Stormwater Local Government Advisory Committee
Thursday, October 11, 2012
Pocahontas Building Auditorium
Richmond, Virginia

SLGAC Members Present

Debbie Byrd, Goochland County
Steve Hubble, Stafford County
Normand Goulet, NVRC
Larry Land, VACO
Alyson Sappington, Thomas Jefferson SWCD
Keith White, Henrico County
Cabell Vest, Aqualaw/VAMSA
Bill Johnston, City of Virginia Beach
Barbara, City of Chesapeake
Bruce McGranahan, Fairfax County
Dan Rublee, City of Harrisonburg
Joe Wilder, Frederic County

By Phone

Wayne Strickland, Roanoke County
Danielle Bishop

Agency Staff Present

Ginny Snead, DCR
Larry Gavan, DCR
Scott Crafton, DCR
Michael Fletcher, DCR
Shawn Smith, DCR
Joan Salvati, DCR
Gerry Seeley, DCR
Michelle Vucci, DCR
Matthew Gooch, Office of the Attorney General

Others Present

Jenny Johnson, Joyce Engineering
Joe Maroon, Maroon Consulting

All materials from this meeting are available at the following link:
http://www.dcr.virginia.gov/lrswlgac01.shtml

Welcome

Ms. Snead welcomed members and staff and reviewed the agenda. She gave the following update.

Local Program Development Grants

- 100 Localities Awarded
- $3.7 Million Requested
- $2.09 Million Awarded
- Basis:
    - Proposals' budget
    - Quality of the Scope of Work based on the evaluation criteria
    - Number of entities covered in the proposal

MS4 Update

- Phase I MS4
    - EPA comments on DRAFT
    - DCR/EPA Letter of Agreement

Mr. White asked if the letter of agreement with the schedule is available.

Ms. Snead said that it had been distributed and that it could be provided to localities.

- Phase II MS4
    - The proposed regulations will go to the Soil and Water Conservation Board on September 28
    - Public Comment Period/EPA Comment
- Phase I and Phase II Consistency

Construction General Permit Reissuance

- Accelerated timeframe – Model Ordinance
    - There have been three meetings of the GP RAP so far. The next meeting was scheduled for October 17
    - The proposed Regulations will go to the Soil and Water Conservation Board on December 11, 2012 with an effective date of July 1, 2014
- Primary Issues
    - Define Common Plan of Development – Fact Sheet
    - Specificity of ELGs
    - Cross Jurisdictional Issues
    - Simplification
    - Address TMDL WLA

Legislative and Regulatory Update

- Nutrient Trading Regulations Update. The NOIRA has been filed. The first meeting of the Nutrient Trading Regulations RAP will be in November.
- The public comment period ended on October 10
- DCR is looking for comments on the NOIRA and for persons requesting to serve on the RAP.

- Integration Bill Exempt Actions
    - These proposed Regulations went to the Soil and Water Conservation Board on September 28, 2012
        - VSMP
        - ESC
        - ESC Certification
        - Bay Act
    - The final Regulations will go to the Board in December

General Update

- Phase II Regional Meetings: Trainings are schedule for this Fall
- The list of training times and locations is available from DCR
- The meetings will be held statewide
- The meetings will be day-long and will offer CEUs
- Tier 1 Training is General Training
- Model Ordinance
- SWPPP Review. Staff has reviewed the law and consulted with the Office of the Attorney General. The review found that it would provide authority for the locality to review the SWPPP.

Mr. Land offered to help publicize the dates and locations of the regional meetings.

Mr. Hubble asked who would be the audience for these meetings.

Ms. Snead said that it would be the local governments adopting the programs.

Ms. Sappington asked if this training was required for future certification.

Ms. Snead said that this training was information. The training required for future certification would be scheduled in the spring.

Mr. Goulet asked the next step in the Phase I process.

Ms. Snead said that at the moment the process was just DCR and EPA review but that there would be a public comment period.

Stormwater Handbook

Mr. Crafton presented an overview of the Stormwater Handbook.
Resources Available in the New (Revised and Updated) Virginia Stormwater Management Handbook

Background

Mr. Crafton said that this project began in 2008. It was well into the fall of 2009 before there was a first draft beyond the old engineering chapters.

- Existing Handbook ("Blue Book") released in 1999
- Since then, quantum leaps in research and knowledge of how to do SWM well
- Many new technologies, practices, and design techniques NOT reflected in old Handbook
- New Handbook incorporates these advances

Mr. Crafton noted that there was no plan to publish the Handbook, but that it would all be available in PDF format on the DCR website.

Handbook Organization

- Three parts:
    - Part 1: Regulations and Program Implementation (Chapters 1-3)
    - Part 2: Understanding Stormwater Management (Chapters 4-7)
    - Part 3: Tools, Methods and Examples (Chapters 8-13)
- Most chapters have multiple Appendices that provide specific guidance, useful tools, case studies, etc.
- Many more helpful photos and graphics

Chapter 1: Introduction

- Provides overview of entire Handbook
- Discusses what is in new Handbook
- Suggests how to use Handbook effectively
- Includes an Appendix with a thorough Glossary of terms and acronyms that apply to SWM

Chapter 2: SWM Law and Regulations

- Provides complete copies of the current Virginia Stormwater Management Act and final revised Virginia SWM Regulations, as of the Handbook publication date
- Provides web lines to Virginia Legislative Information System, where most current versions of law and regulations are posted

Mr. Crafton said that the Handbook also links to the General Assembly Legislative Information System which contains the most current versions of the Regulations and the Law

Chapter 3: Local Program Implementation

Mr. Crafton said that this section would help local governments understand what they need to do and provide the tools necessary.

- Provides guidance for setting up a local Program
- Discusses integrating various local responsibilities related to SWM into efficient, comprehensive program delivery system
- Provides suggestions for solving problems encountered in setting up local program
- Describes process of obtaining Board approval of local program and how to effectively administer various program elements (plan review, inspection, enforcement, reporting, etc.)

Chapter 3 includes five Appendices:

- Appendix 3A discusses IT tools useful for SWM program
- Appendix 3B discusses Local Codes Assessments and provides example checklists
- Appendix 3C provides case study about establishment of local Stormwater Utility
- Appendix 3D provides example Site Plan Review Checklist
- Appendix 3E discusses construction inspections, identifying key elements that must be checked and what to look for

Chapter 4: Why Stormwater Matters

- Primer on water and stormwater, intended to help the reader understand significance of stormwater in urban environment
- Covers hydrologic cycle, earth's water budget, and how population growth, development and changing precipitation patterns affect the water cycle and water supply
- Concludes with discussion of the economic benefits of good stormwater management

Chapter 5: Managing Stormwater

- Discusses actual process of managing stormwater comprehensively, from roof to stream, or, in urban areas, from roof to street, including for redevelopment projects

- Describes and promotes "Green Infrastructure" approach, akin to "sustainable design"
- Introduces concept of using "treatment train" of BMPs to both reduce runoff volume and remove pollutants
- Discusses managing stormwater comprehensively on regional or watershed scale

There are four Appendices in Chapter 5

- Appendix 5A explains the CWP's *Impervious Cover Model*, the basis for the statewide water quality criteria
- Appendix 5B discusses watershed-scale stormwater management planning, including several case studies
- Appendix 5C provides detailed guidance regarding approaches to SWM for redevelopment projects
- Appendix 5D provides explanation and tool for conducting stormwater pollution benchmarking assessments in a community

Mr. White asked if with regard to the regional watershed plan if there was specific language to show the site requirements.

Mr. Crafton said that would be customized by locality staff or consultants. He said that the compliance elements are incorporated into the plan.

Chapter 6: Site Design Considerations

- Consistent with Green Infrastructure Approach, Chapter 6 full of specific Environmental Site Design (ESD) recommendations (*not requirements*) that result in reducing imperviousness, working with terrain, or otherwise reducing amounts of stormwater runoff and making it easier to manage runoff that does occur
- These design techniques provide optimum setting for placement of the newer SWM BMPs
- Provides specific descriptions of 22 ESD practices divided into four categories
    - Conserving natural features and resources
    - Using low impact site design techniques
    - Reducing impervious cover
    - Using natural features and runoff reduction techniques to manage stormwater
- Example site plans approved, illustrating differences between traditional site design and ESD solutions
- Many of the ESD practices may be limited by existing local land use codes, so these are the kinds of things a Local Codes Analysis would reveal

Mr. Rublee asked if open space as a component of the plan is identified as a BMP.

Mr. Crafton said not necessarily, but if credit is being taken for preserved open space it should continue to be preserved. He said that Bay localities would have verification and accountability issues to make sure credit is given.

Mr. Rublee said there should be a standard open space agreement.

Mr. Crafton said that staff would put that on a list of discussion items.

Mr. Battiata said these were two distinctly different things. One is a BMP spreadsheet in the conservation area and the other is open space in the site data. He said that covenants and protective documents were not needed for open space and site area unless they were identified as BMPs.

Mr. Crafton said there was a need for continued discussion.

There are four Appendices in Chapter 6

- Appendix 6A provides site plan preparation and submission guidelines
- Appendix 6B provides specific karst area design guidelines (replaces old DCR Tech Bulletin)
- Appendix 6C provides specific coastal plain setting design guidelines
- Appendix 6D provides a description of the ASLA Sustainable Sites Initiative (SSI), which assigns credits for sustainable site design elements (similar to LEED credits assigned for sustainable/green building elements)

Chapter 7: BMP Upgrades and Retrofits

- Vast amounts of old impervious surfaces have no stormwater management
- To meet water quality goals, particularly those associated with the Chesapeake Bay, runoff from older impervious surfaces will have to be treated
- Some of this can be achieved through redevelopment, but more can be done through *stormwater retrofits* at existing sites
- Chapter 7 discusses:
    - Benefits of retrofits and BMP upgrades
    - Situations where retrofitting is most appropriate
    - Economics of retrofitting
    - Strategies to demonstrate and deliver retrofit projects
    - Examples of retrofit projects
- Appendix 7A is a Charlottesville ready case study
- Appendix 7B provides *Retrofit Reconnaissance* checklists
- Appendix 7C explains Retrofit Pollution Removal Adjustor Curves, used to determine appropriate pollution removal credit

Chapter 8: BMP Overview

- Provides overview of different kinds of BMPs that can be used to reduce and manage runoff
- Discusses most effective logical order of implementing various kinds of BMPs, to maximize reduction and control of runoff and pollution
- Describes 15 non-proprietary BMPs referenced in the new SWM regulations, in five categories:
    - Runoff volume reduction
    - Swales and open channels
    - Filtering systems
    - Infiltration practices
    - Basins (ponds and wetlands)
- Discusses manufactured BMPs and Treatment Train concept
- Provides various tables to help designers choose proper BMPs for various categories of site characteristics:
    - Land use
    - Physical feasibility
    - Presence of critical water resources
    - BMP's stormwater quantity control capability
    - BMP's pollutant removal capability
    - Community and environmental factors
    - Existing regulatory restrictions/setbacks
    - Spatial scale at which BMPs are applied
- Appendix 8A provides design checklists for each of 15 non-proprietary BMPS referenced in regulations
- Also refers readers to the *Virginia BMP Clearinghouse* website, where one obtains design specifications for all Virginia-approved BMPs, including manufactured BMPs (design spec's are no longer in Handbook)

Chapter 9: BMP Maintenance

- Historically, most local SWM programs have failed to assure installed BMPs are maintained so they continue to function as designed
- Studies have shown that, other than wet ponds, typical BMPs no longer function correctly after as little as 1.5 to 2 years
- Chapter 9 provides information to help localities and property owners keep BMPs in good working order
- Discusses various considerations involved in establishing and carrying out an effective local BMP maintenance program
- Discusses routine maintenance tasks and what they involve
- Discusses designing BMPs to minimize maintenance needs

Chapter 9 has Five Appendices:

- 9A: Results of the 2009 CWP/JRA field survey of BMP maintenance
- 9B: Examples of various local government BMP maintenance agreements

- 9C: Sample BMP inspection checklists
- 9D: How to design BMPs to facilitate and simplify their maintenance
- 9E: Estimating sediment accumulation (to plan for its periodic removal)

Chapter 10: Unified BMP Sizing Criteria

- New with this version of Handbook
- Explains design storm criteria for various design purposes:
    - Groundwater recharge (not required, but optional)
    - Water quality treatment
    - Receiving stream channel protection
    - Frequent overbank flood protection
    - Extreme flood protection (function of impoundment dam design)
- Appendix 10A provides a reasonable approach for communities who may want to add (more stringent) criteria to ensure that post-development groundwater recharge mimics the pre-development recharge rates.
- Appendix 10B explains why Virginia changed from the 2-year storm to the 1-year storm as basic sizing criteria for stream channel protection

Chapter 11: Hydrologic Methods

- Provides step-by-step guidance regarding calculations needed to determine compliance via the Runoff Reduction Method
- Four Appendices:
    - 11A: Current Virginia soils classified in USDA-NRCS Hydrologic Soil Groups
    - 11B: 24-hour rainfall depths for Virginia, from the new NOA Atlas 14 rainfall data
    - 11C: Current USDA-NRCS rainfall-runoff tables and CN values
    - 11D: Overview of various stormwater computer models that could assist with SWM designs

Chapter 12: Virginia Runoff Reduction Method (RRM)

- Provides step-by-step explanation of how to use the new RRM Excel spreadsheets for:
    - New development
    - Redevelopment
    - Rainwater harvesting
- Spreadsheets account for treatment trains

Chapter 13: Example Site Plans

- Four example site plans with step-by-step guidance about how the designs were developed and the calculation procedures involved.
    - Residential subdivision
    - Commercial/office
    - Redevelopment
    - Institutional

Mr. Crafton requested that comments be submitted by the end of the month.

Subcommittee Reports

Mr. Seeley reported that there had not been much change since the previous meeting. He said that the contractor was finishing up the alpha version of the core permit application as well as the processing portion of the website. He said once that was complete that he would bring that forward to the committee to review.

Mr. Seeley said that there had been some contractual issues that were still in negotiation.

Mr. Seeley said that the hope was that both the alpha and beta versions would be ready by July 1, 2013.

Roles and Responsibilities

Mr. Hubble distributed a draft of the Roles and Responsibilities chart that outlined the 19 required minimum elements. He noted that each element showed the responsible party and the program element required.

Mr. Hubble asked that DCR distribute the chart and members submit comments. There was also a request for the development of a flow chart.

Ms. Salvati distributed a draft flow chart that would be an addendum to the FAQ page.

With regard to the payment of fees in the ePermitting process, Ms. Brumbaugh said that not all localities would charge the same fees. She said that some may choose not to change their current method. She said that Part XIII of the regulations needs to be reopened to address the administration of the fees.

Ms. Salvati said that staff would revise the chart to show the steps in the ePermitting process.

Mr. Hubble said that his goal was to be able to show who is responsible for what and when do they have to pay.

Mr. Hubble said that comments should be sent to Ms. Smith.

Tool Box, FAQ and Survey Update

Ms. Salvati said that the Tool Box was mostly complete. Items in the Tool Box will include:

- The model ordinance
- Check list
- Finalize FAQ
- Section on administrative tools
- Examples of BMP maintenance agreements and inspection checklists

Ms. Salvati said that staff had received feedback from localities. She said they wanted to see examples of the process. She said that staff had been compiling examples.

Ms. Salvati said that the FAQ document had been distributed for review. She said that it had been revised pursuant to the discussion regarding the review of the PPP in the SWPPP.

Local Stormwater Program Development Survey Results

Ms. Salvati reviewed the survey results.

Overview

- 64 localities of roughly 160 localities responded
- Substantial number of localities will operate their own programs
- Funding needs identified went from $5,000 - $50,000

A full copy of the survey results is available from DCR.

Mr. Land said that it would be important for local governments to have time to review this data.

Ms. Salvati said that the intent of the survey was to prompt local governments to begin considering the issues. She said that going forward DCR would hope to do another survey in several months.

Mr. Wilder asked about the grant applications.

Ms. Snead said that with 59 applications, over 100 localities were represented. She said that DCR was able to fund all or part of each request.

Ms. Johnson asked if the grant applications would be considered public information. Ms. Snead said that they would.

Committee Issue Identifications

Ms. Brumbaugh said that there had been much discussion regarding the common plan of development issue. She said that the issue needed more discussion and explanation. She said there was confusion regarding the fee structure associated with the common plan of development.

Ms. Snead said that staff would clarify that issue in the FAQ.

Next Meeting

It was determined that it would be best to skip November to allow time for various program elements to be edited and revised.

Ms. Snead said that she would look at possible dates for the week of December 17. Items to discuss would include fees, the common plan of development, the RFP and the survey results.

Mr. Johnson said that he also thought that Part XIII needs to be rewritten.

Public Comment

There was no public comment.

Adjourn

There was no further business and the meeting was adjourned.