

**EASTERN VIRGINIA GROUNDWATER MANAGEMENT  
ADVISORY COMMITTEE**

**WORK GROUP #1 – ALTERNATIVE SOURCES OF SUPPLY**

**MEETING NOTES – MEETING #7 - FINAL**

**FRIDAY, MAY 13, 2016**

**DEQ PIEDMONT REGIONAL OFFICE – TRAINING ROOM**

**9:00 – 12:00**

**Meeting Attendees**

<b>EVGMAC – WORKGROUP #1</b>	
Richard Costello – VA Home Builders	Mike Kearns – Sussex Service Authority
Larry Dame – New Kent County	Kristen Lentz – City of Norfolk
Judy Dunscomb – The Nature Conservancy	Britt McMillan - ARCADIS
Jason Early – Consulting Hydro-Geologist	Jamie Mitchell – Hampton Roads Sanitation District
Bill Gill – Smithfield Foods	Doug Powell – James City County
Carole Hamner – WestRock	Donald Rice – Newport News Waterworks
Katie Frazier – VA Agribusiness Council	Erik Rosenfeldt – Hazen and Sawyer
David Jurgens – City of Chesapeake	Gina Shaw – City of Norfolk – Department of Utilities
Whitney Katchmark - HRPDC	Brett Vassey – VA Manufacturers Association

<b>EVGMAC – WORKGROUP #1 – STATE AGENCIES</b>	
Allan Knapp - VDH	

NOTE: Advisory Committee Members NOT in attendance: John Aulbach – VDH – ODW; John “J” Dano – Hampton Roads Sanitation District; Kyle Duffy – International Paper; Jeff Gregson – VA Well Drillers Association; Skip Harper – VA Department of Housing and Community Development – State Building Codes Office; Steve Herzog – Hanover County; Gregg Jones – Cardno; Scott Kudlas – DEQ; Dave Morris – City of Newport News; Paul Rogers, Jr. – Farmer – Production Agriculture; Thomas Swartzwelder – King and Queen County; Chris Thomas – King George County SA; Wanda Thornton – Eastern Shore Groundwater Committee; Mike Vergakis – James City County

<b>INTERESTED PARTIES ATTENDING MEETING</b>	
Phil Abraham – VECTRE Corp.	Michael Davis - VCU
Ken Bannister – Draper Aden	Ted Garty – City of Chesapeake
Robb Bohannon – Fairfax Water	Craig Maples – City of Chesapeake
Jeff Corbin – Restore Systems	Matt Wells - WestRock

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

## 1. Welcome & Opening Comments – Introductions (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.

He noted that the overall goal today is for this group to work on the matrix and to flesh it out. The idea being that on June 24<sup>th</sup>, the Eastern Virginia Groundwater Management Advisory Committee is going to meet and we are going to present work from each of the workgroups to them for their consideration and deliberation. We currently envision that the matrix that we develop today will be at least the interim work product of this workgroup. As much as we would like to think that the work of this workgroup is done – we probably have more work to do.

## 2. Report on Activities and Status of Other Workgroups and Advisory Committee:

Mark provided an overview of the activities and status of the other two workgroups. He noted the following:

- **Workgroup #2B – Trading:** The members of the Trading Workgroup have decided to narrow the focus of their work considerable so that they are looking at how to incentivize banking. So for example, what kind of credits do you get if you are able to put water back into the aquifer? That is going to be the focus of the proposal that they are going to be coming up with for presentation to the main Advisory Group. They meet again on Friday, May 20<sup>th</sup> to finalize their strawman proposal. When the proposal for a trading concept was first presented to the Advisory Group there was not a lot of interest in the concept – there also was not a lot of “warm and fuzzy” feelings for the overall concept of a broad trading system within the trading group itself, so the decision was made to focus more back on the concept that appeared to have the most support and interest – the concept of incentivizing banking – the idea of being able to get credits for putting water back into the aquifer.
- **Workgroup #2A – Alternative Management Structures:** They have also narrowed their approach but it may sound like it is a fairly expansive concept. Their realization is that the permitting system works fairly well when there is enough water. The problems come when there is not enough water, like we are today. He noted that Andrea Wortzel had worked on the concept and had taken a look at the existing Surface Water Management Act and looked at the concept of “voluntary allocation agreements”. These agreements would allow folks within a particular area to be able to get together and create an agreement about how they were going to “share” their allocations in a way that would take into account a period where there is less water. Even though the Surface Water Management Act provides for the creation of a “surface water management area and has been allowed by statute and for the use of this mechanism of “voluntary allocation agreements”, no one has done one yet. So one of the questions that they are looking at is how do you incentivize the use of this mechanism?

## Discussions included the following:

- The idea that a series of localities might have their own amount specified for use among those localities – isn't this basically trading? *Yes, at some point you are allowing folks within a fairly specific area among themselves to start to figure out how to use (allocate) the available water, to allocate it among themselves to get through a given short period of time to figure out how to lessen the use of water during that period. There is an aspect of trading to it, but what you are not doing is creating a whole market where water allocations could be traded within the region – this would be an allocation agreement among certain users. It would just be among those folks who were party to the agreement. The workgroup is trying to figure out how such an agreement would work and who could or would be eligible to be party to those agreements.*
- Would these voluntary allocation agreements replace the use of long-term contracts? Supplemental contracts? Localized trading? Would there be a “trigger” that would have to be reached that would allow for the use of these “voluntary allocation agreements”? *Yes, there would need to be some kind of drought trigger – that is one of the aspects that the workgroup is working on. Once the concept was discussed, one of the ideas that was brought up is if it works in this situation then should it be allowed to work even when you don't have a trigger? Those issues and concerns are being discussed within the workgroup.*
- As time changes – water needs for a locality changes. That's the problem with setting something based on a date – there needs to be a different “trigger” for duration of an agreement. *The idea is that you would be working within the permit period.*
- **The suggestion was made that the workgroup also needs to take into consideration the “local agreements” that a number of localities are already party to that have nothing to do with the time cycle for permits.**
- A question was raised over the concept of “local agreements”: If localities are party to local agreements, is it the state's responsibility to sync up your local agreements with their permitting process? These are not agreements to withdraw water, which would be the purview of the state's permitting process, but are more of an agreement as to who is going to provide water after it has been brought into a treatment plant and distribution system. It is an agreement as to “Who is going to share water with whom.”
- A question was raised regarding the syncing up permits: *This not be a short term voluntary approach this would be a strategy. The current process is moving the permits towards a more uniform renewal period so that in essence the permits will be synced in the future. This has essentially been done with the 14 largest permittees by DEQ's administratively continuing the permits. Some of that process has been done intentionally and some unintentionally because of lack of resources. Consideration of those existing local agreements has not been officially formalized and considered in the current process.*

Mark noted that there was still more work that needs to be done by the workgroups to be able to flesh out and present these ideas at least conceptually to the main advisory group at their meeting on June 24<sup>th</sup>. Hopefully the Advisory Committee is going to provide some guidance on whether some of these

ideas make sense and should be pursued.

### **3. Other Workgroups (Mark Rubin/Bill Norris):**

It was noted there had been discussions regarding the creation of 2 additional workgroups to support the work of the Advisory Group – a question was raised regarding the status of those additional workgroups.

Mark Rubin noted that two additional workgroups were in the process of being created and that the membership on those two new workgroups were being selected. Bill Norris noted that a lot of the delay in the creation of these two new workgroups was an effort to move the existing workgroups closer to completion of at least draft work products and recommendations for the Advisory Committee before trying to flesh out additional details. These new workgroups, who will be looking at “Funding Options” and “Alternative Permitting Criteria” will be able to further flesh-out the recommendations from the currently existing workgroups. There were not a lot of initial interest in the two new workgroups so we are now in the process of identifying additional individuals who would be willing to provide their expertise to the process as it moves forward.

Mark noted that the “Alternative Permitting Criteria” workgroup will probably be tasked with addressing the question of how we address the “unpermitted user” as we move forward.

Bill noted that the current balance of the meeting schedule was:

- Friday, May 20<sup>th</sup> 1:00 – 4:00 – EVGMAC Workgroup #2B – Trading;
- Monday, June 13<sup>th</sup> 1:00 – 4:00 – EVGMAC Workgroup #2A – Alternative Management Structures’
- Friday, June 24<sup>th</sup> 9:00 – 12:00 - EVGMAC

### **4. BREAK-OUT GROUPS – GEOGRAPHIC REGIONS:**

Mark noted that the balance of the meeting would be spent in small break-out groups based on geographic regions looking at the “alternative sources of supply that would be deemed most appropriate for each region – looked at from the perspective of using your own local funding and from the perspective of having state or other alternative funding options. He noted that Brandon Bull had assisted with the development of the matrix for each of the workgroups.

He noted that the work of this group is pivotal to the discussions of the main advisory group and the other workgroups so that the viable and appropriate alternatives can be identified and fleshed out.

The individual break-out groups were instructed to look at those alternatives that would be most appropriate for a specific region that were included on the matrix for each of the regions. (Copies of the matrices were distributed prior to the meeting and were made available to the group as handouts at the meeting.) The goal of this exercise is to flesh-out the matrix for each of the geologic regions.

Mark provided the following list of suggested questions/topics for each of the breakout groups to use in fleshing out their specific matrix:

- Incentives needed? Need to be fleshed out – we were talking about a lot of non-financial incentives.
- More detail on funding options needed to provide a head start to the new Funding committee.
- Unpermitted users – what effect they would have when you start to consider what alternative source of supply you think are the most useful for your region.
- From your list of projects, pick out one and do a little more analysis about the pros and cons of it – particularly looking for what are the hurdles that we have to overcome to implement that project.

After that we will come back together and talk about what everyone has done, but particularly looking at the projects and how you evaluated them. He noted the list of “Alternative Source Criteria” that had been developed in an earlier meeting and had been reproduced and distributed today as a handout.

---

#### ALTERNATIVE SOURCE CRITERIA

- Affordability
- Protect public health
- Sustainable/adequate supply
- Reliable volume
- Protect quality and integrity of products that rely on water
- Consistency of quality
- Ease of monitoring as to quality and quantity
- Practical, available, feasible
- Assurance of safety to the public
- Availability during emergencies
- Adequate quantity for current and future needs
- State and federal regulatory consistency
- Rural and small locality sensitivity
- Effective waste management from purification process
- Protect interests of private well owners
- Unregulated sources/unpermitted users
- Allow citizens to build and live where they want
- Balance the needs of current users with future needs
- Minimize stranding of existing infrastructure
- Injection
- Consistency in design standards
- Optimize demand management where practicable
- Consistency in consumption standards
- Small scale alternatives

It was noted that there had been one fundamental question asked at the end of the last meeting that still remains to be addressed and that is “what is the sustainable withdrawal amount”? What is the number that we are shooting for? What amount do we need to reinject? What is the number? What is the goal of this process? It was recognized that there may be several “right” numbers, but in order for this process to be meaningful there needs to be a “number”.

**ACTION ITEM: Staff will try to address and answer the question as to “what is the number?”**

Mark mentioned the ongoing JLARC study related to Virginia Groundwater resources. He suggested that it appears that they are looking at the same model and same concepts but are looking at it from a different assumption. Instead of looking at use of an 80% number they are seeing if you use a 90% or a 70% figure what does that do? What difference does that make? It was suggested that it might be good for the group to have a report on the JLARC project at some point. It was noted that the JLARC report was due on October 11<sup>th</sup>. He noted that Scott has been working with the JLARC staff on their efforts through this process.

**ACTION ITEM: Staff will provide additional information on the JLARC study as information to the workgroup at a future meeting.**

**Discussions included the following:**

- A question was raised over the notations in the provided matrix – what does the “+” in the matrix mean? *Brandon Bull noted that he had used the “+” instead of a “check mark” to indicate that an option or an alternative that would be appropriate for the region.*
- What should the groups look at in terms of determining whether an option is “appropriate”? *It was suggested that if the group determined that an option was “appropriate” that the question was really then one of how would that be done? The concept of this exercise is to capture the ideas of the group as to what they feel is appropriate for their region and then how would or could it be done? It could be looked at from the perspective of what state or local sources for funding might be available or appropriate to use for that option/alternative?*
- What information is being asked for in regard to permitting issues? What level of specificity is needed to help the main advisory group understand the issues? *It was suggested that the best approach would be to start broad and then to work your way down – whatever level of detail you feel is necessary will be useful.*

#### **5. Break-Out Groups – 9:30 – 10:40:**

The workgroup meeting attendees broke into the three designated geographic regions for discussion of the questions and filling-in of the matrices for each of the regions. The members/participants of each of the break-out groups included the following:

- **Fall-Line:** Jutta Schneider; Carole Hamner; Alan Knapp; Mike Kearns; Jason Early; Erik Rosenfeldt
- **Central:** Craig Nicol; Brett Vassey; Larry Dame; Judy Dunscomb; Matt Wells

- **Eastern:** Brandon Bull; Bill Gill; Don Rice; Britt McMillan; Kristen Lentz; Whitney Katchmark; Doug Powell; David Jurgens; Jamie Mitchell; Rich Costello; Katie Frazier; Jeff Corbin; Phil Abraham

**6. BREAK: 10:40 – 10:50**

**7. Reports from Break-Out Groups: “Central” (Judy Dunscomb – Break-Out Group Spokesperson)**

Judy Dunscomb, who served as the “spokesperson” for the break-out group, provided an overview of the discussions of the “Central” Break-Out Group. She noted the following:

- One of the overarching things that we can put a finer point on is that within the Central Region it is neither optimal for surface water withdrawal nor is it optimal for groundwater withdrawal. The main stem rivers that you would consider for off-stream storage are tidal (salty to a great extent) and when you try to build offstream impoundments you end up with wetland impacts. There are not a lot of good opportunities for groundwater recharge like is being explored in the Eastern part of the state. That drives this region towards a couple of things. It drives it towards smaller surface water impoundments and towards interconnections.
- In regards to local funding, the group talked about the idea of using “tifs” (Tax Incentives Financing) around special service districts which help fund the expansion of infrastructure to get people off of groundwater. The group also talked about tax credits to maybe disincentivize construction within certain areas, to try to consolidate where the infrastructure would be developed.
- In regard to state funding mechanism, the group talked about the idea of the use of the WQIF funding mechanism that already exists and as the need for that mechanism matures out that maybe the conversion of that to support infrastructure might be appropriate. The group also recognize that there is probably “a kettle of vultures” circling around that money waiting for it so that might not be a viable option.
- Impediments – the group just refined a little bit around the idea of impediments. So for surface water impediments, the group refined around the permit issues being that it is difficult to compensate for wetland impacts in the region. Also, there is this legacy, particularly from EPA, having directed applicants from the region to utilize groundwater and now obviously the understanding of groundwater resources has shifted, but there is this lingering issue of whether we could go to EPA with the idea of a permit because of past actions/mandates. There is a hurdle that will need to be gotten over regarding EPA’s understanding of the vulnerability of groundwater as a resource for this region.
- Permitting Cost Impediment: There are fixed costs associated with any permit that you do. If you are permitting multiple small projects you end up repeating that fixed cost multiple times. How do you address that issue?
- The group also discussed scaling up existing infrastructure. It had to do with scalability with limited financing terms – how do you connect the dots in 10 to 15 years?

- The group also talked about public opposition around land-use change.
- There were a number of issues around the concept of interconnections. One of the concerns was the price structure of the contracts entered into and the concern with the extent to which it is at the advantage of the supplier rather than the locality that needs that resource. Another concern was the cost of transmission infrastructure – cost of transmission line capacity – length of pipe – costs - regulatory impacts. *A question was raised regarding whether is any difference between the public concerns over “the pipeline” and their concerns regarding water transmission line location? The answer is that there is no difference – people don’t want either on their property. They don’t want the “Government” on their property.*
- Another impediment around “interconnections” was VDOT. If you have a new development that you need to run infrastructure to, VDOT is already requiring a 50’ right-of-way on either side of that for additional infrastructure needs – so you end up with a very large right-of-way that has to be taken away from the available development footprint which creates a large disincentive for the developer.
- Incentives that the group talked about rate setting for water sellers – where there is scrutiny or regulation around what can be charged for water. Another idea was incentives around how to get some pre-permitting for infrastructure – to get around the idea of not being able to develop an area when you don’t already have a permit from DEQ that demonstrates that you have the water, because you don’t have the permit from the Department of Health or you don’t have something else. How could you get some form of pre-permitting (with some expiration date) to allow the developer to have a level of certainty and would provide an understanding of what the impacts on the resources would be. It would allow for projects that you had a better sense of viability about.
- Non-permitted users: Infrastructure for groundwater withdrawals would impact those smaller non-permitted users because they are not monitoring – so one day they go out to a “horrible sucking sound” and then what do they do? How do you get those users onto a system? How do you develop the needed infrastructure to now bring them into the system and provide them with water? The vulnerability of those unpermitted users is really what needs to be considered.
- From a conservation perspective we need to figure out something more on the wetland impact side, because if surface water impoundments have to be part of this solution then we have to figure out a smart answer to the wetland impacts issue. How could we do that with maybe some pre-project siting – looking at some advanced mitigation or other things we might be able to do to offset wetland impacts. The concern is how do you address the loss of wetland resources when a reservoir or impoundment is created? How do you offset or compensate for that impact?
- *A question was raised about the idea of setting limits on what a water supplier could charge as an incentive? It is not really an incentive but the idea is that there are some ways of addressing impediments that aren’t incentives. It could be an incentive if they thought that the rates were reasonable. “Reasonable” is always a matter of perspective. For the supplier it might be reasonable but for the one that is purchasing the water, it might not be reasonable. Some of the contracts that have been talked about were “50-year Contracts”. It is hard to look at a rate*



*over a 50-year contract period and be able to say that is reasonable. This is looking at the idea of bulk rates and setting them at a “reasonable” level. You have to look at your development and how you are going to use the water. A lot of the time it is having to pay for a certain amount of water under the contract whether you use that much water or not. It is hard to determine that say 40 years into the contract that the rates are still going to be “reasonable”.*

## **8. Reports from Break-Out Groups: “Eastern” (Whitney Katchmark – Break-Out Group Spokesperson)**

Whitney Katchmark, who served as the “spokesperson” for the break-out group, provided an overview of the discussions of the “Eastern” Break-Out Group. She noted the following:

- The group started going through the list of options and alternatives and tried to fill in the gaps in the matrix.
- It was noted that most of the options that were identified are funded locally and that is not likely to change, even though in the future state funding at some level may be needed and appreciated but may not be viable.
- The alternative for use of fresh water stream is not really a viable option for this region. There are not that many fresh water streams that aren't being used that get enough water that it would be worth pursuing.
- The option of building surface water reservoirs/impoundments – this is the exception because there was interest in state funding or some kind of regional/multi-jurisdictional funding approach. The group talked about creating a new political subdivision. The question is whether there needs to be something like that to collect the revenues needed for this type of project to be feasible. In terms of incentives – there needs to be stronger state support and participation in the process. There was a lot of skepticism as to whether this type of project could happen, given past experience with development of a reservoir. Impediments included the Army Corps of Engineer's criteria and trying to find something where this would be the least damaging option/alternative – the least environmentally damaging option. Wetlands impacts and land availability were also raised as impediments that needed to be considered. Is there really a site in the “Eastern” region where a reservoir would be feasible?
- Stormwater – kind of new ground – the group started out focused on whether we could replace a lot of irrigation wells with small scale stormwater ponds? It would be good if there was a way to discourage people from putting in irrigation wells and to encourage the use of small ponds for irrigation. Could incentives be developed to encourage the use of these small ponds for irrigation?
- The group discussed the possibility of putting stormwater into small ponds or reservoirs for use at a later date, possible as irrigation water in lieu of having to install irrigation wells or treat that water through the treatment plants for use as drinking water. The group discussed having a TMDL MS4 protocol where it was clear that you could get credit for taking this approach.

- Direct potable reuse – the group thought that this was a great long-term idea but it might be easier to use in the future once people got used to the concept.
- The group talked about the HRSD project, the “SWRI” – not really local funding but it is paid for by the rate payers. How a project is paid for is important. The goal is to have the people who benefit pay.
- There needs to be an integrated planning concept and process.
- Education and communication are key components that need to be incorporated into any process and project. There needs to be broad support and involvement.
- State has to be a partner in the process.
- It would be more equitable if the people who use groundwater paid more into it.
- Need to consider the economic development component for any alternative.
- There are economic development impacts that need to be considered.
- The group discussed “desalination” and decided it was not a viable economic solution.

Mark raised the concept of “reuse” and it was briefly discussed by the group – is this something that needs to be further fleshed out as a possible solution. It takes a long time to get the public to buy into the concept. The group thought that this might be a local solution in some instances but doesn’t appear to have broad applicability. The group decided that this was not a topic that needed to be further discussed and that no additional presentations are needed at this time. This could be a site-specific solution but they are all small-scale efforts. General sense of the group was NO on the concept of reuse – we know as much as we need to do at this time – could be considered as a small-scale effort at best.

## **9. Reports from Break-Out Groups: “Fall-Line” (Jutta Schneider – Break-Out Group Spokesperson)**

Jutta Schneider, who served as the “spokesperson” for the break-out group, provided an overview of the discussions of the “Fall-Line” Break-Out Group. She noted the following:

- There would be value in distinguishing between alternative sources that are a direct recharge to the aquifer and actually replenish the water as opposed to those alternatives that reduce how much we pull out of the aquifer.
- Need an answer to the volume question – what is the number? Are we aiming to get back to the rebound level or are we aiming to get above that? What is the target number?
- Any system should consider credits for organizations that have already spent a lot of money or resources to reduce aquifer usage.
- Need to generally increase public awareness and education about water sources and water supply issues.
- The group spend the majority of their time talking about surface water recharge. The concept was raised about creating or building a new water authority to manage surface water recharge at the “Fall-Line” or to use seasonal capacity at the existing surface water facilities. Issues

included impact to stream flows by new facilities. What is the operational sweet-spot for existing facilities that needs to be taken into consideration? Need to consider the capital investments needed for the development of recharge wells. Need to consider operational costs in addition to what is needed to meet local demand. It would be helpful if this approach used the model to identify the aquifer's response to the injection.

- The public perception of aquifer injection projects needs to be taken into consideration. What additional public education efforts are needed?
- Public perception is important.
- Proof of concept.
- Funding – the group talked a little about what the models used by Florida and California use – the idea of user fees that could be distributed among aquifer users was discussed. The concept of the use of a “regionalized funding group” was identified. The idea of having state support for the upfront capital costs for a project was discussed by the group – loans; state funding pot.
- On the local funding side, the group talked about the availability of credits for use of excess water capacity – should the drinking water providers get credit? User fees?
- Credits for conservation practices was also discussed within the group – incentives.
- Credits for nutrient reductions.
- Unpermitted users – user fee? – Tax? Unpermitted users would get the benefit of having an aquifer recharge project in place. Assurances into the future because of the recharge project being in place.
- Reuse projects need to be closely coordinated with the economic development folks.
- Concept: First use water should cost more than reuse water. How would you go about making that happen?
- Reservoirs – issue of using water that is already in sand pits and borrow pits – an inventory is needed. Is the volume sufficient? Is the quality sufficient? Is there adequate infrastructure in the area – at that location

#### **10. Next Steps – Meeting Wrap-Up (Mark Rubin):**

Mark noted that the question now is what are we going to do with all of this information? He noted that initially the three facilitators and/or staff support individuals are going to now take the matrix document that we started today's discussions with and fill it based on the conversations that we have had. The idea is (the dream is) that they will revise the matrices based on today's discussions and get them to Bill who will then send them out to everyone for review and comment, then we will take those comments and come up with a “final” product that we will be able to give to the Advisory Committee.

Mark asked for input from the group on “what else we need to tell the Advisory Committee” beyond the matrix. Comments included the following:

- Show me the money! What are our viable funding options? The “Funding” Committee has a tough decision to make with regard to whether it is user fees or is it spread out? That is going to require some help from the General Assembly.
- Consistently over the last several meetings the concept of needing a more regional approach was raised and discussed and seems to be a possible viable option.
- Never thought that we would be discussing the idea of putting in reservoirs or impoundments as a possible option but there seems to be a renewed/revised interest in exploring that option.
- There is a history with reservoir projects of the state really not participating in the process – the state needs to participate in this effort if reservoirs/impoundments are to be part of this discussion. The state needs to take an active role. It was noted that an active state role in the process may not ever happen because the decisions on these types of projects are made by the appointed citizen board – they are autonomist – they can do what they want.
- The need for pre-project planning/preplanning was raised. There could be designated areas that are targeted in advance for development and you have an identified need for that type of development that could be taken into consideration.
- It all goes back to the concept and question of “What are our target numbers and are those numbers tied to a specific geographic area? If this information is available it needs to be mapped so that it can be taken into consideration as the project moves forward. Then that number needs to be crunched through a model to determine if it meets anticipated future demands. The model needs to be both spatial and quantitative.
- The idea of the use of information from the Virginia Economic Development Partnership related to specific areas of anticipated or planned economic growth was discussed. There needs to be more feedback related to economic development. Need to look at VEDP’s projections of need. It was noted that this information may not be as useful without having first identified the type of industry that is planned for in a specific area and the specific water demands for that industry. It was noted that each of the projects that VEDP manages is built for a very specific use and purpose and that there are industry standards for those uses that could be applied to determine their water needs. The water demands for mega sites have been all over the board and there is a lot of competition. There needs to be a balance between groundwater usage and reclaimed water usage. It is a case-by-case process.

**ACTION ITEM: Mark Rubin will talk to Sandi McNinch with the Virginia Economic Development Partnership to see what kind of information that they have available and how that information could be used in the deliberations of this workgroup.**

- The concept of the “GO Virginia” initiative was discussed looking at the concept of increased state participation in the process.

Mark noted that he had taken the opportunity to talk with Craig Maples during the course of the meeting to get some feedback regarding the part of the process that this workgroup represents. He confirmed the following:

- The conversations during these meetings have been very productive.
- People have not been holding back a lot. (This is a positive thing.)
- There is a certain level of trust that seems to be building up through this process.
- The ability of folks to be able to talk like they have in this setting has been very important and very successful.
- He thanked everyone for their participation and their willingness to share their thoughts and ideas freely with the other participants and the good work that everyone is doing.
- We are getting somewhere and there are some interesting thoughts and ideas that have been shared, but we still have a way to go.
- We are making progress.

**11. Public Comment: No public comment was offered.**

**12. Next Meeting Topics – Final Thoughts:**

Mark noted that we will be able to report back to this group the actions of the main advisory group. He asked for any final comments or ideas that the group wanted to share. The following items were raised:

- The concept of the use of “AC Condensate” was raised. This condensate probably amounts to a fairly large amount of water in some cases and it might be useful to offset some water use/needs. It could be used to offset some irrigation need.
- User Fees – Who would be subject to “user fees”? This will need to be discussed by the “Funding Workgroup”. How narrow is the term will need to be identified. The concept of “unpermitted users” will also need to be part of this discussion. Unpermitted users will be looked at by the “Alternative Permitting Criteria Workgroup”. The fact that this workgroup has raised the concern will go into that workgroup’s consideration and discussions of the concept.
- A request was made for information on the actual costs and permitting timeline for impoundments and reservoirs. It was noted that this might be useful information to have available. It was also noted that there are likely to a lot of “lessons learned” from the last attempt to develop an impoundment that might be worth revisiting for this current process.

**ACTION ITEM: Staff will explore the concept of the feasibility of the use of “AC Condensate” to potentially offset some water needs (i.e. irrigation).**

**ACTION ITEM: Staff will develop information for dissemination to the group on the costs and permitting timeline for impoundments and reservoirs and will try to develop some “lessons learned” for consideration by the group.**

**13. Next Meeting/Meeting Adjournment:**

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

we would be sending out a poll to determine the next meeting date for the workgroup.

**ACTION ITEM: Bill Norris will identify available dates for a meeting in the near future and will send out a Doodle Poll to select a preferred date for the next meeting.**

The meeting was adjourned at approximately 12:05 P.M.