

RWSA BOARD OF DIRECTORS
Minutes of Regular Meeting
April 24, 2006

A regular meeting of the Rivanna Water and Sewer Authority (RWSA) Board of Directors was held on Monday, April 24, 2006 at 2:00 p.m., in the Conference Room, Administration Building, 695 Moores Creek Lane, Charlottesville, Virginia.

Board Members Present: Mr. Gary Fern, Mr. Michael Gaffney – Presiding, Ms. Judith Mueller, Mr. Gary O’Connell, and Mr. Robert Tucker.

Authority Staff Present: Ms. Anne Bedarf, Mr. Bruce Edmonds, Mr. Tom Frederick, Mr. Chuck Kent, Ms. Mary Knowles, Ms. Michelle Simpson, Ms. Andrea Terry, Ms. Kathy Ware, Mr. Norman Wescoat, Dr. Robert Wichser, and Mr. Lonnie Wood.

Also Present: Mr. Kurt Krueger – RWSA Attorney, members of the public and media representatives.

1.0 Call To Order

The regular meeting of the RWSA Board of Directors was called to order by Mr. Michael Gaffney on Monday, April 24, 2006 at 2:00 p.m., and he noted that a quorum was present.

Mr. Gaffney welcomed the members of the public in attendance at the meeting and stated that during his opening remarks he would be commenting on the public meeting held on April 18, 2006 concerning the Community Water Supply plan.

Mr. Gaffney then stated that the selection of the preferred alternative was the culmination of many years of hard work by RWSA staff, RWSA consultants, and the citizens who participated throughout the entire process. He especially thanked the citizens for their continued support and input, which help guide the selection process.

Mr. Gaffney further commented that the selection of a mitigation plan for the streams and wetlands would need to be made prior to submitting a Permit Application for the preferred alternative. There were a number of great options in the City and the County for wetland and stream mitigation. Mr. Gaffney put forth the position that the choice of the mitigation plan should be based on the most direct way to obtain the regulators’ acceptance of the permit. Once the permit was approved, the community could then join together to address the other mitigation needs.

2.0 Minutes Of Previous Board Meeting

Mr. Fern noted one correction for clarity to the fourth full paragraph on page 12. He stated that the last sentence which began “An enclosed facility would need to be immediately scrubbed ...” he felt was intended to convey that “the air from the ventilation system would need to be

immediately scrubbed.” Mr. Frederick stated that Mr. Fern was correct in the intent of that sentence.

Upon a motion by Mr. Tucker, and seconded by Ms. Mueller, the Board of Directors by a 5 – 0 vote approved the minutes of the regular Board meeting held on Monday, March 27, 2006 as corrected by Mr. Fern.

3.0 Executive Director’s Report

Mr. Frederick first reported on the Public Outreach Meeting held on Tuesday, April 18, 2006. He thanked the RWSA Board of Directors, elected officials, ACSA Board of Directors, RWSA staff, RWSA consultants, and most importantly the public for bringing together a Community Water Supply Plan that everyone could support concerning the expansion of the Ragged Mountain Reservoir. Those in the community who argue that nothing was being done about the water supply did not realize the amount of effort it took to reach this point in the process. A clear schedule has been developed for a vote on the preferred alternative by all the joint boards by the end of June in order to submit the Permit Application before July 4, 2006. The application will be submitted with or without a completed mitigation plan. He appreciated Mr. Gaffney’s comments concerning this issue at the outset of the meeting as it would be advantageous to have the mitigation plan submitted along with the Permit Application.

Mr. Frederick next stated that the South Fork Hydro Plant was again in operation. It was his understanding that around 2003 the plant developed some major problems that caused it to be shut down. RWSA’s mission for the past several months has been to “troubleshoot” the equipment and do all the necessary mechanical and electrical repair work. The facility was tested briefly over the past month and shut down for some final adjustments. As of last Monday, the plant was put into continuous operation. RWSA’s goal for next year’s budget was to save \$100,000 by operating the Hydro Plant. Unless there was not enough rainfall to provide sufficient water in the spillway, the Authority was very hopeful that the goal could be achieved.

Mr. Frederick also reported that the Draft Drought Response and Contingency Plan was on today’s agenda under “Other Business” for introduction and discussion and not for a vote on final approval. The document was the result of several months of effort by Ms. Andrea Terry, RWSA Watershed Manager, and RWSA staff, in coordination with the staffs at the Albemarle County Service Authority, Albemarle County, and the City of Charlottesville. He recognized all those staffs for their collaborative work and assistance with the development of the plan.

4.0 Items From The Public

Mr. John Martin, a resident of Free Union, Virginia, stated that he would be commenting briefly on the Draft Drought Management Plan. Ms. Lois Rochester spoke on that issue during last month’s meeting, but she was unable to attend today’s meeting as she had recently fallen and broken her hip.

Mr. Martin then remarked that when the Drought Management Plan was finished he was convinced that it would be a very good plan. He also suggested that the plan could be so good

and so effective that it could be a factor at some point in the “far distant future” when the decision was made on the amount of additional safe yield that might be needed, which could possibly save the community a lot of money. The hydrologic model was “exciting ... bringing science into the equation.” He felt it should be kept in mind that it was a big computer making decisions for the community, as it would be a tool that would be used to guide the judgment and discretion of the managers and decision makers on the drought. He thought the goal of the plan was to get the whole total community “reading from one page,” so that when a drought occurred everyone knew what was expected, what to do, and who makes decisions. He pointed out one problem that he saw with the draft plan related to a very important question about “who makes the decision to declare a drought emergency and who makes the decision to trigger imposition of restrictions.” He felt people were “reading from different pages,” and it needed to be sorted out immediately. Albemarle County law says one thing and Albemarle County Service Authority’s regulations say something else. At the Albemarle County Service Authority Board of Directors meeting last week, the discussion on this issue differed from what was in the draft Drought Management Plan. As a citizen, he felt it was very important to establish immediately that the governing bodies of the City and the County jointly declare when there was a drought emergency and that those actions trigger imposition of restrictions so that there would be no misunderstanding.

Mr. Martin next commented that as he suggested last month, he felt there was a real need for more public input than what could be provided in the context of the meeting that had been scheduled for May 16. His remarks were based in light of the experience, in particular, of the business community during the 2002 drought. The business community “came forward and did the heavy lifting for us all.” They were required to submit written plans outlining how they were going to reduce water consumption by 20 percent, and they “sacrificed.” He felt certain that they would have a lot of good information to share, they needed to be heard, and he suspected that they wanted to be heard. They could really improve the plan by looking at the restrictions that were in place in 2002 and providing input on which of those worked and which did not and what other restrictions might work better. He suggested that a “conference” format would be more effective rather than the formalized public meetings that were held for the Community Water Supply Plan. He did not want to exclude non-business community people as he felt they would also have a lot to offer. Flow also needed to be considered. The Nature Conservancy would be developing flow recommendations for the various rivers, and he felt it should be looked at in the context of the Drought Management Plan to see if it could be accommodated as well as other environmental concerns. There was a lot of work that needed to be done, but he guaranteed that there were a “whole lot of people in this community who are ready, willing, and able to do whatever we can to help.”

Mr. Jim Colbaugh, a resident of Keswick, Virginia, commented that he just happened to look back at the Water Supply Plan material that he had, and he thought that the Beaver Creek Reservoir was supposed to make us “drought proof” till 2018. He wondered why something else was being done and if it meant that the study was not right and something worse was expected. He questioned how everything “fit in.”

Mr. Gaffney thanked Mr. Martin and Mr. Colbaugh for their comments. He felt Mr. Martin made some good points concerning holding separate meetings for the business community early in the process and establishing procedures for when and who makes the drought declarations.

Mr. Frederick next addressed Mr. Colbaugh's question concerning Beaver Creek's role in drought management and the Community Water Supply Plan. He stated that Gannett Fleming developed a model based on some assumptions that with supplemental flows from the Beaver Creek Reservoir, safe yield would meet the projected demand until 2018. After a closer examination, the assumptions that were incorporated into their modeling were not necessarily proven to be true at this time, which resulted in RWSA taking a more cautious approach. The assumptions were based on growth projections and 100 percent utilization of the water from the Beaver Creek Reservoir at the South Fork Reservoir. Questions have since been introduced about the potential for streambed loss by using the stream to carry the flow as opposed to building a pipe conduit. Gannett Fleming had also assumed that the production of the North Fork Water Treatment Plant could be maximized early in a drought. In order to do that, the excess flow that was not required for demand in the North Fork system would be treated at the North Fork plant and then transferred to the South Fork system. Currently, there was a pipeline limitation that would not allow that transfer to occur. The construction of that pipeline was included in the approved Five-Year Capital Improvement Plan.

Mr. Frederick further stated that Gannett Fleming's assumptions also included being able to interchange flows readily between the South Fork Water Treatment Plant and the Observatory Water Treatment Plant. Gannett Fleming was not responsible for evaluating the distribution system. Until the Southern Loop was completed, RWSA would not be able to transfer water freely or convert treatment between those two plants as it tended to raise the pressure in some of the older City pipes. The Southern Loop transmission main was needed to relieve those pressures.

Mr. Frederick added that considering those limitations, 2018 might not be a realistic figure. RWSA was taking the approach of proceeding with the construction of a new dam on the Ragged Mountain by 2011, which would address Dam Safety requirements as well as future water supply needs. RWSA was however ready to use the Beaver Creek Reservoir if necessary, but he could not guarantee that it would be an effective supply until 2018.

Mr. O'Connell asked if there were any way to test for streambed loss given the drier conditions now being experienced in this area. Mr. Frederick replied that testing should be conducted when drought conditions were similar to when the water would actually need to be transferred. The transfer has not yet occurred because the South Fork Reservoir has not stopped spilling. If the transfer were to be initiated now and the water reached the South Fork Reservoir, the water would flow over the spillway and not be available for water supply. Once conditions allow for the transfer to take place, measurements would be taken of the flow being released at Beaver Creek Reservoir. The U.S. Geological Survey stream gauge located on the Mechums River at Garth Road would be used as a benchmark to determine how far the water has traveled. Estimates could also be made at the South Fork Reservoir based on the incoming and outgoing flows.

5.0 Consent Agenda

Mr. Gaffney asked if there were any items that the Board members would like to pull for questions or further discussion from the Consent Agenda.

- 5a) Staff Report on Finance
- 5b) Staff Report on Operations
- 5c) Staff Report on On-going Projects
- 5d) Disposition of FY 2005 Surplus
- 5e) Reserve Fund Allocation & Transfers FY 2006
- 5f) Design Services Contract – The Rt. 29 Pipeline and Pumping Station (RFP 06-02)
- 5g) Design Services Contract – Crozet and Scottsville WTP Lagoons (RFP 06-04)

In regards to **Item 5a), Staff Report on Finance**, Mr. Fern noted an observation concerning the Urban Water and Urban Wastewater Flow Graphs. Beginning in March 2006, it was evident that a lot more water was being produced by the system than was being received by the wastewater treatment plant as possibly the result of the onset of irrigation.

In regards to **Item 5c), Staff Report on On-going Projects**, Mr. Gaffney referred to the “Comprehensive Sanitary Sewer Interceptor Study” item on page 2 of the report. He noted the sentence which began “If measurable rainfall events do not occur soon ...” and inquired if the rainfall received the past weekend had any impact on the flows. Mr. Frederick responded that rainfall amounts varied throughout the area. Greeley & Hansen, consultants for this study, will need to collect and evaluate the local data log to assess the rainfall’s impact to this study. Consultants preferred to base their sewer flow monitoring data on three or four precipitation events rather than relying solely on one episode in case some type of equipment failure occurred. Mr. Frederick will keep the Board informed on the status of this study.

Mr. O’Connell further inquired if the all the reservoirs were at full capacity. Mr. Frederick replied in the affirmative.

Upon a motion by Mr. Tucker, which was seconded by Mr. O’Connell, the Board of Directors voted to approve Items 5a), b), c), d), e), f), and g) of the Consent Agenda. The motion was approved by a 5 – 0 vote.

6.0 Other Business

In regards to **Item 6a), Draft Drought Response and Contingency Plan**, Mr. Frederick stated that he appreciated the comments made during the Public Comment period concerning this item. The plan was being introduced today as a draft, and no Board action on adopting the document was being requested. RWSA supports additional public comment. He was aware of discussions taking place among staffs at the Albemarle County Service Authority and Albemarle County concerning how restrictions should be implemented in the County. He felt these were positive discussions that would lead to a comprehensive plan being proposed for adoption.

Mr. Frederick then reiterated that the plan was developed during a collaborative effort at staff level. It was felt that the draft plan was ready to be presented to the elected officials and the public for further input. RWSA was requesting that the Board accept the draft plan for public discussion. Staff was also requesting guidance on how the plan should be adopted and what other governmental boards should be involved in the process. He admitted that although he had been previously involved with drought response planning and implementation it had not been in a community where there were so many organizations that were intertwined and required collaborative efforts. Mr. Frederick felt that the number of specialties that could be utilized would be a positive factor, but the process would require an extensive amount of coordination. For that reason, it was suggested in the plan that during drought conditions regular meetings be held involving all the staffs.

Mr. Frederick next remarked on Mr. Martin's earlier reference to a "computer tool." Mr. Frederick also viewed the hydrologic model as a valuable "tool." In the draft plan, the hydrologic model was referred to as "guidance" when developing criteria for certain drought stage designations. Virginia's Drought Monitoring Task Force was also considered as "guidance," but RWSA was open to suggestions on other criteria that should be considered. The Authority did feel that the hydrologic model was a positive "tool" in that it could actually analyze stream flows, reservoir levels, and the 80-year historical period of record based on Gannett Fleming's work to develop a strong risk assessment for potential drought conditions. Mr. Frederick then used a metaphor to help explain the technical details related to the hydrologic model. He stated that insurance companies used an extensive amount of historical data to predict future occurrences. When a policy is sold to a particular individual, the insurance company does not really know whether that individual was going to make them money or cost them, yet they rely heavily on statistics regarding risk for a wide range of decisions. When forecasting water supply levels in 2006, no one would honestly know for certain in April what the conditions would be in October. The historical data can be used to predict the probability of encountering conditions that might prompt drought staging. This probability-based analysis of drought potential to the Urban Water System will be utilized by RWSA staff as a tool in determining when to initiate a call for drought staging.

Mr. Frederick also commented that Ms. Andrea Terry would next discuss the three stages of drought that were being proposed in the draft plan, which were in line with the Virginia Drought Monitoring Task Force's recommendations. Every community in Virginia will be required to adopt a drought management plan that conforms to State criteria, and Ms. Terry has thoroughly reviewed those regulations to ensure that this community's plan was in compliance with those criteria. Roles would also need to be defined in public discussion. The draft plan suggests that RWSA assume the lead role in monitoring supply conditions and also operate the reservoirs and various pipelines in optimal fashion during drought conditions.

Ms. Terry then reported that the draft report was the result of the hard work by the Rivanna Regional Drought Response Committee. The Committee had met several times during the past six to eight months concerning this issue and included staffs from Albemarle County, Albemarle County Service Authority, City of Charlottesville, and RWSA. As just discussed by Mr. Frederick, roles were outlined in the draft plan. RWSA would monitor the water supply for

signs of stress utilizing the hydrologic model. The Committee members all had input in the development of that model.

Ms. Terry further stated that three stages to the drought were defined, which corresponded to the State Drought Monitoring Task Force recommendations and also to the local and regional water supply planning regulations that would need to be met in the future. The first stage was the “Drought Watch,” which was designed to alert the public that drought conditions were emerging along with a call for voluntary water conservation efforts. The second stage was a “Drought Warning,” which called for mandatory water conservation, with a goal to reduce water demand by a minimum of 5 percent. “Drought Emergency” was the third stage that called for additional mandatory water conservation measures with the goal to reduce water demand by a minimum of 20 percent. Once agreement was reached on each stage of the drought, it would be the responsibility of the Albemarle County Service Authority and the City of Charlottesville to define their respective restrictions to meet demand reductions.

Ms. Terry also commented that it was the intent of this Committee to maintain a very strong public discussion, and the reason for bringing this forward in draft form was to initiate that dialog. She added that Mr. Frederick would address current conditions and proposed format for public discussions on the draft plan.

Mr. Frederick then stated that as discussed in his report, he would now be providing an update on the dry conditions after last weekend’s rain events. Updated copies of the graph that was included in the Board packet concerning the average stream flow for the Mechums River near White Hall was then distributed to the Board and members of the public in attendance at the meeting. Referring to the graph, Mr. Frederick commented that although flows were a little bit higher now than they were last Thursday as a result of the recent rainfall, the increase was not significant. It was expected that the 14-day running average to rise above 40 million gallons per day (mgd) over the next three to four days. The instantaneous flow in the gauge indicated that the flow had already peaked and was already on the down side of the sign curve. He felt this meant that the recent rainfall was insufficient to cause a sustained increase in the base flows and they would remain well below normal. None of the hydrological triggers included in the plan had been reached do date, so he was not in the position to suggest further recommendations at this time. If the current abnormally dry conditions continue, then the Urban Water System might be taxed to point where a drought response might need to be implemented in the coming months, even while in the process of finalizing the plan.

Mr. Frederick next reported that RWSA was proposing a public forum but was not opposed to meeting with other groups as suggested during the Public Comment period of today’s meeting. He felt that the public discussion format should be developed and implemented as soon as possible. With the Board support, RWSA would contact individuals at the staff level to determine how quickly they would be able to hold those discussions and then schedule those events. There might have been a couple of dates that had gotten out to the public, but dates for those meetings have not yet been confirmed. This report was a call for moving in that direction as quickly as arrangements could be made.

Mr. Tucker commented that the draft plan was a good basis to start a public forum even if input was solicited from other groups as well. He was in agreement with Mr. Martin's earlier comments that there was confusion between Albemarle County Service Authority's regulations and the responsibility of Albemarle County and the City of Charlottesville in terms of the emergency declaration. He interpreted that even during a "Drought Watch," once certain criteria had been met Albemarle County would be required to declare an emergency so that Albemarle County Service Authority would be able to declare a mandatory restriction on daytime irrigation. He felt that the process could be made less confusing for the public.

Mr. Gaffney then stated that he thought it would be helpful to take the three proposed drought stages and equate them to 2002 when a drought watch, warning and emergency declarations were announced via media reporting and what occurred with the water demand rates. He felt the percentage reduction in water consumption was higher at that time than what was outlined in the proposed plan. He questioned that if in a "Drought Watch" where there were no mandatory restrictions but there was a voluntary 10 percent reduction in water usage, then during the "Drought Warning" would it be expected that another 5 percent in addition to the 10 percent would be mandated or had the goal been met during the watch stage? He felt the definitions of the reductions needed to be clearer, and whether it was community wide or broken down by City or County or every individual user.

Mr. Tucker agreed with Mr. Gaffney's comments related to clearly defining the drought response to avoid confusion by the public. He also felt that it was important for the regulations of the Albemarle County Service Authority and the City to mirror one another in order to facilitate a coordinated approach. He had previously discussed with Ms. Mueller and Mr. O'Connell that during a "Drought Watch," the Albemarle County Service Authority required that irrigation be conducted only in the evening. This led Mr. Tucker to inquire why evening irrigation was not required at all times because so much water was lost due to evaporation during the daytime. He felt "you get the best bang for the buck" both in the irrigation part and the use and cost of the water. He suggested that the Albemarle County Service Authority might want to consider enacting "irrigation only in the evening" as standard policy. Mr. Frederick added that from his perspective he felt it would be worthwhile if all citizens understood that irrigating during the middle of the day was not the most effective use of the water.

Ms. Mueller pointed out that numerous changes occurred in infrastructure during 2002, such as the toilet rebate programs and water conservation measures implemented by the larger industrial and institutional customers, which meant that some of the reduction in usage was ongoing. She felt that during the next drought, you would not see the dramatic decreases in water consumption because water conservation would begin at another level due to the measures already taken.

Upon a motion by Mr. Tucker, and seconded by Mr. Fern, the Board of Directors voted to accept the Draft Drought Response and Contingency Plan for public discussion and call for a public forum to be scheduled as soon as possible for public discussion.

Poor to the vote, Mr. O'Connell inquired when the draft plan would be brought back to the Board for formal action. Mr. Frederick responded that it would realistically take 60 days for public discussion and interaction with the local boards to be completed. He further stated that

everyone should be mindful of current conditions and work together so that the time frame would not extend beyond the 60 days.

In response to a suggestion by Mr. Gaffney, Mr. Frederick stated that the draft plan would be e-mailed to the citizens on the Community Water Supply Plan e-mail list, which would include many of the organizations that would want to provide input during the public discussion phase.

Mr. Fern asked if it would be conceivable to miss the “Drought Watch” completely and go directly into the “Drought Warning” stage if the process took the entire 60 days. Mr. Frederick stated that if the abnormally dry conditions returned during that time frame, the recommended tool in this draft plan would propose a call for a “Drought Watch” within 60 days. Flexibility might be required during consideration of this plan as a portion of the document might be utilized during that process.

As there were no further discussion or questions, the Board of Directors approved the motion by a 5 – 0 vote.

7.0 Other Items From Board/Staff Not On Agenda

Mr. Tucker stated that he had a follow-up question to the previous discussion concerning the Mitigation Plan. He inquired as to the deadline for submitting the Mitigation Plan to the regulators. Mr. Frederick commented that RWSA had the information that was required by the U.S. Army Corps of Engineers (the Corps) to obtain a federal permit. As a condition for the permit, the Corps will require a conceptual plan with specific mitigation sites before they allowed the dam facility to be constructed. The Virginia Department of Environmental Quality will not complete the review of the Permit Application or issue a permit until a mitigation plan has been completed. He felt the best position would be for the conceptual plan to be completed by the time the Permit Application was submitted.

Mr. Tucker echoed Mr. Gaffney’s earlier comments concerning RWSA moving forward with some type of conceptual plan and then revisiting the other issues that have been raised in a separate process in order that the Permit Application proceed in an expedient manner.

Mr. O’Connell asked Mr. Frederick to briefly review the next steps in the Community Water Supply Plan schedule. Mr. Frederick stated that the presentation of the permit document which included all the engineering studies would be made public in May 2006. Mr. Aaron Keno with Gannett Fleming will provide a brief summary of the report at the May Board Meeting. Approvals by the joint boards have been scheduled during June 2006. With a positive vote by all of those boards, the plan will be presented to the RWSA Board of Directors for final approval at the June 26, 2006 Board meeting. The goal was to submit the Permit Application before July 4, 2006.

8.0 Closed Meeting

There was no need for a closed meeting.

9.0 Adjournment

There being no further business, Mr. Tucker moved that the meeting be adjourned, seconded by Mr. Fern. All members voted aye, and the meeting was adjourned at 2:39 p.m.

Respectfully submitted,

Mr. Robert W. Tucker, Jr.
Secretary-Treasurer