

Attachment 1A
MEETING SUMMARY
DIRECTORS OF UTILITIES COMMITTEE
April 6, 2011
Chesapeake

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

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

2. Private Property Infiltration and Inflow (I/I) Abatement Program

The Committee discussed the March 17, 2011 Commission meeting presentation recommending a regional private property I/I abatement program and the upcoming follow-up discussion of the issue at the April 21, 2011 Chief Administrative Officers (CAO) meeting. It was noted that Mr. Ted Henifin will represent HRSD at the CAO meeting. The Committee's discussion is summarized as follows:

- The purpose of the Commission brief to move forward with developing a regional I/I program was lost among the questions on details.
- The Commissioners were concerned about doing repairs on private property and wanted more information on the cost of the proposed program.
- It seemed that some elected officials did not think that private property work should be funded with public money. The brief stated that the Special Order of Consent (SOC) requires private property I/I abatement but that point was not brought up during the Commissioners' discussion.
- The HRSD Commission agreed to the regional program concept, the point being that costs for private I/I abatement will not come out of localities budget. Also, the HRSD Commission thought that it is unlikely that local governments would force individual homeowners to pay for their own abatement projects.
- The cost of the Private Property I/I program is estimated to be \$13-16M/year. HRSD has included placeholders in its CIP for SOC work, and the private property I/I work could probably be accommodated by these placeholders. Essentially, success of the private property I/I abatement work will offset other future costs estimated for interceptors and wastewater treatment plant upgrades.
- All of the Utility Directors support developing a regional program. It is expected that a longer discussion with the CAOs at the April 21st meeting may facilitate acceptance of the idea to create a regional I/I program.
- Localities should re-brief CAOs prior to the meeting and emphasize that we are seeking agreement to move forward toward development of a regional program and remind them that private property I/I is a requirement identified in the SOC.
- The questions on rate increases, private property access, and liability will likely come up at the CAO meeting.

- Questions on the details of coordination between the localities, HRSD, and homeowners are also likely.
- Questions regarding tax consequences related to work on private property still need to be resolved.
- CAOs should be aware that the regional program would include development of agreements between HRSD and localities, and HRSD and property owners to address liability issues.
- Private property I/I abatement is integral to basin-level peak flow commitments (PFCs), which must be made by May 1, 2012. The Rehabilitation Guidelines, Standards, and Tools Business Rules can be applied regardless of who is responsible for private property work. The planning process for basin PFC is time sensitive and needs to proceed regardless. The post-rehabilitation PFC determines the sizing of all downstream infrastructure and directly impacts the Regional Wet Weather Management Plan (RWWMP).
- I/I accounts for 300 to 500 mgd of wet weather capacity. Reducing I/I benefits local pump stations and regional infrastructure by reducing the volume of flows to be treated.

ACTION: HRPDC staff will report back to the Committee with a summary of the April 21, 2011 CAO meeting.

3. Rehabilitation Guidelines, Standards and Tools (RGST) Business Rules

Mr. Richard Stahr, Brown and Caldwell, briefed the Committee on the draft RGST Business Rules developed by the Capacity Team. The purpose of the Business Rules is to provide a regionally agreed upon approach to assure that the Rehabilitation Plans submitted in November 2012 are appropriately developed to allow the Wet Weather Management Plan to be completed in November 2013. Rehabilitation costs across the region are estimated at \$750 million.

The Regional Technical Standards (RTS) were developed without monitoring information to indicate the extent of I/I in the regional system. The RTS delineates a post-rehabilitation peak flow threshold (PFT) of 775 gpd/ERU. After the RTS, it was determined that 70% of basins in the region exceed the PFT, and many basins exhibit flows well over the PFT. The Business Rules will apply to all localities and HRSD for the development of consistent Rehabilitation Plans, which will contain basin-level scopes, costs, schedules, and PFCs. The elements of the Rehabilitation Plans are enforceable by DEQ.

In developing the Business Rules, the Capacity Team first examined data from other parts of the country and found that although spot repairs reduce structural failures, such “band-aid” repairs are not effective in reducing I/I and more comprehensive rehabilitation is needed. Next, the Capacity Team examined data from two rehabilitation projects in Virginia Beach, where approximately 70% of public infrastructure was replaced at a cost of \$2.5 to \$3.5 million per basin and I/I flow

volumes were reduced by 35 to 40%. This amount of I/I reduction compares favorably with national data. The Capacity Team also considered issues of equity and comparable approaches in developing the Business Rules.

Mr. Stahr reviewed each section of the rules and highlighted key points for the Committee's consideration, as listed below. Questions or comments from the Committee are italicized.

Introduction

- Clarifies that Sewer System Evaluation Survey (SSES) basin status is based on the 10-year peak flow.
- Clarifies that the 10 year peak flow standard was not meant to establish a 10 year level of service (LOS) commitment.

Rehabilitation Plans

- The region agrees to have all PFCs made by May 1, 2012.
- Locality plans will address public infrastructure.
- HRSD plans will address HRSD and private infrastructure.
- *How do the Business Rules address new or planned construction projects that feed into existing basins?*

This remains to be established. Capacity Assessments must be based on 2030 population projections. The Capacity Team must have additional technical discussion on what RTK values (measure of "leaky-ness") are to be assigned to such developments.

Gloucester has been working with DEQ on clarifying this. Compared to estimates using houses, using lots resulted in very different estimates.

Partially developed subdivisions tend to be very leaky. The Capacity Team will look at this issue.

- This section provides a formula to determine the extent of locality rehabilitation, or the scope of rehabilitation commitments for the localities. The formula considers a 40% reduction in I/I as the maximum reduction achievable through rehabilitation work. This prevents planning for unrealistic flow reductions and precludes undersizing of downstream infrastructure. The formula also identifies 1126 gpd/ERU as the maximum 10-year peak flow threshold where a 40% reduction in I/I can result in flows at or below the PFC.
- Comprehensive rehabilitation is defined as rehabilitation of 70% or more of the infrastructure in the basin.
- Localities have flexibility in concentrating work on leakier portions of basins.
- When a locality can demonstrate achievement of the PFC in a basin, rehabilitation work in that basin is considered completed, regardless of how much of the planning scope was actually executed.

- The guideline for comprehensive rehabilitation (70% of basin) is a guideline for project scoping. If a locality completes rehabilitation of 70% of the basin but still has not achieved the PFC, the locality must continue rehab work.
- Page 2, paragraph 4 detailing HRSD's scope will be revised per DEQ comments received on 4-4-11.
- The PFC must be maintained for the long term. The system cannot be allowed to deteriorate such that flows exceed the PFC. The Capacity Team felt the need to clarify that the PFC is "forever" and that funding will be required to maintain facilities.

Why does the language here make further commitments? Why tie this to the MOM plan?

The commitment is needed to ensure timely progress. Page 2, paragraph 5 will be revised to remove the reference to MOM activities. Most localities did not include PFC in the MOM plan.

- Storage may be cost-effective in some basins.

Storage on the locality's side or on HRSD's side?

Either side is feasible.

Is storage only an option after you have achieved the PFC and then fall into non-compliance? The reference to storage seems out of place.

Storage can be implemented both during and after rehabilitation work. This is clarified in the following section on "Peak Flow Commitments."

- The HRSD scope commitment for private property work is illustrated in the examples at the end of the document. In general, private lateral work is not anticipated in basins where the 10-year peak flow is less than 1126. Exceptions exist in basins with primarily commercial uses. Also, in a non-SSES basin where the 10-year peak flow is less than the PFT, the PFC is the PFT.

Establishing the PFC as the PFT in non-leaky basins is a concern. If the estimated 10 year peak flow is less than 950 gpd/ERU, the business rules place the responsibility for the entire I/I reduction on the locality. It should be reasonable to apply the same percent reduction on the high end for HRSD's commitment.

The Capacity Team worked with the understanding that cooperation and information sharing will be critical in this effort. Information regarding significant private contributors should be shared with HRSD.

The Business rules will be revised to include language to add previously identified private lateral defects to HRSD's scope.

Rehabilitation Toolbox

- This section will provide budget cost estimates for sample rehabilitation techniques to be used in planning. This information may likely be placed in a separate document.

Pipe replacement should be added to the list of rehabilitation techniques. Past experience with lining has been unsatisfactory. Norfolk does not plan on employing lining techniques.

Newport News completed two analyses; one based on the method described in the draft Business Rules, to estimate the cost of rehabilitation over a sampling of basins and is willing to share with interested localities. The results indicated that the Business Rules result in more conservative cost estimates.

The group discussed the options for how to memorialize the Business Rules. Mr. Stahr outlined the options as follows:

- Technical memorandum signed by Utility Directors (least formal);
- MOA;
- Minor Revision to the RTS signed by Utility Directors and DEQ Regional Director;
- Amendment to the SOC.

There was discussion over whether the Business Rules constitute a material change to the SOC and the need for a DEQ-enforceable document. The group also discussed the consequences of not having written confirmation of DEQ buy-in on the approach. Another issue raised was what entity would be subject to EPA enforcement actions. The group also expressed concern that some understandings reached by the Capacity Team and applied in the development of the Business Rules were not recorded in the document.

The group explored the idea of submitting several plans to DEQ as early as summer 2011 to gage the agency's acceptance of the method and revise the rules as needed per comments received.

Mr. Stahr advised that if written buy-in from DEQ is desired, then the document needs to be enforceable by the agency. In that case, a Minor Revision to the RTS should be sought. Mr. Stahr noted that the document as written is not suitable for a Minor Revision and would have to be re-crafted as the majority of the material concerns behavior between the partners, not technical requirements. A Minor Revision would require an additional 3 to 4 months to complete.

The Committee agreed to proceed under the approach outlined in the Business Rules and that a Minor Revision should be the mechanism to memorialize the Business Rules. DEQ will be contacted to determine whether they are amenable to a Minor Revision or whether they will require an amendment to the SOC. The group also agreed to proceed with early submission of several plans for DEQ review.

ACTION: Mr. Stahr will contact DEQ regarding the potential Minor Revision to the RTS and the Capacity Team will coordinate with the Committee for preparation of plans for early submission.

4. State Water Supply Plan Advisory Committee

Ms. Whitney Katchmark briefed the Committee on the March 29, 2011 State Water Supply Plan Advisory Committee meeting. A handout was distributed summarizing the key points of presentations made at the meeting. Staff will email the electronic copy of the meeting summary as well as a table pertaining to the first presentation, which compared water supply programs in several East Coast states with riparian rights. In response to a question from the group, Ms. Katchmark summarized the benefits of switching to a permitting system as identified in the presentation: reduction of disputes; clarify use priorities under drought conditions; clarify reasonable use; and clarify permit authority.

In discussion of the second presentation regarding the State Water Resources Report 2010, the group briefly discussed the tracking of water discharges, including wastewater and VPDES discharges, and the relationship to interbasin transfer issues. There were no questions regarding the third presentation on DEQ's Environmental Flow Project.

Ms. Katchmark will distribute future advisory committee meeting announcements to the group. Ms. Kristen Lentz indicated that Norfolk may be interested in attending future meetings as Mr. Carlock's alternate.

Handout:

HRPDC: "HRPDC Summary, Water Supply Plan Advisory Committee, Tuesday, March 29, 2011"

ACTION: No action.

5. Irrigation Submeter Readings and Wastewater Credits

The Committee discussed the practice of providing wastewater billing credits based on irrigation submeter readings. Ms. Lentz indicated that Norfolk is looking to revise the process for allowing commercial customers to call-in submeter readings for wastewater credits. Large users have claimed over a million dollars annually in credits for water used in cooling processes, and Norfolk is considering the use of effluent meters to be read by City staff.

Mr. Craig Ziesemer commented that Suffolk only applies credits to HRSD waste treatment charges and does not apply credits to Suffolk's water/sewer charges. Mr. Brian Ramaley commented that Newport News's ordinance requires that credits be offered as long as the customer has the means to measure it. Mr. Phil Hubbard commented that HRSD reads submeters in some locations, although most reporting is done via phone calls, and that HRSD requires the submeters to be installed and calibrated per HRSD standards.

Continuing on the discussion of submeters, Mr. Ramaley noted several issues related to irrigation submeters and shared examples from North Carolina where there has been much discussion of separate irrigation meters and different water rates for irrigation use. The group discussion is summarized as follows:

- North Carolina requires new homes to have separate irrigation meters; existing customers are grandfathered.
- The argument has been made that irrigation water rates need to be at conservation rates, otherwise the utility is encouraging non-essential water use.
- Landscape and garden centers have complained that new secondary meters are not allowed, therefore, they cannot benefit from reductions to sewer charges.
- Growth fees and secondary meters (one tap, two meters) are also being examined.
- Due to a more urbanized and diversified customer base, Newport News does not experience as high peaks in use as in the past. However, the current price of water should already discourage irrigation use. Newport News Waterworks will be introducing a new rate structure with three tiers to encourage conservation by large users without significant impacts to average customers. The threshold for the conservation tier will be approximately twice as high as that of JCSA. The rate structure is pending Council approval, but thus far has not received much criticism.
- Localities are not in a position to regulate shallow wells; permitting authority under DEQ only pertains to users that withdraw more than 300,000 gallons per day. As water rates increase, installation of irrigation wells becomes a more economical option than using city water for irrigation.
- There has been no discussion among the Committee members as to concerns of more well installations and well interference, nor of encouraging more restrictive well permitting by VDH.

ACTION: No action.

6. UASI Grant RFP Release and Pre-Proposal Conference

Ms. Katchmark provided a summary of the Pre-Proposal Conference for the “Water Infrastructure Assessment and Emergency Response Training” project held on March 25, 2011. The meeting was attended by representatives from 10 consulting firms. Proposals are due on April 14, 2011. If consultant selection goes according to schedule, staff anticipates that contract award and notice to proceed can occur by the end of May 2011.

ACTION: No action.

7. Advisory Committee Reports

Water Reclamation and Reuse Regulations: The Advisory Committee will hold its first meeting on April 21, 2011. A summary of the meeting will be provided at the May 4, 2011 Committee meeting.

ACTION: No action.

8. Staff Reports

A. H2O Program Status Update: Ms. Julia Hillegass provided a summary of recent activities and circulated a contact list to be updated by the Committee. As the H2O program has received section 501(c)(3) tax-exempt status, staff is currently following up on the possibility of accepting donations via text messaging and on-line donations through HRSD. The logo remains the same and staff is working on a website and updating the outreach materials. As H2O allocations will be based on customers, utilities are asked to confirm the number of customers served. Scheduling of the next H2O Board and committee meetings is pending. Topics for discussion include the following:

- Potential transfer of service delivery to a single third party, such as the Salvation Army;
- Delinquency requirements and the ability to provide one-time assistance to customers in good standing; and
- Potential application of funds to wastewater bills.

B. FOG Program Status Update: Ms. Hillegass reported that training for food service establishments (FSEs) and grease haulers will be held on April 20, 2011. FSE training will be at 8:00 a.m. and hauler training will be at 10:00 a.m.

The FOG technical committee will reconvene with a meeting on May 17, 2011. Utilities are urged to send a representative. The discussion will address the following:

- Grease haulers are requesting information on how localities plan to enforce the “no decanting” rule;
- Localities have requested an inspection check list; and
- Restaurant owners have submitted technical questions about sludge judges and various types of grease control devices (GCDs).

Localities who do not have technical staff on the FOG committee are requested to provide HRPDC with contact information for a technical representative.

Newport News indicated that they have been receiving requests for a list of certified GCD installers, similar to the list of certified haulers. This will be added to discussion topics for the technical committee meeting.

- C. **Committee Decision-Making Procedures:** The Committee discussed the pre-final draft of the guidelines for Committee decision-making procedures, which incorporates comments received as of April 5, 2011. It was clarified that all Committee members, not just those present at regular Committee meetings, must agree to the proposed budget. As not all Committee members attend meetings, it was agreed that the last two sentences of guideline number 3 pertaining to voting will be revised such that Committee members may express their support of proposed budgets either in-person at Committee meetings or via written communication to HRPDC staff.
- D. **Regional Water Supply Plan:** Staff reported that the consultant's revised draft of Section 6/7, "Statement of Need/Alternatives" is anticipated by April 15, 2011. Staff will distribute the document for Committee review as soon as possible.

ACTION: No action.

9. Other Business

- A. Newport News Department of Public Works introduced the topic of planning for safe shelter for municipal assets during a major catastrophe. The City's Department of Public Works and the City's Division of Emergency Management requested feedback from other localities as to their interest in exploring options to safeguard equipment/assets by moving these resources out of the area of potential impact due to an impending Category 3 or greater storm or similar event.

Mr. Steve Land provided context for the issue and shared that the City is interested in minimizing loss of equipment assets that will be necessary for post-disaster recovery. Ideas have included possibly utilizing the rail road system to transport equipment to the Richmond area or loading equipment on to ships that will ride out storm events at sea. The Department is seeking input and information on how other locality emergency management plans are handling this issue. The goal is to have a Public Works plan ready with options to inform emergency mitigation and response decisions by elected officials. The discussion is summarized as follows:

- Ms. Lentz noted that Norfolk had considered the use of federal government ships. Mr. James Rogers, Norfolk's emergency manager, had arranged for staff to tour one of the vessels. These ships are moored to withstand Category 5 storms and, therefore, do not need to ride out storms at sea.
- Mr. Land added that pre-positioned Navy supply ships are unsuitable for sheltering locality equipment, as they must deploy immediately if ordered. The question is whether there are vessels not committed to a mission that have space and are available to the localities.
- The question was raised as to whether such activities have been executed in Florida or Gulf Coast areas. It was noted that staff was evacuated, but not equipment.
- Mr. Ramaley commented that, in planning for equipment staging, the Newport News Waterworks Lee Hall Maintenance and Operations Center

was located on high ground in an area unlikely to experience wind damage. According to the utility's hurricane plan, equipment is deployed to designated staging areas in advance of the storm. If equipment is moved out of the area, it is possible that equipment may be delayed in its return to the area of need, hindering recovery efforts.

- Mr. Bill Meyer noted that Chesapeake has plans to move staff, but not equipment.
- Mr. Moses Thompson said that Portsmouth's plan in the event of a Category 4 or 5 storm is to move equipment to the Richmond Area one to two days in advance of the storm.
- The group discussed the lead time for evacuation and noted it will take Hampton Roads 48 to 72 hours to evacuate. Equipment should be moved well in advance. However, the rarity of such storms hitting the region makes it unlikely that evacuation orders will be given in time.
- Mr. Bob Speechley commented that it would be prudent to utilize an agreement with the rail road to move equipment to Richmond, if such an agreement could be made.
- Mr. Ramaley said localities should also take advantage of the Virginia Water and Wastewater Agency Response Network (VA WARN).
- Mr. John Carlock suggested that HRPDC's Emergency Management Administrator, Mr. Richard Flannery, and Mr. Rogers (Norfolk) should discuss this issue. A presentation at a future Committee meeting should be coordinated with Mr. Flannery, Mr. Rogers, and with Newport News Department of Public Works and the City's Office of Emergency Preparedness and Response, Division of Emergency Management.

ACTION: HRPDC staff will coordinate a presentation for the June agenda.

- B. Rate Increases: Mr. Ramaley asked if other localities were planning rate increases for this year. As he indicated during the discussion of agenda item 5, Newport News Waterworks is adopting a tiered rate structure, which will result in an approximate 4% increase for some customers. Mr. Meyer noted that Chesapeake implemented an increase last year, and is not planning an increase this year. Mr. Everett Skipper said that, although wastewater and stormwater rates are not increasing this year, Newport News stormwater rates may increase by approximately 40% next year. Mr. Land indicated that the impact of rehabilitation planning on Newport News wastewater fees remains to be determined.

ACTION: No action.