

Citizens for a Sustainable Water Plan  
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April 5, 2011

**VIA CERTIFIED, RETURN RECEIPT REQUESTED FIRST CLASS U.S. MAIL**

State Water Control Board  
C/O Virginia Department of Environmental Quality  
629 East Main Street  
P.O. Box 1105  
Richmond, VA 23218

RE: Virginia Water Protection Permit Number 06-1574  
Rivanna Water and Sewer Authority (RWSA, the Permittee)

Citizens for a Sustainable Water Plan (CSWP) is a coalition of citizens who live in the City of Charlottesville and Albemarle County. We are concerned about the environmental, financial, and social implications of the 2006 Community Water Plan which includes as its centerpiece, the activities authorized by Virginia Water Protection (VWP) Individual Permit No. 06-1574 and by Permit #06-V1574 issued by the U.S. Army Corps of Engineers.

**A. Request for Permit Termination for Cause**

**9VAC25-210-180(G)**. After notice and opportunity for a formal hearing pursuant to Procedural Rule No. 1 (9VAC25-230-100), a VWP permit can be terminated for cause. Reasons for termination for cause are as follows:

2. The permittee's failure in the application or during the VWP permit issuance process to disclose fully all relevant facts or the permittee's misrepresentation of any relevant facts at any time;
4. A determination by the board that the permitted activity endangers human health or the environment and can be regulated to acceptable levels by VWP permit modification or termination;
5. A change in any condition that requires either a temporary or permanent reduction or elimination of any activity controlled by the VWP permit;

**THEREFORE, pursuant to 9VAC25-210-180(G), CSWP requests termination of Permit No. 06-1574 for cause:**

**A-1. For the permittee's failure to disclose fully all relevant facts, and for misrepresentation of relevant facts, during the permit issuance process and subsequent to the issuance of the permit.**

Justification and Evidence: Termination is warranted because the permit decision relied on the information contained in the Permit Support Document and much of that information has been proven to be incomplete or inaccurate. Further, subsequent to the issuance of the permit, significant new information and new studies have become available and there have been material and substantive changes in the circumstances on which the issuance decision was based. The permittee may not have formally and fully disclosed or accurately represented new information and new studies that were performed subsequent to the issuance of the permit.

New information and data have become available which demonstrate that several aspects of the original basis for selection of the permitted activity as the least environmentally damaging alternative may have been misrepresented or were materially incomplete and perhaps materially false. See descriptions in B-1 and B-2, below. See the attached letter from CSWP to the DEQ and USACE, Norfolk District, for a detailed comparison of statements in the Permit Support Document and new information and new studies that show discrepancies, internally conflicting information, and material and substantive changes.

**A-2. Because the permitted activity endangers the environment and can be regulated to acceptable levels by permit modification or termination.**

Justification and Evidence: In order to properly consider the extent and permanence of beneficial and/or detrimental effects of the proposed project on the environment, including public uses of the area impacted, it is necessary to terminate the permit because the permitted activity endangers the environment significantly more than alternatives that must be evaluated after completion of the projected water demand (see B-1, below) and new information regarding dredging of the SFRR (see B-2, below). Dredging would have significantly less permanent impact on the environment; specifically, dredging would have less impacts that endanger streams and wetlands.

The permitted project involves a concrete dam and a proposed maximum pool elevation that is approximately 45 feet above the current pool of the LRMD. The permittee will seek

a modification of the permit to accommodate a modified project which is an earthen dam on a base that would support an ultimate dam height to raise the pool approximately 42 feet above the current pool. The permittee has not released the differences in stream impacts and permanent wetlands impacts, although it is obvious on the surface that the footprint of the earthen dam is significantly greater than the footprint of the permitted concrete dam and will impact more stream length and likely will have more wetlands impacts. The location of the existing LRMD and the proposed dam is in the center of the Ragged Mountain Natural Area (RMNA) which consists of 988 acres of hardwood trees, public trails, and natural bird and wildlife habitat. The construction of any new dam will have extensive and permanent detrimental effects on the RMNA. Approximately 200 acres will have to be clear cut to accommodate the dam footprint and the modified reservoir pool raise of +42 feet. The RMNA, owned by the City of Charlottesville, will suffer extensive and permanent detrimental effects on public and private uses to which the area is suited. Adjacent property owners and citizens of the City and surrounding areas regularly enjoy the RMNA and that enjoyment will be significantly impaired by the proposed dam and reservoir. These impacts that endanger the environmental can be regulated to acceptable levels by reevaluation of new information and new studies, and subsequent reevaluation of alternatives to meet the projected 30- to 50-year water use needs for the Urban Service Area.

**A-3. Because there have been changes in conditions that require a permanent reduction or elimination of activities controlled by the permit.**

Justification and Evidence: The purpose and need for the project is called into question because of changes in two conditions on which the permitted project was based have occurred that could require a permanent reduction or elimination of the permitted activities and adverse impacts on streams and wetlands: (1) the sustained reduction in water use despite population increase and the new water demand analysis due before November, 2011 (see B-1, below); and (2) evidence that dredging to significantly restore the capacity of the SFRR would cost significantly less than stated in the Permit Support Document (see B-2, below). The very high cost reported by the permittee (and subsequently revised significantly upward) was the basis for dismissal of serious consideration of dredging as a feasible and less environmentally damaging alternative. Given recent decisions by the RWSA Board of Directors to contract for preparation of a new water demand analysis and to move towards dredging, it is appropriate to terminate the permit pending the results of the analysis and the results of solicitation for proposals to dredge. With those results, a new safe yield analysis will be appropriate to properly consider whether permanent reduction or elimination of impacts on streams and wetlands can reasonably and feasibly be

accomplished by an alternate project that accomplishes the objective of satisfying future water supply need for the Urban Service Area with significantly less impact on streams and wetlands.

## **B. Request for Permit Modification or Revocation: New Information**

**9VAC25-210-180(D)** Modification, revocation and reissuance, or termination may be initiated by the board, upon the request of the permittee, or upon the request by another person at the board's discretion under applicable laws or the provisions of subsections D through H of this section. A VWP permit may be modified, or revoked and reissued with permittee consent, when any of the following developments occur:

2. When new information becomes available about the operation or activity covered by the VWP permit that was not available at VWP permit issuance and would have justified the application of different VWP permit conditions at the time of VWP permit issuance (General Condition M, Permit Modification);

**THEREFORE, pursuant to 9VAC25-210-180(D)(2), CSWP requests modification of Permit No. 06-1574 because new information has become available about the activity that was not available when the permit was issued which would have justified different permit conditions. Alternatively, CSWP requests suspension of the permit, suspension of action on any request to modify the permit, and a stay of implementation of any of the conditions of the permit until such time as the new information is taken into account, including anticipated new information that will result from ongoing and anticipated activities of the permittee.**

**B-1. New information about water use in the Urban Service area has become available that would have justified the application of different permit conditions, and a new projected water demand analysis will be available later this year.**

Justification and Evidence: The Permit Support Document<sup>1</sup> cited a water demand projection that was prepared in 2004<sup>2</sup> using data through 2001. Actual water use data reported by the permittee has fallen significantly in the past 8 years (characterized in the consultant's oral presentation as a 22% reduction)<sup>3</sup>, despite an increase in population

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<sup>1</sup> <http://rivanna.org/documents/community/permitsupportdocument.pdf>

<sup>2</sup> <http://rivanna.org/documents/community/demandanalysis.pdf>

<sup>3</sup> [http://rivanna.org/documents/community/Review\\_of\\_2004\\_Water\\_Demand\\_Analysis\\_Swartz.pdf](http://rivanna.org/documents/community/Review_of_2004_Water_Demand_Analysis_Swartz.pdf)

similar to that projected in the 2004 analysis. The RWSA's FY 2012 budget<sup>4</sup> bases revenue projections for FY11 on the same assumptions for water consumption that were used in the FY10 budget (i.e., no increase in water use for the next 12 month period). The fact that the reduction in use has been sustained over several years calls into question the validity of the 2004 projection that the Urban Service Area will require 18.7 MDG by the year 2055. The entire justification for the large new dam near the location of the existing Lower Ragged Mountain Dam (LRMD), and a new pipeline to convey water from the South Fork Rivanna Reservoir (SFRR) to LRMD is predicated on that estimate. Further, at its March 22, 2011 meeting, the RWSA Board of Directors approved a contract with AECOM Technical Services, Inc., to develop a new water demand analysis using current methodologies that will be based on up-to-date water use data, current population projections, and current comprehensive plans. The results of this analysis are due prior to November, 2011. CSWP asserts that, given the sustained drop in demand and the recent review of the previous demand projection requested by the RWSA that recommended a "step-down" in the projection<sup>5</sup> (which was not acted on), there is a reasonable expectation that the anticipated new demand analysis will not support the stated need for permitted project. If that is the case, it is conceivable that a lower projected demand can be met either by a smaller project or an alternative project, both of which would have significantly less adverse impact on streams and wetlands.

**B-2. New information about the current capacity of the South Fork Rivanna Reservoir, the rate of sedimentation, the anticipated post-dredge capacity, and the cost of dredging has become available that would have justified the application of different permit conditions, and a solicitation for dredging is anticipated later this year.**

Justification and Evidence: The Permit Support Document (page 68) reports on an October 27, 2005 meeting with regulators. Based on this meeting the permittee was allowed to summarily eliminate dredging of the SFRR from the short list of alternatives due to what were characterized as "disproportionate costs," despite the fact that "maintaining and expanding an existing element of the existing water supply system at equal cost and with minimal environmental impact, was preferable to constructing a new element of the water supply system, with unclear long term consequences." The Permit Support Document indicates the permittee estimated the cost to dredge the SFRR would be \$145 million (the permittee subsequently revised the projected 2007 cost estimate upward to as high as \$223 million<sup>6</sup>). The 2010 Dredging Feasibility Study<sup>7</sup> conducted

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<sup>4</sup> [http://rivanna.org/documents/agendas/agenda\\_feb22\\_2011\\_doc7a.pdf](http://rivanna.org/documents/agendas/agenda_feb22_2011_doc7a.pdf)

<sup>5</sup> [http://rivanna.org/documents/community/Review\\_of\\_2004\\_Water\\_Demand\\_Analysis\\_Swartz.pdf](http://rivanna.org/documents/community/Review_of_2004_Water_Demand_Analysis_Swartz.pdf)

<sup>6</sup> [http://evillewater.info/cost\\_estimate\\_dredging\\_225.pdf](http://evillewater.info/cost_estimate_dredging_225.pdf)

by HDR Engineering, Inc., found more capacity in the SFRR than was previously reported (i.e., less accumulated sediment); HDR also determined that the rate of sedimentation is half that reported in the Permit Support Document. HDR concluded that the cost to dredge would be \$27-\$40 million, less than one-third of the estimate reported in the Permit Support Document. At its March 22, 2011, meeting, the RWSA Board of Directors adopted guidelines, as required by State law, that allow the RWSA to use a method of procurement that allows responding proponents to, for example, propose alternative approaches, including different ways to manage the dredged materials and different timelines. Using this procurement method is expected to result in even lower costs to restore the SFRR to nearly its original capacity. At the same meeting, the RWSA Board authorized staff to take the next step towards developing an RFP for dredging.

### **C. Request for Permit Modification or Revocation: Reopener Clause**

**9VAC25-210-180(D)** Modification, revocation and reissuance, or termination may be initiated by the board, upon the request of the permittee, or upon the request by another person at the board's discretion under applicable laws or the provisions of subsections D through H of this section. A VWP permit may be modified, or revoked and reissued with permittee consent, when any of the following developments occur:

5. When changes occur that are subject to "reopener clauses" in the VWP permit (General Condition J, Reopener);

**Permit No. 06-1574, General Condition J, Reopener**, allows reopening of the permit for the purpose of modifying the conditions if the circumstances on which the permit was based have materially and substantially changed, or special studies conducted by board or the permittee show material and substantial change since the permit was issued, thereby constituting cause for permit modification or revocation or reissuance.

**THEREFORE, pursuant to 9VAC25-210-180(D)(5), and General Condition J, CSWP requests modification of Permit No. 06-1574 because changes have occurred and the circumstances on which the permit was based have materially and substantially changed and special studies conducted by the permittee show material and substantial change since the permit was issued.**

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<sup>7</sup> [http://rivanna.org/documents/sfrredredging/report\\_alternatives.pdf](http://rivanna.org/documents/sfrredredging/report_alternatives.pdf)

**C-1. The circumstances on which the permit was based, specifically the water demand projection, have changed, documented by the permittee's data and, in part, by a study conducted by the permittee. A new projected water demand analysis is being conducted by the permittee is expected to show material and substantial change in the projected water use which was the basis for the permitted project.**

Justification and Evidence: The Permit Support Document<sup>8</sup> cited a water demand projection that was prepared in 2004<sup>9</sup> using data through 2001. Actual water use data reported by the permittee has fallen significantly in the past 8 years (characterized in the consultant's oral presentation as a 22% reduction)<sup>10</sup>, despite an increase in population similar to that projected in the 2004 analysis. The RWSA's FY 2012 budget<sup>11</sup> bases revenue projections for FY11 on the same assumptions for water consumption that were used in the FY10 budget (i.e., no increase in water use for the next 12 month period). The fact that the reduction in use has been sustained over several years calls into question the validity of the 2004 projection that the Urban Service Area will require 18.7 MDG by the year 2055. The entire justification for the large new dam near the location of the existing Lower Ragged Mountain Dam (LRMD), and a new pipeline to convey water from the South Fork Rivanna Reservoir (SFRR) to LRMD is predicated on that estimate. Further, at its March 22, 2011 meeting, the RWSA Board of Directors approved a contract with AECOM Technical Services, Inc., to develop a new water demand analysis using current methodologies that will be based on up-to-date water use data, current population projections, and current comprehensive plans. The results of this analysis are due prior to November, 2011. CSWP asserts that, given the sustained drop in demand and the recent review of the previous demand projection requested by the RWSA that recommended a "step-down" in the projection<sup>12</sup> (which was not acted on), there is a reasonable expectation that the anticipated new demand analysis will not support the stated need for permitted project. If that is the case, it is conceivable that a lower projected demand can be met either by a smaller project or an alternative project, both of which would have significantly less adverse impact on streams and wetlands.

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<sup>8</sup> <http://rivanna.org/documents/community/permitsupportdocument.pdf>

<sup>9</sup> <http://rivanna.org/documents/community/demandanalysis.pdf>

<sup>10</sup> [http://rivanna.org/documents/community/Review\\_of\\_2004\\_Water\\_Demand\\_Analysis\\_Swartz.pdf](http://rivanna.org/documents/community/Review_of_2004_Water_Demand_Analysis_Swartz.pdf)

<sup>11</sup> [http://rivanna.org/documents/agendas/agenda\\_feb22\\_2011\\_doc7a.pdf](http://rivanna.org/documents/agendas/agenda_feb22_2011_doc7a.pdf)

<sup>12</sup> [http://rivanna.org/documents/community/Review\\_of\\_2004\\_Water\\_Demand\\_Analysis\\_Swartz.pdf](http://rivanna.org/documents/community/Review_of_2004_Water_Demand_Analysis_Swartz.pdf)

**C-2. The circumstances of the permit was based have changed based on a study conducted by the permittee, specifically relating to current capacity of the South Fork Rivanna Reservoir, the rate of sedimentation, the anticipated post-dredge capacity, and the cost of dredging. A solicitation for dredging is anticipated later this year.**

Justification and Evidence: The Permit Support Document (page 68) reports on an October 27, 2005 meeting with regulators. Based on this meeting the permittee was allowed to summarily eliminate dredging of the SFRR from the short list of alternatives due to what were characterized as “disproportionate costs,” despite the fact that “maintaining and expanding an existing element of the existing water supply system at equal cost and with minimal environmental impact, was preferable to constructing a new element of the water supply system, with unclear long term consequences.” The Permit Support Document indicates the permittee estimated the cost to dredge the SFRR would be \$145 million (the permittee subsequently revised the projected 2007 cost estimate upward to as high as \$223 million<sup>13</sup>). The 2010 Dredging Feasibility Study<sup>14</sup> conducted by HDR Engineering, Inc., found more capacity in the SFRR than was previously reported (i.e., less accumulated sediment); HDR also determined that the rate of sedimentation is half that reported in the Permit Support Document. HDR concluded that the cost to dredge would be \$27-\$40 million, less than one-third of the estimate reported in the Permit Support Document. At its March 22, 2011, meeting, the RWSA Board of Directors adopted guidelines, as required by State law, that allow the RWSA to use a method of procurement that allows responding proponents to, for example, propose alternative approaches, including different ways to manage the dredged materials and different timelines. Using this procurement method is expected to result in even lower costs to restore the SFRR to nearly its original capacity. At the same meeting, the RWSA Board authorized staff to take the next step towards developing an RFP for dredging.

#### **D. Request for Public Process and Public Hearing**

**CSWP requests a public hearing to afford interested persons the opportunity to submit factual data, views and comments.**

Justification and Evidence: The public interest was not adequately considered prior to submission of the permit application, during permit evaluation, and subsequent to permit

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<sup>13</sup> [http://cvilleywater.info/cost\\_estimate\\_dredging\\_225.pdf](http://cvilleywater.info/cost_estimate_dredging_225.pdf)

<sup>14</sup> [http://rivanna.org/documents/sfrrdredging/report\\_alternatives.pdf](http://rivanna.org/documents/sfrrdredging/report_alternatives.pdf)

issuance. Further, the public interest has not been adequately considered since circumstances relating to the authorized activity have changed (see B-1 and B2, above). In January 2011, CSWP transmitted a letter to the Virginia Department of Water Quality and the USACE, Norfolk District (attached, receipt confirmed). Neither the DEQ nor the Corps has acknowledged or responded. CSWP is on record expressing significant objections to the authorized activity over several years before numerous public meetings of the City Council and the RWSA Board of Directors, in the press, and during public meetings and forums prior to issuance of the permit. Furthermore, during the 30 day notice permit during which requests for a public hearing on the permit application could be submitted, a letter was sent by a member of CSWP to the Virginia Department of Environmental Quality. The letter was reported "lost in the DEQ mail room" and subsequently dismissed.

Citizens for a Sustainable Water Plan requests that the State Water Control Board and the Virginia Department of Environmental Quality respond to this letter within 15 business days after receipt. Further, if a request for modification of Virginia Water Protection Permit Number 06-1574 is received before the SWCB/DEQ respond, CSWP requests that no action be taken pending response and resolution of the requests and matters raised in this letter is provided.

Sincerely,

*Rhonda Quinn, Chair*  
*Beth Mooney, Sec'y*  
*Bob Ferguson, TREAS.*

*Joanna Salicris, At-Large*

Executive Committee, Citizens for a Sustainable Water Plan

Attachment: CSWP to DEQ/USACE (dated December 13, 2010)

Cc: District Engineer, USACE Norfolk District  
City Council, City of Charlottesville,  
Board of Supervisors, Albemarle County  
Thomas L. Frederick, Executive Director, Rivanna Water & Sewer Authority  
James D. Brown, Esq.