

Objective C 2 - Construct and manage new recreational facilities in a manner that is sensitive to the health of streams and stream buffers.

Recommendation C 2.1: 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.

5.4 D - Existing Development

The following policy changes will help reduce the impact of existing development on streams in the watershed.

Objective D 1 - Address problems associated with pets, wildlife and non-native species.

> **Recommendation D 1.1:** 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.
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> **Recommendation D 1.2:** 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.

Objective D 2 – Implement changes in policy to actively promote and encourage the construction of LID and other innovative stormwater controls on existing residential and non-residential private property.

> **Recommendation D 2.1**: 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.
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> **Recommendation D 2.2:** 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.

Objective D 3 - Reduce trash and dumping in the watershed.

Implementation of the following policy changes will help reduce illegal dumping and minimize improper disposal of trash and garbage in the watershed.

> **Recommendation D 3.1**: Increase fines and penalties, and enforce existing laws prohibiting dumping and littering.

Recommendation D 3.2: Implement a policy in which persons caught dumping or littering will be prosecuted to the maximum extent of the law.

5.5 E - New and Infill Development

The following objectives and recommendations are intended to reduce the impact of new development and infill development within the Cub Run and Bull Run watersheds.

Objective E 1 - Promote the use of LID stormwater management techniques and other innovative stormwater designs in all new development and redevelopment projects in the county.

Recommendation E 1.1: 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.

Recommendation E 1.2: Implement a strategy to review stormwater management design more consistently for new development projects, especially regarding LID implementation.

Recommendation E 1.3: 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.

Recommendation E 1.4: 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.

Recommendation E 1.5: Design new stormwater management facilities to be more aesthetically pleasing, and provide educational and recreational opportunities. Use less visually intrusive designs, implementing landscape architecture techniques to make the stormwater facilities look more natural and to minimize impact on the health of streams, forests and wetlands.

Objective E 2 - Minimize impacts of new development in other jurisdictions.

Recommendation E 2.1: 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.

Objective E 3 – Minimize and properly address the watershed and wetland impacts of highway, roadway, airport and other transportation improvements.

Recommendation E 3.1: 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.

Recommendation E 3.2: Design and build highway and road improvement projects that minimize watershed impacts and include innovative stormwater management controls when feasible.

Recommendation E 3.3: 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.

Objective E 4 - Manage urban forests and stream buffers to reduce runoff rates, and improve stormwater runoff quality and overall stream health.

Recommendation E 4.1: Encourage and require more tree plantings in stream buffers and around new dry ponds. The goal is to improve stream habitat by providing shade, reduce the visual impact of these stormwater facilities and support forests within the watershed.

Recommendation E 4.2: 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.

Objective E 5 – Implement additional strategies to minimize stream impacts.

Recommendation E 5.1: 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.

Recommendation E 5.2: 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.

Recommendation E 5.3: 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.

Objective E 6 - Enforce stormwater facility design criteria to ensure that facilities constructed for new development meet county standards.

Recommendation E 6.1: Before bonds are released, inspect stormwater controls constructed by developers to ensure they are constructed correctly and meet county standards and requirements.

Recommendation E 6.2: Require that development site plans provide sufficient space for proper stormwater management.

5.6 F – Open Space

The preservation of open space provides excellent protection of the county's watersheds, and policies should promote and encourage it.

Objective F.1 - Adopt policies that promote and support the preservation of critical open space, and natural and cultural resources.

Recommendation F 1.1: 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.

Recommendation F 1.2: 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.

Recommendation F 1.3: 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.