

*Fairfax County Stormwater Planning Division*

**ACCOTINK CREEK WATERSHED ADVISORY GROUP MEETING  
MAY 14 & 28, 2009**

**Kingstowne Library**  
6500 Landsdowne Centre  
Alexandria, VA 22315-5011

**I. Welcome and Introductions**

*[Please note that the presentation from the May 14 & 28, 2009 Accotink Creek WAG meetings will be available online at*

*[http://www.fairfaxcounty.gov/dpwes/watersheds/accotinkcreek\\_docs.htm](http://www.fairfaxcounty.gov/dpwes/watersheds/accotinkcreek_docs.htm)].*

Juliana Birkhoff, the meeting facilitator, opened the third meeting of the Accotink Creek Watershed Advisory Group (WAG). She welcomed WAG members and the members of the public and reviewed the meeting agenda.<sup>1</sup> This third meeting was divided into two parts: the first on May 14<sup>th</sup>, and the second on May 28<sup>th</sup>. Both meetings have been included in this meeting summary.

**II. Subwatershed Strategy**

Bill Frost, KCI, summarized for the group how the county developed the Subwatershed Strategy. At the second WAG meeting, members had provided the county with three criteria for determining which subwatersheds to focus effort on:

- Focus on preserving pristine areas first. Once degraded, it is nearly impossible to restore them. Follow with improvements to highly impaired areas, then to those in between.
- Identify locations which are only slightly impaired, which could be restored to expand the population reservoir.
- Identify highly impaired watersheds where only one factor (indicator) is causing the poor ranking and address the single cause.

Based on those criteria and the county's own goals and objectives, KCI developed the following four preservation/restoration strategies to identify target subwatersheds:

1. Preservation of pristine areas by focusing on subwatersheds with less than 50 percent urban land cover;
2. Restoration of areas that are only slightly impaired by focusing on subwatersheds with ten to 25 percent total impervious area;
3. Retrofit poorly ranked areas by focusing on subwatersheds with a composite score of less than 83 (the worst 40 percent of the subwatersheds);

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<sup>1</sup> The list of meeting participants is attached to this meeting summary. A copy of the meeting agenda is available at [http://www.fairfaxcounty.gov/dpwes/watersheds/accotinkcreek\\_docs.htm](http://www.fairfaxcounty.gov/dpwes/watersheds/accotinkcreek_docs.htm).

4. Retrofit high priority problem areas by focusing on subwatersheds with an indicator worse than the 80<sup>th</sup> percentile values.

There are subwatersheds that fall into more than one of those areas.

Mr. Frost took the WAG through a demonstration of a particular subwatershed in Long Branch Central, AC-LB-0005, to illustrate how the project team looked at each of the flagged subwatersheds.

### **III. Potential Retrofit Sites**

Mr. Frost explained how the county identified potential retrofit sites using four groups of indicators to help identify problem areas. These four groups were:

- Stormwater runoff impacts, which looked at stream degradation;
- Flooding hazards, which looked at flooding;
- Habitat health, which looked at terrestrial and riparian habitat; and
- Drinking water quality, which looked at the quality of runoff water.

Data for the four indicator groups came mainly from monitoring, field work, mapping, or watershed modeling.

Mr. Frost used AC-LB-0005, as an example of how KCI determined what types of retrofit projects might be appropriate in a subwatershed.

WAG members discussed and asked questions about the presentation. During the discussion, the following points were made:

- Permeable pavers are one option for replacing the surface of parking lots.
- The county will try and retrofit culverts for storage at dry or ephemeral portions of the stream so fish passage would not be an issue. At some point, though, the county will try to look at fish migration routes being blocked – this is usually indicative of a series of things that need to be fixed.
- To retrofit a dry pond to a wet pond, the channel is removed and replaced with a meandering flow path, and the bottom is graded with differing elevations. A good solution is to convert the dry pond into a marsh with a ten foot wide safety buffer and vegetated over completely. This would allow for the ecological benefits of the wetland to treat stormwater by sediment settling and nutrient uptake.
- There are jurisdictional issues between Fairfax County and VDOT when retrofits overlap with VDOT roads. It is an issue that is currently being discussed. The question of who maintains the site is another issue.
- In order to have an impact on the wider scale, the projects have to be more systematic or programmatic.
- Long-term maintenance of projects is included as part of the county's plan.
- The county does partner with groups, including the Northern Virginia Soil and Water Conservation District, as much as possible.
- KCI has not looked at potential road crossing projects yet.

One WAG member noted that culverts have traditionally been designed to follow design standards that did not allow for low flow to pass through, which may lead to sedimentation, flooding, and degradation downstream. Ecological design acknowledges that culverts should have passages of varying heights. Retrofitting culverts is a fix that can have significant downstream impact without having to gain access to those downstream areas for restoration projects.

Most culvert projects in Fairfax would be under VDOT's jurisdiction, and in order to do those, the county would need to partner with VDOT, which is constrained by money at the moment. For VDOT, if there is no need to retrofit a culvert for safety reasons, it would not be a priority. One county representative stated that VDOT design standards would need to change for ecological designed culverts to become the norm, and that is slow process. The county can note the need for a policy change in the watershed plan to address culvert design standards, and partnering with VDOT to address culvert retrofits as culverts come up for maintenance or repair.

#### **IV. Stream Restoration**

Mr. Frost briefly reviewed the procedure for identifying potential stream restoration sites. KCI stream restoration designers used data and field photos from the Stream Physical Assessment to identify potential project sites. Public input from the Issues Forum and WAG meetings also played a part in site selection. The list was narrowed down based on feasibility, which was determined by field assessment of the sites.

#### **V. Breakout Sessions**

The group divided into breakout groups to inspect maps of the watershed depicting potential projects. Individuals offered the following comments:

1. Daniels Run Elementary School would possibly be open to a project at the school
2. At Kay Court and Winterset Drive, a storm drain outfall is badly eroded but should be fixable. The houses downstream are in danger from the erosion.
3. There are two large storm water ponds that could be retrofitted, but they are not on the list of potential projects.
4. In AC-LA-0085-R04, there are no labeled potential retrofits but there is a new high rise building being built that could be addressed with retrofit opportunities.
5. Near the main steam, Crestwood Elementary School would be receptive to working with the county on retrofit opportunities.
6. The county needs to look at institutional sites at the next round more programmatically. Large parking lots should be a priority.
7. The redevelopment of Springfield Mall would be a huge opportunity for retrofits. The mall parking lot drains into Long Branch.
8. There are abandoned industrial sites that should be looked at. Why is the property not being used? In that same area, there are reforestation strips which show potential for further restoration.
9. The Richard Byrd Library is being renovated and is a year away from being completed. There may be some potential retrofit opportunities there.

10. The county needs to work with VDOT on retrofitting culverts to better enhance water quality. Large culverts that were designed because of VDOT safety standards should be retrofitted to handle low-flow, which will allow for fish passage and reduce flooding.
11. The county needs to work with VDOT to address the impact of the HOT Lanes of I-495.
12. There is a remnant magnolia bog near the headwaters. That is an important preservation opportunity on park land.
13. There is a stormwater outfall from Springfield Plaza which is causing scouring. There is no evidence of any life downstream.
14. In AC-AC-0210-S01, there is severe erosion that needs to be addressed. It is also a dumping site.
15. AC-AC-0085-R03 details a project to save trees south of the golf course. Those trees are already gone.
16. In AC-AC-0070, there is a homeowners association ready to channelize the stream to address flooding. It would welcome public partnerships and guidance on how to better implement a project to prevent flooding. That HOA also has a vacant lot it is willing to turn over to the county. This area is adjacent to parkland.
17. In AC-AC-0145 and AC-AC-0160 in the eastern part of the Accotink Mainstem 6, there is HOA land and the HOA is supportive of having projects on its land. The community is very concerned about erosion.

## VI. Next Steps

Fred Rose, Fairfax County, noted that he believes there will be significant change in requirements within the next five years because of pressure from multiple sides. He is hopeful that the county can require and enforce better treatment and that regulation and standards would have shifted to be ecological. Mr. Frost added that Virginia's new stormwater regulations will be among the best in the country. He noted that in the next five years, redevelopment would greatly improve stormwater management because developers would put in stormwater controls where there are not any and update existing controls.

The WAG will next meet in early July. Because of the changing library hours, county staff asked WAG members to provide alternate meeting locations if possible.

The Accotink Creek watershed is severely degraded, mostly due to urbanization. A planning process initiated by Fairfax County is underway to improve the quality of the waterways and their watersheds. The Watershed Advisory Group (WAG) provides input to Fairfax County. The WAG members serve as liaisons between their respective communities and the project team. KCI Inc. serves as the technical team lead, prepares watershed plan drafts and engineering studies, and facilitates WAG and public meetings for the county. For more information, please contact <[Danielle.Wynne@fairfaxcounty.gov](mailto:Danielle.Wynne@fairfaxcounty.gov)> or visit <http://www.fairfaxcounty.gov/dpwes/watersheds/>

“The opinions represented herein do not necessarily represent those of Fairfax County or its agents.”

*Fairfax County Stormwater Planning Division*

**ACCOTINK CREEK WATERSHED PLAN  
WATERSHED ADVISORY GROUP MEETING  
MAY 14 & 28, 2009**

**Meeting Participants**

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Courtney Gleason  
Susan Jewell\*  
Susan Jones \*  
Chris Landgraf\*  
Phil Latasa\*  
Julie Melear  
Paul Makowski  
Peter Millard \*  
Don Waye\*

**Fairfax County Government Staff:**

Fred Rose  
Russ Smith  
Danielle Wynne

**Engineering Staff:**

Bill Frost, KCI Technologies  
Bill Medina, KCI Technologies

**Public Involvement Team:**

Juliana Birkhoff, RESOLVE  
Debbie Lee, RESOLVE