

Memorandum

To: Members of Permitting Work Group
of the Eastern Virginia Groundwater Management Advisory Committee

From: Mission H2O Groundwater Subgroup Participants

Subject: Topics to be Addressed by the Work Group

Date: August 18, 2016

In anticipation of the Permitting Work Group's first meeting on August 25, 2016, participants in the Mission H2O Groundwater Subgroup (in which 13 of the 14 largest permitted withdrawers are participating) propose that the following topics be addressed. We request that this list be circulated to the participants in the work group so that they can give some thought to these issues in advance of the meeting.

Basis for Permitting Decisions

How frequently should the model be validated against actual monitoring data?

- Actual monitoring data shows that water levels are improving in some areas.
- Validation has not occurred to assess whether model is accurately predicting changes (both declines and recovery).
- Validation is also needed to confirm the appropriateness of the 80% drawdown criteria (and how it is applied).
- One option is to validate the model at least every five years as the state water resource plan is updated.
- Another option is to have a third party research or academic group review periodically.

Changes to Current Groundwater Withdrawal Permits

Can a comprehensive timeline be established that assesses when various alternative sources can be implemented and how that affects the need for current reductions in actual withdrawals?

- Understanding of actual groundwater usage that recognizes the need to preserve the option of using groundwater under certain scenarios, but acknowledges that groundwater is not regularly used outside of those scenarios.
- Based on this understanding, is there a longer time period to make the reductions? If so, some of the "long term solutions" may actually be timely. For example, in DEQ's charts regarding the reductions needed (attached), actual withdrawals are in the 90-110 range; the target reduction range is 70-90. If we can ensure that actual

withdrawals remain closer to 90 during the next permit cycle, is this sufficient to protect the aquifer while other projects come on line?

- This is an important question to address because if individual permittees invest in an individual solution to achieve their own reduction now, there will be little interest in investing in additional reductions in the future. The long term problem will remain unsolved.

Should permit terms be lengthened?

- Currently limited to ten year terms by statute.
- The ten year time period is not consistent with bonding/funding timelines.
- Creates uncertainty.
- Where investments are made to achieve reductions, there should be a longer time period to recover the value of those investments.

Should a reopener provision be included in the permits to allow for changes based on development of alternative sources or improvements in the aquifer?

- What should be the triggers for a reopener?
- Could reopener provision include automatic restoration of groundwater withdrawal volumes under certain circumstances?
- Need consensus on language for such a provision.

Permitting for New Water Supply / Water Storage Projects

Should the permitting criteria for water supply / water storage projects be adjusted to recognize the benefits of reducing groundwater withdrawals? If a water supply project has benefits in other program areas, can such projects be given greater weight?

- For example, if a water supply project also addresses a stormwater or water quality problem, should that be included when evaluating the project? This would enable projects to be evaluated on a more holistic basis.
- Likewise, Virginia's Water Resources Plan notes the "need" for greater water storage projects. If a project helps meet this "need," how can that be factored into the permitting process?
- How can we incorporate a philosophical change to consider water resource management holistically?
- How do we accommodate economic development and new growth?

Unpermitted Withdrawals

How should unpermitted withdrawals be addressed?

- Currently, the volume of unpermitted withdrawals is estimated to equal actual permitted withdrawals.
- Without addressing unpermitted withdrawals, we could end up in a situation similar to the Bay program, where significant costs are incurred by permitted withdrawals. But, at the end of the day, it becomes apparent that the problem will not be solved without addressing unpermitted withdrawals.
- Addressing residential water withdrawals on the basis of cumulative impacts for residences in subdivisions is one option.
- Other options that could be explored include setting location or density goals; evaluating incentives to minimize private wells, enhancing monitoring requirements, etc.
- Development and use of farm ponds for agricultural irrigation is another option to be explored as a groundwater alternative, including evaluating how to address current obstacles to the use of farm ponds.