

Workgroup #3 – Future Permitting Criteria: The workgroup will (i) review recommendations from the other Workgroups (ii) review current permitting criteria and compare to other states; (iii) consider options for incorporating land subsidence and salt water intrusion into the model, including review of land subsidence model package being tested by DEQ; (iv) consider criteria for withdrawals near/impacting the fall line; (v) consider permitting implications/incentives of any alternative sources of supply recommended by Workgroup #1 or the EVGMAC; (vi) consider permitting implications of any alternative management structures recommended by Workgroup #2A or the full committee; (vii) for each option, evaluate statutory/regulatory needs, data needs, and costs; and (viii) perform other tasks as identified by the EVGMAC.

**WORKGROUP #3: PERMIT/PERMITTING ISSUES/CONCERNS RAISED BY THE WORKGROUPS DURING DISCUSSIONS AND INCLUDED IN THE MEETING NOTES:**

- **WORKGROUP #1 – ALTERNATIVE SOURCES OF SUPPLY**
  - **MTG 1 – THURSDAY, SEPTEMBER 17, 2015:**
    - Unpermitted uses - Unpermitted sources that impact the aquifer – now and in the future – need to be taken into consideration;
  - **MTG 2 – THURSDAY, OCTOBER 15, 2015:**
    - Is lowering the trigger for when a permit is required also part of the discussion? Should lowering the trigger be considered? This could be part of a demand management strategy – reduce the "trigger" level.
    - The current groundwater withdrawal permits have something similar but not comparable to the "water conservation management plan" that was discussed in the presentation today – however it is probably not realizing its full potential and part of that is somewhat vague – the standards are particularly specific so in terms of implementation the plans tend to be vague and nonspecific – so there may be an opportunity for improvement here.
    - Groundwater permit thresholds – potentially reducing the current threshold – looking at it from the demand management perspective;
    - Look into unregulated sources/unpermitted users.
  - **MTG 3 – TUESDAY, OCTOBER 27, 2015:**
    - Look into unregulated sources/unpermitted users
  - **MTG 7 – FRIDAY, MAY 13, 2016:**
    - 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 the “Alternative Permitting Criteria” workgroup will probably be tasked with addressing the question of how we address the “unpermitted user” as we move forward.
- 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?
- 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.
  - 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.
  - 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.
- **WORKGROUP #2A – ALTERNATIVE MANAGEMENT STRUCTURES:**
  - **MTG 3 – MONDAY, DECEMBER 7, 2015:**
    - Uncertainty and Equity/Fairness issue - What justification is needed to get your permit? Water quality indicators or thresholds been established. No annual status of the resource report.
    - 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.
    - Fairness/Equity/Best use of resource - 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
    - 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



- The problem is that we have gotten to a point where we are relying on the current permitting process to solve a much larger issue. There needs to be more cross-dialogue across the resource (surface water, groundwater, stormwater) for a longer term planning concept. It was suggested that the permitting process might be the wrong tool for solving the larger issues of Commonwealth's water resources as a whole.
- Maybe the permitting system in and of itself isn't broken but when you reach the point where you are going to be asking for those kinds of investments and reductions there needs to be kind of a "time-out" period where there is an opportunity to explore other options. Maybe there are no other options, but maybe there are. How do you take voluntary agreements and translate them into the permitting construct that we have? One of the questions that is being struggled with is how is the permitting process and the opportunity to explore some of these other options going to marry up on a time line under the current system? Under the current framework is there an opportunity to take a pause and maybe say that for these certain permittees that they are comfortable moving forward with the proposed reductions but these other permittees need additional time (6 months/9 months/1 year) to collaborate on a specific project before agreeing to the proposed reductions?
- The concept of the use of a voluntary allocation agreement really does not seem to address the problem/issue at hand. Right now the basic permitting process/structure seems to be working.
- One of the missing pieces in terms of structure – as far as changing anything with the status quo is that if you develop a surface water source (as is part of the discussions of the "Alternative Sources of Supply" workgroup) what happens with your groundwater withdrawal permit/what impact does that have on your groundwater permit? There is no existing structure or mechanism to dictate that kind of policy decision. It is not spelled out in the law and there are no predictable criteria to know what the resulting impact might be. You have your permit and there is a surface water source and you are trying to make a business decision, you don't know whether it is likely that you will be able to keep your groundwater permit or keep just part of it. It was suggested that it would be helpful if the main committee would say "do you want to investigate that level of change?" Or will be difficult to hash out what type of criteria you would use to evaluate this type of change and the impact on an existing groundwater permit. It is hard to get excited about going down this path without buy-in from the top that there is interest in evaluating that level of

change. Everybody can't be a winner in this scenario without some certainty of what the future holds.

- There needs to be a mechanism for the permittees to have a voice in the process. There needs to be a mechanism for further focused discussions on the permits themselves and how to manage the resource.
- What is the role of the regulated community? What mechanism is there for their input into the process? Is it input to DEQ? Is it a notion that they want to trade among themselves? It is probably some of both. The current system has each individual permittee going in by themselves with DEQ and evaluating options in a one on one (a very silo) manner. We all recognize that given the point that we are at, the longer term solutions are not achievable individually.

- **WORKGROUP #2B – TRADING:**

- **MTG 1 – THURSDAY, OCTOBER 15, 2015:**

- VDH and DEQ permitting systems need to Sync up early in the process – impacts to drinking water permitting systems;
- The loophole created by unpermitted residential wells needs to be addressed to account for that quantity of water being withdrawn from the system but not being managed.

- **MTG 2 – THURSDAY, NOVEMBER 5, 2015:**

- RE: Rural Coastal Area: There are not a lot of withdrawal permits in the rural coastal area. Without a permit, you don't have anything to trade. How would those "silent voices" become heard – become involved – be recognized in the trading system? We have these large rural areas with folks sitting on all of this water with "no straws in the ground" and they are going to be penalized for not using the resource because they can't trade anything. How do you bring in the notion of rural areas that didn't pock holes in the ground early on ought to be rewarded and be able to trade some of that water. It is a question of "allowance".
- RE: Compensation: How do you compensate or make adjustments or make allowances for somebody/a user who has a permitted use of "X" amount but their historic use is obviously lower? So are you going to take away their "permitted use" amount and replace it with a much lower amount in order to meet the cap or are you going to say that your use is the "historic use" amount and in order to meet the cap you will need to reduce it below that level. That is the way that the program was originally designed to function but it has never been implemented in that manner. The statute already accounts for that – it basically says that if you are not using 60% of your permit by "Year-5" we can take it back.

- **MTG 3 – MONDAY, DECEMBER 14, 2015:**
  - The impacts of the non-permitted withdrawals have been raised in each of the workgroups.
  - The question that seems to come up a lot is where are we in terms of the permit? What are our assumptions for the next 50 years? Is it much trouble to have a "cheat sheet" that identifies our starting points and the assumptions that we are working off of for the next 50 years? Permitted? Unpermitted? Growth assumptions? We need to have a common numerical basis to work from. It was noted that the only trouble is that the current scenarios that are being used in the model run are based on the total permitted use. We can use some of the information from the "water supply plans" to compile information on the growth estimates and the estimates of future water needs.
  - Typically the issue is that the growth projections are done on a larger term than the permit is issued for. The permit is issued for what is anticipated to grow during the 10 year permit term instead of the longer planning horizon.
  - Effectively there are "cushions" built into the permits. How do we account for those "cushions"? 50% seems to be a large number. Politically, how do we address the "cushion" in the numbers? Some of the built-in cushions for the models are to address the sources of error in the model. The thinking in the program has always been we need to try to account for the things that we don't know by being a little more conservative. We need to look at how we apply the current model to the existing conditions and anticipated future conditions. There is conservatism on both sides – in terms of how we use the "tool" and in how the projections are made.
  - The state issues permits for permission to withdraw specific amounts of groundwater. What needs to be decided is to what extent are additional choices granted to users over the permissions to withdraw.
  - A question was raised about the current permit system and the amount of water that is being requested which includes a "fudge factor". When an applicant comes in with a permit request needing access to groundwater the normal process is for the applicant to ask for some amount of "fudge factor" – additional water over and above their actual current needs.
  - For areas that are rural, if they are left out of this because they don't have any existing permits then those communities will be left in the stone age because they will have no ability to get into the system because they have no current users of the commodity. Should we consider that the areas - the value of it are inversely proportional to the number of permits that you have? If you don't have a lot of straws poking holes in the ground and you

don't have a lot of users sucking water out of the ground then anything that you are trading in those areas could be worth more, because if they are not, then those areas are going to be punished because they don't have any economic development ongoing on the surface.

○ **MTG 4 – FRIDAY, MARCH 25, 2016:**

- It is anticipated that we will discuss the concept and concerns related to “unpermitted users” in the “Alternative Permitting Criteria” workgroup.
- The group discussed the possibility of having to condition permits based on local conditions – would require an accounting process to keep track of the volumes that are being injected versus those being withdrawn by each withdrawer – there could be localized impacts that would need to be taken into consideration depending on the separation distance between the injection point and the withdrawal point.
- The issue of “unpermitted users” was raised. Questions raised included: How do “unpermitted users” fit into the discussions that the group just had? What effect does that piece of our current structure play here? The group’s discussions included the following:
  - Is there any situation where an “unpermitted user” would be injecting? Not likely.
  - “Unpermitted users” are a loss from the system. When you are putting water into the system how is that kind of loss from the system accounted for? One way is to come up with a number and take it off the top and say that they are unpermitted users and they will be using “x” amount of water from the aquifer – and that amount would come out of the ratio, but that approach is probably not equitable. It is also an “increasing loss” that would need to be taken into consideration.
  - How much certainty do we want to provide for a water allocation?
  - Could DEQ issue permits for the current “unpermitted users”?
  - What are we trying to get out of the “unpermitted users”? For the benefit of the aquifer? To monetize the resource? Do we need to consider a fee for “unpermitted users”?
  - The group discussed the VDH permit fee system and the new well registration law that was passed recently.
  - In our current technical resource evaluation, we are not doing anything to control it - we are currently just accounting for magnitude.
  - The new well registration requirements will provide a reasonable data set moving forward.

- The group discussed the options for addressing “unpermitted users”. You could 1) Let them slide or 2) Charge them a fee – through the existing VDH program or the registration program. Or, you could 3) Treat them as a permittee – similar to a stormwater general permit or a permit by rule. You could charge an annual fee – like a stormwater fee.
  - FLIP CHART NOTES: Unpermitted users – loss from system – how is it addressed? A) Take off top re: ratio-equitable? B) Permit them – regulate? C) Pay a fee to contribute to a banking system. D) Already “accounted for” in the model – improve with well registration legislation – new wells only. Or D) Stay the same.
  - The group discussed the use of a severance tax or a fee for service. It would have to be a groundwater replenishment fee – tied to the cost of replenishing groundwater. The group noted that there would be water rights issues that would need to be taken into consideration.
- **MTG 5 – FRIDAY, MAY 20, 2016:**
- Kurt noted that the strawman is based on the Nevada Model in that you get a storage credit when you inject water and then there will be some sort of process to address/estimate annual loss rates and those loss rates will be deducted from whatever remaining credits that you have left over on an annual basis. This example is divided into both “seasonal” and “long-term” storage options. Under the “seasonal” storage approach there would be an expedited permitting process – you can withdraw what you inject on a “1 to 1” basis and the permit would expire at the end of the year – using a dual purpose well. Examples are provided as to how a “long term storage” process would work. You would need to have a recovery factor that would be determined by DEQ based on where you are in the aquifer and the characteristics of the aquifer and what the loss rates in that area are.
  - From a regulatory perspective there would need to be provision to amend a withdrawal permit to allow for the introduction of these credits for permitted withdrawal and allow you to modify it as a minor modification probably. That is accurate but it would be subject to consideration of any public comment that the agency received on the modification request. DEQ would need to be able to go back and determine that they can withdraw the additional water without any adverse impact to the aquifer. The agency needs to have the opportunity to ensure that the withdrawal is appropriate and will not adversely impact the aquifer.

- Do we need to include the concept of seasonal storage if for nothing more than administrative ease? Administrative ease is the thought process on the stuff that is to come. Would there be a skinnier process – a more streamlined process for seasonal? The presumption is that some kind of streamlined permitting would have to be developed to address this concept.
- Do we need to keep the concept of “seasonal storage” which is the exception to the rule? We do need to have it as a short-term measure to address emergency needs – a simplified permitting process would be needed. Seasonal is a business decision.