TENTATIVE AGENDA
STATE WATER CONTROL BOARD MEETING
MONDAY, JUNE 17, 2013

House Room C
General Assembly Building
9th and Broad Streets
Richmond, VA 23219

CONVENE – 9:30 A.M.

			TAB
I.	**Minutes (**March 14, 2013)		A
II.	**Final Regulations**		
	Amendments to Implement HB2089	Berndt	B
	General VPDES Permit for Potable Water Treatment Plants (9VAC25-860)	Daub	C
	Groundwater Withdrawal Regulation Amendments (9VAC25-610)	Kudlas	D
	Eastern Virginia Groundwater Management Area Regulation (9VAC25-600)	Kudlas	E
III.	**Fast-Track Regulations**		
	Eastern Virginia Ground Water Management Area Regulations (9VAC25-600) and Eastern Shore Ground Water Management Area Regulation (9VAC25-620)	Kudlas	F
IV.	**Proposed Regulations**		
	General VPDES Permit for Nonmetallic Mineral Mining (9VAC25-190)	Daub	G
	General VPDES Permit for Stormwater Discharges Associated with Industrial Activity (9VAC25-151)	Tuxford	H
V.	**Significant Noncompliers Report**	O'Connell	
VI.	**Consent Special Orders (VPDES Permit Program/Unpermitted Discharges)**	O'Connell	I
	Northern Regional Office		
	Loudoun County Sanitation Authority		
	Town of Middleburg WTP (Loudoun Co.)		
	Blue Ridge Regional Office		
	Ronile, Inc. (Franklin Co.)		
	Southwest Regional Office		
	Coeburn-Norton-Wise Regional WWTA (Wise Co.)		
	Valley Regional Office		
	George's Chicken, LLC (Shenandoah Co.)		
	Piedmont Regional Office		
	Powhatan County Dutoy Creek WWTP		
	Charles City County: Administration Bldg.; Hideaway STP; Mt. Zion and Rustic WTP; Roxbury Industrial Center WWTP; And Ruthville WWTP		
VII.	**Consent Special Orders (VWP Permit Program/ Wetlands/Ground Water Permit Program)**	O'Connell	J
	Northern Regional Office		
	I-95 Industrial Park Project/R. Income Properties (Stafford Co.)		
	Willow Pond II, LLC (Loudoun Co.)		
	Piedmont Regional Office		

Bank of America, National Association (Henrico Co.)
King William County Central Garage Water System

VIII.	**Consent Special Orders (UST/Oil)**	O'Connell	K
	Northern Regional Office		
	Holtzman Oil Corp. (Loudoun Co.)		
	Piedmont Regional Office		
	Midget Mart No. 2, Inc. (Petersburg)		
	Tidewater Regional Office		
	Master Fleet Services, Inc. (Hampton)		
	Washington Street Inc. (Suffolk)		
IX.	**Other Business**		
	Cobbs Creek Mitigation Plan	Winn	L
	Review of Trading Ratio for Nutrient Allocation Acquisition Pursuant to § 62.1-44.19:15 B of the Code of Virginia	Baxter	M
X.	**Public Forum**		
XI.	**Division Director's Report**	Davenport	
XII.	**Future Meetings** (Confirm August 26-27, September 31-October 1, and December 9-10)		

ADJOURN

NOTE: The Board reserves the right to revise this agenda without notice unless prohibited by law. Revisions to the agenda include, but are not limited to, scheduling changes, additions or deletions. Questions arising as to the latest status of the agenda should be directed to the staff contact listed below.

PUBLIC COMMENTS AT STATE WATER CONTROL BOARD MEETINGS: The Board encourages public participation in the performance of its duties and responsibilities. To this end, the Board has adopted public participation procedures for regulatory action and for case decisions. These procedures establish the times for the public to provide appropriate comment to the Board for its consideration.

For REGULATORY ACTIONS (adoption, amendment or repeal of regulations), public participation is governed by the Administrative Process Act and the Board's Public Participation Guidelines. Public comment is accepted during the Notice of Intended Regulatory Action phase (minimum 30-day comment period) and during the Notice of Public Comment Period on Proposed Regulatory Action (minimum 60-day comment period). Notice of these comment periods is announced in the Virginia Register, by posting to the Department of Environmental Quality and Virginia Regulatory Town Hall web sites and by mail to those on the Regulatory Development Mailing List. The comments received during the announced public comment periods are summarized for the Board and considered by the Board when making a decision on the regulatory action.

For CASE DECISIONS (issuance and amendment of permits), the Board adopts public participation procedures in the individual regulations which establish the permit programs. As a general rule, public comment is accepted on a draft permit for a period of 30 days. If a public hearing is held, there is an additional comment period, usually 45 days, during which the public hearing is held.

In light of these established procedures, the Board accepts public comment on regulatory actions and case decisions, as well as general comments, at Board meetings in accordance with the following:

REGULATORY ACTIONS: Comments on regulatory actions are allowed only when the staff initially presents a regulatory action to the Board for final adoption. At that time, those persons who commented during the public comment

period on the proposal are allowed up to 3 minutes to respond to the summary of the comments presented to the Board. Adoption of an emergency regulation is a final adoption for the purposes of this policy. Persons are allowed up to 3 minutes to address the Board on the emergency regulation under consideration.

CASE DECISIONS: Comments on pending case decisions at Board meetings are accepted only when the staff initially presents the pending case decision to the Board for final action. At that time the Board will allow up to 5 minutes for the applicant/owner to make his complete presentation on the pending decision, unless the applicant/owner objects to specific conditions of the decision. In that case, the applicant/owner will be allowed up to 15 minutes to make his complete presentation. The Board will then allow others who commented during the public comment period (i.e., those who commented at the public hearing or during the public comment period) up to 3 minutes to respond to the summary of the prior public comment period presented to the Board. No public comment is allowed on case decisions when a FORMAL HEARING is being held.

POOLING MINUTES: Those persons who commented during the public hearing or public comment period and attend the Board meeting may pool their minutes to allow for a single presentation to the Board that does not exceed the time limitation of 3 minutes times the number of persons pooling minutes, or 15 minutes, whichever is less.

NEW INFORMATION will not be accepted at the meeting. The Board expects comments and information on a regulatory action or pending case decision to be submitted during the established public comment periods. However, the Board recognizes that in rare instances, new information may become available after the close of the public comment period. To provide for consideration of and ensure the appropriate review of this new information, persons who commented during the prior public comment period shall submit the new information to the Department of Environmental Quality (Department) staff contact listed below at least 10 days prior to the Board meeting. The Board's decision will be based on the Department-developed official file and discussions at the Board meeting. In the case of a regulatory action, should the Board or Department decide that the new information was not reasonably available during the prior public comment period, is significant to the Board's decision and should be included in the official file, the Department may announce an additional public comment period in order for all interested persons to have an opportunity to participate.

PUBLIC FORUM: The Board schedules a public forum at each regular meeting to provide an opportunity for citizens to address the Board on matters other than those on the agenda, pending regulatory actions or pending case decisions. Those wishing to address the Board during this time should indicate their desire on the sign-in cards/sheet and limit their presentations to 3 minutes or less.

The Board reserves the right to alter the time limitations set forth in this policy without notice and to ensure comments presented at the meeting conform to this policy.

Department of Environmental Quality Staff Contact: Cindy M. Berndt, Director, Regulatory Affairs, Department of Environmental Quality, 629 East Main Street, P.O. Box 1105, Richmond, Virginia 23218, phone (804) 698-4378; fax (804) 698-4346; e-mail: cindy.berndt@deq.virginia.gov.

Amendments to Conform State Water Control Board Regulations to Chapter 348 of the 2013 Acts of Assembly: The regulatory amendments to 9VAC25-31, 9VAC25-32, 9VAC25-220, and 9VAC25-230 are presented to the Board for consideration for adoption. Chapter 348 of the 2013 Acts of Assembly defines, in all statutory or regulatory provisions administered by the Department, "mail" to mean electronic or postal delivery and the term "certified mail" to mean electronically certified or postal certified mail, except that this provision shall apply only to the mailing of plan approvals, permits, or certificates issued under the provisions of this chapter and those of the Air Pollution Control Law, the Virginia Waste Management Act and the State Water Control Law, and only where the recipient has notified the Department of his consent to receive plan approvals, permits, or certificates by electronic mail. Section 2.2-4006 A 4 (a) of the Code of Virginia allows the Board to adopt this regulatory amendment to 9VAC20-40 as the changes are necessary to conform to changes in §10.1-1183 of the Code of Virginia. This regulatory amendment will be effective 30 days after publication in the *Virginia Register*. At the Board meeting on June 17, 2013, the department will request that the Board adopt the amendments to 9VAC25-31, 9VAC25-32, 9VAC25-220 and 9VAC25-230; authorize publication of the amendments; and affirm that the Board will receive, consider and respond to requests by any interested person at any time with respect to reconsideration or revision.

General VPDES Permit Regulation for Potable Water Treatment Plants, VAG64 Amendments to 9VAC25-860 and Reissuance of General Permit: The current VPDES Potable Water Treatment Plant General Permit will expire on December 23, 2013, and the regulation establishing this general permit is being amended to reissue another five-year permit. The staff is bringing this final regulation before the Board to adopt the amendments to the general permit regulation. The proposed regulation takes into consideration the recommendations of a technical advisory committee formed for this regulatory action. The technical advisory committee consisted of representatives from water treatment plants, VDH and DEQ staff. The Board's authorization of a public comment period for the proposal was received at the December 6, 2012 meeting. A public comment period was held December 31, 2012 through March 1, 2013 with a public hearing on February 14, 2013 in Glen Allen. No one attended the public hearing. Written comments were received from Hanover County Department of Public Utilities (Matthew Ellinghaus, Assistant Chief of Operations & Maintenance) who expressed support of the amended regulation. COMMENT: The County commented that many of the proposed changes will allow more potable water treatment plants to take advantage of the general permit as well as decrease the regulatory burden on existing general permit holders. They noted specifically the changes that related to reduced monitoring, whole effluent toxicity, and clarification of definitions and inspection requirements.
DEQ RESPONSE: Noted.
Since publication of the proposal only minor changes were made for clarifications that do not change the intent of the proposal that was approved by the Board for public comment.

SUMMARY OF 9VAC25-860 PROPOSED REVISIONS

Section 10 – Definitions. Definitions were added for department, membrane treatment, microfiltration, municipal separate storm sewer system, nanofiltration, reverse osmosis, total maximum daily load and ultrafiltration. This terminology is used in the regulation and needed explanation. The definition of potable water treatment plant was expanded to include creation of potable water for private industrial uses, and not just limit it to plants primarily engaged in distributing water for sale for domestic, commercial or industrial use. Most of these plants fall under Standard Industrial Classified (SIC) Code 4941 (Water Supply), but some establishments that produce potable water for their own use may not fit under this SIC Code. The technical advisory committee thought these facilities should also have an opportunity for coverage under this permit.
Section 40 – Effective dates were updated to reflect this reissuance throughout the regulation. In addition, the expiration date of this permit was changed from December 23, 2018 to June 30, 2018 to move it away from the end of the year to address DEQ staff resource issues and to have the permit effective date begin on a calendar quarter which is consistent with other general permits.
Section 50 A, B– Authorization – Reformatted to match structure of other general permits being issued at this time. Added two additional reasons authorization to discharge cannot be granted per EPA comments on other general permits issued recently. Therefore, an owner will be denied authorization when the discharge would violate the antidegradation policy or if the discharge is not consistent with the requirements and assumptions of an approved TMDL. The requirement to submit whole effluent toxicity data with the registration statement was removed and a whole effluent toxicity requirement was placed into the permit itself. However, if any whole effluent toxicity testing was done and demonstrated toxicity, the discharge would not be eligible for coverage.
Section 50 C – Added the statement *"Compliance with this general permit constitutes compliance with the Clean Water Act and the State Water Control Law, with the exceptions stated in 9VAC25-31-60 of the VPDES Permit Regulation."* This was added in response to AGO comments on other general permits recently reissued in order to recognize there are some exceptions to compliance with the CWA as stated in the permit regulation.
Section 50 D– Added language to allow for administrative continuances of coverage under the old expired general permit until the new permit is issued, and coverage is granted or coverage is denied; provided the permittee has submitted a timely registration and is in compliance with the expiring permit. This language is being added to all recently reissued general permits so permittees can discharge legally and safely if the permit reissuance process is delayed.
Section 60 A – Registration Statement – Reformatted to match the structure of other recently reissued general permits. Facilities currently holding an individual VPDES permit and requesting coverage under this general permit must notify DEQ 270 days prior to the expiration date of their individual permit, rather than 180 days prior to their expiration date. This gives the permittee time (90 days) to meet their '180 day prior to expiration' individual permit application deadline if their request for coverage under the general permit is denied. Existing facilities covered under the existing general permit must submit a registration statement prior to October 24, 2013 (which is 60 days prior to expiration).
Section 60 B – Added language accepting late registration statements, but stating that authorization to discharge will not be retroactive. Also, existing permittees may be provided administrative continuance of their existing permit if a complete registration statement is submitted before the December 24, 2013 effective date.

Section 60 C – Several minor edits to the registration statement questions were made for clarification. For example, added email address, allowance for submission of computer generated maps with the registration statement, and a few other minor clarifications. Expanded the question about treatment type and whether it has changed since the previous registration. The whole effluent toxicity testing question was clarified to include submittal of data if required by the 2008 general permit or their individual permit, if this was not previously submitted to the department. The chemical usage question was expanded to ask if chemical usage had changed since the previous registration. A question about MS4s was added as follows: *"Whether the facility will discharge to a MS4. If so, the name of the MS4 owner must be provided. If the owner of the potable water treatment plant is not the owner of the MS4, the facility owner shall notify the MS4 owner of the existence of the discharge and include a copy of the notification with the registration statement. The notification shall include the following information: the name of the facility, a contact person and phone number, the location of the discharge, the nature of the discharge, and the owner's VPDES general permit number."* The TAC also thought that notification to downstream localities of any new discharges upstream was important and the following question was added: "*If a new potable water treatment plant owner proposes to discharge within five miles upstream of another public water supply system's intake, the new potable water treatment plant owner shall notify the public water supply system's owner and include a copy of the notification with the registration statement.*"

Section 70 Part I A 1– General Permit limits pages for process water. Clarified that Part I A 1 pages apply to any water treatment plant that does not utilize reverse osmosis or nanofiltration. These are generally what are referred to as 'conventional' plants. The agency also determined that monitoring data associated with the existing general permit showed that monthly reporting from any facility is not necessary based on past compliance within the industry and the fact that these facilities often have no discharge. Therefore, all facilities are afforded the 'reduced monitoring' allowance of 1/3 months (quarterly). Also, footnote #3 now clarifies how a composite sample shall be taken, which varies if the discharge is continuous or batch. The previous 5Grab/8 Hour Composite requirement was a hardship for batch type discharges and not necessary to collect a representative sample. .

The narrative requirement for no discharge of floating solids or visible foam in other than trace amounts was moved to Part B, Special Conditions.

Section 70 Part I A 2 – General Permit limits pages for reverse osmosis and nanofiltration plants. Except for the same clarifications on the composite sampling mentioned in Part I A 1 above, these requirements remained the same. The monitoring frequencies remained monthly; although the owner may get reduced monitoring based on a favorable compliance history.

Section 70 Part I B 1 - Changed that inspections are performed 'when discharging' rather than 'daily.' This was done at the request of the industry TAC members. This seemed reasonable as other states have a similar frequency, or no inspections at all.

Section 70 Part I B 4 – The 'no discharge of floating solids or visible foam in other than trace amounts' requirement was moved from this section. Old special condition 4 which explained the compliance conditions under which to reinstate more frequent monitoring (monthly) when reduced monitoring (quarterly) had been granted was deleted. Almost all water treatment plants in Virginia fall under Part I A 1 (conventional plants), which we are proposing to reduce to quarterly monitoring as the normal frequency. So this section no longer applies to them. If any reverse osmosis plants falling under Part I A 2 quality for reduced monitoring (monthly to quarterly) they will retain that reduced monitoring frequency until reissuance.

Section 70 Part I B 5 – Added a new special condition that *"Owners of facilities that are a source of the specified pollutant of concern to waters where an approved TMDL has been established shall implement measures and controls that are consistent with the assumptions and requirements of the TMDL."* This special condition is being added to all general permits as they are reissued. It reinforces the way general permits are currently handled in TMDLs. The assumption of the TMDL is that general permits are insignificant to the total load until such time that the TMDL program determines that the load is significant and the TMDL needs to be modified to include the load.

Section 70 Part I B 7 - Added that groundwater monitoring plans may be changed when appropriate and that the owner may submit that evaluation to the board for approval. The TAC thought this was reasonable.

Section 70 Part I B 9 - Clarified several of the requirements of the operations and maintenance manual. The manual shall be updated within 90 days of coverage or within 90 days of changes to the treatment system. However, now the O&M manuals are no longer submitted to the department for approval. However, they must be made available to department personnel upon request. O&M manuals have always been an enforceable part of this permit.

Section 70 Part I B 10 – The details of the whole effluent toxicity testing requirement was moved to this special condition and out of the regulation 'authorization to discharge' section 50. The 2008 regulation required this WET testing before coverage could be granted. This was a hardship on new permittees who had to apply and pay for an individual permit before they could qualify for the general permit. With this draft, we are proposing to require the WET testing during the

term of the general permit, only for permittees with flows greater than or equal to 50,000 GPD, and giving the owners an opportunity to find and eliminate the source of toxicity before they are subject to a WET limit upon reissuance. This will allow new permittees and existing permittees less than 50,000 GPD to move away from their individual permits to the general permit. The regulation also allows use of representative toxicity data from the past to qualify for the general permit. Finally, the WET testing requirement within the general permit will be a onetime requirement. Once the permittee shows no reasonable potential, then there is no requirement to repeat the tests unless changes are made at the plant.
Section 70 Part I B 11 Added *"The discharges authorized by this permit shall be controlled as necessary to meet applicable water quality standards."* This is a general requirement to meet water quality standards and matches similar language going into other recently reissued general permits.
Section 70 Part I B 12 – Added a new special condition that describes how terminations of a general permit will be implemented. This is being added to all general permits as they are reissued.
Section 70 Part I B 13 Added *"Approval for coverage under this general permit does not relieve any owner of the responsibility to comply with any other federal, state or local statute, ordinance or regulation."* This requirement is part of the regulation at section 50 C and staff thought it should be repeated in the permit to remind the permittee of the responsibility.
Section 70 Part II A – Conditions applicable to all Permits - Added *"Samples taken as required by this permit shall be analyzed in accordance with 1VAC30-45: Certification for Noncommercial Environmental Laboratories, or 1VAC30-46: Accreditation for Commercial Environmental Laboratories."* This is a new regulatory requirement effective January 1, 2012, and is being added to all general permits as they are reissued.
Section 70 Part II Y – Transfer of permits – Deleted paragraph Y 1 which is the ability to transfer a permit to a new owner by a modification, or revocation and reissuance, or a minor modification. General permit coverage is not modified or revoked and reissued. Revised Y 2 to say automatic transfers can occur at least 30 days in advance of the proposed transfer unless permission for a later date has been granted by the board. Our regional office staff has also stated this advance transfer notification is unnecessary and we should be able to accept a transfer notification at any time.

Request to Adopt Final amendments to the Groundwater Withdrawal Regulation (9VAC25-610 et seq.): [Note: summary of public comment and responses received on these amendments can be found beginning on page 26.] The staff will bring to the Board at the June 17, 2013 meeting, a request to accept final amendments to the Groundwater Withdrawal Regulations (9VAC25-610 et seq.) that establish the guidelines for groundwater withdrawals that occur in a groundwater management area. The regulations are being amended to be more consistent with current administrative and application processing practices of other water permit program regulations. This is needed since the regulations have not been revised in over a decade and agency practices have changed. The application requirements for different types of permits and situations have been separated in to different regulatory sections to provide more clarity concerning the requirements for complete applications. New sections have been added to address surface water and groundwater conjunctive use permits and supplemental drought relief permits. The water conservation and management plan section has been revised to specify the conservation measures and requirements that must be met, depending on the type of the groundwater use. The regulations also now identify information to be provided to ensure that the need for the groundwater has been documented, and that alternatives to using groundwater have been investigated and considered. A section has been added that allows the agency to estimate an area of impact for mitigation of a small withdrawal based on available modeled information instead of requiring geotechnical investigations to occur. The regulations are also being revised to be consistent with current agency guidance concerning the 80% drawdown evaluation criteria. Additional permit conditions are being specified in the regulations that will be applicable to all permits which will clarify the requirements that groundwater withdrawers must meet.
Background: The proposed amendments are necessary to protect the health, safety or welfare of citizens in designated Groundwater Management Areas in order to ensure the availability of groundwater for current and future beneficial uses. Groundwater levels in parts of the coastal plain are declining to the point that they are nearing aquifer tops in a number of localities along the fall line. In addition, levels are declining generally throughout the rest of the coastal plain at comparable rates. The declines in groundwater levels have created a situation in which many existing permitted users are unable to renew their withdrawal permits at permitted amounts when they exceed current use. Also, new or expanded applications are a challenge to permit. Withdrawing groundwater to the point that it falls below the top of the aquifer can lead to subsidence or impair the aquifer's ability to store water in the future, potentially impacting the availability of groundwater for existing users and compromising growth and development potential throughout the groundwater management area. Over the years our understanding of the coastal plain aquifer system has changed. In addition, we need

to address what constitutes an adequate margin of safety and what technical criteria are defensible for determining whether or not to issue a permit and for what amounts.

Notice of Intended Regulatory Action and Regulatory Advisory Panel: A Notice of Intended Regulatory Action (NOIRA) was published in the Virginia Register of Regulations on July 6, 2009. Proposed amendments to the Groundwater Withdrawal Regulation were developed through a public participation process that involved a 19 member Regulatory Advisory Panel (RAP) of stakeholders which met a total of 4 times in 2009 (Sept. 18th , Oct 28th, Nov. 19th, and Dec 9th) and 2 times in 2010 (Feb. 3rd, and April 1st). This RAP also assisted with the development of the amendments to the Eastern Virginia Groundwater Management Area Regulations. Staff worked with the members of the RAP to develop the proposed amendments.

Proposed Regulation and Public Comment: Based on the input of the Regulatory Advisory Panel and comments received during the NOIRA comment period, the DEQ prepared proposed amendments to the regulation. On June 21, 2010, the Board voted to proceed to public comment and hearing on these proposals. Following Board approval, the Attorney General's Office completed its review on June 28, 2010. The Department of Planning and Budget completed an economic impact review on August 12, 2010. The Secretary of Natural Resources granted approval of the proposed regulatory amendments on September 21, 2010, and the Governor approved the amendments on September 18, 2012. DEQ published the proposed amendments in the Virginia Register on October 22, 2012. The public comment period for the proposed amendments was scheduled from October 22, 2012 to January 11, 2013. Middlesex County requested the Board to hold an additional evening hearing in the expanded area and an additional hearing was held in Warsaw, Virginia. As a result of adding an additional hearing, the comment period was extended until January 30, 2013. Pursuant to Section 2.2-4007.03 of the Code of Virginia and 9VAC25-11 (Public Participation Guidelines), DEQ held 3 public hearings as follows:

November 26, 2012 at 1:30 p.m. - James City County Board of Supervisors Meeting Room, Building F, 101 Mounts Bay Rd., Williamsburg, VA

December 4, 2012 at 2 p.m. - Spotsylvania County Administration Building- Holbert Building, Board of Supervisors Meeting Room, 9104 Courthouse Rd., Spotsylvania, VA

January 14, 2013 at 6:30 p.m. - Rappahannock Community College, Room W172, 52 Campus Drive, Warsaw, VA

DEQ received a total of 163 comments on the proposed amendments from 36 organizations and individuals.

Final Amendments to the Regulation: This regulatory action amends the Groundwater Withdrawal Regulation (9VAC25-610-10 et seq.) The following is a summary of significant amendments to the regulation:

- The regulations are being amended to be more consistent with other water permit program regulations. This is needed since the regulations have not been revised in many years. The application requirements for different types of permits and situations have been separated into different regulatory sections to provide more clarity concerning the requirements for complete applications. Previously, different types of permits were listed in one section, making the regulations confusing and difficult to use.
- Throughout the regulation, the term “ground water” has been changed to the term “groundwater” to be consistent with common usage and terminology of the United States Geological Survey (USGS). The terms “amend”, “amended”, and “amendment” have been changed to the terms “modify”, “modified”, and “modification” throughout the regulation to be consistent with the use of these terms in other water permit programs.
- Preapplication meetings are now required prior to submitting a permit application for a withdrawal. This will reduce the number of revisions it takes for the applicant to achieve a complete application and will reduce the number of re-reviews conducted by agency staff. A provision has been added to the regulations that would allow the agency the ability to waive information from being resubmitted by applicants as part of a permit application. During the preapplication meeting, the applicant and the department will review the materials required to be submitted as part of the permitting process as well as the information that the department currently has on file. DEQ will then inform the applicant what information can be waived and what information must still be submitted. This will streamline the permitting process and eliminate the resubmission of information that the agency already has on file.
- New sections have been added to address surface water and groundwater conjunctive use permits and supplemental drought relief permits. Conjunctive use permits will address the balance between available surface water sources and the need to withdraw supplemental groundwater to meet water demand. A section has been added to the regulations to address the requirements for supplemental drought relief permits. Supplemental drought relief permits are permits to withdraw groundwater to meet human consumption after mandatory water use restrictions have been implemented.

- The water conservation and management plan section has been revised to specify the conservation measures and requirements that must be met, depending on the type of groundwater use. This allows the agency to specify specific water conservation measures that must be addressed in water conservation and management plans for specific uses. Conservation measures are required to be implemented through the development of water conservation and management plans. Conservation measures of high volume water consumers on municipal and non-municipal public water supplies shall be explicitly addressed in plans to ensure that conservation measures are being implemented and applied. Changes have been made to make clear that water conservation and management plans are an enforceable part of the permit.
- The regulations also now identify information to be provided to ensure that the need for the groundwater has been documented, and that alternatives to using groundwater have been investigated and considered. Previously there was limited information provided to applicants concerning their justification of need. This section of the regulations should provide more consistency for applicants concerning the information they provide to justify their need to withdraw groundwater. Projected demand information developed as part of water supply plans developed to comply with 9 VAC 25-780 may be used to meet some of the justification of need requirements. These changes bring this regulation in line with current surface water withdrawal justification of need.
- A section has been added to allow for the agency to estimate an area of impact of a small withdrawal based on information available instead of requiring geotechnical investigations to occur. Adding this approach will allow some applicants to accept a default area of impact in lieu of conducting geotechnical investigations. The geotechnical investigations add to the cost of applying for a groundwater withdrawal permit. Applicants will retain the ability to conduct geotechnical investigations in lieu of accepting the agency's default area of impact.
- The regulations are also being revised to be consistent with current agency guidance concerning the 80% drawdown criteria evaluation. This change is needed because additional information concerning the geologic structure of the coastal plain aquifer system and its effects on evaluating withdrawal impacts have been discovered since the regulations were last updated.
- Additional permit conditions are being specified in the regulations that will be applicable to all permits. These changes will provide the applicant with knowledge of minimum permit conditions that they will be required to comply with before they apply for a permit and will increase certainty to the regulated community.

In response to comments, additional changes are being made to the regulations since originally proposed. These changes are in response to public comment and include the following:

- Revising the term "human consumption" to provide more clarify concerning the ways in which water is used to support human life and health.
- Deletion of the term "prepumping levels" since the term is no longer used in the regulation.
- Modifying the regulations to clarify that the evaluations conducted for supplemental drought wells will not be evaluated for stabilized effects since these withdrawals are not continuous.
- Modifying the 80% drawdown criteria. The 80% drawdown criteria is evaluated at the point that is 80% of the distance between the land surface and the top of the aquifer. Previously the 80% drawdown criteria was evaluated based on the prepumping water levels.
- The term "geophysical evaluation" is being replaced with the term "geophysical investigation." This terminology change eliminates redundancy of terminology within the regulation. Previously the regulations said an evaluation of a geophysical evaluation would be conducted.
- The term "viable" is being replaced with the term "practicable." This replaces a previously undefined term with a term defined in the regulations.
- Revising the factors that board considers when evaluating an application. The board will now also consider the public benefit provided by the proposed withdrawal as well as prior public investments in existing facilities for withdrawal, transmission, and treatment of groundwater.
- Removal from the regulations the ability to deny a permit for failure to implement a water conservation and management plan in a previously permitted withdrawal. Issues with a permit holder not implementing a water conservation and management plan will be handled through the compliance and enforcement process.

In addition to the changes listed above, one additional change is being made to the regulations. In response to passage of Chapter 348 of the 2013 Acts of Assembly (HB2089) the regulations are being revised to allow copies of the final regulation to be to be sent by postal or electronic delivery to localities in the groundwater management area.

Request to Adopt Final Amendments to the Eastern Virginia Ground Water Management Area Regulation (9VAC25-600 et seq.): [Note: summary of public comment and responses received on these amendments can be found beginning on page 68.] The staff will bring to the Board at the June 17, 2013 meeting, a request to accept as final,

proposed amendments to the regulations that establish the localities that are included in the Eastern Virginia Ground Water Management Area (9VAC25-600 et seq.). These amendments expand the Eastern Virginia Ground Water Management Area to include all localities in the coastal plain. The following additional localities are being added to the groundwater management area: the counties of Essex, Gloucester, King George, King and Queen, Lancaster, Mathews, Middlesex, Northumberland, Richmond, and Westmoreland, and the areas of Arlington, Caroline, Fairfax, Prince William, Spotsylvania, and Stafford counties east of Interstate 95. Expanding the Groundwater management area will allow groundwater to be more comprehensively managed to ensure long-term availability. These regulations are closely related to the Groundwater Withdrawal Regulations (9VAC25-610-10 et seq.) and amendments to those regulations are being developed in conjunction with these amendments. The Groundwater Withdrawal Regulations outline the requirements that must be met for withdrawals to occur within groundwater management areas. At the June 17, 2013 meeting, the board will also be requested to accept as final, regulations to the Groundwater Withdrawal Regulations (9VAC25-610-10 et seq.) Simultaneous adoption of revisions to these regulations will eliminate confusion with requiring newly added areas of the Eastern Virginia Ground Water Management Area to be subject to existing regulations for a few months, and then become subject to different regulations a few months later.

Background: Amendments to the Eastern Virginia Groundwater Management Area Regulation (9 VAC 25-600-10 et seq.) are needed to effectively manage groundwater in the entire coastal plain. Establishing Groundwater Management Area (GWMA) is important for many reasons. A GWMA protects existing users of groundwater from new or expanding withdrawals by evaluating the impact the new or expanded withdrawal will have on existing users. It also assures continued resource viability into the future by protecting the aquifers from becoming dewatered. This is important because once an aquifer becomes dewatered, it is not able to be recharged in the future and the aquifer looses storage capacity. A GWMA also manages the resource comprehensively. Aquifers are very large and underlay multiple counties. Withdrawals from the same aquifer must be managed comprehensively to protect the finite resource. Water level data from monitoring wells and groundwater monitoring are showing water level declines in the Coastal Aquifer System in the counties not designated.

Notice of Intended Regulatory Action and Regulatory Advisory Panel: A Notice of Intended Regulatory Action (NOIRA) was published in the Virginia Register of Regulations on July 6, 2009. Proposed amendments to the Eastern Virginia Groundwater Management Area Regulation were developed through a public participation process that involved a 19 member Regulatory Advisory Panel (RAP) of stakeholders which met a total of 4 times in 2009 (Sept. 18th , Oct 28th, Nov. 19th, and Dec 9th) and 2 times in 2010 (Feb. 3rd, and April 1st). This RAP also assisted with the development of the amendments to the Groundwater Withdrawal Regulations. Staff worked with the members of the RAP to develop the proposed amendments.

Proposed Regulation and Public Comment: Based on the input of the Regulatory Advisory Panel and comments received during the NOIRA comment period, the DEQ prepared proposed amendments to the regulation. On June 21, 2010, the Board voted to proceed to public comment and hearing on these proposals. Following Board approval, the Attorney General's Office completed its review on June 28, 2010. The Department of Planning and Budget completed an economic impact review on August 12, 2010. The Secretary of Natural Resources granted approval of the proposed regulatory amendments on September 21, 2010, and the Governor approved the amendments on September 18, 2012. DEQ published the proposed amendments in the Virginia Register on October 22, 2012. The public comment period for the proposed amendments was scheduled from October 22, 2012 to January 11, 2013. Middlesex County requested the board to hold an additional evening hearing in the expanded area and an additional hearing was held in Warsaw, Virginia. As a result of adding an additional hearing, the comment period was extended until January 30, 2013. Pursuant to Section 2.2-4007.03 of the Code of Virginia and 9VAC25-11 (Public Participation Guidelines), DEQ held 3 public hearings as follows:

November 26, 2012 at 1:30 p.m. - James City County Board of Supervisors Meeting Room, Building F, 101 Mounts Bay Rd., Williamsburg, VA

December 4, 2012 at 2 p.m. - Spotsylvania County Administration Building- Holbert Building, Board of Supervisors Meeting Room, 9104 Courthouse Rd., Spotsylvania, VA

January 14, 2013 at 6:30 p.m. - Rappahannock Community College, Room W172, 52 Campus Drive, Warsaw, VA

DEQ received a total of 49 comments on the proposed amendments from 32 organizations and individuals. Comments received and the responses to comments are included in the town hall document.

Final Amendments to the Regulation: This regulatory action amends the Eastern Virginia Groundwater Management Area Regulation (9VAC25-600-10 et seq.) in response to issues identified by DEQ and the public. Upon approval of this amendment, the Eastern Virginia Groundwater Management Area Regulations will be comprised of the following localities: the counties of Charles City, Essex, Gloucester, Isle of Wight, James City, King George, King and Queen, King

William, Lancaster, Mathews, Middlesex, New Kent, Northumberland, Prince George, Richmond, Southampton, Surry, Sussex, and York; the areas of Arlington, Caroline, Chesterfield, Fairfax, Hanover, Henrico, Prince William, Spotsylvania, and Stafford counties east of Interstate 95; and the cities of Chesapeake, Franklin, Hampton, Hopewell, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, and Williamsburg.

Request to Adopt Fast Track Amendments to the Eastern Virginia Ground Water Management Area Regulation (9VAC25-600 et seq. which is being renamed to Designated Ground Water Management Areas) and to repeal the Order Declaring the Eastern Shore of Virginia- Accomack and Northampton Counties- as a Critical Ground Water Area (9VAC25-620 et seq.): The staff will bring to the Board at the June 17, 2013 meeting, a request to accept final amendments to the Eastern Virginia Ground Water Management Area Regulation (9VAC25-600 et seq. being re-titled Designated Ground Water Management Area Regulation) and repeal the Order Declaring the Eastern Shore of Virginia- Accomack and Northampton Counties- as a Critical Ground Water Area (9VAC25-620-et seq.). This regulatory amendment will be processed using the fast-track regulatory process. Section 2.2-4012.1 of the Code of Virginia allows for regulations to be modified using the fast track process when changes are expected to be noncontroversial.
Currently Accomack and Northampton Counties are subject to the same requirements as those localities listed as being part of the Eastern Virginia Ground Water Management Area. This fast track regulatory action would list Accomack and Northampton Counties as part of the Eastern Shore Groundwater Management Area in the Designated Ground Water Management Area Regulation and they would no longer be declared as part of the Critical Ground Water Area. The Order Declaring the Eastern Shore of Virginia- Accomack and Northampton Counties- as a Critical Ground Water Area (9VAC25-620) would be repealed. This regulatory action would consolidate all localities included in groundwater management areas within a single regulation.
Background: In 1976, pursuant to the Code of Virginia (The Groundwater Act of 1973), the State Water Control Board declared the counties of Accomack and Northampton to be part of a Critical Ground Water Area. When the Ground Water Management Act of 1992 was passed, repealing the Act of 1973, state code changed the terminology from Critical Ground Water Area to Groundwater Management Area. These localities however, still need to have their groundwater withdrawals managed to protect the groundwater resource. The withdrawals occurring from Accomack and Northampton counties may cause saltwater intrusion into the aquifers. This regulatory amendment will not change the groundwater withdrawal requirements that Accomack and Northampton Counties are subject to. Listing Accomack and Northampton Counties as part of the Eastern Shore Groundwater Management Area within the Designated Ground Water Management Regulation (9VAC 25-740-10 et seq.) will consolidate the list of localities in groundwater management areas within a single regulation. This regulatory action will eliminate a regulation that is no longer needed. (Order Declaring the Eastern Shore of Virginia- Accomack and Northampton Counties- as a Critical Ground Water Area (9VAC25-620)). This regulatory action does not add any additional localities to a groundwater management area; this action consolidates all localities previously designated as part of a groundwater management area within a single regulation. Currently there is a separate regulatory action being processed for the Eastern Virginia Ground Water Management Area that would add additional localities to the Eastern Virginia Ground Water Management Area. Expansion of the Eastern Virginia Ground Water Management Area is being handled as a separate regulatory action which has undergone the full regulatory process, including public participation.
Final Amendments to the Regulation: This regulatory action amends the Designated Ground Water Management Area Regulation (9VAC25-600-10 et seq.) to include Accomack and Northampton Counties as part of the Eastern Shore Groundwater Management Area. It repeals the Order Declaring the Eastern Shore of Virginia- Accomack and Northampton Counties- as a Critical Ground Water Area (9VAC25-620 et seq.). The fast track regulatory process has been used for this regulatory amendment since the revisions to these regulations are not expected to be controversial. This regulatory revision does not change the regulatory requirements for groundwater withdrawals for Accomack and Northampton counties. For all practical purposes, this is simply a name change. After review by the Governor, a notice of a proposed fast-track rulemaking will be published in the Virginia Register and will appear on the Virginia Regulatory Town Hall. This will be followed by a 30 day public comment period before the amendments become final.

General VPDES Permit Regulation for Nonmetallic Mineral Mining, VAG 84 Amendments to 9VAC25-190 and Reissuance of General Permit: The current VPDES Nonmetallic Mineral Mining General Permit will expire on June 30, 2014, and the regulation establishing this general permit is being amended to reissue another five-year permit. The staff is bringing this proposed regulation amendment before the Board to request authorization to hold a public comment period and a public hearing. The proposed regulation takes into consideration the recommendations of a technical advisory committee formed for this regulatory action. The technical advisory committee consisted of industry representatives, Department of Mines Minerals and Energy and DEQ staff. A Notice of Intended Regulatory Action (NOIRA) for the

amendment was issued on September 10, 2012. One request to serve on the technical advisory committee was received from Sam Hollins, the Aggregates Program Manager for the Virginia Transportation Construction Alliance. Mr. Hollins was invited to serve on the technical advisory committee.

SUMMARY OF 9VAC25-190 PROPOSED REVISIONS FOR THE 2013 REISSUANCE

Section 10 – Definitions. Definitions were added for *best management practices*, *department (DEQ)*, *municipal separate storm sewer system (MS4)*, *significant spills and total maximum daily load (TMDL)*. This terminology is used in the regulation and needed explanation. Also deleted metallic products and food processing raw material from the definition of *significant materials* since these materials would not be found at these facilities. Also the *vehicle/equipment washing* definition was changed to *vehicle or equipment degreasing* to match the terminology and definition used in a similar general permit (concrete products).

Section 15 - Applicability of incorporated references based on the dates that they became effective. A statement was added to update all Title 40 Code of Federal Regulations within the document to be those published as of July 1, 2013. This is a recommendation from the DEQ Office of Policy.

Section 20 and 70 – Purpose and Part I. Effective dates were updated to reflect this reissuance.

Section 50 A, B– Authorization – Reformatted to match structure of other general permits being issued at this time. Also, added that an owner will be denied authorization when the discharge would violate the antidegradation policy. This is based on EPA comments provided on other general permits. The requirement that the discharge must meet the assumptions and requirements of an approved TMDL was reworded to match other general permits.

Section 50 C – Added the statement *"Compliance with this general permit constitutes compliance with the Clean Water Act, the State Water Control Law, and applicable regulations under either, with the exceptions stated in 9VAC25-31-60 of the VPDES Permit Regulation."* This was added in response to Attorney General Office comments on other general permits recently reissued in order to recognize there are some exceptions to compliance with the Clean Water Act as stated in the permit regulation.

Section 50 D– Added language to allow for administrative continuances of coverage under the old expired general permit until the new permit is reissued, and coverage is granted or coverage is denied; provided the permittee has submitted a timely registration and is in compliance with the expiring permit. This language is being added to all recently reissued general permits so permittees can discharge legally and safely if the permit reissuance process is delayed.

Section 60 A – Registration – Reformatted this section to match the structure of other recently reissued general permits. Facilities currently holding an individual VPDES permit and requesting coverage under this general permit must notify DEQ 210 days prior to the expiration date of their individual permit, rather than 180 days prior to their expiration date. This gives DEQ 30 days to determine whether coverage can be granted and the individual permit holder then still has the required 180 days to submit an individual permit application if their request for coverage under the general permit is denied. Existing facilities registration submittal dates were revised to April 1, 2014, which is 90 days prior to expiration instead of 180 days prior. New facilities must submit a registration statement at least 45 days prior to commencement of discharge rather than 30 days prior.

Section 60 B – Added language accepting late registration statements (after July 1, 2014, the effective date) but stating that authorization to discharge will not be retroactive. Also, existing permittees may be provided administrative continuance of their existing permit if a complete registration statement is submitted before July 1, 2014.

Section 60 C – Several minor edits were made to the registration statement for clarification. The following notification requirement was added to the registration statement: *"Whether the facility will discharge to a Municipal Separate Storm Sewer System (MS4). If so, provide the name of the MS4 owner. The owner of the facility shall notify the MS4 owner in writing of the existence of the discharge within 30 days of coverage under the general permit, and shall copy the DEQ regional office with the notification. The notification shall include the following information: the name of the facility, a contact person and phone number, the location of the discharge, the nature of the discharge, and the facility's VPDES general permit number."* This notification is a permit requirement and the TAC thought it should be repeated as a reminder in the registration process. The question *"Indicate if there are vehicle or equipment degreasing activities performed on site. If yes, indicate if there is any process wastewater generated from these activities"* was added because the answer to this question is needed to determine if total petroleum hydrocarbon limits are required. The requirement to submit monitoring data to determine compliance with a new special condition for Chickahominy watershed discharges that reflect the existing Chickahominy special standards in the water quality standards regulation (see Part II B 14 below) was added. Also, vehicle equipment or degreasing activities and vehicle washing and return water from operations where mined material is dredged was added to the characterization of each outfall's discharge since it is part of the process water definition.

Section 60 E - Added the allowance for registration statements to be submitted electronically as well as by postal mail. Previously, registration statements were only submitted as a hard copy with the original signature but the agency and the TAC thought electronic submissions of registration statements are appropriate at this time.
Section 65 - Repealed this section *"Termination of permit coverage."* and moved it inside the permit itself. This section contains requirements for termination so it is more appropriate as part of the permit.
Section 70 Part I A 1 and 2 – General Permit limits pages for process water and storm water. *Special Conditions* have been included in the introductory paragraph to Part I which summarizes the requirements of the permit (along with effluent limitations, monitoring, storm water management and conditions applicable to all permits). The footnotes have been rearranged in parts I A 1 and 2 so they are in order in the limits table. Also, footnote #3 for process water (Part I A 1) states that total petroleum hydrocarbon monitoring is only necessary when vehicle degreasing occurs on site.
Vehicle degreasing or equipment degreasing has been clearly defined to mean the washing or steam cleaning of engines or other drive components of a vehicle or equipment in which the purpose is to degrease and clean petroleum products. It does not mean washing sediment off trucks. This has always been unclear to the staff. Also the TPH methods in this footnote for Part I A 1 are included and the requirement for *"no discharge of floating solids or visible foam"* is moved to Part I B 10 (Special conditions). In Part I A 2 (storm water limits table, the timing requirements for collecting a storm water sample (at least three days from preceding storm event and during the first 30 minutes of discharge) has been moved to Part II A (with some modifications, see Part II A below).
Section 70 part I B 1 - Special conditions. This requirement to clean up spilled fluids was revised to delete the words *"to the maximum extent possible."* Legal staff recommended this is difficult to enforce.
Section 70 Part I B 6 – The requirement to modify, revoke and reissue the permit if a more stringent effluent standard or limit is promulgated by EPA was deleted. General permits are not modified, revoked or reissued. The TAC thought a new effluent standard would be incorporated more appropriately during reissuance.
Section 70 Part I B 10 - The requirement that *"There shall be no discharge of floating solids or visible foam in other than trace amounts"* was moved here from the limits table in part I A 1. The addition of the requirement that *"There shall be no solids deposition or oil sheen from petroleum products in surface water as a result of the industrial activity in the vicinity of the outfall"* was added to the another general permit (concrete products) and thought applicable to this permit as well. It serves as an added measure of protection and something the inspector can look for to ensure proper BMPs, clean up measures or treatment is occurring.
Section 70 Part IB 11 - A definition of vehicle/equipment washing is deleted because it had no requirement associated with it and was already in section 10 (Definitions).
Section 70 Part I B 14 – A requirement to meet the Chickahominy special standards (from the water quality standards regulation at 9VAC25-260-310 m) was added. These special standards contain more stringent effluent limits for several parameters for discharges to the Chickahominy watershed. It was included so that any nonmetallic mining permits in that watershed could be eligible for this general permit.
Section 70 Part I B 15 – Reworded the requirement*"to meet applicable water quality standards"* to match the wording used in other recently reissued general permits.
Section 70 Part I B 16 – Added a new special condition that describes how temporary facility closures at inactive and unstaffed sites will be implemented. A similar condition was recently added to another general permit (concrete products). It previously only applied to storm water but now can be implemented for the entire site and now requires board approval and a 30 day reactivation notification. Also, no discharge monitoring reports are required while the facility is inactive and unstaffed.
Section 70 Part I B 17 – Added a new special condition that describes how terminations of a general permit will be implemented. This is being added to all general permits as they are reissued.
Section 70 Part II – Storm Water Management – This entire section was revised to match (for the most part) language in the 2009 Industrial Storm Water General Permit. Some minor differences can be found but these were done with TAC consensus. However, the requirements for storm water management have not changed significantly.
One edition that the TAC discussed in detail was the timing requirements moved from Part I A 2 (storm water limits table). It has been clarified that samples from a storm water management structure (which are a series of large settling lagoons) must meet the *representative samples* requirement. There is no additional timing requirements to obtain a 'first flush' of storm water which is, at most industrial sites, considered the worst case scenario and containing the most pollutants. The timing requirements for typical storm water samples are at least three days from the preceding storm event and during the first 30 minutes of discharge. However, this is not the case when the discharge is through a series of large storm water management structures that hold and settle the solids over time and rarely discharge. If they do discharge, the storm water that is discharged is from the end of the series of control structures where the water has been in

the ponds the longest and therefore, the most settled. This sampling requirement for a *representative discharge* from the storm water control structure vs. other storm water discharges was in the 2009 permit, but was not clear.
Another edition was included in *sampling waivers*. Previously, when a permittee was unable to collect a sample within the monitoring period (annually) due to adverse weather conditions, the permittee was required to collect a substitute sample from the next qualifying event in the next period. Since this permit only required annual sampling, the TAC added a requirement that the permittee must attempt to sample at least four times during the annual sampling period. This is consistent with the quarterly visual exams and routine inspections.
Part III A– Added *"Samples taken as required by this permit shall be analyzed in accordance with 1VAC30-45: Certification for Noncommercial Environmental Laboratories, or 1VAC30-46: Accreditation for Commercial Environmental Laboratories."* This is a new regulatory requirement effective January 1, 2012 and is being added to all general permits as they are reissued.
Part III L - Removed requirement to meet sewage sludge standards as sewage discharges are not covered by this permit.
Section 70 Part II Y – Transfer of permits – Revised so that the board may waive the automatic transfer timing (30 days in advance of proposed transfer). Permittees are rarely able to meet this requirement and the staff thinks they need some flexibility with this. Also, references to modifications and revocations and reissuances have been removed as these events are not appropriate for coverage under general permits.

Reissuance of the General VPDES Permit for Discharges of Storm Water Associated With Industrial Activity, VAR05 (9 VAC 25-151): The purpose of this agenda item is to request that the Board authorize a public comment period and hold a public hearing on a draft regulation that will reissue the general VPDES permit for discharges of storm water associated with industrial activity, VAR05. The existing general permit will expire on June 30, 2014. A Notice of Intended Regulatory Action (NOIRA) for the amendment was published in the Virginia Register on September 10, 2012 and the comment period ended on October 10, 2012. There were five comments received during the NOIRA comment period. This proposed regulation includes requirements for the Chesapeake Bay TMDL in accordance with Virginia's Watershed Implementation Plan (WIP). For existing industrial facilities that do not discharge to a regulated municipal separate storm sewer system (MS4), the WIP includes an aggregate load for nitrogen, phosphorus and sediment. For existing industrial facilities that discharge to an MS4 the aggregate loads are included in the local load allocation for the regulated MS4. The WIP also requires that new and expanding facilities with industrial stormwater discharges not exceed the nutrient and sediment loadings that were discharged prior to the land being developed for the industrial activity.
Consistent with the WIP the proposed regulation includes:

- Monitoring by all Chesapeake Bay facilities for nutrients and sediment to verify the aggregate loadings used in the development of the WIP.
- A special condition requiring facilities discharging to a regulated MS4 to incorporate measures and controls into their Stormwater Pollution Prevention Plan to comply with their locality's ordinance adopted to meet the Chesapeake Bay TMDL.
- Requirements for new and expanding industrial facilities to document the measures and controls they are employing to ensure that their storm water waste loads will not exceed the nutrient and sediment loadings that were discharged from the new or expanded portion of the land prior to the land being developed for the industrial activity.

The revised regulation takes into consideration the recommendations of a TAC formed for this regulatory action. There were several items that the TAC did not reach consensus on:

(1) The current permit has four types of monitoring: effluent limits, benchmark, impaired waters (all of these are annual monitoring) and TMDL monitoring (semi-annual). The proposed permit has changed all the monitoring to semi-annual. This was done to allow us to better track compliance with the monitoring requirements, and to see more quickly which facilities are having storm water quality issues so that we can target inspections to the facilities that need more attention. Associated with this, we have eliminated the follow-up monitoring required by the current permit (since we will now have all monitoring twice per year), and require corrective action and a corrective action report from the permittee when limits are violated. Some on the TAC thought this was too much sampling, especially for small operations. There was much discussion by the TAC on this, but we did not reach a consensus on the increased monitoring.

(2) The proposed permit has special monitoring for the Chesapeake Bay TMDL. As drafted we require four samples to be taken in the first two years of the permit to characterize the nutrient and sediment discharges from each of the facilities in the Chesapeake Bay. Some thought we should only sample from selected facilities, and others thought we shouldn't sample this at all. Others thought we should sample all five years of the permit. Again, there was much discussion by the TAC on this, but we did not reach a consensus on the Chesapeake Bay TMDL special monitoring.

(3) Also related to the Chesapeake Bay TMDL, some on the TAC thought the permit needed nutrient and sediment reductions for all Chesapeake Bay facilities by the end of the permit term. Virginia's Phase 1 WIP requires data collection for this permit term, but there was still a lot of TAC discussion on what Virginia could or should do in the permit to show progress. No consensus was reached on this.

Summary of Significant Proposed Changes From the 2009 General Permit

This general permit replaces the 2009 Industrial Activities Storm Water General Permit (VAR05) which was issued for a five-year term on July 1, 2009. The 2009 permit was based primarily on EPA's 2006 draft Multi-Sector General Permit (MSGP). This revision is based primarily on EPA's 2008 final MSGP. Additional proposed changes to the regulation were made to make this general permit similar to other general permits reissued recently, and in response to the Technical Advisory Committee (TAC) suggestions. Changes were also made to address staff requests to clarify and update permit requirements. Following is a list of the significant proposed changes from the 2009 regulation:

Section 10 – Definitions. Added definitions for Department; Director; measurable storm event; minimize; MS4; primary industrial activity; and Virginia Environmental Excellence Program to clarify these terms in the permit. Modified the definitions of co-located industrial activity; industrial storm water; and storm water discharge associated with industrial activity to conform to EPA definitions.

Section 50 - Authorization to Discharge. Reformatted this section to be consistent with the way this is now being included in other general permits.

Section 50 - Authorization to Discharge, Subsection A. Added an opening paragraph to clarify which facilities are eligible to discharge under the permit.

Section 50 - Authorization to Discharge, Subsection B. Added two reasons why a facility's discharge would not be eligible for coverage under the permit: (1) if the discharge violates or would violate the antidegradation policy in the Water Quality Standards at 9VAC25-260-30, and (2) if the discharge is not consistent with the assumptions and requirements of an approved TMDL. These restrictions on coverage are being added to all general permits as they are reissued.

Section 50 - Authorization to Discharge, Subsection F. Added language to allow for administrative continuance of coverage under the expiring general permit until the new permit is issued by the Board, and facility coverage is either granted or denied. The permittee must submit a timely and complete registration statement prior to the expiration date of the existing permit, and be in compliance with the terms of the expiring permit in order to qualify for continuance. This language is being added to all general permits as they are reissued so permittees can discharge legally and safely if the permit reissuance process is delayed.

Section 60 – Registration Statement (RS). Modified the RS to ask for a FAX number for the facility; the nature of the business; whether, for new facilities, the SWPPP has been prepared; facility site information on total area, area of industrial activity, and the impervious area of the site. Added the three questions from the 2009 RS form regarding a facility's discharges that were left off the 2009 permit. Also added new questions for scrap recycling/waste recycling facilities and primary airports. Changed the map requirement to require just a general location map and a site map showing property boundaries, industrial activity areas, outfalls and all receiving waters. Added a question for newly constructed facilities in the Chesapeake Bay watershed. To be eligible for permit coverage newly constructed facilities must submit documentation that they have either installed measures and controls to meet the "no net increase" of nutrients and sediment from the site prior to their developing the land for the industrial activity, or that they have purchased nutrient credits.

Specified that the RS may be delivered by postal mail or electronically.

Section 65 – Termination of Permit Coverage. Moved this into the permit itself as a special condition so the permittee (who usually only has the permit itself) would have the requirements in the permit.

Section 70 - General Permit, Part I A (Effluent Limitations and Monitoring Requirements).

Benchmark Monitoring, Effluent Limitation Monitoring and Impaired Waters Monitoring. Increased the monitoring for these monitoring types from annual to semi-annual. This was done to allow us to better track compliance with the monitoring requirements, and to see more quickly which facilities are having storm water quality issues so that we can target inspections to the facilities that need more attention. Associated with this, we have eliminated the follow-up monitoring required by the current permit (since we will now have all monitoring twice per year), and require corrective action and a corrective action report from the permittee when limits are exceeded.

Impaired Waters Monitoring (both with and without an approved TMDL). Specified that representative outfall sampling is allowed for these monitoring types, consistent with EPA's 2008 MSGP.

Inactive and Unstaffed Sites. Added that a waiver of the quarterly visual assessments, routine facility inspections, and monitoring requirements (including benchmark, effluent limitation, and impaired waters monitoring) may be granted by the Board at a facility that is both inactive and unstaffed, as long as the facility remains inactive and unstaffed and there

are no industrial materials or activities exposed to stormwater. The owner of such a facility is only required to conduct an annual comprehensive site inspection. They must notify us within 30 days if the facility becomes either active or staffed, and all quarterly visual assessments, routine facility inspections, and monitoring requirements must be resumed immediately.

Corrective Actions. Removed the follow-up monitoring required by the current permit for an exceedance of an effluent limit or a TMDL waste load allocation. The permit now requires the permittee to take corrective action and submit a corrective action report to the Department when effluent limits or TMDL waste load allocations are exceeded.

Section 70 - General Permit, Part I B - Special Conditions. Added or modified the permit special conditions as follows:

(1) Modified SC #1 (allowable Non-storm Water Discharges) to make the list of these discharges consistent with EPA's 2008 MSGP.

(2) Added a section "b" to SC #6 (Discharges subject to TMDL Wasteload Allocations) to require facilities in the Chesapeake Bay watershed to monitor their discharges for sediment and nutrients semi-annually for the first two years of permit coverage (four samples) to characterize the contributions from their facility's specific industrial sector for these parameters.

(3) Added SC #7 which requires facilities discharging through a Virginia Stormwater Management Program (VSMP) regulated municipal separate storm sewer system (MS4) to waters subject to the Chesapeake Bay TMDL to incorporate measures and controls into their storm water pollution prevention plan (SWPPP) to comply with the local ordinances if the facility is notified by the MS4 operator that the locality has adopted ordinances to meet the Chesapeake Bay TMDL.

(4) Added SC #8 which requires that after November 29, 2010 (the date of Virginia's Phase I Chesapeake Bay TMDL Watershed Implementation Plan), the waste loads from any expansion of an existing permitted facility discharging storm water in the Chesapeake Bay watershed can not exceed the nutrient and sediment loadings that were discharged from the expanded portion of the land prior to the land being developed for the industrial activity. The permittee has to document in the SWPPP the information and calculations used to determine the nutrient and sediment loadings discharged from the expanded portion of the land prior to the land being developed, and the measures and controls that are being employed to meet the no net increase of storm water nutrient and sediment load as a result of the expansion of the industrial activity. Alternatively, the facility owner may acquire nutrient credits to meet the no net increase requirement in accordance with applicable regulations.

(5) Moved the termination of permit coverage from the regulation itself to SC #13 so that the permittee will have the requirements in the permit itself, and not in the regulation. This was done because the permittee usually will not have a copy of the full regulation, only the permit.

Section 80 - General Permit, Part III (Storm Water Pollution Prevention Plan)

Part III B 4 b (5) (Salt Storage Piles) – moved this from the permit special conditions section to the SWPPP to be consistent with EPA's 2008 MSGP.

Part III B 4 b (9) (Dust Suppression) – added this subsection to specify the requirements for dust suppression/control on site. The permittee may use collected storm water for dust suppression, but there can be no direct discharge to surface waters from dust suppression activities.

Sections 90 to 370 - General Permit, Part IV (Sector Specific Permit Requirements)

Section 90 – Sector A (Timber Products Facilities). Specified that SIC 2499-1303 (Mulch, Wood and Bark Facilities) is covered under the permit in this sector. This SIC has been covered all along, but until recently we were not aware that mulch operations were classified under that SIC code. Added specific requirements for mulch operations and mulch dyeing operations, along with benchmark monitoring for both of these.

Section 110 – Sector C (Chemical and Allied Products). Specified that SIC 2875 (Composting Facilities) are covered under the permit in this sector. This SIC has been covered all along, but there was still some confusion over where exactly they belonged in the permit. Added benchmark monitoring requirements for these facilities.

Section 150 – Sector G (Metal Mining). Modified this sector extensively to bring it in line with the changes EPA made to their 2008 MSGP. There were no new requirements for these facilities, but EPA cleaned up the language and deleted a lot of requirements that were not necessary for this type of facility.

Section 150 – Sector G (Metal Mining) and Section 160 – Sector H (Coal Mines and Coal Mining Related Facilities). Added the "inactive and unstaffed sites" waiver condition from EPA's 2008 MSGP to these two sectors, which tells facilities how they can qualify for a waiver from the quarterly visual assessments and routine facility inspections for inactive and unstaffed sites.

Section 190 – Sector L (Landfills). Specified that landfills that have been properly closed and capped in accordance with Virginia waste permitting requirements, and that have no significant materials exposed to storm water, do not require this permit. This is different than EPA's permit which does not give landfills this option. Also, we removed the benchmark

monitoring for iron from this sector. Iron is prevalent in Virginia soils and having these facilities monitor for it was unproductive.
Section 210 – Sector N (Scrap and Waste Recycling Facilities). Added benchmark monitoring for source-separated facilities. These facilities are very similar to the non-source separated facilities, and those already had benchmark monitoring requirements. Made the monitoring parameters the same for both.
Section 240 – Sector Q (Water Transportation) and Section 250 – Sector R (Ship and Boat Building and Repair Yards). These two sectors are very similar in their storm water discharge characteristics. Made the benchmark monitoring requirements the same for both sectors (TSS, copper and zinc). Also for both sectors, defined pressure washing and hull washing activities as process wastewater that need separate VPDES permits (not authorized discharges under this permit).
Section 260 – Sector S (Air Transportation). Modified this sector based upon EPA's draft 2013 MSGP to add the federal effluent limitation guideline for airport deicing facilities to the permit. Effluent limits are included for primary airports. Deleted the benchmark monitoring for deicing at major airports (EPA still has this), but added benchmark monitoring for TSS and TPH at all airports with maintenance activities (i.e., fueling, lubrication, mechanical repairs, washing).
Section 340 – Sector AA (Fabricated Metal Products). Added copper to the benchmark monitoring for fabricated metal products facilities (except coating). Data for individual facilities shows this to be a problem at some of these facilities.
Section 350 – Sector AB (Transportation Equipment, Industrial, or Commercial Machinery). Added benchmark monitoring for TSS, TPH, copper and zinc. We have data that shows problems with this sector, and the data will help us to get a better understanding of the specific facilities with issues.

Loudoun County Sanitation Authority - Consent Special Order w/ Civil Charges: Loudoun County Sanitation Authority (Loudoun Water) owns and operates the sanitary sewer collection system in the unincorporated areas of Loudoun County. On June 19, 2012, Loudoun Water notified DEQ that a sanitary sewer overflow (SSO) of approximately 688,000 gallons of raw sewage had occurred at a manhole approximately 1,300 feet upstream of the Upper Foley Pump Station (pump station) and discharged into Foley Run. Loudoun Water indicated that the SSO had occurred between June 16, 2012 and June 18, 2012 and was caused by a pump failure at the pump station. On June 22, 2012, Loudoun Water submitted a letter to DEQ detailing the events that caused the SSO. In the letter, Loudoun Water stated that the SSO was due to two contributing factors. First, the pump station pumps "failed to discharge due to a failure to observe proper procedures during routine pump maintenance. The investigation determined that the pump controls were not correctly positioned while performing pump maintenance on Thursday morning, June 14." This procedure failure caused the motor control breakers to trip and at "12:30 PM the station went into back-up mode and alarmed," and as a result the pumps shut down. Second, the alarm notification system failed to contact Loudoun Water personnel due to faulty transmission/telephone lines and the Loudoun Water staff never responded to the alarm. On June 20, 2012, the Loudoun County Health Department (Health Department) conducted an inspection of the site and the SSO location. The Health Department was satisfied that the area was clean and no additional clean up by Loudoun Water was required. Loudoun Water on the recommendation of the Health Department and neighboring jurisdictions posted SSO signs on the property and along Foley Run. On June 28, 2012, DEQ staff inspected the pump station and the location of the SSO. DEQ found the area dry with flattened grass surrounding the manhole demonstrating the path the sewage traveled into Foley Run. Loudoun Water stated that SSO discharged from the concrete seam of the manhole and not the manhole cover, which was bolted down and had not dislodged. DEQ issued a Notice of Violation, NOV No. W2012-08-N-002 to Loudoun Water on August 9, 2012, for the SSO. On October 16, 2012, Loudoun Water met with DEQ to discuss the NOV. At the meeting, Loudoun Water submitted a timeline of the events related to the SSO. Loudoun Water staff stated that according to their research of the problem, Loudoun Water found that the Verizon telephone line had been accidently cut as a result of a Virginia Department of Transportation road-widening project. In addition to the timeline, Loudoun Water submitted an outline of the preventative measures that Loudoun Water had in place at the time of the SSO and the post SSO measures implemented to prevent future SSOs including increased training and operational changes at the pump station. The most significant step Loudoun Water took was the installation of a supervisory control and data acquisition (SCADA) industrial control system. Currently the system is operating using a cellular modem and was to be upgraded to a permanent radio-based SCADA system by November 2012. At the meeting and in the submitted materials, Loudoun Water emphasized the multiple layers of redundancy in the installed systems at the pump station designed to prevent future events. The Consent Order requires Loudoun Water to: (1) submit an up to-date map of the sanitary sewer collection system servicing the Blue Plains Wastewater Treatment Plant; and (2) submit a completed Reliability Classification Worksheet for Sewage Pumping Stations for all pump stations owned by Loudoun Water in the Blue Plains sewer-shed, including the submission of the confirmation of installation of the permanent radio based SCADA system at the pump station. Loudoun Water has completed all the requirements set forth in Appendix A of the Consent Order. Civil charge: $11,375.

Town of Middleburg - Wastewater Treatment Plant and Collection System - Consent Special Order w/Civil Charges: The Town of Middleburg (the Town) owns, and Loudoun Water operates the Wastewater Treatment Plant (Plant). The Plant is located in Middleburg, Virginia. In submitting its Discharge Monitoring Reports (DMRs) as required by VPDES Permit No. VA0024775 (Permit), the Town has indicated that it exceeded discharge limitations in the Permit for the weekly concentration average maximum limit for carbonaceous biochemical oxygen demand ($CBOD_5$) as reported on its January 2012 DMR, and the weekly concentration average maximum limit and monthly concentration average limit for total kjeldahl nitrogen (TKN) as reported on its March 2012 and April 2012 DMRs. The Town indicated to DEQ that the violations were the result of a faulty dissolved oxygen (DO) probe in the Plant's aeration basin, and insufficient oxygen available for the biomass to effectively deal with the influent TKN load. The Town also noted that the probe was within the manufacturer's claim of a two to three year life span. The Town promptly ordered a new DO probe and installed it in late April 2012. Following the replacement of this probe, the Town has been within its permitted effluent limits. The Town's Permit also required that the Town submit an Industrial User Survey as part of its pretreatment requirements. Due to the Town's belief that it did not have any industrial users and therefore did not feel that it needed to submit the required information to DEQ, the Survey was received late by DEQ. In addition, on May 29, 2013, the Town reported to DEQ that an unauthorized discharge from its collection system of approximately 10,000 gallons of raw sewage had occurred. The raw sewage was released to an unnamed tributary of Goose Creek from the Windy Hill Pump Station as a result of grease holding ball floats down at the pump station. The Town informed DEQ that the unauthorized discharge event did not appear to result in any documented environmental harm, and that it promptly cleaned out the grease and put the pump station on a three month maintenance schedule to prevent further occurrences. DEQ issued a Warning Letter on May 16, 2012, to the Town for failing to submit the Industrial User Survey, for the January $CBOD_5$ exceedance and for the March TKN exceedance; a Warning Letter on June 12, 2012 for the April 2012 TKN exceedances, and for failing to submit the Industrial User Survey; and a Notice of Violation on July 9, 2012, for the May 29, 2012 unauthorized discharge event. The Consent Order requires the Town to submit an Industrial User Survey, a Fats Oil and Grease evaluation, an up to-date map of the sanitary sewer collection system servicing the Plant, information concerning the reliability class for sewage pumping stations for all pump stations owned by the Town, and a list of pump stations not owned by the Town but located within the sanitary sewer collection system serving the Plant. The Town has submitted all items required by the Consent Order at this time. Civil charge: $3,425.

Ronile, Inc. - Consent Order: Ronile, Inc. ("Ronile") owns and operates a textile manufacturing facility in Rocky Mount, Virginia. The Department issued VPDES permit No. VA0076015 to Ronile on September 21, 2008. The permit contains conditions and enumerates limitations on the effluent discharges from the facility. Ronile submitted Discharge Monitoring Reports ("DMRs") to the Department for data collected in April 2012, during the quarter July-September 2012, and in November 2012 and December 2012. The DMRs indicate a violation of the Color (283) parameter in April 2012, the Toxicity (379) parameter for the calendar quarter of July – Sept 2012, and the Zinc concentration average and concentration max parameter for November and December 2012. Ronile is in the 5th year of its VPDES permit cycle. When the permit was reissued in 2008, the permit contained Zinc limits that would become enforceable in the 5th year of the VPDES permit. Ronile has worked over the past four years to identify and remove sources of Zinc from its wastewater stream. The one remaining source of Zinc is latex backing used in the production of one line of products. Ronile has consulted with the supplier of the latex backing and it is not possible to remove Zinc from the latex backing. Ronile has attempted to use a chemical to precipitate the Zinc out of the effluent to meet the effluent limits but the use of the chemical resulted in the violation of the Toxicity parameter. On November 8, 2012, the Department issued Notice of Violation ("NOV") No. W2012-11-W-0001 to Ronile for the violations of the Color and Toxicity effluent limits. The Department issued Warning Letter ("WL") No. W2013-01-W-1003 to Ronile on January 10, 2013 for the November 2012 Zinc violations. Ronile decided to cease manufacturing the product line that requires the Zinc-laden latex backing and notified the Department on April 29, 2013 that it has ceased manufacturing that product line. The Department issued NOV No. W2013-02-W-0001 to Ronile on February 7, 2013 for the December 2012 Zinc violations. The Order before the Board provides interim limit which will be protective of the environment but allow Ronile to maintain compliance until such time that the Zinc cycles through the the process. The Consent Order will institute the interim limits until September 2013.

Coeburn-Norton-Wise Regional Waste Water Treatment Authority for the Coeburn-Norton-Wise Regional Wastewater Treatment Plant - Consent Special Order w/ Civil Charges: The Authority owns and operates the wastewater treatment plant (WWTP, Plant or Facility). The Permit allows the Authority to discharge treated sewage and other municipal wastes from the WWTP, to the Guest River, in strict compliance with the terms and conditions of the

Permit. SWRO issued Warning Letters and NOVs for violations of the Permit's final effluent limits for ammonia as Nitrogen, total suspended solids, 5-day carbonaceous biochemical oxygen demand and the instantaneous technical minimum concentration for chlorine. Several overflows were also cited. The Authority responded in writing to the Warning Letters and Notices of Violation, and has begun a two-year upgrade/expansion project which will increase the design flow of the WWTP from 5.0 MGD to 6.5 MGD. The Authority submitted a revised schedule for construction of the upgrade/expansion project, and a request for interim limits during construction. VPDES Permit No. VA0077828, which has been reissued to the Authority with an effective date of February 5, 2013, contains tiered final effluent limits for the upgraded/expanded 6.5 MGD WWTP upon completion of construction and issuance of a Certificate to Operate. The Consent Order contains a civil charge and a schedule of compliance for completion of the upgrade/expansion project. Due to problems meeting existing ammonia limits, and the fact that clarifier capacity is not being increased but work on existing clarifiers is scheduled as a part of the upgrade, interim final effluent limits for ammonia as nitrogen and total suspended solids are proposed and will expire with completion of construction and issuance of a Certificate to Operate for the upgraded/expanded Facility, but no later than June 30, 2015. The proposed interim limits are set forth in Appendix B of the Consent Order. Due to Water Quality Standard concerns, additional monitoring and reporting requirements are proposed. In conjunction with interim limits for ammonia, there are instream monitoring requirements at stream flows less than 20 cubic feet per second. In conjunction with interim limits for total suspended solids, there is an annual waste load discharge reporting requirement. Virginia Revolving Loan Fund monies (two loans, totaling $14,961,044.00) have been authorized for the upgrade/expansion project, which has a projected final completion date of March 30, 2015. Civil charge: $5,782.

George's Chicken, LLC ("George's) - Consent Special Order w/ Civil Charges: George's owns and operates an advanced wastewater treatment facility ("the Facility") with a design average flow capacity of 1.7 MGD, which serves its poultry processing plant, a rendering operation, and private sewer customers including a trailer park, two businesses, an apartment building and six residences in Shenandoah County, Virginia. The Permit authorizes George's to discharge treated wastewater from the Facility to Stony Creek from Outfall 001, in strict compliance with the terms and conditions of the Permit. On August 3, 2012, George's reported to DEQ that it was experiencing an ongoing unusual discharge to Stony Creek that began on August 2, 2012, which was causing discoloration in the stream. On August 5, 2012, George's reported to DEQ that testing indicated that an unknown source had shocked and dramatically reduced the Facility's nitrification treatment process. On August 6, 2012, DEQ staff investigated the unauthorized discharge. DEQ staff observed a persisting turbid plume in Stony Creek for >200 meters downstream of the outfall with *Sphaerotilus* bacterial growth coating the rocks throughout the area of the plume. The *Sphaerotilus* growth is indicative of high organic loading in the wastewater discharge. On September 20, 2012, DEQ VRO issued a NOV to George's for unauthorized discharges to State waters in conjunction with CBOD, ammonia and D.O. permit effluent limitation exceedances in August 2012. On October 29, 2012, George's notified DEQ that the Facility was again experiencing ammonia effluent limitation exceedances that apparently began on or about October 28, 2012. George's reported that it was conducting testing and investigations to try to identify the source of treatment problems and then take corrective actions to address those problems. On November 26, 2012, George's submitted to DEQ a report with an overview of the sampling and testing conducted in an attempt to identify the cause of the Facility's ammonia treatment problems and the operational controls needed to restore the Facility to compliance. On January 22, 2013, DEQ VRO issued a NOV to George's for a TSS effluent limitation exceedance in October 2012, and ammonia, oil & grease, and total nitrogen effluent limitation exceedances in November 2012. In addition, there were two TSS effluent exceedances in November that were not cited on the NOV. On February 14, 2013, DEQ VRO issued a NOV to George's for oil & grease, total nitrogen and total phosphorus effluent limitation exceedances in December 2012. By letters and communications dated November 28, 2012, February 18, and February 22, 2013, George's submitted a plan of further corrective actions to detect, identify and/or address any future unusual discharges into its system. The proposed Order contains a schedule of compliance to install influent monitoring to provide early detection of substances that could adversely affect the treatment processes. Civil charge: $13,700.

Powhatan County Dutoy Creek WWTP - Consent Special Order w/ Civil Charges: Powhatan County owns and operates the Dutoy Creek Wastewater Treatment Plant (WWTP). DEQ issued VPDES Permit No. VA0090727 (Permit) to the County of Powhatan on September 18, 2007, for the discharge from Dutoy Creek Wastewater Treatment Plant (WWTP) to Dutoy Creek, a tributary of the James River. The Permit would have expired on September 17, 2012, but was administratively continued and issued on February 6, 2013. The Permit will expire on January 31, 2018. The Permit requires that the discharge from outfall 001 comply with the effluent limits as described in the Permit. In submitting its DMRs as required by the Permit, the Dutoy Creek WWTP failed to consistently comply with the effluent limits for zinc

(Zn) from August 2010 through July 2012, for copper (Cu) from September 2010 through November 2011, for dissolved oxygen (DO) in April 2011, August 2011, December 2011, February 2012 through April 2012, for total suspended solids (TSS) in January 2012, March 2012 and May 2012, and for Total Kjeldahl Nitrogen (TKN) in March and May 2012. DEQ issued Notices of Violations to the County on February 17, 2011, September 9, 2011 and March 8, 2012 for failure to comply with effluent limits as described above. The County hired an engineering consulting firm to identify the sources of Zn and Cu and methods to improve their removal from the WWTP discharge. The County has performed bench tests, conducted pilot studies, cleared out the sludge holding tank, looked at a water reuse system, altered the wastewater process, added polymer to settle solids, and taken other corrective steps. The County has maintained compliance with the Zn, Cu, DO, TSS, and TKN effluent limits in the Permit since July 2012. Powhatan County agreed to the Consent Special Order with DEQ to address the above described violations. Since the County has taken corrective actions and has been in compliance with the effluent limits in the Permit, the Order requires the payment of a civil charge. DEQ staff estimated the cost of injunctive relief to be approximately $32,000. Civil charge: $5,200.

Charles City County (Charles City Administration Bldg. WWTF, 10900 Courthouse Rd., VPDES Permit No. VA0060585: Hideaway STP, 9100 Willcox Neck Road, VPDES Permit No VA0080233; Mt. Zion and Rustic WTP, Route 623, VPDES Permit No VA0085936; Roxbury Industrial Center WWTP, 6640 Chambers Road, VPA Permit No VPA00524; and Ruthville WWTP, 8320 Ruthville Road, Permit No VA0021261 - Consent Special Order w/Civil Charges and a Supplemental Environmental Project: The County owns and operates the aforementioned Facilities. In 2008, the County failed to submit timely applications for reissuance of the Administration Building, Hideaway and Mt. Zion Facilities' VPDES permits, and failed to submit annual project summary reports for the Roxbury Facility. During subsequent inspections by Department staff, operational deficiencies were discovered at these four Facilities, as well as operational deficiencies and an unpermitted discharge at the Ruthville Facility. Since then, all five Facilities have reported multiple and chronic exceedances of effluent limits, overflows of wastewater or both. Department staff inspections since late 2011 have shown some improvement in facility operation and management (e.g.; termination of the unpermitted discharge at Ruthville, more timely submittals of required documents and better conditions observed at the respective Facilities); despite these improvements, not all of the facilities have returned to compliance with effluent limits. The November 2011 election of a new Board of Supervisors led to the hiring of a new County Administrator and subsequent turnover of most of the public works staff, including the public works director. The Consent Special Orders for the respective Facilities include injunctive relief; the County has accomplished a number of items that were proposed early in the enforcement negotiations, and these items are noted in the findings of fact in the respective Facilities' Orders. The remaining injunctive relief items are contained in the appendices of the respective Facilities' Orders. The total cost of injunctive relief is undetermined; an engineering firm has been contracted to inspect and recommend either rehabilitation or replacement of the above referenced Facilities. Civil charge and SEP: $85,000 civil charge with $40,000 offset by SEP.

I-95 Industrial Park Project / R. Income Properties, LLC - Consent Special Order: The I-95 Industrial Park project (Site) owned by R. Income Properties, LLC (R. Income Properties) consists of the development of an industrial park consisting of building pads, access roads, utilities and stormwater management facilities. The project site is located in Stafford County, Virginia. A VWP General Permit for impacts was authorized by DEQ on May 29, 2008 (Permit). On February 9, 2011, DEQ inspected the Site. During the inspection, DEQ Staff observed that utility construction activities had impacted surface waters in excess of the authorization by approximately 126 linear feet of stream and 0.312 acres of palustrine forested wetland (PFO). The impacts included: conversion from PFO to palustrine emergent wetland (PEM) due to clearing and grubbing; filling in of PEM; and filling in and disturbance of the stream. In addition to the impacts, DEQ observed that the surface waters were not flagged to prevent the areas from being impacted. Based upon observations made during the February 9, 2011, site inspection, DEQ issued a Notice of Violation (NOV), No. W2011-03-N-002 on March 8, 2011. On March 12, 2013, R. Income Properties' consultant Angler Environmental sent a response letter to DEQ. The letter updated the proposed mitigation and corrective measures to offset the unauthorized impacts on the site. Additional requested information in the form of site maps were provided to DEQ on March 26, 2013. The request letter and subsequent information provided, requested DEQ to re-evaluate the wetland impact areas cited and use partial restoration of the impact areas to offset the originally proposed compensation requirements in the draft Order. The Consent Order takes into account the re-evaluate impact numbers and the revised compensation. The Consent Order requires R. Income Properties to: (1) restoration/reestablishment of 96 linear feet of stream channel to pre-construction contours and stabilization of the impacted stream bed and banks; (2) the purchase of 17 stream compensation credits to compensate for impacts to 30 linear feet of ephemeral stream; and (3) purchase of 0.16 wetland mitigation credits to compensate for 0.16 acre of PFO to PEM conversion.

Willow Pond II, LLC - Consent Special Order w/Civil Charges: Willow Pond II, LLC (Willow Pond) owns Property on the southwest side of Glenn Drive, beginning 400 feet south of its intersection with Sterling Boulevard (Route 846) in Loudoun County, Virginia. The Willow Pond project consists of the construction of an office building pad with the associated infrastructure on a 6.3 acre parcel. Authorized impacts to surface waters associated with the construction of the Willow Pond project were to be compensated through the on-site creation of 1.16 acre of wetlands, consisting of 0.86 acre of palustrine forested wetland, 0.14 acre of palustrine scrub-shrub wetland, and 0.16 acre of palustrine emergent wetland. Compensation for perennial stream channel impacts was to be provided through the relocation of the channel using natural channel design and a 0.29 upland forested buffer. Compensation for impacts to the intermittent stream channel was to be provided through a contribution of $25,200.00 to the Virginia Aquatic Resources Trust Fund. Documentation of the Trust Fund contribution was provided to DEQ. On April 20, 2010, based on a file review and DEQ inspection of the site, DEQ issued a Notice of Violation to Willow Pond citing incomplete wetland and stream compensation. Representatives from Willow Pond informed DEQ that the stream and wetland mitigation areas in question were under construction in 2006, however due to a lack of funding and the current state of the economy, work was not finished and the areas were not monitored or maintained. On January 18, 2011, DEQ issued a Letter of Agreement to Willow Pond to resolve the April 28, 2010, Notice of Violation. The Letter of Agreement required Willow Pond to modify its permit to require compensation construction and planting activities to be completed by June 1, 2012. DEQ staff subsequently conducted an inspection of the project site on June 28, 2012, and observed that the wetland and stream compensation had not been completed in accordance with the modified Permit and final plan. A Notice of Violation was issued to Willow Pond II, LLC on July 19, 2012, for failing to complete the wetland and stream compensation in accordance with the DEQ approved final plan by June 1, 2012. Willow Pond informed DEQ that it had been unable to secure an investor for its business venture, and therefore was unable to secure funding to complete the compensation required by its permit. During negotiations, Willow Pond II, LLC submitted an alternate compensation proposal to DEQ (see details in discussion below). DEQ determined that the alternate compensation proposal met the regulatory requirement of no net loss. DEQ staff conducted an additional site visit to determine the status of the stream channel. DEQ staff noted that the stream was in generally stable condition. Based on the site visit and review of the alternate compensation proposal, DEQ deemed the alternate proposal an acceptable alternative to Willow Pond II, LLC's originally approved Restoration Plan. The Consent Order requires Willow Pond II, LLC to submit proof of purchase of 0.57 wetland mitigation credits to compensate for impacts to 0.57 acre of palustrine emergent wetland, from a wetland mitigation bank that has released credits and is authorized by DEQ to sell credits in the area in which the impacts occurred. The Consent Order also requires Willow Pond II, LLC to submit a draft declaration of restrictions for the 1.52 acres proposed for preservation to DEQ for review and approval. Following DEQ approval, Willow Pond II, LLC shall submit proof of recordation of the declaration to DEQ. Civil charge: $18,921.

Bank of America, National Association - Consent Special Order with Civil Charges: Bank of America, National Association ("BOA") owns and developed the Property and will operate a data center at the Property in Henrico County, Virginia. On August 18, 2011, BOA purchased 1.68 acres of wetland credits from the James River Mitigation Bank. On August 30, 2011, DEQ issued permit WP4-11-0672 to BOA for wetland impacts associated with the construction of Bank of America VA Greenfield. Authorization also included confirmation of coverage under the USACE State Programmatic General Permit (07-SPGP-01). The Permit authorized permanent impacts of no more than 0.79 acre of forested wetlands, temporary impacts to no more than 0.07 acre of forested wetland, and permanently convert 0.10 acre of forested wetlands to emergent wetlands. The Permit required the purchase of 1.68 acres of wetland mitigation credits. The Permit also required notification of construction to DEQ, submitted prior to commencement of activities in permitted impact areas and construction monitoring reports submitted to DEQ in association with the permitted activities. On September 14, 2011, BOA provided a 10-day notice of construction to DEQ. BOA provided construction monitoring reports to DEQ on September 19, 2011, December 1, 2012 and January 9, 2012. On June 13, 2012, DEQ staff conducted a site inspection of the Property, which revealed that the development of the site was underway and all the permitted impacts had been taken. DEQ staff inspected the Property for compliance with the requirements of the State Water Control Law, the Regulations and compliance with the Permit. The DEQ inspectors observed the following:

a) The 0.07 acre of temporary impacts TU1 and TU2 under the Permit had been permanently filled with riprap.
b) The authorized conversion of 0.10 acre of forested wetlands to emergent wetlands (CU1 and CU2) had been permanently impacted by filling with riprap.
c) Approximately 0.30 acre of forested wetland located adjacent to impact areas PG1 and PR2 were impacted without authorization.
d) There was no flagging or marking of nonimpacted surface waters within 50 feet of permitted activity adjacent

to impacts PG1 and PR2.

e) Erosion and sediment controls were not in place in construction areas adjacent to the wetlands near impacts PG1 and PR2, resulting in sediment erosion into the wetland.

DEQ staff subsequently reviewed the file for the Permit and found no record that the construction monitoring report due July 10, 2012 had been submitted. The monitoring report was later submitted on July 24, 2012. In July and August of 2012, BOA restored the 0.30 acre of forested wetland located adjacent to impact areas PG1 and PR2 and reset the silt fencing and flagging. DEQ issued a NOV to BOA for violation of the permit and Virginia Code and regulations. BOA agreed to the Consent Special Order with DEQ to address the above described violations. The Order requires the payment of a civil charge and performance of two appendix items. The appendix items require BOA to purchase 0.10 acre of mitigation credits to compensate for the additional permanent impacts, and to restore the unpermitted impacts at TU1 and TU2. Wetland credits shall be purchased from an approved wetland mitigation bank in the same or adjacent hydrologic unit code as the impacted wetlands and DEQ shall be provided verification of the purchase of the wetland credits by March 31, 2013. Restoration shall be completed by June 1, 2013, with photographic evidence of completion submitted to DEQ for review and approval of completion. On February 8, 2013, BOA purchased 0.10 acre of mitigation credits as required by the order. Civil charge: $27,625.

King William County Central Garage Water System - Consent Special Order w/ Civil Charges: The County owns and operates the Central Garage Water System in King William County, Virginia. The County is located in the Eastern Virginia ground water management area. The County is subject to the Ground Water Withdrawal Permit No. GW0007400 (Permit), which authorizes the County to withdraw and use 170,530,000 gallons per year from the Middle Potomac aquifer. The permitted withdrawal of ground water provides potable water to the high school, residents, and businesses within the service area. DEQ has been working with the County to complete actions required by Part II-Special Conditions No. 8, 10, 11, and 14 of the Permit. The County did not comply with the Part II-Special Conditions No. 8, 10, 11, and 14 of the Permit as required. Part II-Special No. 8 of the Permit requires that the County install an observation well nest with real time data transmission equipment within 15 months of the effective date of the Permit; Part II-Special Condition No. 10 requires that the County submit in an electronic format the recorded daily volume withdrawn from each production well in an annual report; Part II-Special Condition No. 11 requires that the County properly permanently abandon the observation wells within two years of the effective date of the Permit; and Part II-Special Condition No. 14 requires that the County submit an annual report evaluating the per-connection use compared with the projected use, and evaluate the effectiveness of the Water Conservation & Management Plan elements in controlling irrigation or outdoor water use. After DEQ staff performed a compliance review of the file, the County entered into a Letter of Agreement (LOA) with DEQ. The LOA was issued to the County on October 4, 2011. The LOA extended the due dates to complete the previously cited PartII-Special Conditions. The County did not comply with the schedule or complete the corrective actions as stated in the LOA. On February 16, 2012, DEQ issued Notice of Violation (NOV) No. 12-02-PRO-201 to the County citing noncompliance with Part II-Special Conditions No. 8, 10, 11, and 14 of the Permit. King William County agreed to the Consent Special Order with DEQ to address the above described violations. The County has agreed to a schedule to comply with Part II-Special Conditions No. 8, 10, and 14. Part II-Special Condition No. 11 was completed on January 26, 2012. DEQ staff estimated the cost of injunctive relief to be approximately $100,000 for the installation of the observation well nest. Covo; cjarge" $21.674.

Holtzman Oil Corporation -Consent Special Order: Holtzman Oil Corporation (Holtzman Oil) is the owner and operator of an oil transport company based in Mount Jackson, Virginia. On August 30, 2012, DEQ received notification of a discharge of oil, in the form of diesel fuel oil (fuel), at the Dulles Greenway between Belmont Ridge Road and Shreve Mill Road, located in Leesburg, Virginia. The notification indicated that on August 30, 2012, a Holtzman Oil vehicle, fully laden with approximately 7500 gallons of fuel overturned on the Dulles Greenway (Greenway), a privately owned 14-mile, four-lane toll road. As a result of overturning, the tanker ruptured, allowing the discharge of the load of fuel onto the road, shoulder, and the road side embankment. On September 20, 2012, DEQ remediation staff issued a Confirmed Petroleum Release letter to Holtzman Oil. The letter requested the following action items: implement the necessary abatement measures, including the submittal of an Initial Abatement Report and submit a Site Characterization Report (SCR) for the discharge. The oil spill was originally thought to be limited to a 100 foot stretch of embankment on the North side of the Greenway. However, on October 2, 2012, Holtzman Oil's environmental consultant and clean-up contractor GEC Environmental (GEC) observed fuel entering a nearby storm water conveyance pipe under the Greenway and discharging on the south side of the Dulles Greenway into a storm water retention pond system, connected to Goose Creek. This discharge caused a sheen on the surface of the storm water retention pond. In response to the accident and the resulting discharge of oil, the Department issued Notice of Violation No. 2012-10-N-001, dated October 17, 2012, to

the Holtzman Oil for a discharge of oil to the land and state waters. On October 30, 2012, John Davis, Senior Project manager with Cardno MM&A, the consultant for the insurance company, submitted a summary time-line (summary) regarding the accident. The summary detailed how the spill occurred and how the mitigation of the site is progressing. According to the summary, the spill occurred on Thursday August 30, 2012, around 4:30 AM. Representatives of Holtzman oil responded to the accident and contacted GEC to respond to the scene. At the scene of the accident it appeared that the tanker's 7,500-gallon load of fuel discharged directly into the rip-rap construction fill on the north side of the west bound lane of the Greenway and GEC dug recovery pits at the base of the 25 foot slope where the spill occurred. The recovery pits contained small amounts of free product, which was recovered with the vacuum truck. An earthen check dam was placed between a drain culvert located about 75 feet to the east of the base of the slope from the spill and the swale along the base of the slope to prevent free product from entering the culvert. In addition, on August 31, 2012, a day after the accident absorbent booms were placed at the outfall of the culvert on the south side of the highway and at intervals for the first 100 feet of the drainage swale and a 100-foot boom was placed in the storm water retention pond in anticipation of impending rain events. According to the summary, during September 2012, recovery pits were monitored and vacuumed out by GEC when needed. Over the course of the month over 300 gallons of free product was recovered. The check dam at the culvert was enlarged per DEQ's direction. Another 100-foot boom was placed in the lower storm water pond and booms were placed at the outfall structure of the lower pond. No water has entered the culvert since the spill. No free product had been observed on the south side of the Greenway. According to the summary, on October 2, 2012, the area received over 1.9 inches and water had overflowed the containment area and was flowing through the underflow dam. As a result of the rain, a nominal amount of sheen was observed, yet according to GEC, no sheen appeared to be moving past the underflow dam. On October 3, 2012, GEC collected 4,053 gallons of water and oil from the previous day's rain event. The free product had been lifted from the roadway fill into the drainage culvert on south side of Greenway and was observed about 150 yards down drainage culvert. No oil was observed in the perennial stream or the retention ponds. According to the summary, during October 2012, GEC continued to remediate the site. The actions taken by GEC included the excavation of approximately 12 to 15 inches deep over a 60 by 15 foot area and removing a total of 46.94 tons of contaminated material from the excavated area. The area was back filled with stone and free product was removed using a vacuum truck. According to the summary, GEC collected approximately 150 gallons of free product. According to the summary, the contractors are researching the "the feasibility to drill one or more wells at an approximate 45 degree angle with the goal to have recovery wells intersect the virgin soil a few feet behind the retaining wall. If free product is not found in that location, the next step will be a deep fractured rock well located south of the retaining wall." The bulk of the remaining free product, approximately 7,000 gallons, appears to be contained in a pocket near this retaining wall. The inability to reach the free product, the slow discharge of free product to statewaters, and the difficultly of accessing the discharge from the Greenway, makes containment and cleanup of the site difficult. Based on the observations made by DEQ and by the consultant and contractor, the containment and cleanup will take a significant amount of time to successfully complete. The Consent Order requires Holtzman to: submit a Site Characterization Report (SCR); a SCR Addendum and/or a Correction Action Plan (CAP); a CAP Implementation Report with a schedule of compliance. Civil charge: $48,225 and investigative costs of $1,379.96.

Midget Mart No.2, Inc. - Consent Special Order: Midget Mart No.2, Inc. (Midget Mart) is the owner and operator of a UST facility (Facility) that stores regulated substances in the form of gasoline, kerosene and diesel. On November 22, 2010, Department staff inspected the Facility and conducted a file review of Facility records to evaluate the Midget Mart's compliance with the requirements of the State Water Control Law and the regulations. At that time, there were four USTs at the Facility: two 10,000 gallon gasoline USTs, one 10,000 gallon diesel UST, and one 4,000 gallon kerosene UST. DEQ staff observed that records showing recent compliance with release detection requirements were not immediately available at the Facility or readily available at an alternative site and evidence of all financial assurance mechanisms used to demonstrate financial responsibility were not available at the Facility or the owner's or operator's place of work and was not made available upon request. Midget Mart staff later confirmed that release detection was not conducted. On November 22, 2010, the Department issued a Request for Corrective Action (RCA) to Midget Mart requesting correction of the items observed during the inspection. On January 27, 2011, the Department issued a Warning Letter to Midget Mart for the violations observed and on June 30, 2011 sent a Letter of Agreement (LOA) to Midget Mart requesting corrective action completion by October 31, 2011. The LOA was signed by Midget Mart on July 20, 2011, and returned to the Department. On August 3, 2012, the Department issued Notice of Violation (NOV) No. 8-12-PRO-501 to Midget Mart after it failed to meet the terms of the LOA. On February 19, 2013, Department staff met with representatives of Midget Mart to discuss the alleged violations cited in the NOV. Midget Mart agreed to pay a civil charge in installments and conduct the injunctive relief contained in Appendix A of the proposed Consent Order. Civil charge: $8,655.

Master Fleet Services, Inc. - Consent Special Order with a civil charge: Master Fleet Services, Inc. ("Master Fleet Services") operates a facility ("Facility") in Hampton, Virginia, at which it maintains and repairs medium- and heavy-duty trucks, buses, and other large fleet vehicles. On Sunday, October 14, 2012, DEQ received notification of a discharge of Oil, in the form of used oil**,** in a storm water drainage ditch in the City of Hampton ("City"). The discharge was traced to a failed aboveground storage tank ("AST") at the Facility that had discharged its entire contents into the storm water drainage ditch adjacent to the Facility. Representatives of the City fire department initiated containment and cleanup by placing absorbent booms and pads in the drainage ditch. A representative of Master Fleet Services was contacted; he immediately contracted with an oil-response contractor to continue containment and cleanup. DEQ pollution-response staff ("staff") initially visited the Facility on October 15, 2012, and confirmed that the failed AST at the Facility was the source of the discharge and observed the progress of the containment and cleanup efforts. Staff noted that the bottom of the AST was badly corroded at the point of failure and was not equipped with secondary containment. Staff determined that the drainage ditch had been dry at the time of the discharge, but had become periodically inundated by Newmarket Creek, which was downstream of the drainage ditch, due to tidal influence. This, together with a heavy rain event on October 16, 2012, resulted in the discharged Oil migrating farther along the drainage ditch each time the tide receded. Some of the Oil that had saturated the soil in the drainage ditch created a sheen on the surface of Newmarket Creek and a small amount of Oil had accumulated on the vegetation along its banks. A subsequent record review disclosed that the AST that had failed at the Facility was not registered with DEQ. DEQ issued Master Fleet Services a Notice of Violation ("NOV") on November 16, 2012, for the discharge of petroleum to State lands and waters and for failing to register with DEQ a regulated AST. On November 26 and 27, 2012, a representative of Master Fleet Services responded in writing to the NOV. On December 5, 2012, Department enforcement staff met with representatives of Master Fleet Services to discuss the discharge, emergency response, and containment and clean-up. The president of Master Fleet Services estimated that approximately 1,650 gallons of used oil had been stored in the AST and discharged to the drainage ditch. He asserted that Master Fleet Services had responded quickly to the reported discharge; had cooperated with the United States Coast Guard, DEQ, the City fire department, and private land owners in containing and cleaning up the discharge; and had spent some of his personal funds for the cleanup, which included reimbursing private landowners for damage caused by heavy equipment used for the cleanup. DEQ pollution-response staff observed containment and cleanup activities on eight occasions during the period October 15, 2012, to October 26, 2012, and confirmed that activities were completed by October 26, 2012. Reports indicated that most if not all 1,650 gallons of the discharged Oil was recovered. The Consent Special Order ("Order") would require Master Fleet Services to pay a civil charge and reimburse DEQ for oil-spill response costs. Civil charge: $12,500.

Washington Street Inc. - Consent Special Order w/Civil Charges: Washington Street Inc. ("WSI") owns and operates the Happy Shopper #5, a gas station and convenience store located at 600 E Washington Street in Suffolk, Virginia. As part of the Facility, WSI operates two 8,000-gallon and one 6,000-gallon Underground Storage Tank ("UST") containing gasoline and one 4,000-gallon UST containing kerosene. On January 10, 2012, in response to a complaint of petroleum odors at the East End Baptist Church directly across the street from the Facility, DEQ Air Compliance staff conducted an inspection at the Facility. On January 14, 2012, WSI conducted a line leak detection test that indicated that the gasoline USTs were tight; however, the kerosene UST could not be tested as there was air in the line and free product was observed in one of the UST observation pits. On January 17, 2012, DEQ Remediation staff requested WSI to submit a Site Characterization Report ("SCR") and other corrective actions to address the potential petroleum release. On January 27, 2012, DEQ Tank Compliance staff conducted an inspection at the Facility and observed the following deficiencies:

- Records of release detection were not available for the USTs and associated piping
- Records of cathodic protection testing/inspections were not available for the USTs and associated piping
- Records were not provided to indicate that financial responsibility documentation for the UST system had been submitted to DEQ

On February 21, 2012, DEQ issued WSI a Notice of Violation ("NOV") for the observations listed above. On June 15, 2012, WSI submitted documentation that a cathodic protection system evaluation had been conducted on February 17, 2012 and that all protected structures at the Facility passed the cathodic protection survey. On April 4, 2013, WSI submitted passing release detection records from November 2012 to April 2013 and demonstrated financial responsibility for the Facility. The Order requires WSI to pay a civil charge only as the violations cited in the NOV have been corrected. Civil charge: $4,205.

Proposed Final Compensation Plan for Permitted Wetland and Stream Impacts Cobbs Creek Reservoir located in Cumberland County, Virginia Virginia Water Protection Individual Permit No. 05-0852 issued to Henrico County: BACKGROUND: The proposed issuance of Virginia Water Protection (VWP) permit No. 05-0852 for the Cobbs Creek Reservoir project was presented before the State Water Control Board (Board) at its meeting held on September 25, 2007. At this meeting, the Board voted six to one (one member abstained) in favor of one Board member's recommendation to amend the proposed permit to include a condition requiring the final wetland and stream compensation mitigation plan (final plan) be submitted to the Board in addition to the Department of Environmental Quality for final approval prior to any construction activity in permitted impact areas. The Board then voted six to one (one member voted no) in favor of issuing the permit with the Board member's amendment. In accordance with the Board's amendment, staff revised Part I.G.4 of the permit to require Board approval of the final compensation plan. The permit was originally issued with the voted amendment on October 10, 2007. Since then the permit has been modified three times: October 1, 2008, September 14, 2010, and November 27, 2012. Staff received a final plan to mitigate authorized wetland and stream impacts on February 14, 2013 and the permittee's response to staff comment dated May 2, 2013. As directed by Part I.G.5, staff is presenting the final plan before the Board. SUMMARY OF PROPOSED FINAL COMPENSATION PLAN [Note: Current permit Condition Part I.G.5 was G.4 in 2007, Part I.H.5 was H.3 in 2007 and Part I.H.6 was H.4 in 2007.] VWP Permit No. 05-0852 authorizes the permanent impact of 80,963 linear feet of stream channels, 30.99 acres of wetlands and 4.60 acres of open water associated with construction activities of the proposed reservoir. Condition Part I.H.5 and 6 of VWP Permit No. 05-0852 requires the permittee submit a final wetland and stream compensation mitigation plan to mitigate for authorized permanent wetland and stream impacts based upon the approved conceptual compensation plan. Condition Part I.G.5.a through d of the October 12, 2007 permit provides the requirements for a final plan. Condition Part I.G.5 provides that the final wetlands and stream compensation plans shall be prepared in accordance with the Virginia Water Protection Permit Program Regulation (9 VAC 25-210-10 et. seq.) in effect at the time of plan submittal, and shall be based on the most recent mitigation guidance posted on DEQ's wetlands web page. Condition Part I.G.5.a through d provides in part that:

a. The final wetland compensation plan shall include complete information on all components of the conceptual compensatory mitigation plan including a summary of the type and acreage of wetland impacts anticipated during the construction of the compensation site and the proposed compensation for these impacts; a site access plan; a monitoring plan, including the proposed success criteria, the monitoring goals, the monitoring schedule, the location of photo stations, monitoring wells, vegetation sampling points, and reference wetlands (if available), and the monitoring provisions contained in this permit; an abatement and control plan for undesirable plant species; an erosion and sedimentation control plan; a construction schedule; and the mechanism for protection in perpetuity of the compensation site(s), including all surface waters and buffer areas within its boundaries. … Hydrology analyses should include: For riverine or stream-driven systems, a water budget (for nontidal sites only) based on expected monthly inputs and outputs which will project water level water level elevations for a typical year, a dry year, and a wet year; For groundwater- and precipitation-driven sites in non-riverine systems, historic groundwater elevation data, if available, or the proposed location of groundwater monitoring wells to collect these data; and For overbank flood-driven systems, gaging station data and a floodplain analysis, including a minimum 10-year continuous simulation which will account for variability in inputs and outputs under varying conditions.

b. The final stream compensation plan shall include complete information on all of the components of the conceptual compensatory mitigation plan including but not limited to, compensation amounts, credits and/or credit ratios, condition assessment types, and locations. In addition, the plans shall include: a summary of the type and linear feet of stream impacts anticipated during the construction of the compensation site and the proposed compensation for these impacts; a site access plan; an erosion and sedimentation control plan, if appropriate; an abatement and control plan for undesirable plan species; a monitoring plan, including the proposed success criteria, the monitoring goals, the monitoring schedule and the location of photo stations, vegetation sampling points, survey points, bank pins, scourt chains, and reference streams (if available), and the monitoring provisions contained in this permit; a plan view sketch depicting the pattern and all compensation measure being employed; a profile sketch; cross-sectional sketches of the proposed compensation stream; and the mechanism for protection in perpetuity of the compensation site(s), including all surface waters and buffer areas within its boundaries.

c. Any compensation plan proposing the purchase or use of mitigation banking credits shall include: (i) the name of the proposed mitigation bank and the HUC in which it is located; (ii) the number of credits proposed to be purchased or used; and (iii) certification from the bank owner of the availability of credits.

d. Any compensation plan proposing to include contributions to an in-lieu fee fund shall include proof of the willingness of the entity to accept the donation and documentation of how the amount of the contribution was calculated.

DEQ received the proposed "Final Detailed Compensation Plan, Cobbs Creek Regional Water Supply Reservoir," dated February 2013 and received February 14, 2013, and the permittee's response to DEQ comments dated May 2, 2013, and the attached plan set entitled "Final Mitigation Plan for the Cobbs Creek Reservoir Project at the Swift Island Mitigation Site" dated December 15, 2012 and received February 14, 2013, and the permittee's response to DEQ comments dated May 2, 2013 (final plan). In addition to the information required to be submitted in Condition Part I G.5.a through d the final plan identifies compensation to mitigate all permanent wetland and stream impacts authorized under VWP Permit No. 05-0852. The compensation components of the final plan are as follows:

- The creation of 54.0 acres of wetlands, consisting of 39.61 acres of palustrine forested wetland, 9.57 acres of palustrine scrub-shrub wetland and 4.82 acres of palustrine emergent wetland, the enhancement of 2.14 acres of adjacent upland buffer and the preservation of 17.0 acres of adjacent upland buffer at the Swift Island Off-Site Mitigation site in Buckingham County. The mitigation site is located within the same U.S. Geologic Society (USGS) Hydrologic Unit Code (HUC) as the impact site. This component provides 100 percent of the wetland compensation requirement.
- The enhancement of riparian buffer along 3,167 linear feet of stream channel and the preservation of riparian buffer along 17,419 linear feet of stream channel at the Swift Island Off-Site Mitigation site in Buckingham County. The mitigation site is located within the same USGS HUC as the impact site. This component provides 5.5 percent of the stream compensation requirement.
- The preservation of riparian buffers (100 foot wide) along both sides of 298,841 linear feet of stream channels and preservation of riparian buffers (100 foot wide) along one side of 9,676 linear feet of stream channels at the Cumberland State Forest in Cumberland County. The mitigation site is located within an adjacent USGS HUC within the same watershed (James River) as the impact site. This component of the final plan provides 75 percent of stream compensation requirement.
- Purchase of 15,783 stream credits from an approved mitigation bank located with the same or adjacent USGS HUC within the same watershed (James River) as the impact site. This component of the plan provides 19.5 percent of the stream compensation requirement. Note: At the time the final plan was submitted, Henrico County (permittee) was preparing to put out a bid for the purchase of the required stream credits, which was public noticed on April 19, 2013. The bid process was completed on May 14, 2013, and the County intends to award the bid to an approved mitigation bank or banks as soon as possible.

Based upon staff review, the final plan provides the concepts, protections and water quality benefits for this type of project. Staff determined the plan, as revised based upon staff comments, meets the requirements of 9VAC25-210-116.F.1, 9VAC25-210-116.F.2 and VWP Permit No. 05-0852 conditions Part I.G.5 and Part I.H. 5 and 6, and is therefore approvable.

Trading Ratio Study: An enactment clause in Senate Bill 77 (2012) and House Bill 176 (2012) reads "[t]hat by July 1, 2013, (Acts of Assembly, 2012) the State Water Control Board shall reevaluate its trading ratio for nutrient allocation acquisition pursuant to subdivision B 1 b of § 62.1-44.19:15 of the Code of Virginia, giving full consideration to similar trading ratios established by § 10.1-603.8:1 of the Code of Virginia, §10.1-603.15:2 as added by this act, and trading programs in other Chesapeake Bay watershed states. The Board shall establish an advisory group of interested stakeholders for the purpose of receiving recommendations during the reevaluation regarding an appropriate ratio. If warranted based on the outcome of the reevaluation, the Board shall adopt a revised trading ratio for purposes of subdivision B 1 b of § 62.1-44.19:15 as soon as practicable following the completion of the reevaluation." Provisions of the Chesapeake Bay Watershed General Permit require that new or expanding point sources acquire allocations or credits to offset the entirety of their nutrient load (9VAC25-820-70). The permit regulation allows for the offsets to include certified nutrient credits "[s]ubject to a trading ratio of two pounds reduced for every pound to be discharged." As directed by the General Assembly, the Department of Environmental Quality (DEQ) assembled a stakeholder committee to advise the agency on this issue and produced a report. The committee served to advise the agency on the issues raised in the enactment clause, not necessarily endorse any final recommendations by DEQ or the State Water Control Board. All materials and documents related to the study are posted on DEQ's website at: http://www.deq.virginia.gov/Programs/Water/PermittingCompliance/PollutionDischargeElimination/NutrientTrading/TradingRatioStudy.aspx

Final amendments to the Groundwater Withdrawal Regulation (9VAC25-610 et seq.)
Comment Summary and Responses

The following technical comments were received on the proposal.

Commenter	Comment	Agency response
Thomas Shepperd, Jr. , Chairman, Hampton Roads Planning District Commission	9VAC25-610-10, the proposed definition for "Human Consumption" in the draft regulation is too narrow. It does not include toilet flushing, washing clothes, medical needs, etc. The regulation should continue to use the definition of "Human consumptive use" in the existing regulations: *"Human consumptive use" means the withdrawal of groundwater for private residential domestic use and that portion of ground water withdrawals in a public water supply system that support residential domestic uses and domestic uses at commercial and industrial establishments.*	In response to comments, the definition of "human consumption" in the proposed regulations has been modified. The definition of "human consumption" has been modified to read "Human consumption means the use of water to support human survival and health, including drinking, bathing, showering, cooking, dishwashing, and maintaining hygiene."
Thomas Shepperd, Jr. , Chairman, Hampton Roads Planning District Commission	When the available supply of groundwater is not sufficient to meet all requests, meeting the demands of public water systems should be the highest priority. 9 VAC25-610-110 E should be revised as follows: *When proposed uses of groundwater are in conflict or available supplies of groundwater are not sufficient to support all those who desire to use them, the board shall prioritize the evaluation of applications in the following manner:* *1. Applications for public water systems shall be given the highest priority;* *2. Should there be conflicts between applications for public water systems, applications will be evaluated in order based on the date that said applications were considered complete; and* *3. Applications for all uses, other than public water systems, will be evaluated following the evaluation*	§ 62.1-263 of the Code of Virginia establishes "human consumption" as the highest priority of water usage when there is insufficient groundwater for all users. The regulations must be consistent with statutory language and requirements. No change has been made to the referenced section.

	of proposed public water systems' uses.	
Thomas Shepperd, Jr. , Chairman, Hampton Roads Planning District Commission	9VAC25-610-110 F.2 should be revised to ensure that public water systems have enough water to serve existing customers and to protect the health and safety of those communities. The following language is suggested: *The board shall reissue a permit to any public water supply user for an annual amount no less than the portion of the permitted withdrawal that was used by said system during any consecutive 12 month period occurring in the previous term of the permit.*	The Commonwealth has had three different programs designed to reduce groundwater level declines in the coastal aquifers since the 1950s: the Uniform Well Capping Law, the Groundwater Act of 1973, and the Ground Water Management Act of 1992. During the implementation of these programs, public system groundwater use continued to grow and aquifer heads continued to decline. The most recent analysis by the U.S. Geological Survey (USGS) indicates that the aquifer system appears to be over-allocated to be used sustainably over the long term. Guaranteeing any particular groundwater use, including public water system use, will not result in improved aquifer conditions. This request is inconsistent with the purpose and intent of the Ground Water Management Act of 1992.
Thomas Shepperd, Jr. , Chairman, Hampton Roads Planning District Commission	If the criterion for evaluating permits is revised, public water systems should be grandfathered under the criterion used to approve the original permit. We are not making this point with respect to new or expanded applications, only those systems and withdrawals existing at the time this regulation is adopted.	The Code of Virginia at § 62.1-254, acknowledges what has been known for some time, i.e. that existing use of the coastal aquifer system is causing declining groundwater levels, subsidence, and salt water intrusion. The most recent state and federal analysis of the sustainability of the aquifer indicate that these impacts will continue to increase for several generations or more at current levels of use. The Groundwater Act of 1973 was essentially a period of grandfathering where existing users were allowed to continue to withdraw based on the existing capacity. During the 20 year life of that statute, groundwater levels continued to decline. With the Ground Water Management Act of 1992, grandfathering of existing users was eliminated for that very reason. It would be inappropriate for the Board to grandfather anyone, especially now that conditions have not improved.
Thomas Shepperd, Jr. , Chairman, Hampton Roads Planning District Commission	Existing public water systems should not be required to raise pumps because the Potomac aquifer has been redefined as one aquifer, instead of three aquifers. Also, the pump setting requirements should be based on the depth and position of the well screen rather than on which aquifers are utilized as a groundwater source. 9VAC25-610-110 D.3.c should be revised with the following language: *i) The applicant demonstrates that no pumps or water intake devices*	The redefining of the Potomac Aquifer based on current science will result in the raising of pumps over a permittee's 10 year permit term and may have a significant impact on yield for some users, Current pump settings are directly related to continuing losses of elastic and inelastic storage and compaction.

	are placed lower than the top of the uppermost confined aquifer with a well screen in order to prevent dewatering of a confined aquifer, loss of inelastic storage, or damage to the aquifer from compaction. *ii) Public water systems with wells screened in the Potomac Aquifer may continue to operate with pumps set below the top of the Potomac Aquifer if those operational settings were approved in their permits prior to the Potomac Aquifer classification as one aquifer instead of three aquifers (Upper Potomac, Middle Potomac, and Lower Potomac).*	
Thomas Shepperd, Jr. , Chairman, Hampton Roads Planning District Commission	If a public water system requests a renewal of a permit with the same conditions as its existing permit, the system should be guaranteed that the renewal will not be denied based on new evaluation of water level impacts. 9VAC25-610-110 F should be revised with this additional paragraph: *The board shall not conduct or consider technical evaluations of the 80% criteria for reapplications if the applicant is a public water system.*	The most recent analysis by the USGS indicates that the aquifer system appears to be over-allocated to be used sustainably over the long term. Guaranteeing any particular groundwater use or excluding the use from technical analysis, including public water system use, will not result in improved aquifer conditions. This request is inconsistent with the purpose and intent of the Ground Water Management Act of 1992.
Thomas Shepperd, Jr. , Chairman, Hampton Roads Planning District Commission	Public water systems should be granted renewals of permits with the same conditions as its existing permit regardless of the availability of surface water for purchase. 9VAC25-610-102 "Evaluation of need for withdrawal and alternatives" should be revised with this additional paragraph: *F. The board shall not consider requiring public water systems to purchase surface water in lieu of renewing a groundwater withdrawal permit.*	This proposal is a disincentive to long-term reliance solely on groundwater. To manage the aquifer system sustainably, all groundwater users will need to reduce their reliance on groundwater over time. All alternative sources must continue to be evaluated as part of each permit cycle, including the purchase of surface water, water reuse and other potential alternative sources of supply.
Thomas Shepperd, Jr. , Chairman,	The technical evaluation of proposed withdrawals should be based on predicted water levels at	The Board defines the term "stabilized effects" more broadly than the commenter and we do not feel that its use is inconsistent with transient model simulations. It is

Hampton Roads Planning District Commission	the end of the proposed permit term instead of evaluating the "stabilized effects" of proposed withdrawals. A transient model simulation should be used instead of a steady state simulation to estimate water level and head changes caused by a proposed withdrawal. A steady state simulation could represent impacts that are expected to occur 50 years or longer after the permit would expire. 9VAC25-610-110 D. 3. h should be revised with the following language: *The board's technical evaluation demonstrates that the effects from the proposed withdrawal in combination with the effects of all existing lawful withdrawals at the end of the permit term will not lower water levels, in any confined aquifer that the withdrawal impacts, below a point that represents 80% of the distance between the historical prepumping water levels in the aquifer and the top of the aquifer.*	not consistent with statutory intent to limit the evaluation of impacts to the permit term when it is well known that impacts from authorized withdrawals do, in fact, continue for many years beyond the permit term impacting future use of the resource. We do agree that the simulation period needs to be technically defensible and reasonably related to measurable aquifer system impacts from the proposed withdrawals. This can be done by analyzing the drawdown curve and determining the break point at which significant impacts are no longer occurring.
Thomas Shepperd, Jr. , Chairman, Hampton Roads Planning District Commission	Compliance with the 80% drawdown criteria should be based on the calibration limit of a technically sound groundwater model. 9VAC25-610 D.3.h should be revised by adding the following paragraphs: *(1) Compliance with the 80% drawdown criterion for new applications will be determined at the model's minimum drawdown contour based on the predicted effects of the proposed withdrawal. The model's minimum drawdown contour is defined as the calibration limit of the specific groundwater model or assessment methodology used for the technical evaluation.* *(2) Compliance with the 80% drawdown criterion for permit renewals will be determined at the points that are halfway between the proposed withdrawal site and*	The comment is accurate if it is addressing the limitations of the RASA model that will be replaced with the adoption of these regulatory amendments. The new VCPM model's calibration is technically suitable with the one foot drawdown contour measuring point for the 80% criterion. It is important to note that the estimated calibration error for the VCMP includes the entire lateral and vertical extent of the model. The way that the model error works is that in areas like the existing management area where the highest monitoring resolution is located, the accuracy is far better than its total margin for error. Therefore it isn't a technically valid comparison to use the average total model error as the basis for determining validity of the drawdown contour. The use of the half distance point to measure the 80% drawdown was borrowed from the Code of Maryland. It was assumed at that time that the aquifer properties of the Maryland coastal plain aquifer system would be very similar to that of the aquifer system in Virginia. Over the last two decades, our analysis, and that of the USGS, of sediment samples, aquifer testing results, and application of the groundwater flow models have clearly demonstrated that much of the Virginia system behaves differently than the Maryland system. In

	the model's minimum drawdown contour based on the predicted effects of the proposed withdrawal. The model's minimum drawdown contour is defined as the calibration limit of the groundwater model used for the technical evaluation.	the Maryland portion of the system, the majority of head declines from a withdrawal are seen within the first half of the total area of impact. In Virginia, significant drawdowns occur outside this half distance causing water levels to fall below regulatory levels specified for aquifer protection. The regulations have been modified in response to comments concerning the 80% drawdown criteria. Compliance with the 80% drawdown criteria will be determined at the points where the predicted one foot drawdown contour is predicted for the proposed withdrawal. In addition, a significant source of model error—the pre-pumping head—has been eliminated in favor of the land surface.
Thomas Shepperd, Jr. , Chairman, Hampton Roads Planning District Commission	The "area of impact" should be defined according to the calibration of the model used for the analysis. 9VAC25-610-10 should include the following definition: *"Area of impact" means the model's minimum drawdown contour based on the predicted effects of the proposed withdrawal. The model's minimum drawdown contour is defined as the calibration limit of the groundwater model used for the technical evaluation.*	The comment is accurate if it is addressing the limitations of the RASA model that will be replaced with the adoption of these regulatory amendments. The new VCP model's calibration is technically suitable with the one foot drawdown contour measuring point for the 80% criterion. It is important to note that the estimated calibration error for the VCPM includes the entire lateral vertical extent of the model. The way that the model error works is that in areas like the existing management area where the highest monitoring resolution is located, the accuracy is far better than its margin for error. Therefore it isn't a technically valid comparison to use the average total model error as the basis for determining validity of the drawdown contour. The regulations have been modified in response to comments concerning the 80% drawdown criteria. Compliance with the 80% drawdown criteria will be determined at the points where the predicted one foot drawdown contour is predicted for the proposed withdrawal. In addition, a significant source of model error—the pre-pumping head—has been eliminated in favor of the land surface.
Thomas Shepperd, Jr. , Chairman, Hampton Roads Planning District Commission	Permit terms should be extended from the current 10 year term to 30 years to match the financing periods for water infrastructure investments. However, withdrawal amounts should be limited to projected demands for 15 years. This would align permit terms with the financing needs for infrastructure. 9VAC25-610-106 D.13 and 9VAC25-610-40 A. 10 in the draft regulations should be modified with the following language: *Groundwater withdrawal permits shall be effective for a fixed term not to exceed 30 years.*	§ 62.1-266 of the Code of Virginia specifies that permit terms shall not exceed ten years. The Board is not authorized to amend the regulations in a manner inconsistent with the statute or to issue a permit for a term exceeding ten years.

Thomas Shepperd, Jr. , Chairman, Hampton Roads Planning District Commission	If the permit term is extended beyond 10 years, the permitted withdrawal amounts should be limited to the projected water demands in the next 15 years. Groundwater should not be obligated to a permittee fifteen to thirty years before it is needed. Paragraph A.1 should be created in Section 610-102 Evaluation of need for withdrawal and alternatives. The following language is suggested: *Groundwater withdrawal permits shall be based on projected water demands for no more than 15 years from the date of the permit issuance, even if the permit term exceeds 15 years.*	§ 62.1-266 of the Code of Virginia specifies that permit terms shall not exceed ten years. The Board is not authorized to issue a permit for a term exceeding ten years or to change its regulations in a manner inconsistent with this statutory limitation.
Thomas Shepperd, Jr. , Chairman, Hampton Roads Planning District Commission	The Virginia Coastal Plain (VCP) groundwater model should be used to manage the Coastal Plain Aquifer System instead of the RASA model currently in use. The VCP model should be adopted because it produces more accurate predictions of groundwater elevations. The VCP model includes information that was not available when the RASA model was developed such as the groundwater density distribution along the saltwater interface near the Atlantic Ocean, domestic self-supplied withdrawals below the reporting threshold, the Chesapeake Bay Impact Crater, and recognition of a single Potomac aquifer.	The Board concurs.
Thomas Shepperd, Jr. , Chairman, Hampton Roads Planning District Commission	9VAC25-610-104 "Surface water and groundwater conjunctive use systems" in the draft regulations does not accomplish the goal of giving water providers the flexibility to maximize the available water resources with fewer restrictions than Drought Relief Permits. Suggests that the Conjunctive Use Permit category be eliminated. Permits should be issued as either a Production Well	The conjunctive use permit allows the applicant more flexibility than drought relief permits. Drought relief permits are to be used to only withdraw groundwater needed for human consumption needs where conjunctive use permits are available for all permitted uses. Both drought relief and conjunctive use permits are identified and authorized by statute. It would be inconsistent with the statute to eliminate a class of permits.

	Permit or a Drought Relief Permit.	
Thomas Shepperd, Jr. , Chairman, Hampton Roads Planning District Commission	Drought Relief Permits for public water systems should not be limited to permitted withdrawals that only support human consumptive use. The definition of "Supplemental drought relief well" in 9VAC25-610-10 should be revised with the following language: *"Supplemental drought relief well" means a well permitted to withdraw a specified amount of groundwater to meet human consumptive use needs during declared drought conditions, or other declared water supply emergency, after mandatory water use restrictions have been implemented. Permits for public water systems should be permitted to withdraw groundwater to meet the needs of all consumers after mandatory water use restrictions have been implemented.*	§ 62.1-265 of the Code of Virginia states "The Board shall issue groundwater withdrawal permits for supplemental drought relief wells for the amount of groundwater needed annually to meet human consumption needs…" Allowing public water systems to withdraw groundwater to meet the needs of all consumers would be inconsistent with statutory requirements.
Thomas Shepperd, Jr. , Chairman, Hampton Roads Planning District Commission	The impacts of drought relief wells should be evaluated under conditions that more closely match the past operations of drought relief wells in Virginia. The impacts should be evaluated with a transient model assuming the proposed maximum rate and withdrawal amount for two years, followed by eight years at the minimum maintenance withdrawals, and repeated if the permit term is extended beyond 10 years. This approach is based on the historical use of emergency wells in the Virginia Coastal Plain.	The Board concurs that drought relief permits should be modeled differently than base demands. Drought relief is by its nature episodic and transient and the modeling analysis should reflect how the wells are used. While there is merit to the specific modeling recommendation made by the commenter, current drought averages may not be reasonable for the next generation of permittees. The frequency of years considered "drought years" has increased during the last decade and it is not clear if this is a short term aberration or the new "normal" climatic condition. The most recent drought relief permits issued were evaluated using transient model simulations.
Thomas Shepperd, Jr. , Chairman, Hampton Roads Planning District Commission	The draft regulations states that the 80% criterion will be evaluated based on the stabilized effects of the proposed withdrawal. Drought wells are rarely pumped for more than a year and almost never pumped continuously. The aquifer system is sluggish to respond to pumping stresses so using a	The Board concurs that drought relief wells should not be evaluated as continuous base demand withdrawals. While there is merit to the specific modeling recommendation made by the commenter, current drought averages may not be reasonable for the next generation of permittees. The frequency of years considered "drought years" has increased during the last decade and it is not clear if this is a short term aberration or the new "normal" climatic condition. The most recent

	transient model instead of a steady state model is a more accurate way to simulate the impacts of drought relief withdrawals. 9VAC25-610-106 G. 6 should be revised with the following language: *The board's technical evaluation demonstrates that the effects from the proposed withdrawal amounts pumped at the maximum rate for two years followed by the withdrawal of any minimum amounts required for maintenance for eight years in combination with the effects of all existing lawful withdrawals will not lower water levels, in any confined aquifer that the withdrawal impacts, below a point that represents 80% of the distance between the historical prepumping water levels in the aquifer and the top of the aquifer.*	drought relief permits issued were evaluated using transient model simulations. A regulatory amendment is not necessary to achieve the stated purpose.
Thomas Shepperd, Jr. , Chairman, Hampton Roads Planning District Commission	The "area of impact" should be based on the same assumptions used in the technical evaluation of the proposed withdrawal. 9VAC25-610-108 D should be revised as follows: *Mitigation plans for supplemental drought relief permits shall address the area of impact associated with the maximum groundwater withdrawal allowed by such permits assuming the proposed maximum rate and withdrawal amount for two years followed by eight years at the minimum maintenance withdrawals.*	The Commonwealth has experienced extended multi-year droughts historically, and in some cases, these droughts have persisted beyond 2 years. The extended drought period of the 1960s is the most recent example. While this drought did not affect Hampton Roads significantly, it remains the drought of record for portions of the northern coastal plain. The Board believes that evaluating the resource impact on a transient basis is consistent with actual operations and current scientific understanding of system response. Resource impacts of another year or more would be expected to be transient as well. However, impacts to existing self supplied users, such as individual homeowners, could occur with multi-year sustained pumping during an unusual drought period. When an impact to the wells of these users is possible under a withdrawal permit, it is reasonable for the Board to be conservative even if the impact to these users may not be probable.
Thomas Shepperd, Jr. , Chairman, Hampton Roads Planning District Commission	The regulation should address Aquifer Storage Recovery (ASR) wells. Include the following definition in the regulations- "Aquifer Storage Recovery Well" injects drinking water into the aquifer system and stores more water in the system than it withdraws. e) Aquifer Storage Recovery wells	ASR can be done now under current law with coordination with other state and federal permit programs. This proposed change would not result in greater use of ASR or change the fact that multiple permits by multiple agencies would be needed. The issue is better addressed as part of a more comprehensive effort to address this specific issue. The need for a mitigation plan is still appropriate due to the potential water quality changes that could result in the wells of other users from ASR activities.

	should not be required to have a mitigation plan because by definition more water has been injected than withdrawn from the aquifer system. Any and all impacts experienced during a withdrawal cycle are temporary by definition and by operational constraints.	
Thomas Shepperd, Jr. , Chairman, Hampton Roads Planning District Commission	Do not require ASR wells to have a Groundwater Withdrawal Permit, but make them comply with DEQ reporting requirements for withdrawals. The EPA Underground Injection Control Program would regulate injection of water at ASR wells.	A VPA permit from the Board would still be required and this would not change. A groundwater withdrawal permit is appropriately required if the ASR operation is associated with a system that also includes a groundwater withdrawal.
Thomas Shepperd, Jr. , Chairman, Hampton Roads Planning District Commission	Allow ASR well owners to withdraw a maximum of 70% of the volume of water that has been injected into the aquifer system or up to 95% of the injected water, as long as the utility can effectively demonstrate that the withdrawn water above the 70% point is predominantly injected water (by water quality analysis) and not native water.	ASR can be done now under current law with coordination with other state and federal permit programs. This can be addressed through DEQ guidance to determine appropriate specific numbers.
Thomas Shepperd, Jr. , Chairman, Hampton Roads Planning District Commission	Allow ASR well owners to withdraw water up to a maximum rate of four times the average daily injection rate based on the previous 12 months.	ASR can be done now under current law with coordination with other state and federal permit programs. This can be addressed through DEQ guidance to determine appropriate specific numbers.
Thomas Shepperd, Jr. , Chairman, Hampton Roads Planning District Commission	Aquifer Storage Recovery wells should not be required to have a mitigation plan because by definition more water has been injected than withdrawn from the aquifer system. Any and all impacts experienced during a withdrawal cycle are temporary by definition and by operational constraints.	The need for a mitigation plan may still be appropriate due to the potential water quality changes in the wells of other users that could result from ASR activities. If a homeowner's well began to see high levels of metals, fluoride or arsenic, after injection activities began, there is a likelihood that this was the result of the injection as these are commonly seen issues. That user should expect to have their well replaced or a filtration system installed by the injector.
Jeff Howeth, J. L. Howeth P.C.	Would like the term small water systems, used in Mr. Kudlas' presentation at the beginning of the Warsaw, Virginia hearing to be	Mr. Kudlas used the term "small water system" to describe those groundwater withdrawals that are detailed in section 108 of the proposed amendments. This is a new section of the regulation that is being added to

	defined so that the regulated community would know who would be able to use the default area of impact calculations.	address those withdrawals that modeling indicates has an area of impact of less than 12 square miles. Systems with areas of impact that are smaller than 12 square miles withdraw less than 10 million gallons per year. The applicant may choose to accept the area of impact without conducting geophysical investigations, without incurring costs to conduct geophysical evaluations.
Curtis Consolvo, GeoResources, Inc.	Encourages the regulations to contain more creativity on how the technical evaluations are being conducted. There should be a means by which the results may be challenged. The regulations should have an avenue for challenging the results. For both those that have aquifer tests and for those that do not have aquifer tests.	Applicants have the opportunity to challenge or appeal decisions of the Board. Applicants may present additional information to support technical evaluations of groundwater conditions and the need for aquifer testing on a case by case basis.
Curtis Consolvo, GeoResources, Inc.	DEQ regulates the Potomac aquifer as a single aquifer, not three separate aquifers. Geologists consider this an "aquifer system." There are different characteristic in some areas of the aquifers. There are distinct water qualities and quantities. There should be a means by which the applicant can present information to show that the area the well is installed in is not impacting other areas in the aquifer system.	Applicants have the opportunity to appeal decisions of the Board. Applicants may present additional information to support technical evaluations of groundwater conditions related to specific geophysical and hydrological attributes.
Wanda Thornton, Brit McMillan, A-NPDC	Clarify that the 80% drawdown criteria is evaluated over the area of impact, not an area the withdrawal impacts. Revise 9VAC25-610-110 D 3 h to read *"in any confined aquifer that is within the area of impact of the withdrawal."* This would clarify the point of compliance.	The regulations have been modified in response to comments concerning the 80% drawdown criteria. Compliance with the 80% drawdown criteria will be determined at the points where the one foot drawdown contour is predicted for the proposed withdrawal.
Wanda Thornton, Brit McMillan, A-NPDC	Use of the 1 foot drawdown to define the area for compliance greatly exceeds the accuracy of all current numerical models used to evaluate withdrawals in the coastal plain. The RMSE for the most current model is 3.6 feet, and this level of accuracy deviates throughout the coastal plain. The 1/2 distance in the current	The comment is accurate if it is addressing the limitations of the RASA model that will be replaced with the adoption of these regulatory amendments. The new VCP model's calibration is technically suitable with the one foot drawdown contour measuring point for the 80% criterion. It is important to note that the estimated calibration error for the VCPM includes the entire lateral and vertical extent of the model. The way that the model error works is that in areas like the existing management area where the highest monitoring resolution is located,

	regulations compensated for this accuracy. Changing the area of impact to evaluate the 80% criterion to an amount consistent with the accuracy of the model is scientifically defensible.	the accuracy is far better than its total margin for error. Therefore it isn't a technically valid comparison to use the average total model error as the basis for determining validity the drawdown contour.
Wanda Thornton, Brit McMillan, A-NPDC	Use of stabilized drawdown to evaluate a 10 year withdrawal has the potential to over predict the area of impact. This is particularly true for episodic withdrawals (drought relief, irrigation). Impacts from individual withdrawals would be better represented as transient simulations	The Board concurs that permits for episodic demands should be modeled differently than base demands. The modeling analysis should reflect how the wells are used and should be transient simulations. We do agree that the simulation period needs to be technically defensible and reasonably related to measurable aquifer system impacts from the proposed withdrawals. This can be done by analyzing the drawdown curve and determining the break point at which significant impacts are no longer occurring.
Wanda Thornton, Brit McMillan, A-NPDC	Suggests treating smaller withdrawal differently to minimize resources needed to permit small withdrawals. Suggests general permit process could be used or other streamlined permit process. Define a small withdrawer (300,000 gal. per month to 3 million gal. per month), create shorter forms, reduce testing requirements, while maintaining mitigation requirements. This would reduce processing times and encourage smaller withdrawals.	A general permit will not be developed and included in the regulations at this time. Even though the beneficial uses may be similar, withdrawals of the same volume do not always result in similar impacts and therefore does not correlate to the use of general permits in other regulatory programs. For example, in some parts of the coastal plain, a 3 million gallon per day groundwater withdrawal would represent a multi-county area of impact.
Wanda Thornton, Brit McMillan, A-NPDC	Withdrawals from the water table aquifer are managed similarly to those from the confined aquifer, even though the water table aquifer is more readily recharged. Encourage the use of the water table aquifer by allowing a simpler permit process, similar to a general permit to encourage the use of the water table aquifer	The Board does encourage more use of the water table aquifer but there is not statutory authorization to require it. There is little consensus among stakeholders on how best to address this issue.
Wanda Thornton, Brit McMillan, A-NPDC	Aquifer Storage and Recovery (ASR) should be included more fully in the regulations. Suggest addressing ASR by adding the concept of a "water balance" basis whereby the operator can withdraw up to 80% of the water that was previously pumped into the aquifer. This would encourage ASR and potentially significantly	ASR can be done now under current law with coordination with other state and federal permit programs. This can be addressed through DEQ guidance to determine appropriate specific numbers.

	increase the recharge of the aquifer.	
Va. Manufacturer's Assoc.	Section 9 VAC 25-610-94 refers to "reapplication for a current permitted withdrawal." This language is confusing. Is this in essence a permit renewal? If so, permit renewal is the term that should be used. For permit renewals that do not seek to expand the withdrawal amount, there are a number of items specified in this section that are not applicable. The evaluation in the case of permit renewal applications should be more focused on actual water usage (to determine whether there is a need for the full permitted amount) and the impact of that usage.	The term "reapplication" is used in the regulation to indicate that allocations are not guaranteed as long as water levels continue to decline. In common usage, the term "renewal" has the connotation that the use can continue indefinitely without increasing levels of water efficacy and conservation. This was the concept that was the foundation of the Groundwater Act of 1973, which was unsuccessful at maintaining groundwater levels. The Ground Water Management Act of 1992, required ongoing conservation to continue to reduce use over time.
Mission H2O	9VAC25-610-94 refers to "reapplication for a current permitted withdrawal." This language is confusing. This appears to be describing a permit renewal. Consider revising the terminology to "permit renewal."	The term "reapplication" is used in the regulation to indicate that allocations are not guaranteed as long as water levels continue to decline. In common usage, the term "renewal" has the connotation that the use can continue indefinitely without increasing levels of water efficacy and conservation. This was the concept that was the foundation of the Groundwater Act of 1973, which was unsuccessful at maintaining groundwater levels. The Ground Water Management Act of 1992, required ongoing conservation to continue to reduce use over time.
Mission H2O	The Groundwater Withdrawal Regulations contain duplicative requirements of the water supply planning regulation. The duplicative requirements should be waived or the regulation should allow for the applicant to cross reference the previously submitted documentation.	The intent of this provision was to mirror the language in the VWP program that allows the use of demand information developed for the water supply plan to be used in the surface water withdrawal permit process. In addition, the language should provide an incentive for water users and localities to work more closely together on water supply planning to ensure efficient and coordinated implementation of local or regional water supply planning goals. At the preapplication meeting that is now required by 9VAC25-610-85, the applicant and the department will review the materials required to be submitted as part of the permitting process as well as the information that the department currently has on file. This will streamline the permitting process and eliminate the resubmission of information that the Board already has on file.
Mission H2O	9VAC25-610-94 4 states that the Board can waive certain application requirements if it has	At the preapplication meeting that is now required by 9VAC25-610-85, the applicant and the department will review the materials required to be submitted as part of

	access to "substantially identical information that remains accurate and relevant to the permit application." It is unclear how the waiver process will work. Renewal applications should be exempted from some information requirements or required to submit them only if anything has changed. This also applies to 9VAC25-610-96 C.	the permitting process as well as the information that the department currently has on file. This will streamline the permitting process and eliminate the resubmission of information that the Board already has on file.
Va. Manufacturer's Assoc.	Many of the components in the water withdrawal permit application are duplicative of analyses a locality is required to develop as part of its water supply plan. Where the applicant has already made a submission pursuant to 9 VAC 25-780 et seq., the requirements of 9 VAC 25-610-94. 2.h, j, and k should be waived. Although 9 VAC 25-61-94.4 states that the Board can waive certain application requirements if it has access to "substantially identical information that remains accurate and relevant to the permit application," it is unclear how the waiver process will work. Rather, renewal applicants should be exempted from some of the information requirements or required to submit them only if anything has changed. The same comment applies to 9 VAC 25-610-96.C. Where possible, the permit renewal process should be streamlined and simplified.	Applicants typically argue that the analysis conducted to comply with surface or groundwater withdrawal permitting is developed to a greater degree of detail than information developed for the water supply plan analyses. At the preapplication meeting that is now required by 9VAC25-610-85, the applicant and the department will review the materials required to be submitted as part of the permitting process as well as the information that the department currently has on file. DEQ will then inform the applicant what information can be waived and what information must still be submitted. This will streamline the permitting process and eliminate the resubmission of information that the Board already has on file.
Va. Manufacturer's Assoc.	9 VAC 25-610-100.B states that water conservation plans must be consistent with local and regional water supply plans in the applicant's geographic area. This is not appropriate, particularly for industrial and agricultural withdrawers whose information and future plans may not be captured in those plans, which are prepared by localities. There may be conflicts between the entities	The intent of this provision is to ensure that local water conservation plans are not in conflict with those for an individual permittee. An example we have seen is that a locality's water supply plan says its intent for reducing water demand and is to reduce the use of groundwater during critical periods. DEQ has seen applications for community water systems that state their intent is to promote the use of groundwater for residential irrigation. These goals are inconsistent and are not likely to result in effective management of the use or conserve groundwater.

	preparing the plans and the entities using the water in the area. Those conflicts will likely be resolved at the state level, rather than in the local and regional plans.	
Va. Manufacturer's Assoc.	Throughout 9 VAC 25-610-100 there are requirements relating to evaluation of water reuse options, including a requirement that "water shall be reused in all instances where reuse is practicable." "Practicable" is defined at 9 VAC 25-610-10 as "available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes." There may be situations where reuse is technically and financially feasible, but the regulatory program is not in place to allow it. There may also be situations where reuse is technically and economically feasible but the industrial process requires food grade quality in the water used and thus reuse is not a workable option. Finally, there may be situations in which reuse is not an option because it will deplete a return flow needed downstream. This phrase should be deleted. If the economics of reuse work, the applicant will consider reuse on its own merits. Requiring an evaluation of potential reuse options is sufficient, especially as reuse should be evaluated as part of the alternative analysis required by 9 VAC 25-610-106.	By establishing the practicability standard, applicants will have clear criteria that they will be required to document. The current process has proven to be insufficient for providing any meaningful analysis and documentation of alternatives to groundwater use by applicants, especially reuse. The return flow issue is addressed in the final Water Reuse Regulation.
Va. Manufacturer's Assoc.	Water conservation and management plans required by 9 VAC 25-610-100 should not become an enforceable part of the groundwater withdrawal permit. The permit term is 10 years; during this time period changes may occur or new information may become available which leads to changes in the water	The Water Conservation and Management Plan is an enforceable part of the permit and always have been. However, in practice, Water Conservation and Management Plans have not consistently been implemented by applicants and have not resulted in greater water use efficiency over time. This change makes it clear that DEQ will consider the implementation a compliance/enforcement issue. Changes may be made to the plan to update conservation measure being implemented that increases the amount of

	conservation and management plan. Moreover, some of those plans may call for measures that are beyond the withdrawers control, particularly where the withdrawer does not have the ability to implement or enforce local ordinances. This section should be modified to require the development and submission of a water conservation and management plan, and the resubmission of such plan if changes to the plan are made during the permit term.	groundwater conserved by making a minor modification to the permit. If these plans were not an enforceable part of the permit, the Board would be unable to ensure that permitted groundwater withdrawers are implementing measures to reduce their demand on groundwater.
Va. Manufacturer's Assoc.	Sections 9 VAC 25-610-110.D.3.(a) - (f) appear redundant of the application requirements. Before an application is deemed complete, all of this information must be provided. It seems unnecessary to list it here, given that the regulation already states that the Board's determination will be based on a complete application that includes all of this information.	9VAC25-110 D 3 a.- f. lists specific criteria that must be demonstrated to meet certain requirements. Previous sections do list application requirements; however this section focuses on the evaluation conducted by the board prior to permit issuance. No changes have been made to the regulation.
Va. Manufacturer's Assoc.	Section 9 VAC 25-610-140.A.12 relates to well identification plates. There should be some flexibility in how the identification information is provided for groundwater wells. As long as the well identification number is provided in a permanent, legible fashion, there should not be any other requirement. There have been significant costs and logistical difficulties in obtaining and maintaining the well identification plates required in the current regulation.	The Board previously allowed applicants to identify wells through their own permanent marking system. This resulted in a number of problems for DEQ staff when visiting sites and trying to identify wells in the field. Often, identification is lost, mislabeled, or renamed over time. Greater standardization should improve this situation. It is not clear to the Board what the referenced costs refer to.
Western Tidewater Water Authority	Public Water Supplies should receive highest priority. Recommends revising 9VAC25-610-110 E. 1. by replacing "human consumptive use" with "public water supplies," as follows: 1. Applications for public water	The regulations have been structured to prioritize human consumption as the highest use for groundwater. § 62.1-263 of the Code of Virginia specifies that when proposed uses of groundwater are in conflict or when available supplies of groundwater are insufficient for all who desire to use them, preference should be given to human consumption, over all others. Public water systems provide water for human consumption; however

	supplies shall be given the highest priority; 2. Should there be conflicts between applications for public water supplies, applications will be evaluated in order based on the date that said applications were determined complete by the board; and 3. Applications for all uses, other than public water supplies, will be evaluated following the evaluation of proposed public water supplies' uses.	these systems also may provide water for other uses that are not related to human consumption. The regulations have been modified in response to comments concerning public water supplies. The definition of human consumption has been modified to further clarify the ways water is used for human consumption. 9VAC25-110 D 4 has also been modified to state that the board shall consider the public benefit of the withdrawal as well as prior public investments in existing facilities for withdrawal, transmission, and treatment of groundwater. The statute does not authorize further prioritization.
Western Tidewater Water Authority	Recommends revising the first sentence of 9VAC25-610-120 to include the following express acknowledgment of the unique responsibilities of municipal groundwater permittees providing public water supplies: The board shall evaluate all applications for groundwater withdrawals for public water supplies as described in 9VAC25-610-110, and shall apply the criteria in that section so as to insure the protection of public water supplies and the preservation of existing public water supply groundwater withdrawals.	In response to comments, 9VAC25-110 D 4. has been modified to require the Board to examine the public benefit of the groundwater withdrawal, as well as prior public investments to existing facilities for withdrawal, transmission, and treatment of groundwater.
Western Tidewater Water Authority	The term "human consumption" should be defined broadly. Recommends revising the definition of "Human consumption" to read "Human consumption" means the use of water to support human survival and health, including drinking, bathing, showering, cooking, dishwashing, and maintaining oral hygiene."	In response to comments, the definition of "human consumption" in the proposed regulations has been modified. The definition of "human consumption" has been modified to read "Human consumption means the use of water to support human survival and health, including drinking, bathing, showering, cooking, dishwashing, and maintaining hygiene."
Mission H2O	The regulation includes a definition of "human consumption" and identifies priority of uses. The Code of Virginia already includes such definition and priorities. The language of the regulation should	In response to comments, the definition of "human consumption" in the proposed regulations has been modified. The definition of "human consumption" has been modified to read "Human consumption means the use of water to support human survival and health, including drinking, bathing, showering, cooking, dishwashing, and maintaining hygiene."

	be identical to that of the Code, or should be removed as redundant of the language already in the code.	
Western Tidewater Water Authority	Permitted Public Water Supply Withdrawals Should Be Preserved Upon Renewal. Recommends the following revisions to 9VAC25-610-110 D. Replace the existing subsection 3.a. with the following new subsection 3.a. using the newly defined term "practicable," as opposed to the vague term "viable," as follows: 3.a. The applicant demonstrates that no other sources of water supply, including reclaimed water, are <u>practicable</u>. Revise subsection 4., as follows, to direct require that the board to consider the enumerated factors: 4. The board <u>shall</u> also take the following factors into consideration when evaluating a groundwater withdrawal permit application or reapplication, or special conditions associated with a groundwater permit: Revise subsection 4.a., as follows, to require that the board give due consideration to the nature of the proposed withdrawal and give due weight to public water suppliers, as follows: a. The nature of the use of the proposed withdrawal, <u>taking into account whether the proposed withdrawal is for the public benefit as a public water supply, regardless of whether such withdrawal is used in connection with any surface water supply;</u> Add a new subsection at 4.h. and drop the former subsection 4.h. to a new subsection 4.i., as follows: <u>h. Prior public investments in existing facilities for the withdrawal, transmission and treatment of groundwater;</u> i. Other factors that the board deems appropriate.	The Board agrees that the proposed change in 9VAC25-610-110 D.3.a, changing "viable" to "practicable" is an improvement. The Board also concurs with the recommended addition in 9VAC25-610-110 D.4.h. The Board does support the change of "may" to "shall" in 9VAC25-610-110 D.4 The Board does not support the change proposed for 9VAC25-610-110 D.4.a, as it confuses the public benefit stated in the statute (§ 62.1-254) which is "to conserve, protect, and beneficially utilize the groundwater of the Commonwealth" through reasonable control to ensure public health, safety and welfare. We can think of no better way to ensure the future availability of the groundwater resources of the Commonwealth than by ensuring that surface waters are used when available to reduce the overall groundwater demands. Existing uses are expected to result in continued groundwater level declines and the proposed language eliminates the incentive to diversify water supply sources and reduce reliance on the aquifers.

Western Tidewater Water Authority	In order to give due consideration to the importance of public water supply, withdrawals and the associated investment of public funds, revise 9VAC25-610-110 F., as follows: 1. The board shall consider all criteria in subsection D of this section prior to issuing or reissuing a groundwater permit. Existing permitted withdrawal amounts shall not be the sole basis for determination of the appropriate withdrawal amounts when a permit is reissued; <u>provided, however, that the board shall give special consideration to prior public investments in existing facilities for the withdrawal, transmission and treatment of groundwater.</u>	Cost is one factor in the analysis of the suitability of a particular groundwater withdrawal. The Board believes that cost is a mitigating factor and is properly evaluated consistent with the change recommended to add new language regarding costs to 9VAC25-610-110.D.4.d.
Western Tidewater Water Authority	Permit terms should be extended to 30 years to coincide with typical water infrastructure investment financing periods.	§ 62.1-266 of the Code of Virginia specifies that permit terms shall not exceed ten years. The State Water Control Board is not authorized to issue a permit for term exceeding ten years or to change its regulations in a manner inconsistent with this statutory limitation. No change has been made to the regulations in response to this comment.
Mission H2O	The current groundwater permitting system addresses permit applications as they are submitted, instead of evaluating water withdrawals as a whole. The permitting process should encourage users of the same water source to work together to develop a plan for how best to meet the water needs in the area in the future. Reviewing permit applications in tandem would allow for a more comprehensive and collaborative approach to data gathering and resource management. Encourages DEQ to consider changing the regulations to allow for more meaningful collaboration among water users.	Given the physics of the coastal aquifer system and the typical multi-jurisdictional impacts of most industrial and municipal withdrawals, this proposal may represent an opportunity for greater optimization of the resource through greater coordination of pumping by permittees. The Surface Water Management Area Act, § 62.1-242 et seq. of the Code of Virginia, is based on a similar concept, acknowledging that during times that water use would have an unacceptable negative impact on the resource, all users must coordinate and collectively agree to operational limits. The concept needs greater refinement as it pertains to groundwater and more consultation with stakeholders to be practicable. Additional statutory authority may be warranted as well.
Mission H2O	9VAC25-610-94 lists items that are not applicable to permit renewals that are not seeking to	9VAC25-610-94 discusses items that are necessary to evaluate the groundwater withdrawal. The permit term for a withdrawal is ten years. Information may have

	expand the withdrawal amount. The review of the application should focus more on actual water usage and the impact of that water usage.	changed concerning the groundwater withdrawal and this is an opportunity to verify that the information remains the same. The review of the application will focus on water usage, justification of need, and the impact of the groundwater withdrawal, as well as any alternatives available to groundwater withdrawal.
Mission H2O	Many components of the water withdrawal permit application are duplicative of the analysis a locality is required to develop as part of its water supply plan. Where the applicant has already made a submission pursuant to 9VAC25-780 et seq., the requirements of 9VAC25-610-92 2. h, j, and k should be waived.	At the preapplication meeting that is now required by 9VAC25-610-85, the applicant and the department will review the materials required to be submitted as part of the permitting process as well as the information that the department currently has on file. This will streamline the permitting process and eliminate the resubmission of information that the Board already has on file.
Mission H2O	It is not appropriate to require water conservation plans to be consistent with local and regional water supply plans in the applicant's geographical area, particularly for industrial and agricultural withdrawers whose information and future plans may not be captured in the plans prepared by localities. (9VAC25-610-110 B)	The intent of this provision is to ensure that local water conservation plans are not in conflict with those for an individual permittee. An example we have seen is that a locality's water supply plan says its intent for reducing water demand and is to reduce the use of groundwater during critical periods. DEQ has seen applications for community water systems that state their intent is to promote the use of groundwater for residential irrigation. These goals are inconsistent and are not likely to result in effective management of the use or conserve groundwater.
Mission H2O	Throughout 9 VAC 25-610-100 there are requirements relating to evaluation of water reuse options, including a requirement that "water shall be reused in all instances where reuse is practicable." "Practicable" is defined at 9 VAC 25-610-10 as "available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes." There may be situations where reuse is technically and financially feasible, but the regulatory program is not in place to allow it. There may also be situations where reuse is technically and economically feasible but the industrial process requires food grade quality in the water used and thus reuse is not a workable	By establishing the practicability standard, applicants will have clear criteria that they will be required to document. The current process has proven to be insufficient for providing any meaningful analysis and documentation of alternatives to groundwater use by applicants, especially reuse. The return flow issue is addressed in the final Water Reuse Regulation.

	option. Finally, there may be situations in which reuse is not an option because it will deplete a return flow needed downstream. This phrase should be deleted. If the economics of reuse work, the applicant will consider reuse on its own merits. Requiring an evaluation of potential reuse options is sufficient, especially as reuse should be evaluated as part of the alternative analysis required by 9 VAC 25-610-106.	
Mission H2O	Water conservation and management plans required by 9VAC25-610-100 should not be an enforceable part of the groundwater withdrawal permit. 9VAC25-610-100 should require the development and submission of a water conservation and management plan, and the resubmission of such plan if changes to the plan are made during the permit term.	Water Conservation and Management Plans are required to be developed and implemented when a permit is issued. It is already an enforceable part of the permit. If an applicant fails to implement the water conservation and management plan, the applicant is not in compliance with their permit. The Water Conservation and Management Plan section of the proposed regulations has been re-structured to allow the applicant to develop a plan based on their water use. The change is simply a clarification of an existing requirement. The regulations have also been changed in 9 VAC25-340 to no longer state that non-compliance with a water conservation and management plan for a previously permitted withdrawal is a reason to deny a permit for a groundwater withdrawal.
Mission H2O	9VAC25-610-100 B 1 requires the use of water saving equipment by all water users. This requirement is burdensome and impossible in many instances to implement. Some water providers do not have control over the development and/or enforcement of local ordinances.	This section of the regulation has been re-written. "Where practicable, the plan should require the use of water saving equipment and processes…".
Mission H2O	In 9VAC25-610-100 B 1, the sentence "These requirements shall assure that the most practicable use is made of groundwater" does not make sense in light of the definition of "practicable" found in 9VAC25-610-10. Suggest rewriting the sentence to read: "Where practicable, the plan should require the use of water saving equipment and processes for all water users including technological,	The Board concurs with this change.

	procedural or programmatic improvements to the facilities and processes to decrease the amount of water withdrawn or to decrease water demand. The goal of these requirements is to assure the most efficient use of groundwater.	
Mission H2O	The requirement of 9VAC25-610-102 to conduct an evaluation of need for the withdrawal and alternatives should be waived where such an analysis has already been completed as part of the water supply planning process.	When such analysis has previously been conducted, this information may be waived by the Board. The contents of the analysis conducted for the water supply plan should be discussed at the preapplication meeting.
Mission H2O	Section 9VAC25-610-110 D 3 (a) – (f) appear redundant of the application requirements. It appears unnecessary to list here, given that the regulation already states that the Board's determination will be based on a complete application that includes all of this information.	9VAC25-110 D 3 a.- f. lists specific criteria that must be demonstrated to meet certain requirements. Previous sections do list application requirements; however this section focuses on the evaluation conducted by the board prior to permit issuance. No changes have been made to the regulation.
Mission H2O	Section 9VAC25-610-140 A 12 relates to well identification plates. There should be some flexibility in how the identification information is provided for groundwater wells. As long as the identification number is provided in a permanent, legible fashion, there should not be any other requirements. There have been significant costs and logistical difficulties in obtaining and maintaining well identification plates required in the current regulation.	The Board previously allowed applicants to identify wells through their own permanent marking system. This resulted in a number of problems for DEQ staff when visiting sites and trying to identify wells in the field. Often, identification is lost, mislabeled, or renamed over time. Greater standardization should improve this situation. It is not clear to the Board what the referenced costs refer to.
Mission H2O	Failure to implement a water conservation and management plan should not be a ground for denying a permit application (9VAC25-610-340 A 4.) Such requirement is impossible for entities with withdrawal permits that do not have the ability to control and/or enforce local ordinances.	Water Conservation and Management Plans are required to be developed and implemented when a permit is issued. It is an enforceable part of the permit. If an applicant fails to implement the water conservation and management plan, the applicant is not in compliance with their permit and this issue is more appropriately addressed through enforcement of an existing permit. 9VAC25-340 A has been revised to remove failure to implement a Water Conservation and Management Plan as a reason the board may deny issuance of a permit.

In addition to technical comments, other comments were received pertaining to the following subjects: support for the regulations; opposition to the regulations; requests for additional public comment opportunities; water reuse; permit processing; economic concerns; currently permitted withdrawals; and data availability. The following is a summary of the comments received on these topics as well as the response to comments. The entire list of comments as well as responses begins on page 36 of this document.

Support for proposed regulations

Comments were received in support of the proposed regulations. The commenters agreed that the regulations are important and are beneficial to protecting the groundwater resource.

Commenter	Comment	Agency response
Frank Fletcher, citizen	Believes that water shortages and well interference will occur if there is no management of the groundwater.	The Board agrees with this statement.
Mr. Frank Fletcher, Ph.D., citizen	Supports new laws and regulations that have as their goal the utilization of alternative water sources to meet water supply demands.	The Board appreciates the commenter's support of the proposed regulations.
Barbara Jacocks, Richmond Regional Planning District Commission	Supports revisions of Groundwater Regulations to better manage the resource.	The Board appreciates the commenter's support of the proposed regulations.
Barbara Jacocks, Richmond Regional Planning District Commission	It is extremely important to ensure an adequate water supply to public water systems; such supply could be endangered in the future by the limited proposed definition of human consumptive use. Failure to prioritize public water systems could encourage a more sprawling, unpermitted development pattern near areas with a strained or limited public water system.	The regulations have been structured to prioritize human consumption as the highest use for groundwater. § 62.1-263 of the Code of Virginia specifies that when proposed uses of groundwater are in conflict or when available supplies of groundwater are insufficient for all who desire to use them, preference should be given to human consumption, over all others. Public water systems provide water for human consumption; however these systems also may provide water for other uses that are not related to human consumption. The regulations have been modified in response to comments concerning public water supplies. The definition of human consumption has been modified to further clarify the ways water is used for human consumption. 9VAC25-110 D 4 has also been modified to state that the board shall consider the public benefit of the withdrawal as well as prior public investments in existing facilities for withdrawal, transmission, and treatment of groundwater. The statute does not authorize further prioritization.
Gayl Fowler, citizen	Sees the benefit of limiting the withdrawals of groundwater to protect residents. It is a tool that protects communities from having large	DEQ agrees that the withdrawals of groundwater in the coastal plain need to be managed in order to protect all users for the

	industries locate in their community and start withdrawing large amounts of groundwater which would impact the local aquifers. Without this tool, communities are unable to protect their water supply. Groundwater management makes sense to their community.	long term.

Property rights/water rights/ impacts to well use at single family homes/ government control of groundwater / general opposition to the regulation

Some commenters were concerned that these regulations would limit withdrawals of groundwater from wells of individual single family homes, or that the regulations would require individuals to connect to public water supplies. Other commenters were concerned that the regulations placed restrictions on individual property owners and limited their property rights. Commenters suggested that there was no need for oversight of groundwater usage, or that such usage should be managed by local governments.

State law directs the State Water Control Board to adopt regulations for groundwater withdrawals that are 300,000 gallons per month or greater. This is due to the potential impacts that the groundwater withdrawals may have on aquifers, and the fact that impacts from a single withdrawal can impact multiple other localities. Groundwater aquifers extend throughout the coastal plain and do not stop at jurisdictional of property boundaries. This regulation does not impact single family wells since the withdrawals from these wells are below 300,000 gallons per month. The following comments were submitted by citizens. The Board's response is provided for each comment.

Commenter	Comment	Agency response
Mr. Tom Feigum, Middlesex Co. resident	Believes that the regulation of water will cause those in the management area to be unable to obtain water without paying a high premium for water. Believes it will destroy property value, and will require relocation of citizens to cities where water can be provided by the government.	Groundwater has been regulated on the Eastern Shore and in rural areas south of the James River since 1970s. The negative impacts described by the commenter have not happened in these areas over the last 40 years.
Mr. Tom Feigum, Middlesex Co. resident	Water rights were not addressed by the 13 original states. Regulating groundwater may be a tougher decision than the Commonwealth is ready to address.	The Commonwealth has been regulating groundwater in some form since the 1950s. Virginia court decisions have generally followed the "American Rule" which states that a property owner has a right to reasonable use of groundwater provided the impact does not extend beyond the borders of his own property.
Betty Lucas, citizen	States DEQ wishes to take control of the water supply of local residential well users (currently proposed at 300,000 gallons per month), another uncompensated assault on private property rights.	These regulations do not eliminate anyone's right to a well. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
Pat Roth, citizen	Opposed to the Groundwater Withdrawal Regulations. Does not believe that this program will benefit Essex County. Believes that this program is capturing personal water supplies.	The goal of the regulation is to manage groundwater for all users so that the resource will be protected for the long-term. This supports the public health, safety and welfare of all Virginians. These regulations do not eliminate anyone's right to a well. These regulations apply to groundwater withdrawals of 300,000 gallons of water per

		month. Individual single family wells are exempted by this regulation.
Stan Balderson, citizen	Opposed to the Groundwater Withdrawal Regulations. Does not believe that this program will benefit Essex County. Believes that this program is capturing personal water supplies.	The goal of the regulation is to manage groundwater for all users so that the resource will be protected for the long-term. This supports the public health, safety and welfare of all Virginians. These regulations do not eliminate anyone's right to a well. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
William Lucas, citizen	Opposed to expansion of Groundwater management area to include Essex county or Tappahannock.	The goal of the regulation is to manage groundwater for all users so that the resource will be protected for the long-term. This supports the public health, safety and welfare of all Virginians.
William Lucas, citizen	States Essex County and Tappahannock do not have and will not have a ground water shortage now or in the foreseeable future. Submitted a graph from the Middle Peninsula Planning District Commission Regional Water Supply Plan demonstrating Essex County Water Usage and current amount available.	Expansion of the groundwater management area will allow for comprehensive management of the resource. Current estimates indicate that groundwater is being withdrawn from the aquifers at unsustainable rates. If changes are not made to the usage of groundwater, this will lead to the eventual depletion of the groundwater resource. Not including the additional localities in the management area will exclude them from receiving mitigation protection provided to those localities within the management area.
John Paul Jones, citizen	Has a private well and he strongly opposes the proposed expansion of the Eastern Virginia Ground Water Management Area and the proposed Amendments to the Groundwater Withdrawal Regulations.	These regulations do not eliminate anyone's right to a well. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
Shirley Jones, citizen	I urge you to stop this Agenda 21 control of our water supplies. We have perfectly good wells and we do not need any control of Regional Commission's interference anywhere in our state.	These regulations do not eliminate anyone's right to a well. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
Catherine Crabill, citizen	More evidence of Sustainable Development's UN AG21 water control initiative. VA LEADERS must stop this DEQ government control of water use in VA. PLEASE HELP and delay or STOP the actions of Middle Peninsula Planning District Commissions attempts to make everyone dependent on MUNICIPAL costly water! Save our wells that work fine at our expense!	These regulations do not eliminate anyone's right to a well or force anyone to connect to municipal supplies. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
Andrea Clark, citizen	Does not support (Section 9 VAC 25-610) to remove the right for citizens to	These regulations do not remove the right of an individual to have a well. They apply to

	have a well, thereby controlling and restricting our water use in the Commonwealth.	groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
Bowman Davis, citizen	Does not support one such initiative that will usurp our current right to have a water well for our personal use on our own private property and force us onto public water service.	These regulations do not require citizens to connect to a public water source nor do they eliminate anyone's right to a well. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
Cary Nunnally, citizen	Opposed to the Groundwater management regulations.	The goal of the regulation is to manage groundwater for all users so that the resource will be protected for the long-term. This supports the public health, safety and welfare of all Virginians.
Dale Swanson, citizen	Does not support initiatives depleting an individual's right to have a well in order for the DEQ or Middle Peninsula Planning District Commission to control water use in VA.	These regulations do not eliminate anyone's right to a well. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
Dave Rector, citizen	Believes this regulation would deprive private community well owners and private residential well owners of control of their own water usage	These regulations do not eliminate anyone's right to a well. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
June Byrd, citizen	Does not support the Groundwater Management Regulations. Does not believe that counties that have private well water should be regulated.	These regulations do not require citizens to connect to a public water source nor do they eliminate anyone's right to a well. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
Jane Stuczynski, citizen	Does not support initiatives depleting an individual's right to have a well in order for the DEQ or Middle Peninsula Planning District Commission to control water use in VA.	These regulations do not eliminate anyone's right to a well. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
Jane Stuczynski, citizen	Opposed to government control of water rights.	The goal of the regulation is to manage groundwater for all users so that the resource will be protected for the long-term. This supports the public health, safety and welfare of all Virginians.
Sharon Slaughter, citizen	Does not believe DEQ has an authority over water usage on private property.	The Ground Water Management Act of 1992 (§62.1-254 thru 62.1-270 of the Code of Va.) establishes criteria for regulations concerning the withdrawal of groundwater. These regulations are consistent with state law. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are not regulated by this regulation. Large withdrawals, in conjunction with other large withdrawals, can have adverse impacts on the

		aquifers and sustainable groundwater supplies. Regulating all large withdrawals within the coastal plain will benefit all users.
Sharon Slaughter, citizen	Opposed to any DEQ regulation concerning water usage at any level in Matthews County.	The Ground Water Management Act of 1992 (§62.1-254 thru 62.1-270 of the Code of Va.) establishes criteria for regulations concerning the withdrawal of groundwater. These regulations are consistent with state law. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are not regulated by this regulation. Large withdrawals, in conjunction with other large withdrawals, can have adverse impacts on the aquifers and sustainable groundwater supplies. Regulating all large withdrawals within the coastal plain will benefit all users.
Ted Williams, citizen	DEQ should discourage any initiatives regulating/restricting residential well use where such use already exists and meets health codes.	The Ground Water Management Act of 1992 (§62.1-254 thru 62.1-270 of the Code of Va.) establishes criteria for regulations concerning the withdrawal of groundwater. These regulations are consistent with state law. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are not regulated by this regulation. Large withdrawals, in conjunction with other large withdrawals, can have adverse impacts on the aquifers and sustainable groundwater supplies. Regulating all large withdrawals within the coastal plain will benefit all users.
Ted Williams, citizen	Requests that DEQ act to block attempts at charging non-user fees and penalties to those who did not ask for municipal water/sewer and do not want it.	This regulation does not address user fees that localities charge for municipal water or sewer services provided to residents. The Board does not have the authority to regulate fees imposed by localities.
Tricia Stall, citizen	Does not support initiatives depleting an individual's right to have a well in order for the DEQ or Middle Peninsula Planning District Commission to control water use in VA.	These regulations do not eliminate anyone's right to a well. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
Frank Fletcher, citizen	The Groundwater Management amendments are not threats to individual property rights. A property owner does not hold title to the groundwater below his property. The property owner has the legal right to reasonable use of the resource. These amendments do not take away property rights. Essex Co. does not manage its groundwater.	The Board agrees with this statement.
Ms. Trudy Feigum,	Believes these proposed regulations remove governance from elected officials	The goal of the regulations is to manage groundwater so that it is available to all citizens of

Middlesex Co. resident	in Middlesex County and places more governance in the hands of faceless government employees.	the Commonwealth. The stated goal of the General Assembly in 1992, based on the science of the time, was that "unrestricted use" was negatively impacting the quantity and quality of groundwater. The public benefit stated in the statute (§ 62.1-254) is "to conserve, protect, and beneficially utilize the groundwater of the Commonwealth" through reasonable control to ensure public health, safety and welfare. Governance of groundwater use is not an authority that the General Assembly has delegated to Virginia localities.
Mr. Tom Feigum, Middlesex Co. resident	Opposes the proposed regulations. Give more thinking to the proposal, to make sure it serves the needs of the taxpayer, not the need of government.	The goal of the regulation is to manage groundwater for all users so that the resource will be protected for the long-term. This supports the public health, safety and welfare of all Virginians.
Betty Lucas, citizen	Opposed to amendments of the Groundwater withdrawal regulations.	The regulations have not been revised in over a decade and need to be updated as groundwater levels continue to decline. Retaining the regulations in their current form would not be protective to the groundwater aquifers.
Betty Lucas, citizen	States DEQ has historically done nothing to protect the water supply from high users, and currently has no plan as seen in the reopening of the Franklin Mill.	DEQ works with permitted withdrawals to evaluate the need for groundwater withdrawals, to identify alternative water supplies, to reduce water usage, eliminate water loss, and identify opportunities for water reuse.
Betty Lucas, citizen	States DEQ has no proposed viable alternative to responsible long-term water usage, instead planning to limit private property use as a means of restricting local business and residential growth.	DEQ works with permitted withdrawals to evaluate the need for groundwater withdrawals, to identify alternative water supplies, to reduce water usage, eliminate water loss, and identify opportunities for water reuse. This regulation only regulates withdrawals of 300,000 gallons per month; therefore it does not regulate wells that serve single families.
Betty Lucas, citizen	States DEQ's plan will create "Water Wars" among Americans, with the associated partisan "winners and losers" approach, rather than solving potential problems with successful methods already employed in a number of states, most notably in Florida for the past 50 years.	Due to the interconnectivity of the aquifers, impacts from groundwater withdrawals are being seen outside of the groundwater management area. All users of the groundwater resource should be held to the same standards for approving groundwater withdrawals.
Betty Lucas, citizen	Concerned that the larger users of groundwater are causing private well owners to be regulated.	The cumulative withdrawals of all users, including individuals, are causing groundwater levels to decline. These regulations do not eliminate anyone's right to a well. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
Betty Lucas, citizen	Concerned that larger users of water, such as the West Point Paper Mill are not	DEQ works with permitted withdrawals to evaluate the need for groundwater withdrawals, to

	using surface water, or filtering or reusing water instead of withdrawing groundwater.	identify alternative water supplies, to reduce water usage, eliminate water loss, and identify opportunities for water reuse. All of these issues were addressed prior to issuing a groundwater withdrawal permit to the West Point Paper Mill.
Jean Casanave, citizen	Opposed to the Groundwater management regulations.	The goal of the regulation is to manage groundwater for all users so that the resource will be protected for the long-term. This supports the public health, safety and welfare of all Virginians.
Dave Rector, citizen	Opposed to the Groundwater management regulations.	The goal of the regulation is to manage groundwater for all users so that the resource will be protected for the long-term. This supports the public health, safety and welfare of all Virginians.
Bernie Buchanan, citizen	Suggests that the decisions made concerning groundwater usage be made using facts, not political pressures.	Information on impacts to aquifers, available alternative water sources, and the need for groundwater usage are all considered when permit applications are being evaluated.
Stan Balderson, citizen	Suggests that the decisions made concerning groundwater usage be made using facts, not political pressures.	Information on impacts to aquifers, available alternative water sources, and the need for groundwater usage are all considered when permit applications are being evaluated.
Bernie Buchanan, citizen	Richmond and Hampton Roads need to address their own wasteful groundwater problems without making other areas become regulated.	Groundwater withdrawals in the current groundwater management area have received permits for their withdrawals. Prior to approvals being received for groundwater withdrawals, information on impacts to aquifers, available alternative water sources, water reuse, and water conservation measures and the need for groundwater usage are all considered. This has assisted with managing the groundwater resource for future generations. Withdrawals occurring outside of the management area have not undergone these evaluations. Richmond does not use groundwater as a water source.
Stan Balderson, citizen	Richmond and Hampton Roads need to address their own wasteful groundwater problems without making other areas become regulated.	Individual localities are not authorized to control groundwater resources. State law directs the State Water Control Board to regulate groundwater withdrawals of 300,000 gallons per month. Groundwater withdrawals in the current groundwater management area have received permits for their withdrawals. Prior to approvals being received for groundwater withdrawals, information on impacts to aquifers, available alternative water sources, water reuse, and water conservation measures and the need for groundwater usage are all considered. This has assisted with managing the groundwater resource for future generations. Withdrawals occurring outside of the management area have not undergone these evaluations. Richmond does not

		use groundwater as a water source.
Bernie Buchanan, citizen	Require all high volume users of groundwater to stop withdrawing water and immediately require sole use of potable waters. Require them to use treated wastewater treatment plant waters. Utilize river or creek waters and require this water to be treated, tested, and replenished upon its usage.	Current water demands cannot be met by available surface water sources or treated wastewaters without a significant cost. Groundwater withdrawals are needed to supply citizens with water. Many localities withdraw large amounts of groundwater to meet the consumption needs of citizens.
Stan Balderson, citizen	Require all high volume users of groundwater to stop withdrawing water and immediately require sole use of potable waters. Require them to use treated wastewater treatment plant waters. Utilize river or creek waters and require this water to be treated, tested, and replenished upon its usage.	Current water demands cannot be met by available surface water sources or treated wastewaters without a significant cost. Groundwater withdrawals are needed to supply citizens with water. Many localities withdraw large amounts of groundwater to meet the consumption needs of citizens.

Requests to extend comment period/ additional hearing/ comments on reg. process

Requests were received to extend the comment period and to hold an additional public hearing in the proposed expanded area. An additional hearing was held in January 2013 in the evening in Warsaw and the comment period was extended until January 30, 2013. The public comment period lasted 100 days instead of the typical 60 days, and there were three hearings held on the proposals. The hearings were advertised in 4 major daily newspapers throughout the Virginia Coastal Plain. Additionally, localities and planning district commissions were contacted individually by the agency to make them aware of these proposed regulations. Notices were placed in the Virginia Register, on the Virginia Regulatory Town Hall website and were emailed to registered users of the town hall website. Mailings were also sent to interested parties on the State Water Control Board's mailing list. Members of the House of Delegates Agriculture, Chesapeake and Natural Resource Committee, the Senate Agriculture, Conservation and Natural Resources Committee, and Members of the State Water Commission were also notified concerning the proposed regulations.

Commenter	Comment	Agency response
Mr. Tom Feigum, Middlesex Co. resident	Middlesex Co. news paper not listed as the paper in which publication occurred of meetings. Found out about public hearing at Middle Peninsula PDC meeting less than 2 weeks ago.	The hearings were advertised in 4 major daily newspapers throughout the Virginia Coastal Plain. Additionally, localities and planning district commissions were contacted individually by the agency to make them aware of these proposed regulations. Notices were placed in the Virginia Register, on the Virginia Regulatory Town Hall website and were emailed to registered users of the town hall website. Mailings were also sent to interested parties on the State Water Control Board's mailing list. Members of the House of Delegates Agriculture, Chesapeake and Natural Resource Committee, the Senate Agriculture, Conservation and Natural Resources Committee, and Members of the State Water Commission were also notified concerning the proposed regulations.
Mr. Tom Feigum, Middlesex Co.	Questioned timing of hearing- complained about time of day meeting held. Concern with needing to defend	The agency scheduled a third public hearing for Warsaw, VA, to be held in the evening, and extended the comment period until January 30,

resident	their property rights. Fails to see anyone in attendance at the meeting reflecting his rights as a taxpayer.	2013. This allowed citizens the opportunity to attend a meeting in person to submit their comments in lieu of submitting them in writing.
Mr. Matt Walker, Middlesex Co. Administrator	Requested DEQ to hold an additional hearing in either Warsaw or Tappahannock in order to hold a meeting in the center of the proposed new boundaries of the groundwater management area.	The agency scheduled a third public hearing for Warsaw, VA, that was held in the evening, and extended the comment period until January 30, 2013.
Mr. Matt Walker, Middlesex Co. Administrator	Requested DEQ/Water Board to consider expanding the comment period to March or April to allow more time for public comment and avoid conflicts with the holidays.	The agency typically schedules 60 days for public comment and this regulation has had 100 days with the extension to January 30, 2013.
Bowman Davis, citizen	Requests the current hearings to be extended and allow more input from the citizens, and to explain how such a proposal will do serious harm to them, their families and their progeny.	The public comment period began October 22, 2012 and extended until January 30, 2013 as a result of an additional hearing being scheduled. Three hearings were held to allow the public the opportunity to comment on the proposed regulations. The comment period for a proposal is normally 60 days. The comment period for this regulation was 100 days, with the majority of the comment period occurring prior to the start of the 2013 Virginia General Assembly session. The public has had ample time to comment of the regulations and additional hearings will not be held.
Dale Swanson, citizen	Requests the public comment period be extended until after session ends.	The public comment period began October 22, 2012 and was originally scheduled to end January 11, 2013. The comment period was extended until January 30, 2013 as a result of an additional hearing being scheduled. The comment period for a proposal is normally 60 days. The comment period for this regulation was 100 days, with the majority of the comment period occurring prior to the start of the 2013 Virginia General Assembly session. The public has had ample time to comment of the regulations and the comment period will not be extended.
Tricia Stall, citizen	Requests the public comment period be extended until after session ends.	The public comment period began October 22, 2012 and was originally scheduled to end January 11, 2013. The comment period was extended until January 30, 2013 as a result of an additional hearing being scheduled. The comment period for a proposal is normally 60 days. The comment period for this regulation was 100 days, with the majority of the comment period occurring prior to the start of the 2013 Virginia General Assembly session. The public has had ample time to comment of the regulations and the comment

		period will not be extended.

Water reuse comments

Commenters supported the use of water reuse to decrease remand for groundwater withdrawals. The amendments to the regulations include revisions to address water reuse. Applications for new and expanded withdrawals as well as permits that are being renewed must include a water conservation and management plan. The regulations now specifically require water reuse options to be discussed and water reused when practicable. "Practicable" means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project goal.

Some commenters stated that industrial and agricultural sectors should be using water reuse practices to reduce groundwater withdrawal demands. Requiring the purchase of reuse water can negatively impact the viability of the identified economic sectors due to the up-front costs of infrastructure. In addition, groundwater use is free to all beneficial users, including agriculture and industry.

Comments were received concerning the content of the Water Reuse regulations. A separate regulation sets forth water requirements for water reuse projects and those regulations are not open for public comment at this time.

Commenter	Comment	Agency response
Mr. Frank Fletcher, Ph.D. , citizen	Supports expanding water recycling and reuse to lessen demand on groundwater.	The Board agrees that water conservation and water reuse are both important tools for reducing demand on groundwater.
Pete Mansfield, citizen	Supports the use of water reuse to reduce the demand for groundwater withdrawals.	The Board supports water reuse as an alternative source of supply to groundwater withdrawals. The amendments to the regulations include revisions to encourage water reuse. Applications for new and expanded withdrawals as well as permits that are being renewed must include a water conservation and management plan. The regulations now specifically require water reuse options to be discussed and water reused when practicable. "Practicable" means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project goal.
Trudy Feigum, citizen	Supports the use of water reuse to reduce the demand for groundwater withdrawals.	The Board supports water reuse as an alternative source of supply to groundwater withdrawals. The amendments to the regulations include revisions to encourage water reuse. Applications for new and expanded withdrawals as well as permits that are being renewed must include a water conservation and management plan. The regulations now specifically require water reuse options to be discussed and water reused when practicable. "Practicable" means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project goal.
Pete	Stated the Water Reuse regulations should be	The Water Reuse Regulations are not open

Mansfield, citizen	revised to allow for more water reuse, which would in turn decrease the demand for groundwater withdrawals, while reducing nutrients from entering the bay.	for public comment at this time.
Pete Mansfield, citizen	Stated the Water Reuse regulations should be revised to allow for more water reuse, which would in turn decrease the demand for groundwater withdrawals, while reducing nutrients from entering the bay.	The Water Reuse Regulations are not open for public comment at this time.
Trudy Feigum, citizen	Stated the Water Reuse regulations should be revised to allow for more water reuse, which would in turn decrease the demand for groundwater withdrawals, while reducing nutrients from entering the bay.	The Water Reuse Regulations are not open for public comment at this time.
Pete Mansfield, citizen	Stated the industrial and agricultural sectors should be using water reuse practices to reduce groundwater withdrawal demands.	The up-front costs of infrastructure must be paid. In addition, groundwater use is free to all beneficial users, including agriculture and industry. Requiring the purchase of reuse water can negatively impact the viability of the identified economic sectors. The regulations now specifically require water reuse options to be discussed and water reused when practicable. "Practicable" means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project goal.
Trudy Feigum, Citizen	States the industrial and agricultural sectors should be using water reuse practices to reduce groundwater withdrawal demands.	The up-from costs of infrastructure must be paid. In addition, groundwater use is free to all beneficial users, including agriculture and industry. Requiring the purchase of reuse water can negatively impact the viability of the identified economic sectors. The regulations now specifically require water reuse options to be discussed and water reused when practicable. "Practicable means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of the overall project goal.
Betty Lucas, citizen	Supports the use of water reuse to reduce the demand for groundwater withdrawals.	The up-front costs of infrastructure must be paid. In addition, groundwater use is free to all beneficial users, including agriculture and industry. Requiring the purchase of reuse water can negatively impact the viability of the identified economic sectors. The regulations now specifically require water reuse options to be discussed and water reused when practicable.
Betty Lucas,	Stated the Water Reuse regulations should be	The Water Reuse Regulations are not open

citizen	revised to allow for more water reuse, which would in turn decrease the demand for groundwater withdrawals, while reducing nutrients from entering the bay.	for public comment at this time. The regulations were recently amended.
Gayl Fowler, citizen	Does not believe that water reuse projects will solve all of the groundwater issues in Virginia. May be part of the solution, but we are unsure what future use needs will be.	The reuse of water will help to reduce the demand on groundwater supplies, but additional measures are needed to maintain groundwater supplies for the long term.

Comments on permit processing and requirement to obtain a permit

Comments were received concerning the delays projects would encounter while waiting for a groundwater withdrawal permit to be issued. Permits for historical withdrawers of groundwater that become regulated as a result of expansion of the groundwater management area will be handled differently than new permits or for permits for current withdrawals in a groundwater management area. Historical permits will be issued without technical studies being required prior to application. Permits will be issued for withdrawals based on documented amounts of groundwater previously withdrawn.

Previously delays were experienced by those seeking groundwater withdrawal permits due to delays in groundwater modeling being conducted. Operational changes have been made to the program to focus on the reviews of the permits. Often delays are caused by inadequate applications or wells that were not constructed properly. The regulations have been revised to include more detail concerning the content of applications for withdrawals.

Some commenters requested the threshold for requiring a permit to be modified in the regulations. Virginia Code section 62.1-259 establishes the 300,000 gallon per month threshold for needing to obtain a permit. Each withdrawal is viewed independently by well or well system and is independent of the amount of land a groundwater withdrawer owns. The 300,000 gallons per month threshold is the minimum amount of groundwater that requires a permit not a per parcel limit. Many withdrawers of groundwater seek to withdraw millions of gallons of groundwater per month and the withdrawal amount is not limited by the size of the property. The size of the property has no impact on how the withdrawal affects the aquifer.

Commenter	Comment	Agency response
Ms. Trudy Feigum, Middlesex Co. resident	Two replacement wells were needed in my housing development in Middlesex County due to mineral build-up and subsequent lack of pressure. The permit was issued in a short amount of time and work commenced. Once wells were completed and ready for use it took over a year for DEQ to grant permission to withdraw water. Lack of adequate staff to complete the permitting process was a big disadvantage to the citizen, the public. Due to further regulations on withdrawers, believes more time will be needed for the permitting process.	Middlesex County is not currently in the groundwater management area and a permit could not be required from the Board for this activity. Withdrawers in the newly expanded management area will be issued historical permits based on their historical groundwater usage. Historical permits will be issued without technical studies being required. This will expedite the historical permitting process.
Ms. Trudy Feigum, Middlesex Co. resident	More staff will be needed- 6 employees at a cost of $240,000. Concerned that as a taxpayer, this additional cost will impact the taxpayer. Wants to be assured of a more timely response.	Adequate staffing will allow the Board to issue permits in a timely manner. Operational changes have been made to the groundwater permitting program to focus on reviews of permits. Previously there was a long wait for groundwater modeling to be conducted and this issue has been resolved, which allows for the permitting process to proceed faster.

Mr. Tom Feigum, Middlesex Co. resident	Expressed concern with delays in permitting of withdrawals. Jobs are needed. Groundwater permitting delays may cause companies to locate elsewhere instead of here. One county waiting for approval for well for two years and still waiting.	Adequate staffing will allow the Board to issue permits in a timely manner. Operational changes have been made to the groundwater permitting program to focus on reviews of permits. Previously there was a long wait for groundwater modeling to be conducted and this issue has been resolved, which allows for the permitting process to proceed faster. Often, long delays reflect and adequate application or a well that was not constructed properly.
Mr. Tom Feigum, Middlesex Co. resident	A residential development application was approved for 2 replacement groundwater wells, the wells drilled, pumps and pipes installed with restrictors and one year passed before those wells were allowed to be placed online. Replacement wells were needed due to mineralization of the original wells, thus reducing the flow below the groundwater withdrawal level permitted and needed.	Middlesex County is not currently in the groundwater management area and a permit could not be required from the Board for the activity described by the commenter.
Mr. Matt Walker, Middlesex Co. Administrator	Inquired how long it would lake for DEQ to review a permit application for a groundwater withdrawal. Have heard there have been delays of 2 years.	On average it takes the Board 18 months to issue a groundwater withdrawal permit. This time period would be greatly reduced for historical permits issued as a result of the groundwater management area being expanded because no modeling or review of aquifer studies, water conservation plans, or mitigation plans are part of the review.
Andrew Arnold, citizen	Wants information on how the proposed regulations will impact his local water system with 115 users in Fairfax County, and how the existing user will be grandfathered once the groundwater management area is expanded.	DEQ provided information to this local water system concerning the groundwater management program and how existing users will be regulated if the management area is expanded.
Bernie Buchanan, citizen	Three years is too long to process a new groundwater withdrawal permit. Eliminate DEQ oversight of groundwater and give localities that authority to manage groundwater.	The Board agrees that three years is too long to issue a groundwater withdrawal permit. Changes have been made to the regulations to assist with shortening the amount of time required for issuing permits. The State Water Control Board is authorized by state law to manage groundwater, not individual localities; therefore localities do not have the ability to manage groundwater.
Stan Balderson, citizen	Three years is too long to process a new groundwater withdrawal permit. Eliminate DEQ oversight of groundwater and give localities that authority to manage groundwater.	The Board agrees that three years is too long to issue a groundwater withdrawal permit. Changes have been made to the regulations to assist with shortening the amount of time required for issuing permits. The State Water Control Board is authorized by state law to manage groundwater, not individual localities; therefore localities do not have the

		ability to manage groundwater.
Ms. Trudy Feigum, Middlesex Co. resident	Concerned that after 10 years current users may be required to reduce the withdrawals or no permit will be issued in the future. Concerned that her housing development, which currently is permitted for 500,000 gallons per month may be allowed to withdraw less water than is currently being used in the future. Questions with government management, will it be determined the groundwater is needed elsewhere and allowed to be diverted? Believes the government wants to take ownership of the groundwater in the county and the country.	The goal of the regulation is to manage groundwater for all users so that the resource will be available for the long term. The Board believes that the proposed changes will help to reduce current declines of groundwater levels. If these changes do not work, other actions will need to be considered so we do not allow the eventual depletion of the groundwater resource. All users will need to consider using conservation measures to protect the groundwater resource to reduce overall demand on the aquifers over a reasonable period of time.
Morgan Wright, Wood Preservers Inc.	Questioned whether the withdrawal of 300,000 gallons of groundwater per month is applicable to all withdrawals from all aquifers or only aquifers that are currently being depleted.	All withdrawals of 300,000 gallons of groundwater per month that occur in a groundwater management area are required to obtain a permit. This applies to withdrawals of this scale from all aquifers, both confined and unconfined.
Morgan Wright, Wood Preservers Inc.	Questioned if the groundwater withdrawal amounts were tied to the size of a property a withdrawer owns. For example 50 businesses that each have 1 acre of property that are adjacent to each other could each withdraw 300,000 gallons of groundwater per month, while a business on 50 acres would only be allowed to withdraw 300,000 gallons of groundwater per month.	Virginia Code section 62.1-259 establishes the 300,000 gallon per month threshold for needing to obtain a permit. Each withdrawal is viewed independently by well or well system and is independent of the amount of land a groundwater withdrawer owns. The 300,000 gallons per month threshold is the minimum amount of groundwater that requires a permit and is not a per parcel limit. Many withdrawers of groundwater seek to withdraw millions of gallons of groundwater per month and the withdrawal amount is not limited by the size of the property. The size of the property has no relationship to how the withdrawal affects the aquifer.
Morgan Wright, Wood Preservers Inc.	At the public hearing in Warsaw on January 14, 2013 comments were made that 10 entities, businesses or municipal concerns, withdraw 60% of the groundwater in Eastern Virginia. Each of these entities uses tens of millions of gallons per month. If this is factual, it appears that the proposed permit level of 300,000 gallons per month is very low in comparison. This gives me the feeling that the VADEQ could monitor and address groundwater concerns by setting the permit level at millions of gallons per month. The proposed permit level of 300,000 gallons per month will be onerous to small business.	Virginia Code section 62.1-259 establishes the 300,000 gallon per month threshold for needing to obtain a permit. Since this threshold is included in state law, the Board is unable to increase the 300,000 gallons per month threshold. Water withdrawals below the 300,000 gallon per month threshold represent 30% of the total groundwater use and are the fastest growing withdrawal type.

Morgan Wright, Wood Preservers Inc.	Many of the VADEQ assumptions are very conservative. As an example the 300,000 gallon per month limit is to be applied regardless of whether the water is withdrawn from one, or different, aquifers on the same property. The assumption that different aquifers are linked is not necessarily valid.	Virginia Code section 62.1-259 establishes the 300,000 gallon per month threshold for needing to obtain a permit. Each withdrawal is viewed independently by well or well system and is independent of the amount of land a groundwater withdrawer owns. The 300,000 gallons per month threshold is the minimum amount of groundwater that requires a permit from a well in one aquifer or a well system that uses wells in different aquifers. A withdrawal from one well pulling from multiple aquifers is not permitted. Whether aquifers are interconnected on a particular site is determined through analysis of an on-site aquifer test or other geophysical study.
Ms. Trudy Feigum, Middlesex Co. resident	Disagrees with the statement that 'There are no disadvantages to the public from managing the groundwater resources" since all withdrawers of groundwater, unless exempted by statute are required to obtain a permit, which places additional regulations on withdrawers of groundwater occurring within the management area.	The Town Hall document for the final regulation has been revised to reflect this concern.
Betty Lucas, citizen	Concerned that the limit of 300,000 gallons per month does not consider the amount of acreage a withdrawer owns.	Virginia Code section 62.1-259 establishes the 300,000 gallon per month threshold for needing to obtain a permit. Each withdrawal is viewed independently by well or well system and is independent of the amount of land a groundwater withdrawer owns. The 300,000 gallons per month threshold is the minimum amount of groundwater that requires a permit not a per parcel limit. Many withdrawers of groundwater seek to withdraw millions of gallons of groundwater per month and the withdrawal amount is not limited by the size of the property. The size of the property has no impact on how the withdrawal affects the aquifer.
Betty Lucas, citizen	Concerned that there may be multiple withdrawers under the 300,000 gallons per month threshold that are not required to have a permit, and that those withdrawals are not subject to permits. Fails to see how this plan gets water usage under control.	Groundwater users below the 300,000 gallon threshold are factored into the modeled impacts to the aquifer. The USGS and DEQ have developed a methodology to estimate this use based on census data and other sources of water use information.
Betty Lucas, citizen	Concerned about the implications of the 300,000 gal/month usage means in terms of a targeted withdrawal area or 12 square miles.	Mr. Kudlas used the term "small water system" to describe those groundwater withdrawals that are detailed in section 108 of the proposed amendments. This is a new section of the regulation that is being added

		to address those withdrawals that modeling indicates has an area of impact of less than 12 square miles. The applicant may choose to accept the area of impact without conducting geophysical investigations, without incurring costs to conduct geophysical evaluations. Systems with areas of impact that are smaller than 12 square miles withdraw less than 10 million gallons per year.
Bowman Davis, citizen	Believes the regulations will have monumental and negative consequences to the quality of life, personal health and financial well being of every property owner and tax payer throughout the old dominion and beyond.	Groundwater has been regulated on the York-James peninsula, on the Eastern Shore and in rural areas south of the James River since 1970s. The negative impacts described by the commenter have not happened in these areas over the last 40 years.
Dave Rector, citizen	It is unacceptable to me to be faced with having my water sources be diverted to Northern Virginia and the Norfolk area, because they have not had the forethought to establish a viable reuse water program to meet their needs.	Due to the interconnectivity of Virginia's aquifers, the cumulative withdrawal of all users is causing long term groundwater level declines.
James Shelton, citizen	States golf courses and other developments take groundwater as a free resource in Chesterfield but they take too much. Preferences for groundwater should go to homes with existing wells, not for malls and developments and decorative lakes.	State law requires permits to be obtained for groundwater withdrawals that exceed 300,000 gallons per month. The General Assembly did not establish beneficial use priorities for groundwater in the statute. All beneficial uses of groundwater are considered equally beneficial in § 62.1-255 of the Code of Virginia. The only instance when a priority is established is when there is inadequate supply for all beneficial uses. In such an instance, § 62.1-263 establishes human consumption as the highest priority for groundwater use. No changes have been made to the regulations in response to this comment as a statutory change would be necessary to establish specific use priorities for groundwater.
James Shelton, citizen	Believes an insurance policy should be taken out before withdrawals of groundwater are allowed.	Withdrawers of groundwater that are located within groundwater management areas are required to mitigate impacts that they have on other groundwater users by developing a mitigation plan. A mitigation plan protects users of groundwater from impacts caused by larger withdrawers of groundwater, and is similar in nature to an insurance policy that would compensate for impacts caused to

		other withdrawers.
Mr. Matt Walker, Middlesex Co. Administrator	Asked if the proposed regulations would allow counties divided by interstate 95 to pump water to the areas east of 95 to avoid being regulated.	The proposed regulations impact those areas east of interstate 95. The fall line of Virginia (which interstate 95 generally follows) divides the piedmont and the coast plain of Virginia. Coastal Plain aquifers extend to the fall line. If a locality wanted to install a well west of the fall line they would not be withdrawing water from the aquifers being regulated by this regulation and would not be regulated. However, these piedmont sources of groundwater yield far less water than the coastal plain aquifers so it is difficult to see how such a plan would meet the local water needs and be cost effective.

Economic concerns

Comments were received concerning the economic analysis conducted by the Department of Budget and Planning for this regulation. Specific comments are listed below.

Commenter	Comment	Agency response
Ms. Trudy Feigum, Middlesex Co. resident	Disagrees with economic analysis that there will be no economic impact on the citizens. Compliance costs, permit application fees, costs for aquifer tests, geophysical logs, camera surveys, monitoring wells, additional staffing, and other unforeseen costs will be passed on to the end users, the tax payers.	The economic analysis was conducted by the Department of Planning and Budget and includes estimated costs for items listed by the commenter.
Morgan Wright, Wood Preservers Inc.	The economic analysis that was done by the Virginia Department of Planning and Budget reviewed the cost an applicant would incur in obtaining a permit, but that it did not offer any discussion related to business hiring, or a business' ability to continue operating if they could not get the water they need in the future. Many of the large employers in rural Virginia use a fair amount of groundwater.	The economic analysis is conducted by the Department of Planning and Budget. The economic impact did describe projected impacts on employment as a result of these regulations. Current withdrawers of groundwater that become subject to these regulations as a result of expansion of the groundwater management area will be issued permits to withdraw groundwater based on their documented historical withdrawals. The intent of these regulations is not to prevent users from withdrawing groundwater, but to ensure that water resources will be protected. The regulations examine many factors including the availability of water sources, water reuse, water recycling, and water loss prevention to ensure that the use of groundwater is conserved as much as possible.
Betty Lucas, citizen	Concerned that these regulations will prevent businesses from expanding because of greatly increased and continuous costs of compliance with these regulations.	Businesses in the current groundwater management area have been able to comply with these requirements while expanding their businesses. These businesses have implemented water conservation programs

		and water reuse and recycling programs to minimize their demand for groundwater usage.

Comments concerning permitted withdrawals

Comments were submitted concerning groundwater withdrawals that are currently permitted. Comments are accepted on individual groundwater withdrawals prior to individual permits being issued. Public comment periods are held prior to issuance of groundwater withdrawal permits and concerns with individual permits should be submitted during the public comment period associated with each permit. This allows concerns with specific withdrawals to be addressed prior to withdrawal permits being issued.

Commenter	Comment	Agency response
Ms. Trudy Feigum, Middlesex Co. resident	The paper mill at West Point withdraws over 20 million gallons of water per day from the ground, which has influenced and changed the directional flow of groundwater. Groundwater now flows toward West Point. Questions why the state does not require an alternate water source for the paper mill. If all of the aquifers are interconnected, must all tidewater citizens be negatively impacted or penalized by the paper mill?	Neither the statute, nor the regulation allows the Board to eliminate an existing user's access to groundwater. The Board also requires water conservation plans to be implemented, encourages water reuse, and also the use of surface water to meet the needs of water users. These measures seek to minimize the impact the groundwater in the coastal plain. Impacts to other groundwater users who can demonstrate harm is managed through a mitigation plan.
Gayl Fowler, citizen	Saw how the West Point Paper Mill was aggressively saving water used in their process. They were also diversifying their wells across many different aquifers.	DEQ works with permitted withdrawals to evaluate the need for groundwater withdrawals, to identify alternative water supplies, to reduce water usage, the eliminate water loss, and identify opportunities for water reuse. This assists with reducing the demand for groundwater withdrawals. Thank you for validating that the permit process is working to make permittees conserve water resources and minimize the impacts to groundwater resources.
Frank Fletcher, citizen	There was a "rebound" of the groundwater as a result of the Franklin Mill ceasing operations. There was a rebound of the cone of depression, which was rapid at first, then slowed. There has been a little rebound as a result of the Franklin Mill ceasing their withdrawals.	The Board agrees with this statement.
Frank Fletcher, citizen	The permit for the Franklin Mill is valid until renewal, even if operations changed once it was reopened.	The groundwater withdrawal activities occurring at the Franklin Mill are allowed by the current permit.

Data availability

Comments questioned the availability of information concerning aquifers in the groundwater management area. The DEQ and the Unites States Geological Survey (USGS) manage nearly 400 monitoring wells throughout the Commonwealth. This includes 225 wells in the coastal plain aquifer system. Groundwater levels are sampled every 15 minutes at 45 of these wells. Many of these wells have been sampled since at least the 1970s. While the resolution of monitoring wells in the Northern Neck and Middle Peninsula is less than that of the current GWMAs, the wells in the proposed expanded area show very similar trends in aquifer level declines. These results are from actual monitoring of groundwater levels in monitoring wells and are not modeled trends.

Commenter	Comment	Agency response

Ms. Trudy Feigum, Middlesex Co. resident	Questions if there is scientific research available to show groundwater levels in the proposed management area are continuing to decline two to four feet per year, or is this statement being based on results of computer models.	The DEQ and the Unites States Geological Survey (USGS) manage nearly 400 monitoring wells throughout the Commonwealth. This includes 225 wells in the coastal plain aquifer system. Groundwater levels are sampled every 15 minutes at 45 of these wells. The majority of these wells have been sampled since the 1970s or earlier. While the resolution of monitoring wells in the Northern Neck and Middle Peninsula is less than that of the current GWMAs, the wells in the proposed expanded area show very similar trends in aquifer level declines. These results are from actual monitoring of groundwater levels in monitoring wells and are not modeled trends. All but two of the 225 monitoring wells in the coastal plain show continuing water level declines.
Betty Lucas, citizen	Expressed concern with not receiving responses from Essex County concerning their involvement with the proposed regulations	The Board is unable to address this comment since it is outside of its purview.
Betty Lucas, citizen	Expressed concern with finding conflicting information from local governments concerning the groundwater withdrawals occurring at the International Paper Franklin Mill in Franklin Virginia and the associated groundwater impacts from the closure of the mill and the reopening of the mill.	The Board is unable to address this comment since it is outside its purview.
Betty Lucas, citizen	States DEQ does not have real data for the affected area and will need to model state of aquifers again	The DEQ and the USGS manage nearly 400 monitoring wells throughout the Commonwealth. This includes 225 wells in the coastal plain aquifer system. Groundwater levels are sampled every 15 minutes at 45 of these wells. The majority of these wells have been sampled since the 1970s or earlier. While the resolution of monitoring wells in the Northern Neck and Middle Peninsula is less than that of the current GWMAs, the wells in the proposed expanded area show very similar trends in aquifer level declines. All but two of the 225 monitoring wells in the coastal plain show continuing water level declines.
Betty Lucas, citizen	States DEQ claims 50% of the Potomac Aquifer has been used up in the past 50 years, but believes that DEQ does not have the data to support that claim.	The DEQ and the U.S. Geological Survey manage nearly 400 monitoring wells throughout the Commonwealth. This includes 225 wells in the coastal plain aquifer system. Groundwater levels are sampled every 15 minutes at 45 of these wells. The

		majority of these wells have been sampled since the 1970s or earlier. While the resolution of monitoring wells in the Northern Neck and Middle Peninsula is less than that of the current GWMAs, the wells in the proposed expanded area show very similar trends in aquifer level declines. All but two of the 225 monitoring wells in the coastal plain show continuing water level declines.
Betty Lucas, citizen	States DEQ inaccurately says that aquifers can only be recharged to 70% of its previous levels; ignoring the Franklin Mill closure evidence of rapid Norfolk aquifer recharge.	The commenter is referencing a presentation made to the Middlesex County Board of Supervisors which included some findings of recent scientific studies between DEQ and the USGS. When compaction of clay confining layers occurs within aquifer systems, storage of groundwater is lost. The best available science estimates that when this happens approximately 30% of that storage is unrecoverable. While there was a rapid initial increase in water levels when International Paper ceased pumping, the physics of the aquifer system will cause that increase to continue to level off over time. This is the reverse of how the impacts caused by withdrawing the groundwater behave. DEQ installed a number of groundwater level monitors within the mill's cone of depression to measure the aquifer's recovery. The period of no pumping was too short to document more than a small portion of the aquifer response curve.
Gayl Fowler, citizen	Believes that there is more data needed on the groundwater to continue to protect the groundwater supply.	DEQ works with the U.S. Geological Survey to obtain information concerning the conditions of the aquifers in the coastal plain. Monitoring wells have been installed to assist with monitoring the water levels of aquifers throughout areas of the state. Funding is needed to install additional monitoring wells to more fully monitor aquifer levels.
Frank Fletcher, citizen	All evidence indicates that the Va. Coastal Plain is a single system with interconnectivity between the aquifers.	The Board agrees with this statement.
Frank Fletcher, citizen	Most groundwater withdrawn from wells in the Middle Peninsula comes from the Potomac Aquifer.	The Board agrees with this statement.
Frank Fletcher, citizen	There is evidence of the decline in the water level in the Potomac aquifer. The evidence is the shrinkage of the stored water in the artesian water levels. The measure of the loss of	The Board agrees with this statement.

	storage of the aquifer is the decline in water pressure.	

Final Amendments to the Eastern Virginia Ground Water Management Area Regulation (9VAC25-600 et seq.) - Summary of Comments and Responses

Commenter	Comment	Agency response
Mr. Frank Fletcher, Ph.D.	Supports expansion of the current Ground Water Management Area (GWMA) to include the Northern Neck and Middle Peninsula. Urges amendment to be adopted as soon as possible. Also submitted a summary of the groundwater conditions of the Virginia coastal plain.	The agency appreciates the commenter's support of the proposed regulations.
James Shelton, citizen	Supports inclusion of the City of Richmond and Chesterfield Co. in the Eastern Virginia Groundwater Management Area.	Chesterfield County is already included in the Eastern Virginia groundwater Management Area. The City of Richmond is not being included in the Groundwater Management Area due to its distance from the Coastal Aquifer System.
Barbara Jacocks, Richmond Regional Planning District Commission	Supports the expansion of the Eastern Virginia Groundwater Management Area	The agency appreciates the commenter's support of the proposed regulations.
Ms. Trudy Feigum, citizen	Does not support the expansion of the proposed regulations to expand the groundwater management. Commenter believes expansion of the groundwater management area reduces private property rights of citizens.	All significant withdrawals on the Coastal Aquifer System must be managed to slow the rate of water level decline. Expansion of the groundwater management area will allow all significant users to come under management. Current estimates indicate that groundwater is being withdrawn from the aquifers at a rate that is twice the recharge rate. If changes are not made in how groundwater is used, this will lead to groundwater availability problems. Not including the additional localities in the management area will exclude them from receiving mitigation protection provided to those localities within the management area.
Mr. Tom Feigum, citizen	Middlesex Co. news paper not listed as the paper in which publication occurred of meetings. Found out about public hearing at Middle Peninsula PDC meeting less than 2 weeks ago.	The agency exceeded state law in providing public notice of this regulatory process. The hearings were advertised in 4 major daily newspapers throughout the Virginia Coastal Plain. Additionally, localities and planning district commissions were contacted individually by the agency to make them aware of these proposed regulations. Notices were placed in the Virginia Register, on the Virginia Regulatory Town Hall website and were emailed to registered users of the town hall website. Mailings were also sent to interested parties on the State Water Control Board's mailing list. Members of the House of Delegates Agriculture, Chesapeake and Natural Resource Committee, the Senate Agriculture, Conservation and Natural Resources Committee, and Members of the

		State Water Commission were also notified concerning the proposed regulations.
Mr. Tom Feigum, citizen	Expressed concern with delays in permitting of withdrawals. Jobs are needed. Groundwater permitting delays may cause companies to locate elsewhere instead of here. One county waiting for approval for well for two years- still waiting.	Adequate staffing will allow the agency to issue permits in a timely manner. Operational changes have been made to the groundwater permitting program that has improved review time of permits. Previously there was a long wait for groundwater modeling to be conducted and this issue has been resolved, allowing the permitting process to proceed faster. Often, long delays reflect an inadequate application or a well that was not constructed properly.
Mr. Tom Feigum, citizen	In residential development application approved for 2 replacement GW wells, the wells drilled, pumps and pipes installed with restrictors installed completed and one year passed before those wells were allowed to be placed online. Replacement wells were needed due to mineralization of the original wells, thus reducing the flow below the groundwater withdrawal level permitted and needed.	Middlesex County is not currently in the groundwater management area and a permit could not be required fromthe Board for the activity described by the commenter.
Mr. Tom Feigum, citizen	Questioned timing of hearing- complained about time of day meeting held. Concern with needing to defend their property rights. Fails to see anyone in attendance at the meeting reflecting his rights as a taxpayer.	The agency scheduled a third public hearing for Warsaw, VA that was held in the evening, and extended the comment period until January 30, 2013. This allowed citizens an additional opportunity to attend a meeting in person to submit their comments in lieu of submitting them in writing.
Mr. Tom Feigum, citizen	Water rights were not addressed by the 13 original states. Regulating groundwater may be a tougher decision than the Commonwealth is ready to address.	The Commonwealth has been regulating groundwater in some form since the 1950s. Virginia court decisions have generally followed the “American Rule” which states that a property owner has a right to reasonable use of groundwater provided the impact does not extend beyond the borders of his own property.
Mr. Tom Feigum, citizen	Believes that the regulation of water will cause those in the management area to be unable to obtain water without paying a high premium for water. Believes it will destroy property value, and will require relocation of citizens to cities where water can be provided by the government.	Groundwater has been regulated on the Eastern Shore and in rural areas south of the James River since the 1970s. The negative impacts described by the commenter have not happened in these areas over the last 40 years.
Mr. Tom Feigum, citizen	Opposes the proposed regulation. Give more thinking to the proposal, to make sure it serves the needs of the taxpayer, not the need of government.	The goal of the regulation is to manage groundwater for all users so that the resource will be available and productive for the long-term. This supports the public health, safety and welfare of all Virginians.
Mr. Matt Walker, Middlesex Co. Administrator	Asked if the proposed regulations would allow counties divided by interstate 95 to pump water to the areas east of 95 to avoid being regulated.	The proposed regulations impact those areas east of interstate 95. The fall line of Virginia (which interstate 95 generally follows) divides the piedmont and the coast plain of Virginia. Coastal Plain aquifers extend to the fall line. If a locality wanted to install a well west of the fall line they would not be withdrawing water from the aquifers being regulated by this regulation

		and would not be regulated. However, these piedmont sources of groundwater yield far less water than the coastal plain aquifers so it is difficult to see how such a plan would meet the local water needs and be cost effective.
Mr. Matt Walker, Middlesex Co. Administrator	Inquired how long it would lake for DEQ to review a permit application for a groundwater withdrawal. Have heard there have been 2 year delays.	On average it takes the agency 12 to 18 months to issue a groundwater withdrawal permit. This time period would be greatly reduced for historical permits issued as a result of the groundwater management area being expanded because no modeling, aquifer studies, water conservation plans, or mitigation plans are part of the review.
Mr. Matt Walker, Middlesex Co. Administrator	Requested DEQ to hold an additional hearing in either Warsaw or Tappahannock in order to hold a meeting in the center of the proposed new boundaries of the groundwater management area. Requested DEQ/Water Board to consider expanding the comment period to March or April to allow more time for public comment and avoid conflicts with the holidays.	The agency scheduled a third public hearing for Warsaw, VA, that was held in the evening, and extended the comment period until January 30, 2013.
Lewis Lawrence, Middle Peninsula Planning District Commission	The General Assembly should provide adequate staffing levels and adequate funding so that DEQ staff can issue timely water withdrawal permits. Without assurance of certainty, consistency and timeliness for permit issuance, future Middle Peninsula economic development projects that require significant groundwater withdrawal (over 300,000 gallons per month) may experience permit issuance delays upwards or exceeding two years of time.	Adequate staffing will allow the agency to issue permits in a timely manner. Operational changes have been made to the groundwater permitting program that has improved review time of permits. Previously there was a long wait for groundwater modeling to be conducted and this issue has been resolved, allowing the permitting process to proceed faster. Often, long delays reflect an inadequate application or a well that was not constructed properly.
Lewis Lawrence, Middle Peninsula Planning District Commission	DEQ needs to be provided with the resources needed to study groundwater on the Middle Peninsula to protect the resource while not stifling economic development.	DEQ will work with available resources to obtain further information about aquifers under the Middle Peninsula. A study funded by DEQ of the Piney Point Aquifer in the Middle Peninsula and Northern Neck is scheduled for FY14.
Gayl Fowler, citizen	Supports the expansion of the Eastern Virginia Groundwater Management Area	Thank you for your support.
Andrew Arnold, citizen	Wants information on how the proposed regulations will impact his local water system with 115 users in Fairfax County, and how the existing user will be grandfathered once the groundwater management area is.	DEQ provided information to this local water system concerning the groundwater management program and how existing users will be regulated if management areas are expanded. This special meeting was held in Fairfax County on January 17, 2013.
Pat Roth, citizen	Opposed to expansion of the Groundwater Management Area. Does not believe that this program will benefit Essex County. Believes that this program is capturing personal water supplies.	The goal of the regulation is to manage groundwater for all users so that the resource will be available and productive for the long-term. This supports the public health, safety and welfare of all Virginians. These regulations do not eliminate anyone's right to a well. These regulations apply to groundwater withdrawals

		of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
Stan Balderson, citizen	Opposed to expansion of the Groundwater Management Area. Does not believe that this program will benefit Essex County. Believes that this program is capturing personal water supplies.	The goal of the regulation is to manage groundwater for all users so that the resource will be available and productive for the long-term. This supports the public health, safety and welfare of all Virginians. These regulations do not eliminate anyone's right to a well. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
Bernie Buchanan, citizen	Opposed to the expansion of the Groundwater Management Area. Does not believe Essex County should give away their control of groundwater to DEQ. Believes this regulation is a measure by which Richmond and Hampton Roads are using to satisfy their own water needs. Continue restrictions of groundwater usage in the existing Groundwater Management Area.	Individual localities are not authorized to control groundwater resources. State law directs the State Water Control Board to regulate groundwater withdrawals of 300,000 gallons per month. Groundwater withdrawals in the current groundwater management area have received permits for their withdrawals. Prior to approvals being received for groundwater withdrawals, information on impacts to aquifers, available alternative water sources, water reuse, and water conservation measures and the need for groundwater usage are all considered. This has assisted with managing the groundwater resource for future generations. Withdrawals occurring outside of the management area have not undergone these evaluations.
Curtis Smith, Director of Planning, Accomack Northampton Planning District Commission	Concerned that DEQ is not adequately staffed and funded to handle the expanded area. Without additional staff and funding, delays would potentially negatively impact current residents and businesses on the Shore.	Adequate staffing will allow the agency to issue permits in a timely manner. Operational changes have been made to the groundwater permitting program that has improved review time of permits. Previously there was a long wait for groundwater modeling to be conducted and this issue has been resolved, allowing the permitting process to proceed faster. Often, long delays reflect an inadequate application or a well that was not constructed properly.
Betty Lucas, citizen	Opposed to expansion of Groundwater management area. Does not believe Essex county or Tappahannock should turn over control of their groundwater to the state of Virginia.	Individual localities are not authorized to control groundwater resources. State law directs the State Water Control Board to regulate groundwater withdrawals of 300,000 gallons per month.
Nicholas Ferriter	Supports expansion of the Groundwater Management area to include the Northern Neck.	Thank you for your support.
William Lucas, citizen	Opposed to expansion of Groundwater management area to include Essex county or Tappahannock.	All significant withdrawals on the Coastal Aquifer System must be managed to slow the rate of water level decline. Expansion of the groundwater management area will allow all significant users to come under management. Current estimates indicate that groundwater is being withdrawn from the aquifers at a rate that is twice the recharge rate. If changes are not made in how groundwater is used, this will lead to groundwater availability problems. Not including the additional localities in the management area will exclude them from

		receiving mitigation protection provided to those localities within the management area.
William Lucas, citizen	States Essex County and Tappahannock do not have and will not have a ground water shortage now or in the foreseeable future. Submitted a graph from the Middle Peninsula Planning District Commission Regional Water Supply Plan demonstrating Essex County Water Usage and current amount available.	All significant withdrawals on the Coastal Aquifer System must be managed to slow the rate of water level decline. Expansion of the groundwater management area will allow all significant users to come under management. Current estimates indicate that groundwater is being withdrawn from the aquifers at a rate that is twice the recharge rate. If changes are not made in how groundwater is used, this will lead to groundwater availability problems. Not including the additional localities in the management area will exclude them from receiving mitigation protection provided to those localities within the management area.
John Paul Jones, citizen	Has a private well and he strongly opposes the proposed expansion of the Eastern Virginia Ground Water Management Area and the proposed Amendments to the Groundwater Withdrawal Regulations.	These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted from this regulation. Individual property owners may withdraw groundwater. All significant withdrawals on the Coastal Aquifer System must be managed to slow the rate of water level decline. Expansion of the groundwater management area will allow all significant users to come under management. Current estimates indicate that groundwater is being withdrawn from the aquifers at a rate that is twice the recharge rate. If changes are not made in how groundwater is used, this will lead to groundwater availability problems. Not including the additional localities in the management area will exclude them from receiving mitigation protection provided to those localities within the management area.
Shirley Jones, citizen	I urge you to stop this Agenda 21 control of our water supplies. We have perfectly good wells and we do not need any control of Regional Commission's interference anywhere in our state.	These regulations do not eliminate anyone's right to a well. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
Catherine Crabill, citizen	More evidence of Sustainable Development's UN AG21 water control initiative. VA LEADERS must stop this DEQ government control of water use in VA. PLEASE HELP and delay or STOP the actions of Middle Peninsula Planning District Commissions attempts to make everyone dependent on MUNICIPAL costly water! Save our wells that work fine at our expense! Urgent need for your intervention,	These regulations do not eliminate anyone's right to a well or force anyone to connect to municipal supplies. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
Arlene Jacovelli	Opposed to the expansion of the Eastern Virginia Ground Water management Area	The goal of the regulation is to manage groundwater for all users so that the resource will be available and productive for the long-term. This supports the public health, safety and welfare of all Virginians.
Cary Nunnally	Opposed to the expansion of	The goal of the regulation is to manage

	the Eastern Virginia Ground Water management Area	groundwater for all users so that the resource will be available and productive for the long-term. This supports the public health, safety and welfare of all Virginians.
Dale Swanson	Does not support initiatives depleting our right to have a well in the DEQ/MPPDC scheme to control water use in VA.	These regulations do not eliminate anyone's right to a well or force anyone to connect to municipal supplies. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
Dale Swanson	Requests the public comment period be extended until after session ends.	The public comment period began October 22, 2012 and was originally scheduled to end January 11, 2013. The comment period was extended until January 30, 2013 as a result of an additional hearing being scheduled. The comment period for a proposal is normally 60 days. The comment period for this regulation was 100 days, with the majority of the comment period occurring prior to the start of the 2013 Virginia General Assembly session. The agency significantly exceeded normal timeframes for public comment and the comment period will not be extended.
Dave Rector	Opposed to the expansion of the Groundwater management Area.	The goal of the regulation is to manage groundwater for all users so that the resource will be available and productive for the long-term. This supports the public health, safety and welfare of all Virginians.
Dave Rector	Believes this regulation would deprive private community well owners and private residential well owners of control of their own water usage	These regulations do not eliminate anyone's right to a well. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
Dave Rector	Believes Essex County and the Town of Tappahannock have great water resources, which will sustain their growth far into the future, and do not need to be included in the Groundwater Management Area.	The goal of the regulation is to manage groundwater for all users so that the resource will be available and productive for the long-term. Due to the interconnectivity of Virginia's aquifers, the cumulative withdrawal of all users is causing long term groundwater level declines. Managing the groundwater resource comprehensively supports the public health, safety and welfare of all Virginians.
Dave Rector	It is unacceptable to me to be faced with having my water sources be diverted to Northern Virginia and the Norfolk area, because they have not had the forethought to establish a viable reuse water program to meet their needs.	Due to the interconnectivity of Virginia's aquifers, the cumulative withdrawal of all users is causing long term groundwater level declines. This includes withdrawals outside major pumping centers like Hampton Roads. Northern Virginia is primarily supplied by surface water sources.
June Byrd	Does not support expansion of the Groundwater Management Area. Does not believe that counties that have private well water should be regulated.	These regulations do not eliminate anyone's right to a well or force anyone to connect to municipal supplies. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
Jane Stuczynski	Does not support initiatives depleting an individual's right to have a well in order for the DEQ or Middle Peninsula Planning District	These regulations do not eliminate anyone's right to a well or force anyone to connect to municipal supplies. These regulations apply to groundwater withdrawals of 300,000 gallons of

	Commission to control water use in VA.	water per month. Individual single family wells are exempted by this regulation.
Jane Stuczynski	Opposed to government control of water rights.	The goal of the regulation is to manage groundwater for all users so that the resource will be available and productive for the long-term. This supports the public health, safety and welfare of all Virginians.
Jean Casanave	Does not support expansion of the Groundwater Management Area.	The goal of the regulation is to manage groundwater for all users so that the resource will be available and productive for the long-term. This supports the public health, safety and welfare of all Virginians.
Jean Casanave	Believes that Gloucester County should NOT be included in the list of counties that make public water and sewer hookup mandatory.	These regulations do not eliminate anyone's right to a well or force anyone to connect to municipal supplies. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
Monica Sanders	Recommends DEQ only regulate water usage from large commercial users, not individual homeowners. Water use from personal use does not deplete the groundwater system.	These regulations do not eliminate anyone's right to a well or force anyone to connect to municipal supplies. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
Sharon Slaughter	Opposed to the expansion of the Groundwater management Area.	The goal of the regulation is to manage groundwater for all users so that the resource will be available and productive for the long-term. This supports the public health, safety and welfare of all Virginians.
Sharon Slaughter	Does not believe DEQ has an authority over water usage on private property.	The Ground Water Management Act of 1992 (§62.1-254 thru 62.1-270 of the Code of Va.) establishes the criteria for regulations concerning the withdrawal of groundwater. These regulations are consistent with state law. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are not regulated by this regulation. Due to the interconnectivity of Virginia's aquifers, the cumulative withdrawal of all users is causing long term groundwater level declines. Managing the groundwater resource comprehensively supports the public health, safety and welfare of all Virginians.
Ted Williams	DEQ discourage any initiatives regulating/restricting residential well use where such use already exists and meets health codes.	These regulations do not eliminate anyone's right to a well or force anyone to connect to municipal supplies. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
Ted Williams	Requests that DEQ act to block attempts at charging non-user fees and penalties to those who did not ask for municipal water/sewer and do not want it.	These regulations do not eliminate anyone's right to a well or force anyone to connect to municipal supplies. These regulations apply to groundwater withdrawals of 300,000 gallons of water per month. Individual single family wells are exempted by this regulation.
Tricia Stall	Does not support initiatives depleting an individual's right to have a well in order for the DEQ or Middle Peninsula Planning District	These regulations do not eliminate anyone's right to a well or force anyone to connect to municipal supplies. These regulations apply to groundwater withdrawals of 300,000 gallons of

	Commission to control water use in VA.	water per month. Individual single family wells are exempted by this regulation.
Tricia Stall	Requests the public comment period be extended until after session ends.	The public comment period began October 22, 2012 and was originally scheduled to end January 11, 2013. The comment period was extended until January 30, 2013 as a result of an additional hearing being scheduled. The comment period for a proposal is normally 60 days. The comment period for this regulation was 100 days, with the majority of the comment period occurring prior to the start of the 2013 Virginia General Assembly session. The agency significantly exceeded normal timeframes for public comment and the comment period will not be extended.

All changes made in this regulatory action

Please list all changes that are being proposed and the consequences of the proposed changes. Describe new provisions and/or all changes to existing sections.

Current section number	Proposed new section number, if applicable	Current requirement	Proposed change and rationale
10		Definition of terms included in regulation	Definitions are being revised to be consistent with definitions in statute.
20		Identification of localities included in the management area.	The following localities are proposed to be added to the Eastern Virginia Groundwater Management Area: the counties of Caroline, Essex, Gloucester, King George, King and Queen, Lancaster, Mathews, Middlesex, Northumberland, Richmond, and Westmoreland, and the areas of Arlington, Fairfax, Prince William, Spotsylvania, and Stafford counties east of Interstate 95.

Regulatory flexibility analysis

Please describe the agency's analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) the establishment of less stringent compliance or reporting requirements; 2) the establishment of less stringent schedules or deadlines for compliance or reporting requirements; 3) the consolidation or simplification of compliance or reporting requirements; 4) the establishment of performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the proposed regulation.

This regulation only establishes the groundwater management areas. In developing the areas of localities to be included in the expanded groundwater management area, the agency considered how to minimize the area that needed to be included in the expanded Eastern Virginia Groundwater Management area and to provide a definitive way in which to divide parts of localities not needing to be regulated. The agency selected interstate 95 as a dividing point since the geography located west of the fall line differs from geology located east of the fall line. Interstate 95 was selected since it is the approximate area in which the fall line occurs within Virginia.

Family impact

Please assess the impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

This regulatory action is not anticipated to have any impact on the family or family stability.

Acronyms and Definitions

Please define all acronyms used in the Agency Background Document. Also, please define any technical terms that are used in the document that are not also defined in the "Definition" section of the regulations.

GWMA- Ground Water Management Act
USGS- United States Geological Survey