

J.W. Brent

From: Tom Frederick [tfrederick@rivanna.org]
Sent: Monday, May 09, 2005 12:14 PM
To: 'Bob Tucker'; 'Bill Brent'; 'Gary O'Connell'; 'Mike Gaffney'; 'Judy Mueller'
Cc: Aaron Keno; Bill Ellis; Nancy Barker; Andrea Terry; Bob Wichser; Jennifer Whitaker
Subject: RE: Conversation with DEQ staff

I appreciate Ms. Thomas providing a summary of her meeting with DEQ. It is always helpful to know what a regulator is telling others.

To assure clarity, it may help for me to respond to some of the comments in the summary so you understand clearly what the staff has been doing and is doing with respect to this project.

1. It continues to be NO surprise to the RWSA staff that DEQ is telling Ms. Thomas that they have made no binding pronouncements regarding any of our short list concepts. Our understanding is in agreement with hers.
2. We recognized on April 18th that when we said "Community Water Supply Plan", DEQ thought we were talking about their proposed regulations to require statewide planning, and that led to some unintended confusion on DEQ's part that we had to work to correct. But RWSA staff has always understood that what we are doing now is developing the justification for a permit application. We can call it what we want locally, and the idea of calling this effort a "Community Water Supply Plan" is actually a carryover from the document prepared by Mr. Tropea in 2002 when he called it a Community Water Supply Plan. The current effort started in the fall of 2003 has been based from the beginning on a 50-year outlook and I never heard any objection to 50 year planning before March 3, 2005. The 2002 plan was also a 50-year plan. There is a misunderstood idea floating in our community that a 30 year plan can be phased in but a 50 year cannot. This is NOT TRUE. As far back as the presentation at our first Public Outreach Meeting in September 2004 we stated that the plan can be implemented in phases, and during the discussion of the nine possible combination alternatives and rate impacts at the February 17 public meeting, I talked about how to phase EACH alternative. ---- I do not know the context in Ms. Thomas' discussion with DEQ when they stated "they do prefer proposals that work with existing infrastructure." First, RWSA has consistently stated to our public that the South Fork Reservoir will continue to be used and maintained no matter what option is selected (talk about "abandoning" South Fork is a misunderstanding). Second, my understanding of the regulations is that they do require that a proposal to expand an existing reservoir has to be made on the basis of the "least environmentally damaging, practicable alternative" (Section 404 of the federal Clean Water Act); maintaining a reservoir at its existing level usually does not go through the same process.
3. My understanding is that we will be required to mitigate both wetland and stream losses, which is the same as what I believe Ms. Thomas is summarizing. I don't understand the origin of the idea that regulations had changed, but do recall VHB referring to a guidance document on stream mitigation, issued after 2002, that they were using to develop cost estimates on their understanding that they will be enforced. Questions that still exist on this issue should be posed at the Pre-App Meeting. I have heard DEQ state that they would look at The Nature Conservancy's report when it is available, but my understanding is that Mr. Joe Hassell is reserving judgment on how much of it he would mandate until he reviews what they come up with and checks to see how it will affect safe yield.
4. No added comment.
5. The comments Ms. Thomas attributed to DEQ below on the James River and drought are consistent with what we would anticipate from DEQ. The restrictions she summarized as possible on the James are manageable under the plan to use the pipeline in conjunction with Observatory and Ragged Mountain as presented to the public on January 6.
6. We have been aware of the "project purpose" and "practicability" tests DEQ mentioned to Ms. Thomas. Gannett Fleming has already screened all alternatives as part of our local process to determine if they met the project purpose and were "practicable". Of the four short list concepts, ALL of them have been defined by Gannett to meet the project purpose (additional water supply of 9.9 MGD safe yield). Our consultants have provided a written opinion recommending dredging be eliminated as a water supply alternative as not "practicable" based on costs and other uncertainties (note their opinion does NOT cover maintenance

dredging, only dredging as a water supply alternative); in their opinion the other three concepts are practicable. Note that the consultant opinion on the 4-foot crest is based on environmental impact, NOT any concern of practicability.

7. A 5% permanent conservation target based on forecasted growth, on an AVERAGE DAY DEMAND BASIS, is what is currently in the demand projections prepared by Gannett Fleming last year. The four board chairmen are now considering the possibility of changing this to 10% on an average day demand basis. There is not a significant amount of literature available that we can find on what it takes to achieve a 10% permanent target, but what little is out there suggests it may require significant program effort --- AWWA has generalized in a publication M50 that permanent conservation is gradually achievable based on replacement to low flow fixtures and appliances, and that conservation may realize between 4% to 8% (depending on the community) over 50 years (note the success is gradual, not immediate). My interpretation of the discussion by the four board chairmen last Monday is that they want to hear from City Public Works and ACSA on the idea of a 10% target and what level of water conservation program effort it might take to achieve. --- Ms. Thomas' comments address DEQ talking about drought management policies shaving maximum day demands during a drought -- I note again that we did NOT ASSUME USE OF ANY maximum day demand numbers in coming up with the 9.9 MGD deficit -- these peak demands have already been removed.
8. Agree with Ms. Thomas' impressions. The "regional" argument has been made in some public comments, but we have not and are not being pressured by the regulators to go in this direction.
9. A few added comments - In order to make it possible to do "dry dredging" of South Fork, we have to add enough storage at Ragged Mountain to make up for the safe yield lost when we drop South Fork, or we limit the level we can drop the lake to the narrow margin between available safe yield in a given year vs demand. Further, the existing dam has very limited outlets for release of water below the bladder, and the size of the watershed can refill South Fork quickly when it is raining. In a "wet year" we could find it takes a long time, if ever (using existing outlets) to drop the water level sufficient to expose the sediment, then it could rain and re-submerge the sediment before it is exposed long enough to dry. If we choose maintenance dredging, I recommend we not rule out hydraulic methods -- they have many advantages including dredging operations being less vulnerable to weather fluctuations; and the only disadvantage is having to stage the drying of the sediment after it is removed.
10. We understand that DEQ could revisit the existing permit conditions at Mechums if its use were sought in a permit.
11. Agree with first sentence; which helps explain why SFRR made the short list and Buck Mountain Reservoir did not. VHB did classify the type of wetlands in their work as Ms. Thomas' statement suggests: what could be helpful in the Pre-App Meeting would be to have VHB clarify with the regulators if their classification judgments are in sync with the regulators.

I apologize for the length of this response, but hope this helps.

From: Bob Tucker [mailto:BTUCKER@albemarle.org]
Sent: Monday, May 09, 2005 8:25 AM
To: Bill Brent; 'Gary O'Connell'; 'Mike Gaffney'; 'Judy Mueller'; 'Thomas Frederick'
Subject: FW: Conversation with DEQ staff

Everyone: FYI, please see Sally's comments regarding the meeting that she had with DEQ last week.

Thanks, Bob

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From: Sally Thomas

Sent: Thursday, May 05, 2005 5:30 PM

To: Board of Supervisors members; Bob Tucker; Bill Brent; Mark Graham

Subject: Conversation with DEQ staff

Informal discussion with DEQ staff on Tuesday was educational. They would

want me to strongly assure you that they did not make any binding pronouncements about any of the proposals, but I'll

share with you what I learned. I suggest that any of what I say be checked

at the Pre-App meeting. Our meeting was a follow-up of the large meeting with regulators last month, to clarify some aspects that I found most puzzling.

1. They most emphasized: **Don't confuse a long-range plan with a proposal**

for a permit-needing project or set of projects. The planning that we are

doing is equivalent to "required homework" because **it will give explanations**

for the permit request, but in itself it's not required by DEQ. **The time**

frame can be of our own making, 30 years or 50 years or whatever, as long as

we have good reasons with which they can agree. The 2002 Plan was a local one in their eyes, not

connected to the permit-request unless we make the connection.

2. The requirement to select the "least environmentally damaging practicable alternative" creates two sieves. The first sieve strains out all alternatives that are not practicable. The regulations do not require a community to select the "most practicable" alternative; instead, the regs are designed to protect a community from being forced to select an alternative that is "not practicable." This "practicability" standard is more flexible than the environmental damage one. "Practicability" is largely defined by the applicant, and should

include cost, logistics, technological possibilities, be available, and fit the project purpose. We should determine the project's purposes, and it should be more than "provide more storage." This is where we define how many years of water need we're planning to cover with the project. If the project purpose includes keeping existing infrastructure, that's relevant and acceptable (although they didn't in this conversation want to make any pronouncement about what is "acceptable" as a specific project -- they used the "keeping existing infrastructure" as an example of something that would generally be an acceptable purpose). They said they do prefer proposals that work with existing infrastructure. The second sieve is the determination of the "least environmentally damaging" of the group of alternatives that the community has deemed "practicable."

3. There hasn't been a change in regulations regarding mitigation (because we had the impression that there had been). But there has been a change in what I'd call "oversight responsibilities". Now DEQ is involved and plans always to require compensation for environmental impacts, something not previously always required by Corps of Engineers. A specific example that will impact our proposal: the bladder that adds height to Sugar Hollow was permitted by the Corps. Now DEQ will be involved in anything like that and will attach instream flow requirements. DEQ will, in all likelihood, attach instream flow requirements to Mechums, Moormans and/or Rivanna depending on what projects we propose and what the streams require, environmentally. (Note: They said DEQ will make use of The Nature Conservancy's study of the instream flow recommendations for those waters, due to be completed by end of October.)

4. A senior DEQ official opined that the water quality of the James was a specious argument to get involved in. Likewise, that the "watershed will go to hell" if we use the James is specious in his mind (for his reasons, see #5).

5. The James water won't be a magic source to take care of our drought

concerns. Since there are other users of the James, and since some of them have no source other than the James, but since we do have other sources, we would likely be given a permit that allowed "maximum day" needs to be met during times of adequate flow in the James. But in time of drought, we would be allocated "average" day. In layman's terms, this would be essentially what we use in wintertime, when we're not making outdoor uses of our water. So, in time of drought, we'd either have to plan on cutting all outdoor uses out, as we did during the 2002 drought. Or, we'd count on our stored water to see us through. Or, combination of local sources and conservation. And, our James allotment could be cut even further if need be. We would have to use present infrastructure to store water for a drought. So, for those of us who thought the James would be the ticket to never again having to worry about what we do in a drought, the message seemed quite the opposite: if we go to the James we only have to worry during a drought. FYI, all of us present at the meeting heard this message loud and clear. To my mind, this certainly raised the question of why we would, then, want to go to the James since Rivanna provides us with plenty of water during non-drought times.

6. We can choose something other than "the very least environmentally damaging project" if

we have legitimate reason, for example if we can show that another alternative, while it might be the "least environmentally damaging," is not practicable (i.e. it doesn't meet the project's purposes, or for some other aspect of practicability).

7. "Conservation" can be assumed to be more than 5%. The same distinction between maximum day and average day might be used by the applicant to estimate how much conservation can be expected in time of drought.

8. Regional approaches are always valued by DEQ, but

Charlottesville/Albemarle is a regional approach in their eyes. We don't

have to feel any pressure to be more regional. Running pipes from James to

Charlottesville back to Fluvanna/Louisa seemed highly unlikely to be

permitted, as I described it to them. (But remember that they didn't think it appropriate to bless or condemn any particular proposal during our conversation -- they were taken by surprise on this one.) Thinking regionally doesn't have to equate to having one big

project that ties the region together.

9. They are attracted to using Ragged Mtn reservoirs because the dam safety work will already have brought in heavy equipment, churned up the ground etc. Since we have to repair and/or add to that dam, it is an attractive project to get storage capacity in the process. If we want to do maintenance dredging of SFRR, if we have created additional capacity at Ragged Mtn, and if we can connect the two water supplies, it would be possible to draw down SFRR and do dry dredging, which they said can be much more satisfactory than wet dredging.

10. Mechum's pump, presently permitted in some fashion, is something that DEQ and other regulators want to look at, so it can't be taken as a given.

11. SFRR, even at its most impactful with 4 foot crest, does much less impacting of the environment than a new reservoir would. Determining the environmental damage would have to assess the types of wetlands being impacted: damage varies by type and it was implied that SFRR's type was not the most important type. (But the crest also has stream impacts, distinct from wetlands impact, and I realize that we didn't talk about this.)

I believe that all of us from C'ville who engaged in the conversation agree with this summary, and I hope that it helps clarify some aspects. I think that the proposed "pre-app" meeting can be a great opportunity to discuss the general situation. My own advice would be that we not go to that meeting with a single plan, but rather take advantage of it to shape our plans. The parallel in land-use planning would be our Pre-app meetings, which are useless if the applicant is too far committed on a project to be able to benefit from the expertise sitting around the table.

Sally Thomas