

HELP TO OTHERS (H2O) PROGRAM

CRITERIA DOCUMENT

ELIGIBILITY CRITERIA

1. **Must live in the service area of the participating utility.** Participating utilities include public water utilities in Hampton Roads and HRSD.
2. **Must be able to demonstrate that a personal or family crisis has inhibited ability to pay public utility bills.** For most utilities, service can be cut off if the individual is delinquent in paying his or her bill. Representative family or personal crises include, but are not limited to, death of a head of household or other family member, a catastrophic illness, a drastic decrease in family income, or other situations to be evaluated on a case-by-case basis. The program administrator should be given the flexibility to interpret what constitutes a personal or family crisis in specific cases.
3. **Is eligible for program assistance one time in any twelve-month period in the amount of \$250 or the balance due, whichever is less.** The committee believes these limitations on frequency and amount of assistance are equitable and fair to individuals in need.
4. **Must agree to participate in an educational program as recommended by the Salvation Army if there are signs of water waste.** Water conservation education is an example of a recommended program. The program administrator should be allowed the flexibility to determine the needs of the individual based on available services.
5. **Should assume some responsibility for partial payment of the bill.** The program administrator should be allowed the flexibility to determine how much, if any, of a partial payment would be required.

**Attachment 1A
MEETING SUMMARY
MEETING OF
DIRECTORS OF UTILITIES COMMITTEE
October 3, 2012
Chesapeake**

1. Summary of the September 5, 2012 Meeting of the Directors of Utilities Committee

There were no comments on, or revisions to the summary of the September 5, 2012 Committee meeting.

ACTION: The summary of the September 5, 2012 Directors of Utilities Committee meeting was approved.

2. Wastewater Program for FY2014:

HRPDC staff reviewed the Committee Guidelines and noted that consensus on program budgets will be polled via a follow-up email.

The Committee confirmed that the budget allocations should be based on the number of “active accounts” as reported through the annual rate data call. It was clarified that utilities should report “active accounts” and not the number of total accounts, equivalent residential connections. The budget will be based on the numbers reported for the rate data call and not on revised numbers that are sometimes provided at later dates.

- a. **Proposed Budget:** The Committee did not have any recommendations for revisions to the proposed FY14 Wastewater Program budget. There were no objections to the use of wastewater reserve funds to pay for recommended upgrades to the Sanitary Sewer Overflow Reporting System (SSORS).
- b. **Work Program Elements:** There were no comments or recommended additions or revisions to the FY2014 wastewater work program elements, as outlined in the meeting agenda. It was noted that the wastewater program will be influenced by the outcome of the Regional Sewer Consolidation Study. HRPDC staff provided additional details regarding HRFOG education program elements, noting the focus on restaurant best practices, holiday cooking waste disposal best practices, and the expansion of messaging to include what not to flush. Market research will be conducted on advertising success via HRGreen; newspaper overprints of the Green Living Guide and the Green Learning Guide will be distributed through the trailer; social media outreach will continue via the webpage, blog articles, Facebook and Twitter.

ACTION: Committee members will provide written indication (email) of support/non-support of proposed budget to HRPDC staff.

3. Water Program for FY2014:

- a. **Proposed Budget:** The Committee discussed the proposed FY14 Water Program Budget, noting reductions due to elimination of funding for USGS projects and shifting of HRPDC staff time from drinking water to stormwater issues.

The Committee discussed suggestions for revising the formula for determining locality contributions for water technical staff. HRPDC staff provided a revised worksheet showing how the proposed formula revisions affect locality contributions. The Committee also discussed water reserve funds, an appropriate reserve amount, and the use of a portion of reserve funds to support water program activities.

The Committee recommended the following revisions to the proposed budget:

- Revise the formula for funding contributions for water technical staff to decrease the portion of the budget that is allocated equally between 15 localities (30%) and increased the portion of the budget that is allocated by number of active accounts (70%).
- Utilize reserve funds to support a portion of the water program budget at the rate of \$50K annually for 5 consecutive years, beginning in FY14. This will reduce local contributions to the annual budget, while retaining an adequate reserve of \$100K at the end of the 5 year period.

- b. **Work Program Elements:** The Committee discussed the work program elements listed in the meeting agenda. HRPDC staff provided additional details regarding HRWET education program elements, including plans to continue accommodating locality requests for trailer at special events; continuation of give-away widgets, media campaigns, and associated creative support work for drinking water week/fix-a-leak week and AWWA's 4 pillars; expansion of Tap It program vendors; plans for smart landscaping/irrigation month outreach; upcoming market research on advertising success; and new messaging to emphasize the value of water service. It was suggested that water program reserve funds could be used to purchase additional widgets, if needed.

The Water Program will focus on the rate structure project discussed at the September meeting. It was suggested that HRWET should express a regional message regarding the need for utilities to change their rate structures – either raise rates or shift to larger fixed fees. Staff noted that the HRWET subcommittee is trying to strike a balance regarding the value of water message and the wise water use message. The intent is to provide consistency between the message to elected officials regarding rate structures and the message to the public

regarding the value of water service; both messages can be supported through HRWET. Utilities need to explain to customers the cost of service, safe delivery, and fire protection and explain to elected officials that the current volumetric rate structure is not sustainable. Related to the rate structure project, it was noted that utilities need to look at the impacts to low income populations. Rate increases are expected to translate to significant percentages of household gross income for certain customers. Water, sewer, and stormwater rates are all increasing and the cumulative impact to low income populations will be considerable.

Regarding the implementation of UASI study recommendations, HRPDC staff encouraged the Committee to review the recommendations and identify projects that could be included in the work program. The Committee will revisit the recommendations at the November meeting.

Regarding the regional water use data set, HRPDC staff provided a summary of discussions with HRSD, Newport News Waterworks, and Virginia Beach to clarify water use data and to improve the annual data call. It was noted that variations and inconsistencies in data are primarily attributed to different methods data classification and extraction of data from accounting systems. The Committee agreed that disaggregated water use data will be eliminated from the annual rate data call, and that HRPDC staff will perform a separate data call on an as-needed basis to support program activities like the Regional Water Supply Plan and HRWET.

ACTION: Committee members will provide written indication (email) of support/non-support of proposed budget to HRPDC staff.

4. Other Business

- **Sanitary Sewer System Asset Consolidation Study Update:** The Committee agreed that monthly project status briefings should be made to the Chief Administrative Officers, beginning with their November 15, 2012 meeting. The Committee also discussed concerns with the data requests including distribution, format, level of detail, and expectations. In general, the Committee agreed that to meet the deadline, localities should submit available documents and resources in their existing formats and HDR should proceed with data mining activities. HRPDC will provide HDR the results of the FY2013 rate data call.
- **Announcement:** John Carlock, HRPDC Deputy Director, announced to the Committee his intent to retire on January 31, 2012. The Committee expressed its appreciation of Mr. Carlock's service and offered its congratulations.

ACTION: No action

Committee Meeting Sign-In Sheet
October 3, 2012

Locality/Agency	Representative	Representative	Representative	Representative
HRSD				
Chesapeake	Dean Perry			
Franklin				
Gloucester	Martin Schlesinger			
Hampton	Tony Reyes	Jason Mitchell		
Isle of Wight				
James City County				
Newport News	Brian Ramaley	Scott Dewhirst		
Newport News	Everett Skipper	Ralph Caldwell		
Norfolk				
Poquoson	Ellen Roberts			
Portsmouth	Erin Trimyer			
Smithfield				
Southampton				
Suffolk	Craig Ziesemer			
Surry				
Virginia Beach	Tom Leahy			
Williamsburg				
Windsor				
York				
HRPDC	John Carlock	Julia Hillegass	Whitney Katchmark	Tiffany Smith
HRPDC				
New Kent				
DEQ				
EPA				
USGS				
VDH				
VDH				
AECOM				
AquaLaw				
Brown & Caldwell				
CH2M-Hill				
Christian Barton				
CNA				
HDR				
Hurt & Proffitt, Inc.				
McGuire Woods				
REMSA				
Troutman Sanders				
Virginia Fusion Center				
Virginia WARN				
URS				
Watermark Risk Management				
Private citizens				



BRUCE C. GOODSON, CHAIRMAN • STAN D. CLARK, VICE CHAIRMAN • JAMES O. McREYNOLDS, TREASURER
DWIGHT L. FARMER, EXECUTIVE DIRECTOR/SECRETARY

October 15, 2010

Mr. David Paylor
Department of Environmental Quality
629 East Main Street
P.O. Box 1105
Richmond, VA 23218

RE: Draft Ground Water Withdrawal Regulations
(WAS: SWCB)

Dear Mr. Paylor:

The Directors of Utilities Committee of the Hampton Roads Planning District Commission (HRPDC) has provided comments on the draft Ground Water Withdrawal Regulations 9 VAC 25-610. The Committee includes the Directors of water utilities from the following localities: Cities of Chesapeake, Franklin, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, and Williamsburg, Gloucester County, Isle of Wight County, James City County, Southampton County, Surry County, York County and the Towns of Smithfield and Windsor. The Committee encourages the Department of Environmental Quality to consider the following suggestions during the review of the groundwater withdrawal regulations:

1) **Human consumptive use:** The definition of human consumption needs to be broader. In several sections of the regulations, "public water systems" should replace the term "human consumption" to support all of the customers that rely on public water systems.

a) In Section 610-10, the proposed definition for "Human Consumption" in the draft regulation is too narrow. It does not include toilet flushing, washing clothes, medical needs, etc. The regulation should continue to use the definition of "Human consumptive use" in the existing regulations:

"Human consumptive use" means the withdrawal of groundwater for private residential domestic use and that portion of ground water withdrawals in a public water supply system that support residential domestic uses and domestic uses at commercial and industrial establishments.

b) When the available supply of groundwater is not sufficient to meet all requests, meeting the demands of public water systems should be the highest priority. In the existing regulations, human consumptive use is the highest priority which leaves out a portion of the public water systems' customers and creates a burdensome task of

trying to estimate human consumptive use which is not tracked by public water systems. Section 610-110 paragraph E should be revised as follows:

When proposed uses of groundwater are in conflict or available supplies of groundwater are not sufficient to support all those who desire to use them, the board shall prioritize the evaluation of applications in the following manner:

1. Applications for public water systems shall be given the highest priority;
2. Should there be conflicts between applications for public water systems, applications will be evaluated in order based on the date that said applications were considered complete; and
3. Applications for all uses, other than public water systems, will be evaluated following the evaluation of proposed public water systems' uses.

- c) Section 610-110, paragraph F.2 should be revised to ensure that public water systems have enough water to serve existing customers and to protect the health and safety of those communities The following language is suggested:

The board shall reissue a permit to any public water supply user for an annual amount no less than the portion of the permitted withdrawal that was used by said system during any consecutive 12 month period occurring in the previous term of the permit.

- 2) **Grandfathering of public water systems:** Municipal permit holders that operate public water systems have a unique responsibility unlike all other users. They are tasked with supplying safe drinking water to their communities which in turn, supports life itself, the protection of public health, and economic development. These responsibilities do not end when a permit term expires. Municipal permit holders must be able to plan for economic development and land use and know that the water resources to support those plans will continue to be available. If the criterion for evaluating permits is revised, public water systems should be grandfathered under the criterion used to approve the original permit. We are not making this point with respect to new or expanded applications, only those systems and withdrawals existing at the time this regulation is adopted.

- a) Existing public water systems should not be required to raise pumps because the Potomac aquifer has been redefined as one aquifer, instead of three aquifers. The new definition for this aquifer system is at least the third attempt by experts to characterize this resource in the last 30 years. As such, the regulated community cannot be expected to modify designs and infrastructure each time a new regional model is developed. Also, the pump setting requirements should be based on the depth and position of the well screen rather than on which aquifers are utilized as a

groundwater source. Section 610-110 paragraph D.3.c should be revised with the following language:

- i) The applicant demonstrates that no pumps or water intake devices are placed lower than the top of the uppermost confined aquifer with a well screen in order to prevent dewatering of a confined aquifer, loss of inelastic storage, or damage to the aquifer from compaction.
 - ii) Public water systems with wells screened in the Potomac Aquifer may continue to operate with pumps set below the top of the Potomac Aquifer if those operational settings were approved in their permits prior to the Potomac Aquifer classification as one aquifer instead of three aquifers (Upper Potomac, Middle Potomac, and Lower Potomac).
- b) If a public water system requests a renewal of a permit with the same conditions as its existing permit, the system should be guaranteed that the renewal will not be denied based on new evaluation of water level impacts. Section 610-110 F should be revised with this additional paragraph:

The board shall not conduct or consider technical evaluations of the 80% criteria for reapplications if the applicant is a public water system.

- c) Public water systems should be granted renewals of permits with the same conditions as its existing permit regardless of the availability of surface water for purchase. Section 610-102 "Evaluation of need for withdrawal and alternatives" should be revised with this additional paragraph:

F. The board shall not consider requiring public water systems to purchase surface water in lieu of renewing a groundwater withdrawal permit.

- 3) **Improve technical evaluations:** Technical evaluations of proposed withdrawals should be based on the limitations of the simulation model used in the analysis and based on the impacts of proposed withdrawals during the permit term. The permit term should be extended to match typical financing periods of water infrastructure investments and water supply planning horizons.

- a) The technical evaluation of proposed withdrawals should be based on predicted water levels at the end of the proposed permit term instead of evaluating the "stabilized effects" of proposed withdrawals. A transient model simulation should be used instead of a steady state simulation to estimate water level and head changes caused by a proposed withdrawal. A steady state simulation could represent impacts that are expected to occur 50 years or longer after the permit

would expire. Section 610-110 paragraph D.3.h should be revised with the following language:

The board's technical evaluation demonstrates that the effects from the proposed withdrawal in combination with the effects of all existing lawful withdrawals at the end of the permit term will not lower water levels, in any confined aquifer that the withdrawal impacts, below a point that represents 80% of the distance between the historical prepumping water levels in the aquifer and the top of the aquifer.

- b) The point of compliance with the 80% drawdown criteria should be based on the generally recognized calibration limit of the model used for the analysis. Permit renewals should not have to meet a more stringent criterion than the permit's initial technical evaluation.
 - i) Compliance with the 80% drawdown criteria should be based on the calibration limit of a technically sound groundwater model. Section 610-110 paragraph D.3.h should be revised by adding the following paragraphs:
 - (1) Compliance with the 80% drawdown criterion for new applications will be determined at the model's minimum drawdown contour based on the predicted effects of the proposed withdrawal. The model's minimum drawdown contour is defined as the calibration limit of the specific groundwater model or assessment methodology used for the technical evaluation.
 - (2) Compliance with the 80% drawdown criterion for permit renewals will be determined at the points that are halfway between the proposed withdrawal site and the model's minimum drawdown contour based on the predicted effects of the proposed withdrawal. The model's minimum drawdown contour is defined as the calibration limit of the groundwater model used for the technical evaluation.
 - ii) The "area of impact" should be defined according to the calibration of the model used for the analysis. Section 610-10 should include the following definition:

"Area of impact" means the model's minimum drawdown contour based on the predicted effects of the proposed withdrawal. The model's minimum drawdown contour is defined as the calibration limit of the groundwater model used for the technical evaluation.

- c) Permit terms should be extended to 30 years to match the financing periods for water infrastructure investments. However, withdrawal amounts should be limited to projected demands for 15 years.

- i) Permits should be extended from the current 10 year period to a 30 year period. Many of the permit holders must finance significant investments in the infrastructure required to withdraw, treat and convey water. These investments are often financed over 30 year periods. Section 610-106 paragraph D.13 and 610-40 paragraph A.10 in the draft regulations should be modified with the following language:

Groundwater withdrawal permits shall be effective for a fixed term not to exceed 30 years.

- ii) If the permit term is extended beyond 10 years, the permitted withdrawal amounts should be limited to the projected water demands in the next 15 years. Groundwater should not be obligated to a permittee fifteen to thirty years before it is needed. Paragraph A.1 should be created in Section 610-102 Evaluation of need for withdrawal and alternatives. The following language is suggested:

Groundwater withdrawal permits shall be based on projected water demands for no more than 15 years from the date of the permit issuance, even if the permit term exceeds 15 years.

- d) The Virginia Coastal Plain groundwater model should be used to manage the Coastal Plain Aquifer System instead of the RASA model currently in use. The Virginia Coastal Plain (VCP) groundwater model, authored by Charles Heywood and Jason Pope from the USGS Virginia Water Science Center, incorporates the findings of the Virginia Coastal Plain Hydrologic Framework report funded by DEQ and HRPDC. The VCP model should be adopted because it produces more accurate predictions of groundwater elevations. The VCP model includes information that was not available when the RASA model was developed such as the groundwater density distribution along the saltwater interface near the Atlantic Ocean, domestic self-supplied withdrawals below the reporting threshold, the Chesapeake Bay Impact Crater, and recognition of a single Potomac aquifer.
- 4) **Drought relief permits:** Drought relief permits have been better defined in the draft regulations; however, several suggestions are offered to further define how these permits will be issued and evaluated.
 - a) The HRPDC Directors of Utilities Committee originally supported the creation of Conjunctive Use Permits as a new permit category. However, 610-104 "Surface

water and groundwater conjunctive use systems” in the draft regulations does not accomplish the goal of giving water providers the flexibility to maximize the available water resources with fewer restrictions than Drought Relief Permits. The Committee suggests that the Conjunctive Use Permit category be eliminated. Permits should be issued as either a Production Well Permit or a Drought Relief Permit.

- b) Drought Relief Permits for public water systems should not be limited to permitted withdrawals that only support human consumptive use. The definition of “Supplemental drought relief well” in Section 610-10 should be revised with the following language:

“Supplemental drought relief well” means a well permitted to withdraw a specified amount of groundwater to meet human consumptive use needs during declared drought conditions, or other declared water supply emergency, after mandatory water use restrictions have been implemented. Permits for public water systems should be permitted to withdraw groundwater to meet the needs of all consumers after mandatory water use restrictions have been implemented.

- c) The impacts of drought relief wells should be evaluated under conditions that more closely match the past operations of drought relief wells in Virginia. The impacts should be evaluated with a transient model assuming the proposed maximum rate and withdrawal amount for two years, followed by eight years at the minimum maintenance withdrawals, and repeated if the permit term is extended beyond 10 years. This approach is based on the historical use of emergency wells in the Virginia Coastal Plain.

- i) The draft regulations states that the 80% criterion will be evaluated based on the stabilized effects of the proposed withdrawal. Drought wells are rarely pumped for more than a year and almost never pumped continuously. The aquifer system is sluggish to respond to pumping stresses so using a transient model instead of a steady state model is a more accurate way to simulate the impacts of drought relief withdrawals. Section 610-106 paragraph G.6 should be revised with the following language:

The board's technical evaluation demonstrates that the effects from the proposed withdrawal amounts pumped at the maximum rate for two years followed by the withdrawal of any minimum amounts required for maintenance for eight years in combination with the effects of all existing lawful withdrawals will not lower water levels, in any confined aquifer that the withdrawal impacts, below a point that

represents 80% of the distance between the historical prepumping water levels in the aquifer and the top of the aquifer.

- ii) The “area of impact” should be based on the same assumptions used in the technical evaluation of the proposed withdrawal. Section 610-108 paragraph D should be revised as follows:

Mitigation plans for supplemental drought relief permits shall address the area of impact associated with the maximum groundwater withdrawal allowed by such permits assuming the proposed maximum rate and withdrawal amount for two years followed by eight years at the minimum maintenance withdrawals.

- 5) **Aquifer Storage Recovery wells:** The regulation should address Aquifer Storage Recovery (ASR) wells. The regulations should encourage groundwater users to recharge the aquifer system by establishing guidelines for how DEQ will treat ASR wells in the Groundwater Withdrawal Permitting Program. The following suggestions are recommended:

- a) Definition – “Aquifer Storage Recovery well” injects drinking water into the aquifer system and stores more water in the system than it withdraws.
- b) ASR wells do not require a Groundwater Withdrawal Permit but must comply with DEQ reporting requirements for withdrawals. The EPA Underground Injection Control Program regulates injection of water at ASR wells.
- c) ASR well owners can withdraw a maximum of 70% of the volume of water that has been injected into the aquifer system or up to 95% of the injected water, as long as the utility can effectively demonstrate that the withdrawn water above the 70% point is predominantly injected water (by water quality analysis) and not native water.
- d) ASR well owners can withdraw water up to a maximum rate of four times the average daily injection rate based on the previous 12 months.
- e) Aquifer Storage Recovery wells should not be required to have a mitigation plan because by definition more water has been injected than withdrawn from the aquifer system. Any and all impacts experienced during a withdrawal cycle are temporary by definition and by operational constraints.

For the past twenty years, the region’s local governments have provided financial and technical support to the USGS and DEQ through the on-going Cooperative Groundwater Study Program. The Committee members bring considerable technical and policy experience and perspective to the Groundwater Withdrawal Permitting process. The proposed regulatory changes are important to the operations of the water utilities in the

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October 15, 2010
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Hampton Roads region and the Committee would appreciate your careful consideration of its recommendations.

If you need additional information or have any questions, please contact Whitney Katchmark, HRPDC, or me.

Sincerely,

A handwritten signature in dark ink, appearing to read "John M. Carlock", with a long horizontal flourish extending to the right.

John Carlock
HRPDC Deputy Executive Director
Chair, Directors of Utilities Committee

WSK/fh

Copy: Directors of Utilities Committee