

**EASTERN VIRGINIA GROUNDWATER MANAGEMENT  
ADVISORY COMMITTEE**

**WORK GROUP #2A – ALTERNATIVE MANAGEMENT STRUCTURES**

**MEETING NOTES – MEETING #3 - FINAL**

**MONDAY, DECEMBER 7, 2015**

**DEQ PIEDMONT REGIONAL OFFICE – TRAINING ROOM**

**Meeting Attendees**

<b>EVGMAC – WORKGROUP #2A</b>	
Rhea Hale - WestRock	Nikki Rovner - TNC
Brent Hutchinson – Aqua Virginia Inc.	Wilmer Stoneman – VA Farm Bureau
Whitney Katchmark – Hampton Roads PDC	Eris Tucker – City of Norfolk
Britt McMillan – ARCADIS – Eastern Shore Groundwater Committee	Erika Wettergreen – Marstel-Day

<b>EVGMAC – WORKGROUP #1 – STATE AGENCIES</b>	
Elizabeth Andrews - DEQ	Sandi McNinch – VA Economic Development Partnership
Susan Douglas – VDH - ODW	Dwayne Roadcap – VDH - OEHS

NOTE: Advisory Committee Members NOT in attendance: Janet Pawlukiewicz - Citizen

<b>INTERESTED PARTIES ATTENDING MEETING</b>	
Susan Bond - JLARC	Shannon Varner – Troutman Sanders/Mission H2O
Brad Copenhaver – VA Agribusiness Council	Christine Wolfe - JLARC
Brent Hutchinson – Aqua Virginia, Inc.	Andrea Wortzel – Troutman Sanders/Mission H2O
Jamie Mitchell – Hampton Roads Sanitation District	

<b>SUPPORT STAFF ATTENDING MEETING</b>	
Elizabeth Andrews - DEQ	Bill Norris - DEQ
Brandon Bull - DEQ	Valerie Rourke - DEQ
Craig Nicol - DEQ	Mark Rubin – VA Center for Consensus Building

**1. Welcome & Introductions - Opening Comments (Mark Rubin – Meeting Facilitator)**

Mark Rubin, Executive Director of the Virginia Center for Consensus Building at VCU, opened the meeting and welcomed everyone to the meeting.

He asked for introductions of those in attendance and asked for the organizations that they represented.

He provided a brief summary of the meeting of the Advisory Committee meeting that had occurred on Thursday, November 19<sup>th</sup>. (A copy of the meeting notes had been distributed to the group prior to today's meeting.) His summary included the following:

- Basically it was an education and reporting session, no decisions requested, Scott discussed permitting program, # of questions, about monitoring, enforcement, accounting for growth, critical concepts, the only way to stop decline is to stop withdraw, trying to manage the decline, if you withdrawal, it's effect is different, sustainability discussed, brief report from the workgroups, alternative source interested with injection programs, more information about trading, alternative structure seemed ok with what we were talking about, presentation on western tidewater legislative proposal, will meet again on 12/14.

He noted that we had a good meeting of the Alternative Sources of Supply meeting (Workgroup #1) this morning. He noted that there was a discussion of reservoirs/impoundments at the meeting where a distinction was made between the two – the discussions included the following: "Reservoir = river, dam on sizeable tributary, impoundment can be large pit, local scale, small swale, it's matter of scale, impoundment is smaller, limited use on impoundment, impoundment = storage, no legal difference, one is permissible and one is not. Beavers create impoundments."

## **2. Presentation – General Water Policy and Statutory Requirements in Virginia Law (Elizabeth Andrews)**

Elizabeth Andrews with DEQ's Policy Office provided a basic overview of what the State Water Control Board can and can't do. She provided an overview of the General Policy related to waters of the state and statutory requirements and limitations. She reviewed the Groundwater Act of 1973 and the Groundwater Management Act of 1992. She identified the Board's powers; the requirements for groundwater withdrawal permits; the criteria for issuing permits. She also discussed the concept of "giving preference to human consumption". She also identified how Groundwater Management areas are developed and the new requirement in 2015 for "well registration".

**ACTION ITEM: A copy of the presentation will be distributed to the Workgroup and also included on the Eastern Virginia Groundwater Management Advisory Committee webpage.**

## **3. Presentation – What's wrong with the status quo? Permittee concerns on the permit program (Whitney Katchmark)**

Whitney Katchmark with the Hampton Roads PDC provided an overview of some of the permittee's concerns about the permitting program and concerns over any changes to the program. Her presentation included the following:

- Uncertainty and Equity/Fairness issue
  1. How much water and why? Types of use not prioritized, if you can't meet all needs, how to operationalize it.
  2. What justification is needed to get your permit? Water quality indicators or thresholds been established. No annual status of the resource report.

3. Permits for new alternatives. Demand thresholds, coastal plain, if the demands get so close to existing supply, we should invest in new. ODW has 80% threshold, there is perceived real or time lag between I need a permit and design and construct.
  4. Future of existing alternatives. Is new water source worth the environmental impacts, how would it play out. Grandfather withdrawals, surface water is alternative but don't know whether I can use it. Nobody really knows what they are entitled to. There is a trust on being fair--316.B, shad, sturgeon protection. Another issue: other sites ideal for future, no mechanism for looking to future to protect them and no longer available if you need it, allow development thinking I will have groundwater, no way to protect future resources, there is a problem on permit-by-permit basis, also problem about Commonwealth having resources available, Mission H2O, site ideal for natural water feature, but now there is development, good intake sites along tributary that that can be an issue.
- In Texas, concerned about permit ability of good sites, state identifies and preserves those sites, it's like a conservation easement, state buys the land, Virginia made choice for permitting program but not robust planning program, need funding to implement the resources.
  - It's not obvious that you resolve it, there will always be uncertainty, what criteria will you use on a scarcity, resource is variable, underlying uncertainty about having enough water, how much do you want to standardize vs. researching more and studying issue.
  - Projects fail because of political uncertainty, particularly on surface water, you don't know what the governing body will do, in the development of water supply planning, 3 reservoirs couldn't get permits, one focus was how do we get certainty that state is ok and get feds to issue the permit, that issue will always be there, federal system has expectation that state is doing their due diligence, it is very fragile, another example, regional project, permits issued, local gov't voted "no" or "not to pay" for part of the project.
  - If you do water supply plan today, think differently about groundwater withdrawal, might be cut, and you don't know by how much, it comes into play on evaluating the alternatives and how soon might you need to implement an alternative, if you look at those water supply plans, done on locality basis, supposed to bring industrial uses, but didn't, plan approved, as long as it includes information, plan approved knowing the water may not be available, plan approved, dynamic think they are good to go, but 6 months later, find a problem, creates strange dynamic of false sense of security, issue well debated during the regulatory process, could require more rigorous assessment of future demands, but that would be significant debate.
  - Fairness/Equity/Best use of resource
    1. Current structure encourages each permittee to hold on to existing source water for future. Develop more expensive options, may not use resource, municipal systems sell water, the cost after building the infrastructure, easy to distribute, people say for economic/political, rather have new source than pay someone else. Big users in Hampton roads, contracts in play for 20 to 30 years, source of conflict

2. Public water supply decision by local representatives. Politicians significantly influence.
3. Stranded assets, no remedy for costs sunk into groundwater infrastructure.
4. Past investments, permittees that invested in surface water supply infrastructure should benefit from the capital costs and maintenance.
5. Contracts for bulk water sales are 20-30 year terms. Buyer/Seller lack reliable info to forecast demands. Regret signing the contract so want shorter term.
6. Cost of public water service varies significantly depending on location.

- Permitted use versus actual use—there is annual reporting. The regulatory structure says after 5 years, if you haven't used 60%, permit can be pulled back, it's never been done, but it could have been done. Everyone who has a permit explained why they needed it, but predicting the future is hard, see slide from HRPD Commission on Proposed Permit Cuts.
- Water Supply Plan Regulation, didn't want to tell you how much water they had, worried that state would allocate the water, now SCWB has ability to resolve, is that same concern 9-10 years ago still current? Yes, it still exists when you look at alternative sources. Appears to be more openness of discussing pros & cons, no confidence that people feel more pro about it.
- Does this follow the surface water review and permitting for excess and unused portions? Operated the same, but time frame is different, surface water is 15 years, while groundwater is longer, both programs work the same way, people report monthly what they actually use, report on monthly usage, submit it annually.
- Groundwater is easiest; just drill a new well, but its longer time to get surface water developed. If you have to build surface water infrastructure, then business goes somewhere else, municipality didn't plan for new growth, creating a bubble, nobody planned enough, no real solution to that, can't predict future when someone wants a new 20 MGD, not singularly,
- For southern part of GWMA, if you put in big well with big pump, it's there, but this whole process is about you are using this resource in a way that is not sustainable.
- In the market, you can create situation that if company is so valuable, then you buy the credits from others, most of this is about finding the money, re-use, it's hard to justify building plants waiting on a customer that might not come.

Need integrated water resource management, current structure is siloed and developed organically over time.

#### **4. BREAK**

#### **5. Presentation of the Map (Whitney Katchmark):**

Whitney Katchmark provided an overview of the map that she and her staff at the Hampton Roads Planning District Commission. Her presentation included the following:

- This map is a work in progress – a planning map.

- It started out as an effort to identify the different water sources that people were using in the Eastern Virginia Groundwater Management Area.
- The 14 largest groundwater users are identified (the purple circles on the map).
- Then the map captures where the surface water sources are – so the reservoirs were added – then streams were identified; followed by intakes (little yellow plus sign).
- The object was not to just point out one thing but to point out how all these things are interconnected in terms of geography.
- Then the largest waste water treatment plants in the region were included. All of the green squares are waste water treatment plants that have a discharge of greater than 1 mgd.
- The smaller waste water treatment plants are identified with a square with no color added.
- Power plants are also identified.
- The salinity indicators (from the Bay program) as various colors are also included.

**ACTION ITEM: Copies of the map will be provided as a resource on the Eastern Virginia Groundwater Management Advisory Committee webpage.**

**6. Discussion – Is a sub-region needed? Why? What criteria determine a useful region?(Mark Rubin; Scott Kudlas and Workgroup Members)**

Mark Rubin introduced the concept of sub-regions and asked for thoughts from the group. The discussions included the following:

- Regions: Do we need smaller regions? Would smaller regions be helpful? What would the smaller region purpose be?
- From a technical standpoint, we have 2 general areas in the Potomac system, primary source of groundwater and most stressed, (1) West of Franklin is stressed; and (2) sub-area West of West Point and area near the Fall Line, naturally and perpetually stressed, aquifer is very thin there. Then you have all the other areas, proximity and withdrawal is determinant.
- Existing use create the West of Franklin and West of West Point stressed area.
- Don't see greater Eastward movement in Caroline and Hanover, lack of control points, but you would see other problems, finding dry sand in the Potomac from well drillers. Everything North of Mattaponi becomes more of a question mark, there is some unusual things, I-95 marks the area,
- Political jurisdictions have 5 counties in those areas.
- If management structure has to be more than DEQ, determining region, you cut too many pieces out of the pie, then no resources to do it but creates problems for others.
- Practically, can you have an effect on the rest of the management area, water commission gets to pick winners and losers, what do you want the region to do? What's the purpose of the region?

- Region Purpose: Optimize resource; Optimize the system; Evaluate the real impact of a withdrawal, impact in Northern Neck different than another region; Regionalization—different thresholds for different processes, sub-region, big user, how to handle; Optimize cost—supply and demand for the overall system, Degree of integration, surface water overlay, unregulated users (wells), what areas rely solely on the private wells,
- Integration means (1) regulatory management level; (2) implementation and use (get rid of silos). How do you produce, treat, and distribute the water. Conversation with the other 14-15 high users, all water as a resource, stormwater, etc.
- Integrated water system—planning and permitting—we think about as one source of water and that we perhaps have system to reflect permit that covers either source, the criteria is not dramatically different, quirks that deal with surface or groundwater, but assessing impact is similar, integrate sources of supply because of water quality, 2 sources of quantity and the water quality/quantity.
- There is cross-silo communication that is helpful to both processes. Stormwater ponds help groundwater on the surficial but not groundwater, surficial goes to trees, etc.
- Need to consider political boundaries, ability to cross the political hurdles for a regional system, some localities, Hampton Roads, have surface water, other regions don't have surface water, if you are taking pieces of pie, some parts won't have the pie, get to winners and losers.
- What is the purpose of the region? Permitting system that is individual permittees, expire at different times, looking at one entity at a time, water users come together, look at my own operation individually, but if my neighbor's permit comes due, maybe we work together, permitting system change would help and encourage regional discussion, system that fosters collaboration, incentives, all permits on the stage, DEQ says timeline and this is cap, now that we have that information, how do we want to use it, if you had better sense of indicators, it could foster collaboration, challenge is that it can only be effective if I know where the future growth will be, location specificity drives impact, Analysis with projected growth, trend line of what they are using,
- Enhanced alternatives analysis,
- In essence, hydrology and geology, can't understand why we should worry with political subdivisions, there are a lot of political decisions made, and it's not scientific and technical analysis. The challenge is the balance b/w water allocation in courts vs. dealing with science and no political boundaries. Need to find a balance.
- Don't see a pressing need for smaller regions, technical benefits, that's easily debatable, you have to do both, how much of both, which end of the continuum are you using,
- Start at the resource level and work backwards.
- An integrated system, to overcome impediments of regional, need incentives to get people to work together,
- Could cost per gallon served be a consideration?
- What will the integrated system do?
  1. Incentivize people to work together

2. Be flexible
3. Encourage input from stakeholder groups
4. Address uncertainties
5. Be fair/equitable
6. Would include surface/groundwater/reuse
7. Address unregulated activity
8. Optimizing supply and demand
9. Efficient process—reduce number of permits

If stakeholder group functioned at a decision making, might help staff to speed up the process. Could speed up the process, could speed up the regionalized approach.

#### **7. Overview of Stakeholder Involvement Concepts Used in Other States to Manage Water Resources (Andrea Wortzel)**

Andrea Wortzel with Troutman Sanders distributed some information to the group regarding stakeholder involvement concepts used in other states to manage water resources. She noted the following:

**ACTION ITEM: A copy of the overview document on "stakeholder involvement concepts" will be posted on the Eastern Virginia Groundwater Management Advisory Committee webpage.**

#### **8. Next Steps – Next Meeting (Mark Rubin):**

A suggestion has been made for this group to try to meet in sometime after "cross-over" – around middle of February.

**ACTION ITEM: Bill Norris will identify available dates after "cross-over" and will send out a Doodle Poll to select a preferred date for the meeting.**

The idea would be to look at what this integrated system that we have been discussing would look like. Are there any presentations that would be helpful to the group? It was suggested that someone from Alabama's program might be useful as well as someone from Florida – Scott has a staff member that has experience with the St. Johns Water Management Area that might be able to provide some information on their program. Staff will work on getting some presentations on integrated water system for the next meeting.

#### **9. Public Comment: No public comment was offered.**

#### **10. Meeting Adjournment:**

Mark Rubin thanked everyone for their attendance and participation in today's meeting.

The meeting was adjourned at approximately 4:00 P.M.