

**Washington County Service Authority Board of Commissioners  
September 29, 2008 Recessed Meeting Minutes**

The regular meeting of the Washington County Service Authority Board of Commissioners was called to order by the Chairman at 7:01 PM.

**ROLL CALL**

**Commissioners Present:**

Mr. Joe Chase  
Mr. Scott Rector, Vice-Chairman  
Mr. Frank Stephon, IV  
Mr. D.L. Stout

**Commissioners Absent**

Mr. Sam Blaylock  
Mr. Gerald Cole, Chairman  
Mr. Kenneth Taylor

**Staff Present:**

Robbie Cornett, General Manager  
Ella Ratcliffe, Information Systems Manager  
Doug Canody, Chief Engineer  
Mark Osborne, Engineer in Training  
Rick Clevenger, Water Treatment Plant Manager  
Amanda Paukovitz, Administrative Assistant

**Consultants Present:**

Bobby Lane, PE, The Lane Group  
Matthew Lane, PE, The Lane Group  
Jeff Spickard, PE, The Lane Group  
Doug Hudgins, PE, Olver, Inc.

**Also Present:**

Mr. Mark Lawson, General Counsel  
WCSA Employees

**3. Approval of the Agenda**

Mr. Cornett stated that he had no corrections to the agenda. Mr. Chase moved to approve the agenda. Mr. Chase's motion was seconded by Mr. Stephon and approved by a unanimous vote.

**4. Rate Study Committee Recommendations (1 minute)**

Mr. Cornett informed the Commissioners and Council that

there was a brief summary sheet of the Rate Study Procurement, along with the committee's recommendations, at each of their stations. Due to the fact Mr. Cornett was losing his voice, he gave them a couple minutes to read over the summary.

The summary read as follows:

**"Rate Study Committee**

Joe Chase, Commissioner  
Frank Stephon, Commissioner  
Robbie Cornett, General Manager  
Doug Canody, Chief Engineer  
Kim Roberts, Contoller  
Amanda Paukovitz, Administrative Assistant

After receipt, review, and ranking of proposals (five), the Rate Study Committee (Committee) met on August 21, 2008 to discuss potential firms for interview. The Committee agreed that we would interview the top three ranked firms; the procurement act requires that we interview two. The Committee requested that each of the three firms submit a sample Virginia rate study which they had completed. Multiple references for each firm were contacted prior to their interview.

The interview with Rafetelis Financial Consultants was conducted at 10:30 am on September 22, 2008. The interviews with Municipal & Financial Services and Springsted were conducted on September 24, 2008 at 10:30 am and 1:00 pm, respectively. Each firm made a 45 minute presentation and responded to a list of questions drafted by the Committee.

The Rate Study Committee convened immediately after the final interview on September 24, 2008 to

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talk about the interviews. After these discussions, the Committee unanimously agreed that Municipal & Financial Services Group was the top ranked firm.

The Committee would respectfully recommend that the board endorse the Committee's selection of Municipal and Financial Services Group and authorize that staff begin negotiating a contract for the rates and fees study. (The contract would come back to the Board for final approval)."

Mr. Cornett noted that hopefully the Board would be so inclined to make a motion. He also added that Ms. Roberts regrettably could not be in attendance that night, as an employee in her department's father passed away and she was at the funeral home.

As a member of the Rate Study Committee, Mr. Chase recommended that the Board accept the Committee's recommendation, as it was a unanimous opinion of everyone who participated. Mr. Stephon proceeded to make a motion that the Board accept the Committee's recommendation, which was seconded by Mr. Chase and approved by a unanimous vote.

**5. Chemical Bid Recommendation (3 minutes)**

Mr. Cornett pointed out that two sets of handouts regarding the chemical bids were placed at each Commissioner's station. The chemical bids are for three months (90 days), opposed to a year. The advertisement prior to this one was unable to gather chemical bids for a year, so they had to solicit 90 day bids this time. The bottom of the handouts indicate the

recommendation based on the lowest response by the responsible bidders. In addition, the committee provided a charge that indicates the increase in chemical prices for the past two years. There were some pretty significant price increases in chemicals, but they are needed to treat our water. Mr. Cornett reaffirmed that these chemical bids are good through the end of December. Until the suppliers are ready to go further, a re-bid must occur in 90 days.

Mr. Chase made a motion that the Board accept the chemical bid recommendations, which was seconded by Mr. Stout and approved by a unanimous vote.

**6. Drinking Water Plant, Preliminary Engineering Report Presentation (1 hour, 15 minutes)**

Mr. Bobby Lane began the Drinking Water Plant Preliminary Engineering Report (PER) Presentation by The Lane Group and Olver Inc. and expressed his gratitude for the opportunity. He explained that they have been working on the PER during their Authority meetings for the past couple months and they are finished. Although they have completed all of the chapters, Mr. Lane encouraged the Board to review some of the later submittals. He noted that their presentation would reference things that the WCSA Staff has reviewed and approved. There are additional recommendations that The Lane Group & Olver Inc. have made that staff have still yet to approve.

Mr. Lane noted that he wanted to begin with an introduction to the report, followed by a summary of tasks they were assigned to do

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through negotiations with Robbie, Doug and other members of the staff. Their project approach was to draw input from the various members of the WCSA Staff. What they have created is a collective report, or "our study" developed by The Lane Group, Olver Inc. and the WCSA Staff. Mr. Lane explained that one of the most important things he feels they studied was water demand and forecast. They also looked at a 30 year planning period to project how much water we will need. Following an outline of his talking points, he began the presentation.

Mr. Lane reviewed the four task orders, which include: Interim Water Withdrawal Permitting, Raw Water Transmission Line Review, South Fork Intake PER and WTP Expansion PER. He talked about the project approach, which is for Lane/Olver to work together as a team with WCSA staff, utilizing multiple methods, to get well-informed, well-rounded input.

The multiple methods utilized include: Technical Memorandum Format (8 TMs were submitted, each of which to solicit input during the PER development process), a WTP Staff Needs Assessment, a Brainstorming Session and Technology tours. The WTP Staff needs expressed include: to increase laboratory and office space, a need for a more modern SCADA system, VFDs on raw water and finished water pumps, a method for cleaning Middle Fork Intake, to create a less labor intensive method for residuals management, and to update and modernize existing equipment. These individuals

expressed that these advancements would allow WCSA to do their work more effectively, and would ultimately save money for customers in the long run. To follow, a brainstorming work session was held on June 2<sup>nd</sup> which included all members of the project team, as well as Bob Benninger from the WVWA. They committee broke their alternatives into five different categories to discuss, which were the: Intake Design, Water Transmission Line, Water Treatment Process, Disinfection/DBP Reduction, and Residuals Management. The project team also visited several different facilities for technology tours during the PER development, such as: Newport News, Stafford County, WVWA, JFWA, Spotsylvania County, Bristol and Johnson City.

Water Demand projections were developed to 2036. In order to do so, multiple methods, such as: making use of Census Data, the 2002 Master Plan, current water production growth, current active account growth and non-revenue water, were utilized to forecast water demand. Although there have been talks of future galvanized water line replacement projects, the committee still wanted to be conservative in their projections. Projections ranged anywhere from 11.6 MGD to 18 MGD in 2036. They had good data that showed that the least probable demand for 2036 would be 11.6 MGD. With things the way they are now, it is not projected that we will have a tremendous amount of growth over the next 30 years. The team settled on a future water demand of 15 MGD, which is about

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3 MGD more than the Master Plan had projected. The team found that the Water Withdrawal Permit limits the total amount of water to be drawn at any source to 12 MGD; they feel the Permit something that needs to be addressed and revisited by VDEQ. We are allowed to withdrawal 12 million gallons from the river and they found it wouldn't make sense at this time to create a water plan that exceeds that allowance. They settled on expanding our current WTP to 12 MGD.

An Interim Water Withdrawal (from MF) Request was submitted to VDEQ and permission was granted. It allows withdrawals of up to 6.6 MGD from MF until the following the WTP is upgraded to 12 MGD, and the study determines that there is no environmental impact. Thus, Interim Improvements to WTP can be implemented by January 2010 or "early 2010".

At this point, Jeff Spickard discussed the various Intake Options available for the South Fork Intake (Passive Screen, Free Standing Structure or Riverbank Filtration), along with the benefits and drawbacks of each. Lane/Olver recommended the Passive Screen.

At this point, Matthew Lane began to discuss the placement of the Raw Water Line throughout the region, along with the transmission options. The Raw Water Transmission Options available include Parallel Pipes (PVC) or a Single Pipe (PVC), and Mr. Lane discussed the benefits and drawbacks of each. Lane/Olver expressed that their recommendation (from a cost/maintenance

standpoint) would be Parallel 18-inch PVC Pipes.

Mr. Doug Hudgins of Olver Inc. discussed that he was responsible for evaluation of the WTP. Many of the common upgrades considered (regardless of the treatment option) included: common upgrades, energy recovery in the South Fork, DBP Precursor Removal, Sedimentation, Filtration, Disinfection and Solids Dewatering. He talked about the common upgrades to the WTP, which could include: Intake Improvements, Flash Mix Upgrade, Finished Water Pumps, Building Improvements, and Chemical Feed Improvements, bringing a total cost of construction for these upgrades to \$2,408,000. He also talked about some energy recovery options available that would be great to incorporate, per the receipt of various pursued grant money opportunities. He made the note that not incorporating energy recovery options could be a big setback.

Mr. Hudgins continued by discussing DBP Precursor Removal Options, which are: Sodium Permanganate, Chlorine Dioxide, GAC Contactor, and Aeration, along with the benefits and drawbacks of each. Lane/Olver recommended Sodium Permanganate and Chlorine Dioxide (as an extra buffer). He continued by discussing the three sedimentation options, which include: Conventional Sedimentation, Absorption Clarifier and Dissolved Air Flotation, for which they recommended an Absorption Clarifier for preliminary treatment, while still suggesting Conventional Sedimentation as an alternative still to consider. Mr. Hudgins followed by talking about the available filtration

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options, which are: Granular Media Filtration and MicroFiltration with Membranes. In considering the benefits and drawbacks, Lane/Olver felt Granular Media Filtration was the most cost effective option for WCSA. Mr. Hudgins went on to talk about the disinfection options, which include: Chlorine (gas), Sodium Hypochlorite and Ozone. He expressed that they thought Sodium Hypochlorite (12%) was the best option, while still encouraging Ozone to be considered as a potential alternative for disinfection (also for the DBP Control process as well). The final category discussed were that for Solids Handling or Residual Management. The four alternatives considered were: a Solids Press & Holding Tank, Geotubes, Expand Sand Drying Beds and Contact Hauling. He reported that the committee recommends we utilize a Mechanical Dewatering Press.

Mr. Hudgins gave a brief summary of the recommended improvement categories, along with the recommended treatment improvements the Lane/Olver Team has suggested for the South Fork Intake and WTP. He also gave a visual to review what the Proposed Middle Fork 12 MGD WTP would look like, probably cost of each portion and potentially how parts could be financed via potential grant money. He gave a summary of the project costs to: create the Interim Improvements to 6.6 MGD (costing about \$2,636,000, which will be utilized in the 12 MGD WTP), and also to improve the South Fork Intake, Force Mains & upgrade the WTP to 12 MGD (costing about \$24,135,000).

Mr. Bobby Lane continued by discussing the funding options. Rural Development, upon receipt of our application, would finance the project at a 2.75% interest rate over a 20 year term with a 2 year deferment to carry out our costs and not hit our rates too heavily (Note: October begins their Fiscal Year, which means our application would need to be in very soon to make it into their budget). The VRA could finance the project over a 20 year term. Although he is unsure of what the interest rate will be, Mr. Lane thinks it will be between 3-4%. He noted that to spread out the cost of the project and see how it would affect the typical 5,000 gallon user, rates would increase for that user by about \$3.25. The average increase then for the average customer per month would be about \$3-\$3.25. (Note: that rate increase does not reflect any savings of money by not having to purchase water from BVU, or any additional Authority-wide rate increases).

Mr. Lane feels like WCSA is in a very good, feasible position to move forward with the expansion of its WTP. He reviewed the next steps, which would be: an approval of the report, an approval of the environmental study, completing funding applications, interim improvements, design & construction, followed by final improvements, design & construction. After reviewing these steps with the WCSA staff involved, we feel we will get approval of our PER very soon. Lane/Olver has also talked with Robbie and Doug about submitting our report to VDH for review (knowing that our staff is still

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reviewing it) upon receipt of permission tonight; the report could go out first thing in the morning for approval by VDH to get permit negotiations underway with DEQ. Lane/Olver, upon receipt of WCSA permission, feels we should move forward as soon as possible with interim improvements, design & construction, as they feel our plant could be expanded by 2 MGD and running by February 2009. Once the interim work is underway, we can begin finalizing plans for the final improvements, design & construction. Those are the suggested steps. Mr. Lane expressed the team's excitement for the project and thanked the Board for the opportunity and the time allotted for Lane/Olver to give their presentation. Mr. Chase asked if obtaining two of the mentioned easements could propose a hindrance from keeping the project moving forward. Mr. Lane expressed that, as he has expressed to Robbie, that we should start having those conversations needed to obtain the easements now so that if need be, we could move forward with additional steps in a timely fashion. However, Lane/Olver is hopeful that we can work with those property owners and they will be reasonable. Mr. Chase asked whether or not there would be other alternatives of the water line placement if the residents are not cooperative with their easements. Mr. Lane responded that the lines could possibly be placed across public driveways, but it could raise the cost of the project by several hundred thousand dollars. Mr. Matthew Lane added that any additional length we add to the line

could potentially blow the budget out of the water, not to mention that a change in the geography of the line placement could require the addition of pumps, etc. In conclusion, the lines are where they need to be. Mr. Bobby Lane really likes the chance of being able to work something out with those previously mentioned residents to obtain the proper easements and, if need be, at a reasonable price. Again, Lane/Olver feels we need to start those conversations soon.

Mr. Chase asked how much water we could take out of the South Fork and Mr. Lane responded that our permit states we can take 12 MGD. Ironically, the next line of the permit says we can take 12 MGD total from the various locations. He wants to run it by DEQ to remind them what our permit states. Mr. Canody claimed that permits do not typically combine allotments for various locations, so he does not think it will be difficult to clarify our permit.

In response to the presentation, Mr. Canody claims that we have come a long way and that what we have done thus far is very important. He wanted to compliment the Lane/Olver team for the job they have done. He wanted to thank the team members not present tonight, the members who are and for Bobby's ability to work with DEQ. Also, Mr. Canody acknowledged the individuals at the WCSA WTP that have been very involved with the process, probably more than ever. He said that hopefully, the health department will move on our report this week and we can work on obtaining some money. Mr. Cornett affirmed what Mr. Canody said,

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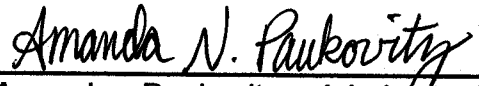
stating he would have said the same had he the voice to do so. He claimed the combined effort of the Lane/Olver team, along with the WCSA Staff, has been outstanding. The project is in the best efforts of the WCSA and he commended those involved for their persistent efforts.

Mr. Rector reaffirmed that he feels we made the right decision by selecting the Lane/Olver team; he looks forward to the end product. Referencing back to the easements, he encouraged the team (based on previous experience) to work on the wording of the documents so that they cannot be challenged later down the road (i.e. line size, etc.). Mr. Cornett noted that at the end of last week, he, Mark and Dawn got together to specifically draft the easement documents, noting line size, number of lines and the ability to come back and later fix the line. Various commissioners noted that the residents from whom we would need to obtain the easements from may not necessarily be easy to work with, based on past experiences.

**7. Adjourn**

Mr. Chase made a motion to adjourn the meeting. Mr. Stephon seconded. The motion passed 4-0. The Board adjourned at 8:25 p.m.

  
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Mr. Gerald Cole, Chairman

  
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Amanda Paukovitz, Administrative Assistant

