A regular meeting of the Rivanna Water & Sewer Authority (RWSA) Board of Directors was held on Tuesday, June 28, 2016 at 2:15 p.m. in the 2nd floor conference room, Administration Building, 695 Moores Creek Lane, Charlottesville, Virginia.

**Board Members Present:** Mr. Tom Foley, Mr. Mike Gaffney – Chair, presiding, Ms. Kathy Galvin, Mr. Maurice Jones, Ms. Judith Mueller and Dr. Liz Palmer.

**Board Members Absent:** Mr. Gary O’Connell.

**Staff Present:** Mr. Mark Brownlee, Mr. Tim Castillo, Ms. Victoria Fort, Dr. Rich Gullick, Ms. Teri Kent, Mr. Doug March, Mr. Philip McKalips, Mr. Scott Schiller, Ms. Michelle Simpson, Ms. Andrea Terry, Mr. David Tungate, Mr. Randy Jones, Ms. Jennifer Whitaker and Mr. Lonnie Wood.

**Also Present:** Mr. Kurt Krueger – RWSA Counsel, Steve Kvech – Virginia Department of Health, 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. Gaffney on Tuesday, June 28, 2016 at 2:15 p.m. and he noted that a quorum was present.

2.0 **Minutes of Previous Board Meeting**

a)  *Minutes of the Regular Meeting of the Board on May 24, 2016*

Dr. Palmer moved to approve the minutes with one typographical correction as noted on page 13. Ms. Galvin seconded the motion, which passed unanimously (6-0). Mr. O’Connell was absent from the meeting and the vote.

3.0 **Recognition**

a)  *Presentation of 2015 Virginia Optimization Program Performance Awards*
Dr. Rich Gullick addressed the Board and stated that the Rivanna Water & Sewer Authority has received Virginia Optimization Program Performance Awards for all five water treatment plants for 2015, exceeding requirements for state drinking water standards. He stated that Steve Kvech, District Engineer with the Virginia Department of Health’s Office of Drinking Water, would present the awards, and Water Manager David Tungate and Assistant Manager Randy Jones would accept the awards on behalf of the RWSA.

Mr. Steve Kvech presented the awards to David Tungate and Randy Jones, and recognized the water treatment plant operators in the field for their hard work.

b) Water Professional Day June 30, 2016 - Resolution

Mr. Gaffney read the following resolution into the record:

**Resolution of Appreciation**

WHEREAS, June 30, 2016 is Drinking Water and Wastewater Professionals Appreciation Day in the Commonwealth of Virginia; and

WHEREAS, access to clean drinking water is crucial to the health and safety of the citizens of the City of Charlottesville and Albemarle County; and

WHEREAS, treatment of, on average, 10.4 million gallons of wastewater daily plays a critical role in the preservation of our local environment and the health of the watershed; and

WHEREAS, the Rivanna Water & Sewer Authority employees do important work every day, year-round to protect our environment and to preserve the quality of life for the citizens they serve; and

WHEREAS, the Rivanna Water & Sewer Authority Board of Directors is most grateful for the professional dedication of those Departments and their members to the Rivanna Water & Sewer Authority, and its customers;

NOW THEREFORE BE IT RESOLVED that the Rivanna Water & Sewer Authority Board of Directors recognizes and commends the men and women who work tirelessly to ensure that our water resources are protected, properly managed, and that the drinking water we deliver to our two customers, the ACSA and the City of Charlottesville, is clean, safe, and reliable. We also recognize those who work to safely return the water to the rivers that eventually flow to the Chesapeake Bay. For their dedication, work and service, we present this resolution as a token of esteem and appreciation.

BE IT FURTHER RESOLVED that this Resolution of Appreciation be entered upon the permanent minutes of the Rivanna Water & Sewer Authority.
Dr. Palmer moved to approve the resolution as presented. Ms. Galvin seconded the motion, which passed unanimously (6-0). Mr. O’Connell was absent from the meeting and the vote.

4.0 Executive Director’s Report

Mr. Wood reported that there has been a lot of follow-up concerning the Sugar Hollow reservoir related to flow release, as reported to the Board in May and Ms. Whitaker and operations staff have been doing a lot of coordinating in the field to better understand the issues discussed at last month’s Board meeting. They have also been working with DEQ on stream gage measurements and Mr. Wood asked that Jennifer Whitaker give the Board an update because that information was not ready at the time the Board memo was prepared.

Ms. Whitaker addressed the Board and stated that in March, staff started investigating the drawdown last fall and this spring at the Sugar Hollow Reservoir that was happening faster than expected. She stated that the RWSA began looking into this issue with DEQ, who has been very cooperative and has offered staff time, resources, equipment and knowledge throughout the process, including significant time with a DEQ stream hydrologist to look at the reservoir, the streams, dam operations, and doing several days of field measurements. Ms. Whitaker reported that since the last discussion with the Board, they spent the entire day of June 9 monitoring flows both upstream and downstream of the reservoir, and confirmed measurements of the permanent river gauges for both the Moormans and Mechums Rivers. She stated that they also released enough flow from the reservoir to temporarily stop overflow for this monitoring event.

Simultaneously with that, she said, a company came and installed a tap into the Sugar Hollow pipeline that could be used to for flow meter calibration measurements. Ms. Whitaker said that the M.E. Simpson company, which has done some of the water treatment plant meter calibrations, ran several scenarios with the discharge meter into the stream – and again shutting the overflow on and off and doing some additional testing.

Ms. Whitaker reported that they have now done two full tests on the Mechums and Moormans River gauges as a surrogate for Sugar Hollow inflow calculations, looking at many different parameters. She indicated that staff anticipated that this may be where the calculated discrepancy might be. She stated that the Mechums gage in these two tests was a fairly good surrogate for the watershed, and on one of the test dates it almost matched exactly with what was coming into the reservoir, with the overall range within 85% to 120%. Ms. Whitaker noted that there is an issue with Mechums River gage right after a storm, and because it is pretty far downstream, the watershed does not have quite as much water inflow coming into it as the gage would have implied, as there is a very short window of higher inflow directly after a storm event. She stated that she did not feel this was where they needed to spend resources in the short term, but could in the future if they wanted further refinement. Ms. Whitaker said that staff met USGS out in the field to see what it would take to install the North Fork gaging station above the reservoir, and now has those cost estimates, but based on what they are seeing, the Mechums variable is fairly solid based on the investigations so far.

Ms. Whitaker reported that based on calculations during the drawdown last fall and this spring, there appears to be between two and four million gallons of water coming out of the reservoir
that was not coming into it, so staff has looked at several things, identifying the potential causes as excess transfers, seepage, or excess stream releases. She stated that regarding transfer, it was possible that it had been incorrectly calculated, but on the day of the tests staff shut off the pipeline – which eliminated that variable. Ms. Whitaker said that the second primary variable is seepage, so they took a closer look at the dam to make sure there were no unusual conditions and talked to our dam safety engineers, who indicated that it was possible to have that type of seepage but it was unlikely based on what they were observing. She stated that the final variable was the discharge to the stream, so in working with DEQ they shut off the discharge coming out of the dam and measured stream flow - which was nominal, with almost no water going downstream. Once the downstream release was reopened, the test showed a two million gallon per day differential.

Ms. Whitaker stated the next day, staff reviewed the downstream release piping configuration and performed a flow meter calibration. The stream release piping at this location is very challenging due to difficult access at the toe of the dam, complicated by the need for a flow meter and control valve. Ms. Whitaker stated that the calibration showed that the meter varied between 57-74% accuracy, over a flow range of 2-10 mgd. This indicates that RWSA was releasing flow into the stream in excess of the required release. She noted that they were releasing between 1.6 - 3.6 mgd in excess of the requirement. As such, this is likely where work needs to be directed going forward. Ms. Whitaker added that they recalibrated the meter to be accurate at the 5 mgd flow point, however, there are still some inaccuracies over the full range of the flow meter. This indicates that there is work to be done – which could require re-plumbing the discharge piping or changes in how the system is operated.

Ms. Whitaker stated that RWSA is still working with DEQ and continues to discuss stream releases and transfers, which would be tied back into their findings. She also indicated that they are also pursuing the design effort for putting in a permanent metering station on the transfer to Ragged Mountain – so that in the future, there is an accurate number of what is being transferred, rather than just a curve based on the number of turns of the valve. She stated that staff feels they now understand what is going on and has made some corrections to temporarily mitigate the issue. Likewise, staff will be working toward a permanent solution going forward.

Mr. Gaffney asked for confirmation that they thought they were releasing 10 mgd, when in fact was releasing 12 mgd.

Ms. Whitaker responded that they may have been releasing close to 14 mgd.

Dr. Palmer asked how many total gallons the reservoir held.

Ms. Whitaker responded that she did not know that number immediately.

Ms. Kent noted that the individual storage capacity for all of the reservoirs was available on the Rivanna website.

Dr. Palmer asked for more detail on the Sugar Hollow pipeline leak at Buckingham Circle, which staff reports indicate is being repaired.
Ms. Whitaker responded that it has been repaired, and explained that over the years, a lot of the older right of ways have not been cleared – with large trees growing in them – and with this particular leak, a tree had pushed down into the “bell” end of the pipe, with a chunk of metal breaking out. She stated that the leak released a garden hose amount of water, adding that it was very noticeable when staff found it – and it was discovered when a staff member coming back from repairing the Ragged Mountain waterline and noticed a blow-off area looking very wet and green. Ms. Whitaker said that the leak had likely started within 24-48 hours of the staff person discovering it.

Dr. Palmer asked if staff still walked the 14-mile length every year, and what percentage of the right of way has actually been cleared.

Ms. Whitaker responded that they did walk it and she would find that percentage for the Board, noting that this line is one of the parallel lines coming into town from Ragged Mountain to the water treatment plant. She stated that this has been one of the last lines to be cleared, in part because of the pipe will eventually be replaced; they prioritized some of the finished water lines, and there is a parallel pipe that can be used as a back-up.

5.0 Items from the Public

There were none presented.

6.0 Responses to Public Comments – No Responses This Month

Mr. Wood stated that he wanted to emphasize to the Board relative to Dede Smith’s comments at the May RWSA Board meeting regarding the need for Rivanna to communicate with City Parks & Rec. Rivanna has been communicating with City Parks & Rec. on a regular basis – and Andrea Terry presented at one of the public meetings that was held. He noted that the memo in the Board materials addresses the rest of Ms. Smith’s comments adequately unless the Board had anything to add he thought the written response was sufficient and he also thanked Ms. Smith for words of support.

Mr. Gaffney stated that he had not read or heard anything in the media regarding resolution to the trail issues at Ragged Mountain.

Mr. Jones responded that there have been several community meetings and there are several options the Parks & Rec Advisory Board would be reviewing on July 20, with that item coming to City Council in September.

Ms. Galvin stated that there was a fifth option added – another variant of a multi-use trail.

Dr. Palmer asked if that information was on the website.

Mr. Jones responded that the options were available on the city’s website.
7.0 **Consent Agenda**

a) *Staff Report on Finance*
b) *Staff Report on Operations*
c) *Staff Report on Ongoing Projects*
d) *Contract Award – a Term Contract for Water Treatment Plant Services*
e) *Vulnerability Assessment & Emergency Response Plan – Contract Award*

Dr. Palmer moved to approve the Consent Agenda as presented. Ms. Galvin seconded the motion, which passed by a 6-0 vote. Mr. O’Connell was absent for the meeting and the vote.

8.0 **Other Business**

There was no other business presented.

9.0 **Other Items from Board/Staff not on Agenda**

There were none presented.

10.0 **Closed Meeting**

There was no closed meeting held.

11.0 **Adjournment**

Mr. Foley moved to adjourn the RWSA Board meeting. Dr. Palmer seconded the motion, which was approved by a vote of 6-0. Mr. O’Connell was absent from the meeting and the vote.

There being no further business, the meeting adjourned at 2:35 p.m.