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RWSA BOARD OF DIRECTORS Minutes of Regular Meeting January 24, 2017

A regular meeting of the Rivanna Water & Sewer Authority (RWSA) Board of Directors was held on Tuesday, January 24, 2017 at 2:15 p.m. in the 2nd floor conference room, Administration Building, 695 Moores Creek Lane, Charlottesville, Virginia.

Board Members Present: Mr. Mike Gaffney – Chair, presiding, Ms. Kathy Galvin (arrived at 2:19 p.m.), Mr. Maurice Jones, Ms. Judith Mueller, Mr. Gary O'Connell and Dr. Liz Palmer.

Board Members Absent: Mr. Tom Foley.

Staff Present: Mr. Tim Castillo, Ms. Victoria Fort, Ms. Teri Kent, Mr. Doug March, Dr. Richard Gullick, Mr. Scott Schiller, Ms. Michelle Simpson, Ms. Jennifer Whitaker, and Mr. Lonnie Wood.

Also Present: Mr. Kurt Krueger, RWSA counsel, 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, January 24, 2017 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 December 20, 2016

Mr. Gaffney asked if there were any changes or comments to the minutes. There were none provided.

Dr. Palmer moved to approve the minutes of December 20, 2016 as presented. Mr. O'Connell seconded the motion, which passed 4-0, with Ms. Galvin not yet present at the meeting, Mr. Gaffney abstaining from the vote because he was not in attendance at the December 20, 2016 meeting, and Mr. Foley absent from the meeting and the vote.

3.0 Recognition

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43	a) Resolution of Appreciation for Tom Foley
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45	Mr. Gaffney read a joint resolution recognizing Tom Foley:
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47	RIVANNA WATER & SEWER AUTHORITY
48	RIVANNA SOLID WASTE AUTHORITY
49	BOARDS OF DIRECTORS
50	Joint Resolution of Appreciation for Thomas C. "Tom" Foley
51 52	WHEREAS, Mr. Foley has served as a member of the Rivanna Water & Sewer Authority Board of Directors and the Rivanna Solid Waste Authority since 2011; and
53	WHEREAS, over that same period in excess of 5 years Mr. Foley has demonstrated
54	leadership in the water, sewer, solid waste, and recycling field, and has been a valuable resource
55	to the Board of Directors and to the Authorities; and
56	WHEREAS, Mr. Foley's understanding of the water, sewer, and solid waste operations
57	of the County of Albemarle, the Rivanna Water & Sewer Authority, and the Rivanna Solid
58	Waste Authority has facilitated a decision-making process that considered not only the benefits
59	to the customers served by the County of Albemarle but also the impacts to the combined utilities
60	and the community as a whole; and
61	WHEREAS, the Rivanna Solid Waste Authority Board of Directors is additionally
62	grateful for Mr. Foley's strong support of a new Ivy Transfer Station; and
63	WHEREAS, the Rivanna Water & Sewer Authority Board of Directors is additionally
64	grateful for Mr. Foley's commitment to improve wastewater infrastructure with his strong support
65	of improvements that are beneficial to our operations and the environment; and
66	WHEREAS, both Authorities Board of Directors are most grateful for the professional
67	and personal contributions Mr. Foley has provided to the Rivanna Water & Sewer Authority,
68	Rivanna Solid Waste Authority, and to the community; and
69	NOW, THEREFORE, BE IT RESOLVED that the Rivanna Water & Sewer Authority
70	and Rivanna Solid Waste Authority Board of Directors recognizes, thanks, and commends Mr.
71	Foley for his distinguished service, efforts, and achievements as a member of these two boards,
72	and presents this Resolution as a token of esteem, with its best wishes in his next career step.
73	BE IT FURTHER RESOLVED that this Resolution be entered upon the permanent
74	Minutes of both the Rivanna Water & Sewer Authority and the Rivanna Solid Waste
75	Authority.
76	Ms. Mueller moved to adopt the joint resolution recognizing Tom Foley for his service to th
77	RWSA and RSWA. Dr. Palmer seconded the motion, which passed 5-0, with Ms. Galvin no
78	yet present at the meeting and Mr. Foley absent from the meeting and the vote.

Mr. Gaffney introduced Doug Walker, Deputy County Executive, who would be joining the RWSA and RSWA boards in February.

b) Staff members who achieved professional licensure

Mr. Mawyer reported that the Virginia Department of Professional and Occupational Regulations requires operators in water treatment plants and wastewater treatment plants to have a certain number and level of licenses. He stated that the license structure starts as "trainee," then moves to "Class IV," and ultimately up to the highest level of "Class I" – and Rivanna is required to have a Class I operator in charge of plants and a Class II onsite during operation. Mr. Mawyer recognized Brian Balsley, who improved his water license from Class III to Class II; Tim Castillo, who improved his water license to Class I and can now work both the water and wastewater sides of the operation; Mark Sharon, who improved his wastewater license from Class IV to Class III; Peter Jasiuskowski, who improved his water license from Class III to Class II; Shane Johnson, who was a trainee and received a Class IV water license; Steve Minnis Jr., who improved his wastewater license Class IV to Class III; and Christopher Ward, who improved his wastewater license from Class IV to Class III.

4.0 Executive Director's Report

Mr. Mawyer reported that the RWSA continues to work on its odor control program, and would be injecting chemicals into the wastewater entering the Moore's Creek Wastewater Treatment Plant in the coming week – which would minimize odors at the plant and in the area. He stated that RWSA would also continue with the long-term project to put covers over the clarifiers and install a new air scrubber facility. He said that there is a new vendor on board in Crozet, who would be putting in a different chemical product in the system there to minimize odors in the Ivy area.

Mr. Mawyer reported that the RWSA has been filling the Ragged Mountain Reservoir from Sugar Hollow since January 7, and that had to be done gradually with the valve opened slowly so it doesn't damage the transfer pipe. He stated that it has reached the maximum transfer rate of four million gallons per day, and if the weather cooperates with additional rain, Ragged Mountain should be full within three to four months. Mr. Mawyer noted that David Tungate, Water Plant Manager, and Rich Gullick, Director of Operations, had provided some additional information in their Operations report, adding that the Ragged Mountain Reservoir needs about 280 million gallons to fill, with 4 million per day coming in and 1 million being taken out for the treatment plant.

Mr. Mawyer reported that in terms of community outreach, Tim Castillo worked with an environmental engineering class at UVA to discuss how the real world of water and wastewater happened outside the classroom.

Mr. Mawyer reported that next month he would introduce the CIP, with the operating budget introduced in March, CIP approval slated for April, rates advertised for an April 24 public hearing, and budget adoption planned for May 23. He stated that next week they would start with the Board subcommittee, with Mr. O'Connell and Ms. Mueller, to review both of the budgets and go through the draft to get feedback.

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Mr. Gaffney asked what the rate of transfer would be once they put the pipeline in from South Fork.

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- 129 Ms. Whitaker responded that they are permitted for five times greater than the Sugar Hollow
- pipeline so a 20 MGD transfer rate. She explained that there is five times the capacity at the
- South Fork Rivanna Reservoir, plus the watershed is much bigger at the South Fork, so water is
- available to transfer more often and for a longer duration.

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Dr. Palmer asked if they were talking about opening up the valves at Sugar Hollow, and if they had ever been replaced over the last 20 years.

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Ms. Whitaker stated that there are some original valves and some upgraded valves for the dam itself, and there is an original valve on the pipeline, with two new valves downstream – and those are the ones used for throttling, with new infrastructure put in to operate the valves remotely and at an appropriate pace so the pipe doesn't break.

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Mr. Gaffney commented that he had been hiking the new trail at Ragged Mountain Reservoir several weeks ago and came upon what he thought was a water feature, but it was the Sugar Hollow pipeline.

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5.0 Items from the Public

There were none presented.

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6.0 Responses to Public Comments – No Responses This Month

There were no responses to public comments this month.

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152 7.0 Consent Agenda

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- 154 a) Staff Report on Finance
- 155 b) Staff Report on Operations
- 156 c) Staff Report on Ongoing Projects
- 157 *d)* Change Order MCAWWRF 2nd Centrifuge

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Dr. Palmer asked if the Operations report could include a column for the average peak daily production, in addition to the information provided on the water treatment plant average daily production and monthly production. She explained that a lot of people look at the average daily production numbers and assume there is plenty of available capacity in the infrastructure – and they don't understand that the peak production is much higher during times of high demand.

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Dr. Gullick explained that the tanks are also supplying the water, so the actual consumption is met by both water previously produced and stored in tanks and by production supplying the system – and the peak daily production would not be an average.

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Dr. Palmer clarified that she was looking for a peak period.

Dr. Gullick said that it would be the maximum daily produced in the course of that period, and

that's what the plants need to be built to provide. He stated that in Crozet, for example, it's the

peak day that is driving the need for expanded facilities, and he could provide that for the month

for any of the facilities.

Ms. Galvin asked what this would be used for.

- Dr. Palmer responded that there have been situations on the Board of Supervisors where average
- daily flow was used to prove that one particular entity did not need as much water – but when they
- looked at peak, it was a very different number. She stated that when they were talking about the
- water supply plan and were doing projections, that was an argument in the community at the time.
- Dr. Palmer said that it would be helpful for the public to understand that they have not overbuilt

its infrastructure.

Mr. Gaffney emphasized that a daily peak isn't going to provide what is needed – because the

system is built for the annual peak.

Dr. Gullick stated that they would still be able to give the monthly peak day as the maximum.

Mr. Gaffney responded that the monthly peak day still will not justify what is built. The annual

peak day is a better indicator of facility needs.

Dr. Gullick concurred with this assessment.

Dr. Palmer said that the average daily production data always looks very low to her, and constituents point this out to her.

Mr. Gaffney stated that we would not want to provide information that gives another false

impression.

Dr. Palmer agreed.

Ms. Galvin stated that they really just want to be able to communicate clearly with the public that they have built the appropriate amount of infrastructure.

Mr. Gaffney suggested including the annual peak for 2016.

Dr. Gullick said that they could also do a rolling 12-month summary that will include the monthly peak day as well as the peak annual day for several years.

Mr. Mawyer stated that they can identify a peak day for any month, as well as peak hour. He said that the challenge on the engineering side is to make sure they can meet the peak daily demand.

Mr. Gaffney suggested showing peak days from 2003, when the drought occurred, to the present.

Mr. O'Connell commented that the average day demand for Crozet is ½ million gallons, with peak days hitting 800 or 900 million gallons and that the Crozet water treatment facility is probably the one that needs the most attention – as the capacity is just 1 million gallons.

Ms. Mueller stated that the new ongoing project and status report format is wonderful and is much more user friendly.

223 Mr. Gaffney said that he especially likes the "percent complete" section.

Mr. Jones moved to approve the Consent Agenda as presented. Dr. Palmer seconded the motion, which passed by a 6-0 vote. Mr. Foley was absent from the meeting and the vote.

8.0 Other Business

230 a) Observatory WTP Presentation

Mr. Mawyer reported that the second largest water treatment plant is the Observatory plant, located behind the University of Virginia (UVA) on McCormick Road. He stated that the plant was started in the early 1900s and was the first plant to serve UVA and the City, with filtration and chemical treatment added in the 1949-1954 timeframe. He stated that the plant's average production is 1.5 million gallons per day, and it is only operated from 6 a.m. to 6 p.m., with one operator on site.

238 Mr. O'Connell asked him to discuss the 5 million gallon production.

Mr. Mawyer explained that the rated capacity is 5 million, but they may not necessarily be able to produce 5 million gallons per day.

Dr. Gullick stated that 4 million gallons per day was probably closer to the actual maximum.

Mr. Mawyer said that there is a series of components evaluated to determine plant capacity— for example, the filters and the chemical treatment – and the limiting factor would be the rating of the plant.

 Mr. Mawyer stated that the Observatory plant, along with the South Fork Rivanna plant, serve all of the City and all of the developed areas of the County – except for Crozet. He said that the water at the Sugar Hollow Reservoir flows by pipe to the Ragged Mountain Reservoir, which supplies water to the Observatory plant, which provides water to the urban water system. He referenced images showing the location of the Sugar Hollow Dam, stating that below the dam is another small dam that impounds water in a fore bay, and he noted that water from Sugar Hollow used to go directly to the Observatory plant but now goes to the Ragged Mountain Reservoir. Mr. Mawyer stated that the filter building at the Observatory plant is where the operators sit when they are not walking the plant, and RWSA is constructing a new intermediate pump station, a new chlorine contact tank, a new granular-activated carbon (GAC) building along with the existing chemical feed building. He explained that the water comes in to one side of the plant and passes through the flocculators to the sedimentation basins, then goes into the filter building, then into the clear well

below the filter building, up to the GAC, then through the chlorine contact tank on its way out to the distribution system.

Mr. Mawyer said that inside the filter building, staff sits in the control room, and to the left is the laboratory – with hydraulic controls dating from the 1950s that open the valves that control the water flow into the filters. He noted that they are hoping to update that system in the near future. Mr. Mawyer stated that in the chemical building at Observatory is lime feed equipment that goes into the water to adjust the pH, through one of the two sediment basins, with water running from those into a concrete flume box and through the filters. He said that the water runs through the filters, below the filters, then into the clearwell where water is stored. Mr. Mawyer referenced a video showing the filter gallery and how the pipes operate. He stated that the walls are now built around the two new GAC vessels.

274 Dr. Palmer asked about the lifespan of the GAC tanks.

Ms. Whitaker responded that it was usually 50-60 years at a minimum, with repair and replacement work needed along the way for parts that need it.

Dr. Palmer asked why the tanks would not just be replaced, and if replacement was an issue with cost.

282 Ms. Whitaker confirmed that it was.

Mr. Gaffney asked for clarification on what needed to be replaced at the Observatory plant.

286 Mr. Mawyer confirmed that the concrete flume needs work.

Ms. Whitaker explained that the chemical feed, the GAC, and those infrastructures are relatively new – so the items needing replacement are really the pipes in the filter gallery, because everything in there is reaching the end of its critical life, including the piping. She stated that a lot of the concrete is also original and may need replacement, and the sediment basins need to be retrofitted to be made more efficient.

Mr. Gaffney asked if they were going to try to do that within the existing building, or build a new building so the existing one continues to run during replacement.

Ms. Whitaker responded that the intent now is to build within the footprint but repurpose areas within the plant, with the work designed so that each individual process will come partially out of service while it is being reworked, then going back into service.

Dr. Palmer asked if the South Fork plant could provide all the water so Observatory could be shut
down during the repairs.

Ms. Whitaker responded that Observatory could only be shut down when the demand is low during the fall and winter months.

307 Mr. O'Connell noted that plant shutdowns had been done during construction.

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309 Ms. Whitaker said that was true of both plants.

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Mr. O'Connell asked if there had been any contact with UVA about the lease, noting that this is their water source.

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314 Mr. Mawyer responded that it was on the list to discuss.

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316 Mr. Gaffney said that there had been preliminary discussions several years ago.

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Mr. Krueger stated that the lease agreement is extremely old and is more than just a lease – covering not only the lease of the plant itself but also including the agreement for the provision of water by the City to UVA. He said that the Authority only wants to lease part of it, and the City would have to negotiate within the lease the water supply and cost provisions that also theoretically expire in 2021, with all of that rolled into one agreement. Mr. Krueger confirmed that it could be separated if all parties agreed, with the City and UVA striking a separate deal for the provision

324 325 and cost of water.

326 Mr. Gaffney commented that one would be used as leverage for the other.

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Mr. Krueger said they would have to see how it played out in the negotiations, and noted that the plant at when originally built was simply a sand filter plant – and at that time that was the extent of treatment to produce potable water.

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Mr. Mawyer said that was in the early 1900s, and then in the 1950s the City took the water treatment plant over – at which time the chemical plant and filtration systems were built and the sand filters demolished.

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Ms. Galvin asked if the goal was to decouple the lease agreement and make RWSA the lessor, then the City would do a cost allocation agreement for UVA.

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Mr. Krueger clarified that the RWSA's water customers are ACSA and the City, with the City in turn providing water to UVA.

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Mr. Gaffney stated that there is already a cost allocation agreement between the City and the ACSA.

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Mr. O'Connell commented that it is the water rate charged by the City to the University that is at stake.

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Mr. Krueger stated that since the Authority is already putting in a significant amount of infrastructure with the GAC system, they want to make sure they are getting a lease extension from UVA to operate it for several years.

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Ms. Galvin asked what the timeframe for discussions was.

Mr. Mawyer responded that the discussion just needs to be set up, and UVA is aware that this is pending, and he confirmed that the lease expires in 2021.

9.0 Other Items from Board/Staff not on Agenda

a) Change Order – Upper Schenks Branch Interceptor

Mr. Mawyer reported that staff would like to present a change order for the construction contract for the Upper Schenks Branch Interceptor, and stated that staff was able to successfully negotiate a change order that was agreed upon on January 23. He said that they would like to get Board approval to execute the change order and make payment to the contractor.

Ms. Whitaker explained that in October, staff requested additional monies for the Phase I of the Upper Schenks Branch project, as they hit contaminated soil and an extensive amount of granitic rock in the trench. She stated that at the time, staff underestimated the quantity of rock and soil and cost to complete the work, which is now almost complete – and they are coming back to the Board to request \$154,603 in additional funding to finish it.

- 372 Ms. Mueller noted that the City is in support of the additional funding.
- 374 Mr. Gaffney noted that the City is responsible for all of these costs.
- 376 Mr. Walker stated that he has been made aware of this.
- Ms. Galvin moved to approve the change order as presented. Mr. Jones seconded the motion, which passed by a 6-0 vote. Mr. Foley was absent from the meeting and the vote.

10.0 <u>Closed Meeting</u> 382

There was no closed meeting held.

11.0 Adjournment

- Mr. Jones moved to adjourn the RWSA Board meeting. Dr. Palmer seconded the motion, which was approved by a vote of 6-0. Mr. Foley was absent from the meeting and the vote.
- There being no further business, the meeting adjourned at 2:53 p.m.