Botetourt County, Virginia
Public Works Department

30 West Back Street, No. 4
Fincastle, Virginia 24090
Phone (540) 473-8316
Fax (540) 473-8360

October 1, 2013

ATTN: MS4 Reports/Stormwater Management
Department of Environmental Quality
Blue Ridge Regional Office - Roanoke
3019 Peters Creek Road
Roanoke, VA 24019

Subject: Botetourt County, 2013 VSMP Phase II Annual Report: Year 5

To Whom it May Concern,

Please see the enclosed MS4 report with supporting documentation. If further information or clarification is needed, I can be contacted by phone at (540) 473-8316 or e-mail at clinkenhoker@botetourt.org.

Sincerely,

Carol Linkenhoker
by edr

Carol Linkenhoker
Project Specialist
Botetourt County, VA

Enclosures

Virginia Stormwater Management Program
Phase II Annual Report

VSMP Permit # VAR040023

Year 5 (2013)

Botetourt County Public Works

Virginia Stormwater Management Program
Phase II Annual Report

VSMP Permit # VAR040023

Year 5 (2013)

Botetourt County Public Works

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Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

Print Name: Kathleen D. Guzzi Title: County Administrator

Signature: Kathleen D. Guzzi Date: 9/27/13

For Department of Conservation and Recreation Use Only

Accepted/Not Accepted by: _____ Date: _____

Basin _____ Stream Class _____ Section _____ Special Standards _____

History of the Program

In compliance with Federal and State Stormwater Quality regulations as outlined in the Federal Clean Water Act (CFR 40) and the State of Virginia regulation (9 VAC 25-750-10 et seq. - General Virginia Pollutant Discharge Elimination System (VPDES) Permit Regulation For Discharges Of Stormwater From Small Municipal Separate Storm Sewer Systems), the County of Botetourt, Virginia, implemented a comprehensive stormwater management program in May 2003. Coverage under the first (Municipal Storm Sewer System) MS4 General Permit issued to Botetourt County ended in 2008. Coverage for this reporting period became effective as of July 9, 2008 and ended June 30, 2013.

Botetourt County's Stormwater management program was developed to fulfill all of the Minimum Compliance Measures (MCM) as required by state and federal mandate. Botetourt County Public Works Department designed and developed targeted Best Management Practices (BMP) to reach a diverse group of County residents and businesses at all economic and social levels. This report documents the status of the program for Year 5 of the Permit. The main components of the stormwater management program areas are:

- MCM 1: Public Education and Outreach
- MCM 2: Public Participation/Involvement
- MCM 3: Illicit Discharge Detection and Elimination
- MCM 4: Construction Site Stormwater Runoff Control
- MCM 5: Post Construction Stormwater Runoff Control
- MCM 6: Pollution Prevention/Good Housekeeping

MCM 1: Public Education and Outreach

Botetourt County makes education and outreach a priority of the stormwater program. It is envisioned that the County will continue to maintain a commitment to education in the stormwater program by continuing the stormwater education field trips, utilizing Standards of Learning (SOL) correlated stormwater curricula, educating developers and builders at pre-construction meetings, providing informative classes & workshops, developing a stormwater ordinance, and updating the stormwater website.

BMP 1:1 *Hold a preconstruction conference before each new Land Disturbing Permit (LDP) project; give minimum standard pamphlet to Responsible Land Disturbers (RLDs) that have not previously conducted projects in Botetourt County.*

Botetourt County's Erosion and Sediment Control Administrator educates contractors and developers at all pre-construction meetings on proper E&S measures. Site specific Erosion and Sediment control measures and areas of critical concern are identified on proposed plans and BMP designs are discussed. A pamphlet created by DCR outlining the nineteen minimum standards is distributed at pre-construction conferences and given to individuals applying for Agreements in Lieu of an E&S plan.

See Supporting Documentation BMP 1:1 for a summary of all new LDP projects in Botetourt County during permit year.

BMP 1:2 *Make Botetourt County's MS4 program plan available to the public by posting the plan and most recent annual report to www.botetourt.org*

The current VSMP registration statement with BMP's in place upon submittal and the most recent annual report are available for the public to view at http://www.botetourt.org/government/env_mgmt.php.

BMP 1:3 *Reach a minimum of 250 students within Botetourt County Public Schools with programs involving stormwater, waste reduction and reuse, and recycling education.*

Clean Valley Council (CVC), a non-profit organization sponsored by local governments, including Botetourt County, provides in-school educational programs. They conducted ____ stormwater programs in Botetourt County Public Schools reaching _____ students between July 2012 and June 2013. In addition, they also conducted _____ recycling programs, reaching _____ students.

Awaiting updated numbers and documentation from CVC. An amended report will be sent once the information is available.

BMP 1:4 *Ensure that printed stormwater educational materials are on display at Botetourt County Public Works and libraries.*

Five (5) stormwater related brochures are available for the public at Botetourt County Public Works and in Botetourt County Public Libraries.

See Supporting Documentation BMP 1:4 for a copy of materials on display.

BMP 1:5 *Ensure that stormwater educational information is available at www.botetourt.org and update annually.*

Information added to the website this year includes the Year 4 report. All other links were tested for accuracy. The webpage includes information, forms, photos, and related links on Erosion & Sedimentation Control, Stormwater Management, and Environmental Education. This site also provides an email address for stormwater, drainage, and E&S complaints. The County will continue to expand, update, and enhance this site for the purpose of educating the public on various environmental topics and issues.

Visit www.botetourt.org/government/env_mgmt.php to view the information posted about stormwater management.

MCM 2: Public Participation/Involvement

Public involvement and participation has been a major focus of the stormwater program efforts. Botetourt County staff serves on the Boards of Directors for the Clean Valley Council, Upper James River Roundtable, and the Upper Roanoke River Roundtable.

BMP 2:1 *Partner with CVC to sponsor at least two clean up events.*

Botetourt County partnered with the Clean Valley Council (CVC), the Upper Roanoke River Roundtable (URRR), and several localities to hold the Fall Waterway Clean Up on October 13, 2012. Botetourt County partnered with the CVC to hold the Clean Valley Day event on April 6, 2013.

BMP 2:2 *Attend at least 75% of meetings, per year, of the Upper Roanoke River Roundtable (URRR) Board of Directors.*

Botetourt County Project Specialist serves as a member and regularly attends meetings of the Board of Directors for the URRR. Twelve (12) URRR Board meetings were held during this reporting year, eight (8) of which were attended by a representative of Botetourt County, yielding a percentage of 67% of meetings being attended.

See Supporting Documentation BMP 2:2 for meeting minutes of the Upper Roanoke River Roundtable.

BMP 2:3 *Attend at least 75% of meetings, per year, of the Clean Valley Council Board of Directors.*

The Botetourt County Project Specialist is currently a board member of the Clean Valley Council (CVC) and attends regular meetings of the CVC Board of Directors. Eight (8) CVC Board meetings were held during this reporting year, all of which were attended by a representative of Botetourt County, yielding a percentage of 100% of meetings being attended.

See Supporting Documentation BMP 2:3 for meeting minutes of the Clean Valley Council Board of Directors.

BMP 2:4 *Conduct at least one HHW collection annually.*

Botetourt County no longer hosts HHW collection events. Alternatively, the following items are collected at the Citizens' Convenience Center year-round:

- Household electronics
- Household batteries
- Propane tanks (≤ 20 lb size)
- Car batteries
- Fluorescent bulbs and tubes
- Used motor oil (≤ 5 gallons)
- Used antifreeze (≤ 5 gallons)

MCM 3: Illicit Discharge Detection and Elimination

Botetourt County's stormwater program activities focused on efforts to distribute educational materials in conjunction with MCM 1 & 2 of the program. Botetourt County staff researched the issues related to the development of an illicit discharge detection and elimination program and ordinance.

BMP 3:1 *Conduct at least one HHW collection annually.*

See BMP 2.4.

BMP 3:2 *Map 80% of the storm sewer system owned by Botetourt County within the watersheds of the Botetourt County urbanized area (UA).*

Mapping conducted in Year 5 involved connecting the points representing above ground features with each other using information from as-built and plan drawings for the in-ground portions of the infrastructure. An estimated 85% of the required mapping is complete at this time.

See Supporting Documentation BMP 3:2 for GIS maps of the stormwater infrastructure.

BMP 3:3 *Develop a stormwater and/or illicit discharge ordinance.*

Botetourt County has evaluated its current ordinances and feel that the following sections of Botetourt County Municipal Code meets the state requirements:

- Chapter 10, Sec. 10-32. **Local erosion and sediment control program.**
- Chapter 10, Sec. 10.34. **Guidelines, criteria, etc., for preparation.**
- Chapter 10, Sec. 10-34.1. **Stormwater management infrastructure maintenance agreement.**

See Supporting Documentation 3:3 for the full text of Chapter 10.

BMP 3:4 *Inspect all Botetourt County owned outfalls annually during dry weather and document the current condition of the outfall.*

Botetourt County owns and maintains two (2) outfalls at East Park Commerce Center, two (2) outfalls at the Greenfield Education and Training Center, one (1) outfall at the Botetourt Sports Complex at Greenfield, and one (1) outfall at Vista Corporate Park. Botetourt County Public Works and Utility staff visually inspect these outfalls while in the field and are instructed to report abnormalities to the Utility Supervisor, Public Works Director, or County Engineer.

BMP 3:5 *Document and take actions to correct any illicit discharges discovered during the inspection of outfalls or through other means.*

No illicit discharges were discovered.

MCM 4: Construction Site Stormwater Runoff Control

The DCR website currently lists Botetourt County's Erosion & Sediment Control program as "consistent". Botetourt County has an alternative inspections program for Erosion and Sediment Control and maintains an Erosion and Sediment Control ordinance that adopts all current State of Virginia Erosion and Sediment Control regulations.

The County Erosion and Sediment Control program reviews E&S plans for all proposed construction projects. Information on E&S and litter control is currently distributed at all pre-construction meetings. Botetourt County's Erosion and Sediment Control Administrator tracks E&S projects through a spreadsheet that includes project name, disturbed acreage, Responsible Land Disturber (RLD), project status and project description. Botetourt County will continue to remain dedicated to the protection of Virginia's waters through the implementation of the County Erosion and Sediment Control Program. Botetourt County staff will continue to review and inspect all required projects in compliance with DCR E&S regulations and will continue to inspect projects consistent with state law. The Botetourt County Stormwater Maintenance Agreement (SWMA) and local E&S ordinance were revised in 2005. Changes to these items included an updated SWMA and adoption of the Virginia Stormwater Management Handbook.

All of the designated VSMP MS4 regulated urban area drains to the Roanoke River basin. Therefore, Botetourt County is exempt from the additional permit reporting requirements related to MS4s draining into the Chesapeake Bay and its tributaries.

BMP 4:1 *Perform formal plan review on all construction sites requiring a Land Disturbing Permit (LDP) to assure compliance with the nineteen minimum standards.*

There were five (5) projects submitted, reviewed, and permitted during Year 5 which required an LDP.

See Supporting Documentation BMP 4:1 for summary of all projects reviewed during program year.

BMP 4:2 *Inspect all sites with an active LDP once every two weeks or within 48 hours of a runoff-producing event OR per set alternative inspection schedule.*

Botetourt County staff strives to visit and inspect each active LDP site every two weeks and within 48 hours of each significant rain event. As such, the ESC program in Botetourt County is listed as "consistent" on the DCR website (http://www.dcr.virginia.gov/stormwater_management/eslpr.shtml).

See Supporting Documentation BMP 4.2 for a sample of an inspection report, a notice to comply, and a stop work order.

BMP 4:3 *Report newly approved land disturbance sites determined to be eligible for the VSMP permit to the DEQ Blue Ridge Regional Office in Roanoke.*

All plan approval letters issued by Botetourt County for new Land Disturbing Permits that may meet the criteria for a VSMP permit inform the applicant that the project may meet the requirement to register for a VSMP permit using the following language:

> "Approval and issuance of a land-distributing permit from this office does not affect any other permits or permission that you may need to complete this project. According to the submitted plans, the Virginia Department of Environmental Quality (DEQ) may require this project to register for a Virginia Stormwater Management Program (VSMP) Permit since all construction activities associated with this project disturb more than 1 acre. However VSMP permit determinations are the responsibility of the DEQ."

See Supporting Documentation for BMP 4:3 for the LDP reports sent to the DEQ.

MCM 5: Post Construction Stormwater Runoff Control

Post construction stormwater runoff control is relatively new in Botetourt County and will take several years to fully implement into the stormwater program. In 2005, Botetourt County laid the foundation for future development by requiring stormwater facility maintenance agreements for all projects resulting in an increase in impervious area and/or stormwater runoff. The requirement is outlined in the current Botetourt County Erosion and Sediment Control Ordinance (adopted July 26, 2005) and required through adoption of Minimum Standard 19 of the Virginia Erosion and Sediment Control regulations and the Virginia Stormwater Management Handbook.

BMP 5:1 *Enforce Botetourt County Code, Chapter 10, Erosion and Sediment Control; evaluate current ordinances upon approval of state stormwater ordinance.*

Botetourt County has evaluated its current ordinances and feel that the following sections of Botetourt County Municipal Code meet the state requirements:

- Chapter 10, Sec. 10-32. **Local erosion and sediment control program.**
- Chapter 10, Sec. 10.34. **Guidelines, criteria, etc., for preparation.**
- Chapter 10, Sec. 10-34.1. **Stormwater management infrastructure maintenance agreement.**

See Supporting Documentation 3:3 for the full text of these ordinances.

BMP 5:2 *Require a stormwater management infrastructure maintenance agreement on all areas of new development and redevelopment needing permanent stormwater protection measures.*

Per Botetourt County Municipal Code, Chapter 10, Sec. 10-34.1, stormwater management infrastructure maintenance agreements must be recorded onto the plat of all new development and redevelopment areas with stormwater management systems. The maintenance and monitoring of these stormwater management systems is the sole responsibility of the property owner or persons signing the agreement.

See Supporting Documentation BMP 5:2 for sample stormwater management infrastructure maintenance agreement.

MCM 6: Pollution Prevention/Good Housekeeping

Botetourt County administers multiple pollution prevention/good housekeeping practices. Staff completes an annual inventory of hazardous materials at County facilities. Botetourt County sponsored its third independent household hazardous waste collection event in Year 5. Additionally, Parks and Recreation reduce phosphorus released into the environment by establishing a soil amendment schedule that utilizes soil testing to minimize the amount of fertilizers needed at county-owned facilities.

BMP 6:1 *Maintain an inventory of hazardous materials used by the Utilities Division and training certifications of those who handle hazardous materials.*

Public Works Department staff performed an inventory of all county facilities and determined that Botetourt County Utility Division stores up to four (4) 55-gal drums of sodium hypochlorite and/or RE-OX at a time. All chemicals have containment pallets and are only handled by certified personnel. Three (3) employees are certified as water and wastewater operators and are the only employees authorized to handle these materials.

See Supporting Documentation BMP 6.1 for a copy of the inventory MSDS and training certifications.

BMP 6:2 *Maintain a level of recycling in Botetourt County which is higher than the state mandated 15% for rural jurisdictions.*

The CY 2012 recycling rate for Botetourt County was 18.5%.

See Supporting Documentation BMP 6.2 for a copy of the letter from DEQ accepting the recycling rate calculated by Botetourt County.

BMP 6:3 *Apply appropriate fertilizers at Botetourt County Parks and Recreation facilities as defined by the results of soil tests.*

Botetourt County Parks and Recreation staff performed soil test on the 6 largest facilities before applying fertilizer in Year 5. Staff currently spreads the application of recommended fertilizers out over a two-year period.

See Supporting Documentation BMP 6:3 for documentation of soil tests and the recommended fertilizer applications for each facility.

BMP 6:4 *Conduct at least one HHW collection annually.*

See BMP 2.4.

Stormwater Management Facilities

No new stormwater management facilities covered under the VSMP have been added in Year 5. Current, only four (4) stormwater management facilities are owned and operated by Botetourt County. Of those, Vista Corporate Park is the only SWM facility that discharges directly into a body of water with Waste Load Allocations. Waste Load Allocations within the Botetourt County urbanized area are listed in the table below.

Waste Load Allocations	Number of Discharges
4.36E+11 cfu/yr to Laymantown Creek	0
1.19E+11 cfu/yr to Glade Creek	0
1.28E+11 cfu/yr to Carvin Creek	0
1.95E+12 cfu/yr to Tinker Creek	1

Information regarding the one discharge in an impaired body of water is as follows:

- Vista Corporate Park
  - Estimated drainage area: 56 acres
  - Impaired receiving water: Tinker Creek Middle
  - Land use: Vista Park is an industrial park currently occupied by two companies. The area consists of approximately 40% impervious area with the remaining area having grassy vegetative cover. The stormwater from this drainage area passes through a detention basin and is discharged via an outfall located on Tinker Creek. The stormwater detention basin is owned and maintained by Botetourt County.

Stormwater management facility data has been submitted in Microsoft Excel format to StormBMP@dcr.virginia.gov. Details regarding the drainage area and design of the basin at Vista Park are found in the attached supporting documentation.

Future Program Goals

Botetourt County will continue to maintain a dedicated effort to fulfill all of the requirements in its stormwater program as outlined in **VSMP Permit # VAR040023**. Future program goals are described in the BMP Summary Table located in the attached supporting documentation.

BMP Summary Table - Year 5
Botetourt County, Virginia

Minimum Control Measure 1 : Public Education and Outreach

	Measureable Goal	Documentation	Responsible Party
BMP 1.1	Hold a preconstruction conference before each new LDP project; give minimum standard pamphlet to RLDs that have not previously conducted projects in Botetourt County	A copy of the minimum standards pamphlet; summary of all LDP new projects in Botetourt County during permit year.	ESC Administrator
BMP 1.2	Make Botetourt County's MS4 program plan available to the public by posting the plan and most recent annual report to www.botetourt.org	Print-out of website.	Project Specialist
BMP 1.3	Reach a minimum of 250 students within Botetourt County Public Schools with programs involving storm water, waste reduction and reuse, and recycling education.	Summary of program performed, to include title of program, school at which program was performed, date of program, number of students attending program	Project Specialist
BMP 1.4	Ensure that printed storm water educational materials are on display at Botetourt County Public Works and libraries.	Copies of materials on display	Project Specialist
BMP 1.5	Storm water educational information will be available at www.botetourt.org and updated annually.	Provide web address.	Project Specialist

Minimum Control Measure 2: Public Involvement/Participation

	Measureable Goal	Documentation	Responsible Party
BMP 2.1	Partner with CVC to sponsor at least two clean up events.	Final event reports as provided by CVC.	Project Specialist
BMP 2.2	Botetourt County staff to attend at least 75% of URRR Board of Directors meetings annually	URRR Board meeting minutes.	Project Specialist
BMP 2.3	Botetourt County staff to attend at least 75% of CVC Board of Directors meetings annually	CVC Board meeting minutes.	Project Specialist
BMP 2.4	Host at least one HHW collection event.	Final event reports when available.	Director of Public Works

Minimum Control Measure 3: Illicit Discharge Detection and Elimination

	Measureable Goal	Documentation	Responsible Party
BMP 3.1	Host at least one HHW collection event.	Final event reports when available.	Director of Public Works
BMP 3.2	Map 80% of storm sewer owned by Botetourt County.	Print-out of map at level of completion at end of permit year.	Project Specialist
BMP 3.3	See BMPs 4.1 and 5.2; evaluate current ordinances upon approval of state stormwater ordinance	See BMPs 4.1 and 5.2	County Engineer
BMP 3.4	Inspect all Botetourt County owned outfalls annually during dry weather and document the current condition of the outfall.	Inspection report for each outfall.	County Engineer
BMP 3.5	Document and take actions to correct any illicit discharges discovered during the inspection of outfalls or through other	Follow up report on any illicit discharge found.	County Engineer

Minimum Control Measure 4: Construction Site Stormwater Runoff

	Measureable Goal	Documentation	Responsible Party
BMP 4.1	Perform formal plan review on all construction sites requiring a Land Disturbing Permit (LDP) to assure compliance with the nineteen minimum standards.	Monthly Land Disturbing Reports sent to DCR Christiansburg office.	ESC Administrator
BMP 4.2	Inspect all sites with an active LDP once every two weeks or within 48 hours of a runoff producing event OR per set alternative inspection schedule	Samples of inspection report, notice to comply, and stop work order.	ESC Administrator
BMP 4.3	Report newly approved land disturbance sites determined to be eligible for the VSMP permit to the Stormwater Compliance Specialist at the DCR Staunton Regional Office.	Monthly Land Disturbing Reports sent to DCR Christiansburg office.	ESC Administrator

Minimum Control Measure 5: Post-construction Stormwater Management in New Development and Redevelopment

	Measureable Goal	Documentation	Responsible Party
BMP 5.1	Enforce Botetourt County Code, Chapter 10, Erosion and Sediment Control; evaluate current ordinances upon approval of state stormwater ordinance	Copy of Botetourt Coundy Code, Chapter 10	County Engineer
BMP 5.2	Require a storm water infrastructure maintenance agreement on all areas of new development and redevelopment needing permanent storm water protection measures.	Monthly Land Disturbing Reports sent to DCR Christiansburg office and a sample agreement.	ESC Administrator

Minimum Control Measure 6: Pollution Prevention/Good Housekeeping for Municipal Operations

	Measureable Goal	Documentation	Responsible Party
BMP 6.1	Maintain an inventory of hazardous materials used by the Utilites Division and training certifications of those who handle	MSDS for all chemicals in inventory and training certifications of utility staff handling the chemicals.	Utilities Manager
BMP 6.2	Increase the monthly mean average of recycling in Botetourt County from that of the previous permit year.	Web address for most recent annual recycling report released by DEQ.	Director of Public Works
BMP 6.3	Apply appropriate fertilizers at Botetourt County Parks and Recreation facilities as defined by the results of soil tests.	Documentation of soil tests.	Director of Parks, Recreation, and Tourism
BMP 6.4	Host at least one HHW collection event.	Final event reports when available.	Director of Public Works

Supporting Documentation

for

BMP 1:1

Land Disturbing Permits Issued During Year 5

Botetourt County, VA

Project Name	Responsible Party	Permit Effective Date	Applicant	HUC	Responsible Land Disturber	Plan Prepared by	Location	Project Type	Disturbed area acres
Santillane (Phase 4)Townhomes	Moore Investment Corp	8/2/2012	Chris Moore	I25 - Catawba Cr	George C. Moore #29986	Pierson Engineering	Herndon St. Fincastle	Residential	0.000096432
DTC Apartments & road Extension	Fralin & Waldron, Inc.	8/15/2012	Bob Flynn	L05 - Tinker Cr / Carvin Cr / Glade Cr	Robert J Flynn # 35227	Engineering Concepts, Inc.	Rt. 220 Ddaleville	Residential	0.000103320
Mill Creek Baptist Church	Mill Creek Baptist Church	9/11/2012	Tommy Moore	I26 - Looney Cr / Mill Cr	David Fowler 5837	Lumsden Engineering	Rt. 11 at BR Turnpike	Religious	3.600128000
General Shale Brick, Inc.	General Shale	11/12/2012	Gregory Bowles	L05 - Tinker Cr / Carvin Cr / Glade Cr	Steve Wyse 38583	DR Proce Engineering & Land Surveying	Healing Springs Rd.	Industrial	1.000000000
Altec-Southern Expansion	Altec Industries	11/20/2012	Gary Dudley	L05 - Tinker Cr / Carvin Cr / Glade Cr	Gary Dudley #36378	Engineering Concepts, Inc.	Greenfield	Industrial	2.000000000

Supporting Documentation

for

BMP 1:3

Supporting Documentation

for

BMP 1:4

Tips to Remember

When reporting an incident:

- State the nature of the incident
- Identify yourself and your location
- Identify location of activity
- Describe any vehicle involved (color, make model, plate #)
- Describe the participants (how many, sex, race, color of hair, height, weight, clothing)

For Emergencies dial 911 or other local emergency response numbers:

- State your business immediately (Police-Fire-Ambulance)
- Give as accurate a description as possible
- Stay on the line until the 911 operator disconnects you

After calling the local emergency number, call the appropriate local water system contact.

Contacts

Name & Telephone

Local Emergency Response: 911 or other:

Police:

Fire:

State Drinking Water Program Contact:

Public Health Office:

Wastewater Utility:

Other:

Tampering with public water supplies is a serious offense and violators will be punished to the fullest extent of the law.

www.epa.gov/safewatersecurity

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EPA United States Environmental Protection Agency

EPA-816-F-03-006
September 2003

EPA

WATER WATCHERS

Helping to Protect Your Local Water System

WE'RE ALL IN THIS TOGETHER

Water security:

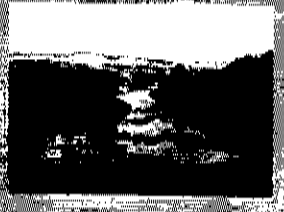
Water Security is a shared responsibility involving water suppliers, wastewater utilities, government, law enforcement and citizens. We can all be involved in homeland security by playing an important role in protecting our critical water resources.

Problem:

Local drinking water and wastewater systems may be targets for terrorist and other would-be criminals wishing to damage and cause harm to your community water supplies or wastewater facilities.

Challenges:

Water utilities are often located in [illegible] locations, making utility staffing and monitoring [illegible] only have long-term but [illegible]



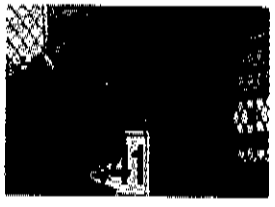
Solution:

Residents can be educated to notice and report any suspicious activity. In and around local water utilities, interested and dedicated citizens are essential to increase the security eyes and ears in your community.

Who Should get involved?

Any resident interested in protecting their water resources and community as a whole can join together with law enforcement, neighborhood watch groups, water suppliers, wastewater operators, and other local public health officials.

As a first step, you should consider introducing yourself to the local drinking water supplier or wastewater operator. You can provide them with your phone number and address, and find out how you can get involved.



What Can You Do?

Form and operate a citizens watch network within your community to communicate regularly with law enforcement, your public water supplier and wastewater operator. Communication is key to a safer community!

- **Be alert.**

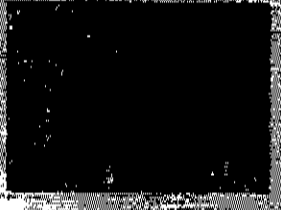
  Get to know your water/wastewater utilities, their vehicles, routines and their personnel

- **Become aware of your surroundings.**

  This will help you to recognize suspicious activity as opposed to normal daily activities.

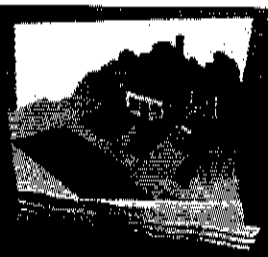
Examples of suspicious activity might include:

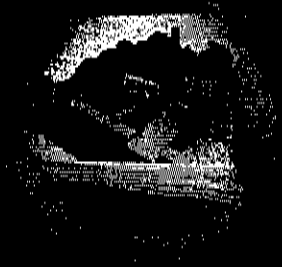
- People dumping or discharging material to a water reservoir
- People climbing or cutting a utility fence
- Unidentified truck or car parked at [illegible] water waterways or [illegible]
- [illegible]
- [illegible]



Do not confront strangers. Instead, report suspicious activities to local authorities.

Clean Water





Use fertilizers sparingly and sweep up driveways, sidewalks, and roads

Never dump anything down storm drains

Vegetate bare spots in your yard

Compost your yard waste

Avoid pesticides; learn about Integrated Pest Management (IPM)

Direct downspouts away from paved surfaces

Take your car to the car wash instead of washing it in the driveway

Check car for leaks, and recycle motor oil

Pick up after your pet

Have your septic tank pumped and system inspected regularly

Everybody's Business

EPA United States Environmental Protection Agency

For more information, visit www.epa.gov/nps or www.epa.gov/npdes/stormwater

Hints for selecting an appropriate fertilizer

All fertilizer packages must have three numbers on them (example: 10-10-10, 16-4-8). The numbers represent the percentages of nitrogen (N), phosphorus (P) and potassium (K) – in that order – by weight. This is also referred to as the N-P-K ratio. So, 16-4-8 fertilizer is 16 percent nitrogen, 4 percent phosphorus and 8 percent potassium. While all three are necessary for proper growth, many soils have enough of certain nutrients. Your soil test will help you understand which nutrients your lawn lacks.

EXAMPLE: Your soil test recommends applying 1 pound actual nitrogen per 1,000 square feet. Say you have a 40 lb. bag of 12-4-8. The 12 means the fertilizer is 12 percent nitrogen by weight. To determine how many pounds to apply, multiply .12 times 40 lbs. This equals 4.8 lbs., the amount of nitrogen in the bag. Now divide 1, the number of lbs. per 1,000 sq. ft. you want to spread, by 4.8, the pounds of nitrogen you have. This gives you .208, or the ratio for what you want to spread. Now multiply your 40 lbs. of fertilizer times .208. This gives you 8.3 lbs. – the amount of fertilizer to spread over the 1,000 sq. feet.

Remember, the best fertilizer for your lawn has a **slowly available** nitrogen source. "Slow-release" nitrogen sources are usually stated on the label, possibly as **WIN** or *water-insoluble nitrogen, sulfur-coated urea, natural organic nitrogen, etc.*

> For dark green turf, a good alternative to nitrogen is iron (periodic use) for "green-up."

Fertilizer application equipment and methods

Nitrogen fertilizer will generally "green-up" a lawn. Therefore it is important to apply the fertilizer uniformly. Use a drop-type or rotary spreader, and be sure to overlap adequately. Check the applicator setting often to be sure you're applying the fertilizer at the proper rate. Applying fertilizer by hand is **not recommended.**

> For uniform fertilizer application, apply half in one direction and the other half in a perpendicular direction!

These guidelines are basics for having a healthy, attractive lawn that protects water quality – both nearby and in the Chesapeake Bay. Your actions do make a difference. For ideas to make your home landscape more environmentally sound, contact the Virginia Department of Conservation and Recreation or Virginia Cooperative Extension.

1-877-42-WATER

Virginia Cooperative Extension

Chesapeake Bay Program
A Watershed Partnership

DCR
Department of Conservation & Recreation
(protecting Virginia's natural & recreational resources)

Tips on keeping your lawn

Tips on keeping your lawn green . . . and the Chesapeake Bay clean

There are 5 million lawns in the Chesapeake Bay watershed, each with the potential to send a potent dose of chemicals into local waters and the bay's fragile ecosystem. These lawns cover Virginia, five other states, and the District of Columbia.

Improper or excessive lawn fertilization is a significant source of nutrient runoff pollution, the most severe problem facing local waterways and the bay. Runoff that carries excess nitrogen increases the growth of algae and reduces water clarity, which stresses underwater plant and animal life.

Runoff from your property can enter one of more than 150 creeks, rivers and streams in Virginia that flow to the bay. The health of Virginia's waterways begins in your backyard.

You can have a great yard and, at the same time, help protect local water quality and improve the Chesapeake Bay. Follow these simple steps, recommended by the Virginia Department of Conservation and Recreation and Virginia Cooperative Extension.

Growing a greener lawn

Mow high with a sharp blade. 2 to 3 inches for cool-season grasses and 1 – 1 ½ inches for warm-season grasses. Don't mow more than 1/3 of the blade at one time.

Don't mow or fertilize when grass is wet or under drought stress.

Leave clippings on your lawn – they reduce the need for nitrogen fertilizer as much as one-third. If clippings clump, spread them over the lawn with a rake or pick them up and make compost.

Established plants need little or no water! Save it for newly planted items, and then let it sink in slowly and over time.

> For a dark green lawn, select darker grass varieties – they require less nitrogen and water.

Fertilizer guidelines

Fertilize when grass is actively growing and can take up the nutrients.

Look for fertilizers with high levels of water insoluble nitrogen (**WIN**). It releases fertilizer slowly, and your lawn makes better use of it.

Never apply more than 1 pound of soluble nitrogen per 1,000 square feet at one time.

Remember, more is not better. Lawn fertilizer is measured in pounds per 1,000 square feet. To determine square feet, multiply the length by the width of the area to be fertilized.

Does my lawn need fertilizer?

The best way to determine whether or not your lawn needs fertilizer is to **test** your soil. Information on soil tests is available through your local Virginia Cooperative Extension Agent. It's easy and inexpensive. The results you get back will include recommendations on amounts of plant nutrients and lime that would benefit your lawn. Soil tests do not determine nitrogen needs. Nitrogen should be applied based upon established requirements of grass species, seasons of growth and intended use. (See chart.)

What if I don't fertilize?

Your lawn will gradually thin and become more susceptible to weeds. Proper and timely fertilization can be good for both your lawn and the environment. There is less chance of nutrient and soil runoff to surface waters from a healthy stand of grass than thin grass. Healthy lawns have less disease, insect and weed problems, reducing the need for pesticides.

When to fertilize

This depends on the type of grass and the lawn's appearance – color, density, uniformity – you want. Summer is best for warm-season grasses, like Bermudagrass and zoysiagrass. September – November is best for cool-season grasses like tall fescue, Kentucky bluegrass and perennial ryegrass. If you don't know what type grass you have, ask your Extension Agent or a landscape professional. Never fertilize when grass is dormant (brown).

Use the following tables to determine nitrogen needs for established lawns:

Pounds of nitrogen per 1,000 square ft. if the fertilizer is less than 50 percent WIN

Type of Grass / Month	Tall Fescue / Perennial Rye	Kentucky Bluegrass	Bermudagrass	Zoysiagrass
September	1	1	0	0
October	1	1	0	0
Early Nov.	1	1	0	0
April	0	0	1	0
May	0-.5	0-.5	1	1
June	0	0	1	0
July/August	0	0	1	1
Yearly LBS N/1,000 sq. ft.	2-2.5	3-3.5	2-4	1-2

Pounds of nitrogen per 1,000 sq. ft. if the fertilizer is more than 50 percent WIN

Type of Grass / Month	Tall Fescue / Perennial Rye	Kentucky Bluegrass	Bermudagrass	Zoysiagrass
August 15	1.5	1.5	0	0
October 1	1.5	1.5	0	0
April	0	0	1.5-2	1.5-2
May 15	0-1	0-1	0	0
June	0	0	1.5-2	0
Yearly LBS N/1,000 sq. ft.	3-4	3-4	3-4	1.5-2

Green areas denote optional or secondary applications

DCR is your watershed connection across Virginia. Our Chesapeake Bay Watershed Office has five locations and our Southern Rivers Watersheds Office has four to serve you locally. For more information, other tips on how you can help and a list of local DCR watershed office contacts, visit DCR's website at http://www.dcr.state.va.us or call 1-877-42WATER.

Chesapeake Bay Program
A Watershed Partnership

Department of Conservation and Recreation
203 Governor St., Suite 213
Richmond, VA 23219

DCR
Department of Conservation & Recreation
CONSERVING VIRGINIA'S NATURAL & RECREATIONAL RESOURCES

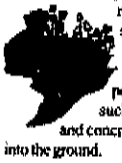
Watershed Connections

Ways you can help your watershed.

1. Learn your watershed address. Being aware of your watershed helps you understand where and by whom decisions affecting your water quality are made. Tell others about watersheds. Take notice of new signs being installed at highway river crossings in Virginia to help people recognize what watershed they are in.

2. Adopt-A-Stream. Go on a stream walk to assess where problems might occur. Organize a clean up or learn to monitor your stream for changes that might affect the water quality.

3. Landscape your home with conservation in mind. Use native plants that require less maintenance and help hold soil in place. Cover bare spots in your yard to prevent erosion. Use permeable paving surfaces such as wood decks, bricks and concrete lattice to let water soak into the ground.

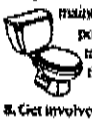


4. Did you know that most grasses should be fertilized in the fall, not spring? Using the correct amount at the right time can save you money and keep harmful nutrients out of local streams.

5. Be a pooper-scooper. Stormwater carries litter, pet waste and other pollutants directly into waterways. Animal waste may contain harmful bacteria, viruses and nutrients that can pollute waterways.

6. Do not dispose of oil or other waste into storm drains. One gallon of used oil can pollute two million gallons of water. Take the oil to a recycling center or gas station to be recycled.

7. If you have a septic system, properly maintain it. Faulty septic systems can pollute local groundwater. Septic tanks should be pumped out every three to five years.



8. Get involved. All of us have a role in improving water quality. Encourage local government officials to plan with the watershed in mind. Get involved in a local watershed organization near you. Get trained to be a volunteer water quality monitor.

9. Buy a Chesapeake Bay license plate. More than half the state's lands drain into the bay. Money from the license plate sales supports the work of local groups to restore and protect the watershed.

Everything we do on the land affects the quality of the water in our rivers and streams.

We need water to drink, to keep clean, for recreation, transportation, fishing, and to produce goods and energy. But most people don't spend much time thinking about where their water comes from or how their actions on land can affect water. Everything we do on the land affects the quality of the water in our rivers and streams. When water runs off the land, it takes fertilizers, loose soil, litter and other pollutants with it.

Trying to prevent pollution from running off land that drains into a waterway is what watershed management is all about.

We all live in a watershed.
You know your street address, but do you know your watershed address?

Think about where the water goes when it runs off your roof. Water runs off your roof or driveway into a nearby creek or stream, and then flows to a larger river, bay or lake. All the land that drains to a particular water body is its ***watershed***.

Virginia's watersheds

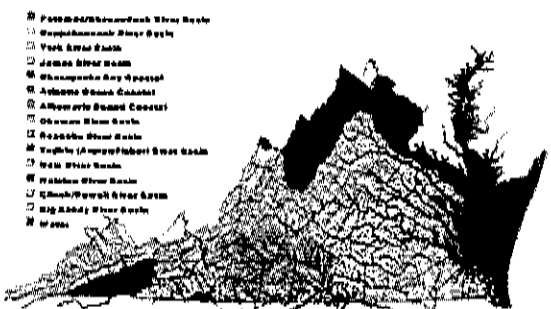
A river's watershed is made up of the smaller watersheds for each creek or stream that flows into the river. Virginia has 497 subwatersheds, that make up the state's 14 major watersheds. More than half of the state's lands drain to the Chesapeake Bay. The waters from the southern rivers all leave the state. Some flow to the Albemarle Sound in North Carolina. It surprises some people to learn that many of Virginia's watersheds eventually drain to the Mississippi River and the Gulf of Mexico!

Why should you care what watershed you live in?

If you're concerned about the quality of the water you use, you might be interested in knowing where it's been before it gets to you. The way land is used upstream has a direct effect on your water. Most of us live downstream from someone else.

[redacted]

What's your watershed address?



Rivers don't know county boundaries or state borders. It's watersheds that connect us to our waters.

There are as many ways to prevent water pollution as there are ways to use land. Businesses that require much land such as farming and logging use a variety of best management practices (BMPs) to keep soil, excess fertilizers, animal waste and pesticides from running off woodlands, pastures and fields.

Towns and cities manage stormwater from parking lots and streets by installing sediment ponds and filter strips to slow runoff and prevent nonpoint source pollution from entering rivers and streams. Silt fences keep soil from running into waterways from construction activities.

[redacted]

Bioretention structures are an innovative way to use the land and plants to slow down and filter stormwater runoff.

NPS

nonpoint source pollution and you

DCR
Department of Conservation & Recreation
Division of Soil & Water Conservation
Virginia Department of Conservation and Recreation
203 Governor Street, Suite 206
Richmond, VA 23219-2094

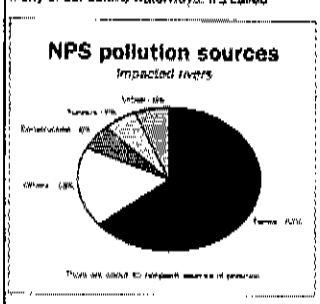
State's water wealth needs our protection

Virginia is a water rich state. Our average annual rainfall, 42 inches, is 12 inches greater than the nation's as a whole. Like most of the East Coast, Virginia typically has enough rainfall. But plenty of water doesn't necessarily mean having abundant usable water. As with all natural resources, we must use water wisely. We need clean water for drinking, food production, jobs, transportation, recreation, beauty and habitat for some of the most unique natural environs in the world. One of these is the world's most productive estuary, the Chesapeake Bay.

Preventing water pollution is difficult, however, because water is dynamic — it flows freely from property to property, from locality to locality, even from the surface to underground. How water is used upstream can and does affect its quality downstream. To put it in perspective, consider these facts: Each of us uses about 70 gallons of water a day, and nearly all economic enterprise depends on abundant, clean water.

Nonpoint source pollution

There's a type of pollution that impacts many of our state's waterways. It's called *nonpoint source (NPS) pollution* because it doesn't come from a single source, or point, such as a sewage treatment plant or an industrial discharge pipe.



In Virginia, NPS pollution occurs mainly through stormwater runoff. When it rains, runoff from farmland, city streets, construction sites, and suburban lawns, roofs and driveways enters our waterways. This runoff sometimes contains harmful substances and solids. NPS pollution's effects seldom show up overnight — they often go unnoticed for years. This characteristic makes it all the more difficult to control.

Types of NPS pollution

There are four major forms of NPS pollution: *sediments, nutrients, toxic substances* and *pathogens*.

Sediments are soil particles carried by rainwater into streams, lakes, rivers and bays. By volume, sediment is the greatest pollutant of all. It's caused mainly by erosion resulting from bare land, poor farming practices, and construction and development.

Nutrients are substances which help, at least to a point, plants and animals grow. NPS officials are most concerned with the nutrients nitrogen and phosphorus. Fertilizer and animal waste are the main sources of these substances.

Toxic substances are chemicals which cause human and wildlife health problems. They include organic chemicals and metals, pesticides, formaldehyde, household chemicals, gasoline, motor oil, battery acid, roadway salt, and so on.

Pathogens are disease-causing microorganisms present in human and animal waste. Most pathogens are bacteria

Where does it come from?

Just about everyone who owns or uses land is a nonpoint source polluter. In Virginia, most efforts concentrate on NPS pollution leaving farmland, urban areas, construction sites and forestland

Farms yield sediment, toxic substances and excess nutrients. Statewide, farmland loses an average of 6.7 tons of soil per acre per year. While this soil is productive on land, in the water it cuts light needed by aquatic plants and causes obstructions. Worse, soil from farmland sometimes takes along pesticides and nutrients that have latched on.

Pesticides leaving farmland through runoff can harm aquatic plants and animals. While pest control is necessary for modern agriculture, pesticides can be used more efficiently and there are natural alternatives.

Even the fertilizer you spread can harm Virginia's waters.

Most of the Virginia's NPS pollution prevention efforts focus on managing nutrients because they pose one of the greatest threats to the health of our waterways and, in particular, to the Chesapeake Bay. Experts estimate that 50 percent of the nitrogen and 29 percent of the phosphorus entering our state's surface waters come from farmland. But farms aren't the only origin of NPS pollution. Urban and suburban areas also contribute significant levels of nutrients as well as toxic substances, pathogens and sediment.

Poorly protected construction sites can erode at a rate 500 times that which would occur naturally. The damage and obstructions caused by runoff from construction sites can be costly and difficult to clean up.

Even city streets and other impervious surfaces yield NPS pollutants such as motor oil, gasoline, antifreeze, and other toxic chemicals. Because surfaces are unable to absorb rainwater, runoff from urban areas is nine times that from forestland. One quart of used motor oil can contaminate two million gallons of drinking water. That's enough water to meet the needs of one person for more than 75 years. The oil from one car engine, about a gallon, can produce an oil slick the size of six football fields.

NPS pollution's effects

Pathogens and toxic substances have a very direct effect: They impair or destroy aquatic life. Sediment and nutrients have less obvious effects.

Life in Virginia's rivers, streams, lakes and bays could not exist without nutrients, but too much of a good thing often causes more harm than good. Nutrients over-enrich our waterways causing algal blooms which deplete oxygen. This makes the oxygen unavailable to fish and shellfish so they suffocate and die. The algae also cloud the water and cost underwater vegetation, cutting much-needed sunlight.

Sediment clouds water too but also obstructs waterways, clogs sewers, interferes with navigation, and smothers fish and shellfish spawning grounds. Natural erosion and sedimentation occur at a lower rate than that resulting from man's land altering activities.

Underwater plants and aquatic animals are particularly threatened by NPS pollution. Oysters, shad, herring, striped bass and submerged aquatic vegetation — considered by many to be the foundation of a stable aquatic ecosystem — are damaged by this obscure pollution.

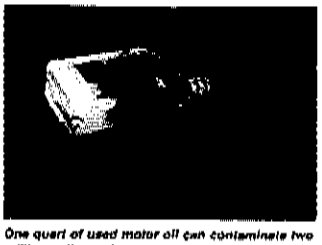
The problem is complicated and there are no easy answers, but recent efforts by Virginia and other bay region states show that NPS pollution can be controlled and that nature responds to restoration efforts. For example, both submerged aquatic vegetation and striped bass populations in the bay are making a comeback. It will take more than governments, however, to solve our NPS pollution problems.

- over

What you can do

Since all of us are NPS polluters, it'll take all of us to control the pollution. Here's what you can do around your home to help.

- Fertilize your lawn and garden according to soil test results. Contact your local extension service agent for instructions. Try to apply fertilizer when heavy rain isn't likely to wash it away.
- Apply pesticides according to instructions on the label.
- Collect litter and animal waste before they wash into storm drains.
- Recycle grass clippings and leaves by mulching or composting. If you can't compost, collect and dispose according to local provisions.
- If you change your own oil, take the used oil to a recycling station. Check with your local service stations for such facilities. Never dump oil into a storm drain.
- Home septic tanks should be located, constructed and installed according to regulations. Maintenance and prompt correction of problems are important.
- Direct roof runoff onto a grassed area. Roof drains should not be connected to a sanitary or storm sewer system.



One quart of used motor oil can contaminate two million gallons of water.

- Watch for soil erosion around your home. Seed, install sod or plant ground cover to protect the site.
- Use porous surfaces such as flagstone, gravel, stone, and interlocking pavers rather than concrete and asphalt.
- If you're concerned about the effects of runoff leaving a nearby construction site, contact the local governing body responsible for erosion and sediment control in your area. Most land disturbance is regulated under the Virginia Erosion and Sediment Control Law.
- Be active! Join a civic or environmental group and let others know how you feel. Give talks, man booths, volunteer... spread the word.

It's our turn

You couldn't live long without clean water. Nothing can. Above are just a few simple ways you can do your part to give something back to our waters. They've always been there for us... now it's our turn.

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203 Governor Street, Suite 206
Richmond, VA 23219-2094
(804) 786-1758

DCR
Department of Conservation & Recreation
CONSERVING VIRGINIA'S NATURAL AND RECREATIONAL RESOURCES

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Supporting Documentation

for

BMP 2:2

Upper Roanoke River Roundtable Board Meeting
July 9, 2012
5:30 – Western Virginia Water Authority Board Room

Board Members Present:
Bill Modica, chairman
Sarah Baumgardner
Kristina Mize
CJ Mitchem
Bill Tanger
Greg Anderson, Advisory Council

Guests:
Sharon Stinnette
Heather Vereb, DCR Watershed Field Coordinator (Heather.Vereb@dcr.virginia.gov)
Erica Moore, Soil & Water Conservation District (sustainablerica@verizon.net)

Bill called the meeting to order at 5:45 pm.

The June minutes were moved for approval by Bill T. and seconded by Kristina M. They were approved unanimously.

DCR Representative
Heather Vereb, DCR, introduced herself to the board. She has worked with TMDLs previously and has her Masters from VaTech. She offered her services for grant assistance. Her email is Heather.Vereb@dcr.virginia.gov

The 2011 DCR grant will go to Nisha for final approval. Starting as early as August 1 (or Oct 1 or Dec1), a scope of work can be submitted to Heather for the next grant application. We are encouraged to seek funding for projects dealing with TMDLs. The DEQ Water Quality Monitoring grant is due August 31. Funding goes Jan 1-Dec 31, 2013.

A implementation plan that will include Bacteria and Benthics(Sediment as stressor) is forthcoming for the Roanoke River.

DEQ Citizen Monitoring Project
Sharon Stinnette shared that we were awarded $3000 (balance of about $600) for 2013. Sharon is training monitors. The final report will be due in February. Sharon shared that she works closely with the SML Association on training. One training class has already happened this spring.

DEQ will have funding again for CY2014. The cap will be $4000 again this year with the deadline of August 31. Sharon is encouraging trainees to work in a diversity of streams in the area. The board expressed interest with Sharon to apply for the CY2014 grant funding.

Bill asked Sharon to encourage her volunteers to participate in Roundtable activities, especially the watershed conferences and the annual meeting. Sharon said that Wes could distribute information to an contact list data base that Sharon and Wes have developed of about 65 active stream monitors.

Erica expressed concern in the Upper James that people are attending the initial classes but not continuing the stream monitoring. She asked Sharon for tips on keeping people active. Sharon felt that the volunteer hours that many volunteers earn in her area to keep their Master Naturalist membership active.

Fiscal Agent Status
The final DCR reimbursement check should be processed through Clean Valley Council.

501(c)3 Process Update

- Bill hopes finalize and submit the final paperwork in the next few weeks.

Explore Park/ Rutrough Road river access

- A kiosk has been built and stained on site. The parking lot that can handle about 30 cars is completed. A payment drop box is under construction. Bill is working on the signage.
- Final work is being completed on the canoe launch area.

Carvins Cove Bio-Retention Project

- Bill executed the contract for $4800 for the design.
- Volunteers will construct the project this fall.

Uranium Mining

- There will be a forum on the topic on July 27 at VWCC – register at vcn@vcnva.org

Annual Meeting

- The event will take place at Carvins Cove picnic shelter this fall.

Board of Directors Members

- Erica Moore has offered to be nominated to the URRR Board. She has Biology and Chemistry degrees from VaTech.
- Bill T. made a motion and Kristina made seconded the motion to appoint Erica Moore to the unexpired board term ending December 2012.

Advisory Committee

- Greg will be calling another meeting in August and ask members to bring completed tasks to that meeting.

Other Business

- The Fall Waterways Clean up will be Saturday, October, 6. We need a team and an exhibit. Drew at DEQ will be the joint team captain.
- The next prescription drug take-back event will be September 29.
- Sarah will talk to the City of Roanoke and CJ will approach the Town of Vinton about their interest in receiving mutt mitt bags for the dispensers.

Bill M. made a motion to adjourn and Kristina seconded. The meeting ended at 6:35.

Upper Roanoke River Roundtable Board Meeting
August 13, 2012
5:30 – Western Virginia Water Authority Board Room

Board Members Present:
Bill Modica, chairman
Sarah Baumgardner
Kristina Mize
Christy Straight
Mike Loveman
Wes Jarcowski
Carol Linkenhoker, MPA
Erica Moore

Guests:
Sharon Stinnette
Heather Vereb, DCR Watershed Field Coordinator (Heather.Vereb@dcr.virginia.gov)

Bill called the meeting to order at 5:44 pm.

Bill made a date change in the July minutes. The revised July minutes were moved for approval by Wes and seconded by Mike. They were approved unanimously.

501(c)3 application
The 501(c)3 application was completed by Bill M. and reviewed by Bill Tanger. The application will be mailed on August 14, 2012. According to IRS representatives, we can act as a 501(c)3 when the application is mailed.

Wes will research how we can obtain a state tax-exempt number.

Bill M. asked that each asset be noted as where the assets are located.

2011 DCR Grant
The final grant information will be submitted this week by Christy. All materials needed are organized for that grant. We are expected to receive about $4400 in grant funds.

Treasurer's Report
We currently have an account balance of $8797.89 and uncommitted cash on hand of $6,420.94.

Erica turned in membership forms for eight members collected at the Catawba Summit.

Nominations
Kafi Howard officially resigned from the board in July.
Representatives for the Nomination Committee were requested. We are in need of three people to fill terms.

Annual Meeting

The annual meeting will be held at Carvins Cove. November 3 was suggested as the date for the event. The meeting would be 11:30 – 3:00. Deli trays, fruit trays, veggie trays will be ordered. Christy made a motion to have the annual meeting at Carvins Cove on Nov. 3, 2012 with a budget up to $400. Wes seconded the motion. The motion passed. Sarah will coordinate.

Heather will coordinate getting a speaker from DCR to speak about storm water.

Nominations for board members will also take place at the annual meeting.

Membership Committee
Wes and Mike are the membership committee representatives.

Erica created temporary membership card to use at the Catawba Sustainability Summit. That format will be used for permanent membership cards.

Carol will create a PayPal account so we can solicit members to pay online. She will have this done by the next meeting.

Christy has envelopes, labels and paper to create applications for memberships. Carol suggested using a postcard to drive people online for membership.

A budget of $500 was suggested for materials and postage. Wes made the motion and Carol seconded the motion. The motion passed unanimously. Erica can help Wes create the mailing labels and postcards.

Glade Creek
Wes shared that the group does not have a specific project for the URRR to take on at this point. He will continue discussions with the group to see if a project is available to add to the DCR grant.

Carvins Cove
The group asked CJ Mitchem to be the lead person on the Carvins Cove bio-retention project. It was suggested that the final planting take place at the annual meeting.

Uranium Mining
The next General Assembly session is expected to vote on lifting the ban on Uranium mining in Virginia.
Bill asked if anything additional should be done by the URRR on this topic.
Wes made a motion to have the URRR state that the group is in favor on keeping the ban on uranium mining. Mike seconded the motion.
Christy shared that by taking a stand on this issue positions us as more of an advocacy group instead of a Roundtable discussion group. Carol shared that there are concerns about taking an opinion when we represent an organization at the Roundtable.
Mike shared that one of our goals as an organization is to hold forums and share information without taking a stand.

Carol shared that a Roundtable is a place where accurate information can be shared. Kristina shared that a letter to the editor could be written letting people know where they can go to get information.
Wes retracted his motion.

Save our Stream/ Citizen Monitoring Grant Funding
Sharon has worked up a grant application for continued training. The current 2012 grant is closed out. Ten people were certified and two were re-certified. She is working on finding stream site locations.
The proposal for the 2013 grant has been prepared and reviewed. An amount of $3800 has been requested. There is a $4000 cap on the grant application. It will be mailed this week. Sharon and Wes were thanked for their continued work on this project.
Erica and Sharon discussed having a hand-out that connects the URRR and Save our Stream and provides contact information.
Bill asked Sharon to come up with ideas and costs to include in the DCR grant.

Catawba Sustainability Celebration
Erica represented the URRR at the event and shared information with Heather. There will also be a farm fest event over Labor Day weekend. Bill thanked them for being there.

DCR Grant
Project suggestions included
Expanding membership $500
SOS/URRR brochure $100
Glade Creek Project $500

We should plan on a January 1 deadline to get the grant submitted.

Annual Meeting $250
Ferrum Conference $1750
Pet Waste Collection $1000
Native Grass Planting $500

In the past, we had
$400 Operating Expenses
$860 Pet Waste Collection

Heather suggested planting and riparian buffer projects targeted to existing TMDL locations. She also suggested having a demonstration garden at an area school – Sarah suggested working with Leigh Anne Brewster at Fallon Park Elementary.

Erica suggested having a presence at the TMDL public comment meetings.

Fall Waterways Cleanup
Drew Miller will head the team with DEQ and the URRR on October 6. Interested parties should contact Drew.

Wes made a motion to adjourn. Kristina seconded the motion. The meeting ended at 7:20pm.

Upper Roanoke River Roundtable Board Meeting
September 10, 2012
5:30 – Western Virginia Water Authority Board Room

Board Members Present:
Bill Modica, chairman
Sarah Baumgardner
Kristina Mize
Mike Loveman
Wes Jarcowski
Carol Linkenhoker, MPA
CJ Mitchem

Guests:
Heather Vereb, DCR Watershed Field Coordinator (Heather.Vereb@dcr.virginia.gov)

Bill called the meeting to order at 5:44 pm.

The minutes of the August 2013 meeting were moved for approval by Mike and seconded by Kristina. The minutes were passed unanimously.

General operating funds, up to $400 will be used for the annual membership meeting.

Review of 2013 DCR Grant Application

- The grant can be submitted at any time, but we would need to start it most likely January 1.
- Heather recommended applying for a two-year grant instead of one year. We should be able to get at least $7,000 in funds.
- The proposed budget:

Annual meeting expenses	$600
Outreach and admin.	$1000 (mileage, admin. Mailing)
Pet Waste Program	$2500 (four stations)
Riparian buffer restoration	$5000
Glade Creek support	$500 (support for project)
New Membership Drive	$500
SOS program brochure	$400 (design and print)
Ferrum Watershed Conf.	$2000
Total Costs	$12,500

A motion to submit this proposal to DCR for a two-year funding grant was made by Wes and seconded by CJ.

Bill and CJ will submit the proposal.

Treasure/Financial Report

- Christy was not able to attend, so no report was presented.

Nominations Committee for 2013

- Kristina was nominated for Chair of the Nominations Committee. She will serve with Bill M.
- Two candidates names were submitted: Nell Boyle with the City of Roanoke and Marc Lucas.
- We are in need of three candidates.
- CJ will ask Meghan Daily with Roanoke County. Carol is going to ask Lindsey Blankenship with Roanoke County.
- Sarah will give Kristina a copy of board member duties

Annual Meeting

- November 17 – Annual Meeting
- Carol will talk to the manager of the River House to see if there an option for us to have our meeting. The Discover Center on Mill Mountain, VWCC Natural Science Center are other options.
- Speaker will be confirmed at the October meeting.

Membership Committee Report

- Wes and Erica created a postcard to go to potential members.

Glade Creek Project Update

- A project is proposed for a riparian buffer at the Boxley quarry.
- Wes made a motion to donate $500 to this project. CJ seconded the motion.
- The motion passed unanimously. The funds will come from operating funds after the Glade Creek project invoices us.
- This project will take place before Thanksgiving.

Carvins Cove Project

- CJ will contact John Burke to discuss the project.

Save Our Stream Funding from DEQ

- Application was submitted by Sharon

Fall Waterways Cleanup Event

- October 6
- Joint team with DEQ
- Contact Drew at Richard.miller@deq.virginia.gov
- A picnic at Wasena Park will take place from 12-3. T-shirts will be provided.

Other Business

October Meeting

- Due to the Columbus Day holiday, the next URRR meeting will be October 1.

E-Waste Collection – September 15
Prescription Drug Take-Back – September 29

Mike made a motion to adjourn. The motion was seconded by Carol. The meeting adjourned at 6:35.

Upper Roanoke River Roundtable Board Meeting
October 1, 2012
5:30 – Western Virginia Water Authority Board Room

Board Members Present:
Bill Modica, chairman
Sarah Baumgardner
Mike Loveman
Wes Jarcowski
Carol Linkenhoker, MPA
Erica Moore
Bill Tanger

Guests:
Heather Vereb, DCR Watershed Field Coordinator (Heather.Vereb@dcr.virginia.gov)
Nell Boyle, City of Roanoke
Megan Dailey, County of Roanoke

Bill called the meeting to order at 5:42 pm.

The minutes of the September 2013 meeting were moved for approval by Mike and seconded by Carol. The minutes were passed unanimously.

Review of 2013 DCR Grant Application

- Bill M. and CJ will review the draft application submitted by Heather.
- This will be a two-year program.
- The proposed budget:

Annual meeting expenses	$600
Outreach and admin.	$1000 (mileage, admin. Mailing)
Pet Waste Program	$2500 (four stations)
Riparian buffer restoration	$5000
Glade Creek support	$500 (support for project)
New Membership Drive	$500
SOS program brochure	$400 (design and print)
Ferrum Watershed Conf.	$2000 (2013 calendar year)
Total Costs	**$12,500**

Treasure/Financial Report

- Christy was not able to attend, so no report was presented.

Nominations Committee for 2013

- Nell Boyle and Megan Daily were nominated for open positions on the Board of Directors.
- Carol submitted a motion to have Nell and Megan be considered as nominees. Mike Loveman seconded the motion.
- Bill Modica has asked David Perry with the Western Virginia Land Trust to be considered as a nominee.
- All new board members will be voted at the Annual Meeting

Annual Meeting

- November 17 – Annual Meeting
- Carol has talked to the River House about using a community meeting room. Residents of the building would be invited to attend the meeting.
- Mike made a motion to have the meeting at the River House and Erica seconded the motion. The motion unanimously passed.
- Speaker proposed would be someone from DCR to discuss stormwater and someone from DEQ to discuss the new TMDL studies in our area.
- The meeting would start at 12 noon.
- Sarah will come up with the ballot.
- As part of the business meeting, we will nominate board members, have committee reports, share photos of projects
- We will need to bring projector, screen and laptop.
- Carol and Sarah will coordinate getting food (meeting budget is $400)

Membership Committee Report

- Membership messages/ invites will go out by email. Additional invites will go out as a postcard.

Glade Creek Project Update

- The project will take place at the Boxley quarry. A step bank next to Glade Creek will be planted by the first of December.
- The Roundtable will donate $500 towards this effort. Bill asked Wes to have an invoice sent to the Roundtable for these funds.
- A representative from DGIF is coordinating this effort.

Fall Waterways Cleanup Event on October 6

- Peters Creek at Strauss Park will be the location. The group will meet at 8:30am, and Drew will bring supplies. Email Drew Miller if you want to be on the team.

Explore Park boat launch site update

- Bill shared photos of the recent work at the site including steps, an informational kiosk and parking facility.
- The location is where the Roanoke River and Back Creek join.
- The project is mostly completed.

November Board Meeting

- Because our normal meeting day, November 12 is Veteran's Day, we will move the meeting to Monday, November 5.

Other Business

- Carol shared that Clean Valley Council is a partner with Tom's of Maine's 50 States for Good Grant program to get a chance of winning up to $50,000 to expand Clean Valley Day in 2013.

Mike made a motion to adjourn. The motion was seconded by Carol. The meeting adjourned at 6:44.

Upper Roanoke River Roundtable Board Meeting
November 5, 2012
5:30 – Western Virginia Water Authority Board Room

Board Members Present:
Bill Modica, chairman
Sarah Baumgardner
Wes Jargowsky
Carol Linkenhoker
Erica Moore
CJ Mitchem
Megan Dailey
Greg Anderson
Bill Tanger

Bill called the meeting to order at 5:43 pm.

The minutes of the October 2013 meeting were moved for approval with changes by Carol and seconded by Wes. On page two under Glade Creek, a step bank was changed to steep bank, it was clarified that Bill T. shared photos from Explore Park. The minutes were passed unanimously.

Review of 2013-14 DCR Grant Application

- CJ submitted the application to Heather on 11-5-12. Heather acknowledged receiving the application via email.
- This will be a two-year program.
- The requested budget is:

Annual meeting expenses	$600
Outreach and admin.	$1000 (mileage, admin. Mailing)
Pet Waste Program	$2500 (four stations)
Riparian buffer restoration	$5000
Glade Creek support	$500 (support for project)
New Membership Drive	$500
SOS program brochure	$400 (design and print)
Ferrum Watershed Conf.	$2000 (2013 calendar year)
Total Costs	**$12,500**

Treasure/Financial Report

- Christy was not able to attend, so no report was presented. She said she would send a report later via email.
- Two members have paid for membership via the website. Carol has sent the collected funds to the bank. Others have filled out the form.

501(c)3 status

- We received notice that the application had been received and the fee for application has been increased by $100. Bill authorized Christy to send in the additional funds.

Nominations Committee for 2013

- Nell Boyle, Megan Daily and David Perry will be new board member candidates on the ballot at the annual meeting
- Bill will ask at the start of the annual meeting for any prospective members to sign up and pay their dues so they can vote.

Annual Meeting

- November 17 – Annual Meeting
- The meeting will take place at the River House
- Mary Dail from DEQ and Heather Vereb from DCR will speak on TMDLs and implementation plans.
- Sarah will come up with the ballot.
- As part of the business meeting, we will nominate board members, have committee reports, share photos of projects
- We will need to bring projector, screen and laptop.
- Carol and Sarah will coordinate getting food (meeting budget is $400)
- Bill will ask Christy if we still have t-shirts. If so, we can sell them at the meeting.
- Postcard invitations have been emailed (300) or mailed (70). Wes also emailed the postcard invitation to SOS.

Membership Committee Report

- Bill M. asked Christy to bring an updated roster of membership to the annual meeting.

Glade Creek Project Update

- Volunteers from Trout Unlimited will be helping with the project.
- The next meeting will be November 7.

Advisory Committee

- Greg shared that there is no new updates from the committee. Greg is having difficulty getting information from members.
- There was discussion as to the merits of continuing with an advisory committee or having the most active members of the group use their energies on other projects within the URRR.

Website Updates

- The membership form and PayPal are now functioning
- Carol updated the project pages and added photos. The list of Board Members was also updated.

Carvins Cove Project Update

- CJ has coordinated with Gay & Neil and is expecting project documents on November 23.
- Construction and planting should be Spring 2013.

Other Business

- The next board meeting will be December 10. Committee structure and certification of new board members will take place at that meeting.
- Bill T. shared information about a project need that he wanted to bring before the board. He shared that there is an erosion problem near Explore Park where Back Creek enters the Roanoke River near Smith Mountain Lake. This project would need engineering design work. Explore Park owns the property at the site of the erosion. Bill M. asked Bill T. to present specifics of what is needed to prevent erosion at the site.

Sarah made a motion to adjourn. The motion was seconded by Carol. The meeting adjourned at 6:33.

Upper Roanoke River Roundtable Board Meeting
December 10, 2012
5:30 – Western Virginia Water Authority Board Room

Board Members Present:
Bill Modica, chairman
Sarah Baumgardner
Carol Linkenhoker
Kristina Mize
Mike Loveman
Erica Moore

Guest: Heather Vereb Logno,

Bill called the meeting to order at 5:44 pm.

The approval of the minutes of the November 2013 meeting were deferred until the next board meeting.

Board Member Discussion

- David Perry declined to be on the board due to the fact that the Roundtable does not carry liability insurance for its Board members.
- Sarah will officially invite Patrick Hogan from the City of Roanoke to the January board meeting so that he can learn more about our organization and we can learn about him.
- There are currently two open slots for Board Directors.

Board Annual Meeting

- A final report on the financial outcome of the annual meeting will wait until Christy submits an annual report.
- Sarah will send a thank you note to the River House this week.

DCR 2011-12 Grant

- Prior to the meeting, Christy, CJ and Bill answered questions and provided additional documents requested by DCR. The information was needed to qualify for the final payment on our 2012-2013 grant cycle.

501(c)3 Update

- Christy confirmed with Bill via email that the additional $100 requested for increased fees has been submitted to allow our application to be processed.

Membership

- Wes emailed a list of members, which stands at just above 30 paid members.
- Membership cards were given to paid members at the annual meeting as a record of membership and a receipt for payment. Those signing up via the web will get an email confirmation that includes a membership card.

- Erica stressed the need to have a URRR presence at as many environmental events in the valley as possible and suggested utilizing members to be our outreach helpers.
- A standard packet of information could be created to provide more information to attract people to the organization. Carol asked if we could update our logo as well, since it is hard to reproduce.
- The annual SML meeting will be in March, a possible outreach opportunity.

Glade Creek Project

- Funds in the amount $500 were requested for parking lot improvements. Bill forwarded that request to Christy for payment as it had been approved by the board at a previous meeting.

Website

- Carol will add some information about the annual meeting.

Treasure/Financial Report

- As Christy is still ill, she was not able to attend, so no report was presented. She said she would send a report later via email.

URRR TMDL study

- Djemel requested a summary list of BMP projects in the Roanoke area. Anyone having information to share should forward it on to him c/o DCR.

Kristina made a motion to adjourn. The motion was seconded by Mike. The meeting adjourned at 6:19pm.

Upper Roanoke River Roundtable Board Meeting
January 14, 2013
5:30 – Western Virginia Water Authority Board Room

Board Members Present:
Bill Modica, chairman
Sarah Baumgardner
Kristina Mize
Mike Loveman
Megan Dailey
Christy Straight
CJ Mitchem
Erica Moore (5:46)
Greg Anderson (5:52)

Guest: Heather Vereb Logno, DCR

Bill called the meeting to order at 5:40 pm.

The minutes of the November 2012 and December 2012 were moved for approval by Mike and seconded by Kristina. The minutes were passed unanimously.

DCR Grant 2012-2014
Official approval is still pending from DCR. Heather asked that if food was going to be served, a description of the type of food and number of people participating be forwarded to DCR in advance.

- Watershed Conference at Ferrum College Fall 2013 - $2000
    - Confirmation with CVC and Ferrum needs to be done
    - CJ and Megan the committee co-chairs
    - Sarah, Kristin and Bill will serve on the committee
- Pet Waste Project $2500
    - Four new pet waste stations are budgeted
    - Hanging Rock trail & Carvins Cove picnic area will get stations
- Riparian Buffers $5000 for two projects
    - Norwich area near new greenway extension will be the 2013 project
    - CJ and Mike will coordinate
- Administration $200
- Hardware (new computer) $400
- Membership $500
    - Goal is to increase core membership through promotion and outreach
- Annual Meeting $400
- SOS brochure $400
    - Sharon Stinnette will coordinate

DEQ/SOS grant request

- $3600 was awarded for stream monitoring

- The approval has arrived and Christy will distribute. Bill will send a copy of the grant application to Christy for her records.

Treasurer Report

- Christy shared the final report
- The balance in the SEP fund is about $1700
- Total uncommitted cash on hand is $1127.54
- Two board members have not made a financial commitment they are encouraged to do so.
- The DCR reimbursement for the 2011-12 grant is pending.

501©3 application

- The IRS has indicated that they received the payment from us. We are still waiting for official non-profit status from them
- A tax return is due by April 15 since we are incorporated and Christy will coordinate. We were incorporated in May 2012.

Board of Directors Nominations

- All nominations should go to Kristina, chair of the nominations committee.
- Per Bill, the Regional Commission asked to have representation on the board if possible.

2012 Officers

- Christy will not be able to continue as Treasurer after the end of January, so we are looking to appoint someone else to serve in that role.
- Christy was thanked for her service.
- Bill will take-over the PO Box.

Membership Committee

- Erica again discussed the need for information for board members to have hand-outs to learn more about the organization and to distribute at community events.

Advisory Committee

- Greg sent an email to all members requesting a meeting Jan 31 or Feb. 7 and asking all of them to finish their tasks of looking at ways to increase membership.
- Greg shared that if they are not able to complete their tasks, maybe the Advisory Committee should be disbanded.

Carvins Cove Project Update

- The Water Quality Committee will meet on Wednesday the 16th to discuss the project. Gay & Neil will discuss the project documents they designed.
- Gay & Neil will also discuss another stream restoration project that could be a private/public partnership.
- We plan to move dirt in the Spring.

Other Business

- Clean Valley Day April 13, 2013
- Earth Day on Grandin April 20. Megan will help with this.

URRR TMDL study

- Djemel requested a summary list of BMP projects in the Roanoke area. Anyone having information to share should forward it on to him c/o DCR.

Sarah made a motion to adjourn. The motion was seconded by CJ . The meeting adjourned at 6:40 pm.

Upper Roanoke River Roundtable Board Meeting
February 11, 2013
5:30 – Western Virginia Water Authority Board Room

Board Members Present:
Bill Modica, chairman
Sarah Baumgardner
Kristina Mize (5:54)
Mike Loveman
Megan Dailey
Christy Straight
Wes Jargowski
Greg Anderson

Guests: Heather Vereb Logno, DCR
Tyler Godsey, RVARC

Bill called the meeting to order at 5:45 pm.

The minutes of the January 2013 were moved for approval by Mike and seconded by Christy. The minutes were passed unanimously.

DCR Grant 2011-2012

- The $4440 re-imbursement from DCR has not been received. Heather will follow up with Neesha at DCR to see where the funds are.
- Clean Valley Council says that the check should be mailed directly to the URRR and not come to Clean Valley.

DCR Grant 2012-2014
Official approval is still pending from DCR. Heather is following up on this status.

Watershed Conference at Ferrum College Fall 2013 - $2000

- Confirmation with Ferrum needs to be done
- Bill confirmed with Cristina at CVC, and CVC does want to participate.
- CJ and Megan the committee co-chairs
- Sarah, Kristin and Bill will serve on the committee

- Pet Waste Project $2500
  - Four new pet waste stations are budgeted
  - Hanging Rock trail & Carvins Cove picnic area & Ferrum College & Norwich riparian buffer project were selected to get stations
- Riparian Buffers $5000 for two projects
  - Norwich area near new greenway extension will be the 2013 project
  - CJ and Mike will coordinate
- Administration $200
- Glade Creek $500

    - Wes was asked to share photos with Carol of the buffer project we supported with $500 last year.
    - Wes will share the future site work we will support
- Hardware (new computer/monitor/photo display) $400
- Membership $500
    - Erica and Sarah on the committee
    - Goal is to increase core membership through promotion and outreach
- Annual Meeting $400
- SOS brochure $400
    - $100 labor for design/ $300 printing
    - Sharon Stinnette will coordinate

DEQ/SOS grant request

- $3600 was awarded for stream monitoring
- Contract #15543
- Bill will send a copy of the grant application to Sarah for her records.

Treasurer Report

- Christy shared her final report as Treasurer – Financial Activities 2012
- Cash on hand balance is $3032.68 plus we are still waiting for $4400 reimbursement from DEQ
- The Uncommitted cash on hand is $1115.55
- The SEP fund balance is $1747.28

501(c)3 application

- Effective May 13, 2011, the Upper Roanoke River Roundtable is considered at 501c3 organization per a letter received January 22, 2013. A copy of the letter was filed with the Secretary.
- A tax return is due by April 15 since we are incorporated. We were incorporated in May 2012.

Board of Directors Nominations

- Tyler Godsey from the RVA-RC joined our meeting to learn more about the organization and to see if there are projects that we might work on together.
- We discussed a Board position with Tyler in case he might be interested in the position.

2013 Officers

- Sarah will stay on as Secretary
- Bill Modica will stay on as President
- Bill M. will talk to Bill Tanger about possibly being Treasurer
- Bill M. will serve as interim Treasurer.
- During the interim period, the Board will review all invoices and payments before the payments are made

Membership Committee

- Erica again discussed the need for information for board members to have hand-outs to learn more about the organization and to distribute at community events.

Advisory Committee

- Heather Vereb has agreed to serve on the Advisory Committee. One additional person needs to be nominated by the URRR board.
- The committee met last week with six members present. The members present turned in their reports which Greg will compile, share with the Committee and then present to the URRR board by the next board meeting.
- The committee will meet again in May and then continue to meet quarterly.

Carvins Cove Project Update

- We plan to move dirt in the Spring.

Other Business

- Clean Valley Day April 13, 2013
- Earth Day on Grandin April 20. Megan will help
- SML Annual Meeting March 5; doors open at 6pm for public at Trinity Ecumenical Church
- Saturday, May 4 is the annual SML clean-up event

Mike made a motion to adjourn. The motion was seconded by Wes . The meeting adjourned at 6:40 pm.

Upper Roanoke River Roundtable Board Meeting
April 8, 2013
5:30 – Western Virginia Water Authority Board Room

Board Members Present:
Bill Modica, chairman
Sarah Baumgardner
Megan Dailey
Greg Anderson
Kristina Mize (5:55)
Carol Linkenhoker
CJ Mitchem
Erica Moore

Guests: Heather Vereb Logno, DCR

Bill called the meeting to order at 5:47 pm.

The minutes of the March 2013 were moved for approval (with changes sent via email prior to the meeting) by Bill T. and seconded by Carol . The minutes were passed unanimously.

Status of Funds from 2011
The check from DCR in the amount of $4440.18 arrived on Thursday, April 6, 2013and has been deposited by Bill Modica.

DCR Grant 2012-2014
The check has been UPS sent to Bill Modica's home. Bill will sign when it arrives and deposit it.

Watershed Conference/ Roanoke River Currents at Ferrum College Fall 2013 - $2000
- The committee met at Ferrum College and selected a date in September for the conference.
- Clean Valley Council will help with planning along with CJ and Megan.
- A 'Save the Date' mailing will be sent next month along with a call for presentations. Based on the topics submitted, the committee will finalize the overall theme of the conference and panel discussion topic.
- Sarah, Kristin and Bill will serve on the committee
- Erica suggested making membership a part of the registration process and possibly having a business or non-profit membership option.
- CJ asked Kristina to talk to the SML Association about possible partnership on the conference as well.

- Pet Waste Project $2500
  - Four new pet waste stations are budgeted
  - Hanging Rock trail & Carvins Cove picnic area & Ferrum College & Norwich riparian buffer project were selected to get stations
- Riparian Buffers $5000 for two projects
  - Norwich area near new greenway extension will be the 2013 project

    - CJ and Mike will coordinate. CJ shared that the City will be working on their entrance in the fall, so the planting will happen in the fall.
    - Sarah shared information about the Leadership Roanoke Valley's proposal to plant a riparian buffer at Vic Thomas Park as a possible riparian buffer project for the group.
    - Bill T. shared some information about the riparian needs at Rutrough Road.
    - A motion was made by CJ to fund the Vic Thomas Park project $2500 contingent on confirmation of the site location and drainage area as an effective riparian buffer. The motion was seconded by Megan. If the project does not meet the board's goals, we will donate $500 towards the project from an educational standpoint or to assist modification to a better location. CJ has offered to help evaluate the site. Seven votes in favor, One abstain.
- Administration $200
    - Display and photo monitor/photo viewer
    - Bill T. will work with someone on logo design
- Glade Creek $500
    - Wes was asked to share photos with Carol of the buffer project we supported with $500 last year.
    - Wes will share the future site work we will support
    - This money is designated for planting.
- Hardware (new computer/monitor/photo display) $400
- Membership $500
    - Erica and Sarah on the committee
    - Goal is to increase core membership through promotion and outreach
    - A business and non-profit rate is needed
- Annual Meeting $400
- SOS brochure $400
    - $100 labor for design/ $300 printing
    - Sharon Stinnette will coordinate

Heather reminded everyone to make sure that money is in hand before projects are funded as this is a reimbursement grant.

DEQ/SOS grant request

- $3600 was awarded for stream monitoring
- Contract #15543
- Bill will send a copy of the grant application to Sarah for her records.
- Sharon is requesting $120 for administrative fees. Bill T. made a motion to approve the payment, CJ seconded.

Treasurer Report

- Bill is reconciling the bank balance with balance sheet numbers.

501(c)3 application

- Effective May 13, 2011, the Upper Roanoke River Roundtable is considered at 501c3 organization per a letter received January 22, 2013. A copy of the letter was filed with the Secretary.

- A tax return is due by May 15 (revised date per Bill M.) since we are incorporated. Bill M. will file the return. We were incorporated in May 2012.

SCC Filing

- We are required to update our registration with the Commonwealth of Virginia every year. All officers on the form and at the meeting signed. Bill M. will get Mike Loveman and Christy Straight to sign.

Board of Directors Nominations

- Tyler Godsey from the RVA-RC joined our meeting to learn more about the organization and to see if there are projects that we might work on together.
- We discussed a Board position with Tyler in case he might be interested in the position.

2013 Officers

- Sarah will stay on as Secretary
- Bill Modica will stay on as President
- Bill M. nominated Bill T. as Vice President. Kristina seconded the motion. Unanimously approved, and Bill Tanger was elected as Vice President.
- Bill M. will serve as interim Treasurer.
- During the interim period, the Board will review all invoices and payments before the payments are made

Advisory Committee Membership Recommendations

- Greg shared key fundamentals of membership related issues for the URRR with the board prior to the meeting.

Membership Committee

- Erica suggested having a membership brochure and sign-up as part of registration for the Watershed Conference.
- Erica also suggested having a form letter to prospective members that could be signed by board members.
- CJ complimented Erica on the fine job she has done for membership, especially noting Corporate Membership needs.
- Bill M. says that expanding our membership is a top priority. Our goal should be 100 members.

Website

- Bill wants a notice that we received the grant and we will be at Earth Day.

Carvins Cove Project Update

- We plan to move dirt in the Spring.

Other Business

- Clean Valley Day April 13, 2013
- Earth Day on Grandin April 20. Megan & Erica will help

- Cox Conserves – nominate those who have done significant work for the environment (April 22 deadline), and a donation will be made.

Bill T. suggested having the next board meeting at Explore Park. We will meet at Rutrough Pointe from 5:30 – 7:30 on May 13.

CJ made a motion to adjourn. The motion was seconded by Megan . The meeting adjourned at 7:26 pm.

Upper Roanoke River Roundtable Board Meeting
May 13, 2013
5:30 – Explore Park – Visitor's Center

Board Members Present:
Bill Modica, chairman
Sarah Baumgardner
Megan Dailey
Greg Anderson
Kristina Mize (5:55)
Carol Linkenhoker
CJ Mitchem
Erica Moore

Guests: Heather Vereb Logno, DCR
Judy Cunningham, VRFA Secretary

The group met at 5:30 to look at Rutrough Pointe erosion issues and then reassembled in the Visitor's Center at Explore Park

Bill called the meeting to order at 5:47 pm.

The minutes of the April 2013 were moved for approval by Bill T. and seconded by Wes. The minutes were passed unanimously.

Status of Funds from 2011
The check from DCR in the amount of $4440.18 arrived on Thursday, April 6, 2013and has been deposited by Bill Modica.

DCR Grant 2012-2014
Bill M. signed the agreement and mailed it back to DCR for their signature. All projects can now proceed.

Watershed Conference/ Roanoke River Currents at Ferrum College Fall 2013 - $2000
- Friday, October 11 has been set as the date for the conference.

- Pet Waste Project $2500
  - Four new pet waste stations are budgeted
  - Hanging Rock trail & Carvins Cove picnic area & Ferrum College & Norwich riparian buffer project were selected to get stations
- Riparian Buffers $5000 for two projects
  - Norwich area near new greenway extension will be the 2013 project in the fall.
  - Sarah will coordinate getting the necessary paperwork completed for the Vic Thomas riparian buffer garden before the check is cut.
  - Bill T. expressed concerns with the garden. He felt that the curbing in the park directs the run-off and feels that the rain garden is not the best option for addressing the run-off issue in the park. He felt that the process was too rushed.

- Administration $200
    - Display and photo monitor/photo viewer
    - Bill T. will work with someone on logo design
- Glade Creek $500
    - Bill asked Wes to share that the $500 funds from the 2012/13 grant should be for on the ground projects only such as plants or materials.
    - A date for the planting has not been set yet.
- Hardware (new computer/monitor/photo display) $400

- Membership $500
    - Erica and Sarah on the committee
    - Goal is to increase core membership through promotion and outreach
    - A business and non-profit rate is needed
    - Membership should be built into registration for the waterways conference.
- Annual Meeting $400
- SOS brochure $400
    - $100 labor for design/ $300 printing
    - Sharon Stinnette will work on it this summer based on a Save-A-Stream brochure.

Logo Redesign

- The old logo will be phased out and the new logo will be used on all new publications and on the web.
- Four different logos were presented. Version One was selected. The 'U' in upper will be capitalized and the green will be a darker emerald. The url will be added to the letterhead.
- We will use the letterhead with the logo left and add the url at the bottom under the art.

Directors Handbook

- Sarah will work on a revised handbook early this summer.

Website

- Bill wants a notice that we received the grant and we will be at Earth Day.

Carvins Cove Project Update

- We plan to move dirt and plant on the site June 29.
- Volunteers are needed June 29

Outreach

- Megan redid some nice displays for Earth Day.
- Megan, Erica and Sarah were at Earth Day.
- Six new members signed up and paid on site.
- Sarah gave extra membership flyers to the Board to share with prospects. Kristina was going to put some of those flyers at the SMLA offices.

Other Business

- DEQ watershed open house on June 11 to address TMDL in the Roanoke River. The Roundtable has been asked to put a display table at the event at the Civic Center. Other groups are encouraged to participate.
- The U.S. Forest Service is looking for applicants for July 15 deadline grants. They are looking for projects up to $25K dealing with urban trees and forests, green infrastructure jobs and green infrastructure jobs dealing with stormwater mitigation. We could suggest partnering with other organizations.

Treasurer's Report

- Bill deposited the checks from DCR and wrote checks in the amount of $120 to Sharon Stinnette for administrative overhead, paid $10 for Earth Day registration and paid $25 for SCC filing.

Mike made a motion to adjourn. The motion was seconded by Carol . The meeting adjourned at 7:07 pm.

Upper Roanoke River Roundtable Board Meeting
June 10, 2013
5:30 – Western Virginia Water Authority Board Room

Board Members Present:
Bill Modica, chairman
Sarah Baumgardner
Megan Dailey
Kristina Mize
Bill Tanger
Carol Linkenhoker
CJ Mitchem (5:51)
Erica Moore
Wes Jargowsky
Mike Loveman
Greg Anderson

Guests: Heather Vereb Logno, DCR

Bill called the meeting to order at 5:45 pm.

The minutes of the May 2013 were moved for approval by Mike and seconded by Carol. The minutes were passed unanimously.

Update on Meeting to Rutrough Point in May

- Bill T. talked about erosion issues on Back Creek
- Bill T. revisited the area today (after the rain) and noted that there was sediment in the water coming from Back Creek – on the Roanoke County side.
- If we wanted to take action in the area, a proposal would need to be made.
- Megan will mention the area to the County Engineer

DCR Grant 2012-2014

- An interim report is due July 15.
- Any activities and invoices need to be sent to Bill M. by the end of June.

Watershed Conference/ Roanoke River Currents at Ferrum College Fall 2013 - $2000

- Friday, October 11 has been set as the date for the conference.
- A save-the-date solicitation will be handed out at the DEQ watershed workshop on June 11, 2013
- Call for presentations will go out in the next few weeks.
- Kristina asked CJ to share information that she can share with the SML Association.
- Erica will send Meghan a copy of our email list.
- 83 people attended in 2011

- Pet Waste Project $2500
  - Four new pet waste stations are budgeted

    - Hanging Rock trail & Carvins Cove picnic area & Ferrum College & Norwich riparian buffer project were selected to get stations
- Riparian Buffers $5000 for two projects
    - Norwich area near new greenway extension will be the 2013 project in the fall.
    - Sarah will coordinate getting the necessary paperwork completed for the Vic Thomas riparian buffer garden before the check is cut. LRV has invoiced the group for $2500.
- Administration $200
    - Bill T. invoiced the group for the new logo designs $200
    - Sarah made the motion to pay for the design, Megan seconded the motion. The motion passed unanimously.

- Glade Creek $500
    - A date for the planting has not been set yet

- Hardware (new computer/monitor/photo display) $400

- Membership $500
    - Erica, Megan and Sarah on the committee
    - Goal is to increase core membership through promotion and outreach
    - A business and non-profit rate is needed. Bill M. suggested making a motion to establish a rate.
    - Membership should be built into registration for the waterways conference.

- Annual Meeting $400

- SOS brochure $400
    - $100 labor for design/ $300 printing
    - Sarah will work on it this summer based on a Save-A-Stream brochure and be in touch with Clean Valley on ideas.

Treasurer's Report

- Invoice for Sharon's training session held on 5-23-13 at SML. $360 charged to DEQ project. Bill made a motion to approve. Kristina seconded the motion. The motion unanimously passed.
- Monthly charges for website hosting of $19.99 have been incurred. These charges will be paid from the general operating account.
- The current balance in the general ledger is $12,949.55.
- CJ asked for a SEP fund balance – as reported in the February meeting minutes, the balance was $1747.28

Board of Directors

- There is not current candidates for the Board of Directors or Treasurer position.
- Bill M. asked if we as a group are comfortable with sharing our books and records. The Board agreed that any candidate could see our reports and financial information – just not any account numbers.
- A Treasurer and other Board Members are needed.

Advisory Committee

- Meeting proposed for July 2013
- Bill T. asked for input on having localities work together to keep sediment out of the rivers.
- Bill M. asked for input on corporate membership rates.

Membership

- Goal is to have 100 paid members by the end of the year.
- New members will be recruited at the DEQ TMDL IP meeting

Website

- No changes

Carvins Cove Project Update

- We plan to do construction June 29 – volunteers are needed
- SC Rossi will do the major construction.
- Volunteers (9-10)will mix and place the soil mixture at 8:30am. Lunch will be provided.
- Planting will happen in the fall.

June 11 – DEQ TMDL IP Meeting

- Sarah will help Erica set-up
- Bill T., Sarah, Erica, Carol and Bill M. will be there

Other Business

- June 20 – Business and Government working group on Rke River TMDL IP. Heather requested that the URRR attend.
- Carol may have limited availability as the Director of Public Works (Ron Smith) has resigned.

Bill M. made a motion to adjourn. The motion was seconded by Mike . The meeting adjourned at 6:47 pm.

Supporting Documentation

for

BMP 2:3

Clean Valley Council, Inc.
Board of Directors Meeting
Roanoke Valley Resource Authority
Minutes from August 28, 2012

The meeting of the Board of Directors of Clean Valley Council was held on August 28, 2012 at Roanoke Valley Resource Authority, 1020 Hollins Road, NE, Roanoke, Virginia.

James Breakell, Clean Valley Council Board President, called the meeting to order at 12:20 PM. Szechenyi called the roll and attendance was recorded.

Present: James Breakell, Adam Cohen, Ed Hacker, Eddie Hunter, Cary Lester, Carol Linkenhoker, Rich Maxwell, Anita McMillan, Amy Louise Reyer, Cindy Simonds, Amanda Spain, Jim Vodnik, Laura Wasko.

Apologies: Owen Grogan, Stephen McTigue, Bittle Porterfield.

Staff: Cristina Siegel, Dawn Luther, Fran Szechenyi.

Minutes: No minutes for June due to the board retreat and there was no board meeting held in July.

Board Member Retiring:
New Board Member: Hunter introduced his replacement, David Knicely, who oversees the First Citizens Bank at Botetourt Commons in Daleville.

Committee Reports
ADM Committee: Wasko reported that the ADM sign has been sent to be printed and should be available within several weeks. The artists are responsible for moving their sculpture to the site. ADM dedication will be Thursday, September 20th at 11:00AM at the Vic Thomas Park. Wasko will hold an ADM Committee meeting directly following today's board meeting to discuss the dedication ceremony. Siegel reported that CVC would send out the invitations shortly.

Budget & Finance:
Hunter reported that the Budget Committee met in June to put together the 2012-2013 proposed budget. The board members were given copies for review.

Educators Report:
Dawn Luther: Luther reported that 250 programs have already been scheduled for 5,200 students between now and May. Luther asked the board to bring her old craft items and "junk" which will be used for The Truth About Trash program. She provided the board with a list of items needed.

Reyer questioned how the teachers were notified about the various events and programs that Clean Valley Council offers. Luther said that emails were sent out to all teachers at the beginning of the year and then there were follow-up emails after about several months into the school.

Cristina Siegel: Siegel informed the board that she has hired Daniel Harrison as our new environmental educator. He has a degree in Wildlife and Fisheries Science from the University of Tennessee, Knoxville and is currently working on a master's degree in Fisheries and Wildlife

Management from Virginia Tech. Harrison has worked with Camp Roanoke for many years teaching children of all ages. Harrison will be starting next Tuesday.

Breakell encouraged all board members to look at the educators' schedule and try to visit one of their programs.

Executive Director's Report:

Financials: June financials were distributed but July financials are pending the passing of the new FY budget. Finance Committee decided to close out the Money Market account (approximately $7600). $5000 was transferred into the ADM Scholarship Fund with the balance transferred into the CVC account.

Summer activities: Volunteers from REACH came in to help clean our attic storage area by organizing our storage supplies and building shelves. A second Reach group helped to paint the office. Siegel and Luther attended a 3-day wind symposium at James Madison University in June that included a tour at the Mt. Storm wind turbine farm. DEQ reports and annual grant application and municipality stormwater contracts were completed.

ECO-Day Event: Siegel is working with Goodwill Industries, Roanoke Natural Foods, Natural Awakenings Magazine and new partners Yokohama, Go Green NRV, and Wades. Four new sites have been added this year. The event will be Saturday, September 15th from 8 to 2 at the following locations: Roanoke Natural Foods Co-Op, Grandin Road (CVC staff will be manning this site), Yokohama Tire, Indiana Street, Salem Wade's Supermarket, Radford & Christiansburg; Friendly City Food Co-Op, Harrisonburg. Siegel mentioned that Cox Communication has also scheduled their E-waste Event on the same date.

New Grant: Siegel has been working with Paige Hodge, Center in the Square, on a joint grant proposal to Tom's of Maine called **50 States for Good.** The Clean Valley Council/CITS proposal was chosen as the finalist for Virginia. CVC will be able to announce this on September 10th at which time a facebook voting period begins. $150,000 is to be awarded to the six grantees with the most votes.

Simonds asked if the board would be receiving an overview of the Board Retreat. Siegel said that before January's follow-up retreat she would send out notes from the June retreat.

Siegel invited the Board to attend the Citizens Stormwater Advisory Meeting to be held at Garst Mill Park at 6PM on Wednesday evening August 29th. Siegel and Luther will be doing the Stream School program for the committee.

Board of Director Changes:

Siegel reported that several board members have reached the end of their terms: Eddie Hunter (served 24 years) and Laura Wasko (served 21). Both have decided to step down from the board. Wasko will be staying until the Ann Davey Masters Memorial dedication is completed. Siegel thanked Eddie Hunter for his many years of service to Clean Valley Council and presented him with a gift of appreciation.

New 2012-2013 Executive Officers:

Siegel thanked the current executive officers for their two-year term of service.

Nominations for the 2012-2013 executive officers were: Cary Lester, President; Stephen McTigue, Vice President; Amy Louise Reyer and Jim Vodnik, Secretary/Treasurer. Amy Louise Reyer declined the nomination. Simonds asked if there is a job description for the secretary position. Siegel stated

that duties are described in the by-laws; however, staff performs many of the secretary-treasurers duties. Clarification on duties will be given to all nominees. A motion to approve the executive committee nominations was approved. The 2012-2013executive officers are as follows:

Cary Lester, President
Stephen McTigue, Vice President
Jim Vodnik, Secretary/Treasurer

Budget:
Hunter explained that the finance committee had approved the proposed budget and that several points of the new budget need some edification:

- Salaries
- Total income
- Equipment expense

Salaries: Siegel explained that salary expense is distributed between Administrative and Program Expenses. In this budget, Siegel and Szechenyi's salaries are split 85% administrative and 15% programs. Educator salaries are 100% under Program Salaries. Siegel noted an increase in salary expense. Both educators will be working 40 hrs/wk, 11-month schedules for the first time.

Income: Goal is to increase the budget above $200,000. This proposed increase includes increased grant revenue and contribution revenue. $6,000 has been budgeted for a grant writer with hopes of bringing in at least $20,000. Siegel has not worked all the details out but it has to be contingent on the dollar amount received. Cohen suggested the benefits of paying grant writers a percentage of monies they bring in. Reyer noted our budget shows we had lower than projected contributions last year. Siegel explained if you include the ADM memorial campaign we actually had much higher contributions, however, it appears the additional campaign affected our general annual campaign. They either gave to the ADM or CVC campaign but not necessarily both. Reyer asked about audit expense. Siegel responded that our audit is scheduled and it does not show on the new budget because we are only required to have an audit every two years. Wasko asked if CVC was receiving a steady amount from Cycle Systems. Siegel responded that we had just received a check for $8,000. Hunter noted that we budgeted $25,000 for last year and received over $30,000 this year.

Office Equipment: Additional funds have been budgeted for new computer equipment. Our current equipment is tired and in need of replacement. This replacement will be contingent on availability of funds. Reyer mentioned that her husband might be able to get some computers for us.

Cohen proposed to accept the 2012-2013 budget, Linkenhoker seconded. The Board approved the budget.

Information:
Next Board Meeting: September 25, 2012

Meeting was adjourned at 1:20PM
Respectfully submitted by Fran Szechenyi

Clean Valley Council, Inc.
Board of Directors Meeting
Roanoke Valley Resource Authority
Minutes from September 25, 2012

The meeting of the Board of Directors of Clean Valley Council was held on September 25, 2012 at Roanoke Valley Resource Authority, 1020 Hollins Road, NE, Roanoke, Virginia.

Cary Lester, Clean Valley Council Board President, called the meeting to order at 12:05PM. Szechenyi called the roll and attendance was recorded.

Present: Bob Bengtson, James Breakell, David Breeden, Adam Cohen, Ed Hacker, Cary Lester, David Knicely, Carol Linkenhoker, Rich Maxwell, Anita McMillan, Stephen McTigue, Cindy Simonds, Laura Wasko.

Apologies: Bittle Porterfield, Amy Louise Reyer, Amanda Spain, Jim Vodnik

Staff: Cristina Siegel, Daniel Harrison, Dawn Luther, Fran Szechenyi.

Minutes: Minutes were presented to the board and approved.

New Educator: Daniel Harrison was introduced to the board as CVC new educator.

New Board Member: David Breeden was introduced as the appointed Salem representative to the board. McMillan was instrumental in securing the Salem representative for CVC. Breeden is the Street Superintendent for Salem.

Board Member Retiring: Laura Wasko is retiring from the board. Siegel praised Wasko for her 21 years of service to the board and was presented a gift of appreciation.

Committee Reports

ADM Committee: Harrison took pictures of the ADM Memorial displaying them to the board. Wasko reported that there were 100 people at the memorial. There were two news articles were covered by WDBJ Channel 7 and RVTV Channel 3. The organization of the ADM Memorial was a collaboration of the City of Roanoke, Arts Commission, Area Neighborhood Groups and Clean Valley Council.

Siegel reported that Mrs. Carol Dolhouse donated $2000 dollars to the ADM Memorial Fund.

Educators Report:

Dawn Luther: Luther reported the following:

- Calendars are filling up fast with program requests
- Educators did 23 programs for 584 students in the last weeks
- Both educators have done programs for Community Youth, Lutheran Church and Lucy Addison Ecology Club
- Harrison did a program for the Boys Scouts Group and is working with the Blue Ridge Council to secure more programs with the Scouts.
- Luther and Harrison are updating and revising the programs.

- Luther asked the board to help come up with a name for the Aluminum, Paper, and Plastic program.

Executive Director's Report:

Financials: No financial reports were given to the board. Siegel reported that we did not have the July and August financials available for the meeting due to issues regarding the closing and transfer of our money market fund to the ADM account and how those funds should be reported.

ADM Checking: Wasko asked for a breakdown of the ADM checking account. Siegel reported that currently there is $10,805.74 in the account which does not include the $2000 that we just received for the scholarship. There was $3000 paid to the two artists with the balance due of an additional $3000. This leaves a balance of $5,663.74. Wasko mention that there will be an additional expense for the signage which will be approximately $2000.

Fall Eco day: This event took place on Saturday, September 15th. There were five sites: Roanoke, Roanoke Natural Foods Co-op; Salem Yokohama Tire; New River Valley, Wade's Supermarket (Radford and Christiansburg); Harrisonburg, Friendly City Food Co-op. They collected 28,000 pounds of electronics. CVC participated at the Roanoke Natural Foods Co-op which collected most of the electronics. Siegel thanked Lester, Breakell, Reyer, and the educators for helping with this collection.

Toms of Maine Campaign: Center in the Square and Clean Valley Council are partners in Tom's of Maine's 50 States for Good grant program and have a chance of winning up to $50,000 in funding to expand Clean Valley Day in 2013. This is a voting process. Siegel passed out instructions on how to cast a vote.

Fall Waterways Cleanup: Coke is our new sponsor. They will provide some of the products for the picnic and barrels to be used as rain barrels. Thanks to Lester for cultivating this sponsorship. Orvis contributed $1500. Tee shirts have been ordered. The Fall Waterways posters were available for the board to distribute.

Earth Summit: Theme for the Summit is "Plastics" which will be held at the Jefferson Center on November 15th. Schools have been notified.

Committee Meetings: Executive Committee and the Education Committee will need to meet soon.

Drug Take Back: Collections in Salem, Roanoke County and City on September 29th.

Information:

Next Board Meetings: October 23, 2012
December 11, 2012 (joint November/December Holiday meeting)
January 22, 2013 (Board Retreat Follow-up)

Meeting was adjourned at 12:45PM
Respectfully submitted by Fran Szechenyi

Clean Valley Council, Inc.
Board of Directors Meeting
Roanoke Valley Resource Authority
Minutes from October 23, 2012

The meeting of the Board of Directors of Clean Valley Council was held on October 23, 2012 at Roanoke Valley Resource Authority, 1020 Hollins Road, NE, Roanoke, Virginia.

Cary Lester, Clean Valley Council Board President, called the meeting to order at 12:12PM. Szechenyi called the roll and attendance was recorded.

Present: James Breakell, Ed Hacker, Cary Lester, Carol Linkenhoker, Anita McMillan, Stephen McTigue, Amy Louise Reyer, Cindy Simonds, Jim Vodnik.

Apologies: Bob Bengtson, David Breeden, Adam Cohen, Daniel Harrison, David Knicely, Dawn Luther, Rich Maxwell, Bittle Porterfield, Amanda Spain.

Staff: Cristina Siegel, Fran Szechenyi.

Guest: Tim Boitnott, CPA from Boitnott & Schaben, LLC

Minutes: Minutes were presented to the board and approved.

Reports:
CVC Audit: Siegel introduced Tim Boitnott, who completed our audit for the fiscal year 2011-2012. Boitnott gave a brief overview to the board.
Results of the audit:

- Internal controls look good, having CPA Jane Schipper helps
- Paperwork was fantastic & easy to find
- No discrepancies
- CVC is well organized
- Having a strong board is vital

Boitnott made two suggestions: (1) have two signatures on all checks; (2) provide check registers with monthly finances board.

Educators Report:
Siegel reported that the educators were in Botetourt County conducting programs for Bay Day (watershed programs for 180 middle school students). This project is a joint effort between Western Virginia Land Trust, Western Virginia Water Authority (WVWA) and CVC.
Educators' Report reported by Siegel:

- Harrison and Luther working well together and have been revising the programs
- In the last 6 weeks, they have completed 127 programs for 3200 students. Programs were presented in Botetourt County, Roanoke County, Roanoke City and Salem. Program request are still coming
- The educators are attending the Virginia Naturally Environmental Educators Conference at Hungry Mother State Park on October 25th & 26th.

Executive Director's Report:
Financials: Financials were presented and discussed. Vodnik requested a column "Budget to Date" in the monthly Income Statement.
CVC received the DEQ litter tax grant funds in the amount of $60,279 which is $18,000 more than budgeted. This is the most that CVC has ever received.

Fall Waterways Cleanup: 46 teams with 791 volunteers collected 24 tons of waste and 100+tires. All cleanup data has not been received but to date 59% of the teams have submitted reports. The picnic and tee shirts were a great success. Special thanks to the board for their participation. WDBJ Channel 7 provided media support.

CVC Office Computers: Special thanks to Amy Louise Reyer and her husband for the donation of two computers. Siegel has purchased Windows 7 from Tech Soup.

Nominee for Small Business of the Year (Roanoke Regional chamber of Commerce): CVC was nominated for small business of the year. We were not selected for the top award but it was nice to be recognized by the community.

City Works Xpo: Siegel helped with their recycling and composting endeavors.

Green Living and Energy Expo: Scheduled for November 2nd and 3rd at the Roanoke Civic Center. CVC will have two booths, one for general display and another for educational activities. Siegel is on the education committee for the Expo. Siegel and the educators will be conducting two educational programs (Wind Turbines and Greening Your School) on Friday from 10AM to 2PM. Board volunteers will be needed to help man the booth on Friday.

Earth Summit: Scheduled for November 15th at the Jefferson Center. Summit topic will be "Plastics!". Siegel reported the following:

- Working on securing speakers
- Registrations coming in
- CVC providing support to help reduce the bus fees
- 2011 Summit approximately 90 students attended

Fundraising Campaign:

- Letter will be going out after Thanksgiving
- Including a newsletter with the campaign letter

New Business:

Committees: The board discussed the following:

- Committees to keep, delete or combine
- Siegel suggested 5 committees instead of the current 9
- Suggestion to use strategic plan to review and realign committees
- Discussion was tabled, to be continued at the January, 2013 meeting

Information:

Next Board Meetings: December 11, 2012 (joint November/December Holiday meeting)
January 22, 2013 (Board Retreat Follow-up)

Meeting was adjourned at 1:15PM
Respectfully submitted by Fran Szechenyi

Clean Valley Council, Inc.
Board of Directors Meeting
Roanoke Valley Resource Authority
Minutes from January 22, 2013

The meeting of the Board of Directors of Clean Valley Council was held on January 22, 2013 at Roanoke Valley Resource Authority, 1020 Hollins Road, NE, Roanoke, Virginia.

Cary Lester, Clean Valley Council Board President, called the meeting to order at 12:11PM. Daniel Harrison called the roll and attendance was recorded.

Present: James Breakell, Ed Hacker, Cary Lester, Carol Linkenhoker, Anita McMillan, Stephen McTigue, Amy Louise Reyer, Cindy Simonds, Jim Vodnik, Bob Bengston, Adam Cohen, David Knicely, Amanda Spain, Rich Maxwell.

Apologies: David Breeden, Bittle Porterfield.

Staff: Cristina Siegel, Dawn Luther, Daniel Harrison.

Guest: Kathy Stockburger, Consultant

Minutes: October 2012 minutes were presented to the board and approved by consensus.

Announcements:

- Cristina welcomed new Roanoke County Board Appointed citizen CVC Board member Theresa Passeretti.
- Cristina expressed regret at Fran Szechenyi's resignation, thanked her (in absentia) for her service and wished her well in her new position.

Educators Report:
The educators continue to be active and Daniel stated that they are gradually updating programs.

Executive Director's Report:

- All special events for CY 2013 have been scheduled and planning is ongoing.
-

Financials: November financials were formally presented and no questions were raised. P&L showed still substantially in the black YTD.

New Business:
Strategic Plan Development:

- Cristina introduced management consultant Kathy Stockburger who facilitated the discussion
- She distilled the visioning from last summer's Board retreat into six **strategic directions.**
- The Board was divided into 5 groups and asked to develop a measureable goal for each.
- Ms Stockburger will write up the results of this exercise and return the document to CVC.
- Future refinement of strategic plan to be determined.

Other: Board needs to appoint new Finance Committee Chair

Next Board Meetings: Tuesday, 2/26/13
Meeting was adjourned at 1:35PM

Clean Valley Council, Inc.
Board of Directors Meeting
Roanoke Valley Resource Authority
Minutes from February 26, 2013

The meeting of the board of Directors of Clean Valley Council was held on February 26, 2013 at Roanoke Valley Resource Authority, 1020 Hollins Road, NE, Roanoke, Virginia.

Cary Lester, Clean Valley Council board President, called the meeting to order at 12:15 PM. Dawn Luther called roll and attendance was recorded.

Present: James Breakell, Adam Cohen, Bob Bengtson, Cary Lester, Carol Linkenhoker, Rich Maxwell, Anita McMillan, Jim Vodnik, StephenMcTigue, Theresa Passeretti

Apologies: Bittle Porterfield, Amy Lousie Reyer, Cindy Simmonds, Amanda Spain, Ed Hacker

Staff: Cristina Siegel, Dawn Luther, Daniel Harrison

Minutes: January 2013 minutes were presented to the board and approved by consensus.

Educator's Report:
Educators are updating programs and corresponding SOLs. There are several new programs and games.

Dawn, Cristina and Daniel have become Project WET certified and Daniel also received certification in Project WET Aquatic and Wonders of Wetlands.

CVC had booth at Tons Of Fun at Tanglewood Mall on February 2nd- Aquatic Health

Cristina judged the Roanoke Valley Governor's School Project Forum on February 2nd. Daniel and Dawn judged the Roanoke City Science Fair held at William Fleming on February 21st.

Daniel discussed partnering with Roanoke Valley Crossfit to aid them in becoming a "green" business and offering community programs on environmentally friendly practices such as use of rain barrels, rain gardens, composting and organic gardening. Adam Cohen suggested we contact Diana at Cool Cities about coming joint presenters.

James Breakell is making contact with GE to highlight their green parking lot in our Business Spotlight.

CVC looking to expand clean up program with online map and other activities. Possible Clean Up Challenge with Pete Eshelman. Want to provide areas needing litter pick up year round not just at events.

Executive Director Report:

Financial reports are still one month behind. ADM account has been incorporated into the regular CVC account.

It was discussed why the revenue was low. Stormwater and community recycling monies are not paid on monthly basis. Gerdau bought Cycle Systems and has sent one check.

Adam asked if we had no grants pending should we rewrite the budget goal. Not possible. Cristina is keeping an eye on expenses and program costs.

We are looking at job description for executive assistant and possibly combining that position with grant writer.

Valley Beautiful disbanding- CVC to take over distribution of grants for Arbor Day

Up Coming Events: volunteers needed

April 13th Clean Valley Day (10 teams registered already!)

April 20th Earth Day Grandin Village- CVC has 2 booths this year

April 20th Blue Ridge Marathon - CVC providing recycling and composting

May 3rd & Sept. 6th First Fridays- fund raising activity

Unfinished Business:

Strategic Plan Development

Kathy Stockburger sent review and analysis, CVC Board will take 20-30 minutes of next 4 meetings to discuss each category.

Jim, Theresa and Stephen agreed to take info discussed and write up new plan

Cristina asked board members to read over strategic goals prior to board meetings. Will send reminders one week ahead.

Next Board Meetings:

March 26th, April 23rd, May 28th, June 25th

Adjournment 1:05 PM

CVC Board Meeting- April 23, 2013
Minutes

Board President Cary Lester called the meeting to order at 12:05

Present: Cary, Stephen, Adam, Theresa, Jim, Cindy, David K., Anita, Carol, Cristina, Dawn, Daniel

Apologies: Bob, Ed, Rich, Bittle, Amanda, Amy Louise, James, David B.

February Minutes: could not be approved- missing in action, will be sent when found

Educator's Report

Year-to-date we have provided 520 programs and seen 12,617 students. This is on par with usual numbers. Percentage of students reached at each locality was discussed.

Cristina has a vision to provide week long summer projects for high school students.

Graph of program breakdown discussed. Storm Drain stenciling and upcoming stream schools mentioned. Additional programs include North Cross Watershed Day May 2, VISA program May 3rd

Daniel is helping Roanoke Valley Crossfit get speakers for setting up garden.

Dawn and Daniel discussed program revisions and displayed the "Green Game"

Director's Report

Financials: Grant income is down, but so are expenses. Still more money coming in, but some grants are arriving later than usual. CVC saved money on salary and communications that were budgeted but not used.

Awards: CVC was nominated by Cary for the Cox Communications Award. Our Clean Valley Day plan was submitted for the $10,000 award.

New Hire: The open Executive Assistant position was discussed. Cristina has been working on plan to change position duties and call something like "Environmental Program Coordinator". Position would entail expanding our pool of volunteers, grant writing and marketing, updating website, and social media. Possible use of Goodwill volunteers (SCEP program) to help with basic administrative duties. Jane our contract accountant will take over the financial activities previously done by the executive assistant.

Anita will send over a job description that might help Cristina draft a job description. Cristina will send board members a copy to distribute to possible candidates.

Roanoke River Conference: Planning beginning for conference to be held October 11, 2013 at Ferrum college. Co-sponsored by Upper Roanoke River Roundtable, Ferrum College and CVC.

Clean Valley Day: 75 teams of 1500 volunteers participated. 36 tons of trash from the city and Salem were reported. No count from Roanoke County yet. Over 500 tires recovered. All localities represented.

Stormwater: Cristina was asked to participate in a panel discussion about stormwater issues at Leadership Roanoke Valley. A rain garden was installed at Vic Thomas Park by Leadership Roanoke Valley.

CVC Press: CVC getting good press coverage lately. WDBJ7 did several spots for Clean Valley Day highlighting CVC and one of our volunteer clean up teams. WSLS put together a segment on stormwater in which Cristina is interviewed and Cristina had an op-ed article in the Roanoke Times, Trash Cans are not Far Away.

Orvis Earth Day Celebration was held at their service center. Cristina manned a CVC booth. They will be highlighted in our business spotlight.

Blue Ridge Marathon: CVC was the green coordinator/ waste reduction team. Kroger agreed to take BRM compostables which eventually go to PME. The city took trash and recyclables. Overall event waste reduced by 80% through composting and recycling program

First Fridays: CVC assigned May 3rd and September 6th. We can expect to earn $2000-3000 for both evenings. Volunteers needed.

Old Business:

Strategic Plan: We will continue work on strategic plan at May meeting. Board members requested written communications (agendas, reports, minutes) be sent one week prior to meetings.

Announcements:

- May 11th -*Citizens for Clean and Green Committee* is sponsoring a tour of the Wastewater Treatment Plant.
- April 26th - Vinton Arbor Day
- May 11th - Gallop for the Greenways, a 5k to raise money to complete the greenway.
- April 27th Drug Take Back Day

Meeting adjourned at 1:15
Minutes submitted by: Dawn Luther
Next meeting May 28th

Clean Valley Council, Inc
Board of Directors Meeting
May 28th, 2013, Tuesday at Noon
Roanoke Valley Resource Authority

The meeting was called to order at 12:10pm.

Roll call was taken. *Present*: Cary L., Stephen M., Jim V., Cristina S., Bob B., James B., Adam C., Ed H., David K., Rich M., Anita M., Bittle P., Amy Louise R., Amanda S., Dawn L. *Regrets*: David B., Carol L., Theresa P., Cindy S. *Guests*: Emily Blanton (new intern), Rob Blackley (new Kroger rep)

Minutes for the February and April meetings were approved.

Amanda Spain announced this will be her last meeting. We welcomed Rob Blackley, from Kroger headquarters, who will replace her.

Reports

Educators- Dawn

- Summer programs: Have 3 stream school activities this summer for first time (partnering with Camp Roanoke and County Parks and Recreation); Stream school at Smith Mountain Lake for Roanoke County schools-VISA; programs for scout groups
- Educators will work on updating programs to be in line with new SOL requirements
- Will update educator section of website

Executive Director - Cristina

- Introduced Emily Blanton, our new summer intern who is a 2nd year Environmental Science major at UVA, minoring in Global Sustainability. Emily will start out by helping set up Citizen Science Monitoring program.
- Working on Environmental Program Coordinator position release- application deadline June 17th, New position captures volunteer management and reporting duties previously done by Executive Assistant while Jane Schipper, our accountant, is taking over book keeping duties. Other office management will be handled by volunteer position.
- Finance and Budget:
    - April financials discussed
    - Finance committee needs to meet in June for budget process. Meeting set for June 20th, 3:00pm at CVC office. David Knicely agreed to chair, other members- Rich Maxwell, Adam Cohen, Jim Vodnik
    - Have not worked on ADM scholarship yet ($8600 in bank)
    - Resource Authority will renew contract with CVC
    - Gerdau will continue support. James Breakell spoke with Gene Suslowicz and was told support will continue. Need to set face-to-face meeting with Cristina too.
    - Contributions down this year, compared to pre-ADM memorial amounts.
- All events are wrapped up, now focusing on reports and paperwork
- Anita announced Roanoke River Watershed Open House – June 11th 3-8 p.m. at Roanoke Civic Center

Unfinished Business

Strategic plan

- Strategic plan reviewed - started with a strategic plan meeting in June 2012, followed up by a session with non-profit advisor Kathy Stockberger in January
- Hope to continue working on the plan monthly and have done by fall.
- In January came up with draft strategic directions
- 5 strategies for success were defined at the previous strategic plan work session

    - The CVC will provide a bridge among corporate, non-profit, and governmental sectors
    - The CVC will be financially sustainable through multiple revenue sources
    - CVC's organizational capacity, including staffing, will support best management practices, program excellence and a professional stance on environmental issues.
    - CVC will deliver high quality and relevant educational programs on current environmental issues to all ages
    - CVC will be known and respected widely in the community for its programs, organizational performance and unique position.
- Five break out groups established with each group taking one target goal and developing one or more strategies to achieve that goal including target implementation date, accountability, funding needed, funding sources.
- Planning committee (Stephen, Theresa and Jim) will collate material generated to go towards the next phase

New Business

New Hire: Environmental Program Coordinator

Announcements

Finance committee meeting in June – FY 2013-2014 budget
June Board meeting – date change June27th

Adjournment

Clean Valley Council, Inc
Board of Directors Meeting
June 27th, 2013, Thursday at Noon
Roanoke Valley Resource Authority
June Meeting Minutes

Opening

Meeting was called to order at 12:13pm

Attendance: **Present** - Bittle Porterfield, Daniel Harrison, James Breakell, Anita McMillan, Cary Lester, Cristina Siegel, Jim Vodnik, Theresa Passeretti, Stephen McTigue, Bob Bengston, Rich Maxwell, Adam Cohen, Emily Blanton, Cindy Simonds, Dawn Luther: **Absent-** Rob Blackley, David Breeden, Ed Hacker, David Knicely, Carol Linkenhoker, Amy Louise Reyer

Minutes Approval: Minutes for May 2013 were approved (Motion – R. Maxwell, Second – A. McMillan)

Reports

Educators

- Rain barrels workshop to be offered by Blue Ridge SWCD, maybe we can form partnership in future
- CVC has been invited to present at Project Wet trainings
- CVC had a booth at Roanoke River Watershed open house
- Involved in several stream schools this summer, VISA, Roanoke County Parks & Rec
- Continue to develop stormwater resources for businesses: creating postcards with BMP's for car wash's, restaurants and auto shops.

Program Wrap Up

- Overall number of programs slightly lower than last year
- Focus has been on teaching effectiveness through smaller groups, more hands on activities
- Revising and updating programs and SOL requirements
- Possible Ideas for recruiting more program requests:
  Present at teacher orientations in Fall
  Quarterly reminders to teachers to sign up
  Focus on getting into secondary schools and into each school at least once

Executive Director

Director recapped past years events and programs – we are doing more than ever, with about the same funding. In addition to our signature events we also are key players in the following:

E waste event- CVC now a prime organizer of annual program, partners with Goodwill and Roanoke Natural Foods Co-op, started with one, added sites, next year one in Daleville
Bob- foresee a private group coming in and taking over e waste

Blue Ridge Marathon Compost event- 3 tiered waste program, 80% was composted or recycled, hope to become model of waste reduction for other events

Stormwater one of the biggest environmental concerns now - what role does CVC play in this? CVC needs to be prepared to provide info to community

CVC looking at more ways to increase information and outreach to adult community on environmental issues. Already involved with Crossfit Gym, Garden Clubs, churches, possible programs with Library

Unfinished Business

Strategic plan to be discussed at August meeting
Cristina will get info out to committee by August 1st, Planning Committee to meet early August
Committee Members: Theresa, Cary, Stephen, Cristina & Jim

New Business

Environmental Program Coordinator:
Application timeline closed, 20 applicants to consider
Cristina will decide candidate by July 17th, to start August 1st
Will get a volunteer from Goodwill program to help with office work

FY 2013-2014 Budget

- Primary focus on bringing in funding- responsibility of new hire
- Adam requests monthly report of grants identified that CVC is eligible for and/or applied for
- $22,000 more in income than expenses this year, expenses about the same as prior year,
- Rich gave an overview of the budget prepared by the finance committee. Motion was made to pass the budget. ***Budget for FY 2013-2014 was approved***
- James proposed that board member need to personally donate, it doesn't have to be much, just something. Contributions from 100% board member are needed for many grants and funding opportunities.

Announcements

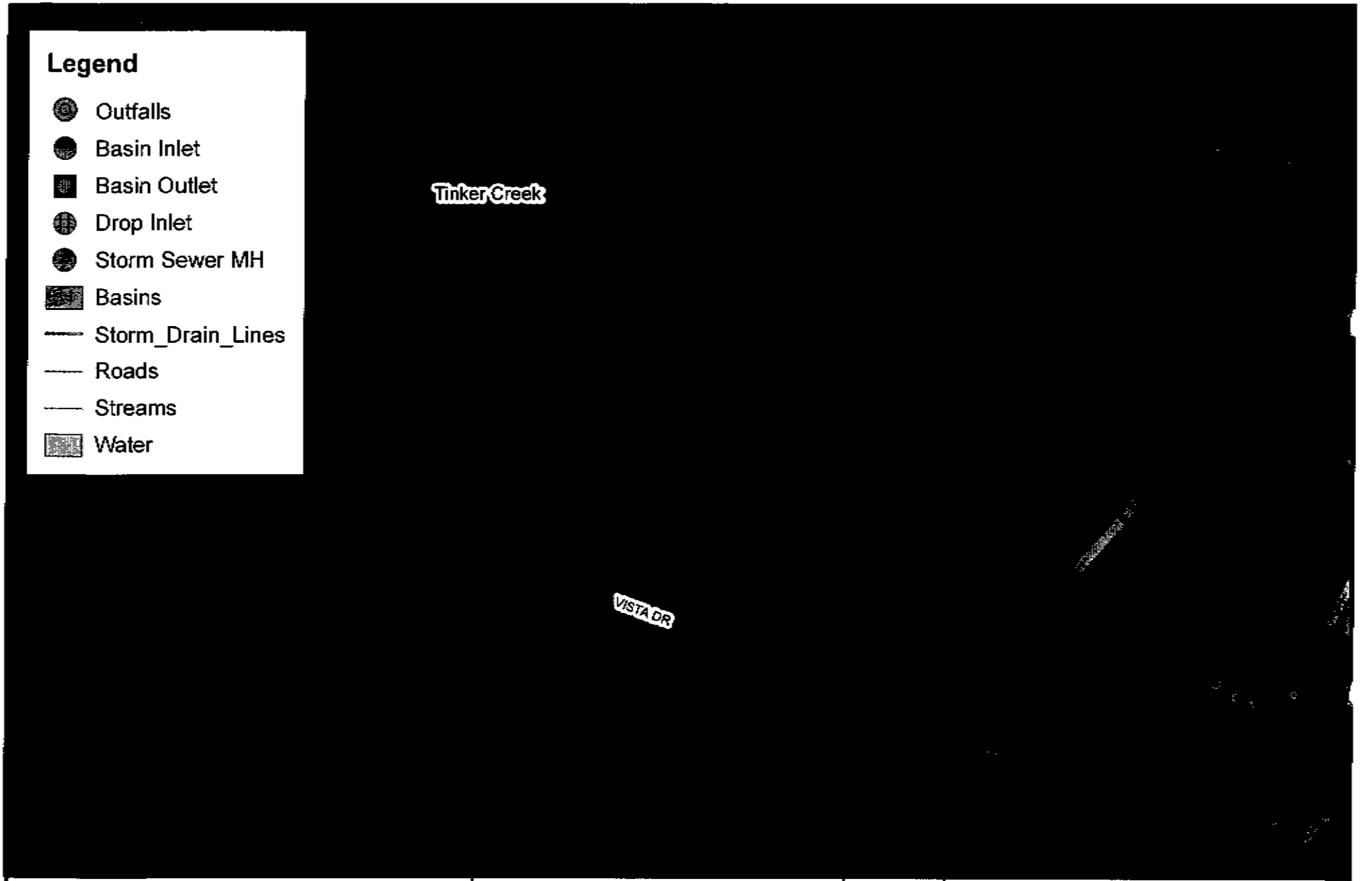
No meeting in July

Adjournment 1:20pm

Supporting Documentation

for

BMP 3:2



Vista Corporate Park Stormwater Infrastructure

0 50 100 200
Feet

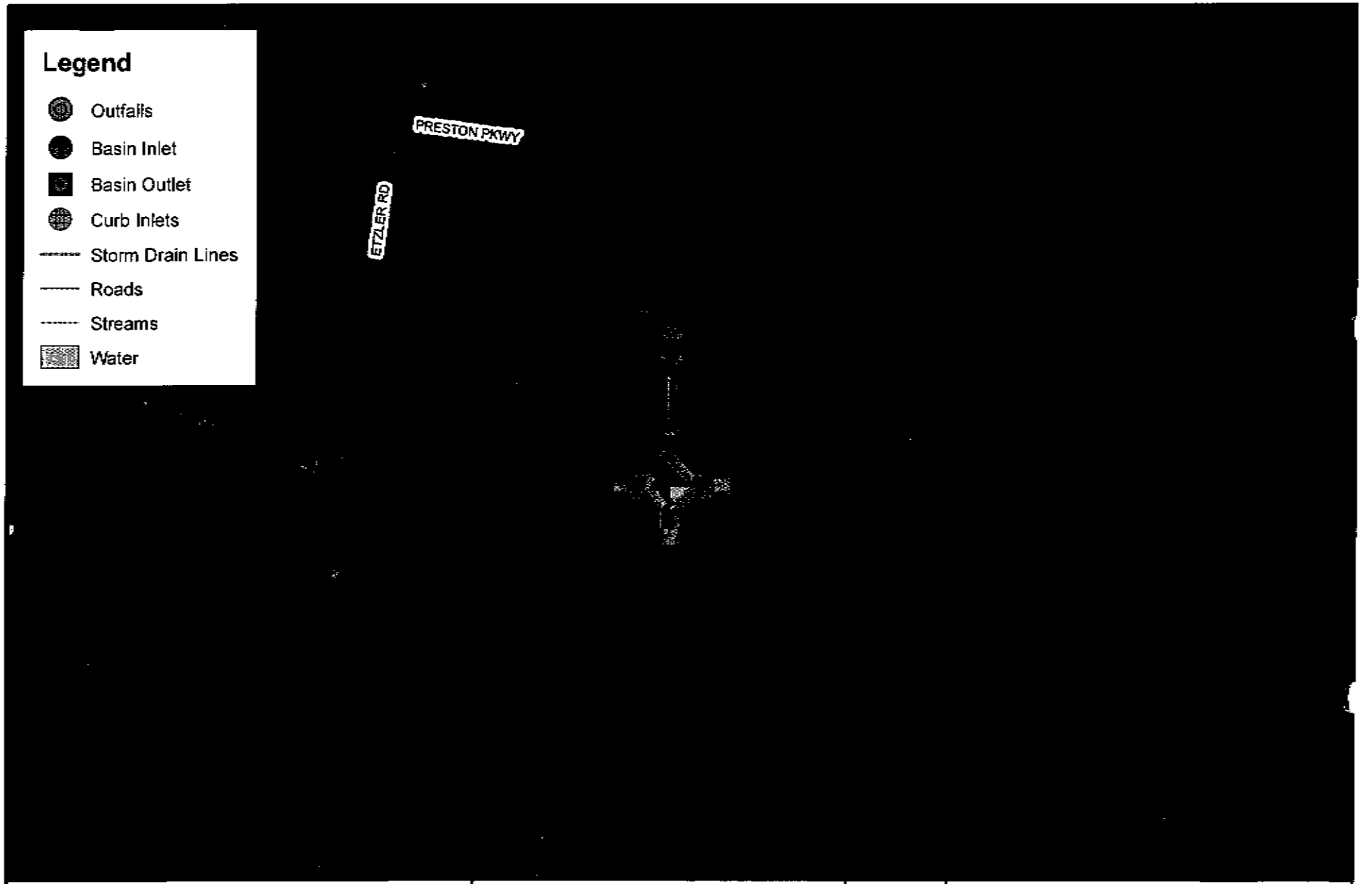
Sheet No.
1 of 1

Utility Mapping Project

Drawn By: CJL

Checked by:

Date: 09/28/2012



Botetourt Sports Complex Stormwater Infrastructure

0 125 250 500
Feet

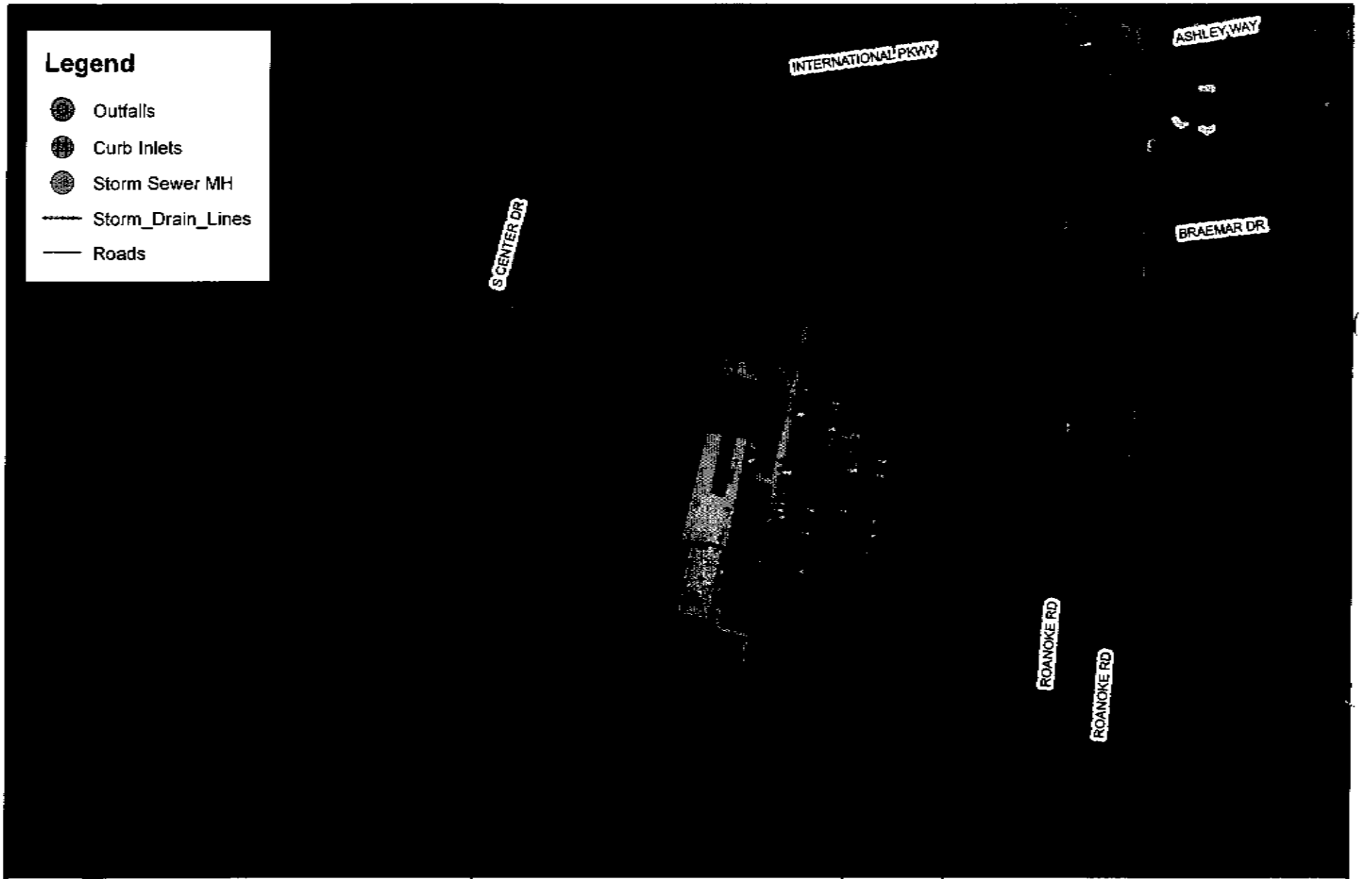
Sheet No.
1 of 1

Utility Mapping Project

Drawn By: CJL

Checked by:

Date: 09/28/2012



Greenfield Education and Training Center Stormwater Infrastructure

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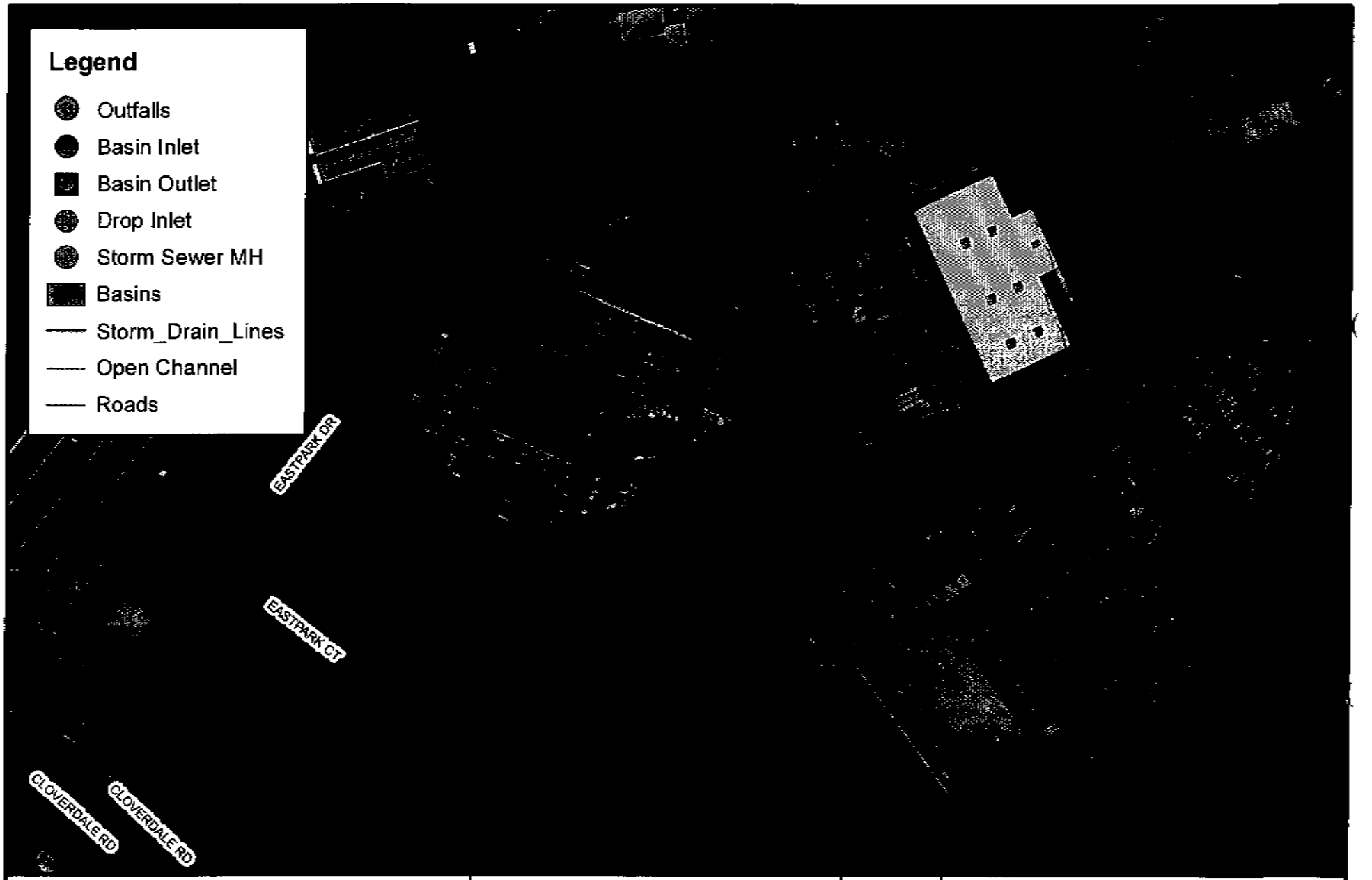
Feet

	Utility Mapping Project
	Drawn By: CJL
Sheet No.	Checked by:
1 of 1	Date: 09/28/2012



East Park Commerce Center Stormwater Infrastructure

0 100 200 400
Feet

	Utility Mapping Project
	Drawn By: CJL
Sheet No.	Checked by:
1 of 1	Date: 09/28/2012

Supporting Documentation

for

BMP 3:3

Chapter 10

EROSION AND SEDIMENT CONTROL*

* **Editors Note:** Res. No. 96-12-09, adopted Dec. 17, 1996, amended Ch. 10, §§ 10-1--10-12, 10-31--10-38 to read as herein set out. Prior to such amendment, former Ch. 10, §§ 10-1--10-12, 10-31--10-38, pertained to the same subject matter and was derived from Res. No. 90-06-17, adopted June 18, 1990.

Cross References: Building regulations, Ch. 6; drainage and flood control, Ch. 8.5; solid waste, Ch. 20; subdivisions, Ch. 21.

State Law References: Erosion and Sediment Control Law, Code of Virginia, §§ 10.1-560--10.1-571.

Article I. In General

Sec. 10-1. Definitions.
Sec. 10-2. Relationship of chapter to chapters 21 and 25.
Sec. 10-3. Exemptions from chapter.
Sec. 10-4. Enforcement of chapter generally.
Sec. 10-5. Enforcement of chapter by legal action.
Sec. 10-6. Appeals from decisions under chapter.
Sec. 10-7. Violations of chapter--Penalties.
Sec. 10-8. Same--Injunctive relief.
Sec. 10-9. Effect of compliance with chapter in proceedings for damages.
Sec. 10-10. Land-disturbing permit.
Sec. 10-11. Bond or other security for land-disturbing activities.
Sec. 10-12. Control measures to be undertaken at owner's expense.
Secs. 10-13--10-30. Reserved.

Article II. Control Plan for Land-Disturbing Activities

Sec. 10-31. Submission and approval required.
Sec. 10-31.1. Agreement in lieu of a plan.
Sec. 10-32. Local erosion and sediment control program.
Sec. 10-33. Contents generally.
Sec. 10-34. Guidelines, criteria, etc., for preparation.
Sec. 10-34.1. Stormwater management infrastructure maintenance agreement.
Sec. 10-35. Review fee.
Sec. 10-36. Approval or disapproval of plan.
Sec. 10-37. Monitoring, reports and inspection.
Sec. 10-38. Changing approved plan.

ARTICLE I.

IN GENERAL

Sec. 10-1. Definitions.

For the purpose of this chapter, the following terms and words shall have the following meanings unless the context requires a different meaning:

Adequate channel (natural): a naturally existing channel, with defined bed and banks, which can convey storm water runoff from a two-year storm without overtopping its banks, surcharging the system, or creating erosive velocities.

Adequate channel (man-made): an existing man-made channel that can convey storm water from ten-year storm without overtopping its banks or surcharging the system and, within which, storm water from a two-year storm does not cause erosive velocities.

Adequate channel (piped): an existing pipe or storm sewer system that can contain and convey storm water runoff from a ten-year storm within the pipe or system.

Agreement in lieu of a plan: A contract between the plan approving authority and the owner which specifies conservation measures which must be implemented in the construction of a single-family residence, or at the discretion of the program administrator, any other minor grading, filling, wasting, or transporting activities, not to exceed one (1) acre of total disturbed area, and which will not lead to a permanent increase in rate, velocity or volume of storm water runoff.

Applicant: Any person submitting an erosion and sediment control plan for approval or requesting the issuance of a permit, when required, authorizing land-disturbing activities to commence.

Board: The Virginia Soil and Water Conservation Board.

Certified inspector: An employee or agent of a program authority who (i) holds a certificate of competence from the board in the area of project inspection or (ii) is enrolled in the board's training program for project inspection and successfully completes such program within one (1) year after enrollment.

Certified plan reviewer: An employee or agent of a program authority who (i) holds a certificate of competence from the board in the area of plan review, (ii) is enrolled in the board's training program for plan review and successfully completes such program within one (1) year after enrollment, or (iii) is licensed as a professional engineer, architect, certified landscape architect or land surveyor pursuant to Article I (section 54.1-400 et seq.) of Chapter 4 of Title 54.1 of the Code of Virginia.

Certified program administrator or *program administrator:* An employee or agent of a program authority who (i) holds a certificate of competence from the board in the area of program administration or (ii) is enrolled in the board's training program for program administration and successfully completes such program within one (1) year after enrollment.

Clearing: Any activity which removes the vegetative ground cover including, but not limited to, root mat removal or top soil removal.

Conservation plan, erosion and sediment control plan, or *plan:* A document containing material for the conservation of soil and water resources of a unit or group of units of land. It may include appropriate maps, an appropriate soil and water plan inventory, and management information with needed interpretations and a record of decisions contributing to conservation treatment. The plan shall contain all major conservation decisions to assure that the entire unit or units of land will be so treated to achieve the conservation objectives.

County: The County of Botetourt, Virginia.

Department: The department of conservation and recreation.

Development: A tract of land developed or to be developed as a single unit under single ownership or unified control which is to be used for any business or industrial purpose, or which is to contain three (3) or more residential dwelling units.

Director: The director of the department.

District or *soil and water conservation district:* The Mountain Castles Soil and Water Conservation District.

Erosion impact area: An area of land not associated with current land-disturbing activity but subject to persistent soil erosion resulting in the delivery of sediment onto neighboring properties or into state waters. This definition shall not apply to any lot or parcel of land of ten thousand (10,000) square feet or less used for residential purposes or to shorelines where the erosion results from wave action or other coastal processes.

Excavating: Any digging, scooping or other methods of removing earth materials.

Filling: Any depositing or stockpiling of earth materials.

Grading: Any excavating or filling of earth material or any combination thereof, including the land in its excavated or filled conditions.

Land-disturbing activity: Any land change which may result in soil erosion from water or wind and the movement of sediments into state waters or onto lands in the commonwealth, including, but not limited to, clearing, grading, excavating, transporting and filling of land.

Land-disturbing permit: A permit issued by the county for the clearing, filling, excavating, grading, transporting of land or for any combination thereof or for any purpose set forth herein.

Local erosion and sediment control program, local control program or *program:* An outline of the various methods employed by the county to regulate land-disturbing activities and thereby minimize erosion and sedimentation in compliance with the state program and may include such items as local ordinances, policies and guidelines, technical materials, inspection, enforcement, and evaluation.

Owner: The owner or owners of the freehold of the premises or lesser estate therein, a mortgagee or vendee in possession, assignee of rents, receiver, executor, trustee, lessee or other person, firm or corporation in control of a property.

Permittee: The person to whom the permit authorizing land-disturbing activities is issued or the person who certifies that the approved erosion and sediment control plan will be followed.

Person: Any individual, partnership, firm, association, joint venture, public or private institution, utility, cooperative, county, city, town or other subdivision of the commonwealth, any interstate body, or any other legal entity.

Plan-approving authority: The County Engineer for Botetourt County, or his designee, who is responsible for determining the adequacy of a conservation plan submitted for land-disturbing activity on a unit or units of lands and for approving plans.

Program authority: The county, which has adopted a soil erosion and sediment control program approved by the board.

Responsible Land Disturber: An individual from the project or development team, who will be in charge of and responsible for carrying out land-disturbing activity covered by an approved plan or agreement in lieu of a plan, who (i) holds a Responsible Land Disturber certificate of competence, (ii) holds a current certificate of competence from the Board in the areas of Combined Administration, Program Administration, Inspection or Plan Review, (iii) holds a current Contractor certificate of competence for erosion and sediment control, or (iv) is licensed in Virginia as a professional engineer, architect, certified landscape architect or land surveyor pursuant to Article 1 (§ 54.1-400 et seq.) of Chapter 4 of Title 54.1. of the Code of Virginia, 1950, as amended.

Single-family residence: A noncommercial dwelling that is occupied exclusively by one (1) family.

State erosion and sediment control program or *state program:* The program administered by the Virginia Soil and Water Conservation Board pursuant to the Code of Virginia, including regulations designed to minimize erosion and sedimentation.

State waters: All waters on the surface and under the ground wholly or partially within or bordering the commonwealth or within its jurisdictions.

Storm water (or stormwater) management plan: A document containing design and material specifications for the construction, operation and maintenance of a storm water management system, and any other facilities that are necessary to provide adequate drainage and disposal of surface and storm waters from or across all streets and adjoining properties, while ensuring protection of downstream properties.

Storm water (or stormwater) management system: culverts, ditches, channels, catch basins, cross drains, curbs and gutters, inlet structures, ponds, and any other facilities that are necessary to provide adequate drainage and disposal of surface and storm waters from or across all streets and adjoining properties.

Transporting: Any moving of earth materials from one (1) place to another place other than such movement incidental to grading, when such movement results in destroying the vegetative ground cover either by tracking or the buildup of earth materials to the extent that erosion and sedimentation will result from the soil or earth materials over which such transporting occurs.

(Res. No. 96-12-09, 12-17-96; Res. No. 03-06-08, 6-17-03; Res. No. 05-07-19, 7-26-05)

Cross References: Definitions and rules of construction generally, § 1-2.

Sec. 10-2. Relationship of chapter to chapters 21 and 25.

It is the intent of the board of supervisors that this chapter be an adjunct to both chapters 21 and 25 of this Code wherein such apply to the development and subdivision of land within the county or such apply to development on previously subdivided land within the county.
(Res. No. 96-12-09, 12-17-96)

Sec. 10-3. Exemptions from chapter.

In no instance shall the provisions of this chapter be construed to apply to the following:

(1) Minor land-disturbing activities as home gardens and individual home landscaping, repairs and maintenance work.

(2) Individual service connections.

(3) Installation, maintenance, or repairs of any underground public utility lines when such activity occurs on an existing hard-surfaced road, street or sidewalk, provided such land-disturbing activity is confined to the area of the road, street or sidewalk which is hard surfaced.

(4) Septic tank lines or drainage fields, unless included in an overall plan for land-disturbing activity relating to construction of the building to be served by the septic tank system.

(5) Surface or deep mining.

(6) Exploration or drilling for oil and gas, including the well site, roads, feeder lines, and off-site disposal areas.

(7) Tilling, planting or harvesting of agricultural, horticultural or forest crops, or livestock feedlot operations; including engineering operations as follows: construction of terraces, terrace outlets, lister furrowing, contour cultivation, contour furrowing, land drainage, and land irrigation; however, this exception shall not apply to harvesting of forest crops unless the area on which harvesting occurs is reforested artificially or naturally in accordance with the provisions of chapter 11 (§ 10.1-1100 et seq.) of Title 10.1 of the Code of Virginia or is converted to bona fide agricultural or improved pasture use as described in subsection (b) of § 10.1-1163.

(8) Repair or rebuilding of the tracks, rights-of-way, bridges, communication facilities and other related structures and facilities of a railroad company.

(9) Agricultural engineering operations including, but not limited to, the construction of terraces, terrace outlets, check dams, desilting basins, dikes, ponds not required to comply with Chapter 8.5 of this Code or with the Dam Safety Act, Article 2 (§ 10.1-604 et seq.) of Chapter 6 of Title 10.1 of the Code of Virginia, ditches, strip cropping, lister furrowing, contour cultivating, contour furrowing, land drainage, and land irrigation.

(10) Disturbed land areas of less than ten thousand (10,000) square feet in size; however, the program administrator may reduce this exception to a smaller area or qualify conditions under which this exception shall apply. This exemption shall not apply to any person who diverts or disturbs the

channel of a stream, drainage channel or where there is probability of sediment being deposited into state waters or upon adjoining property owners. Such activity shall fall within the bounds of this chapter and all chapters and sections shall apply and a land-disturbing permit shall be required.

(11) Installation of fence and sign posts or telephone and electric poles and other kinds of posts or poles.

(12) Emergency work to protect life, limb or property and emergency repairs; provided, that if the land-disturbing activity would have required an approved erosion and sediment control plan if the activity were not an emergency, then the land area disturbed shall be shaped and stabilized in accordance with the requirements of the plan-approving authority.

(Res. No. 96-12-09, 12-17-96; Res. No. 05-07-19, 7-26-05)

State Law References: Activities referenced above excepted from definition of "land-disturbing activity, Code of Virginia, § 10.1-560.

Sec. 10-4. Enforcement of chapter generally.

(a) The program authority shall periodically inspect the land-disturbing activity as required under the state program to ensure compliance with the approved plan and to determine whether the measures required in the plan are effective in controlling erosion and sedimentation. The owner, permittee, or person responsible for carrying out the plan shall be given notice of an inspection.

If the program administrator determines that there is a failure to comply with the plan, notice shall be served upon the permittee or person responsible for carrying out the plan by registered or certified mail to the address specified in the permit application or in the plan certification, or by delivery at the site of the land-disturbing activities to the agent or employee supervising such activities. Where the program administrator serves notice, a copy of the notice shall be sent to the issuer of the permit.

The notice shall specify the measures needed to comply with the plan and shall specify the time within which such measures shall be completed. Upon failure to comply within the specified time, the permit may be revoked and the permittee or person responsible for carrying out the plan shall be deemed to be in violation of this chapter and, upon conviction, shall be subject to the penalties provided by this chapter.

(b) Upon determination of a violation of this chapter, the program administrator may, in conjunction with or subsequent to a notice to comply as specified in this chapter, issue an order requiring that all or part of the land-disturbing activities permitted on the site be stopped until the specified corrective measures have been taken.

If land-disturbing activities have commenced without an approved plan, the program administrator may, in conjunction with or subsequent to a notice to comply as specified in this chapter, issue an order requiring that all of the land-disturbing activities be stopped until an approved plan or any required permits are obtained.

Where the alleged noncompliance is causing, or is in imminent danger of causing harmful erosion of lands or sediment deposition in waters within the watersheds of the commonwealth, or where the land-disturbing activities have commenced without an approved plan or any required permits, such an order may be issued without regard to whether the permittee has been issued a notice to comply as specified in this

chapter. Otherwise, such an order may be issued only after the permittee has failed to comply with such a notice to comply.

The order shall be served in the same manner as a notice to comply, and shall remain in effect for a period of seven (7) days from the date of service pending application by the program authority or permit holder for appropriate relief to the Circuit Court of Botetourt County.

If the alleged violator has not obtained an appropriate plan or any required permits within seven (7) days from the date of service of the order, the program administrator may issue an order to the owner requiring that all construction and other work on the site, other than corrective measures, be stopped until an approved plan and any required permits have been obtained. Such an order shall be served upon the owner by registered or certified mail to the address specified in the permit application or the land records of county.

The owner may appeal the issuance of an order to the Circuit Court of Botetourt County.

Any person violating or failing, neglecting or refusing to obey an order issued by the program administrator may be compelled in a proceeding instituted in the Circuit Court of Botetourt County to obey same and to comply therewith by injunction, mandamus or other appropriate remedy. Upon completion and approval of corrective action or the violator obtaining an approved plan or any required permits, the order shall immediately be lifted.

Nothing in this section shall prevent the program administrator from taking any other action authorized by this chapter.
(Res. No. 96-12-09, 12-17-96)

Sec. 10-5. Enforcement of chapter by legal action.

The commonwealth's attorney for the county shall, upon request of the program authority, take legal action to enforce the provisions of this chapter.
(Res. No. 96-12-09, 12-17-96)
State Law References: Similar provisions, Code of Virginia, § 10.1-569(F).

Sec. 10-6. Appeals from decisions under this chapter.

(a) Any applicant under the provision of this chapter who is aggrieved by any action of the county or its agent in disapproving plans submitted pursuant to this chapter shall have the right to apply for and receive a review of such action by the building code board of appeals provided an appeal is filed within thirty (30) days from the date of the action. Any applicant who seeks an appeal hearing before the building code board of appeals shall be heard at the next regularly scheduled meeting of the building code board of appeals, provided that the building code board of appeals and other involved parties have at least thirty (30) days' prior notice. In reviewing the county or its agent's actions, the building code board of appeals shall consider evidence and options presented by the aggrieved applicant and the county. After considering the evidence and opinions, the building code board of appeals may affirm, reverse or modify the action. The building code board of appeals' decision shall be final, subject only to review by the Circuit Court of Botetourt County.

(b) Final decisions of the building code board of appeals under this chapter shall be subject to review by the Botetourt County Circuit Court, provided an appeal is filed within thirty (30) days from the date of any

written decision adversely affecting the rights, duties or privileges of the person engaging in or proposing to engage in land-disturbing activities.
(Res. No. 9-12-09, 12-17-96)

State Law References: Provisions similar to subsection (b) above, Code of Virginia, § 10.1-568.

Sec. 10-7. Violations of chapter—Penalties.

(a) Violators of this chapter shall be guilty of a Class I misdemeanor.

(b) In lieu of any criminal sanctions which may be levied under subsection (a) of this section, the following civil penalties may be assessed for each violation of the respective offenses:

(1) Commencement of land disturbing activity without an approved plan as provided in section 10-31(a) of this chapter shall be one thousand dollars ($1,000.00) per violation per day.

(2) Vegetative measures--Failure to comply with items 1, 2 or 3 of the minimum standards established by the Commonwealth of Virginia shall be one hundred dollars ($100.00) per violation per day.

(3) Structural measures--Failure to comply with items 2, 4, 9, 10, 11, 15 and 17 of the minimum standards shall be one hundred dollars ($100.00) per violation per day.

(4) Watercourse measures--Failure to comply with items 12, 13 and 15 of the minimum standards shall be one hundred dollars ($100.00) per violation per day.

(5) Underground utility measures--Failure to comply with either 16(a) or item 16(c) of the minimum standards shall be one hundred dollars ($100.00) per violation per day.

(6) Failure to obey a stop work order shall be one hundred dollars ($100.00) per violation per day.

(7) Failure to stop work when a permit is revoked shall be one thousand dollars ($1,000.00) per violation per day.

(8) Failure to obey any other minimum standard established by the Commonwealth of Virginia shall be one hundred dollars ($100.00) per violation per day.

Each day during which the violation is found to have existed shall constitute a separate offense. However, in no event shall a series of specified violations arising from the same operative set of facts result in civil penalties which exceed a total of three thousand dollars ($3,000.00), except that a series of violations arising from the commencement of land-disturbing activities without an approved plan for any site shall not result in civil penalties which exceed a total of ten thousand dollars ($10,000.00). The assessment of civil penalties according to this schedule shall preclude the prosecution of such violation as a misdemeanor under subsection (a) of this section.

In any trial for a civil violation, it shall be the burden of the county to show the liability of the violator by a preponderance of the evidence. Any civil penalties assessed by a court shall be paid into the treasury of the county, except that where the violator is the county itself, or its agent, the

court shall direct the penalty to be paid into the state treasury.

(c) In addition to any criminal or civil penalties provided under this chapter, any person who violates any provision of this chapter may be liable to the county in a civil action for damages.

(d) Without limiting the remedies which may be obtained in this section, any person violating or failing, neglecting or refusing to obey any injunction, mandamus or other remedy obtained pursuant to this chapter shall be subject, in the discretion of the court, to a civil penalty not to exceed two thousand dollars ($2,000.00) for each violation. A civil action for such violation or failure may be brought by the county.

Any civil penalties assessed by a court under this subsection shall be paid into the treasury of the county except that where the violator is the county itself, or its agent, the court shall direct the penalty to be paid into the state treasury.

(e) With the consent of any person who has violated or failed, neglected or refused to obey any regulation or condition of a permit or any provision of this chapter, the county may provide for the payment of civil charges for violations in specific sums, not to exceed the appropriate limits specified in subsection (b) or (d) of this section. Such civil charges shall be in lieu of any appropriate civil penalty which could be imposed under subsection (b) or (d) of this section.
(Res. No. 96-12-09, 12-17-96; Res. No. 05-07-19, 7-26-05)
State Law References: Similar provisions, Code of Virginia, § 10.1-569.

Sec. 10-8. Same--Injunctive relief.

The program administrator, the program authority, the board or the owner of property which has sustained damage or which is in imminent danger of being damaged, may apply to the Circuit Court of Botetourt County to enjoin a violation or a threatened violation of this chapter, without the necessity of showing that an adequate remedy at law does not exist; however, an owner of property shall not apply for injunctive relief unless (i) he has notified in writing the person who has violated this chapter, and the program authority, that a violation of this chapter has caused, or creates a probability of causing damage to his property, and (ii) neither the person who has caused the violation nor the program authority has taken corrective action within fifteen (15) days to eliminate the conditions which have caused, or which create the probability of causing, damage to the owner's property.
(Res. No. 96-12-09, 12-17-96)
State Law References: Similar provisions, Code of Virginia, § 10.1-569.

Sec. 10-9. Effect of compliance with chapter in proceedings for damages.

Compliance with the provisions of this chapter shall be prima facie evidence in any legal or equitable proceedings for damages caused by erosion, siltation or sedimentation, that all requirements of law have been met and the complaining party must show negligence in order to recover any damages.
(Res. No. 96-12-09, 12-17-96)
State Law References: Similar provisions, Code of Virginia, § 10.5-569.

Sec. 10-10. Land-disturbing permit.

No person may engage in any land-disturbing activity until he has acquired a land-disturbing permit,

unless the proposed land-disturbing activity is specifically exempt from the provisions of this chapter, and he has paid the fees and posted the required bond.

These requirements are in addition to all other provisions relating to the issuance of permits and are not intended to otherwise affect the requirements for such permits.
(Res. No. 96-12-09, 12-17-96; Res. No. 05-07-19, 7-26-05)

Cross References: Land-disturbing permit required prior to submission of subdivision plat, § 21-60.

Sec. 10-11. Bond or other security for land-disturbing activities.

All applicants for permits shall provide to the county a reasonable performance bond with surety, cash escrow, an irrevocable letter of credit, any combination thereof, or such other legal arrangement acceptable to the program administrator, to ensure that measures could be taken by the county at the applicant's expense should the applicant fail, after proper notice, within the time specified, to initiate or maintain appropriate conservation measures required of him as a result of his land-disturbing activity. The amount of the bond or other security for performance shall not exceed the total of the estimated cost to initiate and maintain appropriate conservation action based on unit price for new public or private sector construction in the locality and a reasonable allowance for estimated administrative costs and inflation which shall not exceed twenty-five (25) percent of the conservation action. Should it be necessary for the county to take such conservation action, the county may collect from the applicant any reasonable costs in excess of the amount of the surety held.

Within sixty (60) days of adequate stabilization of any land-disturbing activity in any project or section thereof, as determined by the program administrator, such bond, cash escrow, irrevocable letter of credit or other legal obligation, or the unexpended or unobligated portion thereof, shall be either refunded to the applicant or terminated based on the percentage of stabilization accomplished in the project or section thereof.
(Res. No. 96-12-09, 12-17-96)

State Law References: Similar provisions, Code of Virginia, § 10.1-565.

Sec. 10-12. Control measures to be undertaken at owner's expense.

All control measures required by a plan approved pursuant to this chapter shall be undertaken at the expense of the owner or his agent.
(Res. No. 96-12-09, 12-17-96)

Secs. 10-13—10-30. Reserved.

ARTICLE II.

CONTROL PLAN FOR LAND-DISTURBING ACTIVITIES

Sec. 10-31. Submission and approval of plan required.

(a) Except as provided herein, no person may engage in any land-disturbing activity until he has submitted to the program administrator for the county an erosion and sediment control plan for the land-disturbing activity and such plan has been approved by the plan-approving authority. Where land-disturbing activities involve lands under the jurisdiction of more than one (1) local control program, an erosion and sediment control plan, at the option of the applicant, may be submitted to the board for review and

approval rather than to each jurisdiction concerned.

(b) In order to prevent further erosion, the county may require approval of a conservation plan for any land identified in the local program as an erosion impact area.

(c) When land-disturbing activity will be required of a contractor performing construction work pursuant to a construction contract, the preparation, submission, and approval of an erosion and sediment control plan shall be the responsibility of the owner.

(d) Electric, natural gas and telephone utility companies, interstate and intrastate natural gas pipeline companies, and railroad companies shall file general erosion and sediment control specifications annually with the Virginia Soil and Water Conservation Board for review and written comments. The specifications shall apply to:

1. Construction, installation or maintenance of electric, natural gas and telephone utility lines, and pipelines, and;

2. Construction of the tracks, rights-of-way, bridges, communication facilities and other related structures and facilities of the railroad company.

Individual approval of separate projects within subdivisions of 1. and 2. of this subsection is not necessary when Virginia Soil and Water Conservation Board approved specifications are followed, however, projects included in subdivisions 1. and 2. must comply with board approved specifications. Projects not included in subdivisions 1. and 2. shall comply with the requirements of the Botetourt County Erosion and Sediment Control Program.

(e) State agency projects are exempt from the provisions of this ordinance except as provided for in the Code of Virginia, Section 10.1-564.

(Res. No. 96-12-09, 12-17-96; Res. No. 03-06-08, 6-17-03; Res. No. 05-07-19, 7-26-05)

State Law References: Similar provisions, Code of Virginia, § 10.1-563.

Sec. 10-31.1. Agreement in lieu of a plan.

An agreement in lieu of a plan may be substituted for an erosion and sediment control plan, at the discretion of the plan administrator, where:

(a) The land-disturbing activity results from the construction of a single-family residence; or

(b) Minor grading, filling, wasting, or transporting activities, not to exceed one (1) acre of total disturbed area, will not lead to a permanent increase in rate, velocity or volume of storm water runoff.

(Res. No. 05-07-19, 7-26-05)

Sec. 10-32. Local erosion and sediment control program.

(a) Pursuant to section 10.1-562 of the Code of Virginia, the county hereby adopts the regulations, references, guidelines, standards and specifications promulgated by the Virginia Soil and Water Conservation

Board (and any local handbook or publication of the board) for the effective control of soil erosion and sediment deposition to prevent the unreasonable degradation of properties, stream channels, waters and other natural resources. Such regulations, references, guidelines, standards and specifications for erosion and sediment control are included in, but not limited to, the Virginia Erosion and Sediment Control Regulations and the Virginia Erosion and Sediment Control Handbook, as amended from time to time.

(b) Before adopting or revising regulations, the county shall give due notice and conduct a public hearing on the proposed or revised regulations, except that a public hearing shall not be required when the county is amending its program to conform to revisions in the state program. However, a public hearing shall be held if the county proposes or revises regulations that are more stringent than the state program.

(c) Pursuant to section 10.1-561.1 of the Code of Virginia, an erosion control plan shall not be approved until it is reviewed by a certified plan reviewer. Inspections of land-disturbing activities shall be conducted by a certified inspector.

(d) The program and regulations provided for in this chapter shall be made available for public inspection at the office of the program administrator.
(Res. No. 96-12-09, 12-17-96)
State Law References: Similar provisions, Code of Virginia, § 10.1-563(F).

Sec. 10-33. Contents generally.

The erosion and sediment control plan shall detail those methods and techniques to be utilized in the control of erosion and sedimentation.
(Res. No. 96-12-09, 12-17-96)

Sec. 10-34. Guidelines, criteria, etc., for preparation.

(a) The standards contained within the Virginia Erosion and Sediment Control Regulations, the latest edition of the Virginia Erosion and Sediment Control Handbook, and any local handbook or publication, are to be used by the applicant when making a submittal under the provisions of this chapter and in the preparation of an erosion and sediment control plan, except that the standards contained within the Virginia Stormwater Management Handbook are to be used by the applicant in the preparation of a storm water management plan and in the design of permanent storm water management systems. The plan-approving authority, in considering the adequacy of a submitted plan, shall be guided by the same standards, regulations and guidelines. When the standards vary between the publications, the state regulations shall take precedence.

(b) Permit application.

(1) Applications for a permit to do work other than single-family residential shall adhere to the checklist as provided in the Virginia Erosion and Sediment Control Handbook. (VESC VII-26 appendix 2)

(2) Applications for a permit to do work on single-family residential dwellings within two hundred (200) linear feet of any natural watercourse shall provide the following upon submittal:

On the application:

- Tax map and parcel number
- Owner and/or applicant:
    - Name
    - Address
    - Telephone number/mobile number
    - Responsible land disturber (RLD) certification:
    - Name
    - Address
    - Telephone number/mobile number
    - Certification number
    - Date of expiration
    - Erosion and sediment control measures/shoreline protection
    - Total acreage disturbed
    - Project description
    - Directions with site markings
    - Signatures

On the plan/sketch:

- Limits and distances of clearing and grading
- Drain field location
- Driveway location
- Home location
- Existing drainage areas/swales/channels
- Location of silt fence and construction entrance

- Areas that will be re-stabilized with seed and mulch.

(c) Storm water management.

(1) A storm water management plan for a land development project shall be developed so that the post-development peak runoff rate from the site for the two (2) year design storm and the ten-year design storm, considered individually, shall not exceed their respective pre-development rates. These design storms shall be defined as either a twenty-four-hour storm, when using the rainfall distribution recommended by the U.S. Soil Conservation Service methods, or as the storm of critical duration that produces the greatest required storage volume at the site when using design criteria such as the modified rational method. The storm water management plan may include appropriate maps, an appropriate plan inventory, and management information with needed interpretations and a record of decisions contributing to appropriate storm water management. The plan shall contain all major storm water management decisions to assure that the entire unit or units of land will be so treated to achieve the storm water management objectives.

(2) For purposes of computing storm water runoff, all lands in the site shall be assumed to be in good condition (if the lands are pastures, lawns or parks) with good cover (if the lands are woods) or with conservation treatment (if the lands are cultivated), regardless of conditions existing at the time of computation.

(3) All emergency spillways shall be designed to pass the post-development one-hundred-year frequency storm, while maintaining one (1) foot of freeboard below the top of embankment.

(4) The design of a storm water management system must:

a. account for both off-site and on-site storm water runoff;

b. honor natural drainage divides; and

c. convey storm water runoff discharge into an adequate channel.

(d) Proposed storm water management systems which are designed to convey concentrated off-site storm water runoff across the project shall be located within a dedicated drainage easement. Existing or natural channels, which are to be incorporated into the storm water management system, shall likewise be protected by a dedicated drainage easement, having a centerline coinciding with the existing centerline.

(e) Proposed control structures, including but not limited to the principal spillway, outlet structures and outlet pipes, for a stormwater management basin shall be located within a fee simple lot dedicated to the owner/home association. The remaining property of the basin shall be located within a dedicated drainage/stormwater management easement.

(f) Botetourt County requires as-built drawings, one (1) digital and one (1) reproducible copy, for all structures within a stormwater management system including but not limited to: detention basin, outlet

structures, inlet structures, drainage channels or other means of stormwater conveyance. The stormwater management system shall be certified, upon completion of construction, by a licensed professional as to conformance with the approved plans.

(g) When storm water management systems are located on other than publicly owned property, the applicant shall provide methods, procedures, and guarantees that the facilities will be perpetually maintained so as to function as designed and not result in nuisances or health hazards.
(Res. No. 96-12-09, 12-17-96; Res. No. 05-07-19, 7-26-05)

Sec. 10-34.1. Stormwater management infrastructure maintenance agreement.

Prior to the issuance of the land-disturbing permit, the applicant (owner/home association) shall enter into an agreement with Botetourt County to ensure the necessary long-term maintenance of the stormwater management system. The "Stormwater Management Infrastructure Maintenance Agreement" shall be recorded in Botetourt County Circuit Court Clerk's Office and shall constitute a covenant running with the land.
(Res. No. 05-07-19, 7-26-05)

Sec. 10-35. Review fee.

The board of supervisors may, by ordinance or resolution, establish and from time to time amend a schedule of fees for the administrative review of erosion and sediment control plans including stormwater management required by this ordinance and no such review, for which a fee has been so established, shall be issued or amended until such fee has been paid to the treasurer of the county. The board of supervisors may also, by ordinance or resolution, establish and on occasion amend a schedule of fees for the required inspections for the control measures associated with the approved plans and the land-disturbing permit for the inspection of any stormwater management systems, or for any other erosion and sediment control measures required by law or deemed by the board to be important.
(Res. No. 96-12-09, 12-17-96; Res. No. 02-07-11, 7-16-02; Res. No. 05-07-19, 7-26-05)
State Law References: Authority for above fee, Code of Virginia, § 10.1-562(E).

Sec. 10-36. Approval or disapproval of plan.

(a) The plan shall be acted upon by the plan-approving authority within forty-five (45) days from receipt thereof by either approving said plan in writing or by disapproving said plan in writing and giving specific reasons for its disapproval.

(b) The plan-approving authority shall, within forty-five (45) days, approve any such plan, if it is determined that the plan meets the requirements of the local control program, and if the person responsible for carrying out the plan certifies that he or she will properly perform the erosion and sediment control measures included in the plan and will conform to the provisions of this chapter. In addition, as a prerequisite to engaging in the land-disturbing activities shown on the approved plan, the person responsible for carrying out the plan shall provide the name of a responsible land disturber to the program authority, who will be in charge of and responsible for carrying out the land-disturbing activity, in accordance with the approved plan. Failure to provide the name of an individual holding a certificate of competence prior to engaging in land-disturbing activities may result in revocation of the approval of the plan and the person responsible for carrying out the plan shall be subject to the penalties provided in this chapter.

However, the certificate of competence is not required for an agreement in lieu of a plan for construction of a single family residence. If a violation occurs during the land-disturbing activity, then the person responsible for carrying out the agreement in lieu of a plan shall correct the violation and provide the name of an individual holding a certificate of competence, as provided for in the Code of Virginia, Section 10.1-561. Failure to provide the name of an individual holding a certificate of competence shall be a violation of this chapter.

(c) When the plan is determined to be inadequate, the plan-approving authority shall specify such modifications, terms and conditions that will permit approval of the plan.

(d) If no action is taken within forty-five (45) days, the plan shall be deemed approved and the person authorized to obtain a land-disturbing permit, after submitting the completed permit application, any required performance bond, the name of a certified responsible land disturber, and a storm water management system maintenance agreement, if required.
(Res. No. 96-12-09, 12-17-96; Res. No. 03-06-08, 6-17-03; Res. No. 05-07-19, 7-26-05)
State Law References: Similar provisions, Code of Virginia, § 10.1-563.

Sec. 10-37. Monitoring, reports and inspections.

The county may require the person responsible for carrying out the plan to monitor and maintain the land-disturbing activity. The person responsible for carrying out the plan will maintain records of these inspections and maintenance to ensure compliance with the approved plan and to determine whether the measures required in the plan are effective in controlling erosion and sedimentation.
(Res. No. 96-12-09, 12-17-96)
State Law References: Similar provisions, Code of Virginia, § 10.1-566.

Sec. 10-38. Changing approved plan.

An approved plan may be changed by the plan-approving authority when:

(1) The inspection reveals that the plan is inadequate to satisfy applicable regulations; or

(2) The person responsible for carrying out the plan finds that because of changed circumstances or for other reasons the approved plan cannot be effectively carried out, and proposed amendments to the plan, consistent with the requirements of this chapter, are agreed to by the plan-approving authority and the person responsible for carrying out the plan.

(Res. No. 96-12-09, 12-17-96)
State Law References: Similar provisions, Code of Virginia, § 10.1-563(c).

Supporting Documentation

for

BMP 4:1

Supporting Documentation

for

BMP 4:2

INSPECTION REPORT

Sheet _____ of _____

Project Name: _____ File No. _____

Inspection Date: _____ Time: _____ Inspected By: _____

STAGE OF CONSTRUCTION

_____ Pre-Construction Conference
_____ Clearing and Grubbing
_____ Rough Grading
_____ Building Construction
_____ Finish Grading
_____ Final Stabilization

INSPECTION CHECKLIST

Yes	No	NA		
☐	☐	☐	*MS-1	Have all denuded areas requiring temporary or permanent stabilization been stabilized? Seeded? yes/no Mulched? yes/no Graveled? yes/no
☐	☐	☐	MS-2	Are soil stockpiles adequately stabilized with seeding and/or sediment trapping measures?
☐	☐	☐	MS-3	Does permanent vegetation provide adequate stabilization?
☐	☐	☐	MS-4	Have sediment trapping facilities been constructed as a first step in LDA?
☐	☐	☐	MS-5	For perimeter sediment trapping measures, are earthen structures stabilized?
☐	☐	☐	MS-6	Are sediment basins installed where needed?
☐	☐	☐	MS-7	Are finished cut and fill slopes adequately stabilized?
☐	☐	☐	MS-8&9	Are on-site channels and outlets adequately stabilized?
☐	☐	☐	MS-10	Do all operational storm sewer inlets have adequate inlet protection?
☐	☐	☐	MS-11	Are stormwater conveyance channels adequately stabilized with channel lining and/or outlet protection?
☐	☐	☐	MS-12	Is in-stream construction conducted using measures to minimize channel damage?
☐	☐	☐	MS-13	Are temporary stream crossings of non-erodible material installed where applicable?
☐	☐	☐	MS-15	Is necessary restabilization of in-stream construction complete?
☐	☐	☐	MS-16	Are utility trenches stabilized properly?
☐	☐	☐	MS-17	Are soil and mud kept off public roadways at intersections with site access roads?
☐	☐	☐	MS-18	Have all temporary control structures that are no longer needed been removed? Have all control structure repairs and sediment removal been performed?
☐	☐	☐	MS-19	Are properties and waterways downstream from development adequately protected from erosion and sediment deposition due to increases in peak stormwater runoff?

*** Refers to the minimum standards of the Virginia Erosion and Sediment Control Regulations (VR 625-02-06).**

Comments: _____

Verbal/Written notification given to: _____

Report by: _____ Date: _____

May 7, 2009

Grand Hospitality, LLC
Attn: Mr. Jay Patel
3139 Lee Highway South
Troutville, VA 24175

RE: Lee Highway Commerce Park

Inspection Report-Notice to Comply

Dear Mr. Patel,

I have enclosed the original inspection report for the above-mentioned property. Please respond by taking any corrective measures noted as well as any other steps that may be required to satisfy both Virginia Erosion and Sediment Control Regulations (4VAC5030) and Virginia Storm Water Management Regulations (4VAC3-20). All of the required actions have been explained to the site contractor(Thomas Builders) previously. **Corrective action(s) should be completed by May 15, 2009 to avoid further enforcement and/or a Stop Work Order. Should appropriate Corrective Actions not be taken in a timely manner, the Erosion & Sediment Control Standby Letter of Credit may be used.**

Violators of Virginia Erosion and Sediment Control Regulations are subject to fines if problems are not resolved. Please consult the approved Erosion & Sediment Control Plan for the appropriate site measures and requirements. Should you have any questions regarding this matter, please feel free to contact me at the address or telephone number above.

Sincerely,

Shawn D. Crist
Erosion & Sediment Control Administrator
Botetourt County, Virginia

CC. File; Thomas Builders-via Fax, Ron/Kevin/David G.
K:\DailyUse\E&S\Projects\LDP - Active\Lee Highway Commercial Center\2009-5-7 Notice to Comply (Lee Highway Commerce Park).doc

Erosion & Sediment Control Administrator of Botetourt County, Va.
30 W. Back St., #4, Fincastle, VA 24090 (540) 473-8316

STOP WORK ORDER

LAND-DISTURBING ACTIVITIES

TO: Harvest Ministries/[illegible] DATE: 7/6/09

ADDRESS: Rt 460

PROJECT NAME: Harvest Ministries Church

PROJECT LOCATION: Rt 460

COMMENTS:

① Install Appropriate Dewatering Structure per Approved Plans

② Install Riprap and associated grades near the Box Culvert Extension

The above referenced site is in violation of the Botetourt County Erosion and Sediment Control Ordinance. A "Notify to Comply" was issued on May [illegible]. Corrective measures and recommendations specified for compliance have not been performed.

This order requires that all land-disturbing activities on the above referenced site be stopped until the specified corrective measures have been taken. If work is not begun to correct this violation by 7/9/09, further legal action will be taken. Upon completion of the corrective action, this order shall be immediately lifted.

[signature] 7/6/09

Erosion & Sediment Control Adminstrator/Inspector Date

Supporting Documentation

for

BMP 5:2

BOTETOURT COUNTY, VIRGINIA

BOARD OF SUPERVISORS
1 West Main Street -- Box 1, Fincastle, Virginia 24090

STORM WATER DETENTION/RETENTION STRUCTURE MAINTENANCE AGREEMENT

THIS AGREEMENT entered into this _____ day of _____, 20_____, by and between _____, hereinafter referred to as the Developers, and the BOARD OF SUPERVISORS OF BOTETOURT COUNTY, hereinafter referred to as the County.

W I T N E S S E T H

WHEREAS, The Developer is in the process of developing a certain parcel of tract of land in Botetourt County described as follows:_____

_____

WHEREAS, This tract of land, Tax Map:_____, Parcel(s):_____is the site of a stormwater structure(s),

NOW, THEREFORE, Be it covenanted and agreed by and between the parties hereto that maintenance of a certain storm water structure(s) which is shown on plans dated _____, prepared by_____, and approved by _____, as shown on plat attached hereto which made part of this agreement, shall be provided for as follows:

THAT, The responsibilities and obligation for maintenance thereof be, and is declared to be a perpetual covenant running with the land described hereinabove and it is the responsibility of the Developer to inform any future owner of the perpetual covenant. It is further covenanted by the Developer that he/she will not at any time dedicate the storm water structure(s) to the public, to public use, or to Botetourt County unless specifically authorized to do so by the County nor will it subdivide the hereinabove described property without the Deed of Conveyance reciting that the proportionate share of the above described covenant of maintenance runs with each subdivided part of the original tract of land. The Developer accepts liability responsibility for all aspects of said structure(s) and will provide an appropriate construction bond to ensure that the storm water structure(s) are properly constructed.

The parties hereto agree that maintenance is deemed to include, but not limited to, the following marked tasks: ☐ keeping grass and weeds in and on basin(s) cut according to County ordinances; ☐ keeping emergency spillways clear and functional with an unobstructed outlet from these spillways leading to a natural watercourse; ☐ keeping natural or man-made debris removed from this structure(s) as needed along with other sediment and foreign matter; ☐ to eliminate sedimentation from occurring in the structure(s); and ☐ that the bottom of the pond(s) will be scarified to a depth of one (1) foot every two (2) calendar years after the accumulated sediment has been removed from the bottom of the pond(s).

BOTETOURT COUNTY, VIRGINIA

FURTHER, The parties hereto agree that the determination of when maintenance is required on the structure(s) referred to herein shall be made by the Botetourt County E & S Control Administrator. If such work as required by the E & S Control Administrator is not completed within a reasonable period of time, not to exceed fifteen (15) days from written notice by certified mail being given to the owner of the property that such maintenance is necessary, then the owner shall be found to be in non-compliance with this agreement and subject to legal action by the County Attorney's office.

In those situations where the condition of the structures are determined by the County to represent danger or peril, immediate corrective action shall be undertaken by the owner. It is expressly understood by the parties hereto that the County of Botetourt is in NO WAY responsible for any maintenance of the storm water structure(s), nor is the County responsible for any damage to property and/or persons which occur as a result of the construction or usage of this storm water structure(s) or which occur from the County causing any of the required maintenance to be completed.

IN WITNESS OF ALL which the parties hereto have caused this agreement to be executed on their behalf.

Legal Names and Addresses:

By: _____ as _____
Duly Authorized Officer — Title

on behalf of: _____
Principal

_____
State of Incorporation

_____
Type of Organization

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ IRS ID#: _____

State of _____;

County/City of _____, to wit:

BOTETOURT COUNTY, VIRGINIA

The foregoing instrument was acknowledged before me this _____day of _____, 20 ____, by

_____, Duly authorized officer, as

_____, Title.

My Commission expires:

_____ _____

Notary Public

ACCEPTED:

BOARD OF SUPERVISORS OF BOTETOURT COUNTY, VIRGINIA

_____, County Administrator

State of _____;

County/City of _____, to wit:

The foregoing instrument was acknowledged before me this _____day of

_____, 20 _____, by Gerald A. Burgess, Duly authorized officer, as County Administrator.

My Commission expires:

_____ _____

Notary Public

Supporting Documentation

for

BMP 6:1

MATERIAL SAFETY DATA SHEET

Jones Chemicals, Inc. Sunny Sol® 150

SECTION I - IDENTIFICATION

Chemsolv, Inc.
1140 Industry Ave. SE
Roanoke, VA 24013
540-427-4000
Chemical Emergency:
Chemtrec: 800-424-9300

TRADE NAME: Sunny Sol® 150
CHEMICAL NAME: Sodium Hypochlorite
FORMULA: NaOCl
DOT SHIPPING NAME: Hypochlorite Solution
DOT HAZARD CLASS: 8
UN/NA NUMBER: UN 1791
DOT LABEL: Corrosive
DOT PLACARD: Corrosive
PACKING GROUP: III
REPORTABLE QUANTITY: Sodium Hypochlorite: 100 Pounds/45.4 Kilograms
CAS NUMBER: 7681-52-9
NFPA DESIGNATION: The NFPA has not rated sodium hypochlorite.

SECTION II - HAZARDOUS INGREDIENTS

MATERIAL	% BY WEIGHT	CAS NO.	OSHA PEL	ACGIH TLV
Sodium Hypochlorite	12.5-15.6	7681-52-9	Not Applicable	Not Applicable
Sodium Hydroxide	0.1-2.0	1310-73-2	2mg/m^3 ceiling	STEL/CEIL(c) 2mg/m^3 ceiling
Inert Ingredients	Balance	Not Applicable	Not Applicable	Not Applicable

CARCINOGENICITY STATUS: NTP - No, IARC - No, OSHA - No.

SECTION III - PHYSICAL DATA

APPEARANCE: Yellow-green liquid
BOILING POINT: 219°F (104°C) for 12.5% NaOCl by wt.
FREEZING POINT: - 11°F (- 24°C) for 12.5% NaOCl by wt.
ODOR: Chlorine
pH: 12.5 - 13.5 s.u. @ 25°C
VISCOSITY (Cs): 2.15 @ 23°C for 12.5% NaOCl by wt.
% VOLATILE BY VOLUME: Variable water plus products of decomposition
SOLUBILITY IN WATER: Complete
SPECIFIC GRAVITY (Water=1): 1.218 @ 20°C for 13.79 % NaOCl by wt.
VAPOR DENSITY (AIR=1): Not available
VAPOR PRESSURE (mm Hg): Variable water plus products of decomposition.

SECTION IV - FIRE AND EXPLOSION DATA

FLASH POINT (Test method): Not applicable
AUTO IGNITION TEMPERATURE: Not applicable
FLAMMABLE LIMITS IN AIR (Volume %): Not applicable
EXTINGUISHING MEDIA: Flood with water or carbon dioxide (CO_2)
SPECIAL FIRE FIGHTING PROCEDURES: Use National Institute of Occupational Safety & Health (NIOSH) approved respirator with acid type canister or use self-contained breathing apparatus.
Unusual fire and explosion hazards: material is a strong oxidizer. Contact with combustibles may initiate or promote combustion. Acid and heat accelerate decomposition. Decomposition products may include chlorine.

SECTION V - HEALTH HAZARD INFORMATION

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
No medical conditions are known to be aggravated by exposure.

ROUTES OF EXPOSURE

- **INHALATION:** Fumes from spills can cause severe irritation and chemical burns to the nose, throat, and lungs. Very little hazard from properly stored solution.
- **SKIN CONTACT:** Severe irritant, reddening of skin, can cause chemical burns to skin.
- **SKIN ABSORPTION:** Same as skin contact.
- **EYE CONTACT:** Severe irritant, corrosive, can severely burn eyes.
- **INGESTION:** Causes irritation of membranes of the mouth, throat, and stomach pain and possible ulceration. LD50 (oral, rat) for 12.5% NaOCl is approximately 5 g/kg body weight.

EFFECTS OF OVEREXPOSURE

ACUTE OVEREXPOSURE (see Routes of Exposure above)
- **SWALLOWING:** See "ingestion" under routes of exposure.
- **SKIN CONTACT:** severe Irritant, reddening of skin, skin damage, chemical burns.
- **INHALATION:** Fumes from spills are very irritating to mucous membranes.
- **EYE CONTACT:** Extreme irritant, corrosive.

CHRONIC OVEREXPOSURE (see Routes of Exposure above)
- **EYE:** Can cause damage.
- **SKIN:** Can cause damage, chemical burns.

EMERGENCY AND FIRST AID PROCEDURES

IF CONTACT WITH EYES OCCURS: flush with water for at least fifteen (15) minutes. Get medical attention. **IF CONTACT WITH SKIN OCCURS:** wash with plenty of soap and water. **INHALATION:** Remove to fresh air. Call a physician if exposure is severe. **IF SWALLOWED:** drink large amounts of water. Do NOT induce vomiting. Call a physician or poison control center immediately.

SECTION VI - REACTIVITY DATA

CONDITIONS CONTRIBUTING TO INSTABILITY
Solutions are fairly stable in concentrations below 10%. Stability decreases with concentration, heat, light, exposure, decrease in pH, and contamination with heavy metals, such as nickel, cobalt, copper, and iron.

INCOMPATIBILITY
Acids, alcohols, amines, ammonia, chlorinated isocyanurates, combustibles, cyanides, detergents, ethers, hydrocarbons, oxidizable materials, reducing agents. Corrosive to most metals.

DECOMPOSITION PRODUCTS
Hypochlorous Acid (HOCl), chlorine, hydrochloric acid. Composition depends upon temperature and decrease in pH. Additional decomposition products, which depend upon pH, temperature and time, are sodium chloride, sodium chlorate and oxygen.

CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION
Will not occur.

SECTION VII - SPILL OR LEAK PROCEDURES

IN THE EVENT OF A TRANSPORTATION EMERGENCY, CALL CHEMTREC: (800) 424-9300

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED
Cleanup personnel must wear proper protective equipment (See Section VIII). Contain in diked area. Neutralize with sodium bisulfite or ferrous salt solutions. Place neutralized material in DOT specification approved container(s). Flush area with large amounts of water. Comply with all Federal, State and Local reporting requirements.

WASTE DISPOSAL
Contact Federal, State, County, and Local environmental regulators for guidance regarding proper disposal.

SECTION VIII - SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS: Local exhaust is recommended.

SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

- **RESPIRATORY:** Use National Institute of Occupational Safety and Health (NIOSH) or Mine Safety and Health Administration (MSHA) approved respirator appropriate for this product when permissible exposure limits are exceeded.
- **EYES:** Use chemical goggles and face shield.
- **GLOVES:** Use chemical resistant rubber, plastic, or neoprene gloves.
- **OTHER:** Use chemical resistant splash apron and boots. Safety shower and eye wash fountain should be located nearby.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING

DANGER: This product is corrosive and may cause severe skin irritation or chemical burns to broken skin. Causes eye damage. Do not get in eyes, on skin or on clothing. Wear goggles and face shield and chemical resistant gloves when handling this product. Wash after handling. Avoid breathing vapors. Vacate poorly ventilated areas as soon as possible. Do not return until odors have dissipated.

PROPER STORAGE AND DISPOSAL REQUIREMENTS

Store this product in a cool, dry area away from direct sunlight and heat to avoid deterioration. In case of spill, flood areas with large quantities of water.

Disposal for domestic use: Do not reuse container. Rinse thoroughly before discarding in trash. Disposal for all other uses: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Do not contaminate water, food, or feed by storage, disposal or cleaning of equipment.

STORE IN AN UPRIGHT POSITION

OTHER PRECAUTIONS

STRONG OXIDIZING AGENT: Mix only with water according to label directions. Mixing this product with gross filth such as feces, urine, etc., or with ammonia, acids, detergents or other chemicals may release hazardous gases irritating to eyes, lungs and mucous membranes.

ADDITIONAL REGULATORY CONCERNS

- **EPA:** May not be used for disinfection or sanitization without prior approval by EPA. Repackagers must obtain EPA registration and establishment numbers.
- **FIFRA:** This product is regulated under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) if used as a disinfectant or sanitizer.
- **TSCA:** Included in the Toxic Substances Control Act (TSCA) Inventory Of Chemical Substances.

MSDS PREPARED BY: Jones Chemicals, Inc.
100 Sunny Sol Blvd.
Caledonia, NY 14423
Phone: 716-538-2314

ISSUE DATE: 12/09/98
SUPERSEDES ISSUE DATED: 12/05/94

The information herein is given in good faith but no warranty, expressed or implied is made.

Material Safety Data Sheet

Issue Date: 10/30/07 Supersedes Date: 12/28/04

Section 1: PRODUCT AND COMPANY IDENTIFICATION
RE-Ox LLC
9179 West Flamingo Road, Suite 110
Las Vegas, NV 89147
Company & Emergency Phone Number: (702) 360-3520

Product Name: ***RE-Ox®***

Section 2: HAZARDS IDENTIFICATION
Appearance/Odor: Clear liquid with slight chlorine odor

This material is considered NOT hazardous to health by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

EYE – Contact of eye tissues with liquid may cause slight irritation
INHALATION – Inhalation of high vapor concentrations may cause shortness of breath, irritation of mucous membranes
INGESTION – Ingestion of this material may cause gastrointestinal irritation.

Potential of low concentrations of chlorine gas if mixed with acids or other low pH solutions.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS #	% by Wt
NaOCl (activated HOCl)	7790-92-3	0.08% - 0.02%

Section 4: FIRST AID MEASURES

Eye Contact:	Flush with water
Skin Contact:	Rinse with water
Inhalation:	Move to fresh air
Ingestion:	Drink water.

Section 5: FIRE FIGHTING MEASURES
Product is non-flammable

Section 6: ACCIDENTAL RELEASE MEASURES
Treat as non-hazardous. Allow to evaporate in place.

Section 7: HANDLING AND STORAGE
Keep out of Sunlight. Keep cool for longest life (refrigerate if possible)

Section 8: EXPOSURE CONTROL / PERSONAL PROTECTION
Treat as non-hazardous. No exposure or engineering controls needed
Eye, face, skin or respiratory protection is NOT required.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES
Color: Colorless
Odor: Slight Chlorine
Odor Threshold: Not Available
Physical State: Liquid
pH: 6.5 – 7.5
Freezing Point: ~ 30° F
Boiling Point: ~ 212° F
Flash Point: Not Applicable
Evaporation Rate: 40g/m2/hr @ 68° F (20° C)
Flammability (solid, gas): Not Flammable
Upper Flammability Limit: Not applicable
Lower Flammability Limit: Not applicable
Vapor Pressure: 17.54 mmHg @ 68° F (20° C)
Vapor Density: 17.3 gm/m3 @ 68° F (20° C)
Specific Gravity: 1.0 @ 68° F (20° C)
Solubility (water): 100%
Partition [illegible] (n-octanol/water): No Data Available
Form [illegible]

Auto-Ignition Temperature: Not Applicable
Percent Volatile, wt. %: 99.9%
Volatile Organic Compound (VOC) content, wt. %: 0%

Section 10: STABILITY AND REACTIVITY
Stability: Stable
Conditions to Avoid and Incompatible Materials: Acids or other low pH solutions.
Hazardous Decomposition Products: Low concentrations of Hydrochloric acid
Possibility of Hazardous Reactions: Reaction with acids or low pH solutions may create low concentrations of chlorine gas.

Section 11: TOXICOLOGY INFORMATION
ACUTE EFECTS

Oral LD_{50}	> 5,000 mg/kg (rats)
Inhalation LC_{50}	> 2.30 mg/L (rats)
Eye Irritation	Non-irritating (rabbits)
Skin Irritation	Non-irritating (rabbits)
Sensitization	No sensitizing reaction (guinea pigs)

CHRONIC EFFECTS
Carcinogenicity: Found to be non-carcinogenic in accordance with OSHA, NTP, and IARC standards.
Mutagenicity, Reproductive Effects, Developmental Effects: No data

Section 12: ECOLOGICAL INFORMATION
Ecotoxicity: No data available
Persistence/ Degradability, Bioaccumulation/ Accumulation: No data
Mobility in Environment: Free flowing liquid, similar to water.

Section 13: DISPOSAL CONSIDERATIONS
Allow to evaporate in place. Dispose of in accordance with existing Federal, State and Local environmental regulations.

Section 14: TRANSPORTATION INFORMATION
US DOT: Title 49 Section 172, this product is NON – LISTED.
It is not considered hazardous to health
ICAO, IMDG, TDG: See US DOT

Section 15: REGULATORY INFORMATION
EPA Reg. No. 74321-2. NSF/ANSI Registered Standard 60 and G4 (Soicer Randolph LLC). USDA approval program, meets FDA 21 CFR. CFIA Accepted.

Section 16: OTHER INFORMATION
HAZARD RATING: Health – 0, Fire – 0, Reactivity - 0
0 – Minimum, 1 – Slight, 2 – Significant, 3 – Serious, 4 – Extreme

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for his own particular use. This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of RE-Ox LLC.

DEPARTMENT OF PROFESSIONAL AND OCCUPATIONAL REGULATION
COMMONWEALTH OF VIRGINIA

9960 Mayland Dr., Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON
02-28-2015

NUMBER
1955005685

BOARD FOR WATERWORKS AND WASTEWATER WORKS OPERATORS
AND ONSITE SEWAGE SYSTEM PROFESSIONALS
WATERWORKS OPERATOR LICENSE
CLASS 4

CECIL ERWIN HOYT III
124 ROLLINGWOOD COURT
TROUTVILLE, VA 24175

Gordon N. Dixon, Director

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498 IVY MOUNTAIN ROAD
BUCHANAN, VA 24066

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498 IVY MOUNTAIN ROAD
BUCHANAN, VA 24066

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WASTEWATER WORKS OPERATOR LICENSE
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JOSEPH CHARLES WHEELER
941 WEBB LANE
TROUTVILLE, VA 24175

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EXPIRES ON
02-28-2015

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AND ONSITE SEWAGE SYSTEM PROFESSIONALS
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CLASS 4

PHILLIP DALE MEADOR
2615 FRINGER TR
BUCHANAN, VA 24066

Gordon N. Dixon, Director

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WATERWORKS OPERATOR LICENSE

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NUMBER: 1955003970 EXPIRES: [illegible]-28-2015

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TROUTVILLE, VA 24175

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Supporting Documentation

for

BMP 6:2

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
Street address: 629 East Main Street, Richmond, Virginia 23219
Mailing address: P.O. Box 1105, Richmond, Virginia 23218
TDD (804) 698-4021
www.deq.virginia.gov

Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

May 21, 2013

Mr. Gregory Hannah
County of Botetourt
259 Landfill Road
Troutville, Virginia 24175

Dear Mr. Hannah:

We have completed our review of Botetourt County's 2012 Recycling Rate Report submitted pursuant to The Virginia Regulations for Solid Waste Management Planning (9VAC-20-130-165). State law (10.1-1411) and section 120.B. of the regulations require each city, county, town or region to maintain a minimum recycling rate and to report the data for the previous calendar year to DEQ by April 30 of each year. Botetourt County was to meet or exceed a 15% mandated recycling rate based upon the criteria established in 2006.

We accept your data as submitted, and your calculated recycling rate for CY 2012 will be reported as 18.5 %. This information has been forwarded to DEQ's Office of Waste Permitting and Compliance for consideration during their reviews of the Solid Waste Management Plans.

Attached for your review and filing is our worksheet that shows the DEQ review of your report. Please contact me with any questions.

Sincerely,

G. Stephen "Steve" Coe

G. Stephen Coe
Environmental Specialist - Recycling
Office of Land Protection & Revitalization

Enclosure:
cc: RRR file

Supporting Documentation

for

BMP 6:3

lb/A

59514-3

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name Wills Soil & Stream City Montvale State VA

Independent Consultant Wills Soil & Stream Date 02/27/2013

Sample Location JRHS			JR FB1	JR BB1	JR BBP	JR SB1
Sample Identification						
Lab Number			0400-1	0401-1	0402-1	0403-1
Total Exchange Capacity (ME/100 g)			14.88	14.86	10.29	8.12
pH (H_2O 1:1)			a 7.5	a 7.5	6.8	7.0
Organic Matter (humus) %			3.71	3.11	3.39	2.49
Estimated Nitrogen Release		lb/A	87	81	84	70
ANIONS	SOLUBLE SULFUR*	ppm	13	26	13	12
PHOSPHORUS	MEHLICH III lb/A	P as P_2O_5	518	481	504	215
		ppm of P	113	105	110	47
	BRAY II lb/A	P as P_2O_5	1177	1063	884	444
		ppm of P	257	232	193	97
	OLSEN lb/A	P as P_2O_5				
		ppm of P				
EXCHANGEABLE CATIONS	CALCIUM*	lb/A	4718	4502	2670	1946
		ppm	2359	2251	1335	973
	MAGNESIUM*	lb/A	500	574	536	550
		ppm	250	287	268	275
	POTASSIUM*	lb/A	254	410	390	388
		ppm	127	205	195	194
	SODIUM*	lb/A	46	48	44	48
		ppm	23	24	22	24
BASE SATURATION PERCENT						
Calcium	%		79.27	75.74	64.87	59.91
Magnesium	%		14.00	16.09	21.70	28.22
Potassium	%		2.19	3.54	4.86	6.13
Sodium	%		0.67	0.70	0.93	1.29
Other Bases	%		3.90	3.90	4.60	4.40
Hydrogen	%		0.00	0.00	3.00	0.00
EXTRACTABLE MINORS						
Boron* (ppm)			0.85	0.63	0.60	0.41
Iron* (ppm)			206	171	209	130
Manganese* (ppm)			142	181	86	214
Copper* (ppm)			2.25	3.24	1.86	1.80
Zinc* (ppm)			8.04	8.17	7.00	4.57
Aluminum* (ppm)			376	514	542	544
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					

a - alkaline soil

* Mehlich III Extractable

lb/A

59514-3

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name Wills Soil & Stream City Montvale State VA

Independent Consultant Wills Soil & Stream Date 02/27/2013

Sample Location CAMS			CA BB1	CA FB1			
Sample Identification							
Lab Number			0398-1	0399-1			
Total Exchange Capacity (ME/100 g)			12.84	12.25			
pH (H_2O 1:1)			6.3	6.7			
Organic Matter (humus) %			5.92	4.30			
Estimated Nitrogen Release		lb/A	105	93			
ANIONS	SOLUBLE SULFUR*	ppm	11	13			
PHOSPHORUS	MEHLICH III	lb/A P as P_2O_5	105	513			
		ppm of P	23	112			
	BRAY II	lb/A P as P_2O_5	179	1058			
		ppm of P	39	231			
	OLSEN	lb/A P as P_2O_5					
		ppm of P					
EXCHANGEABLE CATIONS	CALCIUM*	lb/A	3062	3468			
		ppm	1531	1734			
	MAGNESIUM*	lb/A	602	428			
		ppm	301	214			
	POTASSIUM*	lb/A	464	428			
		ppm	232	214			
	SODIUM*	lb/A	36	54			
		ppm	18	27			
BASE SATURATION PERCENTAGES							
Calcium		%	59.62	70.78			
Magnesium		%	19.54	14.56			
Potassium		%	4.63	4.48			
Sodium		%	0.61	0.96			
Other Bases		%	5.10	4.70			
Hydrogen		%	10.50	4.50			
EXTRACTABLE MINORS							
Boron* (ppm)			0.51	0.84			
Iron* (ppm)			122	225			
Manganese* (ppm)			33	75			
Copper* (ppm)			2.58	2.83			
Zinc* (ppm)			3.32	11.16			
Aluminum* (ppm)			491	576			
OTHER TESTS	Soluble Salts (mmhos/cm)						
	Chlorides (ppm)						

* Mehlich III Extractable

lb/A

59514-3

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name Wills Soil & Stream City Montvale State VA

Independent Consultant Wills Soil & Stream Date 02/27/2013

Sample Location GREENFIELD			GF BB	GF S1	GF S3		
Sample Identification							
Lab Number			0395-1	0396-1	0397-1		
Total Exchange Capacity (ME/100 g)			11.11	10.89	12.48		
pH (H_2O 1:1)			7.3	6.9	6.5		
Organic Matter (humus) %			3.51	3.87	3.48		
Estimated Nitrogen Release		lb/A	85	89	85		
ANIONS	SOLUBLE SULFUR*	ppm	18	16	69		
PHOSPHORUS	MEHLICH III	lb/A P as P_2O_5	211	275	115		
		ppm of P	46	60	25		
	BRAY II	lb/A P as P_2O_5	403	431	270		
		ppm of P	88	94	59		
	OLSEN	lb/A P as P_2O_5					
		ppm of P					
EXCHANGEABLE CATIONS	CALCIUM*	lb/A	2866	2866	2918		
		ppm	1433	1433	1459		
	MAGNESIUM*	lb/A	656	560	684		
		ppm	328	280	342		
	POTASSIUM*	lb/A	516	496	524		
		ppm	258	248	262		
	SODIUM*	lb/A	44	46	52		
		ppm	22	23	26		
BASE SATURATION PERCENT							
Calcium	%		64.49	65.79	58.45		
Magnesium	%		24.60	21.43	22.84		
Potassium	%		5.95	5.84	5.38		
Sodium	%		0.86	0.92	0.91		
Other Bases	%		4.10	4.50	4.90		
Hydrogen	%		0.00	1.50	7.50		
EXTRACTABLE MINORS							
Boron* (ppm)			0.60	0.65	0.57		
Iron* (ppm)			108	132	69		
Manganese* (ppm)			132	61	51		
Copper* (ppm)			2.37	2.31	2.13		
Zinc* (ppm)			3.08	2.88	3.83		
Aluminum* (ppm)			670	587	732		
OTHER TESTS	Soluble Salts (mmhos/cm)						
	Chlorides (ppm)						

* Mehlich III Extractable

lb/A

59514-3

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name Wills Soil & Stream City Montvale State VA

Independent Consultant Wills Soil & Stream Date 02/27/2013

Sample Location RMMS			RM FB	RM SB			
Sample Identification							
Lab Number			0393-1	0394-1			
Total Exchange Capacity (ME/100 g)			9.41	8.56			
pH (H_2O 1:1)			6.3	6.5			
Organic Matter (humus) %			3.21	2.97			
Estimated Nitrogen Release		lb/A	82	79			
ANIONS	SOLUBLE SULFUR*	ppm	14	10			
PHOSPHORUS	MEHLICH III	lb/A P as P_2O_5	412	197			
		ppm of P	90	43			
	BRAY II	lb/A P as P_2O_5	769	298			
		ppm of P	168	65			
	OLSEN	lb/A P as P_2O_5					
		ppm of P					
EXCHANGEABLE CATIONS	CALCIUM*	lb/A	2380	2142			
		ppm	1190	1071			
	MAGNESIUM*	lb/A	334	354			
		ppm	167	177			
	POTASSIUM*	lb/A	392	448			
		ppm	196	224			
	SODIUM*	lb/A	46	44			
		ppm	23	22			
BASE SATURATION PERCENT							
Calcium	%		63.23	62.56			
Magnesium	%		14.79	17.23			
Potassium	%		5.34	6.71			
Sodium	%		1.06	1.12			
Other Bases	%		5.10	4.90			
Hydrogen	%		10.50	7.50			
EXTRACTABLE MINORS							
Boron* (ppm)			0.38	0.40			
Iron* (ppm)			135	104			
Manganese* (ppm)			138	182			
Copper* (ppm)			7.42	7.51			
Zinc* (ppm)			6.38	5.07			
Aluminum* (ppm)			754	809			
OTHER TESTS	Soluble Salts (mmhos/cm)						
	Chlorides (ppm)						

* Mehlich III Extractable

lb/A

59514-3

BROOKSIDE LABORATORIES, INC.

SOIL AUDIT AND INVENTORY REPORT

Name Wills Soil & Stream City Montvale State VA

Independent Consultant Wills Soil & Stream Date 02/27/2013

Sample Location LBHS			LB [redacted]	LB FB1	LB [redacted]	LB PRAC
Sample Identification						
Lab Number			0389-1	0390-1	0391-1	0392-1
Total Exchange Capacity (ME/100 g)			11.06	11.67	11.21	10.42
pH (H_2O 1:1)			6.2	7.2	7.0	7.0
Organic Matter (humus) %			3.58	4.89	4.30	4.70
Estimated Nitrogen Release		lb/A	86	99	93	97
ANIONS	SOLUBLE SULFUR*	ppm	34	14	12	19
PHOSPHORUS	MEHLICH III	lb/A P as P_2O_5	169	600	403	440
		ppm of P	37	131	88	96
	BRAY II	lb/A P as P_2O_5	279	1209	641	820
		ppm of P	61	264	140	179
	OLSEN	lb/A P as P_2O_5				
		ppm of P				
EXCHANGEABLE CATIONS	CALCIUM*	lb/A	2568	3450	3314	3126
		ppm	1284	1725	1657	1563
	MAGNESIUM*	lb/A	496	410	408	348
		ppm	248	205	204	174
	POTASSIUM*	lb/A	464	562	492	454
		ppm	232	281	246	227
	SODIUM*	lb/A	36	56	46	52
		ppm	18	28	23	26
BASE SATURATION PERCENT						
Calcium		%	58.05	73.91	73.91	75.00
Magnesium		%	18.69	14.64	15.17	13.92
Potassium		%	5.38	6.17	5.63	5.59
Sodium		%	0.71	1.04	0.89	1.08
Other Bases		%	5.20	4.20	4.40	4.40
Hydrogen		%	12.00	0.00	0.00	0.00
EXTRACTABLE MINORS						
Boron* (ppm)			0.36	0.65	0.80	0.71
Iron* (ppm)			61	187	163	173
Manganese* (ppm)			36	54	109	86
Copper* (ppm)			1.81	6.41	2.81	5.86
Zinc* (ppm)			2.68	6.93	6.53	8.05
Aluminum* (ppm)			737	677	553	667
OTHER TESTS	Soluble Salts (mmhos/cm)					
	Chlorides (ppm)					

* Mehlich III Extractable

lb/A

BROOKSIDE LABORATORIES, INC.

59514-3

SOIL AUDIT AND INVENTORY REPORT

Name Wills Soil & Stream City Montvale State VA

Independent Consultant Wills Soil & Stream Date 02/27/2013

Sample Location			BLUE RIDGE PARK	BRP S1	BRP		
Sample Identification					BB/SB		
Lab Number				0387-1	0388-1		
Total Exchange Capacity (ME/100 g)				10.38	10.30		
pH (H_2O 1:1)				6.5	6.7		
Organic Matter (humus) %				3.92	3.99		
Estimated Nitrogen Release			lb/A	89	90		
ANIONS	SOLUBLE SULFUR*		ppm	10	16		
ANIONS – PHOSPHORUS	MEHLICH III	lb/A	P as P_2O_5	165	151		
			ppm of P	36	33		
	BRAY II	lb/A	P as P_2O_5	284	220		
			ppm of P	62	48		
	OLSEN	lb/A	P as P_2O_5				
			ppm of P				
EXCHANGEABLE CATIONS	CALCIUM*		lb/A	2448	2366		
			ppm	1224	1183		
	MAGNESIUM*		lb/A	562	650		
			ppm	281	325		
	POTASSIUM*		lb/A	424	510		
			ppm	212	255		
	SODIUM*		lb/A	42	36		
			ppm	21	18		
BASE SATURATION PERCENT							
Calcium			%	58.96	57.43		
Magnesium			%	22.56	26.29		
Potassium			%	5.24	6.35		
Sodium			%	0.88	0.76		
Other Bases			%	4.90	4.70		
Hydrogen			%	7.50	4.50		
EXTRACTABLE MINORS							
Boron* (ppm)				0.43	0.43		
Iron* (ppm)				120	100		
Manganese* (ppm)				108	148		
Copper* (ppm)				2.29	2.42		
Zinc* (ppm)				4.28	2.43		
Aluminum* (ppm)				570	637		
OTHER TESTS	Soluble Salts (mmhos/cm)						
	Chlorides (ppm)						

* Mehlich III Extractable