# VIRGINIA EROSION AND STORMWATER MANAGEMENT PROGRAM (VESMP) REGULATORY ADVISORY PANEL (RAP)

#### **MEETING #5 NOTES - FINAL**

#### **TUESDAY, DECEMBER 10, 2019**

#### **DEQ PIEDMONT REGIONAL OFFICE – TRAINING ROOM**

#### **Meeting Attendees**

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VESMA RAP MEMBERS	
Phillip F. Abraham – The VECTRE Corporation	Richard Jacobs, PE –Culpeper SWCD
Barbara Brumbaugh – City of Chesapeake	Anna Killius – James River Association
John W. Burke – Montgomery County	Adrienne Kotula – Chesapeake Bay Commission
Debra Byrd – Goochland County	Melanie Mason – City of Alexandria
Andrew C. Clark – Home Builders Association of VA	Beth McDowell – Westmoreland County
Jen Cobb, PE – Henrico County	Lisa Ochsenhirt, Esq. – AquaLaw – VAMSA
Patricia Colatosti – Town of Christiansburg	John Olenik – Virginia Department of Transportation
Chuck Dietz – Virginia Tech (Alternate for Mike	Jason Papacosma – Arlington County
Vellines)	
Jimmy Edmunds, CFM – Loudoun County	Jonet Prevost-White – Town of Dumfries
Dawson Garrod, PE – University of Virginia	Jill Sunderland – Hampton Roads Planning District
	Commission
Normand Goulet – Northern VA Regional PDC	

NOTE: RAP Members NOT in Attendance; Matthew Knightes, PE – MSA; Erin Rountree – City of Suffolk; Joe Wilder – Frederick County; Sandra Williams – Atlantic Environmental Solutions, LLC; Mike Vellines – Virginia Tech

PUBLIC/INTERESTED PARTIES	
Scott Dunn – Chesterfield County	Dan Rublee – City of Harrisonburg
Doug Fritz - GKY	Ginny Snead - AMT
Scott Jackson – Henrico Co. DPW	Jerry Stonefield – Fairfax County
Melissa Lindgren – Isle of Wight County	Chris Swanson - VDOT
Bryce H. Miller - WSSI	John Woodburn – Goochland County
Sheila Reeves – Timmons Group	

TECHNICAL ADVISORS AND DEQ STAFF	
Erin Belt – DEQ	Debra Harris - DEQ
Brandon Bull – DEQ	William Norris - DEQ
Robert Cogan - DEQ	Jaime Robb - DEQ
Tamira Cohen – DEQ Training Staff	Kristen Sadtler - DEQ
Melanie Davenport – DEQ	Matthew Stafford - DEQ
Drew Hammond – DEQ	Derek Tribble - DEQ

The meeting convened at 10:00 a.m. and adjourned at 3:10 PM

#### 1. Welcome and Introductions – Jaime Robb – DEQ:

Jaime Robb welcomed members of the VESMP Regulatory Advisory Panel (RAP) and members of the public to the 5th meeting of the VESMP RAP. She noted that there today was also Melanie Davenport's Birthday. There are snacks and birthday cake to share in celebration of her birthday.

Jaime noted that this is officially a RAP meeting and that we will be deferring to the RAP Members primarily throughout the discussions but that members of the public in attendance will be allowed to make comments as we work through the agenda, especially in the discussions on MS19.

Members of the RAP and members of the public introduced themselves.

#### 2. VESMP RAP #4 – November 20th Meeting Notes – Jaime Robb – DEQ:

Jaime asked for any comments or edits to the VESMP RAP #4 Meeting Notes from the November 20th meeting. No comments or edits to the Meeting Notes were offered during the meeting and the notes were approved.

ACTION ITEM: The notes from the November 20, 2019 meeting of the VESMP RAP will be posted as "Final" to Town Hall.

#### 3. Definitions Discussion – Jaime Robb/Tamira Cohen – DEQ/VESMP RAP:

Jaime Robb briefly reviewed the "definitions" section of the regulations with the group and reviewed the matrix that Erin had compiled for review by the group which was distributed and discussed at the last meeting of the RAP.

Jaime noted that the assignment that had been given the RAP at the last meeting was to review that matrix of definitions, especially those definitions where some conflicts had been noted and to provide any comments and recommendations back to DEQ for discussion by the RAP.

Jaime noted that John Burke had provided the only comments related to the definitions section. She asked John to summarize his comments. His recommendation was:

"I may have thought of a way to clarify agreement in lieu applicability. Would it be possible to reference § 62.1-44.15:28 part 11, or the language of item 11, in the definition of agreement in lieu to clarify the intent for use within a common plan of development? The current proposed definitions include reference to both Code and Administrative Code sections. A draft addition is added below in red. I wish you all a Happy Thanksgiving!

"Agreement in lieu of a plan" means a contract between the VESMP authority or the Board acting as a VSMP authority and the owner or permittee that specifies methods that shall be implemented to comply with the requirements of this article for the construction of a single-family detached residential structure; such contract may be executed by the VESMP authority in lieu of a soil erosion control and stormwater management plan or by the Board acting as a VSMP authority in lieu of a stormwater management plan. When executed by a VESCP authority, this term means a contract between the VESCP authority and the owner that specifies conservation measures that must be implemented in the construction of a single-family detached residential structure and may be

executed by the VESCP authority in lieu of a formal site plan. An agreement in lieu of a plan may be executed pursuant to part 11 of § 62.1-44.15:28 for the construction of a single-family detached residential structure developed under a subsequent parcel owner within a subdivision with an approved soil erosion control and stormwater management plan or stormwater management plan.

#### References:

§ 62.1-44.15:28. Development of regulations.

§ 62.1-44.15:28.10. Establish statewide standards for soil erosion control and stormwater management from land-disturbing activities;

§ 62.1-44.15:28 .11. Establish a procedure by which a soil erosion control and stormwater management plan or stormwater management plan that is approved for a residential, commercial, or industrial subdivision shall govern the development of the individual parcels, including those parcels developed under subsequent owners;"

He noted that the issue is that the original definition does not address where it is appropriate to use this approach.

Staff and the Group discussed the term "Common Plan of Development" and the concept of "an agreement in lieu of a plan".

The term "single family detached structure" was also discussed. It was noted that there is not currently a definition of "single family detached residential structure".

Jaime asked for the group to continue to look over the matrix of definitions that had been provided at the last meeting and to provide any comments and suggestions to staff for consideration, especially for those definitions where there is an apparent conflict in the definitions between the various programs being consolidated through this on going process. Erin Burke noted that in the Word version of the definitions materials that suggestions have been included as to possible ways to eliminate or minimize those areas of conflict. She asked for the group to look those recommendations over and to provide any comments or recommendations.

#### **DISCUSSIONS:**

The group discussed the following definitions and concepts:

- "Owner":
- "Pre-development" what conditions and state constitute "pre-development conditions"?
- "Early grading plans"; "Early Grading Policy" declaring a use and requiring that each phase of a project must meet specific requirements;
- "Pre-development standards";
- Use of "base-line aerials" to estimate "pre-development" conditions;
- "Changing run-off characteristics" vs. "land disturbance"

• "Change in initial conditions"

## ACTION ITEM: Jimmy Edmonds with Loudoun County offered to share their "Early Grading Policy" with the group.

Jaime thanked the group for their input to the "definitions" discussions and noted that we are bound by the definitions in the Law, but that we still need to identify and resolve any conflicts that are identified.

#### 4. BREAK – 10:55 AM – 11:08 AM

## 5. Minimum Standard 19 Discussions – DEQ Staff/VESMP RAP/MS19 Stakeholders: Jaime Robb noted that the following materials had been distributed to the VESMP RAP Distribution Lists prior to the meeting:

Please see the following documents and Virginia Erosion and Sediment Control Handbook link for a review of Minimum Standard 19 (9VAC25-840-40):

- 1980 General Criteria #7
- Pre-July 2014 MS-19
- Post-July 2014 MS-19
- ESC Law § 62.1-44.15:52 (existing and proposed)
- MS19 870-66 Email 2014 (redacted)
- MS-19 Technical Assistance 2015 (redacted)

#### Chapter 5 of the

VESCH: <a href="https://www.deq.virginia.gov/Portals/0/DEQ/Water/StormwaterManagement/Erosion-Sediment Control Handbook/Chapter%205.pdf">https://www.deq.virginia.gov/Portals/0/DEQ/Water/StormwaterManagement/Erosion-Sediment Control Handbook/Chapter%205.pdf</a> The section on determining an adequate channel begins on PDF page 126.

As spelled out in the agenda that was distributed to the group:

Chapter 154 of the 2018 Acts of Assembly (item 2) directs that "the Department of Environmental Quality shall utilize an appropriate new or existing Regulatory Advisory Panel (RAP) to assist in clarifying the interpretation and application of subdivision 19 of 9VAC25-840-40 (Minimum Standard 19)." The Department will utilize the existing RAP for the purpose of discussion of the application and history of Minimum Standard 19. It is not the Department's intention to propose any revisions to Minimum Standard 19 under the regulatory action currently underway for creation of the Virginia Erosion and Stormwater Management Program (consolidated program).

Jaime noted that even though the current regulatory action does not allow moving forward with recommendations related to MS19, this is a good group to start those discussions with the thought that discussions by this group could be used to jump start needed actions at a future date. The thought is to get the input from this existing RAP as a way to inform the process moving forward.

Drew Hammond initiated the discussions by reviewing the requirements in 9VAC25-840-40.19.m:

m. For plans approved on and after July 1, 2014, the flow rate capacity and velocity requirements of § <u>62.1-44.15:52</u> A of the Act and this subsection shall be satisfied by compliance with water quantity requirements in the Stormwater Management Act (§ <u>62.1-44.15:24</u> et seq. of the Code of Virginia) and attendant regulations, unless such land-disturbing activities (i) are in accordance with provisions for time limits on applicability of approved design criteria in <u>9VAC25-870-47</u> or grandfathering in <u>9VAC25-870-48</u> of the Virginia Stormwater Management Program (VSMP) Regulation, in which case the flow rate capacity and velocity requirements of § <u>62.1-44.15:52</u> A of the Act shall apply, or (ii) are exempt pursuant to § <u>62.1-44.15:34</u> C 7 of the Act.

n. Compliance with the water quantity minimum standards set out in <u>9VAC25-870-66</u> of the Virginia Stormwater Management Program (VSMP) Regulation shall be deemed to satisfy the requirements of this subdivision 19.

The group also discussed the requirements identified in 9VAC25-870-66:

#### 9VAC25-870-66. Water Quantity.

A. Channel protection and flood protection shall be addressed in accordance with the minimum standards set out in this section, which are established pursuant to the requirements of § 62.1-44.15:28 of the Code of Virginia or as permitted in accordance with § 62.1-44.15:27.2 of the Code of Virginia. Nothing in this section shall prohibit a locality's VSMP authority from establishing a more stringent standard in accordance with § 62.1-44.15:33 of the Code of Virginia especially where more stringent requirements are necessary to address total maximum daily load requirements or to protect exceptional state waters. Compliance with the minimum standards set out in this section shall be deemed to satisfy the requirements of subdivision 19 of 9VAC25-840-40 (Minimum standards; Virginia Erosion and Sediment Control Regulations).

- B. Channel protection. Concentrated stormwater flow shall be released into a stormwater conveyance system and shall meet the criteria in subdivision 1, 2, or 3 of this subsection, where applicable, from the point of discharge to a point to the limits of analysis in subdivision 4 of this subsection.
  - 1. Manmade stormwater conveyance systems. When stormwater from a development is discharged to a manmade stormwater conveyance system, following the land-disturbing activity, either:

- a. The manmade stormwater conveyance system shall convey the postdevelopment peak flow rate from the two-year 24-hour storm event without causing erosion of the system. Detention of stormwater or downstream improvements may be incorporated into the approved land-disturbing activity to meet this criterion, at the discretion of the VSMP authority; or
- b. The peak discharge requirements for concentrated stormwater flow to natural stormwater conveyance systems in subdivision 3 of this subsection shall be met.
- 2. Restored stormwater conveyance systems. When stormwater from a development is discharged to a restored stormwater conveyance system that has been restored using natural design concepts, following the land-disturbing activity, either:
  - a. The development shall be consistent, in combination with other stormwater runoff, with the design parameters of the restored stormwater conveyance system that is functioning in accordance with the design objectives; or
  - b. The peak discharge requirements for concentrated stormwater flow to natural stormwater conveyance systems in subdivision 3 of this subsection shall be met.
- 3. Natural stormwater conveyance systems. When stormwater from a development is discharged to a natural stormwater conveyance system, the maximum peak flow rate from the one-year 24-hour storm following the land-disturbing activity shall be calculated either:
  - a. In accordance with the following methodology:

 $Q_{\text{Developed}} \leq I.F.^* (Q_{\text{Pre-developed}} * RV_{\text{Pre-Developed}}) / RV_{\text{Developed}}$ 

Under no condition shall  $Q_{\text{Developed}}$  be greater than  $Q_{\text{Pre-Developed}}$  nor shall  $Q_{\text{Developed}}$  be required to be less than that calculated in the equation  $(Q_{\text{Forest}} * RV_{\text{Forest}})/RV_{\text{Developed}}$ ; where

I.F. (Improvement Factor) equals 0.8 for sites > 1 acre or 0.9 for sites  $\le 1$  acre.

 $Q_{\mbox{\tiny Developed}}$  = The allowable peak flow rate of runoff from the developed site.

 $RV_{Developed}$  = The volume of runoff from the site in the developed condition.

 $Q_{\text{Pre-Developed}}$  = The peak flow rate of runoff from the site in the pre-developed condition.

 $RV_{\mbox{\tiny Pre-Developed}}$  = The volume of runoff from the site in pre-developed condition.

 $Q_{\text{Forest}}$  = The peak flow rate of runoff from the site in a forested condition.

 $RV_{\mbox{\tiny Forest}}$  = The volume of runoff from the site in a forested condition; or

- b. In accordance with another methodology that is demonstrated by the VSMP authority to achieve equivalent results and is approved by the board.
- 4. Limits of analysis. Unless subdivision 3 of this subsection is utilized to show compliance with the channel protection criteria, stormwater conveyance systems shall be analyzed for compliance with channel protection criteria to a point where either:
  - a. Based on land area, the site's contributing drainage area is less than or equal to 1.0% of the total watershed area; or

- b. Based on peak flow rate, the site's peak flow rate from the one-year 24-hour storm is less than or equal to 1.0% of the existing peak flow rate from the one-year 24-hour storm prior to the implementation of any stormwater quantity control measures.
- C. Flood protection. Concentrated stormwater flow shall be released into a stormwater conveyance system and shall meet one of the following criteria as demonstrated by use of acceptable hydrologic and hydraulic methodologies:
  - 1. Concentrated stormwater flow to stormwater conveyance systems that currently do not experience localized flooding during the 10-year 24-hour storm event: The point of discharge releases stormwater into a stormwater conveyance system that, following the land-disturbing activity, confines the postdevelopment peak flow rate from the 10-year 24-hour storm event within the stormwater conveyance system. Detention of stormwater or downstream improvements may be incorporated into the approved land-disturbing activity to meet this criterion, at the discretion of the VSMP authority.
  - 2. Concentrated stormwater flow to stormwater conveyance systems that currently experience localized flooding during the 10-year 24-hour storm event: The point of discharge either:
    - a. Confines the postdevelopment peak flow rate from the 10-year 24-hour storm event within the stormwater conveyance system to avoid the localized flooding. Detention of stormwater or downstream improvements may be incorporated into the approved land-disturbing activity to meet this criterion, at the discretion of the VSMP authority; or
    - b. Releases a postdevelopment peak flow rate for the 10-year 24-hour storm event that is less than the predevelopment peak flow rate from the 10-year 24-hour storm event. Downstream stormwater conveyance systems do not require any additional analysis to show compliance with flood protection criteria if this option is utilized.
  - 3. Limits of analysis. Unless subdivision 2 b of this subsection is utilized to comply with the flood protection criteria, stormwater conveyance systems shall be analyzed for compliance with flood protection criteria to a point where:
    - a. The site's contributing drainage area is less than or equal to 1.0% of the total watershed area draining to a point of analysis in the downstream stormwater conveyance system;
    - b. Based on peak flow rate, the site's peak flow rate from the 10-year 24-hour storm event is less than or equal to 1.0% of the existing peak flow rate from the 10-year 24-hour storm event prior to the implementation of any stormwater quantity control measures; or
    - c. The stormwater conveyance system enters a mapped floodplain or other flood-prone area, adopted by ordinance, of any locality.
- D. Increased volumes of sheet flow resulting from pervious or disconnected impervious areas, or from physical spreading of concentrated flow through level spreaders, must be identified and evaluated for potential impacts on down-gradient properties or resources. Increased volumes of sheet flow that will cause or contribute to erosion, sedimentation, or flooding of down gradient properties or resources shall be diverted to a stormwater management facility or a stormwater conveyance system that conveys the runoff without causing down-gradient erosion,

sedimentation, or flooding. If all runoff from the site is sheet flow and the conditions of this subsection are met, no further water quantity controls are required.

- E. For purposes of computing predevelopment runoff, all pervious lands on the site shall be assumed to be in good hydrologic condition in accordance with the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) standards, regardless of conditions existing at the time of computation. Predevelopment runoff calculations utilizing other hydrologic conditions may be utilized provided that it is demonstrated to and approved by the VSMP authority that actual site conditions warrant such considerations.
- F. Predevelopment and postdevelopment runoff characteristics and site hydrology shall be verified by site inspections, topographic surveys, available soil mapping or studies, and calculations consistent with good engineering practices. Guidance provided in the Virginia Stormwater Management Handbook and on the Virginia Stormwater BMP Clearinghouse Website shall be considered appropriate practices.

#### **DISCUSSIONS:** The group discussed:

- The concepts of "adequate channel" and discharge through a "stormwater conveyance system"
- The use of "on-site channels";
- The concept of the use of "energy balance";
- Channel adequacy calculations;
- Natural stormwater conveyance;
- The use of the terms "shall" and "must";

#### 6. Break for Lunch – 12:00 NOON – 1:05 PM

## 7. Minimum Standard 19 Continued Discussions – DEQ Staff/VESMP RAP/MS19 Stakeholders:

The discussions related to Minimum Standard 19 continued after lunch.

#### **DISCUSSIONS:** The group discussed:

- The 1% Rule;
- Limits of Analysis;
- Limits of Downstream Analysis;
- Channel Protections
- Technical Bulletin 1
- The requirements related to Flood Protection found in 66 C 1,2, and 3:

C. Flood protection. Concentrated stormwater flow shall be released into a stormwater conveyance system and shall meet one of the following criteria as demonstrated by use of acceptable hydrologic and hydraulic methodologies:

1. Concentrated stormwater flow to stormwater conveyance systems that currently do not experience localized flooding during the 10-year 24-hour storm event: The point of discharge

releases stormwater into a stormwater conveyance system that, following the land-disturbing activity, confines the postdevelopment peak flow rate from the 10-year 24-hour storm event within the stormwater conveyance system. Detention of stormwater or downstream improvements may be incorporated into the approved land-disturbing activity to meet this criterion, at the discretion of the VSMP authority.

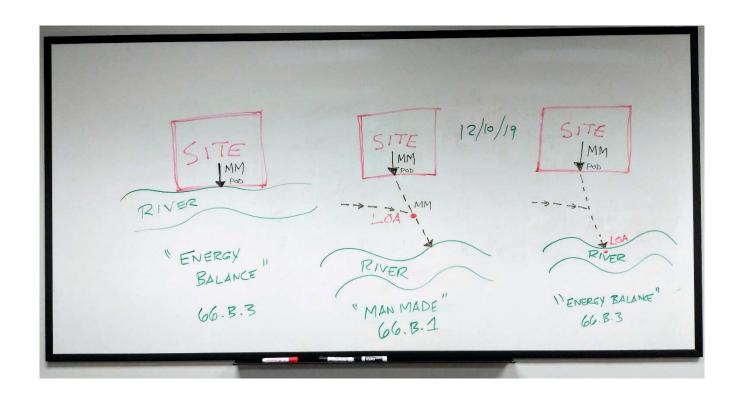
- 2. Concentrated stormwater flow to stormwater conveyance systems that currently experience localized flooding during the 10-year 24-hour storm event: The point of discharge either:
  - a. Confines the postdevelopment peak flow rate from the 10-year 24-hour storm event within the stormwater conveyance system to avoid the localized flooding. Detention of stormwater or downstream improvements may be incorporated into the approved land-disturbing activity to meet this criterion, at the discretion of the VSMP authority; or
  - b. Releases a postdevelopment peak flow rate for the 10-year 24-hour storm event that is less than the predevelopment peak flow rate from the 10-year 24-hour storm event. Downstream stormwater conveyance systems do not require any additional analysis to show compliance with flood protection criteria if this option is utilized.
- 3. Limits of analysis. Unless subdivision 2 b of this subsection is utilized to comply with the flood protection criteria, stormwater conveyance systems shall be analyzed for compliance with flood protection criteria to a point where:
  - a. The site's contributing drainage area is less than or equal to 1.0% of the total watershed area draining to a point of analysis in the downstream stormwater conveyance system;
  - b. Based on peak flow rate, the site's peak flow rate from the 10-year 24-hour storm event is less than or equal to 1.0% of the existing peak flow rate from the 10-year 24-hour storm event prior to the implementation of any stormwater quantity control measures; or
  - c. The stormwater conveyance system enters a mapped floodplain or other flood-prone area, adopted by ordinance, of any locality.

#### **Continued Discussions:**

The group discussed:

- The concept of the use of an "energy balance" and raised the question of "when would you not have to do "energy balance".
- Limits of analysis;
- Maintaining natural hydrology;
- Adequate channel;
- Channel protection;
- Discharge to a natural channel
- 1% by flow or by drainage area?

Drew provided a visual representation of the concepts of points of discharge; limits of discharge and the use of "energy balance":





#### 8. BREAK: 2:05 PM – 2:12 PM

## 9. Minimum Standard 19 Continued Discussions – DEQ Staff/VESMP RAP/MS19 Stakeholders:

Drew Hammond reviewed the materials that had been sent out to the group – email dated December 1, 2015:

"In general, the Department's guidance regarding MS-19 is as follows: • Projects subject to the old SWM Part IIC technical criteria or ESC only projects approved prior to July 1, 2014, must comply with MS-19 sections a, b, c, d, e, f, g, h, i, j, and k. In lieu of complying with sections a, b, and c, an owner may develop and implement a design in accordance with section 1. • Projects subject to the new SWM Part IIB technical criteria or ESC only projects approved after July 1, 2014, must comply with MS-19 sections d, e, f, g (portion of; energy dissipaters must be placed at the outfall of all detention facilities as necessary), h, j, k, and m (which is Section 66 of the VSMP regulations)."

Drew also discussed a number of items currently found in MS 19 that should live on as we move forward through this process. They include:

- d. The applicant shall provide evidence of permission to make the improvements.
- e. All hydrologic analyses shall be based on the existing watershed characteristics and the ultimate development condition of the subject project.
- f. If the applicant chooses an option that includes stormwater detention, he shall obtain approval from the VESCP of a plan for maintenance of the detention facilities. The plan shall set forth the maintenance requirements of the facility and the person responsible for performing the maintenance.
- g. Outfall from a detention facility shall be discharged to a receiving channel, and energy dissipators shall be placed at the outfall of all detention facilities as necessary to provide a stabilized transition from the facility to the receiving channel.
- h. All on-site channels must be verified to be adequate.
- j. In applying these stormwater management criteria, individual lots or parcels in a residential, commercial or industrial development shall not be considered to be separate development projects. Instead, the

development, as a whole, shall be considered to be a single development project. Hydrologic parameters that reflect the ultimate development condition shall be used in all engineering calculations.

k. All measures used to protect properties and waterways shall be employed in a manner which minimizes impacts on the physical, chemical and biological integrity of rivers, streams and other waters of the state.

#### **Discussions: The group discussed:**

- General Criteria 7;
- Consolidation and Maintenance Agreements for E&S;
- DEQ Template for Maintenance Agreements

ACTION ITEM: The group asked if it was possible for DEQ to share their "Template for Maintenance Agreements"? Staff offered to share that information with any one of the group who was interested.

Drew Hammond initiated a discussion of Section 2C projects and asked the group for any input on their thoughts of any of the pathway moving forward with these projects.

#### **Discussions: The group discussed:**

- MS 19:
- Adequate channel design;
- Technical Bulletin1;
- The Rolband amendment;
- '95 General Criteria;
- Is there any value with monkeying with the existing language?
- The 1980 Brown Book

#### 10. Meeting Wrap-up – Jaime Robb

Jaime thanked the group for all of their input during today's meeting. She reminded the group that we can't use this current regulatory effort to pursue anything related to MS19 but the information from today's meeting will be helpful in informing a future regulatory action. There is currently no time-table for any action related to MS19. That will have to be taken under consideration by another Regulatory Advisory Panel at a future date. This process today was just a way to inform that process as it moves forward in the future.

Jaime noted that staff would be looking back over the input from the RAP over the course of the previous meetings and the materials related to the current action today to put together documents for review and consideration by the RAP.

#### 11. Public Comment: 2:42 PM – 3:01 PM

An opportunity for members of the public who were in attendance to make any public comment to the group was provided. Jerry Stonefield with Fairfax County provided the following comments:

- How will the program address "Natural Stream Concepts"?
- How are "restored conveyance systems" going to be addressed?
- The regulations don't give criteria for "natural concept design".

It was noted that the approach would likely to be "seeking an exception" or "granting an exception". Another approach might be to "seek open space designation".

#### 12. Next Steps - Jaime Robb:

Jaime informed the group that over the next several months that staff would be reviewing all of the input from the RAP and will be compiling that information and those suggestions with the goal of providing those materials to the RAP for their review and comment. After sufficient time for review and consideration, another RAP meeting will be scheduled to consider the revised documents. The best-case scenario would be to be able to take a recommendation to the State Water Control Board in the Winter of 2020. The idea would be to seek a 6 to 9- or 12-month delated implementation of the revised regulations to allow time for localities to develop and adopt local ordinances to address the changes in the program.

Jaime asked to input from the group on any aspect that has been discussed and any suggestions that might be useful in putting together a revised version of the consolidated program for review and consideration by the group.

ACTION ITEM: Bill Norris will distribute copies of the Meeting Notes from today's meeting following review by DEQ Project Staff.

ACTION ITEM: Bill Norris will distribute the recommendations received from John Burke related to definitions and will distribute the links and information related to the use of the terms "must" and "shall" that were discussed.

#### 13. Adjournment – 3:10 PM

Jaime thanked everyone for their participation and input and wished everyone a very Merry Christmas. The meeting was adjourned at 3:10 PM