

Attachment 1A
MEETING SUMMARY
DIRECTORS OF UTILITIES COMMITTEE
March 2, 2011
Newport News

1. Summary of February 2, 2011 Meeting of the Directors of Utilities Committee

The Summary of the February 2, 2011 meeting of the Directors of Utilities Committee was approved.

HRPDC staff announced that the H2O - Help To Others - Program received the IRS determination that the program is exempt from Federal Income Tax under 501(c)(3) of the IRS Code. HRPDC staff will proceed with coordinating the advisory committee and fund raising and public education campaigns.

2. UASI Grant - Request for Proposals (RFP)

The revised draft RFP for the “Water Infrastructure Assessment and Emergency Response Training” project was approved, and the schedule for RFP release and contract award was updated to include the RFP pre-proposal conference on March 25, 2011 (instead of March 24, 2011). HRPDC staff will proceed with the follow-up actions described in the schedule. It was noted that release of the UASI grant funds is still pending.

The Committee agreed that the RFP selection panel will be comprised of four locality representatives and one HRPDC representative. The selection panel will participate in the pre-proposal conference on March 25, 2011 and the vendor interviews on April 28, 2011.

- ACTION:**
1. The revised draft RPF was approved for finalization and release.
 2. The Committee agreed to the RFP selection panel membership as follows:
 - Suffolk representative
 - Norfolk representative
 - Mr. Parimal Patel, Newport News Waterworks
 - Mr. John Edwards, Surry
 - HRPDC representaive

3. Committee Decision-Making Procedures

The Committee discussed the Draft Guidelines for Committee Actions, specifically the number of Committee members required for a quorum and agreed to revise the guidelines to specify that six members or their designated representatives will

constitute a quorum. The Committee also considered a formal public comment period for meetings; it was clarified that although public meetings are open, they differ from public hearings in that there is no requirement to provide for an oral comment period. A formal comment period will not be included in the agendas. There were no further comments on the document.

ACTION: Staff will email the revised document to the Committee for comment. Any further revisions will be discussed at the April meeting. Otherwise, the document will be considered approved by the Committee.

4. Uranium Mining

Mr. Tom Leahy briefed the Committee with a presentation on the “Preliminary Assessment of Potential Impacts of Uranium Mining in Virginia on Drinking Water Sources” initiated by the City of Virginia Beach. Committee questions (*italicized*) and discussion are summarized as follows:

- *Following a flood/containment cell failure event, would VDH deny use of the source? Would VDH allow pumping from Lake Gaston when radiation levels in the water column are near the Maximum Contaminant Level (MCL)?*
It is unclear how VDH would respond to such a situation. Current, radiation levels in drinking water are 5-10% of the MCL. With a flood/failure event, levels could increase but remain below the MCL. Approximately 50% of the radiation could be removed by water treatment plants (WTPs); although the water would be safe, the public relations and public perception issues remain. Additionally, the disposal of the contaminated sludge from the WTP could be very costly and problematic. All WTPs that receive water from the Norfolk system would be affected by the sludge disposal problem.
- *Has the Nuclear Regulatory Commission provided guidance on catastrophe response?*
Their position is that containment cells will not fail. They provide design specifications, with safety features stipulated to withstand probable maximum precipitation (PMP) events.
- *Has the City of Virginia Beach done any analysis of the financial impacts to the region?*
No, not at this point. Compared to other communities closer to the source, Virginia Beach is well positioned to shut down the Lake Gaston source for a few months, but not for 2 years should drought conditions prolong the presence of radiation in the water column. If a flood/failure event were to occur, the radiation levels would be temporary and the utility would not have to abandon the pipeline and water treatment plant.

- *Everyone in the region benefits from Virginia Beach being proactive in this effort.* It has been the public's perception that water quality impacts from uranium mining would only occur in Virginia Beach. Other localities that use water from the Norfolk system should co-advocate Virginia Beach's position, and the City is available to discuss the issue with other localities.
- *The Sierra Club is also interested in the issue and the interconnections between area water systems. Should a flood/failure occur, there will be ample warning time to stop pumping Lake Gaston water and to prevent radioactivity from entering area reservoirs.*

The model indicates that after a flood/failure event, it would take one year for water quality to recover under normal precipitation and two years in drought conditions. Currently, there are six-month periods where rainfall is such that Lake Gaston water is not required. Virginia Beach may not have to use the Lake Gaston source at all following a flood/failure event, and the City would have adequate time to conduct testing and prioritize water use.

The mining company is considering deep shaft mining techniques where mine tailings are mixed with concrete and returned to the bore hole. This adds to costs and the company is not required to use such techniques. This technique would decrease the risks of a failure occurring and impacting water supplies.

- *Who in the General Assembly has been the most interested in this issue?* Dominion Power supporters advocating energy independence have expressed their support. There has been talk that the moratorium on uranium mining will likely be lifted in 2012 if Republicans have a majority in the State Senate.

Handout:

City of Virginia Beach Presentation: "City of Virginia Beach Uranium Mining Impact Study, Lake Gaston Water Safety Council, February 23, 2011"

ACTION: No action.

5. Interbasin Transfers

The Committee discussed legislation introduced during the 2011 session by Senator Frank M. Ruff, Jr. (Senate Bill No.1307) and Delegate Thomas C. Wright, Jr. (House Bill No. 2402) regarding the regulation of interbasin transfers of water. SB 1307 was withdrawn, however it will likely be resubmitted next year.

Ms. Kristen Lentz recommended that Hampton Roads localities stand uniformly against such legislation, as regulations for interbasin transfers are unnecessary and onerous. During the discussion, it was noted that North Carolina has regulations in place regarding interbasin transfers and that Senator Ruff and Delegate Wright represent areas near Kerr Reservoir. Other areas of the state are fearful that Hampton Roads and

Richmond represent future water transfers. However, Virginia Beach is bound by the Federal Energy Regulatory Commission (FERC) license until 2044 which stipulates that the City cannot request additional withdrawals from Lake Gaston. The Committee commented that the definition of a “basin” is not clear; that there should be state support for streamlining the development of new sources. It was noted that the Virginia Water Protection (VWP) Permit Program already provides regulatory oversight, and that language could be added to the VWP Program to clarify what constitutes an interbasin transfer and what criteria should be applied in considering such transfers.

The Committee agreed to take a position against any new regulations for interbasin transfers. As the proposal is anticipated to be a topic of discussion at the next Water Supply Advisory Committee meeting, the Committee agreed that that HRPDC Deputy Director John Carlock, Hampton Roads representative on the State Advisory Committee, should communicate the Utility Director’s position to the state committee.

Handout:

City of Norfolk Department of Utilities: “Public Water Supply System Concerns Related to Interbasin Transfers as Part of State Water Supply Planning (Draft 2/10/2011)”

ACTION: The State Advisory Committee will be advised of the Directors of Utilities Committee’s position against any new regulations relating to interbasin transfers.

6. Staff Reports

A. Capacity Team Update: Mr. Craig Ziesemer summarized the Capacity Team’s continuing efforts to develop business rules, providing a benchmark standard for evaluation of rehabilitation plans. The proposal, which is in the draft stage, provides for consistency in scope development, reduction of I/I flows, and investment by the utilities. Mr. Ziesemer noted the expectation that the peak flow commitments made per the rehabilitation plans are to be maintained.

It was clarified that the impacts of new development should be addressed through 2030 in basin-level growth plans for both existing and potential basins; therefore, the peak flow commitment should anticipate planned growth through 2030. New development or redevelopment must be jointly approved by HRSD and localities for flow acceptance and capacity assurance. Once projects are approved, the locality base flow, as well as peak flow, is increased. Ziesemer emphasized that it is in the interest of the utilities to send representatives to Capacity Team meetings to participate in the planning process.

B. Private Property Inflow/Infiltration (I/I) Abatement Program: HRPDC staff previewed a draft of the brief to be presented at the March 17th meeting of the Commission and requested input from the Committee. Comments are summarized as follows:

- It was noted that the peak flow commitment is married to private property rehabilitation work. Large I/I contributors were identified through the SSES process. While work on the public side can be planned, the question remains as to how to address the I/I contribution from private property.
 - The group discussed the typical private property I/I contribution and estimated ranges from 30-50% and from 1/3 to 2/3.
 - Slide 2: It was clarified that the area affected by the Consent Order does not extend past Gloucester.
 - Slide 8: P3 enforcement should be clarified. Reduction of public and private I/I flows is typically more cost effective than conveying and treating flows. HRSD's capital plan incorporates the work to be done under the Regional Private Property I/I Abatement Program. It is possible that the general rate structure will be adjusted to accommodate costs.
- C. Regional Water Supply Plan: Staff updated Committee members, as work on the plan continues with the review draft of Section 6/7 forthcoming.
- D. HRPDC Retreat Summary: HRPDC staff provided a summary of the Water Resources and Regional Planning Departments' February presentations at the HRPDC retreat. The Commission was supportive of the development of a regional groundwater policy and the project will be included in the work plan for FY2012. The Commission was also receptive to the Planning Department's regional priority data needs and development of land use categories. Staff noted that the delineation of land use categories may help with source water protection.

7. Other Business

- A. Ms. Lentz inquired with the other localities as to the practice of allowing commercial entities to call in irrigation submeter readings to receive credits on wastewater bills. Most localities indicated that this was not permitted, although for existing submeters, Newport News Waterworks allows such crediting via call-in reporting to HRSD. Newport News Waterworks anticipates that this issue will come before the City Council.

ACTION: HRPDC staff will conduct an email poll of committee members and the issue will be included on the next Committee meeting agenda for further discussion.

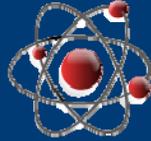
- B. Mr. Leahy asked if any other localities besides Virginia Beach set their water rates in thousands of gallons. Gloucester and Isle of Wight indicated that they also do so.

- C. The Committee discussed the consistency of information reported for the annual water rate study. Portsmouth reports the water rate in terms of total cost to the customer, including the utility tax. Other localities have excluded the tax. For future reporting, HRPDC staff will request both the rate and tax information.

Committee Meeting Sign-In Sheet

Locality/Agency	Representative	Representative	Representative	Representative
HRSD	Chris Stephan			
Chesapeake	Jim Walski			
Franklin				
Gloucester	Martin Schlesinger			
Hampton				
Isle of Wight	Frank Halton			
James City County				
Newport News	Eileen Leininger	Steve Land	Everett Skipper	
Norfolk	Kristen Lentz			
Poquoson	Ellen Roberts			
Portsmouth	Bryan Foster			
Smithfield	Bill Hopkins			
Southampton				
Suffolk	Craig Ziesemer			
Surry	John Edwards			
Virginia Beach	Tom Leahy	Bob Montague		
Williamsburg				
Windsor				
York				
HRPDC	Whitney Katchmark	Tiffany Smith		
HRPDC				
New Kent				
DEQ				
EPA				
USGS				
VDH				
VDH				
VDH				
AECOM				
AquaLaw				
Brown & Caldwell				
CH2M-Hill				
Christian Barton				
Hurt & Proffitt, Inc.				
McGuire Woods				
Prism C.E.				
Remsa, Inc.	Joe Duffy			
Troutman Sanders				
URS				

**City of Virginia Beach
Uranium Mining Impact Study**



**Lake Gaston Water Safety
Council**

February 23, 2011

Uranium Mining Basics

- There are several ways to mine uranium, but in Virginia open pit, hardrock mining is most likely
- Uranium ore is excavated from deep under ground
- The ore is milled into very small sand and clay-like particles
- Uranium is leached from the ore and recovered as uranium oxide
- Leftover ore sediments are known as **Uranium Mill Tailings**

Uranium Mill Tailings Basics

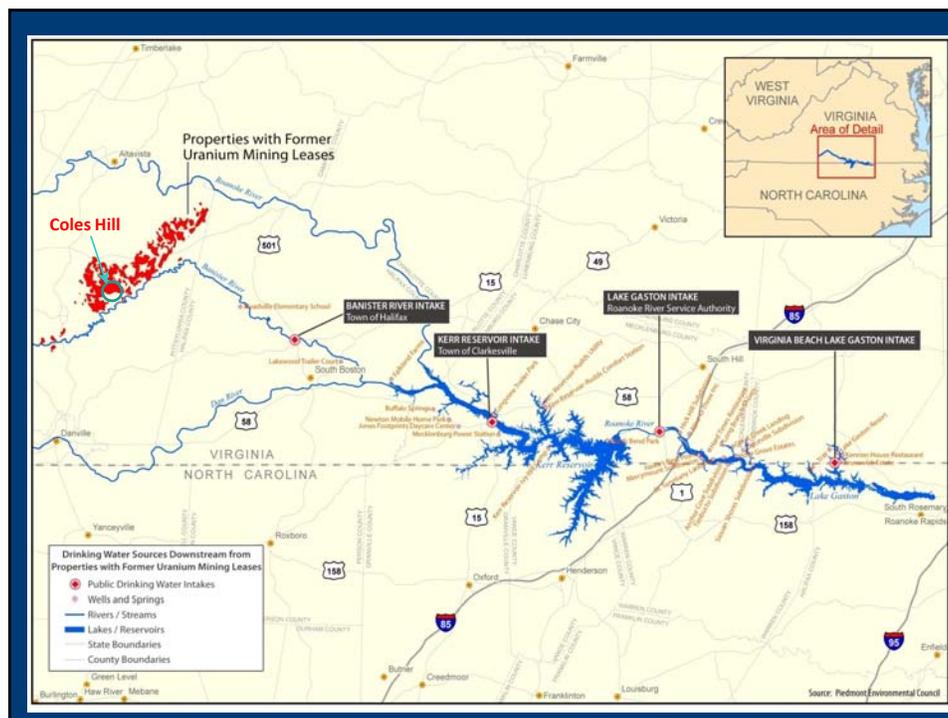
- One ton of uranium ore produces 2 lbs of uranium oxide (yellowcake) and 1,998 lbs of uranium mill tailings
- Unlike buried ore, tailings are susceptible to transport by air & water
- Overburden, clay, and liners are used to construct confinement cells and caps to confine the tailings
- Mill tailings retain 85% of the original radioactivity for >>> 300,000 years

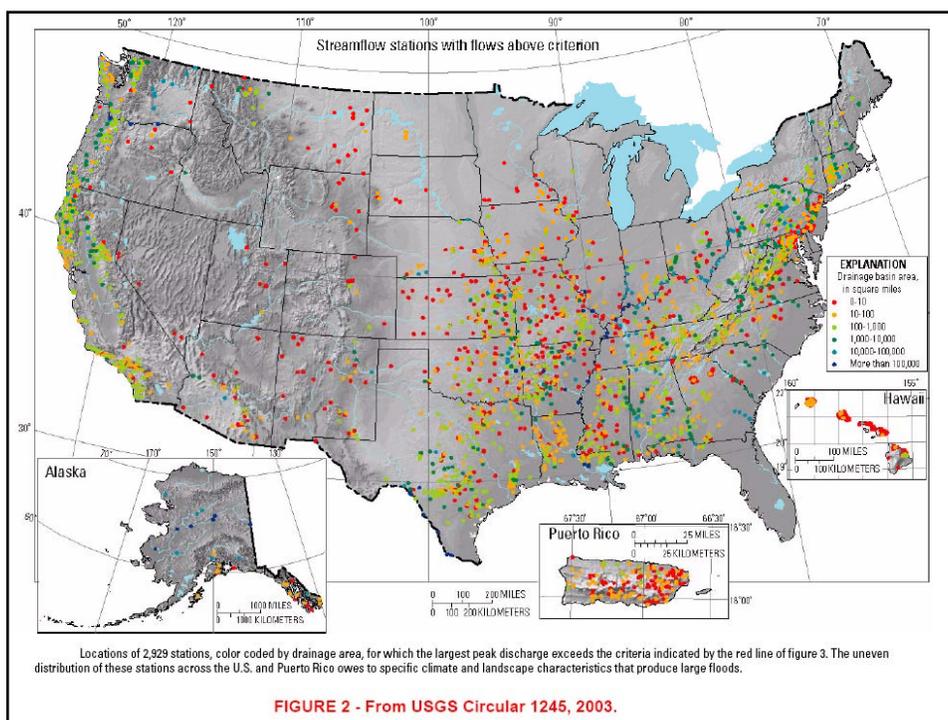
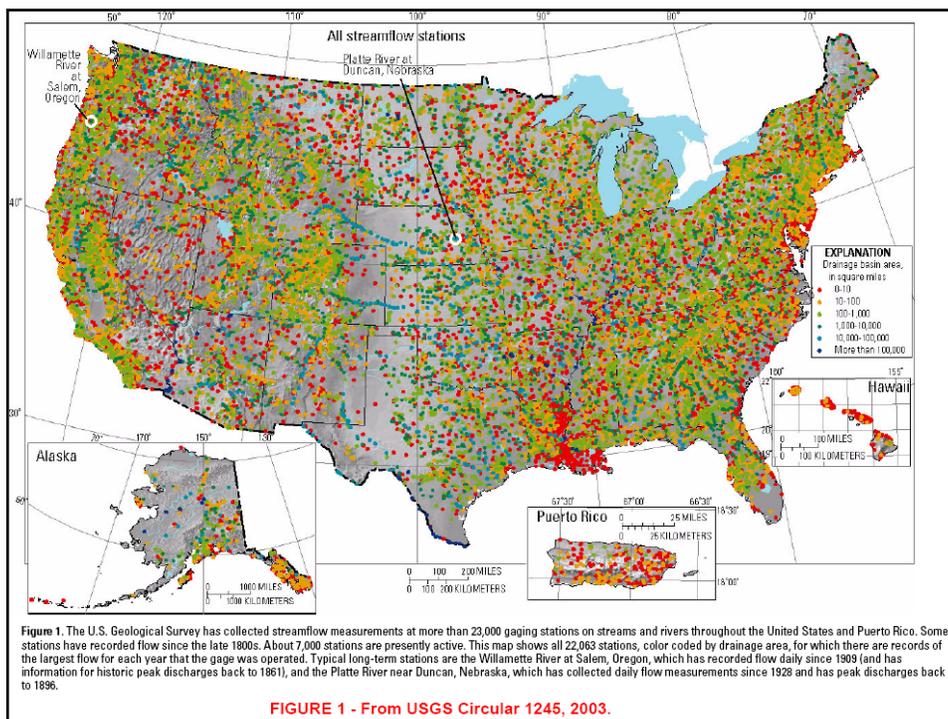
Uranium Mill Tailings

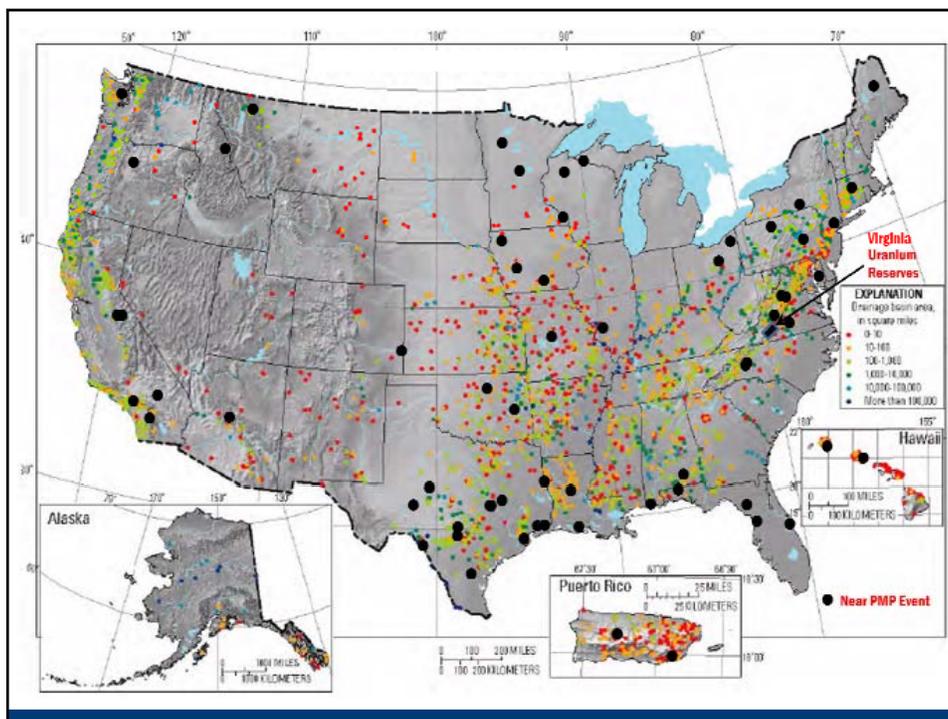
- Cole's Hill Site - 100 million pounds of uranium yellowcake
- 30 million cubic yards of mill tailings
- 6 – 12 confinement cells, each 40 acres and 2.5 – 5.0 million cubic yards
- Mount Trashmore = 20 acres and 1.3 million cubic yards
- Depending upon groundwater, much of the cells may be below ground

Uranium Mill Tailings Legacy

- Historically, tailings were not properly confined resulting in radioactive contamination of ground and surface waters
- 1978: Federal government stepped in to remediate – UMTRCA (DOE, NRC)
- Uranium mining industry does not dispute past issues with mill tailings
- They say that modern confinement cell design and NRC regs will protect ground and surface waters
- **But what if something goes wrong?**



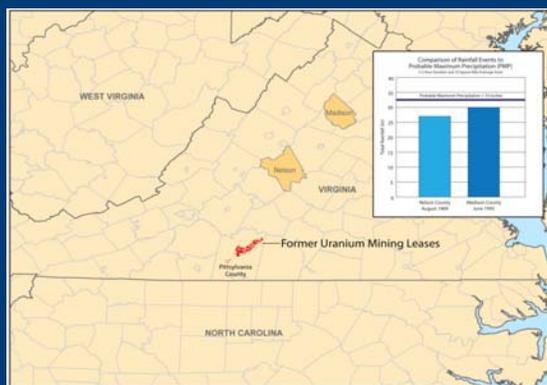




Near PMP Storms in Virginia

■ Examples:

- Nelson County – August 1969
 - 27 – 31 inches in 8-hours (Hurricane Camille)
- Madison County – June 1995
 - 30 inches in 14 hours



Task and Purpose of the Study

- Model and estimate the water quality impacts from a storm-based breach of a uranium mill tailings confinement structure, which results in a large release of mill tailings downstream to the Banister or Roanoke rivers
- Provide the results to the National Academies of Sciences Committee on Uranium Mining for consideration as part of its study due Dec 2011

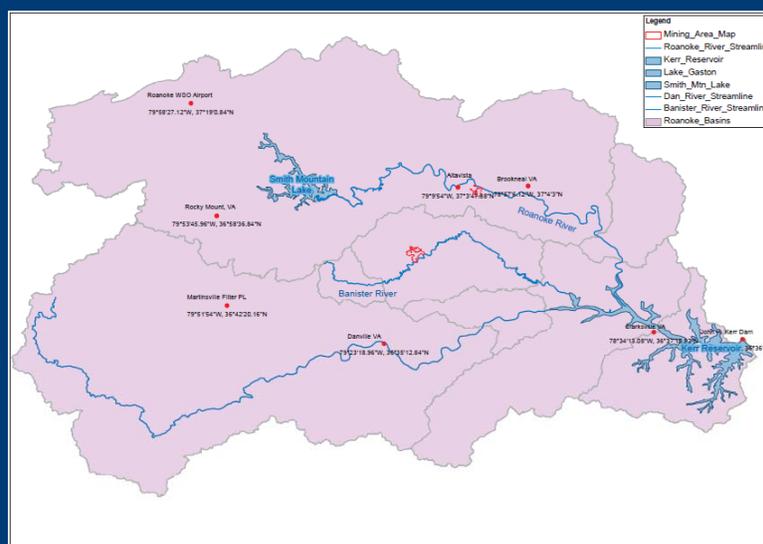
Study Qualifiers

- The study is simulating a rare event that regulations are supposed to prevent
- The model does not address the issue of whether there will be a catastrophe – it only simulates the outcome if one did occur
- In order to deliver a credible product in the time frame provided and within the resources allotted, certain assumptions and concessions were made

Model Scenarios

- Roanoke River Basin, Dan River Basin and Banister River Basin from headwaters to Kerr Dam
- 10-yr, 100-yr, and 500-yr floods were modeled, as well as “sunny-day” failures
- After each flood, a typical year with normal flows was appended to judge long-term effects
- Confinement cell dam heights: 5, 15, 30 & 50 m
- Radioactivity of tailings – RAD1 (lower) and RAD2 (higher)

Roanoke River Basin 1-D Model with Sediment and Water Quality Functions



Aftermath of a Tailings Release

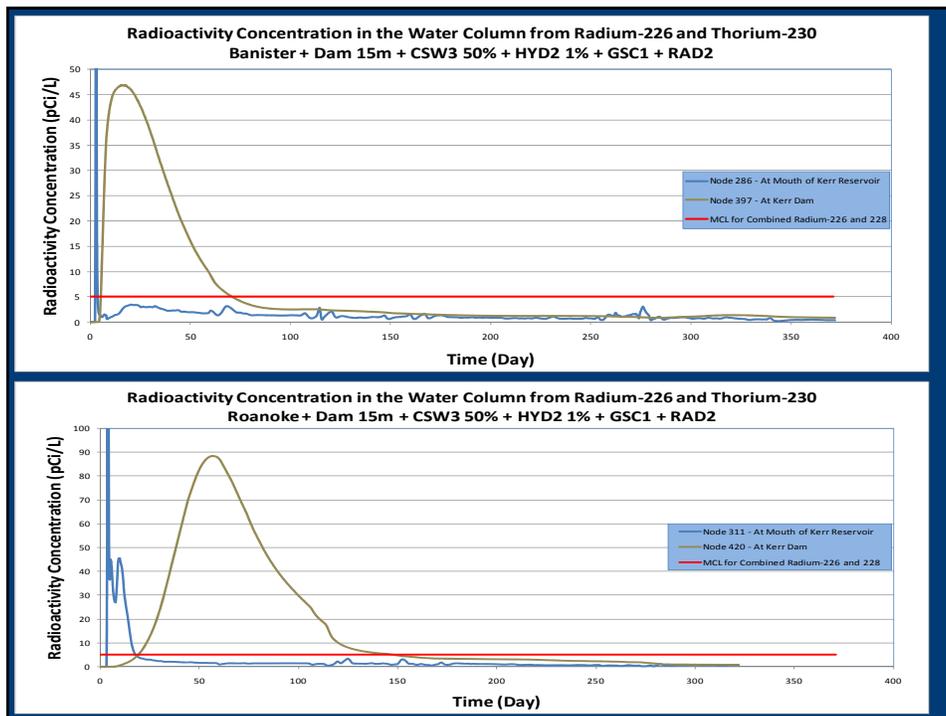
- Tailings separate into particulate and dissolved components
- Most of the particulates tend to remain above Kerr Dam – in the reservoir, river bed and flood plain sediments
- The dissolved contaminants move downstream with the water and flow into Kerr Reservoir and then into Lake Gaston
- Ultimately, most dissolved contaminants flow downstream - out of the two reservoirs

Impacts Above Kerr Dam

- Significant radioactive sediments in the river bed, flood plain and reservoir
- Radioactivity in the water column is initially very high, but declines as the particulates settle and the dissolved contaminants flow downstream
- Radioactivity of the sediments remains high on a long-term basis
- High flows re-suspend a portion of the settled particulates and move them incrementally to Kerr
- Most particulates will remain in the flood plain, river bottom, or Kerr Reservoir

Water Quality Impacts in Kerr Reservoir

- Radioactivity in the water column 10 – 20 times greater than SDWA MCL’s accumulates in Kerr Reservoir over a period of months
- With normal inflows, contaminants in Kerr settle out or are flushed from the water column into Lake Gaston in roughly two to six months
- In time, contaminants would flow out of Gaston
- Flushing time is very dependent upon the magnitude and timing of stream flows after a tailings release



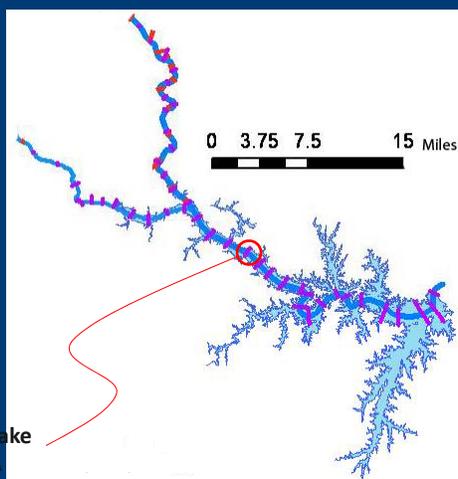
Model Limitations – Flushing Time

- Kerr Reservoir was modeled as a large, one-dimensional channel – a giant river
- Reasonable during flood periods. During normal and drought periods, Kerr Reservoir will act more like a lake
- Dissolved contaminants will experience mixing, dispersion, stagnation. May add to flushing time
- Lake Gaston has a volume equal to about half of Kerr Reservoir which will add to flushing time

Kerr Reservoir Modeled as Large One-Dimensional Channel

Due to time and resource constraints, Kerr Reservoir was modeled as a large, one-dimensional channel that follows the thalweg line of the former Roanoke River

A significant tributary, which has considerable volume, but less significant inflow was excluded



Kerr Reservoir Intake
At Clarkesville, VA

Flushing Time in Kerr and Gaston

- Retention time for Kerr and Gaston combined:
 - About one month during severe flooding
 - About six months during normal flows
 - About one year during droughts
- In one-dimensional river flow, most dissolved contaminants are flushed in one retention time
- In a lake with good mixing – about two retention times
- Depending upon whether it is wet or dry following a significant contamination event, it could take two months or two years to flush dissolved and suspended contaminants from both reservoirs

Fate of Radiological Contaminants in the System after One Year

	Banister River, Various Modeling Scenarios	Roanoke River, Various Modeling Scenarios
Percent of Radioactivity Leaving the System (Flowing Downstream as a Dissolved Contaminant)	5-11%	11-19%
Percent of Radioactivity Remaining in the Water Column	0-2%	0-2%
Percent of Radioactivity Remaining in the System (In the Flood Plain, River Bed or Kerr Reservoir)	89-93%	78-87%

Fate of Uranium as a Heavy Metal in the System after One Year

	Low Partition Coefficient (High solubility of Uranium)	High Partition Coefficient (Low solubility of Uranium)
Percent of Uranium Leaving the System (Flowing Downstream as a Dissolved Contaminant)	47 to 73%	3-4%
Percent of Uranium Remaining in the System (In the Flood Plain, River Bed or Kerr Reservoir)	27 to 53%	96-97%

Model Sensitivity to Certain Variables

- Dam height (amount of tailings released)
 - 1.0 MCY (15 m dam), 2.0 MCY (30 m dam)
 - About one-third of tailings in the cell
 - Recent TVA fly ash impoundment failure: 4.0 MCY
- Initial radioactivity of the tailings
- Assumption of stream flow patterns after a simulated tailings release
 - Wet weather: lower concentrations, faster flushing
 - Dry weather: higher concentrations, slower flushing

Conclusions (1 of 2)

- Hydrology in Virginia is more than adequate to move tailings downstream
- Tailings separate into particulate and dissolved phases
- Particulates settle in the flood plain, river bed, and bottom of Kerr Reservoir
- Dissolved contaminants move downstream
- Radiation in the water column rises significantly above SDWA levels

Conclusions (2 of 2)

- Time required to flush radioactive contaminants out of Lake Gaston could be as little as a few months or as much as two years
- Kerr Reservoir is a significant long-term trap for particulates
- Impacts upstream and in Kerr are more significant and more lasting than impacts downstream

Future Investigations by VA Beach

- Model Kerr and Gaston to better define flushing time of contaminants from both reservoirs in normal and dry periods
- Narrow the range of storm intensity, dam height, volume and radioactivity of tailings to reduce the number of scenarios
- Better definition of tailings & partition constants

Future Investigations by VA Beach

- Capacity and ability of water treatment plants in the region to remove uranium, thorium and radium
- Assist communities upstream of Kerr that may want to use the model to better define environmental and water quality impacts
- Five to six months, \$165,000
- Supplemental Report to NAS

Questions?

**PUBLIC WATER SUPPLY SYSTEM CONCERNS RELATED TO INTERBASIN TRANSFERS
AS PART OF STATE WATER SUPPLY PLANNING**

DRAFT 2/10/2011

Addressing interbasin transfers by new state-wide legislation or regulation is not necessary or appropriate. Further, within the state water supply planning framework, policy-makers and DEQ must ensure that the most efficient and equitable approach is taken to account for interbasin transfers, particularly as to existing interbasin transfers on which water supply systems already depend to meet current and future demands and other operational needs. Below is a list of related concerns that should be considered as part of ongoing state water supply planning.

1. A new or expanded permit program for interbasin transfers is not necessary or appropriate and would duplicate existing permit processes.

a. Concerns about interbasin transfer impacts on “source” communities and “receiving” communities and respective water resources are already addressed as part of existing Virginia Water Protection (“VWP”) Permit program.

- VWP Permit process properly accounts for interbasin transfer aspects as part of holistic assessment of withdrawal, not as independent basis for permitting.
- VWP Permit applications include the needed information relevant to interbasin transfer aspect of such withdrawal and water use.
- Existing VWP Permit public notice and hearing requirements are sufficient to address interbasin transfers.

b. The North Carolina interbasin transfer law is a poor model for Virginia: it prohibits interbasin transfers except when specially permitted as such; this runs counter to holistic approach under VWP Permit process and would render permitting of interbasin transfers impractical and too costly to achieve despite their relative merit.

2. General policy and programmatic concerns.

a. Statewide planning is based on local and regional plans that assume the availability of existing resources or development of additional resources.

b. Local and regional plans and the state water supply plan were not intended to and should not serve as the basis for permit conditions or restrictions.

- This intent not to link permitting and planning was clear in the water supply planning regulation TAC process.
- Water supply plans must remain flexible and open to amendment based on changing conditions and relationships among water suppliers and not be tied to specific permit withdrawals.

c. State water supply plan must properly account for existing interbasin transfers.

- Need to avoid upsetting the capacity of water supply systems and their ability to rely on such capacity in the future.
- Long term contracts are executed based on anticipated use of resource.
- Must be consistent with current VWP Permit grandfathering and exclusions.
- Existing grandfathered withdrawals are not and should not be subject to any permit or grandfathered status reopening unless there is a proposed increase in withdrawal capacity that triggers VWP permit review.

Sanitary Sewer Overflow Consent Order
Private Property
Inflow & Infiltration Abatement

Whitney S. Katchmark
Principal Water Resources Engineer
March 17, 2011



Establishing an I/I Abatement Program is a requirement of the Consent Order.

“HRSD and the Localities shall develop and implement a Private Property I/I Abatement Program. The Private Property I/I Abatement Program will require, to the extent allowed by law, the correction of identified private system deficiencies.”

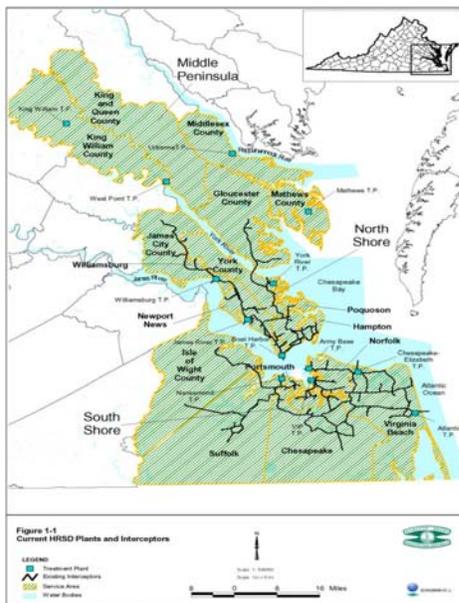
Recommendation: HRSD Managed Program
Alternative: Locality Managed Programs

WHY ARE WE UNDER A CONSENT ORDER?

Sewer system overflows occur allowing untreated sewage to reach public waters. These overflows are non-permitted discharges.

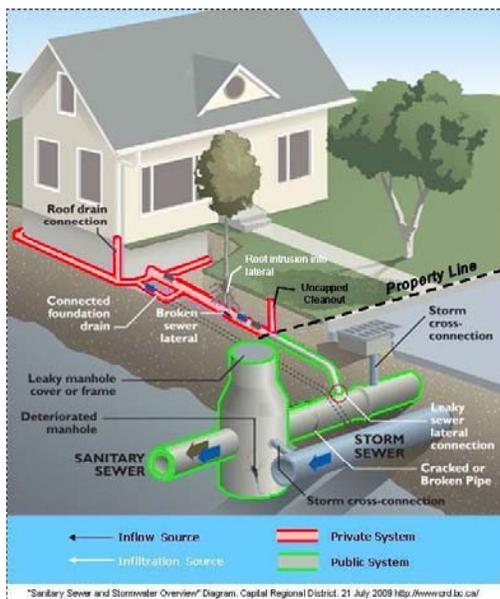
WHY DO SEWER OVERFLOWS OCCUR?

HOW WILL THE CONSENT ORDER REDUCE OVERFLOWS?



Background

3



PUBLIC PROPERTY I/I

- Leaking lateral connection to main
- Leaky manholes
- Cross connections with storm sewers
- Deteriorated sanitary sewer pipe

PRIVATE PROPERTY I/I

- Leaking service laterals
- Roof drain connections
- Missing clean out caps
- Sumps/foundation drains

Inflow & Infiltration diagram

4

Localities will reduce I/I on Public Property. Also, need mechanism to reduce I/I on Private Property.

I/I from Private Property is estimated to be 50% of the total I/I in the regional system.

Reduction of private property I/I will be more cost effective than building larger pipes, pumps and treatment plants.

Two options were proposed to implement I/I abatement on Private Property.

Why need Private Property I/I Abatement

5

Directors of Utilities Committee reviewed two options.

Option 1 – Locality Managed Program

Each locality would enact required model ordinance (tailored to meet local preferences) and create their own private property I/I abatement program consistent with regional standards
Costs recovered as locality determines

Option 2 – HRSD Managed Program

HRSD would develop program in partnership with Localities under existing authority granted in enabling act to be implemented on a regional basis
Costs recovered through regional treatment rate

Private Property I/I Abatement Options

6

<p>Option 1: Locality Managed Program</p>	
<p>Advantages History of working directly with customer Peak flow commitment all within Locality control (no fingers to point) Aligns with conventional thinking : every Locality for themselves</p>	<p>Disadvantages Inconsistent approach subject to 13 different utility departments and local governing bodies interpretation and political will Disparate costs among localities Redundant resources for program administration: duplication of effort Consumes Locality capital</p>
<p>Option 2: HRSD Managed Program</p>	
<p>Advantages Regionally consistent approach Economy of scale: fewer contracts, less overhead Does not compete for resources with other critical local government programs Spreads cost across all communities: consistent with metro treatment rate logic</p>	<p>Disadvantages Requires extensive collaboration and trust Splits responsibility for peak flow commitment (potential for finger pointing) Consumes HRSD capital (economic and political)</p>
<p>Private Property I/I Abatement Options 7</p>	

<p align="center">Directors of Utilities Committee Recommendation: HRSD Managed Program</p>	
<p><i>Program Funding: HRSD funds residential lateral inspection and repair.</i></p>	
<p><i>Commercial/industrial costs paid by property owners with P3 enforcement.</i></p>	
<p><i>Preliminary estimates range from \$200-\$500 million or \$13-\$16 million per year for a 15 year program.</i></p>	
<p>Program Funding 8</p>	

Summary of Locality Practices for
Submeter Readings and Wastewater Credits

On March 23, 2011, HRPDC staff contacted the Directors of Utilities Committee via email and requested information on locality practices for submeter readings and wastewater credits. Responses to the survey are summarized as follows:

<p>1. Regarding the practice of allowing call-in submeter readings for wastewater credits: A. Is this practice allowed? Was it allowed in the past? B. If so, please describe the reporting and crediting process for your utility and indicate any limitations (irrigation system and cooling tower use; existing "grandfathered" submeters only; utility-installed submeters only.)</p>	
Chesapeake	Submeters for wastewater credits are not allowed.
Franklin	Practice does not apply to Franklin.
Gloucester	The Board of Supervisors has approved an Ordinance Amendment allowing the use of irrigation meters. The Board is scheduled to approve a public comment period for this amendment at the April 5 th meeting. If adopted, the ordinance will allow separate irrigation meters which will be "water only"; these will have no minimum monthly charge.
Hampton	¹ Not applicable.
Isle of Wight	
JCSA	Practice is currently allowed and has been allowed in the past. Customers submit readings in writing or via the internet (60%). Customers can use HRSD – Customer Care option to report readings. JCSA personnel input the readings. JCSA sends customers reminders to submit submeter readings by certain dates for timely processing.
Newport News	Practice is allowed. Section 33.34 of the City code states: <i>The method of determining the quantity for billing the charges prescribed by this article shall be through use of the individual water meter. In cases where it can be positively demonstrated that a certain percentage of the metered water is not discharged to the sewerage system, the billing shall be based on the percentage of metered water which actually enters the sewerage system.</i> (Ord. No. 2405, § 2[10-170]) Section 33.34 obligates the citizen to provide evidence that a percentage of their water is not being discharged to the sewer system. Additionally, this section clearly obligates the City to bill for sewerage based on water consumption <u>unless the citizen can prove that a percentage of that water is not being discharged into the sewer system.</u> In order to provide the necessary evidence that a percentage of the water supplied to a residence is used for irrigation, the customer must install a second water meter solely for the irrigation system. The cost to install the second meter is approximately \$2,640 and there is a monthly fee of \$9.00 for the continued use of the meter.

Norfolk	<p>Practice is allowed. Norfolk has been adjusting wastewater collection fees since 1994.</p> <p>Until November 2008, commercial and residential customers that registered sub-meters with HRSD were eligible for wastewater collection credits based on submeter readings/consumption. Customers were required to submit monthly submeter consumption to HRSD via fax, e-mail, phone calls and U.S. Postal Service. Once received, HRSD would forward the consumption information to Norfolk, and the wastewater collection fees for the respective accounts were adjusted based on the submissions.</p> <p>In 2008, Norfolk changed its process for residential customers. Privately owned submeters were changed out and replaced by City-installed meters that only measured consumption on the irrigation systems. Additionally, separate "water-only" accounts were created and wastewater fees were not assessed on these accounts. The change in process eliminated the need for residential customers to submit readings and receive adjustments. Today, commercial customers are still allowed to submit consumption information and receive adjustments.</p>
Poquoson	¹ Not applicable.
Portsmouth	
Southampton	
Suffolk	<p>Practice is allowed, but only applies for HRSD Waste Treatment charges. It does not apply to Suffolk water/sewer charges.</p> <p>Suffolk follows HRSD's processes (jointly billing through HRUBS).</p>
Surry	
Virginia Beach	No, not currently allowed. Has not been allowed in the past.
Williamsburg	
York	¹ Not applicable.
<p>¹ Water service provided by Newport News Waterworks. Responses for Poquoson and York were inferred by staff.</p>	



ADDENDUM

For a

**WATER SUPPLY ASSESSMENT & EMERGENCY
RESPONSE TRAINING**

**RFP NO.
WR-RFP-2011-01**

March 30, 2011

WRITTEN QUESTIONS AND RESPONSES

The following written questions were submitted to the Hampton Roads Planning District Commission (HRPDC) for clarification. Questions and responses are arranged according to the question's respective section within the RFP.

SECTION I GENERAL INFORMATION

No questions were received regarding this section of the RFP.

SECTION II INSTRUCTIONS TO PROPOSERS

1. How much weight is given to "Ownership of firm by minority or participation of minority personnel, or subcontractors on the project."

The relative importance (percent weight) of the evaluation criteria "*Ownership of firm by minority or participation of minority personnel, or subcontractors on the project*" is 2.5 percent (%).

2. What are the relative weights used for the Evaluation Criteria?

The relative weights (%) of the evaluation criteria are shown in the table below:

Evaluation Criteria	Weight (%)
a. Responsiveness to Scope of Work and Proposal Requirements.	2.5
b. Professional competence of the firm, including qualifications and competence of key personnel and joint venture or association participants related to the specific areas for which the firm is proposing.	10
c. Proposed project approach and methodology.	15
d. Experience on projects involving multiple local jurisdictions, agencies, and regional committees.	5
e. Experience with similar projects and submission of previous work samples.	10
f. Record of the firm in accomplishing work on other projects with respect to such factors as the quality and adequacy of the work, resource allocation, ability to meet schedules, innovative approaches and cost control.	10
g. Accessibility of the firm and the ability of key personnel to visit the project area and meet with HRPDC staff and the Directors of Utilities Committee.	15

h. Knowledge of the Hampton Roads area; Hampton Roads water and wastewater utilities; Hampton Roads energy, transportation, health care, and telecommunications infrastructure; and Hampton Roads public safety and emergency response agencies and organizations.	15
i. Knowledge of federal and State programs and planning efforts for critical infrastructure protection and emergency response including, but not limited to, programs and guidelines established by the Department of Homeland Security (DHS), the Federal Emergency Management Agency (FEMA), the Environmental Protection Agency (EPA), the Virginia Department of Emergency Management (VDEM), the Virginia Department of Health (VDH), and the Virginia Department of Environmental Quality (DEQ).	10
j. Knowledge of the Virginia Water and Wastewater Agency Response Network (VA WARN) program (www.vawarn.org).	5
k. Ownership of firm by minority or participation of minority personnel, or subcontractors on the project.	2.5

SECTION III SCOPE OF WORK

1. **After reviewing the RFP, we are uncertain of the number and specific description of the deliverables for this contract. Section III B, (Scope of Work, Objective) indicates the requirement for a comprehensive assessment report, a regional plan for improving water system emergency response and recovery, and the development and execution of a NIMS/HSEEP compliant tabletop training program. Section III C (Scope of Work, Primary Scope of Work, indicates you require a project initiation briefing, a draft project methodology, an assessment report, a regional plan, and the conduct of two exercises - seminar and table top (with AAR and IP). There are also indications in this same section that you require additional deliverables such as individual system and regional NIMS-typed asset inventories, asset and/or resource requests, a separate implementation plan, etc. Will you kindly provide a complete list of the required deliverables?**

Section III C. Primary Scope of Work lists the tasks that should be completed through this project. Proposers may provide alternative strategies or methodologies to address the tasks, and it is expected that specific project deliverables would be identified based on the proposed project methodology.

- 2. In III A. (Scope of Work, Background) you state “...there are coordination gaps between water utilities, public health personnel, first responders, and other interdependent services and critical infrastructure.” Will you explain/identify “other interdependent services and critical infrastructure”? It will be important to know all the areas of concern in order to properly scope the level of effort for this project.**

Please refer to Task 5 of the Primary Scope of Work. Proposers may provide alternative strategies or methodologies to address this task and the overall project. It is envisioned that the project will examine water sector interdependencies as described in EPA guidance documents and the 2007 Water Sector-Specific Plan as input to the National Infrastructure Protection Plan (<http://www.dhs.gov/xlibrary/assets/nipp-ssp-water.pdf> or http://www.dhs.gov/xlibrary/assets/Water_SSP_5_21_07.pdf).

- 3. In III B. (Scope of Work, Objective) you state “The project may involve agencies throughout the Hampton Roads UASI region, including but not limited to...and non-profit and private sector entities.” Have you identified the non-profit and private sector entities you believe should be/will be involved in this project? If not, can you provide a rough estimate of the number of entities you expect to be involved?**

It is expected that the involvement of non-profit and private sector entities will be driven by the proposed project methodology and that appropriate stakeholders would be identified through the project.

- 4. Tasks three and four of the primary scope of work appear to refer to individual water systems. Do you desire an inventory/report on risk scenarios and resultant impacts for each water system, or scenarios and impacts on the region?**

Task 3 is intended to have a regional focus. The HRPDC Directors of Utilities Committee will prioritize risk scenarios. An inventory of risk scenarios for each system is not expected.

Task 4 will require analysis of the emergency response or operation plans and standard operating procedures for each publicly-owned community water systems in the region, as well as the emergency operation plans for the localities where systems are located.

- 5. Task 4 specifies a review of the “emergency operation plan for the jurisdiction in which the water system is located.” Is this limited to its applicability to the water system or inclusive of other existing all-hazards annexes such as HazMat, Pandemic, Flooding, etc.?**

The review and analysis of locality emergency operation plans should be primarily concerned with the water sector, however, the proposed project methodology may provide a larger focus for this task, as appropriate.

- 6. Task five of the primary statement of work requires an analysis of the critical infrastructure interdependencies in the “water sector”. DHS defines the water sector as being comprised of drinking water and wastewater utilities, their regulatory primacy agencies, and an array of training and technical assistance partners. Is it your intention to have the analysis include the regulatory agencies, training, and technical assistance partners?**

Proposers may provide alternative strategies or methodologies to address this task and the overall project. It is expected that the proposed project methodology will drive the inclusion of such entities in the analysis.

- 7. Reference Task 6a of the primary statement of work; is there currently a NIMS-type asset inventory at each utility? Is there a regional list? If not, is the development of such inventories a deliverable under this contract?**

Any existing NIMS-type asset inventories will be made available to the selected contractor. It is expected that development of such inventories will be required for this project.

SECTION IV REQUIRED SUBMITTALS

No questions were received regarding this section of the RFP.

SECTION V TERMS AND CONDITIONS

No questions were received regarding this section of the RFP.

SECTION VI HRPDC CONTRACT

No questions were received regarding this section of the RFP.

OTHER QUESTIONS

- 1. Is it possible to accommodate virtual attendance of the pre-proposal meeting via teleconference?**

The option to attend the pre-proposal meeting via teleconference is not available. The RFP addendum covering questions and responses will be distributed to all interested parties.

2. Will the list of pre-proposal meeting attendees be made available to those who express interest in the RFP?

Yes, the addendum includes the list of individuals in attendance for the pre-proposal conference (refer to the Additional Information section below). The RFP addendum covering questions and responses will be distributed to all interested parties.

3. Will you identify the water systems associated with this project, and the number of people each system serves?

This project pertains to the 65 community water systems owned and operated by Hampton Roads localities. For 2010, it is estimated that 92% of the 1.6 million people in the region were served by publicly-owned community water systems. Specific information on these water systems will be made available to the selected contractor.

4. Will you characterize or describe the degree of interaction and support currently among and between water systems in the region? Do water systems currently work together? Is there a regional water system association or organization similar to the Hampton Roads Regional Chiefs of Police Association?

The Hampton Roads Planning District Commission (HRPDC) is a regional organization representing this area's sixteen local governments. The purpose of planning district commissions, as described in the Code of Virginia, Section 15.2-4207 is "...to encourage and facilitate local government cooperation and state-local cooperation in addressing on a regional basis problems of greater than local significance."

The HRPDC Directors of Utilities Committee serves as an advisory committee to the PDC. The water and wastewater utility departments of member localities are represented on the Committee, which meets the first Wednesday of every month. The Committee has met to discuss water issues for over ten years and is currently developing a regional water supply plan.

5. Will you identify the amount of UASI grant money available for this project?

Price negotiations will occur after the WR-RFP-2011-01 proposals have been reviewed by the selection committee.

PRE-PROPOSAL CONFERENCE SUMMARY

1. Attendance

The following individuals were in attendance at the WR-RFP-2011-01 Pre-Proposal Conference on March 25, 2011.

Name	Organization	Phone	Email
Leo Labaj	Raytheon Telemus	865-567-2938	llabaj@telemussolutions.com
Parimal Patel	Newport News Waterworks	757-234-4879	ppatel@nngov.com
Natalie Mackie	Newport News Waterworks	757-234-4903	nmackie@nngov.com
Leo Rios	Abrams Learning & Info Systems (ALIS)	703-740-5702 703-944-1672	lrios@alisinc.com
Andy Landrum	Whitman, Requardt & Associates	757-599-5101	alandrum@wrallp.com
Mike Barbachem	URS Corp	757-499-4224 757-321-1218	mike_barbachem@urscorp.com
Vern Land	City of Suffolk	757-514-7031	vland@suffolkva.us
Eric Tucker	City of Norfolk	757-664-6862	eric.tucker@norfolk.gov
Joel Silverman	CNA	703-568-2952	silvermj@cna.org
Bob Campbell	ASG	757-303-6669	robert.campbell@asg-inc.org
Matt Branigan	Watermark Risk Management Int.	703-621-0045	matt.branigan@wrmi-llc.com
Phil Grandfield	WBB	757-213-8170 x831	pgrandfield@wbbinc.com
George D. Gabriel	WBB	757-213-8170 x806	ggabriel@wbbinc.com
Donna Brehm	CRA, Inc.	757-377-0313	dbrehm@cra-usa.net
Shelly Frie	CH2M Hill	757-671-6222	shelly.frie@ch2m.com
John Edwards	Surry County	757-294-5271	jbedwards@surrycountyva.gov
Whitney Katchmark	HRPDC	757-420-8300	wkatchmark@hrpdcva.gov
Nancy Collins	HRPDC	757-420-8300	ncollins@hrpdcva.gov
John Carlock	HRPDC	757-420-8300	jcarlock@hrpdcva.gov
Richard Flannery	HRPDC	757-420-8300	rflannery@hrpdcva.gov
Tiffany Smith	HRPDC	757-420-8300	tsmith@hrpdcva.gov

2. Presentation

The following points were clarified during the presentation at the Pre Proposal Conference:

- a. The project is related to the forthcoming Hampton Roads Regional Water Supply Plan.

- b.** Relationships between Hampton Roads water and wastewater utilities have been established through the HRPDC Directors of Utilities Committee. The Committee will be involved in the approval of deliverables and will be available as an information resource, in addition to HRPDC staff.
- c.** This project is the first attempt at a regional assessment, not an update of existing plans or programs. Incidents related to terrorism and natural disasters should be considered. UASI grant funds for this project are for planning and exercise expenses, not equipment.
- d.** Regarding Task 3 of the primary scope of work, the initial identification of risk scenarios should consider how different threats may impact different types of water systems (small, large, and conjunctive use systems) on regional and sub-regional scales. The HRPDC Directors of Utilities Committee will be involved in the prioritization and selection of scenarios for the project.
- e.** Regarding Task 5 of the primary scope of work, it was noted that water systems may have customers located in different localities and that water sources may also be located outside the system locality.
- f.** Regarding Task 6 of the primary scope of work, it was noted that the analysis should not only address equipment gaps, but also identify shortcomings in existing processes and the formalization of agreements and protocols.
- g.** Regarding Task 8 of the primary scope of work, it was clarified that a briefing/training seminar should be held immediately prior to the table-top exercise to bring all participants up to date on the plan and plan implementation.
- h.** It is important that the selected consultant be available for local meetings. Familiarity with Hampton Roads water systems and the history of the area will also be important. Many localities are also members of the Virginia WARN, and the project should take advantage of this program and existing mutual aid agreements.
- i.** Proposers will be notified by April 22 if they will be asked to provide a presentation and interview. The RFP indicates that interviews, if needed, will be held before April 30, 2011. The selection panel has identified April 28, 2011 as the date for interviews.

3. Questions and Responses

Below is a summary of the post-presentation questions and responses from the Pre-Proposal Conference:

- a. Are you requiring two exercises or one? A seminar and a table-top exercise are two separate things. Are you only looking for a table-top exercise?**

The project should provide a table-top exercise. However, a training session is needed to brief participants on the content of the plan.

- b. Will you indicate the available amount of UASI funds for this project?**

Price negotiations will occur after the WR-RFP-2011-01 proposals have been reviewed by the selection committee.

- c. How much work has been done for gap analyses for the water sector?**

No gap analyses have been completed for the water sector. All work in the region thus far has been for Department of Homeland Security Target Capabilities, which do not include the water sector.

- d. Has an UASI plan been developed for the region?**

A Homeland Security Strategy has been developed for the region and will be made available to the selected contractor.

Are the goals, priorities, and strategies to be determined through this project?

Yes.

- e. Will you be providing a list of today's attendees?**

Yes, the attendance will be included in the addendum to be posted on the HRPDC website by March 30, 2011.

Hampton Roads Help To Others Program (H2O) - CONTACT LIST								
ID	last name	first name	phone	fax	e-mail	address	city/county	zip code
CH	Moore	Markiella	382-6670	382-8352	mmoore@mail.city.chesapeake.va.us	306 Cedar Rd	Chesapeake	23322
GL	Francis	Arnie	804-693-1230	804-693-4664	jfrancis@gloucesterva.info	6582 Main Street	Gloucester	23061
GL	Putt	Amber	804-693-4044	804-693-4664	aputt@gloucesterva.info	6582 Main Street	Gloucester	23061
IOW	Carter	Linda	365-6284	357-8203	lcarter@iwus.net	P.O. Box 108	Isle of Wight	23397
SM	Minga	Ellen	365-4272	357-9933	Eminga@smithfieldva.gov	P.O. Box 246	Smithfield	23431
WIN	Stallings	Michael	242-4288	242-9039	mstallings@windsor-va.gov	P.O. Box 307	Windsor	23487
JCSA	Davis	Beth	253-6859	253-6850	bdavis@james-city.va.us	101-E Mounts Bay Road	Williamsburg	23187
WM	Rojek	Tammy	220-6146	259-3798	Trojek@williamsburgva.gov	401 Lafayette Street	Williamsburg	23185
NNWW	Harrington	Nan	926-1047	926-1049	nharrington@nngov.com	700 Town Center Dr, Suite 100	Newport News	23606
NNWW	Murphy	Tom	926-1090	926-1168	tmurphy@nngov.com	700 Town Center Dr, Suite 400	Newport News	23606
POQ	Bliemel	Jeffrey	868-3508	868-3515	JBliemel@Poquoson-VA.gov	500 City Hall Ave	Poquoson	23662
NOR	Customer	Services	664-6700	664-6707	UTWAINQ@norfolk.com	400 Granby Street	Norfolk	23510
NOR	Tarrats	Quetzy	664-6718	664-6375	quetzy.tarrats@norfolk.gov	400 Granby Street	Norfolk	23510
POR	Thompson	Moses	393-8691	393-8976	Warrene@portsmouthva.gov			
SH	Johnson	Julien	654-6023	653-0227	julienjohnson@charterinternet.com	17287 Pittman Road	Boykins	23827
SH	Harness	Jeanne			jharness@charterinternet.com	17287 Pittman Road	Boykins	23827
SUF	Wieckert	Kim	514-7015	934-7922	kwieckert@city.suffolk.va.us	P.O. Box 737	Suffolk	23439
VB	Johnson	Shirley	385-8945	385-4925	ShAJohns@vbgov.com	2405 Courthouse Dr.	Virginia Beach	23456
YK	Rhodes	Amanda	890-3741	890-3759	rhodesa@yorkcounty.gov	PO Box 532	Yorktown	23690

Please review and confirm the number of metered accounts in your locality.
Changes can be sent to Lisa Hardy: LHardy@hrpdcva.gov

Locality	Total Metered Accounts¹
	A
Chesapeake	60,672
Gloucester	4,408
Hampton ²	48,023
Isle of Wight	2,374
James City County ²	22,787
Newport News	53,321
Norfolk	66,286
Poquoson ²	4,449
Portsmouth	32,551
Smithfield	2,907
Southampton	960
Suffolk	25,000
Virginia Beach	131,085
Williamsburg	4,100
Windsor	818
York County ²	19,006
Totals	478,747

¹ The numbers listed in "A" provided by the water utilities.

² The numbers listed in "A" represent the total number of metered connections and combine the number of local system accounts with Newport News Waterworks accounts.

Summary of Locality FOG Ordinances

On March 23, 2011, HRPDC staff contacted the Directors of Utilities Committee via email and requested information on the status of FOG ordinances. Responses to the survey are summarized below. Status information from January 2011 is also provided, if available.

1. Regarding FOG program status:	
A. Has the locality passed a FOG ordinance? If so, what is the effective date?	
B. If not, when is an ordinance expected to come before council?	
Chesapeake	<p><i>March Status Report:</i></p> <p><i>January Status Report:</i> Ordinance is not yet approved.</p>
Franklin	<p><i>March Status Report:</i> Franklin's FOG ordinance was adopted between 2000 and 2003 with modifications. Related sections of the city ordinance are found from section 30-62 to section 30-93.</p>
Gloucester	<p><i>March Status Report:</i> Gloucester County adopted a FOG ordinance on August 3, 2010. It becomes effective March 31, 2011. The County is currently gearing up for the start of the program.</p>
Hampton	<p><i>March Status Report:</i> The effective date of Hampton's ordinance is 1/13/2010.</p>
Isle of Wight	<p><i>March Status Report:</i></p> <p><i>IW January Status Report:</i> Ordinance approved last week, coordinating with HRPDC staff to host information sessions in February, and starting GCD and FSE registration.</p> <p><i>SM January Status Report:</i> All FSEs are in 100% compliance but Smithfield is waiting on the online FSE training to become available.</p>
JCSA	<p><i>March Status Report:</i> JCC's ordinance is expected to go to council summer 2011.</p> <p><i>January Status Report:</i> Ordinance still needs to go before the Board, hoping to hire a new FOG position to oversee the program.</p>
Newport News	<p><i>March Status Report:</i> City of Newport News adopted its FOG ordinance on March 5, 2010.</p>

Norfolk	<p><i>March Status Report:</i> Norfolk’s ordinance is expected to go to Council for approval this summer.</p> <p><i>January Status Report:</i> Ordinance is still in review at the City Attorney’s office and Norfolk Utilities has moved forward with FSE notification and public involvement.</p>
Poquoson	<p><i>March Status Report:</i></p>
Portsmouth	<p><i>March Status Report:</i></p>
Southampton	<p><i>March Status Report:</i> Southampton County has not adopted an ordinance yet and, at this time, there is no firm schedule for adoption.</p>
Suffolk	<p><i>March Status Report:</i></p> <p><i>January Status Report:</i> Ordinance not yet in place, but public outreach has begun.</p>
Surry	<p><i>March Status Report:</i></p>
Virginia Beach	<p><i>March Status Report:</i> Yes, ordinance passed. Effective February 24, 2009.</p> <p><i>January Status Report:</i> Ordinance approved approximately two years ago, finished pre-inspection period and will soon begin compliance inspections. VB is currently making minor changes to their Ordinance.</p>
Williamsburg	<p><i>March Status Report:</i></p>
York	<p><i>March Status Report:</i></p>