

Appendix C: Local/Regional Water Supply Plan Reviews and Conditions of Approval

Accomack County and Towns Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Accomack County and Towns Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 8, 2018, whichever comes first:

1. Accomack County and towns need to clarify how the localities intend to implement and enforce mandatory restrictions and provide copies of enacted ordinances upon adoption.
2. For all community water systems and self-supplied users in all localities, provide all of the data required by 9 VAC 25-780-80 including water usage on an average monthly and annual basis, max day, peak day water use by month, and disaggregated use data.
3. For all community water systems and self-supplied users in all localities, provide all of the data required by 9 VAC 25-780-70.
4. Improve data collection for agricultural self-supplied users and provide additional detail on location and type (surface water or groundwater) sources as required by 9VAC 25-780-70.I.
5. Provide missing disaggregated demand data required by §9 VAC 25-780-100.D.4 for all community water systems in the planning region.
6. Provide a description of potential threats to existing water quantity and quality beyond those currently identified as required by 9 VAC 25-780-90B.11.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on March 4, 2013. General comments were received from the Virginia Department of Conservation and Recreation, the Department of Game and Inland Fisheries, the Marine Resources Commission, and the Department of Historic Resources.

The Department of Health provided the following specific comments:

1. "Significant waterworks that were excluded from the plan include Virginia Landing and Accomack Manor. Parts of the Captains Cove service area were also not included."

2. "There is some excess capacity in some systems in Accomack County. The Industrial Park and the two NASA systems are examples of systems utilizing below 30% of capacity. Northern and Central Accomack are expected to grow. Onancock is picking up demand (possibly a good bit of the Onley area)."
3. "Some of the newer sources (wells) have demonstrated high Secondary Maximum Contaminant Level parameters (color, TDS, iron) as well as some Primary Maximum Contaminant Levels (arsenic) items. Some of the sources have also indicated sufficient disinfection by-product precursors to cause elevated disinfection byproducts."
4. "There will be about 60,000 gpd demand moving from Northampton County to Accomack County with the move of the hospital, and this is not reflected in the Water Supply Plan. Also, the projections for Onancock and Parksley don't make sense - the Plan shows slow population growth but fast (and very significant) demand growth, which is not explained (i.e., no discussion of industrial or commercial growth that would account for the demand increase)."
5. "There is discussion of a program for submission and review of annual production meter calibration reports, but no description of who will be responsible for the program."
6. "The Plan mentions a demand center for the Dreamland Homes mobile home community in the section about Groundwater Withdrawal Permits. This community is a collection of 15 (or more) small separate and non-interconnected non-regulated water systems (each being too small to regulate as a waterworks), but does not address the water quality issues that have been reported at the community."
7. "There are several references to waterworks that are not part of the Plan. The Town of Eastville is mentioned briefly (it's actually located in Northampton County), plus data from and information about the Town of Chincoteague is presented (the Town of Chincoteague has its own, separate Water Supply Plan)."

The Virginia Marine Resources Commission provided the following comments:

"While the plan characterizes the existing resources information in the region, we note that new water supplies will likely target ground water resources. As such, the need for any permits for encroachments over State-owned submerged land would likely only involve pipelines or infrastructure that would cross a waterway."

Albemarle County Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Albemarle County Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 15, 2018, whichever comes first:

1. Work with cooperative extension or soil and water conservation staff to better represent source, use, and projected demand information for agricultural users.
2. Provide one or more maps showing the boundary of the service area for each Community Water System service area. Where mapping is not readily available, it should be so noted in the narrative.
3. Update Section 8 of the plan to include the status of state and federal permit modifications issued for the Ragged Mountain Reservoir Expansion project.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on December 3, 2012. General comments were received from the Department of Health, the Department of Conservation and Recreation, the Department of Historic Resources, and the Department of Game and Inland Fisheries. The Marine Resources Commission did not provide comments on this plan.

Amelia County Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Amelia County Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five year review of the plan, or November 15, 2018, whichever comes first:

1. Provide the community water system peak day water use and projected demands on a peak monthly basis.
2. Provide information for the existing water resources not currently addressed in the plan including significant fisheries, impaired streams, and river segments with recreational significance.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on 12/03/2013. General comments were received from the Department of Conservation and Recreation, the Department of Game and Inland Fisheries, and the Department of Historic Resources. The Marine Resources Commission did not provide comments on this plan.

The Department of Health provided the following comment:

“The plan indicates the Amelia Courthouse system is permitted for 546,000 gpd. The system is currently permitted for 207,200 gpd and is anticipated to be permitted for 310,400 gpd in the near future when the permit is revised.”

Appomattox River Water Authority and the City of Hopewell Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Regional Water Supply Plan for the Appomattox River Water Authority (ARWA) and the City of Hopewell be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 15, 2018, whichever comes first:

1. Virginia American Water Company should clarify implementation and enforcement of the Water Conservation Plan for its customers in the City of Hopewell.
2. Please provide all of the data requested by 9 VAC 25-780-70 for all community water systems and self-supplied users in all localities.
3. Improve documentation of the inclusion of Prince George County and the City of Hopewell in the Groundwater Management Area and the annual and monthly permitted amounts for each permittee, where applicable.
4. A source water assessment program for the region was completed by VDH and should be provided.
5. Work with privately owned community water systems to better represent water use information required by Section 9 VAC 25-780-80 of the Regulation for their systems.
6. Provide all of the data required in Projected Water Demand (§9 VAC 25-780-100), such as population with each locality served by a community water system, disaggregated demand data, and water demand projections for both large and small self-supplied users.
7. Provide a map for each community water system service area and any proposed expansion.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on December 3, 2012. General comments were received from the Department of Conservation and Recreation, the Department of Historic Resources, the Department of Game and Inland Fisheries, and the Marine Resources Commission. .

The Department of Health provided the following comments:

“There were some well yields and storage tank capacities that differed from those listed on description sheets or in our files. Some waterworks listed in the plan, like Browders HFA and Dinwiddie Unit 27, are now inactive, and new groundwater sources have been installed in other locations. Virginia American Water supplies water to a portion of Prince George County, but this was not clear in the plan. Technical memo #3 notes that the VAW – Hopewell plant capacity will increase to 38 MGD following plant upgrades but it is unclear how this value was generated. The treatment capacity of the potable train in the plant will be 18 MGD but the waterworks permit capacity will be less than that due to limited storage (approx. 14.4 MGD). VDH does not regulate the non-potable portion of the VAW – Hopewell system, and does not track capacity of that facility.”

Blacksburg/Christiansburg Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Blacksburg/Christiansburg Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 8, 2018, whichever comes first:

1. Provide a qualitative description of existing in-stream beneficial uses, either within or outside of the planning area, affected by the point of stream withdrawal for each community water system in the Plan that uses a stream intake.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on August 15, 2012. General comments were received from the Department of Health, the Department of Conservation and Recreation, the Department of Historic Resources, the Department of Game and Inland Fisheries, and the Marine Resources Commission.

Buckingham County and the Town of Dillwyn Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Buckingham County and Town of Dillwyn Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five year review of the plan, or November 15, 2013, whichever comes first:

1. Existing Water Sources: Improve estimates of agricultural users by using U.S. Department of Agriculture census data.
2. Existing Water Resources: Provide percentage of impervious cover for the planning region.
3. Projected Water Demand: Provide explanation of how current conservation practices, techniques, and technologies were considered in the water demand projections.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on December 3, 2012. General comments were received from the Department of Conservation and Recreation, the Department of Game and Inland Fisheries, the Department of Historic Resources, and the Marine Resources Commission.

The Department of Health provided the following comments:

“The WSP includes information for Community GW systems that are currently inactive. To date, Buckingham County has three (3) active community waterworks which are: Buckingham County Water System, Discovery School of Virginia (boys facility), and Gold Hill Village. The Discovery School of Virginia is currently in the preliminary engineering phase of development of an additional community waterworks for a girls facility.”

Caroline County and the Town of Bowling Green Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Caroline County and the Town of Bowling Green Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five year review of the plan, or December 20, 2018, whichever comes first:

1. Evaluate factors used to establish drought stage levels. Sections 6.2.1 and 6.2.2 of the plan list precipitation and well drawdown as the two drought stage indicators. The precipitation evaluation described in the plan will benefit from specific ranges for each drought stage, similar to those used in the Virginia Drought Response and Assessment Plan. Groundwater production well levels for each drought stage should be established with monitoring. If production wells prove too variable, the region may use one or more USGS groundwater monitoring well(s) to establish specific drought stage levels.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on January 3, 2013. General comments were received from the Department of Conservation and Recreation, the Department of Game and Inland Fisheries, and the Department of Historic Resources. The Marine Resources Commission did not provide comments on this plan.

The Department of Health provided the following comments:

1. "Caroline County Utilities is continually looking for new sources as system takeovers and development plans continue to tax the current supply.
2. "New source considerations are additional wells, a new surface water facility, and consecutive connections with Hanover and/or Spotsylvania Counties.
3. "There is speculation that a private waterworks company will buy Lake Caroline waterworks and rebuild the surface water plant, which would revise the projected future demand for Caroline County Utilities."

Charles City County Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Charles City County Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five year review of the plan, or November 15, 2018, whichever comes first:

1. Existing Water Use: Provide peak day use by month for each community water system.
2. Projected Water Demand: Include all nonagricultural self-supplied user(s) even if their use will remain static (Port Tobacco and Ingenco).
3. Statement of Need and Alternatives Analysis: Provide a description of potential water savings through demand management actions and include water demand management and conservation measures as an alternative.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on December 3, 2012. General comments were received from the Department of Conservation and Recreation, the Department of Historic Resources, the Department of Game and Inland Fisheries, and the Marine Resources Commission.

The Department of Health provided the following comments:

1. "Courthouse Complex system includes the old Courthouse Complex well and the old Gov't/School administration Bldg. systems and wells."
2. "The following are listed as community waterworks, but are noncommunity waterworks: Courthouse Complex, School Complex, Roxbury Industrial Park, Ruthville Recreation Center, and Ruthville Gym."

Charlotte County and Towns Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Charlotte County Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 8, 2018, whichever comes first:

1. Include the source water assessment program for the region that was completed by VDH.
2. Provide the design capacity for the average daily withdrawal and maximum daily withdrawal for each community water system.
3. Provide peak day water use by month for each community water service within the planning area.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on August 15, 2012. General comments were received from the Department of Health, the Department of Conservation and Recreation, the Department of Game and Inland Fisheries, the Department of Historic Resources, and the Marine Resources Commission.

Chincoteague (Town of) Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Town of Chincoteague Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five year review of the plan, or December 13, 2018, whichever comes first:

1. Provide an estimate of the amount of water used in production processes by the community water system.
2. Provide information on existing environmental conditions that pertain to, or may affect the sources that provide the current supply.
3. Estimate the water demand for each existing or proposed community water system disaggregated into categories of use appropriate for the system.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on March 4, 2013. General comments were received from the Department of Conservation and Recreation, the Department of Historic Resources, and the Department of Game and Inland Fisheries. The Marine Resources Commission did not provide comments on this plan.

The Department of Health provided the following comments:

“While not pin-pointed, the plan does indicate the probable locations for future water sources in a general nature (in existing easements) and the possibility of desalination (noted as still expensive).

1. Safe yield evaluation of the existing source(s) have not been provided. “It is known about what yields the new wells will have based on the existing wells.”
2. “Given the availability of buildable lots, the growth rate discussed in the WSP may be aggressive.”

Craig County and the Town of New Castle Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Craig County and the Town of New Castle Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 15, 2018, whichever comes first:

1. Provide information regarding water “available to be purchased” and water “to be purchased” from sources outside the region’s planning area, per §9 VAC 25-780-70 G & H.
2. The Drought Response and Contingency Plan defines a “primary drought indicator”: precipitation deficits. The County and Town will use this single indicator to determine whether a drought stage is warranted. Establish a groundwater based indicator to enhance drought stage declarations.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on December 3, 2012. General comments were received from the Department of Conservation and Recreation, the Department of Historic Resources, and the Department of Game and Inland Fisheries. The Marine Resources Commission did not provide comments on this plan.

The Department of Health provided the following comment:

“One NTNC waterworks identified in the plan is no longer active (PWSID 2045090 Camp on Craig).”

Culpeper County Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Culpeper County Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five year review of the plan, or December 20, 2018, whichever comes first:

1. Provide all of the data requested by Section 9 VAC 25-780-70 for the region.
2. Clarify whether or not water is available for purchase from outside the geographic boundaries of the planning area (Section 9 VAC 25-780-70.G).
3. A source water assessment program for the region was completed by VDH and should be provided.
4. Provide a summary of the County's groundwater protection program.
5. Provide all of the data requested by Section 9 VAC 25-780-80 for the region.
6. Provide a service area map, including any proposed expansion area, for each community water system in the County (Section 9 VAC 25-780-100.D.2).
7. Provide all of the data requested by Section 9 VAC 25-780-100 for the region.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on January 3, 2013. General comments were received from the Department of Health, the Department of Conservation and Recreation, and the Department of Game and Inland Fisheries. The Department of Historic Resources and the Marine Resources Commission did not comment on this plan.

Cumberland, Goochland, Henrico, and Powhatan Counties Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Regional Water Supply Plans for the Counties of Cumberland, Goochland, Henrico, and Powhatan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 15, 2018, whichever comes first:

1. Provide all of the data requested by 9 VAC 25-780-70 for all community water systems and self-supplied users in all localities, including well construction data.
2. Provide any applicable contract or agreement term (period) for the Founders Bridge system in Powhatan County.
3. Provide all of the data requested by 9 VAC 25-780-80 for all community water systems and self-supplied users, including peak day use by month for Cumberland County.
4. Provide all data requested by 9 VAC 25-780-100 including peak use by month for all community water systems and self-supplied users in Cumberland and Henrico counties, disaggregated demand data for Powhatan County, a clarification of large self-supplied users demand both inside and outside of community water system service areas for Goochland County.
5. Update the Drought Response and Contingency information for all localities to reflect updated local ordinances and/or applicable conditions issued under any Virginia Water Protection Permits.
6. Update appropriate sections of the plan narrative regarding permit applications and issuances for water supply projects, such as the Cobb Creek Reservoir and Henrico County's James River withdrawal.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on December 3, 2012. General comments were received from the Department of Conservation and Recreation, Department of Historic Resources, the Department of Game and Inland Fisheries, and the Marine Resources Commission.

The Department of Health provided the following comments:

"If additional capacity is needed for the village area of Crozier in Goochland County, a safe yield evaluation will be needed for any new wells. Chesterfield County will probably not be able to increase its

allocation to Powhatan County, because it will need the remainder of its available water supply for its own customers. The Henrico Regional WTP is currently undergoing an expansion from 58 MGD to 80 MGD. Two non-community waterworks in Henrico County need to be added to the plan – Cedar Fork and Elko Community Center. Three non-community waterworks in Henrico County need to be deleted from the plan – Deep Bottom Boat Ramp, Echo Lake Park, and Richmond Elks Lodge #45.”

Fauquier County Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Fauquier County Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 15, 2018, whichever comes first:

1. Provide a copy of the County's updated Drought Response and Contingency Plan (DRCP) with drought stage response and trigger updates. In addition, provide a description of the procedures adopted for implementation and enforcement of the DRCP measures in the Town of Remington and those portions of Fauquier County not served by the Fauquier County Water and Sanitation Authority.
2. Include well construction information for all non-agricultural, self-supplied users of more than 300,000 gallons per month of groundwater.
3. Provide information for water available to be purchased outside the planning area from any source with the capacity to withdraw more than 300,000 gallons per month of surface and groundwater.
4. Provide a projection of water demand on an annual average basis for each existing and any proposed self-supplied nonagricultural user of more than 300,000 gallons per month of surface and groundwater located outside the service areas of CWS.
5. Provide an explanation of how the projected needs of domestic consumption, in stream beneficial uses, and economic development have been accounted for in the projections of future demand is needed.
6. Submit a copy of the County's well monitoring program.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on August 15, 2012. General comments were received from the Department of Health, the Department of Conservation and Recreation, the Department of Historic Resources, the Department of Game and Inland Fisheries, and the Marine Resources Commission.

Fluvanna County and the Town of Columbia Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Fluvanna County and Town of Columbia Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 15, 2018, whichever comes first:

1. As outlined in the Local and Regional Water Supply Planning Regulation, Section 9 VAC 25-780-50 D, please provide an update on activities associated with the James River Water Authority.
2. Work with other partners to improve the availability of data requested under the Water Supply Regulation. This includes data gaps in Section 9 VAC 25-780-80 Existing water use information for all public and private community water systems.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on December 3, 2012. General comments were received from the Department of Conservation and Recreation, the Department of Game and Inland Fisheries, the Department of Historic Resources, and the Marine Resources Commission.

The Department of Health provided the following comments:

“Recent political developments imply that the proposed James River Water Authority will likely not develop into a countywide system. Other alternatives are being considered to supply water to Zion Crossroads area. The new high school is not mentioned in the report, but water availability has become a concern for that facility.”

Greene County and the Town of Stanardsville Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Greene County, Virginia and the Town of Stanardsville Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five year review of the plan, or November 15, 2018, whichever comes first:

1. Provide a discussion of the pump storage reservoir that was permitted in 2012.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on December 3, 2012. General comments were received from the Department of Health, the Department of Conservation and Recreation, the Department of Historic Resources, the Department of Game and Inland Fisheries, and the Marine Resources Commission.

Greenville County/Sussex County/City of Emporia Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Greenville County/Sussex County/City of Emporia Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five year review of the plan, or December 6, 2018, whichever comes first:

1. Clarify annual water use for Georgia Pacific.
2. Clarify average day and max day withdrawals for Stony Creek.
3. Provide Virginia Department of Health Public Water System Identification (PWSID) numbers for applicable groundwater wells.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on February 4, 2013. General comments were received from the Department of Conservation and Recreation and the Department of Historic Resources. The Marine Resources Commission did not provide comments on this plan.

The Department of Health provided the following comments:

“The GCWSA-Skippers and Jackson-Field Home waterworks are non-community systems, but have been included in the analysis with the regional community systems. Birch Island is incorrectly listed as having only one well (pg. 41) – it actually has two wells. The Northeast Regional System in Sussex County serves both the prison and several residences, which is not reflected in the report. However, it is unclear whether the non-institutional, residential connections had been added to this system when this report was generated.”

The Department of Game and Inland Fisheries provided the following comments:

“Plan is missing water use values for the Borden Plant and the Sussex County Courthouse well complex. Figures 3.1 and 3.2 are very confusing – discrepancy between legend values (mg/day) and table labeling as ‘annual water withdrawals.’ The colored points in Figure 3.1 do not seem to match up with the use values in associated Table 4.1. They do not appear to match up. We recommend clarifying/fixing that.”

Halifax County Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Halifax County Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 8, 2018, whichever comes first

1. The Town of Scottsburg should provide a method to enforce the Drought Response and Contingency Plan.
2. Provide construction information for non-agricultural, self-supplied users of more than 300,000 gallons per month of ground water [ODEC Clover Power Station drinking water well].
3. The Towns of Scottsburg and Virgilina should address conservation methods.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on August 1, 2012. General comments were received from the Department of Health, the Department of Game and Inland Fisheries, the Department of Conservation and Recreation, the Department of Historic Resources, and the Marine Resources Commission.

Hanover County and the Town of Ashland Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Hanover County and the Town of Ashland Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 22, 2018, whichever comes first:

1. Verify the locality population figure, total population served by community water system figure, and the existing use data for self-supplied residences and businesses (inside and outside community water system service areas).
2. Provide the existing water used on an average monthly and annual basis for the Holly Ridge community water system.
3. Provide the projected population and estimated water demand for each individual community water system in the planning area, including: a) estimates of the projected population served within the locality for each community water system; b) estimated water demand on both an annual average and peak monthly basis for each community water system; and c) estimated water demand disaggregated by categories of use appropriate for each community water system.
4. Provide the missing source information for community water systems using groundwater.
5. Provide the missing source information for non-agricultural, self-supplied users of more than 300,000 gallons per month of surface water.
6. Include requested information on impaired streams, including the type of impairment.
7. Re-evaluate the adequacy of water resources and additional alternatives as demand is projected to exceed supply prior to completion of the Verdon Quarry water supply project in 2037.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on February 4, 2013. General comments were received from the Department of Conservation and Recreation, the Department of Game and Inland Fisheries, and the Department of Historic Resources. The Marine Resources Commission did not provide comments on this plan.

The Department of Health provided the following comments:

“Many listed systems (Tables 4-1 and 4-2) use <300,000 gal/month. Two systems listed as ‘community’ are actually non-community (Hanover Courthouse & Taylor House). Richfood Holdings, Inc. may be the same system as Super Value Inc – Mechanicsville Warehouse.”

Town of Hillsboro Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Town of Hillsboro Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 15, 2018, whichever comes first:

1. Provide unaccounted for losses in the water system due to aging infrastructure.
2. Provide a map of the service area.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on September 26, 2012. General comments were received from the Department of Conservation and Recreation, the Department of Historic Resources, the Department of Game and Inland Fisheries, and the Marine Resources Commission.

The Department of Health provided the following:

1. "The historic water demands have been limited by inadequate water sources. The WSP acknowledged that water demand will increase after inadequate water sources are addressed; however, no attempt was made to quantify the increase. As a result, the WSP should be revised."
2. "The WSP does not call for expansion of the waterworks capacity. The waterworks capacity will need to increase to at least meet the design standards in the Waterworks Regulations; however, this was not discussed in the plan and it should be revised."
3. "The existing spring is likely to be abandoned; therefore a safe yield evaluation will not be needed. The existing well, if retained in service, will need a new safe yield evaluation. The water supply plan should be revised to include reasonable future water demand projections, including review of water demand data from the last decade of waterworks operations (only 2005 was presented) and evaluation of peak day demands based on actual data. Further, the minimum design capacity requirements in the Waterworks Regulations must be considered. The waterworks has completed a Preliminary Engineering Report that addresses much of this information and could be used as the basis for an updated and more useful WSP. The Town acknowledged that a PER was anticipated to be completed in 2011 and '...when more information on the Town's water system is available, a revised Water Supply Plan will be submitted.'"

Hampton Roads Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Hampton Roads Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 8, 2018, whichever comes first:

1. Provide all of the data requested by 9 VAC 25-780-70 for all community water systems and self-supplied users in all localities.
2. Provide all of the data requested by Section 9 VAC 25-780-80 of the Regulation, including for privately-owned community water systems.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on December 3, 2012. General comments were received from the Department of Conservation and Recreation, the Department of Historic Resources, the Department of Game and Inland Fisheries, and the Marine Resources Commission.

The Department of Health provided the following comments:

1. "The plan does not include Pooles MHP in Surry County. In Hampton, Langley AFB has spun off the old Bethel Housing area to a contractor, and it is now considered to be a separate waterworks, with a claimed population of 3,344. The total population in the city hasn't changed, but the population is spread over more waterworks. The proposed water system in James City County (Liberty Ridge) is now permitted and in operation. Two other waterworks in James City County are in development: Fords Colony 35 (currently under construction) and Deer Lakes (construction plans pending). The plan does address the Liberty Ridge project (groundwater), but does not address either Ford's Colony 35 or Deer Lakes."
2. "The current VDH permit limit for the Town of Dendron is 125 ERC (0.05 MGD), not 0.02 MGD as listed in Table 1-28. The Scotland Riverview waterworks (formerly known as Scotland Heights) has two wells, but the report only lists one well for the system. DEQ has issued a Groundwater Withdrawal Permit to Chippokes State Park (covering the two separate waterworks in the park), but the park is not identified in the plan as a self-supplied user. The Tidewater Academy waterworks has been inactivated. New sources have been installed or activated at several waterworks since the drafting of this plan."

3. "Gatling Pointe does receive water from the Town of Smithfield, as noted on page 1-48, but is NOT under a fluoride Consent Order. The Town of Smithfield waterworks is in fact limited by a DEQ Groundwater Withdrawal Permit. Isle of Wight County now owns Lawne's Point, however the system still does not qualify as a Community Waterworks. Ashby Subdivision, Brewer's Creek, Cannon Acres, and Queen Anne's Court have all been connected to Isle of Wight County's Northern Development Service District (NDSD), and their separate Waterworks Operation Permits have been revoked. Red Oaks Mobile Community is in the process of final connection to the NDSD and at that time will no longer be a Community Waterworks. Four waterworks remain on VDH Consent Order for high fluoride violations: Cherry Grove Acres, Deer Run, Longview Acres and Springfield Downs. Bob Steele, Edwards Trailer Park and James River Shores have each been physically separated into private, non-regulated well systems. International Paper's future water needs are unknown. It is unlikely that Smithfield Foods (withdrawing more than 300,000 gal/month) would connect to a publicly owned waterworks in the future."
4. "Water quality data for the new Drewryville well has been submitted, but the well yield needs to be re-evaluated. The City of Chesapeake will increase their use of raw water from Lake Gaston, once the Red Top transmission facilities (pump station improvements and raw water main, currently under construction) are placed into service. The City of Suffolk is expected to begin purchasing raw water from Lake Gaston as early as 2015. The plan does not include well #6 serving the Holland waterworks in the City of Suffolk."
5. "The plan noted that the Peninsula may be in a source water deficit situation during the 40-year design period of the plan, but doesn't really address any additional sources to be developed."

King George County Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the King George County Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 15, 2018, whichever comes first:

1. Provide water source data for all community water systems and self-supplied users.
2. Provide water use data for all community water systems and self-supplied users.
3. Provide projections by individual community water system, including projected future water demands on both an annual average and peak monthly basis, projections of population served, and future demands disaggregated into categories of use.
4. Evaluate potential savings through water demand management actions in the analysis of alternative water sources.
5. Describe practices to address water loss in the maintenance of systems to reduce unaccounted for water loss.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on November 20, 2012. General comments were received from the Department of Health, the Department of Conservation and Recreation, the Department of Historic Resources, and the Marine Resources Commission.

The Department of Game and Inland Fisheries provided the following comments:

“Federal Endangered Atlantic sturgeon and federal endangered shortnose sturgeon need to be added to the listed species discussion.” Additionally, the agency suggested that all water supply plans include the location and amount of return flows into the system.

Lake Country Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Lake Country Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 8, 2018, whichever comes first:

1. Clarify the purpose of water withdrawals for SJB Farms, Inc. as being irrigation or non-irrigation, or both.
2. Provide a copy of the source water assessment program for the region that was completed by VDH.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on August 15, 2012. General comments were received from the Department of Conservation and Recreation, the Department of Historic Resources, the Department of Game and Inland Fisheries, and the Marine Resources Commission.

The Department of Health provided the following comments:

1. "WSP is consistent [with existing ODW information and previous planning reports for waterworks] for all systems except the Town of Lawrenceville. Lawrenceville will require an expanded waterworks capacity to serve a committed energy company. ODW has approved a PER that includes a proposed increase in the permitted capacity of the Lawrenceville WTP from 2.0 MGD to 3.0 MGD."
2. "Lake Country WSP should be updated to reflect that the Town of Chase City is now consecutive to the RRSA. The Town was supplied by groundwater wells until August 2012."

Louisa County Long Range Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Louisa County Long Range Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five year review of the plan, or November 22, 2018, whichever comes first:

1. Provide an update within the five year review period on activities associated with the James River Water Authority.
2. Work with other partners to improve the availability of data requested under the Water Supply Regulation.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on February 4, 2013. General comments were received from the Department of Conservation and Recreation, the Department of Game and Inland Fisheries, and the Department of Historic Resources. The Marine Resources Commission did not provide comments on this plan.

The Department of Health provided the following comment:

“The Cutalong Development and New Bridge Landing were not included in the report. These are relatively new and of considerable size.”

Lunenburg County Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Lunenburg County Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five year review of the plan, or December 6, 2018, whichever comes first:

1. Clarify the name of the future water source as either Victoria Lake or Modest Creek Reservoir. See Part II, Section A.6.g.
2. Provide a discussion concerning the amount of water available for purchase outside of the planning area from any source with the capacity to withdraw more than 300,000 gallons per month (§9 VAC 25-780-70.G). See Part II, Section A.11.c.
3. Reconcile discrepancies between §2.12 and §5.3.2.2 of the Plan concerning agricultural self-supplied users withdrawing more than 300,000 gallons per month. See Part II, Sections A.12.e and B.5.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on February 4, 2013. General comments were received from the Department of Conservation and Recreation and the Department of Historic Resources. The Marine Resources Commission did not provide comments on this plan.

The Department of Game and Inland Fisheries provided the following comment:

“We recommend that location maps for the sites of water sources be included in the plan.”

The Department of Health provided the following comment:

“Safe yield analysis should be updated for Town of Kenbridge and the Town of Victoria.”

Madison County Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Madison County Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five year review of the plan, or December 20, 2018, whichever comes first:

1. Provide well construction data requested for all community water systems using groundwater (§9 VAC 25-780-70.B).
2. Work with privately owned community water systems in the planning area to better represent water use information required by Section 9 VAC 25-780-80 of the Regulation for their systems.
3. Address production processes as a disaggregated use for the Rapidan Service Authority Community Water System existing water use and projected water demand (§9 VAC 25-780-80.B.9 and 100.D.4).
4. Provide population projections for all community water systems (§9 VAC 25-780-100.D.1).
5. Provide a service area map, including any proposed expansion area, for each existing community water system (§9 VAC 25-780-100.D.2).

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on January 3, 2013. General comments were received from the Department of Health, the Department of Conservation and Recreation, the Department of Historic Resources, and the Department of Game and Inland Fisheries. The Marine Resources Commission did not provide comments on this plan.

Middle Peninsula Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Middle Peninsula Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or December 20, 2018, whichever comes first:

1. Complete items marked as “to be addressed in the next plan revision” as noted in the “Response Matrix for DEQ Comments,” submitted to DEQ with the regional plan in July 2011.
2. Include the annual and monthly permitted amounts contained in groundwater withdrawal permits for all the community water systems located within the Ground Water Management Areas.
3. Provide additional information for non-agricultural self-supplied users of >300,000 gallons per month of surface water including any limitations on withdrawals established by permits issued by the SWCB, VDH, or any other agency and the average and maximum daily withdrawal design capacities.
4. Provide peak day water use by month for community water systems in the planning region.
5. Provide the missing water demand projection data for the community water systems in the region including the estimated water demand in annual average and peak monthly basis for each existing or proposed CWS.
6. Evaluate the items currently missing from the alternative analysis, including a description of potential water savings through demand management, and a description of water demand management and conservation alternatives.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on January 3, 2013. General comments were received from the Department of Conservation and Recreation, the Department of Game and Inland Fisheries, and the Department of Historic Resources. The Marine Resources Commission did not provide comments on this plan.

The Department of Health provided the following comments:

“In Table 4 on page 23, Essex County presently has 12 community water systems and Mathews County has 7 community water systems for a total of 46 community water systems. On Page 112, it was stated that the Town of West Point may exceed VDH permitted capacity by 2012. It has not exceeded and is well within the VDH permitted capacity.”

New Kent County Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the New Kent County Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five year review of the plan, or November 15, 2013, whichever comes first:

1. Specify the number of self-supplied users less than 300,000 gallons per month of groundwater inside each community water system service area.
2. Provide all the information required by for all community water systems using groundwater, including those privately owned.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on December 12, 2012. General comments were received from the Department of Health, the Department of Conservation and Recreation, the Department of Game and Inland Fisheries, the Department of Historic Resources, and the Marine Resources Commission.

New River Valley Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the New River Valley Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five year review of the plan, or November 8, 2018, whichever comes first:

1. Maps should include references to streams, rivers, counties, etc. in Existing Resource Information.
2. Provide summary table for disaggregated demand, including non-municipal (private) community water systems.
3. Provide peak day water use by month for all community water systems within the planning area.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on August 15, 2012. General comments were received from the Department of Health, the Department of Conservation and Recreation, the Department of Historic Resources, the Department of Game and Inland Fisheries, and the Marine Resources Commission.

Northampton County Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Northampton County Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five year review of the plan, or December 13, 2018, whichever comes first:

1. Clarify how the region intends to implement and enforce the mandatory restrictions of the drought response and contingency plan prior to drought ordinance adoption, and provide copies of enacted ordinances upon adoption.
2. Please provide all of the data requested by 9 VAC 25-780-70 for all community water systems and self-supplied users and self-supplied users.
3. Work with community water systems and self-supplied users to develop the water use information required by Section 9 VAC 25-780-80 of the Regulation for their systems, particularly average daily and maximum daily withdrawals, and average monthly and average annual withdrawals.
4. Provide all of the data requested by §9 VAC 25-780-100 Projected Water Demand. Much of the data requested by the Regulation has been provided; however, certain necessary data is missing for a number of community water systems and self-supplied users such as population with each locality served by a community water system and self-supplied users, maps depicting proposed community water systems and self-supplied users service areas, disaggregated demand data, and water demand projections for both large and small self-supplied users..
5. Provide an update on use and demand for Kiptopeke Condominiums.
6. Provide a service area map for the Northampton County Complex.
7. Provide savings calculations, estimates, or a description of potential water savings through demand management actions.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on March 4, 2013. General comments were received from the Department of Conservation and Recreation, the Department of Game and Inland Fisheries, the Marine Resources Commission, and the Department of Historic Resources.

The Department of Health provided the following comments:

1. “The plan indicates growth in the Cape Charles and Exmore areas, based on past population projections, perhaps to the point where they exceed the current VDH permitted capacities. The plan does not address expansion of either waterworks' capacity.”

Responding to the need for future new or expanded waterworks - “although it would not take much to cause the projections to be off. Just about any minor positive correction in the economy could triple the growth rate.”

2. “The plan mentions RO and ASR in general, but does not discuss their implementation with respect to any particular waterworks.”
3. “The WSP does not address the scheduled move of the hospital (a significant user of the aquifer) from Northampton County to Accomack County. There is currently no established timeframe for the move, but current indications are that it will occur in the next three to five years.”
4. “Section 6 of the WSP (Water Demand Management) is written as if for a single waterworks/town, rather than for the actual situation (multiple jurisdictions).”
5. “The service area for the Town of Eastville doesn't include the high school (which the Town serves) - the population given is only for the Town proper.”
6. “The Plan talks about population growth in the Cheriton and Nassawadox areas, but there are currently no waterworks located in those areas. The Plan does not discuss creation of new waterworks in those areas.”

The Virginia Marine Resources Commission provided the following comments:

“While the plan characterizes the existing resources information in the region, we note that new water supplies will likely target ground water resources. As such, the need for any permits for encroachments over State-owned submerged land would likely only involve pipelines or infrastructure that would cross a waterway.”

Northern Neck Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Northern Neck Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 15, 2018, whichever comes first:

1. Provide a map for each community water system service area.
2. Provide all of the data requested by the Existing Water Use (§9 VAC 25-780-80) and Projected Water Demand (§9 VAC 25-780-100) sections of the Regulation for all community water systems as well as for small self-supplied users. Provide water use data by community water systems for disaggregated use type and for unaccounted losses.
3. Provide additional information on existing water resource conditions including a description of impaired streams and the type of impairment and a description of conservation easements and riparian buffers.
4. Provide additional information on existing water resources, if available, including an indication of the percentage of impervious cover within the source watershed and where new development may impact source water quality.
5. Provide information on additional water demand management strategies to ensure the sustainability of water resources in the region, including efforts to improve compliance with the Uniform Statewide Building Code.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on 9/26/2012. General comments were received from the Department of Health, the Department of Historic Resources, and the Marine Resources Commission. The Department of Conservation and Recreation did not provide comments on this plan.

The Department of Game and Inland Fisheries provided the following comments:

1. "The following listed species are known from the counties covered by this plan but were not included in the plan. We recommend that the plan be updated to include these species:
 - a. Westmoreland County – federal Endangered (FE) Atlantic sturgeon

- b. Lancaster County – federal Endangered Kemp’s Ridley sea turtles, federal Threatened (FT) loggerhead sea turtles, FT green sea turtles, FE Atlantic sturgeon, and FE shortnose sturgeon
 - c. Richmond County – FE shortnose sturgeon
 - d. Northumberland County - federal Endangered Kemp’s Ridley sea turtles, federal Threatened (FT) loggerhead sea turtles, FT green sea turtles, Atlantic sturgeon, and FE shortnose sturgeon”
2. “Impoundments have been identified as possible drinking water supplies in case groundwater does not meet future demand or becomes unusable for some reason. It would be helpful if the potential sites were identified by information other than simply the physical address (maps, lat/long coordinates, stream name) and if the size and yield of the impoundments were included for each.”

Northern Shenandoah Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Northern Shenandoah Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 15, 2018, whichever comes first:

1. Town of Mount Jackson needs to provide documentation of how drought measures will be enforced.
2. Projected Water Demand for City of Winchester should be presented for each decade in the planning horizon.
3. Work with cooperative extension or soil and water conservation staff to better represent source information for non irrigation, i.e. livestock watering.
4. Work with privately-owned community water systems to better represent use information for their systems.
5. Projected Water Demand: The following use categories should be incorporated into summary tables by county/city and by planning region, even if their use is expected to remain static.
 - a. self supplied non agricultural users >300,000 gallons per month
 - b. privately owned community water systems using >300,000 gallons per month
 - c. self supplied agricultural users > 300,000 gallons per month
 - d. small self supplied users on domestic wells (rural population) and small businesses using less than 300,000 gallons per month
6. Statement of Need and Alternatives Analysis: Additional detail is requested on Berryville's conservation predictions of 20% reduction; additional detail is requested on FCSA's planned quarry expansion or other alternatives, including potential issues and impacts; additional detail is requested on Middletown's conservation strategy.
7. Water Available to be Purchased: Elaborate on the opportunities for water purchases with localities that are not part of the NSRVC.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on November 20, 2012. General comments were received from the Department of Conservation and Recreation, the Department of Historic Resources, the Department of Game and Inland Fisheries, and the Marine Resources Commission.

The Department of Health provided the following comments:

“Two identified community waterworks – Battleground Trailer & Mountain Waterworks – are no longer active waterworks. George’s Chicken permitted design capacity is 1.525 MGD, not 14.98 MGD.”

Northern Virginia Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Northern Virginia Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 15, 2018, whichever comes first:

1. Provide the design capacity for the average daily withdrawal for each of Loudoun County's six public groundwater-based community water systems.
2. Provide the storage capacity and/or safe yield of the Savage Reservoir.
3. Provide the following information on City of Fairfax's Goose Creek intake: drainage area above the intake, lowest daily flow of record, and design capacity of the pump station.
4. Provide information for agricultural self-supplied users of more than 300,000 gallons per month.
5. Provide the maximum daily withdrawal for Community Water Systems.
6. Provide usage on an average monthly and annual basis peak day use by each month for Arlington County.
7. Provide peak day use by each month for Cities of Alexandria and Fairfax and Towns of Hamilton, Lovettsville, and Middleburg.
8. Provide estimate of the water used on an average annual basis by self-supplied nonagricultural users of more than 300,000 gallons per month of surface and ground water for Arlington County and Fairfax County.
9. Provide the estimated average annual use for Festival Lake Farm in Loudoun County.
10. Provide the estimated average annual use for the Fairfax County Park Authority Burke Lake Golf Course.
11. Provide the estimated average annual use for Ticonderoga Farms and Wheatland Vegetable Farm in Loudoun County.
12. Provide total projected water demand for all existing or proposed community water systems, including privately owned, disaggregated into categories.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on November 20, 2012. General comments were received from the Department of Conservation and Recreation, the Department of Historic Resources, the Department of Game and Inland Fisheries, and the Marine Resources Commission.

The Department of Health provided the following comments:

1. "The Town of Round Hill is expected to require expansion, but the WSP does not identify this need."
2. "No effort was made to evaluate the status and capacity of existing groundwater sources beyond a paperwork review of VDH ODW's permitted yields and waterworks capacities. Round Hill, Purcellville and Hamilton, for example, are known to have groundwater wells that have experienced declining yields and the most recent yield and drawdown tests (conducted decades ago) are no longer reasonable estimates of the source capacities (i.e., are overoptimistic). This introduces some uncertainty into the capacity of the waterworks. As part of the planning effort, these groundwater sources need to [be] reevaluated and this new yield information considered as part of the statement of need. At a minimum, the uncertainty in the capacity of the waterworks should be shown in the graphs in Section 8 of the report."
3. "VDH ODW conducted a spot review of the calculations and assumptions used in the demand projections for the non-coop water system. We have the following comments:
 - a. Table 5-5: Method 2 Total Projected Demand on page 5-10 contains incorrect information and needs to be updated. The values in this table do not match the values in Appendix D.
 - b. The data in the graphs in Section 8.3, Statement of Need for the non-coop waterworks is incorrect. The supply surplus should [be] calculated as the water source capacity minus the peak monthly average rather than the annual average. Further, the peak day demand should be estimated to confirm that the waterworks can meet this demand.
 - c. Generally, the assumptions used for modeling the demand need to be reviewed and validated by the water system owners. We feel some assumptions do not match reality or our knowledge of the water systems.
 - d. The demand type percentages in Table 5-4 should be backed up with facts about the water systems, rather than assumed. For example, Towns of Lovettsville, Round Hill, Hamilton, and Middleburg do not have industrial parks (and this is unlikely to change) and the percentage of Heavy Industry Demand should be zero. Likewise, the percent commercial, institutional, and industrial demand should be obtained from the waterworks and not assumed.

- e. Town of Quantico was assumed to have zero percent unaccounted for water, which is overoptimistic. The Town's unaccounted for water [was] 6.7% in 2010 and this assumption should be revised.
- f. The 2007 annual average demand for Lovettsville is 113,313 gpd or 3.4 MG/month; however the calculations showed 0.11 MG/month. The calculations and Figure 8.3.6 need to be corrected.
- g. The Town of Clifton water supply demand projection should be revisited because it was based principally on information from two noncommunity waterworks - one of which is located outside of the Town. There is no central or community waterworks serving Clifton. The demand projections should be updated to include the five noncommunity waterworks located inside Town plus the residential demand supplied by private wells.
- h. Some water systems serve both customers inside the Town and in adjacent areas outside the Town in the County, for example, Hamilton, and Round Hill. Others still have significant undeveloped land in town such as Purcellville and Lovettsville. In addition to using census data and growth projections for the land inside the Town borders, the population served by the water system in 2040 should consider the expected increase in service area outside the existing service area. We understand the Round Hill and Lovettsville will experience significant growth through 2040, not reflected in the demand projections. As a result of this growth, expansion in source capacity may be required.”

Nottoway Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Nottoway Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five year review of the plan, or December 6, 2018, whichever comes first:

1. Provide response to §9 VAC 25-780-70 G and 70 H regarding water available to be purchased from outside the planning area.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on February 4, 2013. General comments were received from the Department of Conservation and Recreation, the Department of Game and Inland Fisheries, and the Department of Historic Resources provided general comments. The Marine Resources Commission did not provide comments on this plan.

The Department of Health provided the following comments:

“Updated safe yield analysis should be completed for the Town of Crewe and Blackstone. The Town of Crewe has a SRF planning grant to identify possible additional sources of raw and finished water. A preliminary engineering conference was held in DFO on March 8, 2013. The Town is currently working with a consultant to develop a PER to be submitted to this Office for review.”

Orange County Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Orange County Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five year review of the plan, or December 20, 2018, whichever comes first:

1. Provide the design capacity for average daily and maximum daily withdrawals from the Town of Orange Reservoir.
2. For all non-agricultural, self-supplied users of more than 300,000 gallons per month of surface water, provide the design capacity for the maximum daily withdrawal and any limitations on the withdrawals, as established by permits issued by the State Water Control Board (DEQ), the Virginia Department of Health, or any other agency.
3. For all non-agricultural, self-supplied users of more than 300,000 gallons per month of groundwater, provide the well construction data (well name/ID, well depth, casing depth, screen depth, well diameter); the design capacity for the maximum daily withdrawal; and any limitations on the withdrawal, as established by permits issued by the Virginia Department of Health.
4. Provide the well construction data.
5. Provide a summary of findings and recommendations from source water assessment plans and/or wellhead protection programs.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on January 3, 2013. General comments were received from the Department of Conservation and Recreation and the Department of Game and Inland Fisheries. The Department of Historic Resources and the Marine Resources Commission did not provide comments on this plan.

The Department of Health provided the following comments:

“RSA Wilderness has submitted an application requesting a permitted withdrawal of 3.0 mgd.”

Town of Port Royal Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Town of Port Royal Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or December 20, 2018, whichever comes first:

1. With assistance as offered from the Virginia Department of Health, investigate loan opportunities for system improvements, and keep DEQ apprised of the efforts.
2. Investigate opportunities in demand management, including public outreach for conservation efforts.
3. Provide percentage of impervious cover within the Town limits.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on January 03, 2013. General comments were received from the Department of Conservation and Recreation, the Department of Game and Inland Fisheries and the Department of Historic Resources. The Marine Resources Commission did not provide comments on this plan.

The Department of Health provided the following comments:

“Existing town growth negligible, but major infrastructure rehab is needed before any serious growth could occur. Tidewater mobile home park has two wells of unknown capacity or construction that could be considered [as additional sources] after well yield and draw down tests that could show respectable yields. Tidewater MHP to do yield and drawdown [tests] if considered [as new water sources].”

Prince Edward County and the Town of Farmville Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Prince Edward County and the Town of Farmville Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 15, 2018, whichever comes first:

1. Because withdrawals from the Sandy River Reservoir are currently permitted under state (DEQ) and federal (Corps) regulations, provide the information required by -70 C (source information for community water systems using reservoirs) including the limitations on withdrawal established by the permits.
2. Update all applicable sections of the plan to reflect any new information regarding the Manor Golf Club.
3. Revise the statement found in Section 2.9 of the plan, as follows: "During times of drought, farmers in Prince Edward County may be ~~given the right to~~ authorized to withdraw water directly from the Appomattox River and the Sandy River Reservoir with tanker trucks. ~~However, this right is given to local farmers~~ on a case by case basis after evaluation of the water source and drought conditions by applicable permitting agencies." DEQ, on behalf of the State Water Control Board, makes this determination at the state level [-70 I].
4. Clarify what the term "grandfathered" refers to on page 44 of the plan narrative ["Water use information concerning transient-non-community systems in Prince Edward County is scarce. Most systems are known as "grandfathered systems" and are not required to monitor or report their water usage."] Clarify which regulation is referenced such as the Virginia Water Protection Permit Program Regulation; the Virginia DEQ Water Use Reporting Regulation; Virginia Department of Health Regulations; or some other regulation.
5. Peak daily demand (gpd) projections were provided for each sector by decade. Provide the estimated water demand for each existing or proposed CWS on a peak monthly basis [Note: the Town reliance on upstream storage cannot occur without authorization by a VWP permit].

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on December 3, 2012. General comments were received from the Department of Conservation and Recreation, the Department

of Game and Inland Fisheries, the Department of Historic Resources, and the Marine Resources Commission.

The Department of Health provided the following comments:

1. "The WSP indicates that the Appomattox River has adequate capacity to meet the existing and future demands of the Farmville Community Waterworks; however, historically there is evidence that additionally source water is needed during low-flow or drought conditions."
2. "The WSP indicates that the Town of Farmville's consulting engineer has estimated the safe yield of the Buffalo Creek Watershed as approximately 2 MGD. To date, the Office of Drinking Water has not reviewed and approved a safe yield analysis, as required by the Waterworks Regulations, for withdraw of raw water from the Buffalo Creek Watershed. A preliminary engineering report will need to be developed and submitted to the Office of Drinking Water which evaluates water quality, safe yield, and design of proposed intake, control, and pumping facilities prior to proceeding with final design and construction."
3. "A DEQ withdrawal permit of 6.3 MGD has been issued to Prince Edward County for the existing Sandy Creek Reservoir. The Office of Drinking Water has approved a preliminary engineering report for a WTP for Prince Edward County with the Sandy Creek Reservoir as the water source. To date, neither an evaluation nor a formal review of the Buffalo Creek Watershed water quality has been performed by the Office of Drinking Water [one of the five alternatives discussed in the WSP to provide additional source water to the Farmville WTP]."

Roanoke Valley Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Roanoke Valley Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 8, 2018, whichever comes first:

1. Provide well construction information for all groundwater-based community water systems and self-supplied users in the region.
2. Provide the disaggregation information for each individual community water system and the peak day water use by month for each individual community water system in the planning area.
3. Provide a qualitative description of existing in-stream beneficial uses within the planning area or outside the planning area that may be affected by the point of stream withdrawal.
4. Provide a summary of land use in the region and the aage of impervious cover. Also, provide a summation of the land use where new development may impact the quality of a water source.
5. Provide water use data for self-supplied agricultural users of more than 300,000 gallons per month of surface water and groundwater for agriculture.
6. Provide the estimated water demand for each existing or proposed community water system on both an annual average and peak monthly basis. In addition, estimate water demand for each existing or proposed community water system disaggregated into categories of use appropriate for the system.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on September 7, 2012. General comments were received from the Department of Conservation and Recreation, the Department of Historic Resources, the Department of Game and Inland Fisheries, and the Marine Resources Commission.

The Department of Health provided the following comments:

1. The WPS does not mention the 12-inch diameter US Route 220 waterline that extends from the Western Virginia Water Authority into Franklin County.

2. The WSP mentions Andrew Lewis Place as a consecutive waterworks to the City of Salem. Andrew Lewis Place is served by the Western Virginia Water Authority.
3. The WSP does not mention that the Western Virginia Water Authority provides some water to the Town of Vinton - mainly to a single manufacturing facility.
4. The WSP makes reference to a private community water system that utilizes groundwater within the City of Salem. This statement is incorrect.
5. Page 9 of the Executive Summary notes an existing capacity for the City of Salem as 10.5 MGD. The currently permitted capacity for the City of Salem waterworks is 10.0 MGD.
6. Page 9 of the Executive Summary states "...The City of Salem currently has a water supply surplus of 2.50 MGD based on a limiting capacity of 8.00 MGD". As noted the existing permitted capacity for the City of Salem waterworks is 10.0 MGD. This design capacity is source limited with 8 MGD capacity from the Roanoke River intake and an additional 2.0 MGD capacity from 3 drilled wells that provide additional source water to the WTP.
7. Page 10 of the Executive Summary indicates that the Town of Fincastle owns and operates the public community water system for the Town. Actually the Western Virginia Water Authority operates the waterworks.
8. Page 11 of the Executive Summary indicates that the Town of Troutville purchases some water from the Western Virginia Water Authority. Actually the Town of Troutville purchases water from Botetourt County.
9. Section 2-26 indicates BCPSA owns Woodhaven Nursing Home. Woodhaven Nursing Home is privately owned by Family Health Initiatives, Inc.
10. Section 2-27 Information for Hillcrest Subdivision (PWSID 5019425) is incorrect. It uses information from Hillcrest Mobile Home Park (PWSID 5019430).
11. Section 2-28 Meadow Run MHP has connected to City of Bedford water system.
12. Section 2-33 Waterways Subdivision has connected to Smith Mountain Lake Central Water System.
13. Plan does not mention the SR220 waterline owned by WVA that starts in Roanoke and follows SR220 through Boones Mill and terminates about a mile north of Rocky Mount.

Rappahannock County Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Rappahannock County Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five year review of the plan, or December 20, 2018, whichever comes first:

1. Improve data collection for self-supplied users and provide source data for those self-supplied, non-agricultural users that withdraw more than 300,000 gallons per month of surface water or groundwater (§9 VAC 25-780-70.E).
2. Provide an estimate of projected water demand for the system disaggregated into categories of use appropriate for the system, as required by 9 VAC 25-780-100 D.4.
3. The County should consider placing greater emphasis on water conservation and demand management practices, given the region's dependence upon groundwater sources and the concerns expressed in the Plan regarding future water supply quantity and quality.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on January 3, 2013. General comments were received from the Department of Health, the Department of Conservation and Recreation, the Department of Game and Inland Fisheries, and the Department of Historic Resources. The Marine Resources Commission did not provide comments on this plan.

Region 2000 Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Region 2000 Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 8, 2018, whichever comes first:

1. Per 70B, provide the Design Capacity-Max Daily for community water systems in Bedford and Campbell Counties.
2. Per 80B, provide the peak day water use by month (e.g., one value for each of the twelve months of the year in which data applies) for each community water system.
3. Provide the Maximum Daily Withdrawal (mgd) for the Town of Altavista.
4. Provide a qualitative description of existing in-stream beneficial uses either within or outside the planning area that may be affected by the point of stream withdrawal for each community water system using stream intakes.
5. Provide the break out of percentage of impervious cover for Amherst County and the Town of Amherst.
6. Address the information required by Sections 100 of the regulation, as noted in the checklist.
 - a. Per Section 100D of the regulation, provide estimates of population within the locality served by each community water system.
 - b. Per Section 100D, provide the estimated water demand for each existing or proposed private community water system on both an annual average and peak monthly basis, as well as the estimated water demand for each existing or proposed private community water system disaggregated into categories, for those jurisdictions where this information is not shown.
 - c. Per Section 100D, revise Section 2 to show service area boundaries.
 - d. The projected needs of economic development have been accounted for in the demand projections for Amherst County, Appomattox County, Bedford County, and the City of Lynchburg. As required by Section 100I of the regulation, explain how domestic consumption and the projected needs of economic development have been accounted for in the demand projections for the remaining jurisdictions. Also, elaborate on how domestic consumption has been

accounted for in the demand projections for Amherst County, Appomattox County, Bedford County, and the City of Lynchburg.

7. Provide a statement as to whether or not, and how, current conservation practices, techniques and technologies were considered in the water demand projections, as required by Section 110B of the regulation.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on August 15, 2012. General comments were received from the Department of Conservation and Recreation, the Department of Historic Resources, the Department of Game and Inland Fisheries, and the Marine Resources Commission.

The Department of Health provided the following comments:

1. For CCUSA, report states capacity of 4.4 MGD. WTP is only rated for 4.15 MGD. Current permit is 3.0 MGD due to raw water pump station.
2. NCSA Wintergreen's source has been previously impacted by drought and this waterworks will likely need additional source capacity well before the projected 2060 county-wide date.
3. Gladstone's source is NOT a "stream" it is a groundwater spring.
4. Johnson Senior Center is no longer regulated as a community waterworks.
5. In the Lovington system, Bowling Well Nos. 2 and 3 no longer exist as they were interconnected with Bowling Well No. 1
6. Stoney Creek Village now has 4 wells (Well 26 is missing from the report)
7. Interconnection between CCUSA, Appomattox County, and Town of Appomattox has occurred.
8. Bedford County Public Service Authority High Point WTP uses surface water reservoir (Smith Mountain Lake), not stream.
9. Eagle Eyrie system is an "NTNC" not "C".
10. Information for Hillcrest Subdivision (PWSID 5019425) is incorrect. It uses information from Hillcrest Mobile Home Park (PWSID 5019430).
11. The following waterworks are no longer regulated as community waterworks:

- a. Serving less than 15 connections or 25 persons- Bedford Place #2, Hardy Road MHP Section I, Clearview Estates, Homestead MHP, Lake Forest, Landmark MHP, Liberty Apartments, Snidow
 - b. Connected to Forest Central Water System (PWSID 5019315)- Ashton Ridge, Cedar Hills, VDOT
 - c. Connected to City of Bedford (PWSID 5515050)- Meadow Run MHP
 - d. Connected to Smith Mountain Lake Central Water System (PWSID 5019400)- Waterways
 - e. Connected to Stewartsville Consecutive (PWSID 5019795)- Cherry Hill Estates
 - f. Never regulated as a community waterworks- Blue Ridge Heights, Edwards MHP, Harbour Heights
12. Amherst County Service Authority's James River intake is for emergency use only. Not approved as a regular source.
 13. BCPSA High Point WTP now has a 1 MGD Capacity.
 14. Water supply plan does not include Big Otter River as a water source (part 2.1.6) for City of Bedford.
 15. The supply plan (part 8.2.7) also shows a capacity of 2.0 MGD for City of Bedford, actual permitted capacity is 3.45 MGD.

City of Richmond Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the City of Richmond Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 15, 2018, whichever comes first:

1. There is no information presented on written comments that may have been submitted as part of the public hearing process. Indicate whether or not comments were received. If written comments were received, a copy of the written comments and the locality's written response must be submitted.
2. Ordinances adopted to implement the Drought Response and Contingency Plan are not included. Confirm that Ordinance No. 2002-210-223 (adopted July 30, 2002) and Ordinance No. 220-238-256 (adopted September 23, 2002) are applicable for enforcing the City's drought responses.
3. Provide the value for safe yield for the James River intake rather than reference Army Corps of Engineers permit.
4. Provide the percentage of impervious cover in the city.
5. Provide projected water demand in disaggregated categories, including a line item for wholesale values to neighboring counties, with self-supplied user demand for the thirty- to fifty-year planning period. This cumulative table would promote a better understanding of all demands for the planning area.
6. Provide information regarding the Virginia Department of Health's Source Water Assessment Program results.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on December 3, 2012. General comments were received from the Department of Health, the Department of Conservation and Recreation, the Department of Game and Inland Fisheries, the Department of Historic Resources, and the Marine Resources Commission.

Southwest Virginia Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Southwest Virginia Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five year review of the plan, or December 13, 2018, whichever comes first:

1. Provide copies of any adopted drought ordinances or clarify how Lee County, the City of Norton, and the Towns of Appalachia, Big Stone Gap, Clinchport, Coeburn, Dungannon, Gate City, Jonesville, Nickelsville, Pennington Gap, Pound, St. Paul, and Wise will implement and enforce the drought response and contingency plan.
2. Provide well, reservoir, and stream intake source information for community water systems in the planning region.
3. Provide the maximum daily and average annual purchase and the term of contract/agreement for the Bland County's Rocky Gap/Bastian system.
4. Clarify information regarding the Austinville community water system and the New River Water Authority, which appear to be discussing the same intake on the New River (permitted by DEQ under VWP No. 04-2106). If considered two separate community water systems as presented in the source section of the plan, provide water use data for the New River Water Authority.
5. Provide source information for self-supplied users of greater than 300,000 gallons per month of surface water and groundwater.
6. For the towns in Cumberland Plateau and LENOWISCO PDC areas, provide information for self-supplied residential and business users withdrawing less than 300,000 gallons per month.
7. Information needed to address Section 80 B is listed below:
 - a. Provide water use information for each individual community water system in the following municipalities: Bland County (both municipal community water systems), Buchanan County (Osborne Mountain), Lee County (the nine community water systems that purchase water), Russell County (Castlewood community water system), Smyth County (all nine municipal community water systems), and Wise County (South Mountain, Mill Branch, Blackwood, Flatwoods, Appalachia #1, and Wise #2).

- b. Provide the peak day use data for community water systems within the Mount Rogers Planning District.
 - c. Provide the disaggregated use for the Lee Co PSA- separate disaggregation for each of the nine community water systems that purchase water; Wise Co PSA- separate disaggregation for each of the nine systems that purchase water; and Mt Rogers PDC - separate disaggregation for all municipal community water systems.
 - d. For each community water system using stream intakes, provide a qualitative description of existing in-stream beneficial uses either within or outside the planning area that may be affected by the point of stream withdrawal.
8. To address Section 90 B, verify the primary land uses within the Cumberland Plateau and LENOWISCO PDCs, which is noted as being “primarily residential with limited agricultural and commercial activity,” and provide a discussion of percentage of impervious cover for each of the PDC regions.
 9. Provide a total projected water demand by disaggregate category for all existing or proposed community water systems in the Cumberland Plateau and Lenowisco PDCs. Provide projected demand information for the Castlewood Water and Sewer Authority.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on March 4, 2013. General comments were received from the Department of Conservation and Recreation, and the Department of Historic Resources. The Marine Resources Commission did not provide comments on this plan.

The Department of Game and Inland Fisheries provided the following comments:

“This plan was very confusion [sic]. It was poorly organized and inconsistent from one section to another. There were a number of inconsistencies documented on page 3-8. Some of the values appear incorrect, the math just doesn’t work out. On page 3-8 Washington County use is described as about 2400 mg per year used for residential and commercial uses as well as unaccounted for loss. That works out to an average of above 6.575 mgd. However, on page 3-9 they say the average withdrawal is .6 mgd with a peak day demand of .72 mgd. For uses without info on peak demand they use a factor of 1.2 to predict peak demand but on page 3-9 they cite the Middle Fork Holston use with a documented peaking factor of 2.556. We recommend the authors of the plan use the information available based upon actual use rather than an arbitrary multiplier. In addition, they cite peak day demands that exceed permitted withdrawals. In Lee, Tazewell and Wise Counties they cite surface withdrawals that are either extremely close or exceed the permitted withdrawal but no documentation for expanded need for the future.”

The Department of Health provided the following comment:

“Virginia Carolina Water Authority (1077825) and Fancy Gap (1035581) [are identified as significant waterworks that are excluded from the plan].

Spotsylvania County, VA and the City of Fredericksburg Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Spotsylvania County, VA and City of Fredericksburg Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five year review of the plan, or November 22, 2018, whichever comes first:

1. Provide the drainage area above each stream intake for those Community Water Systems that utilize intakes.
2. Provide the design capacity withdrawal (average daily and maximum daily) for each self-supplied user listed in Table 2-4, and provide any limitations on withdrawals established by permits issued by the SWCB, VDH, or any other agency.
3. Provide well construction data and design capacity average daily data for the ground water users listed in Table 2-3.
4. Clarify the number of self-supplied users of less than 300,000 gallons per month.
5. Provide the actual values in each disaggregated use category shown in Figures 5-4 and 5-5 (Section 5 of the plan), including the total projected water demand for all existing or proposed CWS disaggregated into the categories.
6. Verify whether or not the Ni River intake structure for GM Powertain, as noted on page 2-13 of the plan, has been abandoned and/or physically removed from the river.
7. Provide a discussion of the disaggregated category “sales to other community water systems” in projected demands section of the plan.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on January 3, 2013. General comments were received from the Department of Conservation and Recreation and the Department of Game and Inland Fisheries. The Department of Historic Resources and the Marine Resources Commission did not provide comments on this plan. The Department of Health provided the following comments:

1. "This report presents a number of different options to expand source capacity, but doesn't propose implementing any of them. The report indicates alternative C1, "New Intake on the Lower Rappahannock River," was deemed unfeasible due to water quality concerns, although it remains among the recommended options."
2. "Among the recommended options is wholesale purchase from Stafford Co, although Stafford Co Utilities has not included wholesale delivery of water to Spotsylvania Co in their planning."
3. "Figures used for safe yield in the report for existing reservoirs may not have included sediment or recreation volume. The County has performed more recent evaluations of safe yield that are currently under review by ODW."
4. "WSP projects a 2060 demand from the Spotsylvania Co municipal system and Fredericksburg of 24 MGD, compared with the current combined source capacity of 21.4 MGD. The report doesn't address this shortfall, but the projected demand in 2050 is 19.9 MGD and 2050 is beyond the 30 year WSP minimum required planning period."
5. "There is no discussion of the methodology employed in projecting commercial/industrial growth."
6. Some of the values in the report do not match VDH records: e.g. the design cap of Motts is listed as 13 MGD, with permitted cap of 15 MGD (which matches our records). Some of the values are errors, e.g. New Life for Youth yield is 32 gpm rather than the 320 gpm in the report. These errors are probably of less significance in terms of biasing the reports' conclusions than some of the other issues, namely the uncertainty regarding projecting commercial and industrial growth."

Stafford County Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Stafford County Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 15, 2018, whichever comes first:

1. Provide a list of the agricultural users in the County.
2. Update the plan to reflect the status of the Stafford County, Spotsylvania County, and the City of Fredericksburg Regional Public Water and Sewer Mutual Aid and Assistance Agreement from February 2009. Piped emergency treated water connections were expected to increase the water transfer capacity to between 5 and 10 MGD.
3. Update plan data regarding the Rocky Pen Run Reservoir and intake, including any operational information and permit limitations.
4. Expand upon and update the discussion of the presence or absence of state threatened or endangered species is not discussed in the plan narrative.
5. Update the status of water purchase agreements between Stafford County and Quantico Marine Corps Base.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on September 26, 2012. General comments were received from the Department of Conservation and Recreation, the Department of Historic Resources, the Department of Game and Inland Fisheries, and the Marine Resources Commission.

The Department of Health provided the following comments:

1. "Plan discussed future transfer from Lunga (Quantico MCB) to Beaverdam Run (Smith Lake), but only as a short term measure, not to increase safe yield of Smith. The current agreement between Quantico MCB and Stafford allows for 0.75 MGD transfer to offset treated water sales to Quantico MCB — Camp Barrett, but Stafford has not historically requested that allowance."
2. "Even with Rocky Pen Run project, shortfall of 2.6 MGD is expected by 2050. Shortfall will be made up by water conservation and control of water loss. Plan doesn't address sedimentation of reservoirs or forecast a decrease in safe yield or need for dredging."

Upper James River Basin Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Upper James River Basin Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 15, 2018, whichever comes first:

1. Section 9 VAC 25-780-50.C.1 of the Regulation requires “a description of existing water sources in accordance with the requirements of 9 VAC 25-780-70.” Although an effort to provide this information has been made, data gaps exist for community water systems and self-supplied users in some localities. Provide all of the data requested by 9 VAC 25-780-70 for all community water systems and self-supplied users in all localities.
2. Planning partners should collaborate to present methodologies and data located within the Existing Water Usage and Projected Water Demands chapters in a consistent format to improve data collection, analysis, and presentation, and to provide a comprehensive representation of the entire region.
3. Work with privately-owned community water systems to better represent water use information required by Section 9 VAC 25-780-80 of the Regulation for their systems.
4. Provide a map for each community water system service area, including any proposed expansion areas, for each community water system in the planning region (§9 VAC 25-780-100.D.2).
5. Consider current conservation practices, techniques, and technologies in water demand projections (§9 VAC 25-780-110 B).
6. Update Table 8.1 to include all existing municipal water systems to provide a comprehensive picture of future demand for the region.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on December 3, 2012. General comments were received from the Department of Conservation and Recreation, the Department of Historic Resources, the Department of Game and Inland Fisheries, and the Marine Resources Commission.

The Department of Health provided the following comment:

“Several waterworks are listed in the report that are no longer public water systems. Most have been incorporated into larger existing systems and some are no longer public due to size.”

Upper Shenandoah Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Upper Shenandoah Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 15, 2018, whichever comes first:

1. Provide all of the data requested by 9 VAC 25-780-70 for all community water systems and self-supplied users in all localities.
2. Verification is needed from localities as to whether there is water available for purchase outside of the planning area.
3. Work with privately-owned community water systems to better represent water use information required by Section 9 VAC 25-780-50.C.2 of the Regulation for their systems.
4. Provide a map for each community water system service area.
5. Provide an estimate of future water use projected at the beginning of each decade for Augusta County.
6. Provide an explanation of how the projected needs of domestic consumption, in-stream uses, and economic development have been accounted for in the demand projection for the planning period.
7. Provide a more thorough analysis of potential alternatives to meet future demand shortfalls, including a description of potential water savings from water demand management actions and a description of potential resource impacts for each potential new source as called for in §9 VAC 25-780-130 B of the Regulation.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on August 15, 2012. General comments were received from the Department of Health, the Department of Conservation and Recreation, the Department of Historic Resources, the Department of Game and Inland Fisheries, and the Marine Resources Commission.

Town of Warrenton Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the Warrenton Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 15, 2018, whichever comes first:

1. Provide well construction data: screen depth.
2. Provide all of the data requested by 9 VAC 25-780-80 for all community water systems and self-supplied users.
3. Provide documentation for the 700gpd/acre multiplier used to determine build-out water demand for commercial land uses.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on 9/26/2012. General comments were received from the Department of Health, the Department of Conservation and Recreation, the Department of Historic Resources, the Department of Game and Inland Fisheries, and the Marine Resources Commission.

West Piedmont Regional Water Supply Plan Compliance Determination

Proposed Action:

As documented in the attached Compliance Checklist, staff recommends that the West Piedmont Regional Water Supply Plan be found to comply with 9 VAC 25-780-140.C and F, with the following conditions to be completed in time for the five-year review of the plan, or November 8, 2018, whichever comes first:

1. Provide peak day water use by month for the community water systems located in the Towns of Chatham, Danville, and Gretna.
2. Update all plan data regarding the following facilities, including the operational status and corresponding Virginia Water Protection (VWP) permit or permit exclusion status of each facility, as well as the effects of changes in the status of the facilities upon projected demands for the following:
 - a. The Town of Gretna Whitethorn Creek Reservoir
 - b. Henry County Upper Smith River intake (a VWP permit application for an increased withdrawal was under review by DEQ as of 2013)
 - c. Pittsylvania County Leesville Lake intake (VWP permit 06-2325, not constructed as of 2013)
3. Expand on land cover and land use information to include percentage of impervious cover within a watershed and areas where new development may impact water quality of the source.

State agency comments:

The plan was submitted to state agencies for their evaluation and comment on September 7, 2012. General comments were received from the Department of Conservation and Recreation, the Department of Historic Resources, the Department of Game and Inland Fisheries, and the Marine Resources Commission.

The Department of Health provided the following comments:

“City of Martinsville sources (Beaver Creek Reservoir and Leatherwood Creek) safe yields have been reduced and reflected in Operation Permit dated January 31, 2012. The report indicates that the Patrick County Public Service Authority (PCPSA) operates a public community water system using two groundwater wells. This is incorrect. The PCPSA only consists of distribution piping, receives water from and is operated by the Town of Stuart. The Layman Water Supply Waterworks Operation Permit was revoked on July 5, 2011 because the system was connected to the Town of Stuart water system.”