Appendix C: Public Involvement

Summaries of the initial community workshop and each of the five Watershed Advisory Group (WAG) meetings that were held through the watershed management plan development process are included in Appendix C.

i. October 30, 2008
ii. December 10, 2008
iii. March 3, 2009
iv. June 3, 2009
v. March 9, 2010
vi. July 21, 2010

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Healthy Watersheds, Healthier Communities

Fairfax County Stormwater Planning Division

Sugarland Run & Horsepen Creek Watersheds Community Workshop

Herndon High School Lecture Hall, 700 Bennett St
Herndon, VA 20170

Thursday, October 30, 2008 6:30-9:00 pm

Agenda

6:30 p.m.	**Watershed Registration – Sign in and find your watershed address**
7:00 p.m.	**Welcome** by Fred Rose, Chief, Watershed Planning and Assessment Branch, Fairfax County Supervisor John W. Foust, Dranesville District Supervisor Cathy Hudgins, Hunter Mill District
7:15 p.m.	**Slide Show:** Introduction to the watershed and planning Process
8:00 p.m.	**Watershed Input Sessions** – attend a breakout group and note locations or concerns for the watersheds
9:00 p.m.	**Adjourn** *(turn in any comment sheets)*

Visit the Virtual Forum at:
http://www.fairfaxcounty.gov/dpwes/watersheds/sugarlandrun.htm

Fairfax County Stormwater Planning Division
12000 Government Center Pkwy, Ste. 449 • Fairfax, VA 22035 • 703-324-5500, TTY 711
www.fairfaxcounty.gov/dpwes/watersheds

Fairfax County Stormwater Planning Division

SUGARLAND RUN/HORSEPEN CREEK WATERSHEDS WORKSHOP
OCTOBER 30, 2008

Herndon High School
700 Bennett St.
Herndon, VA 20170

I. Welcome and Introductions

Fred Rose, the Chief of the Watershed Planning and Assessment Branch, Fairfax County Department of Public Works, opened the meeting, welcoming the members of the public in attendance.

Mr. Rose then gave a brief history of stormwater management in Fairfax County. He noted that the County has been interested in stormwater management since the 1970s, when the County's first set of watershed plans were developed. These comprehensive plans focused on flooding and erosion. In the 1980s, the emphasis of stormwater management shifted. While still looking at flooding and erosion, the focus turned towards water quality. In the 1980s, the County carried out a regional pond study concerned with controlling the water downstream from large facilities. In the late 1990s and early 2000s, the focus of stormwater management shifted again towards controlling the source, which involved a change in technology needs. In 2001, the County performed a Stream Protection Assessment Study that assessed and ranked every stream in the County. Over 70 percent of the streams were found to be in "fair" to "very poor" condition. The County took the study results as a call to action, and started developing watershed plans. Over the years, the County has adopted a variety of practices for stormwater management, and constantly changing requirement to keep pace with changing technology. Mr. Rose noted that every person in the watershed contributes to the problem, so every person has to also be involved in the solution.

Mr. Rose talked specifically about the Sugarland Run and Horsepen Creek Watersheds Plan. He explained that the plan has a ten- to twenty-year implementation horizon, and was designed to evolve with changing technology. The Sugarland Run and Horsepen Creek Watersheds Plan is part of Fairfax County's second round of plans. In the first round, approximately 50 percent of the County's land area was addressed in six plans encompassing eleven watersheds. All the plans from the first round have been adopted by the County Board of Supervisors. So far, 100 projects have been completed from the first round of watershed plans. In this second round, the County will complete seven watershed plans encompassing nineteen watersheds. The process has been streamlined from the first round by developing the watershed plans concurrently rather than sequentially. The County has a goal to finish development of all these plans by 2010, consistent with the Chesapeake Bay Agreement. While the stormwater program competes with other funding needs, Mr. Rose reassured the group that the stormwater projects will continue to be funded. Over the past few years, the program has succeeded in securing funds; for example, in 2005, the Board dedicated funding from tax revenue for the stormwater program. .

Mr. Rose then introduced John Foust, Supervisor for the Dranesville District. Mr. Foust thanked Mr. Rose and the staff of Fairfax County Stormwater Planning Division for all their work putting together the watershed plans. He said that prior plans were successful because the community was involved in preparing them. He reemphasized Fairfax County's commitment to watershed planning and stormwater management, noting that there are only two projects with committed funding sources: this project and affordable housing. Mr. Foust finished by thanking the members of the public who took the time to come to the forum. He said he looked forward to working with the public over the next year to develop and implement the watershed plan.

Mr. Rose then introduced Juliana Birkhoff, the public forum facilitator. She reviewed the meeting agenda and introduced the teams of Fairfax County staff, technical consultants, and facilitators.

II. Slide Show

Watershed Primer: An Introduction

Joe Sanchirico of the Fairfax County Stormwater Planning Division gave a background presentation to the group, reviewing overall concepts and terms related to watershed management. Mr. Sanchirico informed the group that the Sugarland Run and Horsepen Creek watersheds are nested within the Potomac River watershed, which is in turn nested within the 64,000-square-mile Chesapeake Bay watershed. He then noted that for the purpose of data collection, the County divided the two watersheds into sixteen watershed management areas of three to seven square miles, which were then further broken down into subwatersheds of approximately 100-300 acres each.

Mr. Sanchirico briefly reviewed the watershed planning process and then listed the five main steps:

- Evaluate the data to determine the state of the watersheds;
- Identify the issues the plan will address;
- Establish a vision for the watershed and goals that improve, enhance, and protect the watershed;
- Develop specific actions to achieve the goals; and
- Create a framework and timeframe for implementation.

He noted that the County designed watershed plans to address stormwater issues through various means. Fairfax County requires a comprehensive plan because County land is mostly built up and complicated. Stormwater can affect drinking water and community health, and ineffective stormwater management can negatively affect property, recreation, and environmental health. Mr. Sanchirico stated that the goal of watershed planning is to help Fairfax County and its residents make informed decisions about stormwater management.

Watershed Workbook

Melissa Taibi of F.X. Browne presented a brief overview of the watershed characterization of Sugarland Run and Horsepen Creek Watersheds. She noted that the watersheds straddle Fairfax and Loudon Counties, which makes watershed planning more difficult. The watershed plan will focus on the parts of the watersheds in Fairfax County, while keeping in mind that the watershed as a whole influences the water body. Fairfax County has about 60 percent of the Sugarland Run watershed and about 44 percent of the Horsepen Creek watershed, but about 53 percent of the streams of Horsepen Creek.

Ms. Taibi then briefly summarized the structure and contents of the Watershed Workbook and the methods used to develop the watershed characterization presented in the Workbook. She clarified that the subwatersheds were ranked to identify those needing more attention and gave a brief summary of one watershed management area. She then reviewed the various indicators used to develop the rankings, highlighting a correlation between lower scores and urbanization.

Ms. Taibi explained that subwatersheds were ranked with the Fairfax County Goals and Objectives in mind. The goals are to

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

The objectives include the following:

1) Hydrology
2) Habitat
3) Stream Water Quality
4) Drinking Water Quality
5) Stewardship

There was a short question and answer session following Mr. Sanchirico's and Ms. Taibi's presentations. In response to questions, members of the Fairfax County and F.X. Browne teams made the following points:

- The models were developed based on land use, and the indicators were based on data collected from field tests. Biotic data used are from studies conducted over the last ten years. Results from annual stream monitoring, including *E. coli*, were also integrated into the ranking.
- Only composite scores are included in the Workbook, but the disaggregated scores can be used for individual analyses.
- Some indicators have more complete data than others. For some, a surrogate was used to transfer data to a subwatershed that had incomplete data.

Public Involvement Process

Juliana Birkhoff of the Consensus Building Institute provided a brief overview of the public involvement process, sharing that the Watershed Advisory Group (WAG) will consist of twelve to twenty members representing a diverse set of interests and types of people. The WAG will meet over six sessions to identify problems and possible solutions and issue a draft report.

Following these sessions, there will be another forum where members of the public can offer improvements and suggestions to the WAG report. The County will accept comments throughout the WAG process through the website at http://www.fairfaxcounty.gov/dpwes/Watersheds/sugarlandrun.htm.

III. Open House

Dr. Birkhoff then invited meeting attendees to participate in break out sessions based on their location in the watersheds – Horsepen Creek, Upper Sugarland Run, or Lower Sugarland Run – to identify locations of concerns in the watershed.

Individuals identified the following items during the break out sessions:

Horsepen Creek

1) At Reflection Homes and Lake Homes, there is runoff from storm drains and the banks were incised, leading to floods and erosion. This runoff is from Herndon Industrial Park, where water flows overland, and from Four Season Homes which has stormdrains. Neither has stormwater control.
2) The drainage for a dry pond on Glenbrooke Woods Drive is clogged, and gravel is washing into the creek from the road. This had been redone about a year ago. The dry ponds outlet structure is damaged, with no restriction to water flow.
3) The planned regional pond at Chantilly Highlands, Lady Bank Lane, was never built so new development has occurred. There is now no room for the pond and severe erosion along Cedar Run and the path.

Lower Sugarland Run

1) At Gilman Lane, there are consistent flooding problems in homeowners' basements. During rainstorms, Gilman Lane floods and becomes a "river." There are soil erosion problems from Gilman Lane down to the creek, and stormwater controls are mainly grates and gutters. There is a dry pond on the south side of Wiehle Avenue.
2) There was a plan for new residences being built in a resources protection area near Shaker Woods Road at the confluence of the tributary. This project is possibly dead, after the developers were ordered to start over after they could not defend their plan.
3) West of Holly Knoll and north of Leesburg Pike, there is a manmade mountain of construction debris. The artificial wetlands off of Sugarland Run are of questionable effectiveness.
4) In the area that used to be Dranesville Road before the road was moved, artificial wetlands were built and these are effective.
5) Along Sugarland Run near Route 7, there is a very long and shallow concrete channel that does not allow fish to pass through.

Upper Sugarland Run

1) There is raw dirt under Wiehle Bridge over Sugarland Run. High water causes much erosion.
2) There is flooding and overflow of the floodplain at a neighborhood pool and clubhouse.
3) At Cavendish Spur, a remediation pond has lots of cattails and frequently spills over.

4) The Town of Herndon was reported to have inadequate stormwater management in the B&P Inspection Report.
5) The CH2M Hill Filtration Project should fix the stream bank.
6) In Folly Lick Branch, stormwater runoff has caused property damage and yard loss.
7) The VDOT property may need stormwater control.
8) There are trash issues at the Target parking lot and Dunkin Donuts at Sunset Hills, Eldon Street, and the Parkway.
9) The wooden foot bridge closest to Wiehle Avenue and Rosiers Branch has washed out.
10) There are invasives in the riparian corridor at Sugarland and Carlisle Drive.
11) The Town of Herndon should inspect its sewer lines.
12) The construction of a dry pond at Wiehle Avenue and Sugarland Run involved the removal of trees that provided a necessary buffer. There are kiosks along the running trail that can be used to display public outreach signs.

Forum participants made the following suggestions for WAG memberships during the open house sessions:

- US Geological Survey;
- Herndon Community Golf Course *(Mike Mueller, Golf Course Superintendent)*;
- Hilton Development/Construction Group or the owner of the Herndon business park; and
- The Reston Association.

SUGARLAND RUN / HORSEPEN CREEK WATERSHEDS
INTRODUCTORY AND ISSUES SCOPING FORUM
OCTOBER 30, 2008

Forum Participants

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Sugarland Run & Horsepen Creek Watersheds Plan
Watersheds Advisory Group (WAG) Meeting #1
December 10, 2008
Herndon Community Center, Room #2
814 Ferndale Ave, Herndon, VA 20170

Agenda

Purpose: Set the stage and begin involving the WAG in the watersheds planning process for Sugarland Run and Horsepen Creek, including having the WAG:

- Become aware of the big picture of the watersheds planning process;
- Understand their role in the process;
- Develop a common understanding of the current watersheds characteristics;
- Identify and discuss problems in the Sugarland Run and Horsepen Creek watersheds.

6:30 pm	***Check-in and Light Refreshments***	
7:00-7:10	**Welcome and Introductions** • Participant and team introductions • Review meeting purpose • Review agenda • Review group expectations and participation	*Juliana Birkhoff, CBI*
7:10-7:30	**Introduction to the Watershed Planning Process and Presentation of Policy Issue** • Purpose and History	*Fred Rose, Fairfax County*
7:30-7:40	**Timeframe of Watershed Plan and WAG involvement processes** • Milestones, timing and activities	*Joe Sanchirico, Fairfax County*
7:40-8:00	**Introduction and expectation for WAG meetings** • Role of Watershed Advisory Group • WAG Participation Guidelines • Clarifications and Questions about WAG Role and Participation	*Juliana Birkhoff, CBI*
8:00-8:30	**Presentation of WMP Goals and Objectives** • Watershed Workbook Wrap-up and Review • Additional Problems, Comments and Issues Identified • What Types of Projects Can Be Found in a Watershed Plan?	*Melissa Taibi, F.X. Browne*
8:30-8:35	**Next Steps** • Next WAG Meeting – timing and focus	*Juliana Birkhoff, CBI*
8:35-8:50	**Questions and Answers/Discussion**	*Juliana Birkhoff, CBI*
9:00	**Adjourn**	

http://www.fairfaxcounty.gov/dpwes/watersheds/sugarlandrun.htm

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www.fairfaxcounty.gov/dpwes/watersheds

Fairfax County Stormwater Planning Division

SUGARLAND RUN AND HORSEPEN CREEK WATERSHED WORKSHOP
DECEMBER 10, 2008

Herndon Community Center
814 Ferndale Ave
Herndon, VA 20170

I. Welcome and Introductions

[Please note that the presentation from the December 10, 2008 Sugarland Run and Horsepen Creek WAG meeting will be available online at http://www.fairfaxcounty.gov/dpwes/watersheds/sugarlandrun.htm.]

Fred Rose, the Chief of the Watershed Planning and Assessment Branch, Fairfax County opened the meeting, welcoming the Watershed Advisory Group (WAG) and members of the public in attendance.[1] Juliana Birkhoff, the facilitator, briefly reviewed the meeting objectives and the meeting agenda.[2] She noted that this was the first of a series of 4-6 meetings of the WAG. She briefly reviewed group expectations.

II. Introduction to the Watershed Planning Process and Presentation of Policy Issues

Mr. Rose reviewed the history of watershed planning in Fairfax County. He also reviewed basic watershed planning terms, such as Total Maximum Daily Load (TMDL), which is developed for water bodies considered "impaired." He noted that while Horsepen Creek does not contain any impaired sections, there are a few sections of Sugarland Run that are impaired by *E. coli*. Mr. Rose recounted that the county had been developing watershed plans since the 1970s. Mr. Rose noted it was necessary to develop new plans to take into account new development, current regulations, and changes in the understanding of watershed management. He reviewed events since the 1970s for watershed monitoring and planning. He explained that the Sugarland Run and Horsepen Creek watershed management plan is part of the second round of watershed plans. The first round of plans was started in 2003 and encompassed 50 percent of the county's land area. The second round was streamlined by consolidating the modeling work, scheduling the public involvement piece after most of the modeling was completed, and developing the watershed plans concurrently rather than sequentially.

He explained that stormwater capital improvements had been partially funded with a pro rata share fee paid by developers per acre of impervious surface added and the fee varies per watershed. In addition, the Board of Supervisors had passed a dedication of one-penny real estate tax revenues which provided an average of $20 million a year for the past four years for stormwater programs. The one-penny dedication gave the Stormwater Planning Division a significant boost in implementing stormwater management capital improvement projects. So far,

[1] The list of meeting participants is attached to this meeting summary.
[2] The meeting agenda is attached to this meeting summary.

over one hundred projects have been put in the ground. Mr. Rose noted that the revenue from the one-penny tax has been used for funding the entire stormwater program including project implementation and infrastructure maintenance. He acknowledged that revenue is projected to be decreased next fiscal year, which will affect the FY10 budget. In response to a member's question, Mr. Rose informed the group that in the last year, the operating budget that had previously been funded by the General Fund was rolled into the one-penny dedication fund which resulted in less money available to implement improvement projects.

III. Timeframe of Watershed Plan and WAG Involvement Processes

Joe Sanchirico, Fairfax County, reviewed the timeline for the watershed planning process for Sugarland Run and Horsepen Creek. He noted that the bulk of the six planned WAG meetings will be focused on projects. The county will introduce potential projects to the WAG and the WAG will provide input on which projects to implement. Mr. Sanchirico added that the county was trying to target which projects are right for the watershed, and in what areas. He informed the group that after the Draft Sugarland Run and Horsepen Creek Watershed Plan was developed and reviewed by the WAG, it would be presented at a second public forum. In response to a member's question, he added that each proposed project will include proposed costs. He explained that for modeling purposes, the watershed was broken down into watershed management areas (WMAs) and further divided into sub watersheds of 100-300 acres. Most of the information presented to the WAG will be at the sub watershed level.

IV. Role of Watershed Advisory Group and Participation Guidelines

Dr. Birkhoff briefly reviewed the Watershed Advisory Group Participation Guidelines that were included in the meeting handouts.[3] She asked WAG members to check in with their constituencies and other organizations outside of the meetings to identify other problem areas, issues, and values not represented on the WAG. She informed the WAG that their role was advisory only. Because there are competing priorities between different watershed plans in the County, the final plan may not include every thing the WAG recommended.

In response to members' questions, Dr. Birkhoff added that even if the county decides not to include a comment form the WAG in the final watershed management plan, the county will provide the reasoning behind that decision at the meeting, and both will be documented in the meeting summaries. Members will be notified by e-mail when the summaries are posted onto the website.

V. Review Current Information on Watershed Characteristics

Melissa Taibi, F.X. Browne, reviewed the characteristics of the Sugarland Run and Horsepen Creek watersheds, which were used to develop the Watershed Workbook.[4] She noted that both Sugarland Run and Horsepen Creek have watersheds that straddle Loudoun and Fairfax Counties. While the workbook mainly focuses on the Fairfax County portions of the watersheds,

[3] For a copy of the Participation Guidelines, please contact Debbie Lee at dlee@resolv.org.
[4] The Watershed Workbook is available online at http://www.fairfaxcounty.gov/dpwes/watersheds/sugarlandrun.htm.

there is an understanding that all the land in the watershed contributes to the overall health of the watershed, and that there are downstream effects of waters quality upstream. Ms. Taibi stated that with the exception of one portion in Lower Middle Sugarland Run, most of the watersheds drain into Loudoun County.

Ms. Taibi then gave the group an overview of the different chapters of the Watershed Workbook, and how the data was gathered. She summarized major components of watershed characterization, sub watershed ranking, and the indicators that were used to determine the rankings. She noted that all the rankings were rolled into one composite score. She observed that based on the preliminary findings, the most degraded portions of the watersheds were urban areas.

Ms. Taibi briefly listed problems in the watershed that had already been identified in previous studies. These included:

- Stream channel erosion;
- Insufficient stormwater controls;
- Flooding; and
- Damaged stormwater facilities.

She listed potential project types, noting that generally, non-structural stream restoration projects are favored over structural stream restoration projects because of additional ecological benefits.

The WAG members asked questions. They discussed the following points:

- Percent impervious surface allowed would depend on zoning. Commercial zoning would allow more impervious surface than residential. Any new development must have no more flowing from the site than before, and must reduce phosphorous and nitrogen runoff by 40%.
- The county has a goal to provide stormwater management in redevelopment areas beyond what is currently required.
- Nitrogen runoff is correlated with urbanization. Impervious surfaces trap nutrients from the air and from motor vehicle exhaust.
- Floodplains depicted in the Workbook are the initial modeled 100yr floodplains. The Workbook looks at 100-year floodplains as well as smaller increment floodplains. The modeled floodplains are important for determining the subwatershed ranking and evaluating potential projects.
- FEMA just recently updated its 100-year floodplains for the area, which is important because zoning is based on the FEMA maps, and there are insurance consequences of FEMA's floodplain definitions.
- Some indicators have better data than others; some indicators are using surrogates. Currently, the county is evaluating which indicators make sense. Eventually, the county will develop a matrix to show how to adjust the numbers to help prioritize projects. While the county has not officially gone through a weighting exercise, there is an unofficial prioritization being use (e.g., structures with currently flooding are a priority, as are pristine areas that should be preserved).
- There are partial records on permanent structures in the watershed. Due to budget constraints, there are no additional monitoring sites planned.

- The county will bring potential projects to the WAG for discussion and prioritization. However, members should bring up problems too.
- During the first round of watershed management plans, there were a good mix of different types of projects, including public outreach and education. However, to prevent redundancy, the county wants the second round of plans to focus mainly on projects—not policies. The county agreed to share with WAG members the policy recommendations developed during the first round, as well as a consolidated list with characterizations.
- While the County Board of Supervisors had indicated flooding was a priority area, because much of the flooding involved road crossings, 90% of which are the responsibility of VDOT, the Board had indicated that not a lot of the funding will be allocated towards road projects.

VI. Watershed Planning Next Steps

The next WAG meeting will probably be around February or March. The Public Involvement Team and the Fairfax County staff will contact members to schedule this meeting. In the meantime, Dr. Birkhoff requested that members look through the Watershed Workbook and continue to provide the Team with information on specific problems and issues in the watershed.

Dr. Birkhoff noted that in case of inclement weather, WAG meetings will be cancelled if Fairfax County Public Schools are closed. She requested that members provide her with names of any other people who might be interested in serving on the WAG or participate in the next public forum.

After the meeting, members reviewed comments collected during the Public Issues Forum on October 30, 2008 and suggested other possible problem areas.[5] If members think of more issues, they can e-mail them to Mr. Sanchirico and Ms. Taibi.

The Sugarland Run and Horsepen 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. F.X. Browne 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 <Joseph.Sanchirico@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."

[5] These additional comments collected at the WAG meeting are attached to the end of this summary.

Fairfax County Stormwater Planning Division

SUGARLAND RUN / HORSEPEN CREEK WATERSHEDS
WATERSHED ADVISORY GROUP
DECEMBER 10, 2008

Meeting Participants

Jennifer Boysko*
Zoran Dragacevac*
Beverly Elgin*
Alan Ford*
Nicki Foremsky*
Richard A. Gollhofer
Konrad Huppi*
Charlie Marts*
Greg Noe*
James Palmer*
Norbert Pink*
Glen Rubis*
Robert Soltess*
Dave Swan
Bobby Winterbottom*

Fairfax County Government Staff:
Takisha Cannon
Fred Rose
Joe Sanchirico

F.X. Browne Staff:
Melissa Taibi

Public Involvement Team:
Juliana Birkhoff, Consensus Building Institute
Debbie Lee, RESOLVE

***WAG Member**

Sugarland Run and Horsepen Creek Watersheds
December 10, 2008
WAG Meeting Issue Additions

Item	Issue Description	Location	Contact
A	Stormwater from Lake Newports soccer fields at Reston Parkway must drain through neighborhoods to reach stormwater dry detention pond – ideally there should be a stormwater facility closer to Reston Parkway	Origin of drainage problem behind Autumn Ridge Circle	Nicki Foremsky, Reston Association
B	Wehr structure overflowed during Tropical Storm Hannah flooding. Weir may be undersized – functioned as predicted, backed up the floodwater (6ft) as intended, but overtopped/weir not tall enough for storm	Upstream of crossing at Quincy Adams	Greg Noe, USGS
C	Undersized culvert observed during worst flash flood recalled in past 20 yrs. Approx 17 years ago, may have been addressed since then	Off of Queens Row Street	Richard G.
D	Suspected water quality issue, probably coming from much farther upstream (hasn't noticed any association with the nearby stormwater outfalls). Last few weeks, significant foaming in stream, also noticed a little farther upstream. Foam backs up at partial log obstruction. Also in spring, significant algal blooms – very little riparian buffer below golf course, suspected nutrient overload	Folly Lick Park	Jim Palmer
E	Farm pond is being modified for a new development – supposed to be a wet pond. The common/open space area with pond is supposed to be given to Fairfax County Parks Assoc. and added to adjacent park	Off of Young Ave & Hiddenbrook Dr	Jim Palmer

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Sugarland Run & Horsepen Creek Watersheds Plan
Watersheds Advisory Group (WAG) Meeting #2
Herndon Fortnightly Public Library,
768 Center St, Herndon, VA 20170
(703) 437-8855
March 3, 2009
Agenda

Purpose:

- Update on Sugarland Run and Horsepen Creek modeling;
- Discuss County goals and objectives;
- Review preliminary strategies for watershed improvements and preservation and discuss their application to Sugarland Run and Horsepen Creek

6:30 pm	***Check-in and Light Refreshments***	
7:00-7:15	**Welcome and Introductions** • Introductions • Review meeting purpose • Review agenda • Review group expectations and participation	*Juliana Birkhoff, CBI*
7:15-7:30	**Presentation of Fairfax County Goals and Objectives** • Presentation • Facilitated discussion to understand goals and objectives and apply to Sugarland Run and Horsepen Creek	*Joe Sanchirico, Fairfax County* *Juliana Birkhoff, CBI*
7:30-7:50	**Problem Areas Identified by Subwatershed Characterization** • Presentation • Questions	*Melissa Taibi, F.X. Browne, Inc.*
7:50-8:00	**Break and Discussion:** WAG members can take time to review the subwatershed characterization and problem area maps posted in the room and provide comment.	
8:00-8:40	**Preliminary Strategies for Watershed Improvements and Preservation** • Presentation • Questions • Facilitated discussion to discuss how strategies could be applied in Sugarland Run and Horsepen Creek	*Melissa Taibi, F.X. Browne, Inc.*
8:40-8:45	**Next Steps** • F.X. Browne, Inc. will begin identifying specific projects and provide homework to WAG on possible projects. • Next meeting approximately late April to discuss proposed projects.	*Juliana Birkhoff, CBI*
8:45	**Adjourn**	*Juliana Birkhoff, CBI*

http://www.fairfaxcounty.gov/dpwes/watersheds/sugarlandrun.htm

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Fairfax County Stormwater Planning Division

SUGARLAND RUN AND HORSEPEN CREEK WATERSHEDS
WATERSHED ADVISORY GROUP MEETING
MARCH 3, 2009

Herndon Fortnightly Public Library
768 Center St
Herndon, VA 20170

I. Welcome and Introductions

[Please note that the presentation from the March 3, 2009 Sugarland Run and Horsepen Creek WAG meeting will be available online at http://www.fairfaxcounty.gov/dpwes/watersheds/sugarlandrun.htm.]

Juliana Birkhoff, the meeting facilitator, welcomed Watershed Advisory Group (WAG) members and the public to the second meeting of the Sugarland Run and Horsepen Creek WAG.[1] She briefly reviewed the meeting agenda, meeting objectives, and group expectations.

II. Presentation of Fairfax County Goals and Objectives

Joe Sanchirico, Fairfax County, told the group that this would be the last WAG meeting focused on background information. Future meetings will focus on projects. He reviewed the county's goals and objectives and defined "goals", "objectives", and "indicators." Indicators are used in the watershed ranking process and apply to goals and objectives, creating a direct relationship between what the county is attempting to accomplish and the data. Mr. Sanchirico pointed WAG members to the list of Fairfax County goals and objectives included in their meeting materials.[2]

Mr. Sanchirico briefly reviewed the WAG process expectations, highlighting that WAG time will be primarily devoted to project identification and selection. He encouraged WAG members to generate support in the community for the Sugarland Run and Horsepen Creek Watershed Management Plan when it is developed.

WAG members asked Mr. Sanchirico questions and discussed his presentation. During the discussion, members noted:

- Data used in the watershed characterization was collected from a variety of sources, including field reconnaissance, modeling data, surrogates, and data from the 2001 Stream Physical Assessment and other past surveys.
- Available data can be used to establish a baseline of the watershed's current health. There should be a way to measure the success of the projects implemented with future data and indicator trends.

[1] A list of the meeting attendees are attached to this meeting summary. A copy of the meeting agenda is available online at http://www.fairfaxcounty.gov/dpwes/watersheds/sugarlandrun.htm.
[2] For a copy of the Fairfax County's goals and objectives, please contact dlee@resolv.org.

III. Problem Areas Identified by Subwatershed Characterization

Melissa Taibi, F.X. Browne, Inc., informed the WAG how they identified problem areas using subwatershed characterization. She noted that the county can use predictive indicators to characterize future scenarios to identify areas that need preservation and evaluate the benefit of proposed projects.

Ms. Taibi reviewed the three groups of indicators used to determine the subwatershed rankings:

1. Watershed Impact Indicators, which provide information on the overall watershed condition;
2. Source Indicators, which provide data on the location of watershed stressors; and
3. Programmatic Indicators, which provide information on existing watershed management programs.

Ms. Taibi explained in more detail the watershed impact indicators, which are comprised of objective composite scores related to stormwater runoff, flooding hazards, habitat health, habitat diversity, stream water quality, drinking water quality, and storage capacity. The individual objective composite scores are summed into an overall watershed impact objective composite score, which provides an overall look at the subwatershed condition.

Ms. Taibi reviewed each of the objective composite scores. During the presentation, WAG members asked questions about the indicators used to develop the composite scores and discussed the data presented. Individuals made the following points during the discussion:

- A benthic community is comprised of the macroinvertebrates that inhabit the stream.
- The county has data on nutrient runoff for nitrogen and phosphorous. That data is grouped into one of the stormwater runoff indicators.
- At this point in the process, all the indicators are weighted equally. This might change in the future.
- Herndon has a low rank for health habitat because it is urbanized and there is little habitat.
- Fairfax County may want to look into developing an indicator for tree cover.
- When surrogates are used to develop indicators, this should be indicated on the maps – perhaps with hashing.
- The county is considering weighting areas that rely heavily on surrogates lower.
- The county has not looked into a threshold for the veracity of the data, but may take that into consideration in the future.
- In Sugarland Run and Horsepen Creek watersheds, very few if any households are using the streams as water sources, so the composite score for drinking water quality may not be as applicable as it is elsewhere in the county.

Ms. Taibi also briefly reviewed source indicators, individual indicators, and programmatic indicators. The WAG will delve more deeply into the programmatic indicators when it discusses candidate projects. She reviewed the problems identified in the watershed based on data collected from field reconnaissance, past surveys, public comment on the watershed workbook, and input collected from the public watershed forum.

IV. Preliminary Strategies for Watershed Improvements and Preservation

Ms. Taibi summarized three restoration strategies and gave examples of each. The three restoration strategies were:

- Reduce Flooding;
- Improve Water Quality; and
- Improve Habitat or Reduce Streambank Erosion.

One WAG member suggested that the county prepare a list of local places where restoration strategies were implemented, so that the group can visit some.

The group discussed the various restoration strategies. Individuals made the following points:

- Education can be considered a non-structural measure to improve water quality.
- There are constructed wetlands just east of Dranesville Road near Route 7. They are on the west side of Sugarland Run, close to the shopping center.
- The Chesapeake Bay Foundation used to have a matching grants program for homeowners to implement restoration projects, but it is halted now.
- As of two to three years ago, Fairfax County did not have tax breaks for businesses that implemented restoration strategies on their premises. That may have changed. The county will check to see if that was on their list of policy issues from the first round of watershed management plans.
- The Reston Association had received funds from the Northern Virginia Stream Restoration Bank to restore the Snakeden Watershed using natural stream channel design. Included was funding for ten years of survey longitudinal profiles. So far the restored stream channel has withstood Hurricane Hanna.

Ms. Taibi reviewed three subwatersheds as examples of how the County could apply the strategies given each subwatershed's descriptions and problem areas.

WAG members made the following suggestions for other strategies:

- In areas with lots of federal government buildings, such as subwatershed SU-SU-0048, the county may want to consider community partnerships.
- In lower-income areas, such as subwatershed SU-SU-0051, families do not have a lot of money to improve their property. In such areas, the county may want to look at opportunities on publicly owned land, such as Dogwood Elementary School.
- The county may want to collaborate with Volunteers with Change; an organization that helps busy adults finds volunteer opportunities. This would be a way for the county to find volunteers to help conduct surveys.
- Implement tax benefits to implementing restoration strategies, or tax penalties for not.
- Offer a credit for homeowners to implement restoration strategies on their property.
- Convert some HOA property into conservation easements and no-mow areas.

V. Watershed Planning Next Steps

Before the next WAG meeting, currently planned for mid-April, the county will distribute a list of proposed projects to the members to review. In the meantime, the county will send out a list of

local restoration projects, a draft list of policy issues compiled from the previous round of watershed management plans, and an updated WAG member roster. The county will also attempt to give a general idea of cost per project type, and plan a field trip to look at sites with implemented restoration projects. Dr. Birkhoff requested that any members who preferred to keep their email addresses on the BCC line of emails notify her.

The Sugarland Run and Horsepen Creek watershed is 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. F.X. Browne, 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 <Joseph.Sanchirico@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

SUGARLAND RUN / HORSEPEN CREEK WATERSHEDS
WATERSHED ADVISORY GROUP
MARCH 3, 2009

Meeting Participants

Juliana Birkhoff, Consensus Building Institute
Darold Burdick, Fairfax County Stormwater Planning Division
Takisha Cannon, Fairfax County Stormwater Planning Division
Zoran Dragacevac, Town of Herndon, Department of Public Works*
Craig Dubishar, St. Timothy's Episcopal Church*
Alan Ford, Virginia Native Plant Society*
Nicki Foremsky, Reston Association*
Gary Gepford, Herndon High School*
Richard A. Gollhofer
Konrad Huppi, Shaker Woods Homeowners*
Debbie Lee, RESOLVE
Charlie Marts, Reflection Homes Association*
Greg Noe*
Norbert Pink, Sierra Club*
Cecily Powell, Town of Herndon, Neighborhood Resources
Joe Sanchirico, Fairfax County Stormwater Planning Division
Deborah Slawson, F.X. Browne, Inc.
Alison Smith
Melissa Taibi, F.X. Browne, Inc.
Robert Soltess, Friends of Sugarland Run*
Bobby Winterbottom, Sugarland Run Homeowners Association*

***WAG Member**

Sugarland Run and Horsepen Creek Watershed Advisory Group Meeting #3
June 3, 2009 7:00-8:45 p.m.

Herndon Fortnightly Library
768 Center St
Herndon, VA 20170

Agenda

Purpose:

- Learn about how projects were developed;
- Learn about FX Browne work to date;
- Identify projects on the map, discuss appropriateness, and provide feedback on any missing projects or conflicts;
- Review next steps and WAG homework.

6:30 pm	***Check-in and Light Refreshments***	
7:00–7:15	**Welcome and Introductions** • Introductions • Review meeting purpose and agenda • Review group expectations and participation	*Juliana Birkhoff, RESOLVE*
7:15-7:30	**Project Development Process** • Presentation • Facilitated discussion to learn how projects were developed.	*Melissa Taibi* *FX Browne*
7:30-8:30	**Break Out Groups to Review Potential Projects** • Facilitated small break out sessions to discuss projects and locations and provide feedback.	*Melissa Browne* *FX Browne*
8:30 – 8:45	**Next Steps** • FX Browne will evaluate projects based on County goals and objectives, WAG input, and field assessment; develop prioritization to identify a subset of projects for concept design. • Next meeting – early July.	*Juliana Birkhoff, RESOLVE*
8:45 pm	***Adjourn***	

http://www.fairfaxcounty.gov/DPWES/watersheds/sugarlandrun.htm

Fairfax County Stormwater Planning Division

SUGARLAND RUN/HORSEPEN CREEK WATERSHED ADVISORY GROUP MEETING
JUNE 3, 2009

Herndon Fortnightly Library
768 Center St
Herndon, VA 20170

I. Welcome and Introductions

[Please note that the presentation from the June 3, 2009 Sugarland Run/Horsepen Creek WAG meeting will be available online at http://www.fairfaxcounty.gov/dpwes/watersheds/sugarland_docs.htm].

Juliana Birkhoff, the meeting facilitator, opened the third meeting of the Sugarland Run/Horsepen Creek Watershed Advisory Group (WAG). She welcomed WAG members and the members of the public and reviewed the meeting agenda and group expectations.[1]

Joe Sanchirico, the project manager from Fairfax County, thanked everyone for a great field trip on May 29th. WAG member Nicki Foremsky led a tour of the Snakeden stream restoration, and the group went to Fox Mill Estates to look at streams in relatively good condition and streams that were severely degraded. After that, the group drove around to look at other sites and noted some potential solutions to problems related to stormwater.

II. Subwatershed Strategy

Melissa Taibi, F.X. Browne, Inc., summarized how the county developed its Subwatershed Strategy. She listed the following steps in the project development process:

1. Identification of priority subwatersheds, which included those in moderate to poor condition and those in better condition with at-risk areas;
2. Identification of impairments and preservation qualities;
3. Develop improvement goals (e.g., restoration and preservation strategies); and
4. Identification of projects.

Ms. Taibi went into more detail on each step, using one subwatershed in the Horsepen Creek headwaters as an example.

She also reviewed some of the possible types of projects for each strategy.

Following Ms. Taibi's presentation, the WAG members asked questions. During the discussion, the following points were made:

- When the county decides what projects to include in the watershed management plan, it

[1] 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/sugarlandrun_docs.htm.

should consider the different impacts of each project, and how many of each type of project will be included on the final projects list.

Project Comments: Breakout Groups

The group divided into breakout groups to inspect maps of the watershed depicting potential projects. The project list distributed to the WAG lists the nearest address to each potential project site so members could go visit the site. Some project sites had multiple potential projects; the engineering team has not yet determined which project would be best so included them all. Individuals offered the following comments:

- There is a bad erosion problem in HC-CR-0001 at the trail crossing near project 191, and the path is almost gone. The whole stretch behind Motherwell Court has degraded significantly since the stream assessment.
- Rock Hill Road in HC-HC-0019 is an area under an APR process.
- The obstructions that would be removed as part of project 122 in HC-HC-0031 might already be gone.
- Project 161 in HC-HC-0035 is an active recreational area. Any treatment should maintain the field off of Emerald Chase Drive.
- There is a high quality wetland to the east of project 181 in HC-HC-0040, which could be impacted if the project was implemented. The county should consider a project upstream closer to the source instead, perhaps LID or a small structure, to control the water draining from the shopping center.
- One WAG member noted that projects 99F-H in SU-FF-0003 should not be a high priority.
- For project M86 in SU-FL-0005, topography may inhibit otherwise good infiltration.
- For project M67 in SU-FL-0002, rather than building a new dry pond, it may be better to divert just downstream to an existing depression which already collects water.
- One WAG member liked the possible community involvement aspect of stream restoration and riparian buffer planting after construction of project M87 in SU-FL-0005.
- In SU-FL-0004 where projects M81 and M83 are proposed, that area is already naturalized and people have complained that it is an eyesore. The area holds some water, leading to a mosquito problem.
- There is development currently in SU-FL-0004. This will have BMPs and walking trails.
- Projects M85 and M86 in SU-FL-0005 are in the middle of an HOA's property. There may not be open space there to implement the proposed projects.
- There may be resistance to projects M88 and M89 in SU-FL-0006 from the golf course, which purposefully maintains the channels to look a certain way. The county needs to coordinate with the golf course.
- The Town of Herndon is already planning stream restoration projects on a reach of Follylick in SU-FL-0008, where projects M109 through M118 are proposed.
- In SU-RI-0003, the Shaker Woods HOA supports regional pond alternatives (projects 166A-F). Also in that subwatershed, water is not getting to the dry pond in the area, possibly due to obstruction. Southington Lane has flooding and drainage problems.
- There are drainage problems in SU-RI-0005 where projects 166 through 167 are proposed. While VDOT maintains the roadways generating flows to the area, the HOA

may own the adjacent land where the concrete ditches are located.

- One WAG member was worried about tree loss from projects 119-124 in SU-SU-00032.
- Project 176 in SU-SU-00034 would be near Sugarland Run trail. If a stormwater management pond was installed, there could be a safety issue as this trail is heavily used by children.
- Stevenage Road in SU-SU-0035 above project 222 is a possible stream restoration site. There is a headcut problem from Bennington Woods.
- SU-SU-0035 contains Reston Association property. There is creek cutting at Moss Point Lane. Interior drainage flows over a homeowner's yard. There is a need for infiltration.
- At Spectrum Court in SU-SU-0037, the shopping center is in redevelopment. The county should keep an eye on that area. There are plans for a possible high rise building.
- In SU-SU-0043, projects 326 and 327 are stream preservation projects, which could include some stream flow diversion to take pressure off of the stream during flooding. The projects are situated on undevelopable land that belongs to the business park owner. The owner would like to develop the land but cannot because it is on a floodplain. The county can work with the owner to put in riparian buffers and trees. There is an easement possibility.
- The building located in SU-SU-0045 where project 358 is sited cannot support a green roof. Cisterns are currently not allowed in Reston but rain barrels will work. The trapezoidal ditch outside of the building should be removed and naturalized.
- One WAG member liked the idea of bioretention in the Target parking lot in SU-SU-0045 (project 363), noting there are currently some trees but the lot is very dry.
- One WAG member noted that project 359 in SU-SU-0045 is a good project.
- Projects M35 and M36 in SU-SU-0046 are located in really high quality woods. A vernal pond may be a better alternative as a means to keeping the area wooded but still have treatment.
- The USGS facility in SU-SU-0046 has flow northwest from the parking lot. This is an opportunity to convert one of the parking lots into a pond or other stormwater control.
- Project M16 in SU-SU-0049 may not work because the soil's low porosity could cause poor infiltration.
- The Dulles Metro development/redevelopment would cause large scale disruption to the watershed. However, any redevelopment should reduce stormwater runoff by 25 percent.
- The Dranesville District Supervisor's Office endorses all projects prioritized by the Town of Herndon staff.
- One WAG member noted that the county should use conservation easements and stream restoration when possible.
- The following subwatersheds are considered priorities by Supervisor Foust's office:
    - SU-FF-0002, for and conservation easement and stream restoration;
    - SU-FF-0004;
    - SU-FL-0003, for conservation easement;
    - SU-FL-0004, to repair erosion;
    - SU-FL-0008;
    - SU-MB-0001, for conservation easements;
    - SU-SU-0020, for conservation easement;
    - SU-SU-0022, for conservation easement;

- SU-SU-0028;
- SU-SU-0034, for conservation easement and stream restoration;
- SU-SU-0039, for stream restoration; and
- SU-SU-0040.

A few WAG members raised concerns about communication before the County implements projects. Mr. Sanchirico noted that before the County finalizes the plan being County will hold another public forum and allow members of the community to comment on the plan both at the forum and online.

Mr. Sanchirico informed the group that in the final watershed plan, the county will include approximately 100 projects in the 10 year plan for both watersheds. There are currently 800 possible projects, including duplicate projects at the same site location. A lot of those 800 will be eliminated relatively quickly through feedback and field reconnaissance.

He added the cost will factor into what projects are picked. Fred Rose, Fairfax County, noted that there is no ceiling on the total cost of the projects included in the final plan but that the costs will be realistic. He acknowledged there are more problems and issues than can be solved with the budget and that the county has to pick wisely. Mr. Sanchirico informed the WAG that if they were interested in the total estimated cost, previously completed watershed plans are online at the county website, and that the executive summary of each mentions the cost.

Next Steps

The Sugarland Run/Horsepen Creek WAG will next meet in approximately six weeks. As the county library hours will change beginning July 1st, Dr. Birkhoff asked WAG members to suggest alternate meeting locations.

The county will provide a summary of the proportions of different projects. If WAG members would like copies of the maps or informational brochures, they can request them from Dr. Birkhoff via email.

The Sugarland Run and Horsepen Creek watershed is 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. F.X. Browne, 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 <Joseph.Sanchirico@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.

SUGARLAND RUN/HORSEPEN CREEK WATERSHED ADVISORY GROUP MEETING
JUNE 3, 2009

Meeting Participants

Jennifer Boysko*
Zoran Dragacevac*
Alan Ford*
Nicki Foremsky*
Richard Gollhofer
Konrad Huppi*
Greg Noe*
Jim Palmer*
Glen Rubis*
Cheri Salas*
Alison Smith
Bob Soltess*

Fairfax County Staff
Takisha Cannon
Fred Rose
Joe Sanchirico

Engineering Team
Jon-Paul Do, F.X. Browne, Inc.
Melissa Taibi, F.X. Browne, Inc.

Public Involvement Team
Juliana Birkhoff, RESOLVE
Debbie Lee, RESOLVE

***WAG member**

Sugarland Run and Horsepen Creek Watershed Advisory Group Meeting #4
March 9, 2010 | 7:00-9:00 p.m.
Reston Community Center Lake Anne
1609-A Washington Plaza | Reston, VA 20190

Agenda

Purpose:
- Learn about how projects were prioritized from the initial candidate list;
- Learn about F.X. Browne, Inc. work to date;
- Identify projects on the map, discuss appropriateness, and provide feedback;
- Review next steps and WAG homework.

6:30 pm	***Check-in and Light Refreshments***	
7:00-7:15	**Welcome and Introductions** • Introductions • Review meeting purpose and agenda • Review group expectations and participation	*Juliana Birkhoff, RESOLVE*
7:15-7:30	**Process Update** • Where we are since the last meeting	*Fred Rose, Fairfax County*
7:30-7:45	**Project Prioritization Process** • Presentation • Facilitated discussion to learn how projects were prioritized.	*Melissa Taibi F.X. Browne, Inc.*
7:45-8:45	**Break Out Groups to Review Potential Projects** • Facilitated small break out sessions to discuss projects and locations and provide feedback.	*Melissa Taibi F.X. Browne, Inc.*
8:45-9:00	**Next Steps** • WAG will provide feedback on projects by March 29th. • FX Browne will further refine the project ranking based on WAG input, cost, implementability and additional modeling. • Project fact sheets will be created for the 10 year priority projects. • Draft plan will be developed for review by WAG prior to public forum.	*Juliana Birkhoff, RESOLVE*
9:00 pm	***Adjourn***	

http://www.fairfaxcounty.gov/DPWES/watersheds/sugarlandrun.htm

Fairfax County Stormwater Planning Division
12000 Government Center Pkwy, Ste. 449 • Fairfax, VA 22035 • 703-324-5500, TTY 711
www.fairfaxcounty.gov/dpwes/watersheds

Fairfax County Stormwater Planning Division

SUGARLAND RUN/HORSEPEN CREEK WATERSHED ADVISORY GROUP MEETING
MARCH 9, 2010

Reston Community Center Lake Anne
1609-A Washington Plaza | Reston, VA 20190

I. Welcome and Introductions

[Please note that the presentation from the March 9, 2010 Sugarland Run/Horsepen Creek WAG meeting is available online at http://www.fairfaxcounty.gov/dpwes/watersheds/sugarland_docs.htm].

Juliana Birkhoff, the meeting facilitator, opened the fourth meeting of the Sugarland Run/Horsepen Creek Watershed Advisory Group (WAG). She welcomed WAG members and the members of the public and reviewed the meeting agenda and group expectations.[1]

II. Process Update

Fred Rose, the Chief of the Watershed Planning and Assessment Branch of the Fairfax County Department of Public Works, thanked everyone for attending the meeting. Mr. Rose reported the progress of the overall watershed planning process to WAG members. The county will send the final plan to the Board of Supervisors by the end of the year. Mr. Rose indicated that the county would use a system to prioritize the projects to ensure the county uses its resources efficiently.

The county is developing a watershed data management system to house all of the projects from the watershed management plans. The County will use the system to track implementation progress.

Following Mr. Rose's process update, WAG members asked questions. During the discussion, participants made the following points:

- The county is working to standardize the practices used for round one and two of the county's watershed planning as much as possible.
- Funding may increase for 2010. A county executive put forward a proposal to dedicate an additional half penny of taxes to stormwater this year. The County will make a final funding decision in April.
- The County has installed four monitoring stations in collaboration with USGS. The county will use the stations to illustrate the effectiveness of new projects. This data will help to quantify the effectiveness of county resources.

III. Project Prioritization Process

Melissa Taibi, F.X. Browne, Inc. summarized how the county developed its project prioritization

[1] 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/sugarlandrun_docs.htm.

process. She listed the following steps in the project prioritization process:

1. Field reconnaissance to narrow down potential projects. The initial list consisted of over 580 projects.
2. A first round of project cuts occurred eliminating projects deemed low priority or not viable. 128 structural projects remain.
3. F. X. Browne prioritized the final proposed project list with 59 structural projects for Horsepen and 69 structural projects for Sugarland. F.X. Browne plotted the projects with GIS mapping technology. The project prioritization process considered 5 factors;
    - Effect on watershed impact indicators
    - Effect on source indicators
    - Location within priority sub watersheds
    - Sequencing
    - Implementability
4. Each project was designated an initial project ranking composite score. The higher the score, the higher the priority of the project (ex; 1=lowest priority, 72=highest priority.) Ms. Taibi explained that these rankings are based on a weighted average of the 5 prioritization factors. The final rankings also include planned regional ponds.

Ms. Taibi conveyed that the project prioritization process would be broken down into 10 and 25-year implementation plans. The 10-year plan will include the 70 highest ranked projects in Sugarland and Horsepen (Sugarland projects ranked 37-72 and Horsepen projects ranked 30-62.) The 25-year plan will include the next 50 projects in ranking order (Sugarland projects ranked 9-36 and Horsepen projects ranked 8-29.) Ms. Taibi conveyed the importance of WAG input in assisting to refine the project rankings for inclusion in the final implementation plans. Along with WAG input, F.X. Browne will use the water quality modesl (STEPL and SWMM) to compose the final rankings for projects.

Ms. Taibi discussed the inclusion of non-structural projects in the final implementation plan. They did not rank non-structural projects because it is difficult to quantify their benefits. Ms. Taibi explained that each sub watershed includes non-structural projects. They complement structural projects or provide water quality benefits where it would be difficult to construct structural projects.

Following Ms. Taibi's presentation, the WAG members asked questions. During the discussion, participants discussed:

- The prioritization rankings account for property ownership. Projects located on public property were ranked highest, project located on private property ranked lower, and project located on several parcels of private property ranked the lowest
- F.X. Browne averaged the indicators to ensure that they could compare projects to other projects across the watershed and the County. This is not a perfect science, but was the most effective way to compare projects of different types.
- The County did use RPA designations for the sub watershed ranking indicators. The county still needs an easement to pursue a project within an RPA on private property.
- The 10-year implementation plan's goal of completing the 70 highest ranked projects is optimistic. The Board of Supervisors will use a financial assessment along with the project rankings and statewide mandates to make the best decision on which projects to focus on.
- The County will address non-structural projects differently outside of the structural plan. These projects are program related, and do not need to be limited to specific areas. They also have

administrative complications that make calculating the cost of non-structural projects difficult.
- The county government's Watershed Planning and Assessment Branch will reevaluate the effectiveness of the implementation plan 5 years into the process.

Project Comments: Breakout Groups

The group divided into breakout groups to inspect maps of the watershed depicting potential projects. The project list distributed to the WAG lists the project ID number, sub watershed location, rank, and brief description of the project. Some project sites had multiple potential projects, indicated by alphabetical project components.

Individuals offered the following comments;

- Cedar Run – A WAG member asked why F.X Browne did not identify the reach between McLaren Road and Fairfax County Parkway for invasive plant removal and buffer restoration. The member noted that a recent habitat assessment revealed more degradation at this location than the "good" SPA score indicates.
- Folly Lick - Participants noted that there are not many projects proposed for Folly Lick.
- Herndon - The town of Herndon does not like detention ponds, residents perceive them as an eyesore.
    - Herndon promotes bioretention facilities and underground detention vaults as alternatives.
    - One participant proposed more stream restoration projects in Herndon.
- Kling Chase Area – A WAG member noted this would be a good area for a rain barrel project.
- One participant suggested that F.X. Browne has ranked stream restoration projects too high. F.X. Browne should take into account the complexities inherent in stream restoration. F.X. Browne should rank other project types higher in all instances.
- Several participants commented that non-structural projects should retain their importance
    - These participants would like to see non-structural and structural projects ranked together.
- HC9120 – A participant agreed with the high ranking of this project.
- HC9505B – One WAG member asked what generated this project
- SU146 A&B – One WAG member commented that one of these locations is a publically maintained dry pond. The other is a privately maintained rain garden.
- SU9117A – A participant notes that this location is an open area by the road where children come to play.
    - F.X. Browne needs to consider safety.
    - There is a big sycamore tree in the area that the County should protect and ensure that the project will not affect the livelihood of the tree.
- SU9140 A&B – A participant mentioned that these detention ponds are only 8-10 years old and should meet modern standards.
    - These ponds are under private maintenance.

Projects participants felt F.X. Browne should rank the following projects higher:

- HC9503 – One WAG member suggested ranking the project higher than 29. The project is in Frying Pan Park, this is a good location for public education about low impact development and

stormwater management. Participants recommended that the County put educational signs near the rain garden.
    - The participant noted that the County ranked some adjacent projects to include in the 10-year group, so this one should be as well.
- SU9201A – A participant felt that this project should have be higher in priority compared to SU9123.
    - This is a visible Area with clear signs of degradation and erosion on park property

Projects participants felt should be ranked lower:
- HC9200B – A member supported reducing the rank of this project because it is a stream restoration.
- SU9204 A & B – One WAG member noted that these seem to be good projects; however, SU9201A should have a higher ranking.

Projects participants disapproved of or thought would not be viable:
- HC9110 – WAG members noted that this site is located in the middle of a residential neighborhood and is not feasible.
- SU503 A & B - There is already underground detention at these sites. A rain garden would not be desirable.
- SU9188 - Redevelopment will be taking place on this property as a mixed-use private/public partnership.
    - The property will incorporate modern stormwater management.
- SU9201B – One participant noted that there might not be enough space for pond.
- SU9505B – A participant noted that this is a developed area and there may not be enough space for a rain garden.
- SU9510 A, D & E – One participant noted that a green roof is not feasible unless the site undergoes redevelopment.

Participants noted the following project map and location problems;
- SU9142 - This site appears to be missing from the map.
- SU9505C - This site appears to be missing from the map.
- SU9905 - This site is labeled incorrectly. The description does not correspond with the site location.

Next Steps

WAG members were encouraged to take maps home and share with their communities. The County can accept feedback until March 26. Additional feedback including the project ranking and ID number should be sent to Melissa Taibi (mtaibi@fxbrowne.com) or Joe Sanchirico (Joseph.Sanchirico@fairfaxcounty.gov) FX Browne will consider WAG member feedback to refine the 10 and 25-year plans. F.X. Browne will take SPA water quality modeling into account to adjust ranking for the 10-year plan. We will distribute the final ranking to WAG members before the next meeting.

Several WAG members proposed to draft a cover letter for the final report. This letter will summarize the WAG perspective. A small committee will draft a letter and send it to Dr. Birkhoff. We will circulate it to the WAG before the meeting. The Agenda will include a discussion segment for the cover letter.

The Sugarland Run/Horsepen Creek WAG will next meet in approximately six weeks. The meeting will focus on WAG member feedback of the implementation plans prior to the public forum. WAG members should begin to consider targeting members of their community to attend the public forum.

The Sugarland Run and Horsepen Creek watershed is 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. F.X. Browne, 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 <Joseph.Sanchirico@fairfaxcounty.gov> or visit *http://www.fairfaxcounty.gov/dpwes/watersheds/*

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Fairfax County Stormwater Planning Division

SUGARLAND RUN/HORSEPEN CREEK WATERSHED ADVISORY GROUP MEETING
MARCH 9, 2010

Meeting Participants+

John Dargle
Zoran Dragacevac*
Alan Ford*
Nicki Foremsky*
Richard Gollhofer
Konrad Huppi*
Cynthia McNeal
Jim Palmer*
Glen Rubis*
Cheri Salas*
Bob Soltess*

Fairfax County Staff
Takisha Cannon
Catherine Morin
Sajan Pokharel
Fred Rose
Joe Sanchirico

Engineering Team
Jon-Paul Do, F.X. Browne, Inc.
Melissa Taibi, F.X. Browne, Inc.

Public Involvement Team
Juliana Birkhoff, RESOLVE
Jason Gershowitz, RESOLVE

***WAG member**
+ If you attended the meeting and are not listed as attending, please inform Jason Gershowitz (jgershowitz@resolv.org) and he will add you to the list.

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Healthy Watersheds, Healthier Communities

Fairfax County Stormwater Planning Division

Sugarland Run and Horsepen Creek Watershed Advisory Group Meeting #5
July 21, 2010 | 7:00-9:00 p.m.
Herndon High School
700 Bennett Street | Herndon, VA 20170

Agenda

Purpose:

- Recap the steps taken since last WAG meeting;
- Review the organization of the watershed management plan;
- Discuss comments to improve draft plan;
- Discuss community outreach plans for the forum;
- Review how the plan will be finalized and next steps in the process.

6:30 pm ***Check-in and Light Refreshments***

7:00-7:10 **Welcome and Introductions** — *Juliana Birkhoff, RESOLVE*

- Introductions
- Review meeting purpose and agenda
- Review group expectations and participation

7:10-7:20 **Thank You and Process Recap** — *Fred Rose, Fairfax County*

7:20-8:00 **Overview of the Draft Watershed Management Plan** — *Melissa Taibi, FX Browne*

- Plan progress update since WAG #4
- How the plan is organized
- Overview of project fact sheets

8:00-8:45 **Questions and Discussion of the Watershed Plan**

8:45-9:00 **Next Steps** — *Juliana Birkhoff, RESOLVE*

- Preparation for the Public Forum
- How to comment on the draft plan
- Finalization of Plan

9:00 pm ***Adjourn***

http://www.fairfaxcounty.gov/DPWES/watersheds/sugarlandrun.htm

Fairfax County Stormwater Planning Division
12000 Government Center Pkwy, Ste. 449 • Fairfax, VA 22035 • 703-324-5500, TTY 711
www.fairfaxcounty.gov/dpwes/watersheds

Fairfax County Stormwater Planning Division

SUGARLAND RUN/HORSEPEN CREEK WATERSHED ADVISORY GROUP MEETING
JULY 21, 2010

Herndon High School – Lecture Hall
700 Bennett Street | Herndon, VA 20170

I. Welcome and Introductions

[The presentation from the July 21, 2010 Sugarland Run/Horsepen Creek WAG meeting will be online at http://www.fairfaxcounty.gov/dpwes/watersheds/sugarland_docs.htm].

Juliana Birkhoff, RESOLVE, opened the fifth meeting of the Sugarland Run/Horsepen Creek Watershed Advisory Group (WAG). She welcomed WAG members and the members of the public and reviewed the meeting agenda and group expectations.[1]

II. Watershed Planning Update

Fred Rose, the Chief of the Watershed Planning and Assessment Branch of the Fairfax County Government, thanked everyone for attending the meeting and participating in developing the draft watershed management plan. He encouraged WAG members to stay involved as the County finishes the draft watershed management plan and begins to implement projects. Mr. Rose explained that the overall watershed planning process is almost finished. The county will send the final plan to the Board of Supervisors by the end of the year. Mr. Rose said the County will use a new tool to prioritize and select projects as they implement the 13 watershed plans. This tool helps the County use resources efficiently to meet budget needs, regulatory requirements, and watershed objectives.

Following Mr. Rose's update, WAG members asked questions. During the discussion, Mr. Rose noted:

- The county is renewing their MS4 Permit. The new permit requires investment in stormwater infrastructure.
- The county will keep WAG member contact information for future public involvement
- The county will host a watershed management website that will include project-tracking information as the County selects and implements projects. The annual work plan will include countywide watershed management activities.
- The county is adopting an adaptive management approach to track progress against TMDL regulatory requirements. Individual projects will contribute to TMDL reduction. As the Chesapeake Bay TMDL regulations are promulgated, the county will select projects to meet those regulations.

[1] 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/sugarlandrun_docs.htm.

III. Overview of the Draft Watershed Management Plan

Melissa Taibi, F.X. Browne, Inc. summarized the organizational structure and components of the draft watershed management plan.[2] She reviewed the following components of the draft watershed plan:

i. Executive Summary

The executive summary includes background information for the Sugarland and Horsepen watersheds and a summary of each of the draft watershed management plan sections. The executive summary includes non-structural, 10-year, and 25-year master project lists (by project number, type, WMA, and location). Ms. Taibi emphasized that participants should use these lists to identify projects and find them on the map.

1. Introduction

Ms. Taibi informed WAG members that this section introduces watersheds and watershed planning. This section also includes a map of the Fairfax County Watershed Planning Groups.

2. Watershed Planning Process

This section includes the criteria and objectives for the watershed planning process. Ms. Taibi reviewed the indicators used to measure and compare existing and future conditions. She reviewed the composite scores and how FX Browne used them to rank high and low priority watershed management areas. The section also reviews stormwater modeling techniques and the County's Public Involvement Plan.

3. Summary of Watershed Conditions

This section summarizes information on each WMA's size and subwatershed stressors. There are also maps for each subwatershed, with Sugarland first.

4. Summary of Watershed Restoration Strategies

Ms. Taibi reviewed how FX Browne prioritized projects' subwatershed restoration strategies. She highlighted that F.X. Browne grouped some projects as potential alternatives to regional ponds. Ms. Taibi informed WAG members that the descriptions of each project type (both structural and non-structural) are in this section with pictures and sample project plans.

5. WMA Restoration Strategies

This section reviews WMAs and how proposed projects will help meet watershed restoration objectives. This section includes WMA maps and project fact sheets for the 10-year projects.

Ms. Taibi reviewed a project fact sheet with WAG members. Each fact sheet includes the project's location, land owner(s), costs, control type, drainage area, and receiving waters. The fact sheets include a description of the project, its benefits, design considerations, and an aerial map of the project area.

[2] The complete draft watershed management plan and appendices are available on the County website. Information for submitting comments is also available at http://www.fairfaxcounty.gov/dpwes/watersheds/sugarlandrun_docs.htm

6. Benefits of Plan Implementation

This section includes analysis from the watershed model for existing conditions, future conditions without projects, and future conditions with projects. The section also describes the costs and benefits of implementing the plan. She told WAG members that the final watershed management plan will include an analysis of the benefits to the watershed of implementing all the 25 year projects.

7. Glossary and Acronyms

Ms. Taibi asked WAG members to let her know if she missed any abbreviations and acronyms. Several WAG members requested FX Browne to include abbreviations for the projects that are on the fact sheets in the fact sheet legend.

8/9. References / Appendices

Ms. Taibi reviewed the appendices. The appendices include; A: *Watershed Workbook* with information and modeling results from the beginning of the planning process, B: *Technical Documents* describing subwatershed strategies, priorities for potential projects, the model data collection, and C: *Public Involvement* records and summaries.

Following Ms. Taibi's presentation, the WAG members asked questions. During the discussion, participants discussed:

- Some of the project models include an increase in runoff. These models project growth over 25 years.
- The watershed planning process is dynamic. The county will evaluate and adjust which projects they implement each year.
- The project fact sheets should be consistent with all acronyms spelled out wherever possible.
- Try to limit projects in new Metrorail development areas. There will be a lot of redevelopment in those areas.
    - Herndon Metro development may displace wetlands.

Project Comments: Breakout Groups

The group divided into breakout groups to inspect maps of the watershed management areas with potential projects.

Individuals commented:

- SU9121 – Engineers should consider how close these projects are to homes when placing these projects. Engineers should examine an existing stormwater infrastructure at this location.
- SU9511 – Rain gardens might be a maintenance problem with the residents of the apartments at this location.
- HC9107 – Project proposes creation of marsh areas that might generate complaints of standing water and mosquitoes.
- HC9142 – One WAG member suggested re-wording the project description to better represent the project and illustrate that the high quality wetlands in the bottom of the existing pond will remain undisturbed by the retrofit. In addition, it may be possible to add a new component in an undevelopable parcel just upstream of the pond.

Projects participants disapproved of or thought would not be viable:

- SU 9136 – WAG members noted concern that the Friends of Runnymede Park will not support any project that affects trees or disturbs areas of the park. They noted that this is the only natural area left in Herndon. WAG members informed County staff that there is a bioretention project upstream that will be implemented next spring.
- SU9146 – The proposed pond retrofit may cause standing water and the homeowner next to the pond has complained about standing water.
- SU9203 –Colonial Oil spilled oil here and they funded a stream restoration project on this reach 2-3 years ago. WAG members did not think the County needed to redo work here.
- SU9201 – Possible to remove pond component of this project. The community draining to the pond is new and has on-site controls; there was stream erosion before the community was developed.
- SU9505 – Elden Street will be widened in the future, the proposed swale is probably not viable.
- SU 9509 – This project is not viable if it involves removing any trees. Trader Joe's specifically preserved the trees on this property. Engineers should investigate the property across the street as a potential secondary project location.

Next Steps

WAG members were encouraged to take maps home and share them with their communities. The County will accept comments on the draft watershed management plan until September 3. If members have any feedback they should note the project ID number and send comments to Melissa Taibi (mtaibi@fxbrowne.com) or Joe Sanchirico (Joseph.Sanchirico@fairfaxcounty.gov.) FX Browne will also review any public feedback to revise the draft watershed management plan. Comments can be submitted at the public forum on August 3, via the County's Sugarland Horsepen website, via mail to the Stormwater Planning Division at 12000 Government Center Parkway, Suite 449 Fairfax VA 22035, or via Fax 703-802-5955 or Phone 703-324-5500, TTY 711

The Sugarland Run and Horsepen Creek watershed is 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. F.X. Browne, 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 <Joseph.Sanchirico@fairfaxcounty.gov> or visit *http://www.fairfaxcounty.gov/dpwes/watersheds/*

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Fairfax County Stormwater Planning Division

SUGARLAND RUN/HORSEPEN CREEK WATERSHED ADVISORY GROUP MEETING
JULY 21, 2010

Meeting Participants+

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Zoran Dragacevac*
Richard Gollhofer
Konrad Huppi*
Greg Noe*
Dana Singer*
Yasmin Shafiq*

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