



Rivanna Water and Sewer Authority

Board of Directors Meeting

March 27, 2018

2:15pm



695 MOORES CREEK LANE
CHARLOTTESVILLE, VA 22902-9016
TEL: 434.977.2970
FAX: 434.293.8858
WWW.RIVANNA.ORG

BOARD OF DIRECTORS

Regular Meeting of the Board of Directors of the Rivanna Water & Sewer Authority

DATE: March 27, 2018

LOCATION: Conference Room, Administration Building
695 Moores Creek Lane, Charlottesville, VA

TIME: 2:15 p.m.

AGENDA

- 1. CALL TO ORDER**
- 2. MINUTES OF PREVIOUS BOARD MEETINGS**
 - a. Minutes of Regular Board Meeting on February 27, 2018*
- 3. RECOGNITION**
- 4. EXECUTIVE DIRECTOR'S REPORT**
- 5. ITEMS FROM THE PUBLIC**
- 6. RESPONSES TO PUBLIC COMMENTS**
- 7. CONSENT AGENDA**
 - a. Staff Report on Finance*
 - b. Staff Report on Ongoing Projects*
 - c. Staff Report on Operations*
 - d. MCAWRRF Second Centrifuge Project – Request for Additional Construction Change Order Authorization and Project Budget*
- 8. OTHER BUSINESS**
 - a. Presentation from Rivanna Conservation Alliance, Executive Director, Robbie Savage*
 - b. Introduction of Proposed FY 2018 – 2019 Budget: Executive Director, Bill Mawyer*
- 9. OTHER ITEMS FROM BOARD/STAFF NOT ON AGENDA**

10. CLOSED MEETING

11. ADJOURNMENT

GUIDELINES FOR PUBLIC COMMENT AT RIVANNA BOARD OF DIRECTORS MEETINGS

If you wish to address the Rivanna Board of Directors during the time allocated for public comment, please raise your hand or stand when the Chairman asks for public comments.

Members of the public requesting to speak will be recognized during the specific time designated on the meeting agenda for "Items From The Public." Each person will be allowed to speak for up to three minutes. When two or more individuals are present from the same group, it is recommended that the group designate a spokesperson to present its comments to the Board and the designated speaker can ask other members of the group to be recognized by raising their hand or standing. Each spokesperson for a group will be allowed to speak for up to five minutes.

During public hearings, the Board will attempt to hear all members of the public who wish to speak on a subject, but it must be recognized that on rare occasion presentations may have to be limited because of time constraints. If a previous speaker has articulated your position, it is recommended that you not fully repeat the comments and instead advise the Board of your agreement. The time allocated for speakers at public hearings are the same as for regular Board meetings, although the Board can allow exceptions at its discretion.

Speakers should keep in mind that Board of Directors meetings are formal proceedings and all comments are recorded on tape. For that reason, speakers are requested to speak from the podium and wait to be recognized by the Chairman. In order to give all speakers proper respect and courtesy, the Board requests that speakers follow the following guidelines:

- Wait at your seat until recognized by the Chairman.
- Come forward and state your full name and address and your organizational affiliation if speaking for a group;
- Address your comments to the Board as a whole;
- State your position clearly and succinctly and give facts and data to support your position;
- Summarize your key points and provide the Board with a written statement, or supporting rationale, when possible;
- If you represent a group, you may ask others at the meeting to be recognized by raising their hand or standing;
- Be respectful and civil in all interactions at Board meetings;
- The Board may ask speakers questions or seek clarification, but recognize that Board meetings are not a forum for public debate; Board Members will not recognize comments made from the audience and ask that members of the audience not interrupt the comments of speakers and remain silent while others are speaking so that other members in the audience can hear the speaker;
- The Board will have the opportunity to address public comments after the public comment session has been closed;
- At the request of the Chairman, the Executive Director may address public comments after the session has been closed as well; and
- As appropriate, staff will research questions by the public and respond through a report back to the Board at the next regular meeting of the full Board. It is suggested that citizens who have questions for the Board or staff submit those questions in advance of the meeting to permit the opportunity for some research before the meeting.

The agendas of Board meetings, and supporting materials, are available from the RWSA Administration Office upon request or can be viewed on the Rivanna website(s)



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FAX: 434.293.8858
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RWSA BOARD OF DIRECTORS
Minutes of Regular Meeting
February 27, 2018

A regular meeting of the Rivanna Water & Sewer Authority (RWSA) Board of Directors was held on Tuesday, February 27, 2018 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; Ms. Lauren Hildebrand; Mr. Maurice Jones; Mr. Gary O’Connell; Dr. Liz Palmer; and Mr. Jeff Richardson.

Board Members Absent: None.

Staff Present: Mr. Tim Castillo, Ms. Victoria Fort, Mr. Tom Freeman, Mr. Rich Gullick, Mr. Austin Marrs, Mr. Bill Mawyer, Ms. Katie McIlwee, Mr. Bill Morris, Ms. Betsy Nemeth, Mr. Scott Schiller, Ms. Michelle Simpson, Ms. Andrea Terry, Ms. Jennifer Whitaker, and Mr. Lonnie Wood.

Also Present: Mr. Kurt Krueger, RWSA counsel and members of the public.

1. CALL TO ORDER

Mr. Gaffney called to order the Board of Directors of the Rivanna Water and Sewer Authority at 2:37 p.m.

2. MINUTES OF PREVIOUS BOARD MEETINGS

a. Minutes of Regular Board Meeting on December 19, 2017

Mr. Gaffney asked if there were any changes or comments on those Board minutes. None were offered.

Mr. Jones moved to approve the minutes as presented. Dr. Palmer seconded the motion, which passed unanimously (7-0).

3. RECOGNITION

Mr. Gaffney asked Mr. Mawyer if there were any recognitions, and Mr. Mawyer stated that there were none.

4. EXECUTIVE DIRECTOR'S REPORT

Mr. Mawyer opened by stating that he was pleased to report that the water supply at Sugar Hollow continued to overflow, as well as a total of four reservoirs overflowing with the exception of Ragged Mountain. He reported that when Sugar Hollow was overflowing or less than 19 feet down during the winter, RWSA was filling Ragged Mountain. He stated that Ragged Mountain was currently at 88% full, and 10% would be 150 million gallons, with 3 million gallons per day net – so two more months would be needed to get Ragged Mountain full.

Mr. Mawyer stated that he felt the reservoirs were in very good shape, and RWSA had been filling Ragged Mountain since January 22. He stated the localities to the east were not in quite as good a shape as RWSA, and the Louisa County Water Authority still had mandatory water restrictions in effect and had been in effect since October 2017. He stated that they got their water from a reservoir and groundwater wells, and those levels were still low. Mr. Mawyer referenced a news report about Capetown, South Africa and the water rationing that they were having to do for their city of four million people. He stated that they had been enduring a three-year drought, which was leading to discussions of desalination and other programs to address that issue.

Ms. Galvin added that the Capetown situation was a serious situation of inequity because the very wealthy people were getting access to drilling wells and were able to buy water, and the lower income population was left with not even a general water supply source. She expressed gratitude for our local system and stated it was a fundamental function of local government.

Mr. Gaffney added that four or five years ago, Capetown had been lauded for having such an exemplary water supply system, which showed how quickly a three-year drought could turn things around.

Mr. Mawyer reported that as a result of the water restrictions from the fall RWSA planned meet with DEQ to review the permit requirements and the release requirements. He stated RWSA was were trying to get that scheduled for March in Richmond and, in addition to permit and release requirements, would also include a discussion about the drinking water infrastructure plan for Crozet and the findings RWSA had so far in draft about whether Beaver Creek Reservoir was sufficient to meet the growing needs of the Crozet community. Mr. Mawyer stated that he hoped to have more information on the issue to report to the Board in March or April.

Mr. Mawyer added one other data point on the weather and directed members to a graph that showed January 22 data for the middle James River area, in the center of the state. He indicated that the graph showed precipitation on the top left of the graph and stream flow on the bottom right both being in the red/emergency category. He stated the new state monitoring report for February 25 showed precipitation at normal levels, reservoir levels at normal, groundwater levels still in “warning” stage, and stream flows in the “watch” stage. Mr. Mawyer noted that the recent

86 rains had yielded improvements, but the entire center of the state was in a moderate drought
87 condition.

88
89 Mr. Gaffney noted that the groundwater had gotten worse and suggested that it may not have
90 made its way down yet.

91
92 Mr. Mawyer stated that the intern program had been successful last summer and Rivanna was
93 recruiting for three more intern positions for help this upcoming summer. He reported that
94 RWSA was able to hire Austin Marrs as a permanent employee, and in May he would assume
95 the position of engineer in the capital projects group. Mr. Mawyer noted that Mr. Marrs would be
96 following in the footsteps of Bethany Houchens, who was hired several years ago after
97 completing the internship program.

98
99 Mr. Marrs thanked the group for the opportunity to serve.

100
101 Mr. Mawyer discussed community outreach publicity via the *Crozet Gazette* and *C'ville*
102 publications regarding the water supply plan and infrastructure projects, and noted their
103 interviews with members of RWSA. He stated that he felt the articles were very well written and
104 stated that RWSA's water manager, Mr. Tim Castillo, had provided a demonstration with a third-
105 grade class St. Anne's Belfield School; and the water resources manager had spoken to a class at
106 Monticello High School about the Ragged Mountain reservoir and the community water supply.
107 He indicated that Mr. Tungate had done a tour of the Observatory Water Treatment plant for a
108 class from UVA.

109
110 Mr. Mawyer reported that Rivanna had given a tour for Nikayah Walker, Mayor of
111 Charlottesville; and Heather Hill, Vice-Mayor of Charlottesville. He stated the tour was a driving
112 tour of the Observatory Treatment Plant, Ragged Mountain Reservoir, South Rivanna Reservoir,
113 and the Rivanna Treatment Plant, as well as Moores Creek. Mr. Mawyer stated he appreciated
114 the opportunity to discuss the facilities with them and give them a real-life perspective on the
115 location and magnitude of those facilities.

116
117 Mr. Mawyer reported that the granular-activated carbon system had gone into operation the
118 previous Monday in Scottsville. He stated RWSA expected to bring the Crozet plant and the
119 North Rivanna plant online by March, with the Observatory Treatment Plant and Rivanna to
120 follow in April or early May. He stated RWSA hoped to have all systems online for the
121 celebration of National Drinking Water Week, observed May 7 through 11. He added that
122 RWSA was planning to have three celebrations at Rivanna, Scottsville, and Crozet, respectively,
123 but probably not on the same day. Mr. Mawyer indicated that the following week was National
124 Infrastructure Week, observed May 14 through 18, and a celebration was planned for the
125 completion of the odor control facilities at Moores Creek. He continued that RWSA was trying
126 to follow the national lead regarding these programs and hoped for it to coincide with RWSA's
127 project completions.

128
129 Mr. Gaffney asked for clarification as to where the celebrations would be held.

Mr. Mawyer indicated that a final decision had not been made, but Riverview was the likely choice.

Mr. Gaffney suggested a big picnic for the community.

Ms. Galvin added that since the odor control project had been in progress for seven years, there were many residents in Woolen Mills, Belmont, Carlton, and Pantops that were unaware of how serious of a problem it had been. She suggested that Rivanna do some information outreach to inform them of what an accomplishment it had been.

Mr. Mawyer agreed with that suggestion and added that when Rivanna did the tour with the Mayor, she did get a close-up view – and smell – of the facility, and explained that it was considerably better than it used to be.

Mr. Mawyer stated that Rivanna would be introducing the water/wastewater CIP at today's meeting, and stated that in March staff would propose the operating budget for water and sewer, as well as providing a master staffing plan to cover a six-year period for staffing needs, along with the operating budget that would include next year's staffing needs as well as the next five-year period. He added that he was hopeful the board would authorize staff to advertise the operating budget and stated in April, staff would be back in front of both Rivanna boards regarding the first-year strategic plan projects and what those priorities would be. He stated he was looking forward to the Board's input on those priorities, and in April staff hoped to have DiNatale back to provide information on part two of the reservoir management report regarding how to take care of the reservoirs.

Mr. Mawyer reported that in May, he was hopeful that the CIP and operating budgets would be adopted for both the RWSA and RSWA.

Mr. Gaffney asked if there were any further questions for Mr. Mawyer. There were none.

5. ITEMS FROM THE PUBLIC

Mr. John Martin from Free Union addressed the board and stated that the water supply planning process had very active and involved citizen participation. He pointed out that the process had gone on for years and was very difficult for citizens and was very painful for citizens along the way. He stated that the end result, when the water supply plan was adopted, was that some people were happy with it and others were not – but the important thing was that citizens working together yielded an outcome of what was possibly the most thoroughly vetted water supply plan in the history of the state. Mr. Martin commented that it was a system that worked and stated that a few months ago, Mr. Mawyer had introduced various alternative schedules for completion of the Ragged Mountain pipeline as part of the water supply plan. Mr. Martin requested that as the decision-making process advanced, a written report be published with a recommendation of the decision with detailed rationale for the decision, so the public could read it and determine for themselves whether it posed any detriment to the public and public interest. He stated that given the amount of citizen involvement in the water supply planning process, he did not think that such a request was unreasonable. Mr. Martin also requested that following the

publishing of the report, a public hearing be scheduled and held so all citizens could come in after reviewing the plan and offer comments. He stated that he also felt that process would be beneficial to the DEQ and the State Water Control Board.

Mr. Gaffney thanked Mr. Martin for his comments.

6. RESPONSES TO PUBLIC COMMENTS

There were no responses to public comments.

Dr. Palmer noted that they should consider Mr. Martin's suggestions at a later date.

7. CONSENT AGENDA

a. Staff Report on Finance

b. Staff Report on Ongoing Projects

c. Staff Report on Operations

d. Recommendation for Approval of Purchasing Manual Update

Dr. Palmer moved to approve the consent agenda. Mr. Jones seconded the motion, which passed unanimously (7-0).

8. OTHER BUSINESS

a. Presentation to the RWSA / RSWA on the Compensation & Classification Study Recommendations: Director of Finance & Administration, Lonnie Wood and Consultant David Bollenback with Evergreen Solutions

Members of the RSWA joined the meeting for this presentation.

Mr. Wood reported that the previous summer, staff initiated a compensation study that included reviewing job titles, classifications and job descriptions which had not been done for about ten years. He stated it was also initiated to conduct a market survey analysis which was in the process of going out to the market and getting information on compensation levels, compensation ranges, and pay grades. Mr. Wood stated that the last time an adjustment had been done to the pay raise system was in 2015, and the personnel policy required this to be reviewed every three years. He noted that it was also in line with the strategic plan, and even though the strategic plan was initiated at the same time, one of the conclusions in the plan that was adopted by the RSWA and RWSA in late 2017 was to conduct a comprehensive compensation and staffing study. He stated he expected the staffing study to come when the budget was introduced next month. Mr. Wood indicated that the consultant that was hired to help with the survey, Evergreen Solutions, would give a brief presentation on how the study would be conducted.

Mr. David Bollenback of Evergreen Solutions stated that he would discuss some of the findings from the study process and some of the recommendations that were before the boards. He reported that one of the primary pieces of the process was data collection and stated they had to gather information from HR and Finance, as well as collect data from employees. He stated they used a Job Assessment Tool (JAT) process that was sent out to all employees asking them to complete what was essentially a summary of their position, which allowed Evergreen to make sure they understood each position and the various functions that they were in charge of, as well as being able to determine the relative compensation levels of those positions.

Mr. Bollenback stated that there were also some outreach and orientation sessions wherein they interviewed and discussed with employees what they liked or didn't like with issues that they were experiencing with the scope of the study, and introduced them in the orientation sessions to their study as well as to the JAT process.

Mr. Bollenback reported that Evergreen had also done an analysis of the current conditions, which assessed the nature of the pay scales as to whether they were close enough to each other in terms of the various grades, as well as being far enough apart, and other various best practice pieces that were investigated as they related to those scales. He stated that they also conducted a market survey, which was a big piece everyone was interested in hearing about, and he would talk about those results, as well as recommendations.

Mr. Bollenback explained that the study was launched in June 2017, followed by orientation focus groups onsite as well as with employees asked to attend focus groups, in July 2017. He stated there were 11 focus groups with 55 employees – so just over half of the employees participated in the focus groups. He also stated that the JAT process ran from July 21 to August 15. He stated that the JAT participation rate was 83.5% out of a total 91+ employees who were asked to participate, which was considered a very strong completion rate as 70% was the desired rate.

Mr. O'Connell asked if the JAT was like a job description.

Mr. Bollenback confirmed that and stated that the JAT was introduced by having employees literally write their own job description, but it was asked to be done from the employee's individual perspective – so that if employees share a job title, it would be Evergreen's expectation that those JATs would look slightly different. He added that in some cases if there was a classification issue, they would look very different. He noted that those differences and similarities were what Evergreen was trying to see in the JAT process, and then use that information to determine the compensation composition.

Mr. Bollenback stated that he wanted to present several notes on what employees shared when they came onsite. He stated that many of them stated that they appreciated the stability that working for the Authorities provided them. He also noted that there were some mid to upper-level compensation compression issues (i.e., people's opinions that salaries were too close to one another based on certain variables such as experience, tenure, performance, etc.). He reported that whatever metric they were using, employees stated they still felt that salaries were not differentiated from one another in a manner they felt was appropriate. He stated that Evergreen

heard many different reasons for that compression, but stated those were fairly common complaints and that was one of the things Evergreen was looking to address. Mr. Bollenback stated that some employees felt their job descriptions were not accurate due to job duties having evolved over the years, and that Evergreen was asked to review those job descriptions, which they were still in the process of finalizing.

Mr. Bollenback indicated that there was a single salary schedule, which was sometimes presented separately, with solid waste in one schedule and water and wastewater in another one, but overall, they were shared dollar figures and nomenclature. He reported that there were 56 unique classifications, so different job titles slot into that plan, with 99 budgeted positions – but he clarified that their numbers were not 99 because they were dealing with the actual employees present at the time of the study initiation, so those numbers did not match perfectly all the time with budgeted positions.

Mr. Bollenback reported that the current range structure was very solid. He reported that generally you would expect to see a range spread of 50 to 70 %, and stated that the range spread was essentially the percentage increase from the minimum to the maximum of a pay range. He stated that it represented the lower to upper limit of compensation, and how much compensation could grow as an employee throughout the time of employment. He reported that the Rivanna Authorities were sitting right at 66%, which was considered excellent. He also directed the boards' attention to grade progression, which was the percentage increase from one grade to the next, and stated it was fairly consistent for the Rivanna Authorities at about 5%, which was within best practice limits. Mr. Bollenback noted that this was relevant because there was a grade structure that they then had to slot classifications onto, so having those pay ranges relatively close to one another allowed them to slot them as close to market as possible. He added that being 5% apart from one another would allow them to slot them closer to their target value than if they were 10% apart from one another. He indicated that this was good news, and Evergreen had sought to build on the strengths that were identified during the Analysis of Current Conditions (AOCC) process, while also bringing up the ranges and some individual positions to market.

Mr. Bollenback reported on the market survey and stated they had benchmarked 63 classifications, with some speculative ones that were also included for data purposes. He reported that they went to 26 market peers, including cities, counties, school systems, and other utilities – casting a wide net to try to get a feel for the labor market that the Rivanna Authorities compete in. Mr. Bollenback stated that overall 607 market matches were made, which was fairly strong for a study of this size and was just under 10 responses per position. He stated that the findings showed that overall, positions were on average 5% below market at minimum, 6.3% below at midpoint, and about 7.4% at maximum. He reported that this was an average of market responses using published pay ranges compared to Rivanna's published pay ranges, and these were not representative of employees' actual salaries but were structural comparisons. Mr. Bollenback also stated that when they referred to 5% below market on average they meant on average, and there were several positions that were compensated in terms of the pay range above the market average and several that were below that 5%.

Mr. O'Connell asked if the survey included any local employers besides another utility, such as contractors or UVA.

Mr. Bollenback responded that they had a private sector component but could not compel private organizations to provide them with that data, so they utilized a service from the Economic Research Institute that provided localized private sector salaries and ranges based on experience and time with organization to really mirror that using private sector data. He stated they did not have a direct response from a specific entity but did have an aggregated response from the private sector.

Mr. Henry asked if this was a consistent peer group as the last evaluation from three years ago.

Mr. Bollenback presented the list of comparative entities and stated that there were 26 organizations surveyed.

Mr. Wood confirmed that this was very similar to the previous survey and stated that they took what they could find with the city and county markets, so they were consistent with what the localities did.

Mr. Bollenback addressed the cost of living index and stated that there was a service called coli.org, an entity that provides regional cost of living indexes, and their metric 100 is the national average cost of living – whereas anything over 100 is above average and below 100 is below average. He stated that there was list of county-level cost of living index results and stated they used that information to essentially inflate or deflate peer responses. Mr. Bollenback used an example by comparing Rivanna at 106.4 and an organization that was below that, and stated that the actual dollar figure that came from them would have been inflated slightly by an equivalent percentage to make sure they were comparing apples to apples as closely as possible. He referred to the City of Lynchburg, which was just below 100, and stated that to try and compare that with Rivanna's salaries would lead to some inequities by the nature of the cost of living in that area. He noted that those were county-level cost of living indexes.

Mr. O'Connell asked if Western Virginia on Mr. Bollenback's slide was Roanoke, and whether their cost of living was higher than Albemarle's.

Mr. Wood confirmed this.

Mr. Bollenback asked if there were any further questions before moving on.

Mr. Henry asked what the asterisk on the slide represented.

Mr. Bollenback explained that the asterisked entities represented organizations – the South Central Wastewater Authority and Appomattox County Water – and the asterisks indicated that the administration of the water plans was shared.

Mr. Bollenback then referred to Evergreen's recommendations. He stated that the first recommendation was to adopt their revised unified grade structure and the revised class list. He

added that the revised class list included some job title changes, as well as a few grade placement changes.

Mr. Bollenback stated that the grade structure being recommended started with Rivanna's current grade structure and represented a 4% increase from the current structure, but that was not the sole summary to be taken from the survey. He reported that not only were the grades themselves adjusted by 4%, but there was a more detailed class list in the report that would detail where Evergreen recommends each position should be placed. He stated that some of those were in higher grade placements than they were currently, so even though there was only a 4% adjustment shown on the scales, for individual positions that adjustment may be greater.

Mr. Bollenback stated that the second recommendation was to utilize the JAT and Point Factor System process to revise or establish pay grades going forward for positions. He stated that Evergreen has used that structure and methodology to compare each position to determine the appropriate pay level for the position, and it would be Evergreen's recommendation that Rivanna continue using that methodology going forward as needed. He added that he had been working with Ms. Nemeth as to how that would be done, and Evergreen would be available to ensure that the adoption of that practice was smooth and expressed hope that Rivanna would continue to use that.

Mr. Bollenback stated that the final recommendation would be that Rivanna conduct a comprehensive compensation and classification study every three to five years – with three being the most ideal and five being the absolute outside limit. He noted that the reason for that was that market trends sometimes move very quickly, and it was important to stay aware of what was happening. He cited an example as being an increase for certain operators where their compensation went up regionally, but this didn't necessarily affect every other position and it might not be immediately seen but could have some long-term ramifications if not addressed. Mr. Bollenback stressed the importance of staying on top of the market every few years, and he asked for any comments or questions.

Dr. Palmer asked that if everything was adjusted 4% up, how the three indicators that were given as 5% below the market average minimum would be changed.

Mr. Bollenback replied that he did not have the exact figures but stated that the figure would be closer to zero. He stated that as mentioned earlier, he was hesitant to give updated figures because really they were looking at jobs. He clarified that when they actually slotted those positions in the pay structure, they looked at it at the individual job level to make sure that the actual job was closer to market, so he felt they were closer to the zero mark. He reiterated that he did not have the exact figure at present but could provide it to them.

Mr. O'Connell stated that the ultimate goal was for the pay structure to reflect the market Evergreen surveyed for that particular job where it was slotted.

Mr. Bollenback confirmed this and stated that when they looked at an individual job, they would hope that the job would be even closer to market, if not actually at market.

Ms. Galvin inquired as to the impact to the operating budget and expenditures.

Mr. Wood stated it would have no effect as it was for next year. He stated that it would not have any effect at all, as no one would receive a pay raise explicitly because of the study. He noted that what the study found was that Rivanna's pay grade for the incumbent employee was actually a little bit above market and a little bit above the current pay grade system, so shifting the grade was all that was happening. He stated that people stayed where they were but would receive better position within the grade that they were currently in now, with more room to grow. He stated that the only budget impact would be when discussions were held for the budget and the recommended merit increases. Mr. Wood stated that there were a few positions that were significantly below the market, and stated those were usually the newer positions. He stated those would be addressed administratively internally, and he stated that if you pulled those data points out of the market analysis, those 5 to 6 to 7% above or below market that Mr. Bollenback mentioned would decrease a little bit. He stated that it was a combination of the 4% increase and then dealing with some of the larger outliers within the market survey itself.

Mr. O'Connell added that from the employee perspective, it would create more growth and make them better able to compete in the market place.

Mr. Wood agreed and stated that it would allow for keeping the market as a range in line with what the outside world was doing, so they could better compete within that market.

Mr. Henry asked Mr. Wood to clarify the second recommendation in regard to utilizing Evergreen's JAT tool and point factor system to revise and establish pay grades. He also asked if that looked at the individual job assignment and whether it might involve a reclassification of that position.

Mr. Wood confirmed that and stated that when there is turnover in a position it creates an opportunity to look at that position in terms of what it is doing, what you want it to do, and if it was fitting the skill set for the person in that position. He added that if during the budget process you are asking for a new position, it helped HR to determine where to slot that within the rest of the pay grade structure and classification. He noted that it was good for new positions, as well as to review any open ones they might have an opportunity to fill.

Mr. Henry asked whether it could result in a reclassification.

Mr. Wood confirmed that it could if there was a good enough reason for it. He stated that if all of their operators were terribly graded, for example, they would do a JAT on all four of the different positions, and it could be done administratively at any time.

Mr. O'Connell stated that through the study, everybody participated as to where they were put in the appropriate position – so it should be corrected.

Mr. Wood confirmed that and added that one of the things that would come out of this would be that there would be brand new job descriptions, which was based on a lot of the JAT input that came during the employee meetings. He also wanted to note that the supervisors had a

chance to review what the employees stated but did not approve, negate, or override it – but they did have a chance to comment on what the employee feedback was.

Mr. Richardson asked if he had addressed the fact that the grades were moving but people would stay where they currently were, and asked about an employee who had been with the organization less than two years who may be near the entry level.

Mr. Wood stated that had been considered and no one was “hitting the floor.”

Mr. Richardson asked about the compensation compression because there were some compression concerns. He asked about someone who might be close to the minimum who had been there a couple of years – because if they moved the grades and not the person, they might be hiring someone in the future at the same rate as someone who had been there just a year or two.

Mr. Wood stated that those would be addressed administratively if they thought they were way off base on their tenure and skill set and where they fall in there.

Mr. Richardson asked if that would be handled on a case by case basis and that would be looked at.

Mr. Wood confirmed that a lot of times it would be handled that way.

Mr. Mawyer stated that they would have a merit discussion next month that would be considered within the operating budgets, so employees that might just be starting this week would not be eligible for a merit – but if they started a year ago, they would get a merit with the new scale to create some space. He added that if they hired someone in August, the new employee would not be on step one with the existing employee.

Mr. Richardson stated that he was not concerned about someone that had been there 10 to 20 years, as there were lots of reasons over a period of decades where people separate out in terms of pay and such – but when there was an employee hired within the last 24 months, that learning curve is very steep. He stated that if that person was near or at the minimum and someone else was brought in, there was a lot of difference between a brand new employee and a two-year employee in terms of what they have learned. He asked if there would be a mechanism in place where that could be addressed and still keep what was an appropriate amount of spacing between someone brand new versus someone who had been there 18 to 24 months.

Mr. Mawyer stated that was correct.

Mr. Wood stated that the Authorities historically for the past 15 to 18 years had always done pay increases based upon a merit system, and had never been a 1% cost of living adjustment plus merit – so the system rewards the high performers. He commented that if an employee was at the bottom, there was usually a reason that they were at the bottom or have stayed down towards the bottom, instead of getting shifted up automatically.

Mr. O'Connell stated that one of the positions that he had heard they were having trouble hiring were water plant operators, and wondered if this approach would help with that and if that was still an issue.

Mr. Wood responded that he did not feel that they were having a hard time finding people that were interested in working for Rivanna in a water operator job, but stated they were having a hard time finding people that had an Operator Class 1 License. Internally, he stated they knew they needed to grow those employees and to hire employees that were capable of moving up that chain and taking tests, as this was a test-driven license. He stated that some people just didn't test well, so Rivanna had to help them with that. Mr. Wood stated that after recently talking to the water manager, he stated that he was now in a place where he could start moving people that had been there one or two years into those 1 and 2 operator slots. He added that the way they have tried to address that is to grow them from inside.

Ms. Galvin asked if they had vocation programs at the community college or some place where people can actually get those credentials.

Ms. Nemeth stated that they used a Sacramento State program online.

Mr. Wood added that there were also some state programs at Virginia Tech.

Mr. Mawyer stated that Mountain Empire College also offers online classes.

Mr. Castillo noted that there were some programs offered in person within the state, but they were very hard to keep going because there usually were not enough students for water/waste water to keep those kind of training programs.

Mr. Wood stated that the recommendation for this meeting was to adopt the proposed pay grade structure that was noted in the presentation, with a copy with the comparison of the current pay grade structure in the cover memo. He stated it would be helpful to adopt the cover memo and second schedule, which was where people would be placed in the new pay grade structure based on the recommendations as a result of the market study.

Dr. Palmer asked if they were going to deal with the other recommendation from Evergreen regarding the JAT.

Mr. Wood responded that he felt that could be dealt with administratively and if they wanted to use it and found it beneficial they could keep using it – and if not, they would stop using it.

Mr. Wood stated that this was helpful for the employees to step out of what they were doing and assess what they were doing. He noted that several other things in the study that were not addressed that could be done administratively were a couple of recommendations to shift some positions from non-exempt to exempt, as well as several title shifts. He stated that some of their assistant managers were not graded equally, so they have redone some of them to bring them closer in line with each other as they were all doing the same thing as far as management skills.

Mr. Gaffney asked how all of this could be tied into the strategic plan and how what was just done has helped to get to this point.

Mr. Mawyer explained that workforce development was key to the strategic plan in making sure that they have a qualified professional, highly skilled, dedicated, and versatile team. He added that they needed to maintain competitive pay to do that, so they needed their scales to be competitive as well as their actual salaries. He reported that Mr. Wood and the study both indicated their scales were less than competitive so they were recommending increasing it. He stated that their actual salaries were very competitive with the market and were slightly above the market. Mr. Mawyer stated that they would still recommend a pay increase in March but were looking at both things, so this supported workforce development in the strategic plan.

Mr. Richardson asked about an exemption status with hourly versus annual wage earners, and asked if they had made recommendations pointing in both direction and what they were able to find.

Mr. Bollenback responded that they found there were several positions that were listed as non-exempt that could qualify as exempt status. He clarified that they were not labor attorneys and that this was just their understanding of what was presented to them by employees, and he stated it certainly needed to be reviewed. He stated that some positions that went from non-exempt to exempt and there were positions that went from hourly to annual, not from annual to hourly.

Mr. Richardson responded that this was the side that opened up the liability, and asked whether Evergreen was comfortable in moving a position from hourly to annual wage status, and whether they were in good shape in that regard.

Mr. Mawyer stated that they were and would double check based on those comments. He stated they had assistant managers, some of whom were non-exempt – meaning they got paid overtime – while other assistant managers were not. He stated that those particularly were the ones they looked at from a consistency standpoint. He added that those should be exempt – meaning there was no requirement to pay them overtime.

Mr. O'Connell pointed out that the budget recommendation on pay would be around individual performance – also called merit – as an evaluation that determined whether there would be a pool of money.

Mr. Mawyer explained that next month they would bring the operating budget to the Board with a recommendation for a 3% merit pool. He explained that they would take 3% of the salary dollars that they had and put them in a pool. Mr. Mawyer stated every employee would go through the merit evaluation program and would get a score between 1 and 4 – with 4 being high performers and 1 being the minimum performers – and those 3% dollars would get allocated to employees based on their score. Mr. Mawyer stated that 3% would likely be the average increase, higher performers would get more than 3%, and lower performers would get less than a 3% increase. He added that this was what the Authorities had done for many years.

Mr. O'Connell asked if they needed a motion for approval.

Dr. Palmer asked if they needed two motions or one.

Mr. Krueger clarified that it would be better to have two motions, one for each Authority, and stated the motions could be paired as one motion for each Authority to recommend both the adoption of the pay salary grade scale for FY18-19, and the proposed job title placements.

Dr. Palmer moved for the RWSA to adopt the attached proposed pay grade scale for FY18-19 table one, and to approve the proposed job title placements as shown in the attached table two as recommended by the study. Mr. O'Connell seconded the motion, which passed unanimously (7-0).

The RSWA Board adopted its own motion and then adjourned its meeting.

b. Introduction of the FY 2019 – 2023 Capital Improvement Program: Executive Director, Bill Mawyer and Director of Engineering and Maintenance, Jennifer Whitaker

Mr. Mawyer stated that he wanted to give some general comments about the CIP for FY19-23, and then Jennifer Whitaker would provide details.

Mr. Mawyer reported that they had a proposed CIP with new projects, and previously approved projects that were all in the CIP. He stated that the amounts totaled \$152.7 million, slightly higher than it was in the last five-year CIP at \$135.9 million. Mr. Mawyer stated that the \$152.7 million actually represented \$97.3 million in expenditures, because the the \$152.7 million included the total project budgets for previously approved projects that would have expenditures in FY19-23. He noted that an example might be GAC, as even though it was substantially finished, Rivanna was not ready to take it off the books because there were a few things they would be doing in July that would have associated costs, so Mr. Wood would keep the entire \$25 million in the CIP. He noted that they were not truly dollars that would be spent in 2019 – 2013, and that most of the funds had already been spent in the past.

Mr. Mawyer stated that \$32.1 million would be added as additional funds for previously approved projects that were in prior CIP's that now needed adjustments. He stated that some or most were added to the budget and a few were credits, resulting in the total adjustment of \$32.1 million.

Mr. Mawyer reported that thirdly, they were adding \$23.3 million in funds for new projects, and that was the way they totaled the CIP. He noted that in general there was about \$100 million in new expenditures in the five-year CIP, and stated that \$50 million had already been approved and budgeted.

Mr. Mawyer indicated that major objectives in the CIP were to increase the drinking water treatment capacity at Observatory and Crozet treatment plants, to renew their largest water treatment plant at South Rivanna, to improve the water supply redundancy/reliability in accordance with the community water supply plan by continuing to work on the right of way

procurement for the pipeline from South Rivanna to Ragged Mountain, and to replace the piping and pumping that convey raw water from Ragged Mountain to Observatory Treatment Plant. He also stated that there was a major project at Beaver Creek, which was driven by regulatory compliance.

Mr. Mawyer directed the Board to a graph from the previous month, with the lime green color indicating current debt service profile that they were paying about \$12 million per year in debt service on the current 2019-2023 CIP. He stated that to finance the 2019-2023 CIP, they would have to add on the top dark green bars on the graph, which would increase the debt service to \$15.7 million for FY 2019. He stated it added about \$96 million in debt to the current debt load of \$160 million. Mr. Mawyer noted that of the approximately \$100 million they were adding in new expenditures for the next five years, 93% was debt financed and 7% was cash financed. He added that the dark green bars at the top of the graph add the \$96 million to the current debt service payments. Mr. Mawyer stated that their revenues came from the City of Charlottesville and the Albemarle County Service Authority, and he referenced the rates that were projected for those two customers, including the operating budget, and the total rate increases projected for the next 5 years.

Ms. Galvin asked if they could be presented also in dollar amounts in terms of what it meant for the rate payer.

Mr. Mawyer stated that Ms. Hildebrand and Mr. O'Connell had to translate the rate increases to the customers, as their rate changes would be different than those proposed by Rivanna.

Ms. Galvin stated that the public looks at the percentages and think "Oh, that's terrible," but then they find out it really is a small amount.

Dr. Palmer stated that it was good for them to know the sense of the wholesale rate too.

Mr. Mawyer confirmed that and stated that staff would have that information in their budget for March, which would show the wholesale rate per thousand gallons.

Mr. O'Connell stated that they wouldn't have the ACSA retail rate until April, but he could assure them that it would not be 10.2%.

Mr. Mawyer concluded his remarks and introduced Ms. Whitaker.

Ms. Jennifer Whitaker stated that there were several things in the board packets regarding the CIP, and she would highlight a few projects were the most notable or had seen the most change. She added that there were a tremendous number of projects and information contained within the book itself, and she would be happy to answer any detailed questions on any individual projects. Ms. Whitaker reported that the introduction did go through a discussion of projects that have been completed in the past year, projects where funding had been added, and also projects where the funding had changed or they added new projects. She stated they were trying to present the data in about three or four different ways so that depending on what the priorities were, that information could be looked up. Ms. Whitaker stated that the body of the document was divided

681 basically along the lines of which system the work was happening in, and stated there were four
682 or five tables in the back of the book that “sliced and diced” the rates in a variety of different
683 ways.

684
685 Ms. Whitaker stated that part of the discussion this year was that there were a lot of new projects
686 in the CIP, and some of those projects were projects that had been lingering in concept for a long
687 period of time, and some of them were being brought forward now to really try to improve the
688 system. She stated that the first project was Ragged Mountain Reservoir to Observatory
689 Treatment Plant raw water line and pump station, which was fundamental to how the urban water
690 system operated on the raw water side. She stated that this project was part of the raw water
691 supply plan, and the intent was to replace the two 18-inch cast iron mains that go from Ragged
692 Mountain to the Observatory plant. Ms. Whitaker noted that one of those mains was over 110
693 years old and the other was about 70 years old. She stated this would also allow them to deliver a
694 reliable, solid, 10 mgd of raw water to Observatory so that when Observatory is upgraded they
695 can deliver, receive, and treat the water. She stated that part of their concern when they started
696 talking about upgrading Observatory to 10 mgd was that they could build a plant to treat 10 mgd
697 and could get 10 mgd into the system, but were not certain on the raw water side whether they
698 could consistently and reliably get that to the plant. Ms. Whitaker stated that there were
699 questions about that, which was why over the course of their discussion in the last few months,
700 that was moved up the priority list. She stated that they wanted to upgrade the raw water pump
701 stations with a single new raw water pump station that also had the capability of serving as the
702 south end of the Ragged Mountain Reservoir to South Fork Rivanna Reservoir pipeline pump
703 station. She stated that when they did the original 2010 Wiley-Wilson report, there was a
704 discussion about how to optimize the needs to pump east/west with the needs to pump
705 north/south, and that pump station would be able to serve both of those purposes at a single site.

706
707 Mr. Gaffney asked for clarification of the capacity.

708
709 Ms. Whitaker confirmed that it could pump 25 million gallons per day from SRR to RMR, 10
710 mgd to Observatory and 16 mgd back to the north, so they could return the full capacity of South
711 Fork back to the South Fork plant to utilize that full capacity.

712
713 Ms. Whitaker stated that the pipeline would take 25 million gallons per day to the south and 16
714 back north.

715
716 Ms. Whitaker referred to several pictures of the current state of infrastructure on the raw water
717 system. She stated that the Royal Pump Station was built in 1920, and she stated the inside
718 looked a little better than the outside. She did say that it was the original pump, and some of the
719 valves and equipment in the building was also original. Ms. Whitaker stated that the Stadium
720 Road Pump Station was a newer pump station and had replaced an older piece of infrastructure
721 that was in that location in 1987 and stated it would require some substantial upgrades in order to
722 operate that system in the future.

723
724 Ms. Whitaker referenced pictures showing the lower Sugar Hollow raw water main and the
725 Ragged Mountain raw water main. She stated that the issue was that the main itself was in fairly
726 decent shape, but that the big issue was that when the pipe was installed, it was installed until it

hit rock, so that the pipe was laid on top of the ground in some places. She stated that when they hit soft soils, they dug three feet deep, and the pipe went in underground fully protected – then hit rock at a stream crossing and it got laid right across the stream at grade. Ms. Whitaker commented that when streams and creeks move, the pipe was susceptible to coming apart. She stated that when there were two mains that operate in parallel and two pump stations that operate in parallel, they are redundant to each other as long as Observatory is at 2 mgd of production. She stated that they were now designing Observatory to treat 10 mgd on any given day, reliably and efficiently – and they then lose the redundancy of being able to afford to have one of those pipelines go out of service, which happens about once a year. Ms. Whitaker added that under their current scenario, they could switch production to the other side, make the repair, and switch back. She noted that in the future they would not have that luxury and it would actually lead to a reduced production on that side, which was why it was recommended to upgrade that particular facility.

Ms. Whitaker directed members to view a diagram depicting how Ragged Mountain tied to Observatory. She stated that the pipeline itself was about three miles of raw water pipeline, and the full CIP amount would not be available in the budget because the budget was only for five years. She stated that the project was expected to take longer than those five years and it was about \$14.5 million for the pipeline work and almost \$5 million for the pump station work.

Dr. Palmer stated that she was confused about the term “lower” Sugar Hollow water main, and asked Ms. Whitaker to clarify that term.

Ms. Whitaker explained that the Sugar Hollow Reservoir was a distance away and came down through Ivy and traversed at Cherry Hill Farm and then came into the back of Ragged Mountain. She stated that it used to go around the edge of Ragged Mountain and tie in, and they could take water directly from Sugar Hollow into the treatment plant without ever going into the reservoir. She added that when the Ragged Mountain Dam was built, they actually demolished the piece that connected those two together, so there was now two pipelines at what was all called Sugar Hollow – but now they tried to differentiate between upper Sugar Hollow, which was above Ragged Mountain; and lower Sugar Hollow, which was the 18-inch pipe that comes from the Ragged Mountain to the Observatory Treatment Plant. Ms. Whitaker stated it was to differentiate between the two 18- inch mains that were along Reservoir Road.

Mr. O’Connell asked if the new project would be one single line from the Ragged Mountain Reservoir to a new pump station location.

Ms. Whitaker affirmed that and stated one single line would be there, and stated there were a few locations they were investigating – with the most likely candidate being near the marshaling site when they built the Ragged Mountain Dam.

Dr. Palmer asked if there would be two pump stations.

Ms. Whitaker stated that on that pipeline, they would be replacing the two existing pump stations with a single pump station.

773
774 Mr. Mawyer added that there would be two sets of pumps in the new pump station.
775
776 Ms. Whitaker pointed out the Stadium Road and Royal pump stations and stated they were on
777 two separate pipelines, and stated the new one would basically replace those two with a single
778 pipeline and a single pump station in that general vicinity.
779
780 Mr. O'Connell asked for confirmation that the backup would be inside the pump station with
781 multiple pumps.
782
783 Ms. Whitaker confirmed that and stated they would be full service, with a quiet pack generator,
784 and constructed to all modern standards, with much improved electrical systems compared to the
785 1920's Royal Pump Station.
786
787 Dr. Palmer asked again to clarify that there were two select projects listed – Ragged Mountain
788 Reservoir/Observatory Treatment Plant, with the second one being the one that would operate as
789 the north/south and east/west.
790
791 Ms. Whitaker clarified that one pump station would be able to serve both directions, and another
792 pump station would be up at South Fork at some future point.
793
794 Ms. Galvin asked if this represented existing conditions.
795
796 Ms. Whitaker stated that the map was for existing conditions, and they would be replacing those
797 existing conditions.
798
799 Dr. Palmer asked her to point out where the select new projects were going to go on the existing
800 conditions map.
801
802 Ms. Whitaker explained that the pipeline itself would go from Ragged Mountain Reservoir along
803 the alignment to the Observatory Treatment Plant and would be a single pipeline. She clarified
804 that they had two 18-inch pipelines there currently, and they would likely have a single 36-inch
805 pipeline that would run the entire length. Ms. Whitaker stated that it would not be visible and
806 would be completely subterranean. She stated they were also looking at a pump station site
807 somewhere in the vicinity of the old marshaling site for the Ragged Mountain Dam construction,
808 which was near Foxhaven Farm at the turn onto Reservoir Road from Fontaine Avenue.
809
810 Mr. O'Connell asked if the new long term pipeline from South Fork would come into that pump
811 station and pump into Ragged Mountain.
812
813 Ms. Whitaker stated that was correct and stated to think of it as a "T", stating that what they were
814 talking about was where the two arms meet, that would be where the pump station would go. She
815 stated the pipeline would be built east/west, and in the future when they brought the north/south
816 pipeline in, it would tie in right at that pump station site – and with some valving and plumbing,
817 they would be able to use that pump station site to serve all of the purposes that would be needed

on the south end of the project. She added that it would save quite a bit of money to optimize how that pump station operated.

Ms. Whitaker reported that the next series of projects were the South Rivanna River Crossing and the North Rivanna Transmission Main. She stated that currently, they had a single 12-inch crossing of the South Rivanna River that served everything north of the river. She stated with the VDOT's new Route 29 widening and Rio Road and Berkmar projects, Rivanna put a new 24-inch main up the side of Route 29 in the multi-use path that went all the way up to Kohl's. She reported that this was basically completing the loop of that project by bringing in a 24-inch line across the river and interconnecting the north and south pressure zones. Ms. Whitaker stated that it would allow them to build off of that to create a future Airport Road zone. She stated they currently had pressures in that north area that were almost 200 pounds per square inch of operating pressure, which was a very high operating pressure. Ms. Whitaker stated they would be able to reduce those operating pressures, which also reduces electrical cost as well as improving general maintenance systems.

Ms. Whitaker explained that there were three key components. She stated that on the south end it would give them a new 24-inch river crossing. She referred to the overall map and pointed to the close-up depictions of each section. She stated that the pipeline from the South Fork water treatment plant tied into a connection at Polo Grounds and Rio Mill, when the new pipeline was built they built out across the road with a new 24" pipe and they would come in and tie into that pipe. Ms. Whitaker stated that the second component was the existing 24-inch main that was just built. She explained that the northern portion of that project was to connect behind Kohl's and stated there was a little piece of pipe that was built with the Berkmar project. She stated it then would continue down Meeting Street and they would build a pump station near the cell tower site, then tie the pipeline in to Airport Road. She stated that basically this allowed them to connect the north and south zones and stated they would like to make the Kohl's temporary pump a permanent connection, so that with a flip of a switch they could deal with north/south conductivity issues. Ms. Whitaker commented that eventually the northern part of Albemarle County would grow to a point where they could not supply it with the North Fork treatment plant, so this would allow for continued growth along Route 29 as well.

Mr. O'Connell asked if the northern point where the pump station was located would be where the tank would go.

Ms. Whitaker stated that was correct and the first step would be to get that all tied in and the pump station operational. She pointed to a picture of the Route 29 pump station site and pointed to the cell tower site and the end of Meeting Street, which provided a redundant feed to the North Rivanna zone and all of Route 29 North. Ms. Whitaker stated that it provided for future growth in the Places 29 Master Plan area, which was one of the key components that the County was looking for, and it also created the Airport Road pressure zone in the future, which allowed them to deal with the extremely high operating pressures and drop those down. She added that there was a site plan to show what that site would look like – with Meeting Street coming in from the left, Airport Road being east/west, and eventually be two tanks on that site and a pump station to be built.

Ms. Whitaker reported that the next project was a review and revamp of the administrative space for the RWSA. She stated that the engineering building was across the parking lot and was modular trailers, quickly approaching 15 years old and never really intended to be permanent space. She noted that the space was somewhat limited as they expanded capabilities within the Authority and was not good utilization of the space. Ms. Whitaker stated that currently, IT and laboratory space did not meet modern operating standards, and there was a need to upgrade those spaces. She stated they would like to improve their public meeting space and their ability to have educational and environmental outreach with a classroom-type environment where they can bring people to the facility and showcase some of the great work being done. Ms. Whitaker added that they wanted to have their space needs meet the requirements of the plant expansion, so as they looked to expand the plant at some future date, they can ensure that what they built and what they had for administrative space didn't hamstring the plant from being able to expand.

Ms. Whitaker addressed mechanical thickeners, which she described as sludge thickening, and stated that there had been tremendous improvements made over the last 10 years that included how they treated nutrients and how they dealt with wet weather, but stated they still had some issues where they were trying to deal with their solids handling at the plant. She noted that there were several projects in the CIP that were geared toward enhancing that. Ms. Whitaker stated one of the projects they looked at with odor control was taking in-plant clarifiers out of service, and they did a tremendous amount of work around the rest of the plant and decided to take the in-plants out of service. She noted that most of the time they were able to do that; however, they have found that there were times where they just couldn't, so the in-plants had to go back in service, which was the odor noticed as you turned the corner coming into the plant. She stated it didn't generally travel really far off the plant site but it was a pretty noxious smell. Ms. Whitaker noted that other piece of that puzzle was that it hamstrung the operators, and their plan and need was to either revamp those in-plant clarifiers or come up with another way to deal with the solids thickening. She added that this project allowed them to do mechanical thickening so they could process the solids more efficiently as they put them through the centrifuge. She noted that it was a step they were hoping not to take because it was a cost avoidance measure, but at this point there was still a lot of question marks as to whether or not it was sustainable in the long run without it.

Ms. Whitaker addressed the next project of security enhancements at \$2.5 million dollars in the CIP this year, and some of those recommendations came out of their vulnerability assessment done in conjunction with the City and the Service Authority. She stated it allowed them to have access control across all of their facilities, which they felt was absolutely necessary. Ms. Whitaker noted that some of it was as simple as fences, barbed wire, lock sets and exterior doors versus interior doors, but stated that it also included cameras, lighting and surveillance. She added that the big dollar amount was access control for every facility – every hatch, door, and window – to make sure they knew who was going in and out.

Ms. Whitaker stated that the previously approved projects that had a fairly substantial increase in dollar value were the upgrades to the Observatory Water Treatment Plant, with \$8-10 million designated the previous year and a current cost of \$18.6 million, with the idea that they would go to 10 mgd production capacity and would make the improvements necessary to do that. She noted that when they went from 7 to 10 mgd, it was likely that they would need a finished water

910 pump station – so that was a big part of this. She added that currently the system was beautifully
911 designed, but it all flowed by gravity down into town, and when they would attempt to push
912 more water into the system from town, they needed to include a pump station.

913
914 Ms. Whitaker stated that regarding the Avon to Pantops water main, the budget had always been
915 \$13 million but slid another year on to the plan, so therefore the funding started to show up more
916 significantly.

917
918 Ms. Whitaker addressed the South Rivanna Water Treatment Plant improvements and stated
919 those have increased a little bit as they continued to assess issues at the facility, so that had
920 increased costs a little bit.

921
922 Mr. O'Connell asked for clarifications as to what kinds of things would be done.

923
924 Ms. Whitaker confirmed that there was no capacity upgrade planned and stated that the South
925 Rivanna Treatment Plant had initially started by identifying five or six areas that needed non-
926 capacity related improvement. She noted that they had minimal alum storage and would like to
927 have two to three times that amount. She referred to underground facilities and stated that when
928 they had pipe breaks, it flooded and shorted the whole facility out. She noted that they had four
929 or five of these projects and their initial approach was to get those projects done. Ms. Whitaker
930 stated that as they looked at the facility, they questioned where there were electrical
931 shortcomings with the facility, and as they started to add another piece of electrical gear on top
932 of another piece of electrical gear, storage and air conditioning for the equipment became an
933 issue.

934
935 Mr. O'Connell suggested that it was more of a wholistic approach to addressing the problems.

936
937 Ms. Whitaker agreed.

938
939 Mr. Mawyer stated that they didn't want to spend \$5 million for a facility that still didn't really
940 optimize what they were trying to do, so staff was encouraged to identify the things they needed
941 to do for it to work effectively.

942
943 Dr. Palmer asked Ms. Whitaker where the Observatory Hill Treatment Plant pump was going to
944 be located.

945
946 Ms. Whitaker stated that it would be placed in the treatment plant project.

947
948 Ms. Whitaker addressed the Beaver Creek Dam alteration and stated that more of the funding
949 had come onto the CIP. She stated additionally they have included a new raw water pump station
950 and a hypolimnetic aeration, and those things would be discussed as the DWIP progresses and as
951 the DiNatale study came before the RWSA Board in April. She stated they would also be
952 discussing reservoir health and water quality, so they included some capital funding in the
953 Beaver Creek Dam project to address some of those concerns.

954
955 Dr. Palmer asked for clarification on what the DWIP was.

956
957 Ms. Whitaker stated it was the Drinking Water Infrastructure Plan for Crozet, so it was the water
958 supply plan for Crozet.
959
960 Mr. O'Connell asked how much was being spent on the pump station there.
961
962 Ms. Whitaker stated that they had budgeted \$2.5 million for the finished water project.
963
964 Mr. Krueger asked if the Avon to Pantops Water Main project was basically a completion of the
965 Southern Loop.
966
967 Ms. Whitaker stated that was correct, and it was the same concept but a different route.
968
969 Ms. Whitaker stated that the last item to be addressed was the Crozet Water Treatment Plant
970 expansion. She stated they had placed some study money in the previous budget and now the
971 actual water treatment plant expansion was now on the budget. She added that she also had a lot
972 of tables and stated Mr. Wood was prepared to speak to them if there were questions about some
973 of the budgeting, rates, etc.
974
975 Mr. Mawyer stated that in January they had discussed the Community Water Supply Plan but did
976 not have any of the piping project for South Rivanna Reservoir to Ragged Mountain Reservoir in
977 the five-year CIP. He stated those dollars were in a placeholder for 2027 to 2035 in the long-
978 range financial model. He stated that this represented what they thought was needed to keep the
979 facilities going, expand capacity, and provide reliability.
980
981 Mr. Gaffney asked if the pipeline had easements included.
982
983 Mr. Mawyer responded that it was in the five-year 2019 – 2023 CIP.
984
985 Mr. O'Connell stated if the pump station was also included.
986
987 Mr. Mawyer confirmed that it was, along with the water line replacement.
988
989 Mr. Gaffney asked how this tied into the strategic plan.
990
991 Mr. Mawyer responded that this was about infrastructure planning, as well as building reliability
992 into their system and maintaining it. He stated that a preview of the CIP budget had been
993 completed with Mr. O'Connell and Ms. Hildebrand a week or two earlier, and they went through
994 all the projects as a draft board committee.
995
996 Mr. O'Connell stated that he felt this was really thoughtful as it was a lot of money, and stated it
997 also went back to 2006, with the original water supply plan having a lot of these projects in it. He
998 commented that for whatever reasons, they were not coming to the surface until now.
999
1000 Mr. Gaffney noted that they had to do the wastewater projects first.
1001

1002 Mr. O'Connell agreed, adding that this put all of the pieces together and in place.

1004 Ms. Galvin asked what the total asset value would be when this was done.

1006 Mr. Mawyer stated that the assets were at \$300 million currently.

1008 **9. OTHER ITEMS FROM BOARD/STAFF NOT ON AGENDA**

1010 Mr. O'Connell stated that because of the way their meetings fell, he was able to brief the Albemarle County Service Authority Board at their January meeting based on the conversation and discussion that the Rivanna Board had, particularly around the timeline for the RMR-SFRR pipeline, but also the overall water supply plan and all the different projects that were part of that. He stated that at their February meeting a week earlier, their board had reached a conclusion that they wanted him to share the information with the RSWA Board. He stated it was in the form of a motion that was basically trying to look at the projects that they had been talking about, plus looking at the pipeline. Mr. O'Connell stated that with regard to the timing for the pipeline, they were concurring with the recommendation to focus on Schedule B – which would be the time frame of 2027 to 2035. Mr. O'Connell stated they saw that as the most favorable option and were suggesting removing option A, which the RWSA Board has actually done, and also option D. He stated that they also felt that the 12-foot fill level increase at the Ragged Mountain Reservoir should be in place upon completion of the pipeline. He stated they were trying to tie together all the different projects, and he was trying to get a better understanding from the ACSA Board's perspective as to what position they would want him to represent on the RWSA Board. Mr. O'Connell stated that the ACSA Board had asked ACSA staff to look at Schedule B. He noted that ACSA was doing a rate study currently that was a 10-year review of rates and capital projects, and ACSA was also working with Mr. Wood, the Rivanna staff, their staff, and the consultant who was also doing the City's and Rivanna's rate studies, to look at the impacts of the pipeline and how they could begin to plan today for that expense.

1031 Dr. Palmer asked if they were planning to program their surplus into their rates.

1033 Mr. O'Connell responded that they were looking at a way to fund the debt service for some of the Rivanna projects, including the pipeline, and they had it as just a model right now but felt it was their hope that they had a 10 or 12-year plan that didn't have big rate spikes in it and allowed all those projects to get done in a timely fashion.

1038 Mr. Gaffney stated that they had passed the water supply plan in 2010, and that stated they would complete the Community Water Supply Plan in 25 years, based on 2010 to 2035. He commented that he felt that 25 years was probably long enough to get that implemented.

1042 Dr. Palmer agreed and stated she was very appreciative of Mr. O'Connell getting the ACSA Board together on this and giving them the letter for some direction.

1045 Mr. O'Connell stated that the decision to do that was not unanimous.

1047 Dr. Palmer stated it was close and they would have to see if the other person would come on
1048 board after they could see the rate study and programming. She stated that she remembered when
1049 she first got on the ACSA Board in 2006, she questioned the big surplus from the connection
1050 charges and was told by the chairman at that time that she didn't understand and they needed to
1051 be putting money aside and that was what the connection charges were for, and that they had big
1052 projects coming forward. She stated she didn't think that it would be that long before they started
1053 looking at that, and she was glad to hear that they were now at that point. Dr. Palmer suggested
1054 that they give Mr. Mawyer direction on this at their March meeting for future planning purposes
1055 from this board.

1056
1057 Ms. Galvin stated that City Council still needed to discuss it.

1058
1059 Mr. O'Connell responded that he recognized that, emphasizing that he was a single voice to
1060 some extent.

1061
1062 Dr. Palmer stated that the Board of Supervisors had been having some one-on-one discussions,
1063 and Mr. Richardson had been discussing it with Board members, so this would provide some
1064 time to make sure they were all on the same page.

1065
1066 Mr. O'Connell commented that an issue for all of them was the rate planning piece of it, which
1067 would be going to City Council fairly soon.

1068
1069 Ms. Galvin clarified that it would come to them in May.

1070
1071 Dr. Palmer suggested taking options A and D off the table and narrowing it to the other options,
1072 adding that this would provide guidance as to when they are getting easements for the pipeline,
1073 as this was important to the public affected by it.

1074
1075 Mr. Richardson recognized the staff for their hard work on all of the agenda items.

1076
1077 **10. CLOSED MEETING**

1078
1079 There was no closed meeting.

1080
1081 **11. ADJOURNMENT**

1082
1083 **At 4:05 p.m., Mr. Jones moved to adjourn the meeting. Dr. Palmer seconded the motion,**
1084 **which passed unanimously (7-0).**

MEMORANDUM

**TO: RIVANNA WATER & SEWER AUTHORITY
BOARD OF DIRECTORS**

FROM: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: EXECUTIVE DIRECTOR'S REPORT

DATE: MARCH 27, 2018

Water Supply

- Four of our five reservoirs are full and overflowing. Ragged Mountain Reservoir is 90% full. We started transferring water from Sugar Hollow to RMR on January 22, 2018, and have increased the volume of water stored in RMR by 150 million gallons (10%) during this period.
- The State Drought Monitoring Report continues to indicate central Virginia (our Middle James Region) is in a moderate drought.
- As part of the Drinking Water Infrastructure Plan for Crozet, we met with the VDEQ and other State and Federal Agencies on March 12, 2018 to review our information about Safe Yield from the Beaver Creek Reservoir and the requirement for a Minimum Instream Flow below the dam, all as part of our 50 year water supply plan for Crozet. The Agencies were receptive to our report. We plan to have information about water supply, treatment, distribution and dam modifications when we meet with the Crozet Community Advisory Committee on June 20, 2018.
- Staff met with representatives of the UVA Foundation to coordinate installation of the SRR – RMR pipeline where it will cross Birdwood Golf Course. We are working with our design engineer and making every effort to complete the design of this section of the piping so it can be constructed when the golf course modifications are being completed from July 2018 – April 2019.

Community Outreach

Our Wastewater Department Manager, Tim Castillo, provided a presentation and tour of the Moores Creek Wastewater facilities to two separate classes from the University of Virginia, an Environmental Engineering Lab and a Systems Engineering class. Our Water Department Manager, Dave Tungate, provide a tour of Observatory Water Treatment Plant to a Systems Engineering class from UVA.

Our Water Resources Manager, Andrea Terry, and our Water Quality Specialist, Bethany Houchens, set up an information table at the City of Charlottesville sponsored “Fix-a-Leak 5k”. Andrea, along with our Communications Manager, Katie McIlwee, also participated in the World Water Day event sponsored by the Ivy Creek Foundation.

On March 28, I have been invited to talk about our water supply and water treatment programs with the League of Women Voters at 1:30 pm in the University Village at 500 Crestwood Drive, and with the local Sierra Club at 7 pm in the McIntire Room of the Central Library.

We plan to celebrate completion of our Granular Activated Carbon project during National Drinking Water Week, May 7 – 11. A ribbon-cutting ceremony with tours will be held on Tuesday, May 8 at the South Rivanna Water Treatment Plant at 10 a.m. Similar ceremonies will be held at the Crozet Water Treatment Plant on Wednesday, May 9 at 10 a.m., and at the Scottsville Water Treatment Plant on Thursday, May 10 at 10 a.m.. Invitations will be extended to Board Members, elected officials, the media and the public for these events.

We plan to celebrate completion of our Odor Control project during National Infrastructure Week, May 14 – 18. A ceremony and cook-out will be held on Thursday, May 17 at the Riverview Park at noon. Invitations will be extended to Board Members, elected officials, the media and the public for this event.

Alum Litigation

We are moving forward with other local utilities (Newport News, Norfolk, Henrico, Chesterfield, Lynchburg, Appomattox River Water Authority, South Central Wastewater Authority) in an action under the Sherman Antitrust Act and the Clayton Antitrust Act, and the laws of the Commonwealth of Virginia, for compensatory damages, restitution, disgorgement, treble damages, injunctive relief, and other relief, including but not limited to an award of attorneys’ fees and expenses, as well as pre-judgment and post-judgment interest on the damages awarded, against Defendants, jointly and severally, for conspiring to suppress and eliminate competition in the sale and marketing of aluminum sulfate (“Alum”) by agreeing to rig bids and allocate customers for, and to fix, stabilize, inflate, and maintain the price of Alum sold to counties, cities, authorities and companies in the United States from January 1, 1997 through at least February 2011 and until such time as to be determined (the “Conspiracy Period”). Defendants’ actions caused localities and authorities across the United States to overpay by many millions of dollars for the Alum they needed. Plaintiffs, which have paid millions of dollars to purchase Alum, seek to recover damages they suffered from the initiation of the conspiracy until the cessation of the anticompetitive effects resulting therefrom (the “Injury Period”). AquaLaw PLC (Richmond) and Ballard Spahr LLP (Philadelphia) will serve as counsel.

MEMORANDUM

**TO: RIVANNA WATER & SEWER AUTHORITY
BOARD OF DIRECTORS**

**FROM: LONNIE WOOD, DIRECTOR OF FINANCE AND
ADMINISTRATION**

SUBJECT: FEBRUARY MONTHLY FINANCIAL SUMMARY – FY 2018

DATE: MARCH 27, 2018

Urban Water flows and rate revenues are 3% under budget estimates for the first eight months of this fiscal year, and Urban Wastewater rate revenues are 12% under budget. Revenues and expenses are summarized in the table below:

	Urban Water	Urban Wastewater	Total Other Rate Centers	Total Authority
Operations				
Revenues	\$ 4,447,588	\$ 4,278,948	\$ 1,361,505	\$ 10,088,041
Expenses	(4,314,864)	(5,211,947)	(1,275,401)	(10,802,212)
Surplus (deficit)	<u>\$ 132,724</u>	<u>\$ (932,999)</u>	<u>\$ 86,104</u>	<u>\$ (714,171)</u>
Debt Service				
Revenues	\$ 3,746,310	\$ 5,536,531	\$ 560,946	\$ 9,843,787
Expenses	(3,738,215)	(5,499,587)	(560,806)	(9,798,608)
Surplus (deficit)	<u>\$ 8,095</u>	<u>\$ 36,944</u>	<u>\$ 140</u>	<u>\$ 45,179</u>
Total				
Revenues	\$ 8,193,898	\$ 9,815,479	\$ 1,922,451	\$ 19,931,828
Expenses	(8,053,079)	(10,711,534)	(1,836,207)	(20,600,820)
Surplus (deficit)	<u><u>\$ 140,819</u></u>	<u><u>\$ (896,055)</u></u>	<u><u>\$ 86,244</u></u>	<u><u>\$ (668,992)</u></u>

Urban Wastewater received the annual Nutrient Exchange Credit of \$87,105 and Albemarle County's annual septage receiving support of \$109,441 in July.

Some expense categories are over the prorated year-to-date budget as follows:

- A. Personnel Costs (Lab – page 10) – Lab salaries are over budget due to the August payment of accumulated leave balances to the lab manager upon his retirement, and due to overlapping salaries in July for the former lab manager and his replacement.

- B. Other Services & Charges (Urban Wastewater, Administration, Engineering - pages 5, 8, 11) - Urban Wastewater is over budget on odor control costs for Crozet Interceptor/Pump Stations, and Utility costs are running higher than budget estimates. The Administration Department is over budget on strategic planning costs.
- C. Equipment Purchases (Scottsville Wastewater - page 7) – Scottsville Wastewater spent \$14,000 on unbudgeted equipment purchases.
- D. Information Technology (Engineering – page 11) – Engineering paid \$25,000 in August to renew an annual computer software license agreement, as budgeted.
- E. Operations and Maintenance (Urban Wastewater, Administration, Maintenance, Lab – pages 5, 8, 9, 10) – Urban Wastewater is \$139,000 over the prorated budget for Pipelines and Appurtenances due to emergency repairs. More than \$116,000 was spent on a Rivanna Interceptor stream bank restoration in Dunlora in October. Urban Wastewater is also over budget on chemical purchases and repairs and maintenance. The Administration, Maintenance, and Lab departments are over budget on repairs.
- F. Professional Services (Urban Water, Crozet Water, Administration – pages 2, 3, 8) – Urban Water is \$78,000 over the prorated budget for engineering and technical services but is not over the annual budget. Urban Water has spent \$32,000 more than the total year’s budget for legal fees, related to the Observatory plant lease. These fees will continue to be significantly over budget. Crozet Water has spent \$36,000 more than the total annual budget for engineering and technical services costs. Administration is currently \$28,000 over the prorated budget, but is within the annual budget.

Attachments

Rivanna Water & Sewer Authority
Monthly Financial Statements - February 2018
Fiscal Year 2018

Consolidated**Revenues and Expenses Summary****Operating Budget vs. Actual**

Notes

Revenues

	<i>Budget FY 2018</i>	<i>Budget Year-to-Date</i>	<i>Actual Year-to-Date</i>	<i>Budget vs. Actual</i>	<i>Variance Percentage</i>
Operations Rate Revenue	\$ 15,403,127	\$ 10,268,751	\$ 9,565,743	\$ (703,008)	-6.85%
Lease Revenue	64,000	42,667	67,208	24,541	57.52%
Admin., Maint. & Engineering Revenue	410,000	273,333	285,200	11,867	4.34%
Other Revenues	534,630	356,420	375,547	19,127	5.37%
Use of Watershed Management Funds	80,000	53,333	58,789	5,456	10.23%
Interest Allocation	15,000	10,000	20,753	10,753	107.53%
Total Operating Revenues	\$ 16,506,757	\$ 11,004,505	\$ 10,373,241	\$ (631,264)	-5.74%

Expenses

	<i>A</i>		<i>F</i>		<i>B</i>		<i>D</i>		<i>E</i>		<i>C</i>	
Personnel Cost	\$ 7,841,522	\$ 5,153,363	\$ 4,908,162	\$ 245,201	4.76%							
Professional Services	590,350	393,567	462,408	(68,842)	-17.49%							
Other Services & Charges	2,552,662	1,701,775	1,965,938	(264,163)	-15.52%							
Communications	142,605	95,070	97,686	(2,616)	-2.75%							
Information Technology	324,400	216,267	149,672	66,594	30.79%							
Supplies	44,970	29,980	30,295	(315)	-1.05%							
Operations & Maintenance	3,613,450	2,408,967	2,554,341	(145,375)	-6.03%							
Equipment Purchases	336,300	224,200	211,909	12,291	5.48%							
Depreciation	788,000	525,333	525,333	(0)	0.00%							
Reserve Transfers	272,500	181,667	181,667	0	0.00%							
Total Operating Expenses	\$ 16,506,759	\$ 10,930,188	\$ 11,087,411	\$ (157,224)	-1.44%							
Operating Surplus/(Deficit)	\$ (2)	\$ 74,317	\$ (714,171)									

Debt Service Budget vs. Actual**Revenues**

Debt Service Rate Revenue	\$ 13,561,158	\$ 9,040,772	\$ 9,040,776	\$ 4	0.00%
Use of Reserves for 2016 Bond DS	600,000	400,000	400,000	-	0.00%
Septage Receiving Support - County	109,440	72,960	109,441	36,481	50.00%
Buck Mountain Surcharge	84,000	56,000	63,200	7,200	12.86%
Buck Mountain Lease Revenue	1,600	1,067	1,309	242	22.69%
Trust Fund Interest	46,400	30,933	32,187	1,253	4.05%
Reserve Fund Interest	100,500	67,000	196,874	129,874	193.84%
Total Debt Service Revenues	\$ 14,503,098	\$ 9,668,732	\$ 9,843,787	\$ 175,055	1.81%

Debt Service Costs

Total Principal & Interest	\$ 12,370,200	\$ 8,246,800	\$ 8,246,800	\$ -	0.00%
Reserve Additions-Interest	100,500	67,000	196,874	(129,874)	-193.84%
Debt Service Ratio Charge	725,000	483,333	483,333	-	0.00%
Reserve Additions-CIP Growth	1,307,400	871,600	871,600	-	0.00%
Total Debt Service Costs	\$ 14,503,100	\$ 9,668,733	\$ 9,798,608	\$ (129,874)	-1.34%
Debt Service Surplus/(Deficit)	\$ (2)	\$ (1)	\$ 45,179		

Summary

Total Revenues	\$ 31,009,855	\$ 20,673,237	\$ 20,217,027	\$ (456,209)	-2.21%
Total Expenses	31,009,859	20,598,921	20,886,019	(287,098)	-1.39%
Surplus/(Deficit)	\$ (4)	\$ 74,316	\$ (668,992)		

Rivanna Water & Sewer Authority
Monthly Financial Statements - February 2018

Urban Water Rate Center
Revenues and Expenses Summary

<i>Budget FY 2018</i>	<i>Budget Year-to-Date</i>	<i>Actual Year-to-Date</i>	<i>Budget vs. Actual</i>	<i>Variance Percentage</i>
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Operating Budget vs. Actual

Notes

Revenues

Operations Rate Revenue	\$ 6,758,077	\$ 4,505,385	\$ 4,362,006	\$ (143,378)	-3.18%
Lease Revenue	35,000	23,333	47,475	24,141	103.46%
Miscellaneous	7,000	4,667	-	(4,667)	-100.00%
Use of Reserves	40,000	26,667	29,394	2,728	10.23%
Interest Allocation	6,300	4,200	8,712	4,512	107.43%
Total Operating Revenues	\$ 6,846,377	\$ 4,564,251	\$ 4,447,588	\$ (116,663)	-2.56%

Expenses

Personnel Cost	\$ 1,828,852	\$ 1,202,695	\$ 1,152,512	\$ 50,183	4.17%
Professional Services	142,450	94,967	207,444	(112,477)	-118.44%
Other Services & Charges	606,100	404,067	300,598	103,469	25.61%
Communications	64,690	43,127	43,008	118	0.27%
Information Technology	65,300	43,533	22,913	20,621	47.37%
Supplies	7,000	4,667	5,376	(709)	-15.19%
Operations & Maintenance	1,522,660	1,015,107	930,795	84,312	8.31%
Equipment Purchases	106,500	71,000	52,415	18,585	26.18%
Depreciation	260,000	173,333	173,333	(0)	0.00%
Reserve Transfers	250,000	166,667	166,667	0	0.00%
Subtotal Before Allocations	\$ 4,853,552	\$ 3,219,161	\$ 3,055,061	\$ 164,101	5.10%
Allocation of Support Departments	1,992,824	1,311,766	1,259,804	51,963	3.96%
Total Operating Expenses	\$ 6,846,377	\$ 4,530,928	\$ 4,314,864	\$ 216,063	4.77%
Operating Surplus/(Deficit)	\$ 0	\$ 33,324	\$ 132,724		

Debt Service Budget vs. Actual

Revenues

Debt Service Rate Revenue	\$ 5,345,730	\$ 3,563,820	\$ 3,563,824	\$ 4	0.00%
Trust Fund Interest	18,000	12,000	12,649	649	5.41%
Reserve Fund Interest	18,000	12,000	105,328	93,328	777.73%
Buck Mountain Surcharge	84,000	56,000	63,200	7,200	12.86%
Lease Revenue	1,600	1,067	1,309	242	22.69%
Total Debt Service Revenues	\$ 5,467,330	\$ 3,644,887	\$ 3,746,310	\$ 101,423	2.78%

Debt Service Costs

Total Principal & Interest	\$ 4,242,130	\$ 2,828,087	\$ 2,828,087	\$ -	0.00%
Reserve Additions-Interest	18,000	12,000	105,328	(93,328)	-777.73%
Debt Service Ratio Charge	400,000	266,667	266,667	-	0.00%
Reserve Additions-CIP Growth	807,200	538,133	538,133	-	0.00%
Total Debt Service Costs	\$ 5,467,330	\$ 3,644,887	\$ 3,738,214	\$ (93,328)	-2.56%
Debt Service Surplus/(Deficit)	\$ -	\$ -	\$ 8,095		

Rate Center Summary

Total Revenues	\$ 12,313,707	\$ 8,209,138	\$ 8,193,898	\$ (15,240)	-0.19%
Total Expenses	12,313,707	8,175,814	8,053,079	122,736	1.50%
Surplus/(Deficit)	\$ 0	\$ 33,324	\$ 140,819		
Costs per 1000 Gallons	1.99		1.95		
Thousand Gallons Treated or Flow (MGD)	3,432,018	2,288,012	2,215,341	(72,671)	-3.18%
	9.403		9.117		

Rivanna Water & Sewer Authority
Monthly Financial Statements - February 2018

Crozet Water Rate Center
Revenues and Expenses Summary

<i>Budget FY 2018</i>	<i>Budget Year-to-Date</i>	<i>Actual Year-to-Date</i>	<i>Budget vs. Actual</i>	<i>Variance Percentage</i>
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Operating Budget vs. Actual

Notes

Revenues

Operations Rate Revenue	\$ 915,336	\$ 610,224	\$ 610,224	\$ -	0.00%
Lease Revenues	29,000	19,333	19,733	400	2.07%
Use of Reserves	24,000	16,000	20,752	4,752	29.70%
Interest Allocation	900	600	1,309	709	118.22%
Total Operating Revenues	\$ 969,236	\$ 646,157	\$ 652,019	\$ 5,861	0.91%

Expenses

Personnel Cost	\$ 289,212	\$ 190,220	\$ 180,999	\$ 9,221	4.85%
Professional Services	47,000	31,333	83,157	(51,824)	-165.40%
Other Services & Charges	121,480	80,987	68,617	12,369	15.27%
Communications	4,230	2,820	3,401	(581)	-20.62%
Information Technology	14,200	9,467	509	8,957	94.62%
Supplies	670	447	739	(292)	-65.34%
Operations & Maintenance	233,630	155,753	147,464	8,289	5.32%
Equipment Purchases	26,400	17,600	21,094	(3,494)	-19.85%
Depreciation	25,000	16,667	16,667	0	0.00%
Reserve Transfers	20,000	13,333	13,333	(0)	0.00%
Subtotal Before Allocations	\$ 781,822	\$ 518,627	\$ 535,981	\$ (17,354)	-3.35%
Allocation of Support Departments	187,417	123,366	118,990	4,376	3.55%
Total Operating Expenses	\$ 969,238	\$ 641,993	\$ 654,971	\$ (12,978)	-2.02%
Operating Surplus/(Deficit)	\$ (2)	\$ 4,165	\$ (2,952)		

Debt Service Budget vs. Actual

Revenues

Debt Service Rate Revenue	\$ 691,476	\$ 460,984	\$ 460,984	\$ -	0.00%
Trust Fund Interest	1,800	1,200	1,223	23	1.92%
Reserve Fund Interest	2,700	1,800	2,953	1,153	64.06%
Total Debt Service Revenues	\$ 695,976	\$ 463,984	\$ 465,160	\$ 1,176	0.25%

Debt Service Costs

Total Principal & Interest	\$ 426,977	\$ 284,651	\$ 284,651	\$ -	0.00%
Reserve Additions-Interest	2,700	1,800	2,953	(1,153)	-64.06%
Reserve Additions-CIP Growth	266,300	177,533	177,533	-	0.00%
Total Debt Service Costs	\$ 695,977	\$ 463,985	\$ 465,138	\$ (1,153)	-0.25%
Debt Service Surplus/(Deficit)	\$ (1)	\$ (1)	\$ 22		

Rate Center Summary

Total Revenues	\$ 1,665,212	\$ 1,110,141	\$ 1,117,179	\$ 7,037	0.63%
Total Expenses	1,665,215	1,105,977	1,120,108	(14,131)	-1.28%
Surplus/(Deficit)	\$ (3)	\$ 4,164	\$ (2,930)		
Costs per 1000 Gallons	5.31		5.02		
Thousand Gallons Treated	182,610	121,740	130,538	8,798	7.23%
Flow (MGD)	0.500		0.537		

Rivanna Water & Sewer Authority
Monthly Financial Statements - February 2018

Scottsville Water Rate Center
Revenues and Expenses Summary

<i>Budget FY 2018</i>	<i>Budget Year-to-Date</i>	<i>Actual Year-to-Date</i>	<i>Budget vs. Actual</i>	<i>Variance Percentage</i>
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Operating Budget vs. Actual

Notes

Revenues

Operations Rate Revenue	\$ 412,236	\$ 274,824	\$ 274,824	\$ -	0.00%
Use of Reserves	16,000	10,667	8,642	(2,024)	
Interest Allocation	400	267	543	276	103.47%
Total Operating Revenues	\$ 428,636	\$ 285,757	\$ 284,009	\$ (1,748)	-0.61%

Expenses

Personnel Cost	\$ 154,467	\$ 101,610	\$ 95,335	\$ 6,275	6.18%
Professional Services	26,000	17,333	11,851	5,482	31.63%
Other Services & Charges	19,490	12,993	16,302	(3,309)	-25.46%
Communications	3,210	2,140	2,402	(262)	-12.25%
Information Technology	7,000	4,667	1,131	3,536	75.77%
Supplies	750	500	75	425	85.01%
Operations & Maintenance	66,570	44,380	42,163	2,217	5.00%
Equipment Purchases	14,400	9,600	1,798	7,802	81.28%
Depreciation	17,000	11,333	11,333	(0)	0.00%
Reserve Transfers	2,500	1,667	1,667	0	0.00%
Subtotal Before Allocations	\$ 311,387	\$ 206,224	\$ 184,056	\$ 22,167	10.75%
Allocation of Support Departments	117,247	77,185	74,762	2,423	3.14%
Total Operating Expenses	\$ 428,634	\$ 283,409	\$ 258,819	\$ 24,590	8.68%
Operating Surplus/(Deficit)	\$ 2	\$ 2,348	\$ 25,191		

Debt Service Budget vs. Actual

Revenues

Debt Service Rate Revenue	\$ 129,448	\$ 86,299	\$ 86,296	\$ (3)	0.00%
Trust Fund Interest	400	267	354	87	32.78%
Reserve Fund Interest	1,500	1,000	1,575	575	57.50%
Total Debt Service Revenues	\$ 131,348	\$ 87,565	\$ 88,225	\$ 660	0.75%

Debt Service Costs

Total Principal & Interest	\$ 129,848	\$ 86,565	\$ 86,565	\$ -	0.00%
Reserve Additions-Interest	1,500	1,000	1,575	(575)	
Reserve Additions-CIP Growth	-	-	-	-	
Total Debt Service Costs	\$ 131,348	\$ 87,565	\$ 88,140	\$ (575)	-0.66%
Debt Service Surplus/(Deficit)	\$ -	\$ -	\$ 85		

Rate Center Summary

Total Revenues	\$ 559,984	\$ 373,323	\$ 372,234	\$ (1,089)	-0.29%
Total Expenses	559,982	370,974	346,959	24,015	6.47%
Surplus/(Deficit)	\$ 2	\$ 2,348	\$ 25,275		
Costs per 1000 Gallons	22.39		23.54		
Thousand Gallons Treated	19,143	12,762	10,993	(1,769)	-13.86%
or					
Flow (MGD)	0.052		0.045		

Rivanna Water & Sewer Authority
Monthly Financial Statements - February 2018

Urban Wastewater Rate Center
Revenues and Expenses Summary

Budget FY 2018	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
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Operating Budget vs. Actual

Notes

Revenues

Operations Rate Revenue	\$ 6,680,446	\$ 4,453,631	\$ 3,894,001	\$ (559,630)	-12.57%
Stone Robinson WWTP	27,630	18,420	14,133	(4,287)	-23.27%
Septage Acceptance	390,000	260,000	274,309	14,309	5.50%
Nutrient Credits	100,000	66,667	87,105	20,438	30.66%
Miscellaneous Revenue	10,000	6,667	-	(6,667)	-100.00%
Interest Allocation	6,800	4,533	9,400	4,867	107.36%
Total Operating Revenues	\$ 7,214,876	\$ 4,809,917	\$ 4,278,948	\$ (530,969)	-11.04%

Expenses

Personnel Cost	\$ 1,230,128	\$ 808,747	\$ 708,102	\$ 100,645	12.44%
Professional Services	54,000	36,000	12,480	23,521	65.33%
Other Services & Charges	B 1,571,400	1,047,600	1,383,920	(336,320)	-32.10%
Communications	10,430	6,953	8,026	(1,072)	-15.42%
Information Technology	57,300	38,200	38,466	(266)	-0.70%
Supplies	2,700	1,800	723	1,077	59.83%
Operations & Maintenance	E 1,390,300	926,867	1,193,832	(266,965)	-28.80%
Equipment Purchases	54,000	36,000	38,280	(2,280)	-6.33%
Depreciation	465,000	310,000	310,000	-	0.00%
Reserve Transfers	-	-	-	-	-
Subtotal Before Allocations	\$ 4,835,258	\$ 3,212,167	\$ 3,693,828	\$ (481,660)	-14.99%
Allocation of Support Departments	2,379,618	1,566,386	1,518,120	48,266	3.08%
Total Operating Expenses	\$ 7,214,876	\$ 4,778,553	\$ 5,211,947	\$ (433,394)	-9.07%
Operating Surplus/(Deficit)	\$ 0	\$ 31,364	\$ (932,999)		

Debt Service Budget vs. Actual

Revenues

Debt Service Rate Revenue	\$ 7,384,689	\$ 4,923,126	\$ 4,923,128	\$ 2	0.00%
Use of Reserves for 2016 Bond DS	600,000	400,000	400,000	-	0.00%
Septage Receiving Support - County	109,440	72,960	109,441	36,481	50.00%
Trust Fund Interest	26,200	17,467	17,928	461	2.64%
Reserve Fund Interest	77,300	51,533	86,034	34,501	66.95%
Total Debt Service Revenues	\$ 8,197,629	\$ 5,465,086	\$ 5,536,531	\$ 71,445	1.31%

Debt Service Costs

Total Principal & Interest	\$ 7,561,430	\$ 5,040,953	\$ 5,040,953	\$ -	0.00%
Reserve Additions-Interest	77,300	51,533	86,034	(34,501)	-66.95%
Debt Service Ratio Charge	325,000	216,667	216,667	-	0.00%
Reserve Additions-CIP Growth	233,900	155,933	155,933	-	0.00%
Total Debt Service Costs	\$ 8,197,630	\$ 5,465,087	\$ 5,499,587	\$ (34,501)	-0.63%
Debt Service Surplus/(Deficit)	\$ (1)	\$ (1)	\$ 36,944		

Rate Center Summary

Total Revenues	\$ 15,412,505	\$ 10,275,003	\$ 9,815,480	\$ (459,524)	-4.47%
Total Expenses	15,412,506	10,243,640	10,711,535	(467,895)	-4.57%
Surplus/(Deficit)	\$ (1)	\$ 31,363	\$ (896,055)		
Costs per 1000 Gallons	2.11		2.55		
Thousand Gallons Treated or Flow (MGD)	3,424,639	2,283,093	2,047,001	(236,092)	-10.34%
	9.383		8.424		

Rivanna Water & Sewer Authority
Monthly Financial Statements - February 2018

Glenmore Wastewater Rate Center
Revenues and Expenses Summary

<i>Budget FY 2018</i>	<i>Budget Year-to-Date</i>	<i>Actual Year-to-Date</i>	<i>Budget vs. Actual</i>	<i>Variance Percentage</i>
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Operating Budget vs. Actual

Notes

Revenues

Operations Rate Revenue	\$ 352,344	\$ 234,896	\$ 234,896	\$ -	0.00%
Interest Allocation	300	200	436	236	117.90%
<i>Total Operating Revenues</i>	\$ 352,644	\$ 235,096	\$ 235,332	\$ 236	0.10%

Expenses

Personnel Cost	\$ 90,823	\$ 59,715	\$ 52,154	\$ 7,561	12.66%
Professional Services	3,000	2,000	-	2,000	
Other Services & Charges	31,490	20,993	22,487	(1,494)	-7.11%
Communications	2,600	1,733	2,209	(476)	-27.43%
Information Technology	3,500	2,333	119	2,215	94.92%
Supplies	100	67	-	67	100.00%
Operations & Maintenance	121,450	80,967	57,473	23,493	29.02%
Equipment Purchases	3,100	2,067	1,733	333	16.13%
Depreciation	5,000	3,333	3,333	(0)	0.00%
<i>Subtotal Before Allocations</i>	\$ 261,063	\$ 173,208	\$ 139,508	\$ 33,700	19.46%
Allocation of Support Departments	91,584	60,304	58,241	2,062	3.42%
<i>Total Operating Expenses</i>	\$ 352,647	\$ 233,512	\$ 197,750	\$ 35,763	15.32%
<i>Operating Surplus/(Deficit)</i>	\$ (3)	\$ 1,584	\$ 37,582		

Debt Service Budget vs. Actual

Revenues

Debt Service Rate Revenue	\$ 1,582	\$ 1,055	\$ 1,056	\$ 1	0.13%
Trust Fund Interest	-	-	-	-	
Reserve Fund Interest	600	400	591	191	47.66%
<i>Total Debt Service Revenues</i>	\$ 2,182	\$ 1,455	\$ 1,647	\$ 1	0.09%

Debt Service Costs

Total Principal & Interest	\$ 1,582	\$ 1,055	\$ 1,055	\$ -	0.00%
Reserve Additions-Interest	600	400	591	(191)	-47.66%
<i>Total Debt Service Costs</i>	\$ 2,182	\$ 1,455	\$ 1,645	\$ (191)	-13.10%
<i>Debt Service Surplus/(Deficit)</i>	\$ -	\$ -	\$ 1		

Rate Center Summary

Total Revenues	\$ 354,826	\$ 236,551	\$ 236,978	\$ 428	0.18%
Total Expenses	354,829	234,967	199,395	35,572	15.14%
Surplus/(Deficit)	\$ (3)	\$ 1,584	\$ 37,584		
Costs per 1000 Gallons	8.12		7.38		
Thousand Gallons Treated or Flow (MGD)	43,412	28,941	26,799	(2,142)	-7.40%
	0.119		0.110		

Rivanna Water & Sewer Authority
Monthly Financial Statements - February 2018

Scottsville Wastewater Rate Center
Revenues and Expenses Summary

<i>Budget FY 2018</i>	<i>Budget Year-to-Date</i>	<i>Actual Year-to-Date</i>	<i>Budget vs. Actual</i>	<i>Variance Percentage</i>
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Operating Budget vs. Actual

Notes

Revenues

Operations Rate Revenue	\$ 284,688	\$ 189,792	\$ 189,792	\$ -	0.00%
Interest Allocation	300	200	353	153	76.39%
Total Operating Revenues	\$ 284,988	\$ 189,992	\$ 190,145	\$ 153	0.08%

Expenses

Personnel Cost	\$ 90,848	\$ 59,732	\$ 52,153	\$ 7,578	12.69%
Professional Services	2,000	1,333	-	1,333	100.00%
Other Services & Charges	22,900	15,267	17,888	(2,621)	-17.17%
Communications	2,630	1,753	2,878	(1,124)	-64.12%
Information Technology	4,400	2,933	-	2,933	100.00%
Supplies	100	67	-	67	100.00%
Operations & Maintenance	57,850	38,567	10,663	27,904	72.35%
Equipment Purchases	3,400	2,267	15,733	(13,467)	-594.12%
Depreciation	16,000	10,667	10,667	0	0.00%
Subtotal Before Allocations	\$ 200,128	\$ 132,585	\$ 109,982	\$ 22,603	17.05%
Allocation of Support Departments	84,858	55,875	53,879	1,995	3.57%
Total Operating Expenses	\$ 284,987	\$ 188,460	\$ 163,861	\$ 24,599	13.05%
Operating Surplus/(Deficit)	\$ 1	\$ 1,532	\$ 26,284		

Debt Service Budget vs. Actual

Revenues

Debt Service Rate Revenue	\$ 8,233	\$ 5,489	\$ 5,488	\$ (1)	-0.01%
Trust Fund Interest	-	-	32	32	
Reserve Fund Interest	400	267	394	127	47.64%
Total Debt Service Revenues	\$ 8,633	\$ 5,755	\$ 5,914	\$ 159	2.75%

Debt Service Costs

Total Principal & Interest	\$ 8,233	\$ 5,489	\$ 5,489	\$ -	0.00%
Reserve Additions-Interest	400	267	394	(127)	-47.64%
Estimated New Principal & Interest	-	-	-	-	
Total Debt Service Costs	\$ 8,633	\$ 5,755	\$ 5,882	\$ (127)	-2.21%
Debt Service Surplus/(Deficit)	\$ -	\$ -	\$ 31		

Rate Center Summary

Total Revenues	\$ 293,621	\$ 195,747	\$ 196,059	\$ 311	0.16%
Total Expenses	293,620	194,215	169,744	24,472	12.60%
Surplus/(Deficit)	\$ 1	\$ 1,532	\$ 26,315		
Costs per 1000 Gallons	14.27		14.26		
Thousand Gallons Treated or Flow (MGD)	19,967	13,311	11,491	(1,820)	-13.68%
	0.055		0.047		

Rivanna Water & Sewer Authority
Monthly Financial Statements - February 2018

Administration

<i>Budget FY 2018</i>	<i>Budget Year-to-Date</i>	<i>Actual Year-to-Date</i>	<i>Budget vs. Actual</i>	<i>Variance Percentage</i>
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Operating Budget vs. Actual

Notes

Revenues

Payment for Services SWA	\$	409,000	\$	272,667	\$	272,667	\$	(0)	0.00%
Miscellaneous Revenue		1,000		667		4,806		4,140	620.97%
Total Operating Revenues	\$	410,000	\$	273,333	\$	277,473	\$	4,140	1.51%

Expenses

Personnel Cost		\$	1,544,126	\$	1,013,872	\$	1,015,775	\$	(1,903)	-0.19%
Professional Services	F		171,900		114,600		142,569		(27,969)	-24.41%
Other Services & Charges	B		111,940		74,627		96,886		(22,259)	-29.83%
Communications			21,280		14,187		10,611		3,576	25.21%
Information Technology			118,000		78,667		46,856		31,811	40.44%
Supplies			22,000		14,667		17,858		(3,191)	-21.76%
Operations & Maintenance	E		36,600		24,400		34,141		(9,741)	-39.92%
Equipment Purchases			8,300		5,533		5,533		(0)	0.00%
Depreciation			-		-		-		-	
Total Operating Expenses		\$	2,034,146	\$	1,340,552	\$	1,370,229	\$	(29,677)	-2.21%

Department Summary

Net Costs Allocable to Rate Centers		\$	(1,624,146)	\$	(1,067,219)	\$	(1,092,755)	\$	25,537	-2.39%
<u>Allocations to the Rate Centers</u>										
Urban Water	44.00%	\$	714,624	\$	469,576	\$	480,812	\$	(11,236)	
Crozet Water	4.00%	\$	64,966		42,689		43,710		(1,021)	
Scottsville Water	2.00%	\$	32,483		21,344		21,855		(511)	
Urban Wastewater	48.00%	\$	779,590		512,265		524,523		(12,258)	
Glenmore Wastewater	1.00%	\$	16,241		10,672		10,928		(255)	
Scottsville Wastewater	1.00%	\$	16,241		10,672		10,928		(255)	
	100.00%	\$	1,624,146	\$	1,067,219	\$	1,092,755	\$	(25,537)	

Rivanna Water & Sewer Authority
Monthly Financial Statements - February 2018

Maintenance

<i>Budget FY 2018</i>	<i>Budget Year-to-Date</i>	<i>Actual Year-to-Date</i>	<i>Budget vs. Actual</i>	<i>Variance Percentage</i>
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Operating Budget vs. Actual

Notes

Revenues

Miscellaneous Revenue

Total Operating Revenues

-	-	4,610	4,610
\$ -	\$ -	\$ 4,610	\$ 4,610

Expenses

Personnel Cost

Professional Services

Other Services & Charges

Communications

Information Technology

Supplies

Operations & Maintenance

Equipment Purchases

Depreciation

E

Total Operating Expenses

\$ 1,150,821	\$ 756,345	\$ 738,676	\$ 17,668	2.34%
-	-	-	-	
12,300	8,200	13,561	(5,361)	-65.37%
15,635	10,423	13,926	(3,503)	-33.61%
6,500	4,333	2,328	2,005	46.28%
500	333	97	236	70.83%
64,450	42,967	49,045	(6,079)	-14.15%
94,850	63,233	59,388	3,845	6.08%
-	-	-	-	
\$ 1,345,056	\$ 885,835	\$ 877,022	\$ 8,813	0.99%

Department Summary

Net Costs Allocable to Rate Centers

\$ (1,345,056)	\$ (885,835)	\$ (872,412)	\$ (4,202)	0.47%
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Allocations to the Rate Centers

Urban Water

30.00%

Crozet Water

3.50%

Scottsville Water

3.50%

Urban Wastewater

56.50%

Glenmore Wastewater

3.50%

Scottsville Wastewater

3.00%

100.00%

\$ 403,517	\$ 265,750	\$ 261,724	\$ 4,027
47,077	31,004	30,534	470
47,077	31,004	30,534	470
759,957	500,497	492,913	7,584
47,077	31,004	30,534	470
40,352	26,575	26,172	403
\$ 1,345,056	\$ 885,835	\$ 872,412	\$ 13,423

Rivanna Water & Sewer Authority
Monthly Financial Statements - February 2018

Laboratory

Budget FY 2018	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
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Operating Budget vs. Actual

Notes

Revenues

N/A

Expenses

Personnel Cost	A	\$ 293,948	\$ 193,085	\$ 227,538	\$ (34,453)	-17.84%
Professional Services		-	-	-	-	
Other Services & Charges		10,412	6,941	4,649	2,292	33.02%
Communications		600	400	867	(467)	
Information Technology		2,200	1,467	270	1,197	81.60%
Supplies		1,650	1,100	2,072	(972)	-88.35%
Operations & Maintenance	E	55,000	36,667	46,860	(10,193)	-27.80%
Equipment Purchases		1,500	1,000	667	333	33.34%
Depreciation		-	-	-	-	
Total Operating Expenses		\$ 365,310	\$ 240,660	\$ 282,923	\$ (42,263)	-17.56%

Department Summary

Net Costs Allocable to Rate Centers		\$ (365,310)	\$ (240,660)	\$ (282,923)	\$ 42,263	-17.56%
<u>Allocations to the Rate Centers</u>						
Urban Water	44.00%	\$ 160,736	\$ 105,890	\$ 124,486	\$ (18,596)	
Crozet Water	4.00%	14,612	9,626	11,317	(1,691)	
Scottsville Water	2.00%	7,306	4,813	5,658	(845)	
Urban Wastewater	47.00%	171,696	113,110	132,974	(19,864)	
Glenmore Wastewater	1.50%	5,480	3,610	4,244	(634)	
Scottsville Wastewater	1.50%	5,480	3,610	4,244	(634)	
	100.00%	\$ 365,310	\$ 240,660	\$ 282,923	\$ (42,263)	

Rivanna Water & Sewer Authority
Monthly Financial Statements - February 2018

Engineering

<i>Budget FY 2018</i>	<i>Budget Year-to-Date</i>	<i>Actual Year-to-Date</i>	<i>Budget vs. Actual</i>	<i>Variance Percentage</i>
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Operating Budget vs. Actual**Revenues**

Payment for Services SWA

Total Operating Revenues

\$ -	\$ -	\$ 3,117	\$ 3,117	
\$ -	\$ -	\$ 3,117	\$ 3,117	

Expenses

Personnel Cost

Professional Services

Other Services & Charges

Communications

Information Technology

Supplies

Operations & Maintenance

Equipment Purchases

Depreciation & Capital Reserve Transfers

Total Operating Expenses

\$ 1,168,296	\$ 767,342	\$ 684,918	\$ 82,425	10.74%
144,000	96,000	4,907	91,093	94.89%
45,150	30,100	41,031	(10,931)	-36.32%
17,300	11,533	10,358	1,176	10.19%
46,000	30,667	37,081	(6,415)	-20.92%
9,500	6,333	3,356	2,978	47.01%
64,940	43,293	41,905	1,388	3.21%
23,850	15,900	15,267	633	3.98%
-	-	-	-	
\$ 1,519,036	\$ 1,001,169	\$ 838,823	\$ 162,346	16.22%

Department Summary

Net Costs Allocable to Rate Centers

\$ (1,519,036)	\$ (1,001,169)	\$ (835,706)	\$ (159,229)	15.90%
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Allocations to the Rate Centers

Urban Water

Crozet Water

Scottsville Water

Urban Wastewater

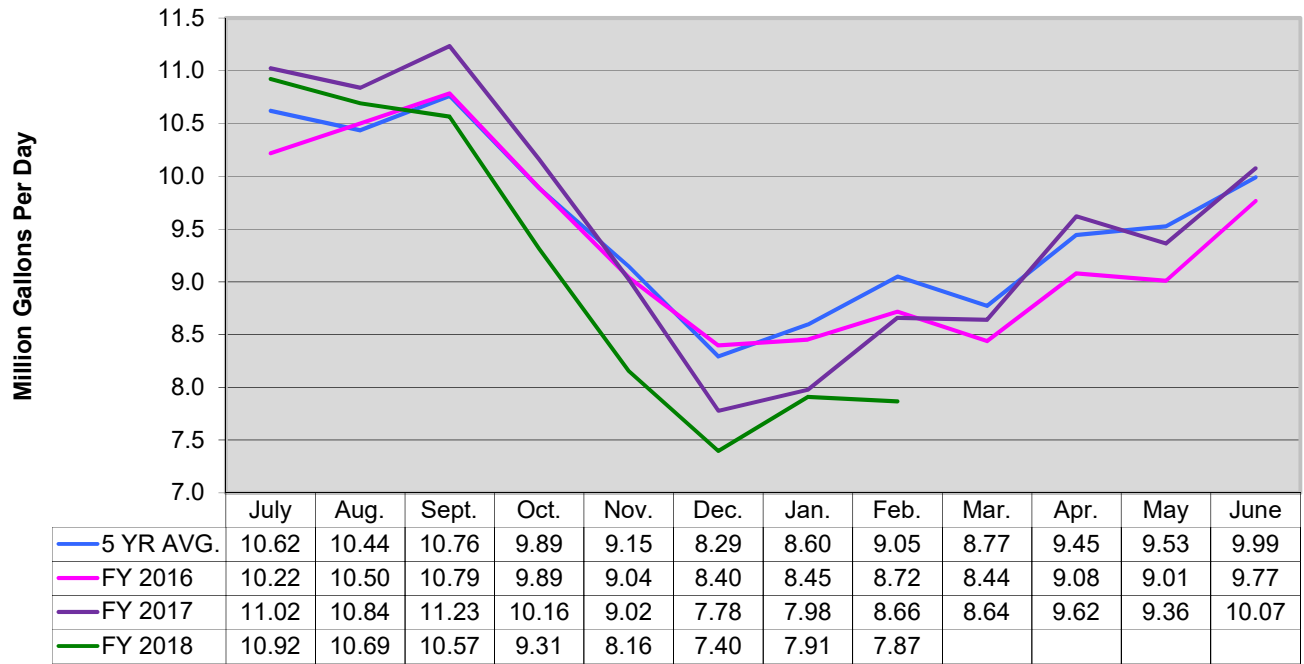
Glenmore Wastewater

Scottsville Wastewater

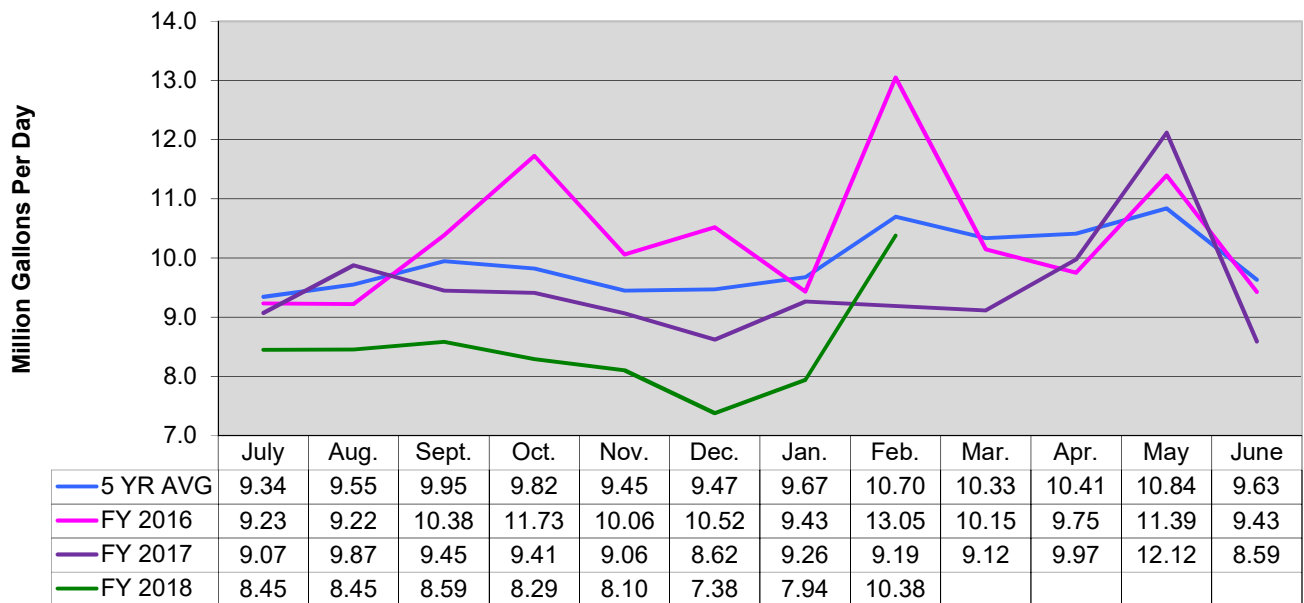
47.00%	\$ 713,947	\$ 470,549	\$ 392,782	\$ 77,768
4.00%	60,761	40,047	33,428	6,619
2.00%	30,381	20,023	16,714	3,309
44.00%	668,376	440,514	367,711	72,804
1.50%	22,786	15,018	12,536	2,482
1.50%	22,786	15,018	12,536	2,482
100.00%	\$ 1,519,036	\$ 1,001,169	\$ 835,706	\$ 165,463

**Rivanna Water and Sewer Authority
Flow Graphs**

Urban Water Flows



Urban Wastewater Flows



MEMORANDUM

**TO: RIVANNA WATER & SEWER AUTHORITY
BOARD OF DIRECTORS**

**FROM: JENNIFER WHITAKER, DIRECTOR OF ENGINEERING &
MAINTENANCE**

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: STATUS REPORT: ONGOING PROJECTS

DATE: MARCH 27, 2018

This memorandum reports on the status of the following Capital Projects as well as other significant operations, maintenance and planning projects.

Under Construction

1. Drinking Water Activated Carbon and Water Treatment Plant Improvements
2. Wholesale Water Master Metering
3. Moores Creek AWRRF Odor Control Phase 2, Bridge Repairs & Second Centrifuge
4. Crozet Finished Water Pump Station
5. Moores Creek AWRRF Roof Replacements
6. Sugar Hollow Reservoir to Ragged Mountain Reservoir Transfer Flow Meter
7. Piney Mountain Tank Rehabilitation
8. Interceptor Sewer & Manhole Repair
9. Urgent and Emergency Repairs

Design and Bidding

10. Observatory Water Treatment Plant Expansion
11. South Rivanna Water Treatment Plant Improvements
12. Crozet Water Treatment Plant Expansion
13. Interconnect Lower Sugar Hollow and Ragged Mountain Raw Water Mains
14. Route 29 Pump Station and Pipeline
15. South Fork Rivanna Reservoir to Ragged Mountain Reservoir Water Line Right-of-Way
16. Avon to Pantops Water Main
17. Crozet Interceptor Pump Stations Bypass & Isolation Valves
18. Crozet Flow Equalization Tank

Planning and Studies

- 19. Reservoir Management Plan
- 20. South Rivanna Hydropower Plant Decommissioning
- 21. Drinking Water Infrastructure Plan – Crozet Area

1. Drinking Water Activated Carbon and WTP Improvements

Design Engineer:	Hazen and Sawyer
Construction Contractor:	Ulliman Shutte Construction, LLC
Construction Start:	April 2015
Percent Complete:	97%
Base Construction Contract + Change Orders to Date = Current Value:	\$22,563,000 + \$974,710 = \$23,537,710
Expected Completion Date:	April 2018
Total Capital Project Budget:	Urban GAC: \$24,000,000 Crozet GAC: \$3,418,390 Scottsville GAC: \$1,600,000

Current Status:

Scottsville WTP – The GAC system has been completed. Treatment of water through the GAC system began in February. Only some final asphalt paving and other punch list item work is left for the contractor to complete.

Crozet WTP – The Granular Activated Carbon (GAC) system has under gone start-up procedures and the additional work on the carbon effluent vault has been completed. The GAC treatment process is expected to be placed in service this month. Only punch list item work is left for the contractor to complete.

North Rivanna WTP – The GAC system is scheduled to be in operation this month. Improvements to the electrical system wiring are on-going as well as work on punch list items.

South Rivanna WTP – The GAC system is anticipated to be in operation by May. The GAC metal building, GAC contactors, GAC piping and chemical feed systems have been completed. Final testing of the filter air scour system is on-going. The liquid lime feed tanks and interior piping have been installed, with minor improvements on-going. All clarifier and filter work is complete and in service. Minor electrical installations and change order work associated with basin ladders are on-going. Programming associated with the backwash system, GAC system and lime feed system is on-going.

Observatory WTP - The GAC system is anticipated to be in operation by May. The GAC building, Intermediate Pump Station building, and chlorine contact tank are complete, except for some interior painting and finishes. The electrical conduit and wiring installation for the buildings is ongoing. The new potable water service line and booster pump system is complete and in service. Landscape retaining walls and storm sewer systems have been

installed, with landscaping and fencing installation on-going. Programming associated with the backwash system and GAC system will begin this month.

We plan to have a press release in April, with on-site celebration events for Scottsville, Crozet and the Urban System (South Rivanna Water Treatment Plant) in May.

History:

In 2006, the US EPA promulgated the Stage 2 Disinfectant and Disinfection Byproducts (D/DBP) Rule, which limits the maximum levels of certain disinfection byproducts in water distribution systems. RWSA hired Hazen and Sawyer to evaluate alternatives to reduce disinfection byproducts and ensure compliance with the Stage 2 D/DPR Rule. Hazen and Sawyer presented possible alternatives to assure continuous compliance with the Stage 2 D/DBP Rule, and the Board selected installation of granular activated carbon contactors. At the March 2015 RWSA board meeting, the Board approved a construction award to USC in the amount of \$22,014,250 and a construction management work authorization in the amount of \$1,686,700 to Hazen and Sawyer. In addition, the Board approved changes to the 2015-2019 Capital Improvement Plan (CIP) as follows: (1) Combined the Crozet GAC and Crozet Water Treatment Plant Improvements projects and increased the budget by \$550,800 for a new total project budget of \$3,190,000; (2) Increased the budget for Scottsville GAC by \$382,100 for a new total project budget of \$1,600,000; and (3) Combined the Urban Water GAC, South Fork Rivanna Water Treatment Plant Improvements, and the North Fork Water Treatment Plant Improvements projects into a single account with a combined total project budget of \$24,000,494.

An additional CIP amendment was approved by the RWSA Board at the March 22, 2016 meeting. This adjustment increased the Crozet Water GAC and Water Treatment Plant Improvements project to \$3,418,390. The RWSA Board also approved an additional change order amount to Ulliman Schutte of \$840,356 at the December 15, 2015 meeting. This additional cost is for Observatory WTP flocculator upgrades, and is funded from a separate CIP project (Observatory WTP improvements).

2. Wholesale Water Master Metering

Design Engineer:	Michael Baker International (Baker)
Construction Contractor:	Linco, Inc.
Construction Start:	January 2016
Percent Complete:	94%
Base Construction Contract + Change Orders to Date = Current Value:	\$2,228,254 - \$221,177 = \$2,007,077
Expected Completion Date:	June 2018
Total Capital Project Budget:	\$3,600,000

Current Status:

Three water treatment plant flow meters and 23 of 25 distribution system flow meters have been completed. Based on recent progress, staff anticipates completion of one of the two remaining meters by May of 2018. The final remaining site, located adjacent to Ivy Road,

has been removed from the Linco's contract and will be completed under a separate contract. Staff is in discussions with contractors under the existing on-call contract to determine a price and final completion schedule for the Ivy Road Site. An administrative plan to manage this program has been reviewed with the ACSA and the City, and completed.

History:

In January 2012, a Water Cost Allocation Agreement was signed by the City of Charlottesville (City) and ACSA designating how the two agencies would share in the financing of the New Ragged Mountain Dam project. Within the agreement is a general provision developed by the ACSA and City to enhance measurement of the water usage by each of the distribution agencies.

The Board authorized staff in August of 2012 to enter into an agreement with Michael Baker International, Inc. (Baker) to complete an engineering study on metering plan alternatives. Baker's study identified several alternatives for a metering plan based on combinations of metering and estimating methodologies. Based on feedback from ACSA, the City, and RWSA, Baker recommended a Jurisdictional Approach which included installation of water meters at 34 locations at the City/County corporate boundary and at each of the three urban water treatment plants at an estimated cost of \$6.4 million. At its September 2013 meeting, the RWSA Board of Directors requested staff to proceed with the Jurisdictional Coverage Approach. In February 2014, the Board of Directors authorized Baker to complete preliminary and final design for the project and to provide bid-phase services. The final design includes construction of 25 metering systems in underground vaults and required acquisition of twenty (20) permanent water line easements and one (1) permanent access easement.

Staff met with the ACSA and the City on July 12, 2017 and established a plan for implementation of the new meters in accordance with the 2012 Water Cost Allocation Agreement and the Baker Study.

3. Moores Creek AWWRF Odor Control Phase 2, Bridge Repairs and Second Centrifuge

Design Engineer:	Hazen and Sawyer
Construction Contractor:	MEB General Contractors
Construction Start:	June 2016
Percent Complete:	98%
Base Construction Contract + Change Orders to Date = Current Value:	\$6,796,000 + \$1,571,652.63 = \$8,367,652.63
Expected Completion Date:	March 2018
Total Capital Project Budget:	Odor Control Phase 2 - \$10,108,000 MC Bridge Repairs - \$330,000 Second Centrifuge - \$1,290,000

Current Status:

The bio-scrubber, bridge painting, 2nd centrifuge and concrete repairs have been completed. The Contractor is anticipated to be Substantially Complete by the end of March 2018 and will be working on punch list items.

In addition to the above construction activities, the following initiatives are being conducted as part of the overall Odor Control program:

- Digester Coating (\$540,000 budgeted). Odor-causing gases have been found to be emitted from the digester roofs. This project is intended to seal the interior of the digesters, reducing gas emission as well as protecting the integrity of the existing digester roof from harmful corrosion. Bids were received on August 3, 2017, and the Board approved the award at the September 2017 BOD meeting. Contract documents were executed and work began on January 2, 2018 to erect scaffolding in Digester No. 1. The coating work is completed and air tightness testing is anticipated mid-March.
- Holding Pond Cleanout (\$500,000 budgeted). Over time, grit and organic material have accumulated in the Wet Weather Holding Ponds and Equalization Basins and have been a source of odor. This project is to remove these accumulated solids in the summer of 2018 after the other components of the Odor Control project have been completed.
- Solids Handling (\$550,000 budgeted). RWSA purchased covered trailers to load biosolids directly from the centrifuge's conveyor system. Conveyor system modifications are complete and the new trailers are being utilized.

History:

At its September 2013 meeting, members of City Council inquired about the possibility to add another phase of odor control to the current Capital Program in response to citizen complaints. Staff asked Hazen at that time to compile conceptual costs to implement the next phases of odor control from the 2007 master plan, which were estimated over \$10 million dollars. In an effort to better define our next steps for odor control while being cost effective, Hazen performed an operations audit over the winter and two rounds of air and liquid phase sampling at the wastewater treatment facility in summer and fall of 2014. Hazen attended the Board of Directors meeting in December and presented a summary of recommendations and estimated project costs for a project that would significantly control odors from traveling beyond the MCAWRRF fence line.

At the January 27, 2015 meeting, the Board approved this project with a budget of \$9,330,000 and adopted it with the 2015-2019 CIP. DEQ issued the Certificate to Construct in early November 2015. This project advertised for bid on November 6, 2015 and bids were opened on December 17, 2015. Unfortunately, all of the bids were considerably over the project budget and subsequently were rejected. The design engineers, Hazen and Short Elliot Hendrickson, Inc. evaluated ways to reduce the scope of work without sacrificing the odor control goals. The redesigned project with reduced scope

advertised for bid on February 5, 2016 and bids were opened on March 30, 2016. The Board of Directors approved award of the construction contract to MEB General Contractors, Inc. at the April 2016 Board Meeting with an associated capital budget increase.

4. Crozet Finished Water Pump Station

Design Engineer:	Short Elliot Hendrickson (SEH)
Construction Contractor:	Anderson Construction, Inc.
Construction Start:	May 2017
Percent Complete:	60 %
Base Construction Contract + Change Orders to Date = Current Value:	\$1,941,000
Expected Completion Date:	September 2018
Total Capital Project Budget:	\$2,600,000

Current Status:

Concrete floor slabs have been placed for the pump station building. Electrical rough-in work continues. All pipelines have been flushed, pressure tested and disinfected. Pump station metal building erection has begun. The contractor is grading and preparing the foundation for one of two retaining walls.

History:

Bids were received and opened for the project on March 7, 2017. The apparent low bidder was Anderson Construction, Inc. from Lynchburg, VA. The Board of Directors approved the contract bid award of \$1,941,000 at the March 2017 meeting, a Notice of Award was issued on April 10, 2017, and a Notice to Proceed was issued on May 3, 2017.

The filter plant effluent line to the ground storage tank has been installed, tested, disinfected and placed into service. The existing generator and electrical lines have been relocated and placed into a temporary location. The pipeline and generator were relocated in order to make room for the new pump station foundation excavation. Partial removal of old, existing asbestos cement (transite) pipe was completed in July.

As part of the current FY 2016 CIP, the Crozet Water Treatment Plant is being studied to expand the treatment capacity to secure future demand needs of the Crozet community. Prior to any plant expansion, it has been determined that the finished water pumping facilities are in need of replacement. The existing pump station is very small and was constructed as part of the original plant construction in the late 1960s. The pumping equipment and controls are outdated, and reduce operational reliability and efficiency. The pump house is located in a low, poorly drained area near the ground storage clearwell, and drainage issues exist. Due to the age and condition of pumps, electrical systems, building systems and controls, it has been determined that a full station replacement is necessary. An Alternatives Analysis Report was completed in June 2016, and the chosen alternative is to construct a new, larger building uphill from the existing clearwell tank. The new pump

station building will be of similar construction as what is being proposed for the GAC facility at Crozet WTP.

5. Moores Creek AWWRF Roof Replacements

Design Engineer:	Hazen and Sawyer
Construction Contractor	Triangle Roofing Services, Inc.
Construction Start:	March 2018
Percent Complete	5%
Base Construction Contract + Change Orders to Date = Current Value:	\$818,000
Expected Completion:	September 2018
Total Capital Project Budget:	\$1,264,000

Current Status:

A pre-construction conference was held and roofing materials for all eight buildings have been delivered. The contractor is starting the project by removing and replacing roofs at the Moore's Creek Pump Station and the Effluent Pump Building.

History:

Construction bids were received on September 7, 2017 to replace the metal roof on eight buildings and award of the project was approved by the Board at the September Board Meeting. A Notice of Award was provided to Triangle Roofing Services, Inc. on October 10, 2017. Final Contract Documents have been executed.

The majority of the buildings at the Moores Creek Advanced Water Resource Recovery Facility were constructed in 1981 and 1982 during a major expansion of the existing treatment plant. All buildings constructed at that time were built with a metal roof system. In 2014, deficiencies were identified in the roof at the Administration Building and the roof was replaced. The materials of the original roof at the Administration Building are the same as the roof material on the other buildings. Likewise, many of the buildings have started to experience leaks and structural deficiencies. As a result, the purpose of this project is to replace the roof systems at the following buildings at the Moores Creek AWWRF: Blower Building, Moores Creek Pump Station, Sludge Pump Station No. 2, Maintenance Building 1, and Maintenance Building 2. Following additional review of the conditions of various buildings located at the Moores Creek AWWRF, this project also now includes replacement of the roof systems Sludge Pumping Building, the Primary Pump Building, and the Effluent Pump Building.

In December 2016, the Board of Directors authorized staff to enter into a work authorization with Hazen and Sawyer to design bidding documents to replace the identified roofs at Moores Creek AWWRF. A kick-off meeting was held with plant operations and maintenance staff; asbestos testing was performed to determine impacts during demolition activities; and design is ongoing. An application was submitted to the Albemarle County Architectural Review Board and approval has been obtained.

6. Sugar Hollow to Ragged Mountain Reservoir Transfer Flow Meter

Design Engineer:	Michael Baker International (Baker)
Project Start:	July 2017
Project Status:	100% Design Complete
Construction Contractor:	G.L. Howard
Construction Start:	July 2018
Completion:	September 2018
Total Capital Project Budget:	\$350,000

Current Status:

This project will require the Sugar Hollow to Ragged Mt. Reservoir transfer line to be out of service and unavailable for approximately 4 weeks. Due to the current refill of Ragged Mountain Reservoir, we are delaying this project until reservoir storage capacities improve and transfers from Sugar Hollow are not needed.

History:

RWSA staff has worked with the design engineers to complete plan and profile design drawings for this project. The project will include installation of a flow meter on the 18-inch diameter Sugar Hollow Reservoir discharge pipe, and a control valve that can be operated remotely through the Observatory WTP SCADA system. The control valve will modulate the amount of flow being transferred between the two reservoirs, the flow meter will record data, and staff will be able to remotely monitor the data through the SCADA system. Additional work has been added to this project including replacement of an existing, original gate valve at the site, demolition of two existing small utility structures that have not been used in many years, demolition of the existing Gatekeeper's House, and a separate control valve vault that will optimize the accuracy of the new flow meter by creating adequate separation distance between the meter and modulating control valve. The structures to be demolished and removed have been inspected and tested for asbestos containing materials and lead based paint. There will be some special abatement work required, and the contractor will have to include these costs in their estimate.

After initial cost estimating discussions with the contractor and RWSA staff, it was found that the current project budget is not enough to complete all of the identified work aspects. The Capital Improvement Program budget will likely have to be increased in order to perform all the work in one project.

7. Piney Mountain Tank Rehabilitation

Design Engineer:	Johnson, Mirmiran & Thompson (JMT)
Project Start:	September 2017
Project Status:	Notice of Award Issued
Construction Contractor:	Utility Service Co, Inc.
Construction Start:	April 2018
Completion:	October 2018

Total Capital Project Budget: \$500,000

Current Status:

A Notice of Award has been issued and construction is expected to start in April of 2018. System pressure testing without the tank is underway to ensure adequate pressures during the construction period.

History:

The project was advertised for bid on November 28, 2017 and bids were opened on January 9, 2018. At its January meeting, the RWSA Board of Directors approved staff's recommendation of award to Utility Service Co., Inc., the apparent low bidder on the project.

The 700,000 gallon Piney Mountain Tank serves the North Rivanna pressure zone. A routine inspection of the Piney Mountain Tank in April of 2012 revealed several deformed roof rafters, indicating the potential for structural deficiency. An in-depth structural inspection was performed in May of 2013 and a list of recommended roof repairs provided. This project includes consultant services for design and bidding of necessary roof repairs and other ancillary items, as well as construction, construction administration, and inspection services. Long term plans for the Rt. 29 service area include the modification or elimination of this facility. The current recommended improvements are needed in order to maintain the existing tank in service for at least the next 10 years.

8. Interceptor Sewer and Manhole Repair

Design Engineer:	Frazier Engineering
Project Start:	July 2017
Project Status:	5% Construction Complete
Construction Start:	November 2017
Completion:	2020
Total Capital Project Budget:	\$1,962,389

Current Status:

Award of the 2017 Sanitary Sewer Rehabilitation and Repair Contract to IPR Northeast was approved by the Board at the October Board Meeting and a Notice of Award has been provided. Contract Documents have been formally executed, a preconstruction meeting was held with the contractor, and a Notice to Proceed was provided. Frazier Engineering continues to conduct condition assessment activities and has completed a preliminary review of previous CCTV results. Manhole inspections on various interceptors were completed and a report documenting the results is being developed. An initial work authorization with the contractor to perform additional CCTV investigations is being developed.

History:

Results from sewer flow monitoring and modeling under the Comprehensive Sanitary Sewer Study provided awareness to specific inflow and infiltration (I&I) concerns in the

collection system and resulted in strengthened commitments from the City, ACSA and RWSA to continue professional engineering services to aid in the rehabilitation and repair of the sewer collection system. Engineering services will be used for sewer infrastructure condition assessments and the development of a sewer rehabilitation bid package for the procurement of a contractor to perform the recommended rehabilitation work.

9. **Urgent and Emergency Repairs**

Staff is currently working on several urgent repairs within the water and wastewater systems as listed below:

Project No.	Project Description	Approx. Cost
2017-03	Crozet Sewer Force Main Air Release Valve Repair	\$100,000
2017-04	Crozet Water Main Repair – 5068 Three Notch'd Road	\$25,408
2018-01	Rivanna Interceptor – RVI-MH-32 Erosion Repair	\$25,000

- **Crozet Sewer Force Main Air Release Valve Repair**

During routine inspections of the sewer force main, the Maintenance Department identified that the saddle for one of the air release valves was loose and needed to be repaired. Due to the profile of the force main however, it is not possible to dewater the force main and take pressure off the pipe at this location without the installation of line stops. As a result, a contractor has been contacted to begin development of a method to address the issue.

- **Crozet Water Main Repair – 5068 Three Notch'd Road**

A potential leak was identified near the 12-inch Crozet Water Main based on water collecting in an adjacent ditch line. The water was tested and appears to be finished water and the potential leak is located near the termination point of a recent water main replacement project. RWSA coordinated with ACSA and VDOT since the repair requires a street cut of Route 240 and assistance from ACSA should the line need to be cut. To begin the repair process, an exploratory excavation was performed by Faulconer Construction on January 24th to better determine the cause and location of the leak. A section of the water main was exposed and it was confirmed that the supposed leak was not coming from the RWSA main. During this process, the excavation area was dewatered and on the second day of the work, no additional finished water was found in the trench. As a result, it's possible that there is a small leak elsewhere that coincidentally accumulated in this area or that a significant amount of finished water was purposely released from another location that happened to pool in this location. RWSA will coordinate with ACSA to determine if leak detection activities are necessary to better identify what the issue may be, but otherwise, urgent work on this section of water main is complete. Based on the exploratory excavation, temporary asphalt was used for initial restoration of Route 240 with final restoration and permanent asphalt was placed on February 28, 2018 completing the work.

- **Rivanna Interceptor – RVI-MH-32 Erosion Repair**

During routine inspections of the Rivanna Interceptor, the Maintenance Department observed some significant erosion around RVI-MH-32. The issue is being reviewed to determine the cause of the erosion and to develop a preferred method of repair. A contractor has been contacted to assist with the development of a repair strategy.

10. Observatory WTP Expansion

Design Engineer:	Short Elliot Hendrickson, Inc. (SEH)
Project Start:	October 2017
Project Status:	Preliminary Engineering Report
Construction Start:	2019
Completion:	2022
Total Capital Project Budget:	\$18,630,000

Current Status:

The PER will be completed by May 2018. Design documents will be completed by May 2019.

History:

This project will consider the design and costs for upgrading the plant systems to achieve a consistent 7 MGD plant capacity, as well as consider the costs involved with upgrading the plant to 10 or 12 MGD capacity.

Much of the Observatory Water Treatment Plant is original to the 1953 construction. In an effort to better understand the needed future improvements, a Condition Assessment Report was completed by SEH in October of 2013. The approved Capital Improvement Plan project was based on the findings from this report. A portion of this project was expedited in order to repair and replace old, existing equipment that was not functional. The flocculator systems have been replaced and upgraded as part of the Drinking Water Activated Carbon and WTP Improvements project (GAC). The second flocculator system was started up in May 2017, and both systems are currently in full service. The contractor needs to address some minor punchlist items in order to reach final completion.

11. South Rivanna Water Treatment Plant Improvements

Design Engineer:	Short Elliot Hendrickson (SEH)
Project Start:	October 2017
Project Status:	Preliminary Engineering Report
Construction Start:	2019
Completion:	2022
Total Capital Project Budget:	\$7,500,000

Current Status:

The PER will be completed by May 2018. Design documents will be completed by May 2019.

History:

The South Rivanna Water Treatment Plant is currently undergoing significant upgrades as part of the Granular Activated Carbon Project. Several other significant needs have also been identified and have been assembled into a single project. The projects herein include: expansion of the coagulant storage facilities; installation of additional filters to meet firm capacity needs; the addition of a second variable frequency drive at the Raw Water Pump Station; the relocation for the electrical gear from a sub terrain location at the Sludge Pumping Station; a new building on site for additional office, lab, control room and storage space; improvements to storm sewers to accept allowable WTP discharges; and the construction of a new metal building to cover the existing liquid lime feed piping and tanks. The scope of this project will not increase plant treatment capacity.

12. Crozet WTP Expansion

Design Engineer:	Short Elliot Hendrickson (SEH)
Project Start:	August 2016
Project Status:	50% Design Complete
Construction Start:	September 2018
Completion:	December 2020
Total Capital Project Budget:	\$7,000,000

Current Status:

Construction documents will be completed by June 2018. Drawings developed to the 50% complete design stage were submitted and reviewed in March 2018.

History:

SEH has completed the Preliminary Engineering Report (PER) for this project, and is in the process of addressing comments from the Virginia Department of Health. Some preliminary watershed modeling and data collection was also performed as part of this work. In addition, raw water jar testing has been performed to finalize the type of treatment parameters necessary for the upgrade work, and the testing results were incorporated into the PER. The proposed new work will provide needed updates to equipment, as well as a plant capacity upgrade to approximately 1.5 - 2.0 million gallons per day.

A new Work Authorization with SEH was executed to perform preliminary and final design documents, as well as construction administration services.

This project was created to analyze the feasibility of increasing the supply capacity of the existing Crozet WTP by modernizing plant systems. The goal is to not drastically increase the plant footprint in regards to existing filter plant, flocculation tanks, and sedimentation basins. By modernizing the outdated equipment within these treatment systems, the plant discharge capacity can be improved by approximately 50-100%. The project currently only includes study and design funding.

13. Interconnection Lower Sugar Hollow and Ragged Mountain Raw Water Mains

Design Engineer:	Dewberry Engineers
Project Start:	October 2017
Project Status:	20% Design
Construction Start:	May 2018
Completion:	October 2018
Total Capital Project Budget:	\$225,000

Current Status:

A Work Authorization with Dewberry was executed to evaluate several alignment options and to identify the most suitable alignment. Feasible alignments are being evaluated and a separate Work Authorization will be executed to prepare final design documents after the final alignment is selected.

History:

The two 18-inch water mains that supply water from Ragged Mountain Reservoir to Observatory Water Treatment Plant are 71 and 109 years old. The mains are interconnected at the top of the Ragged Mountain Dam, with one serving the 1920's Royal Pump Station and the other serving the more modern Stadium Road Pump Station. Both pump stations provide raw water to the Observatory Water Treatment Plant. This project will serve to interconnect the two raw water lines near the Route 29/Fontaine Avenue Intersection, which will provide improved reliability and operability in the event of raw water line breaks.

14. Route 29 Pump Station and Pipeline

Design Engineer:	Michael Baker International (Baker)
Project Start:	July 2018
Project Status:	Update Existing Design Report
Construction Start:	2019
Completion:	2021
Total Capital Project Budget:	\$2,300,000

Current Status:

Work is currently underway to review and update the 2008 preliminary engineering report, including analysis of current water demand projections. Portions of the work have already been completed, including a temporary bypass pumping location near Kohl's department store, and the abandonment of existing pipeline in the median of Rte. 29 from the south end of Hollymead Town Center to Timberwood Boulevard. Other portions of the project have been completed including the Pump Station Site Acquisition and new 24-inch pipeline installed as part of the Rt. 29 VDOT Betterment project. Once the report update has been completed, the preliminary design of the remaining pipeline and the pump station will be started. Preliminary and final design along with construction funding will be included in the 2019-2023 CIP.

History:

This project will include construction of a 2 mgd drinking water pump station and two 1,000,000 gallon ground water storage tanks, as well as completion of a 24-inch diameter pipeline along the Meeting Street corridor. This project has been identified as a need in the County Comprehensive Plan and RWSA Capital Improvement Plan.

A report and technical memorandum on this project was previously completed in 2008. The future pump station and tanks, along with a new transmission pipeline between the pump station and the South Rivanna Water Treatment Plant, will provide an interconnection between the areas presently served by the South Rivanna WTP and the North Rivanna WTP. The interconnection is needed for redundancy of service in the event of an emergency, during drought conditions, and to adequately serve the growing needs of the Rt. 29 area generally north of Hollymead Town Center and Airport Road.

At the May 2017 Board Meeting, a 1.6-acre parcel of land was acquired through condemnation proceedings which included a public hearing. The site location was identified in a prior project report from 2008 (completed by Michael Baker), and is also identified in the current County Comprehensive Plan. The land value of the parcel was estimated through a March 16, 2017 Property Appraisal completed by CRES, Inc., a professional real estate and appraiser company. After negotiations with the current landowner to acquire the property were unsuccessful, and final offers were refused, the land was acquired after a Certificate of Take was recorded. This property will be utilized for future construction of a new drinking water pump station and ground storage tanks.

15. South Fork Rivanna Reservoir to Ragged Mtn. Reservoir Water Line Right-of-Way

Design Engineer:	Michael Baker International (Baker)
Project Start:	October 2017
Project Status:	25 % Complete
Completion:	2021
Total Capital Project Budget:	\$2,295,000

Current Status:

The PER will be completed by August 2018. Preliminary design work began in November 2017. Property owners will be contacted in May 2018 to gain permission to begin topographical surveying. The consultant is in the process of data collection, and review, hydraulic modeling, and field evaluation of alignment options for the Preliminary Engineering Report.

History:

RWSA has negotiated a scope and fee with Michael Baker International for the routing study, preliminary design, plat creation and easement acquisition process.

The approved 50-year Community Water Supply Plan includes the future construction of a raw water line from the South Fork Rivanna Reservoir to the Ragged Mountain Reservoir. This water line will replace the existing Upper Sugar Hollow Pipeline along an alternative alignment to increase raw water transfer capacity in the Urban Water System. The

preliminary route for the water line followed the proposed Route 29 Charlottesville Bypass; however, the Bypass project was suspended by VDOT in 2014, requiring a more detailed routing study for the future water line. This project includes a routing study, preliminary design and preparation of easement documents, as well as acquisition of water line easements along the approved route.

16. Avon to Pantops Water Main

Design Engineer:	Michael Baker International (Baker)
Project Start:	August 2017
Project Status:	30% Preliminary Design Complete
Construction Start:	2020
Completion:	2022
Total Capital Project Budget:	\$13,000,000

Current Status:

Route alignment determination, hydraulic modeling, and preliminary design are underway. Route alternatives are being developed for review.

History:

An engineering contract has been negotiated and was approved by the Board of Directors in July 2017.

The focus of this project is on the southern half of the urban area water system which is currently served predominantly by the Avon Street and Pantops water storage tanks. The Avon Street tank is hydraulically well connected to the Observatory Water Treatment Plant while the Pantops tank is well connected to the South Rivanna Water Treatment Plant. The hydraulic connectivity between the two tanks, however, is less than desired, creating operational challenges and reduced system flexibility. In 1987, the City and ACSA developed the Southern Loop Agreement which laid out two key phases (with the first being built at the time). The 1987 Agreement and planning efforts will service as a starting point for this current project.

17. Crozet Interceptor Pump Stations Bypass and Isolation Valves

Design Engineer:	Johnson, Mirmiran & Thompson (JMT)
Project Start:	August 2017
Project Status:	95% Design Complete
Construction Start:	July 2018
Expected Completion Date:	October 2018
Total Capital Project Budget:	\$720,000

Current Status:

Bidding is anticipated for May with a contract award at the June Board Meeting.

History:

A work authorization with JMT was finalized to provide design, bidding and construction administration related services for this project. Design services began in August.

There are four pump stations located in the Crozet Interceptor system that help convey flow from the Crozet Area into the Morey Creek Interceptor and the rest of the urban collection system. These pump stations were constructed in the 1980s and provided no means of isolating each pump station from its downstream force main. This condition complicates maintenance-related activities as each time a pump station component needs to be serviced or replaced, the volume of wastewater within the force main must be addressed at the pump station as it drains back to the wet well. In addition, the Crozet Interceptor pump stations also have limited storage within their wet wells, and any reduction of down time as a result of dealing with the impacts of no isolation valves, decreases the amount of time available to work on the equipment. In order to alleviate this condition, temporary valves called “line stops” will be temporarily installed on the force mains downstream of the pump stations to allow enough time for a new isolation valve to be installed. Isolation valves will be located in order to provide the maximum amount of down time available based on current system conditions for future pump station maintenance activities. While line stops are in place, bypass connections will also be provided at each pump station. These will allow staff the option of bringing in bypass pumps for more significant pump station shutdowns required for maintenance activities or repairs for which the isolation valves alone cannot account.

18. Crozet Flow Equalization Tank

Design Engineer:	Greeley and Hansen (G&H)
Project Start:	October 2016
Project Status:	Siting Study 100% Complete
Construction Start:	2019
Completion:	2020
Total Capital Project Budget:	\$3,300,000

Current Status:

The work authorization has been finalized, and a design project kick-off is anticipated for the first week of April.

History:

G&H has submitted a work authorization to continue the project through construction which was approved by the Board during the December meeting. G&H has completed a report documenting potential tank locations within the drainage basin. A meeting was held with ACSA on October 9, 2017 and a tank location was agreed upon for additional investigation work and preliminary engineering activities.

A Work Authorization with G&H to perform a siting study for the flow equalization tank project was issued in October 2016 and with completion expected in 2017. These services include the sizing of the flow equalization tank and the pumping station based on information from the updated model, a preliminary site selection process based on the

sizing requirements identified in order to narrow down the number of sites, and an alternatives analysis performed for each selected site to evaluate the feasibility of locating the facility. This is the first step in the site selection process and will be followed by a more in depth analysis of the potential tank locations and the eventual selection of a final site. As part of the first task, pump tests are being performed at all four Crozet Pump Stations to confirm existing capacities.

Rehabilitation work in the RWSA and Albemarle County Service Authority sewer systems is on-going to meet inflow and infiltration (I&I) reduction goals in the Crozet Interceptor sewer basin based on the flow metering and modeling results of the Comprehensive Sanitary Sewer Model and Study conducted in 2006. The intent was to reduce I&I in the system to meet the 2020 two-year storm flow targets.

A 2016 update to the 2006 model was completed which evaluated the I&I reduction goals previously established and future capital project needs. Based on the results of that study, it was determined that the Crozet Interceptor system and namely the existing Crozet Pump Stations (1 through 4) have adequate capacity to handle the 2015 peak wet weather flow from the Crozet Service Area during a two-year storm. However, as projected growth in the service area occurs, peak wet weather flows in the area under the storm conditions established in the updated model will begin to exceed the firm capacities of the pump stations by 2025. Additional I&I reductions in order to reduce flows enough to not exceed the pump station firm capacities are not feasible and as a result, the construction of a flow equalization tank was identified as the best method to alleviate wet weather capacity issues.

While the study indicates that capacity should not be an issue until 2025, a flow equalization tank would also provide a significant benefit to the maintenance of the Crozet Pumping Station system which currently lacks system storage necessary to allow adequate time to perform repairs on the pumps and the associated force mains while the system is down. As a result, it is important to progress into the siting study for the flow equalization tank to ensure that it can be constructed in time for the 2025 flow targets but also to facilitate less complicated and more thorough maintenance on the system that has not been possible previously.

19. Reservoir Management Plan

Consultant:	DiNatale Water Consultants
Project Start:	November 2014
Project Status:	95% Complete
Completion:	April 2018
Total Contract Cost:	\$336,475

Current Status:

The final report with recommendations will be presented to the Board in April 2018.

History:

The second year of water quality monitoring for this project is in progress. An intensive week of sampling took place in June 2017. A project team meeting was held on June 16

to discuss the results. Sediment sampling at Beaver Creek Reservoir and South Fork Rivanna Reservoir took place in July 2017. The Phase 1 report is complete, along with a related public information document, and both have been distributed to the Board and are also available for public review at www.rivanna.org/reservoir-study. In June 2014 staff received proposals for services to develop a Reservoir Management Plan to include all five reservoirs that RWSA manages for water supply (Beaver Creek, Ragged Mountain, South Fork Rivanna, Sugar Hollow, and Totier Creek). A selection committee represented by staff from RWSA, ACSA, and the City reviewed proposals and selected two firms for interviews. DiNatale Water Consultants was awarded this contract in the amount of the \$176,334, and the contract was executed in November 2014. The contract was extended in 2016, with \$160,141 being approved by the Board in August 2016 for Phase 2, for a total approved contract amount of \$336,475.

20. South Rivanna Hydropower Plant Decommissioning

Consultant:	Gomez and Sullivan
Project Start:	October 2016
Project Status:	Exemption Surrender Process – Phase 2 Underway
Construction Start:	2019
Completion:	2020
Total Capital Project Budget:	\$1,000,000

Current Status:

A consultation document to be provided to local regulatory agencies is being finalized with the intent of hosting a meeting with agencies to discuss the decommissioning process in late April or early May 2018. Following input from local agencies based on the consultation document, a surrender application will be developed for submission to FERC.

History:

Work associated with the first phase of the exemption surrender process with Gomez and Sullivan and Van Ness Feldman was completed confirming with FERC what the next steps in the surrender process would include. A work authorization with Gomez and Sullivan for Phase 2 of the exemption surrender process was finalized in August 2017 and includes tasks to manage the local regulatory agencies consultation process and development of the surrender application and decommissioning plan.

RWSA constructed a hydropower plant at the South Fork Rivanna Dam in 1987. Power generation at the plant was limited for a number of years due to various mechanical issues and has been completely offline for the past four years. In December 2011, RWSA retained HDR to perform a mechanical and electrical equipment assessment and to provide recommendations for capital expenditures and continued operation. This assessment identified the need to perform a number of mechanical and electrical modifications to improve operation of the hydropower plant. On June 16, 2013, while the plant was down for testing associated with repairs to the speed reducer and generator, the powerhouse flooded during a heavy rainfall event. A post-flood inspection indicated that the rising water damaged the electrical equipment. In addition to electrical system issues, the turbine blades were “stuck” and inoperable prior to the flood event. Prior to beginning

any rehabilitation work on the hydropower plant, it was determined that a feasibility study should be performed that reviewed previous recommendations and took into account interaction with the Federal Energy Regulatory Commission (FERC) to determine if it was cost effective for RWSA to rehabilitate the facility. The feasibility study was conducted by Gomez and Sullivan and concluded that rehabilitation of the facility would most likely not provide a return on investment based on current market conditions. Staff recommended that RWSA proceed with surrendering the exemption to licensure with FERC and decommission the facility. During the meeting on October 25, 2016, the Board of Directors agreed with the recommendation and staff began to proceed with the surrender process.

21. Drinking Water Infrastructure Plan – Crozet Area

Design Engineer:	Hazen and Sawyer
Project Start:	June 2017
Project Status:	60% Complete
Completion:	Fall 2018
Total Capital Project Budget:	\$300,000

Current Status:

Staff met with VDEQ and other State and Federal Agencies on March 12, 2018 to provide a pre-application project overview as well as Safe Yield and Minimum Instream Flow information. Hazen is gathering final information needed to support water supply, treatment, distribution and dam modification plans when we provide an update to the Crozet Community Advisory Committee on June 20, 2018.

History:

A progress meeting was completed in October, and additional meetings with the County of Albemarle Planning Department and the VADEQ are scheduled for November.

Hazen is currently reviewing RWSA and ACSA historical average and peak day water demand data, as well as County zoning and land use data, to develop water demand forecasts. RWSA staff has provided Hazen with existing data, reports and service area history to start their analysis. A design team kick-off meeting has been held, and additional meetings with county staff and the VA DEQ will be scheduled this Fall, when future demand analyses have been completed. Field investigation of hydraulic data was scheduled. Hydrant flow testing were suspended until the Drought Watch restrictions were lifted.

Preliminary meetings with an Albemarle County Board member and Community Development representatives were held in May 2017. A meeting with the Crozet Community Advisory Committee was held on June 21, 2017.

This project was previously entitled the Crozet Water Master Plan, and is identified in the current Capital Improvement Plan as such. The project name has been changed to avoid confusion with the separate Crozet Master Plan document. The Crozet water service area

continues to see expanded growth in the average and maximum day water demands. Discussion with county and ACSA officials have confirmed recent growth trends that water use is increasing in Crozet. While some projects are currently underway to address the immediate need in Crozet, this project will develop a comprehensive mid and long range plan (50 years) for the entire water system including; raw water supply, raw water pumping and conveyance, finished water treatment, finished water pumping, and finished water distribution and storage. Future water demand projections will be an important part of this project. At the June 27, 2017 Board Meeting, it was approved to award this planning project to the consulting engineering firm of Hazen and Sawyer. An Engineering Services Agreement was executed on July 5, 2017, as well as Work Authorization No. 1 for the fee of \$269,120.



695 MOORES CREEK LANE
CHARLOTTESVILLE, VA 22902-9016
TEL: 434.977.2970
FAX: 434.293.8858
WWW.RIVANNA.ORG

MEMORANDUM

**TO: RIVANNA WATER & SEWER AUTHORITY
BOARD OF DIRECTORS**

**FROM: DAVE TUNGATE, WATER MANAGER
TIMOTHY CASTILLO, WASTEWATER MANAGER**

**REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR
LONNIE WOODS, INTERIM DIRECTOR OF OPERATIONS**

SUBJECT: OPERATIONS REPORT FOR FEBRUARY 2018

DATE: MARCH 27, 2018

WATER OPERATIONS:

The average daily/monthly total water distributed for February 2018 was as follows:

<i>Water Treatment Plant</i>	<i>Average Daily Production (MGD)</i>	<i>Total Monthly Production (MG)</i>	<i>Maximum Daily Production in the Month (MGD)</i>
Observatory	0.91	25.44	---
South Rivanna	6.66	186.51	---
North Rivanna	<u>0.29</u>	<u>8.37</u>	---
<i>Urban Total</i>	7.86	220.32	8.675 (2/22/18)
Crozet	0.48	13.52	0.722 (2/06/18)
Scottsville	<u>0.045</u>	<u>1.28</u>	0.066 (2/07/18)
<i>RWSA Total</i>	8.39	235.12	---

- All RWSA water treatment facilities were in regulatory compliance during the month of February.

Status of Reservoirs (as of March 22, 2018):

- Urban Reservoirs: 95 % of Total Useable Capacity
- Ragged Mountain Reservoir is -2.68 feet (90 %)
- Sugar Hollow Reservoir is full (100%)
- South Rivanna Reservoir is full (100%)
- Beaver Creek Reservoir is full (100%)
- Totier Creek Reservoir is full (100%)

WASTEWATER OPERATIONS:

All RWSA Water Resource Recovery Facilities (WRRFs) were in regulatory compliance with their effluent limitations during the month of February 2018. Performance of the WRRFs in February was as follows compared to the respective VADEQ permit limits:

WRRF	<i>Average Daily Effluent Flow (mgd)</i>	<i>Average CBOD₅ (ppm)</i>		<i>Average Total Suspended Solids (ppm)</i>		<i>Average Ammonia (ppm)</i>	
		<i>RESULT</i>	<i>LIMIT</i>	<i>RESULT</i>	<i>LIMIT</i>	<i>RESULT</i>	<i>LIMIT</i>
Moore's Creek	10.40	1.5	10	1.3	22	0.06	7.0
Glenmore	0.138	2.3	15	4.1	30	0.23	NL
Scottsville	0.081	3.5	25	11.8	30	0.04	NL
Stone Robinson	0.002	7.0	30	6.1	30	3.0	NL

NR = Not Required

NL = No Limit

<QL: Less than analytical method quantitative level (2 ppm for CBOD, and 1 ppm for TSS) is reported as zero.

Nutrient discharges at the Moore's Creek AWRRF were as follows for February 2018:

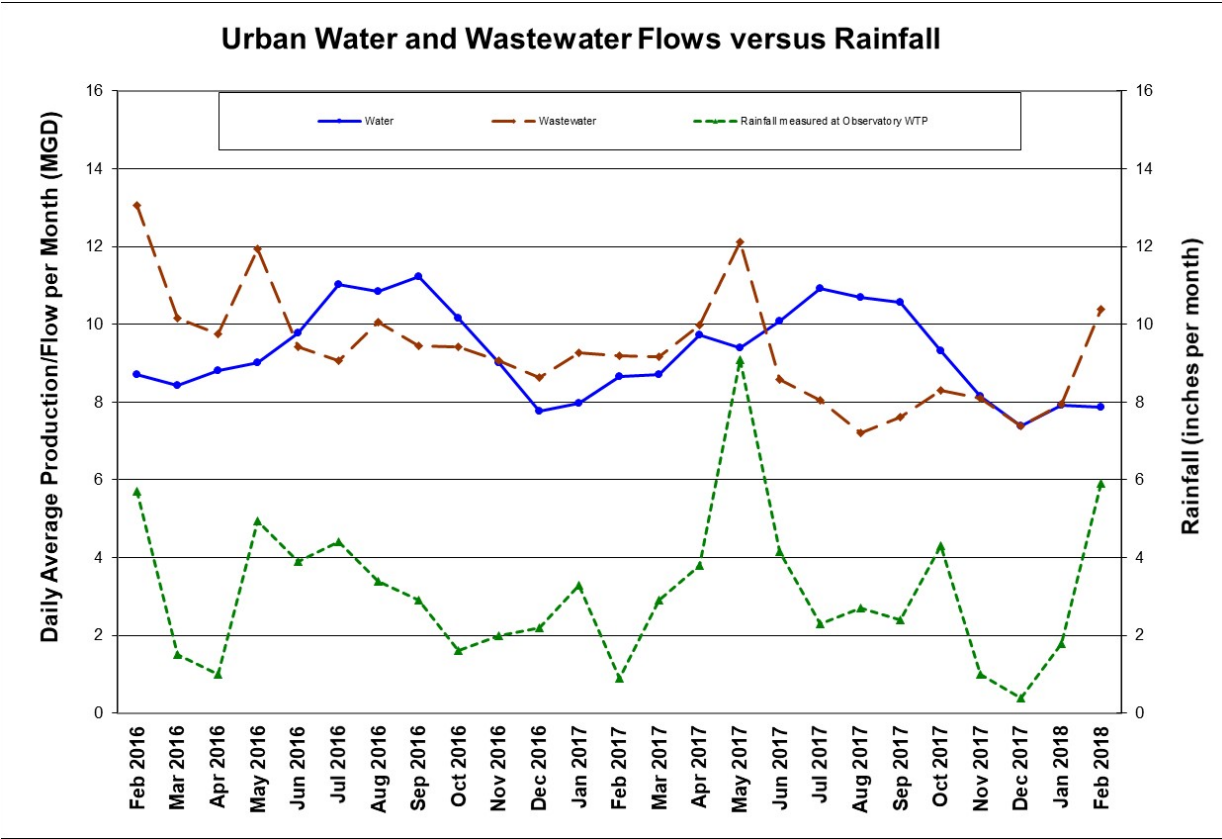
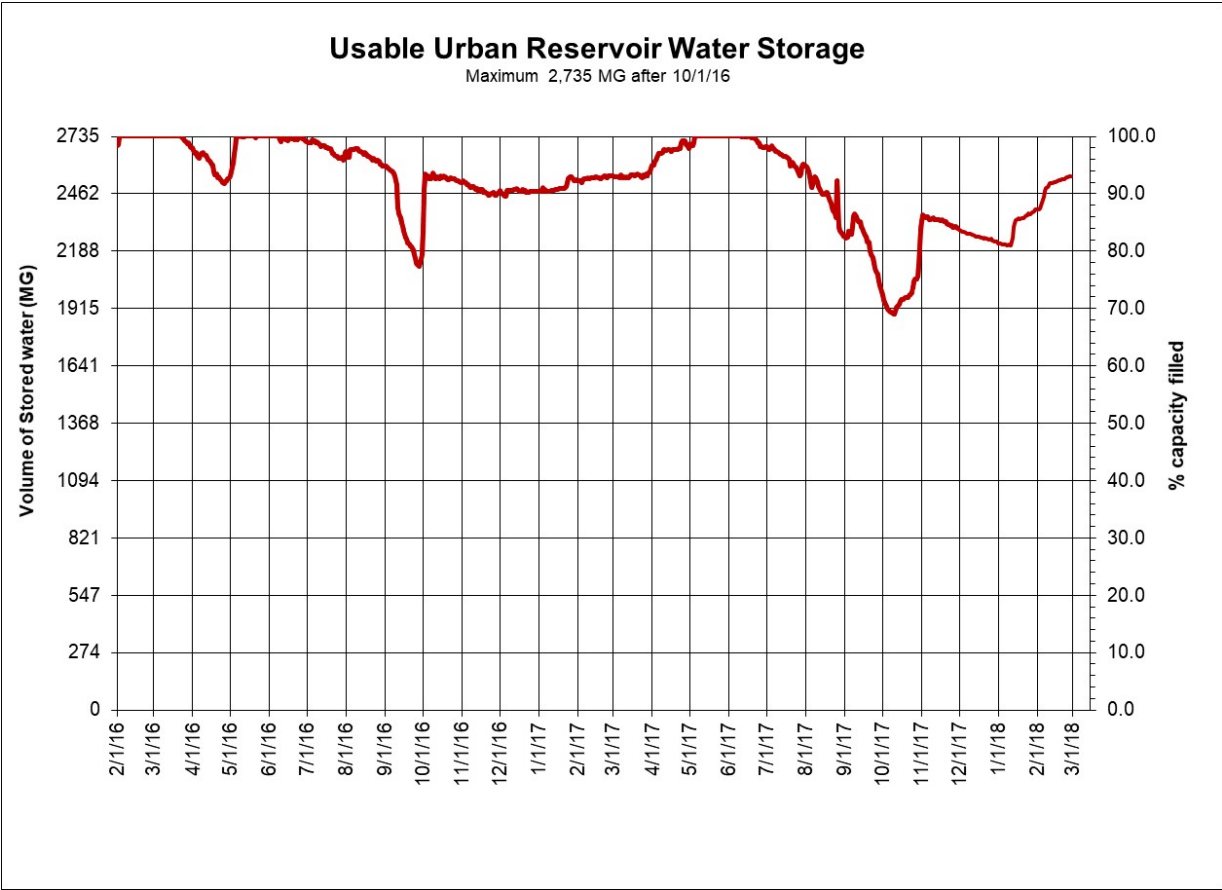
<i>State Annual Allocation (lb./yr.)</i>		<i>Average Monthly Allocation (lb./mo.)*</i>	<i>Moore's Creek Discharge (lb./mo.)</i>	<i>Performance as % of Average Allocation*</i>
Nitrogen	282,994	23,583	13,790	58%
Phosphorous	18,525	1,544	614	40%

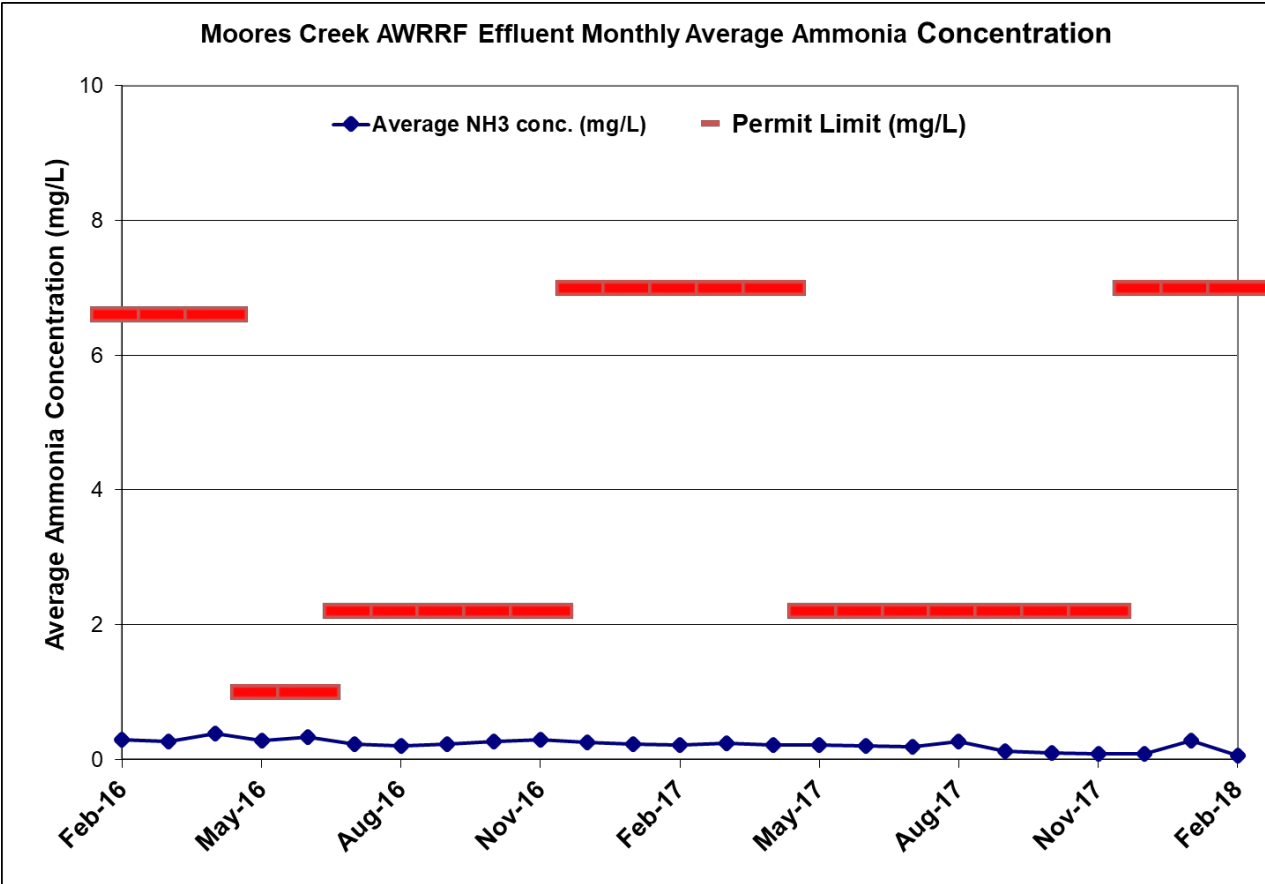
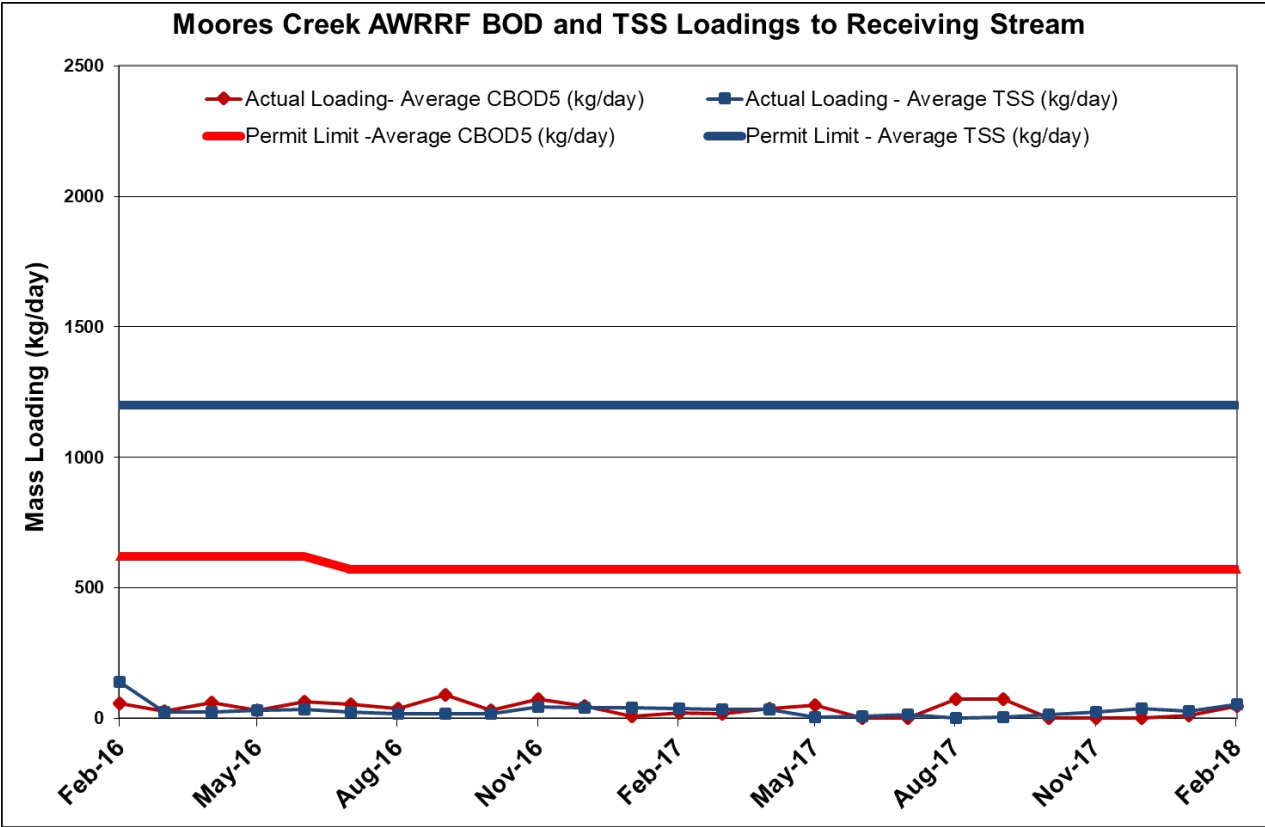
*State allocations are expressed as annual amounts. One-twelfth of that allocation is an internal monthly benchmark for comparative purposes only.

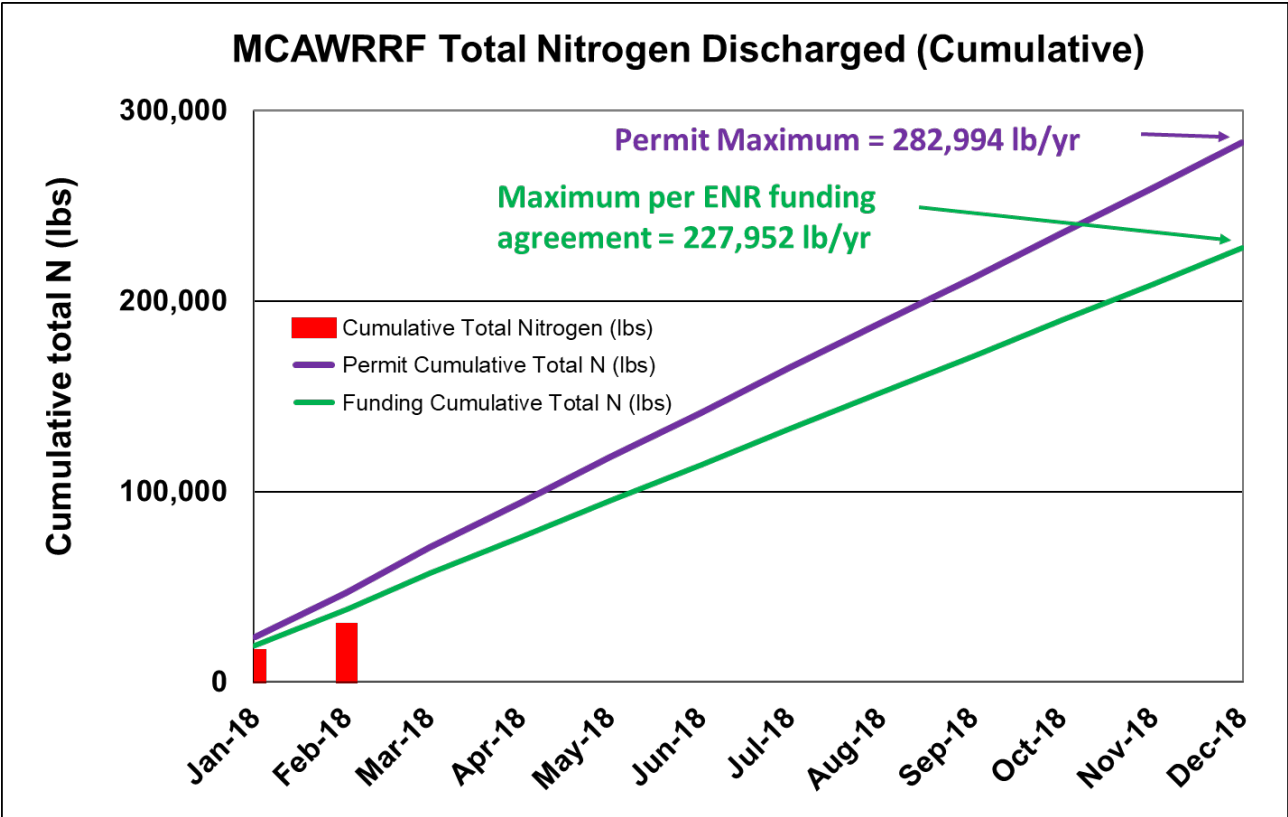
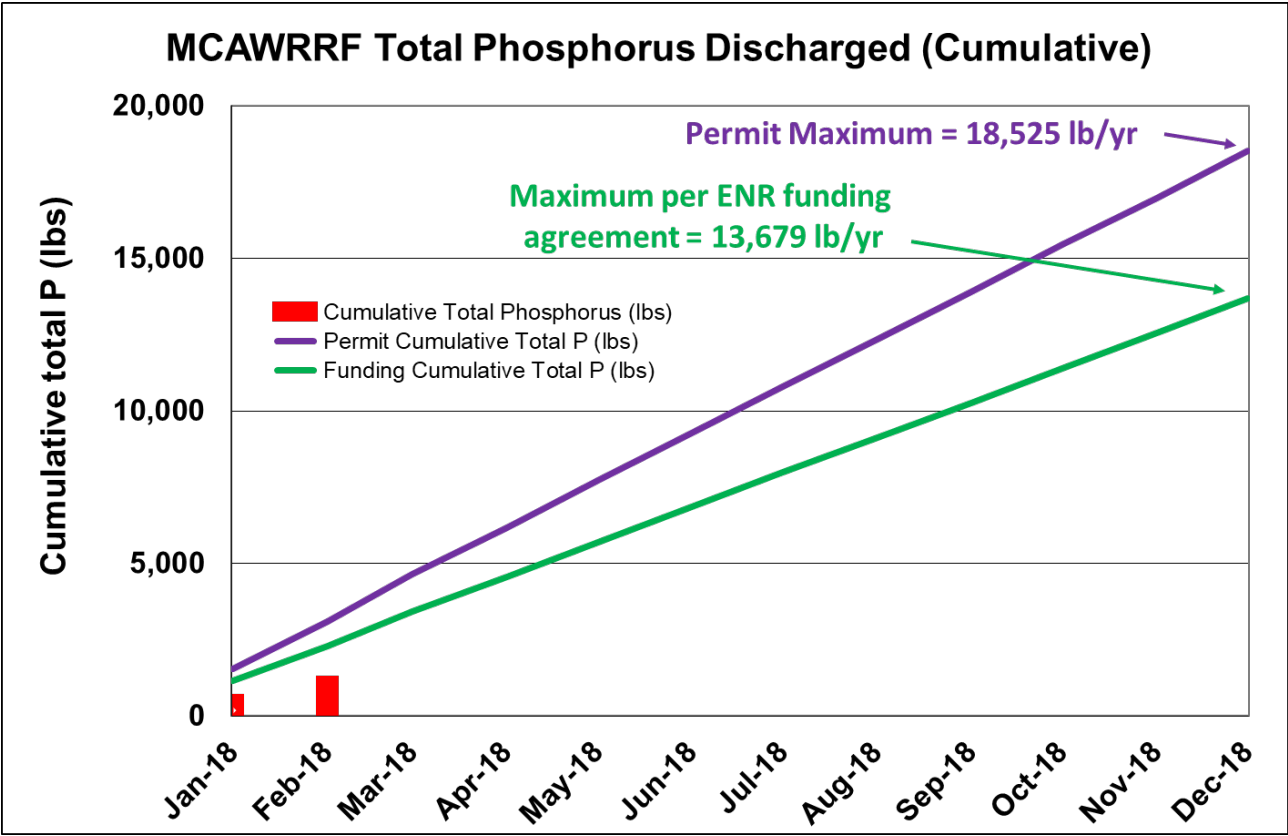
WATER AND WASTEWATER DATA:

The following graphs are provided for review:

- Usable Urban Reservoir Water Storage
- Urban Water and Wastewater Flows versus Rainfall
- Moore's Creek AWRRF BOD and TSS Loadings to Receiving Stream
- Moore's Creek AWRRF Effluent Monthly Average Ammonia Concentrations
- Moore's Creek AWRRF Total Phosphorus Discharged
- Moore's Creek AWRRF Total Nitrogen Discharged







MEMORANDUM

**TO: RIVANNA WATER & SEWER AUTHORITY
BOARD OF DIRECTORS**

**FROM: JENNIFER WHITAKER, DIRECTOR OF ENGINEERING AND
MAINTENANCE**

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

**SUBJECT: MCAWRRF SECOND CENTRIFUGE PROJECT –
REQUEST FOR ADDITIONAL CONSTRUCTION
CHANGE ORDER AUTHORIZATION AND PROJECT BUDGET**

DATE: MARCH 27, 2018

At the April 26, 2016 meeting, the Board of Directors approved the award of a construction contract to MEB General Contractors, Inc. for the MCAWRRF Odor Control Phase 2 and MCAWRRF Bridge Repairs project. At the January 24, 2017 meeting, the Board of Directors approved completion of the Second Centrifuge Project totaling \$1,032,398.40 as a change order to the Odor Control contract with a contingency of 10% for any additional change orders.

It was anticipated that the new centrifuge would match the existing centrifuge and have a similar footprint to the previous press which would allow for the re-use of the existing hoist and monorail system. Unfortunately, the manufacturer is now producing a new model of centrifuge which has different weight requirements than our existing centrifuge. As such, a new hoist system will need to be installed. Other valving and programming upgrades are warranted as well to update the existing centrifuge to operate more efficiently with the new pump and program installed with the project. Additional construction funds needed to complete the second centrifuge project total approximately \$47,000. This will bring the total change order contingency up to approximately 15%, and the total project budget to \$1,337,000.

Board Action Requested:

Staff requests the Board of Directors to authorize:

- an increase of \$47,000 to the total change order contingency for the MCAWRRF Second Centrifuge Project and an increase to the total project budget from \$1,290,000 to \$1,337,000.
- the Executive Director to approve additional change orders to the contract with MEB General Contractors, Inc. on the MCAWRRF Second Centrifuge Project, only when necessary for the completion of this project, provided the total amount of all change orders does not exceed 15% of the awarded price.

MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY
BOARD OF DIRECTORS

FROM: ANDREA TERRY, WATER RESOURCES MANAGER

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: PRESENTATION FROM RIVANNA CONSERVATION ALLIANCE

DATE: MARCH 27, 2018

Ms. Robbi Savage, Executive Director of the Rivanna Conservation Alliance, is here today to report on the programs and projects of the Rivanna Conservation Alliance

Board Action Requested:

This presentation is for information only. No Board action is requested.

RIVANNA CONSERVATION ALLIANCE



RCA VISION

A healthy, thriving community that values its rivers and streams.

RCA MISSION

Protection of the Rivanna River and its tributaries through community involvement, conservation, education, recreation, restoration and water quality monitoring and reporting.

PROGRAMS & PROJECTS

- Advocacy
- Education
- Kiosks
- Mapping & Posters
- Monitoring-Bacterial
- Monitoring-Benthic
- Rivanna Guardians
- River Stewards
- River Access Project
- Scheier Natural Area
- Scheier Education Center
- Science Advisory Committee

UPDATE

Last Year I shared with you our organizational goals and I'm delighted to tell you that we have met and exceeded every one of them.

1) Increased the number of volunteers and monitoring sites.

UPDATE

2) Achieved Level III Bacteria Monitoring – now using the same system as the State and Federal Agencies - Coli-ert System approved by the DEQ.

UPDATE

3) With this achievement RCA is the only nonprofit in Virginia (and to our knowledge the entire Chesapeake Bay Watershed) to be certified at this level for both Bacteria and Benthic Water Quality Monitoring.

UPDATE

4) Expanded the Science Advisory Committee to include representatives of the City, County and RWSA.

5) Moved to a new location (1150 River Road, Charlottesville), so that our staff and our laboratory are in the same location.

AWARDS

USDA/NRCS

1) Virginia's Earth Team Award

For Outstanding Volunteer Group (2017)

2) South East Region's Earth Team

Award For Outstanding Volunteer

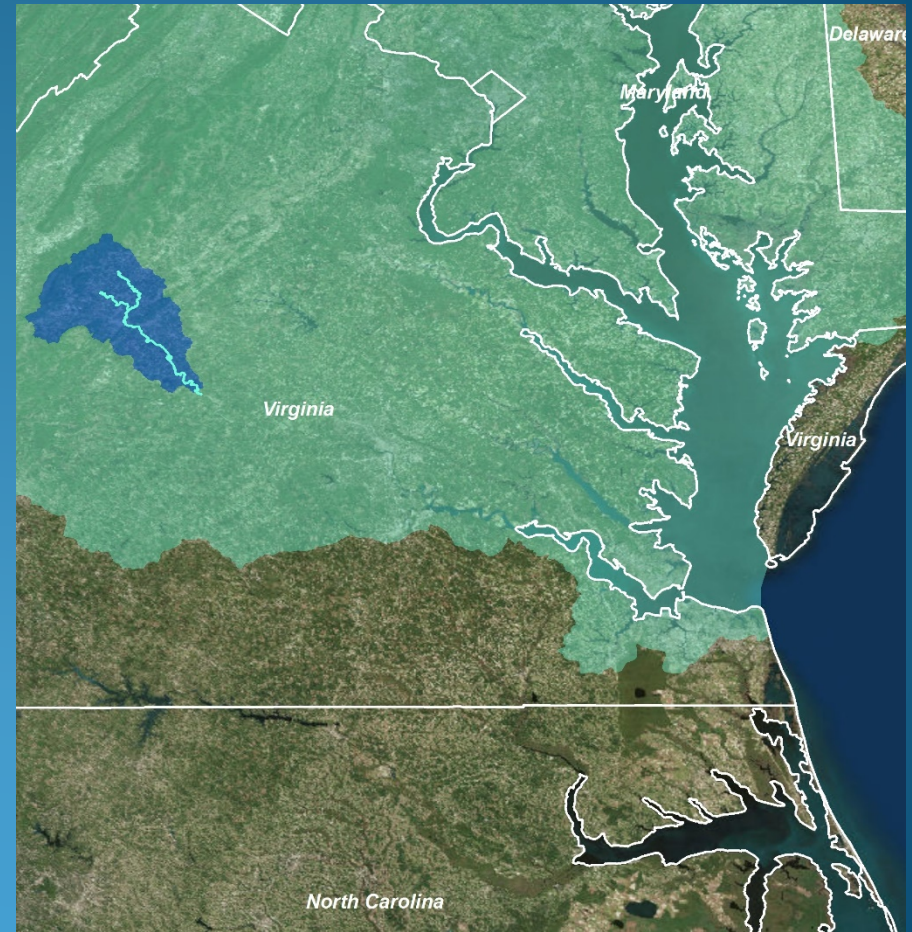
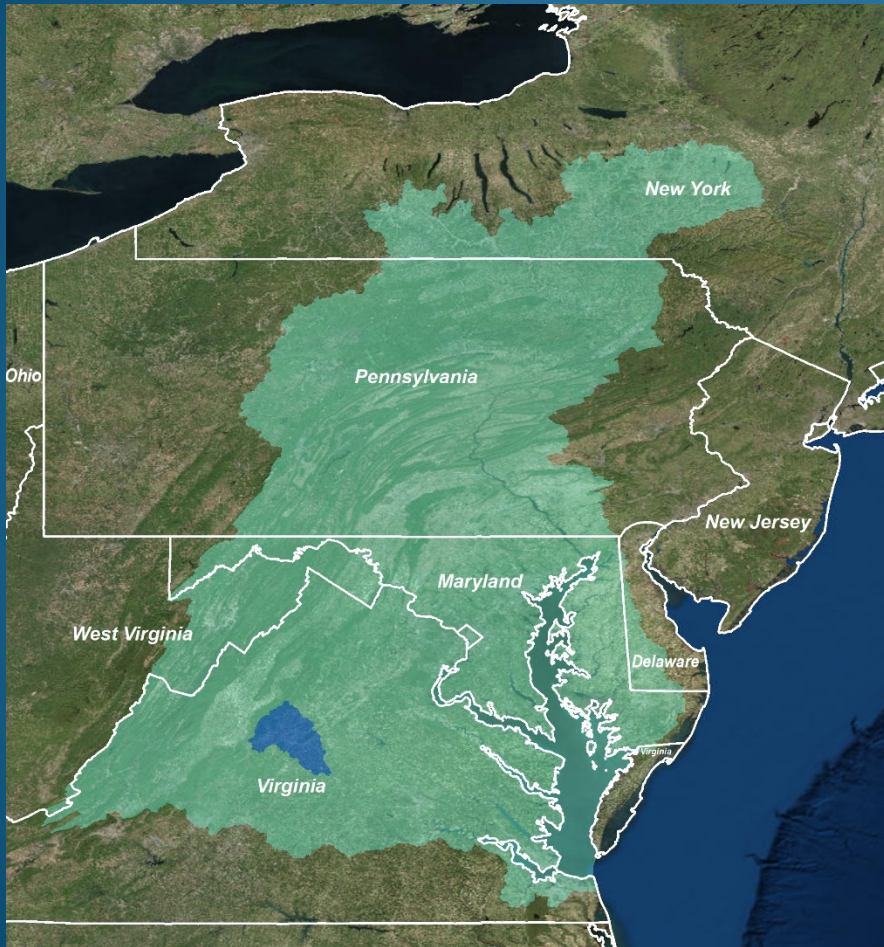
Group (2018)

AWARDS

AMERICAN FISHERIES SOCIETY'S

3) Virginia's Citizen Conservationist
of the Year awarded to the Executive
Director.

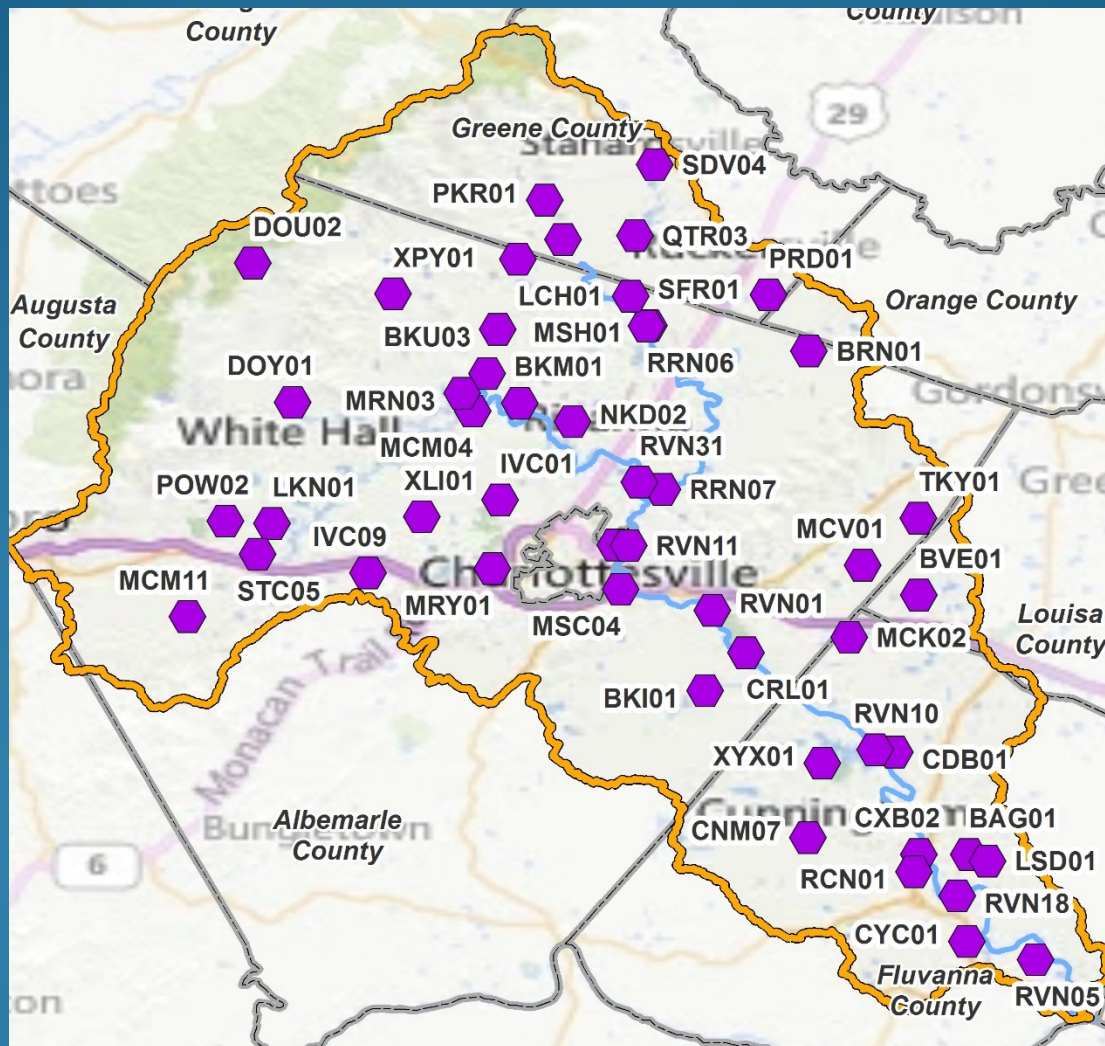
Rivanna River Watershed



Data Level Quality

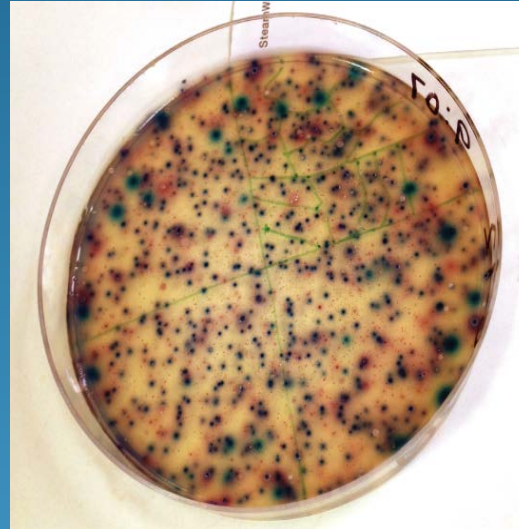
- RCA Bacteria and Benthic Monitoring Programs are certified at the highest VADEQ level (Level III), which means that RCA data can be used by local, state and federal government agencies for environmental decision-making.

Benthic Monitoring





Bacteria Monitoring



Rivanna Conservation Alliance - StreamWatch Citizen Science Program
Bacteria Monitoring Field & Lab Data Sheet

Site Code: P20 Site Name: Rivanna Riverview Park
Sample Date/Time: 8/11, 11:00 AM Date/Time delivered to field lab: 8/11, 12:00 PM

MONITOR NAMES	VOLUNTEER HOURS <small>Includes prep and travel</small>	Was water sample collected? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <small>(If not, please explain in comments section below)</small>
<u>Emma Watts</u>		
		Split sample collected? <input type="checkbox"/> YES <input type="checkbox"/> NO
		Sample placed on ice? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO

GENERAL OBSERVATIONS AND WEATHER CONDITIONS

Water Temperature: 27.2 °C Air Temperature: 30.6 °C Thermometer #: 12
Rainfall in last 24 hrs: 0 (in) - get from <http://www.wunderground.com/history/>

Weather Type (check any that apply):
☒ Sunny ☐ Overcast ☐ Partly Cloudy
☐ Fog/Haze ☐ Drizzle ☐ Intermittent Rain
☐ Rain ☐ Snow ☐ Other: _____

Water Color (check any that apply):
☐ Clear ☐ Muddy ☐ Iridescent Sheen
☒ Green ☒ Milky/Gray ☐ Brown/Black
☐ Ice ☐ Foamy ☐ Other: _____

Water Odor (check any that apply):
☒ Natural ☐ Gas/Oil ☐ Chlorine ☐ Rotten Egg
☐ Sewage ☐ Chemical ☐ Other: _____

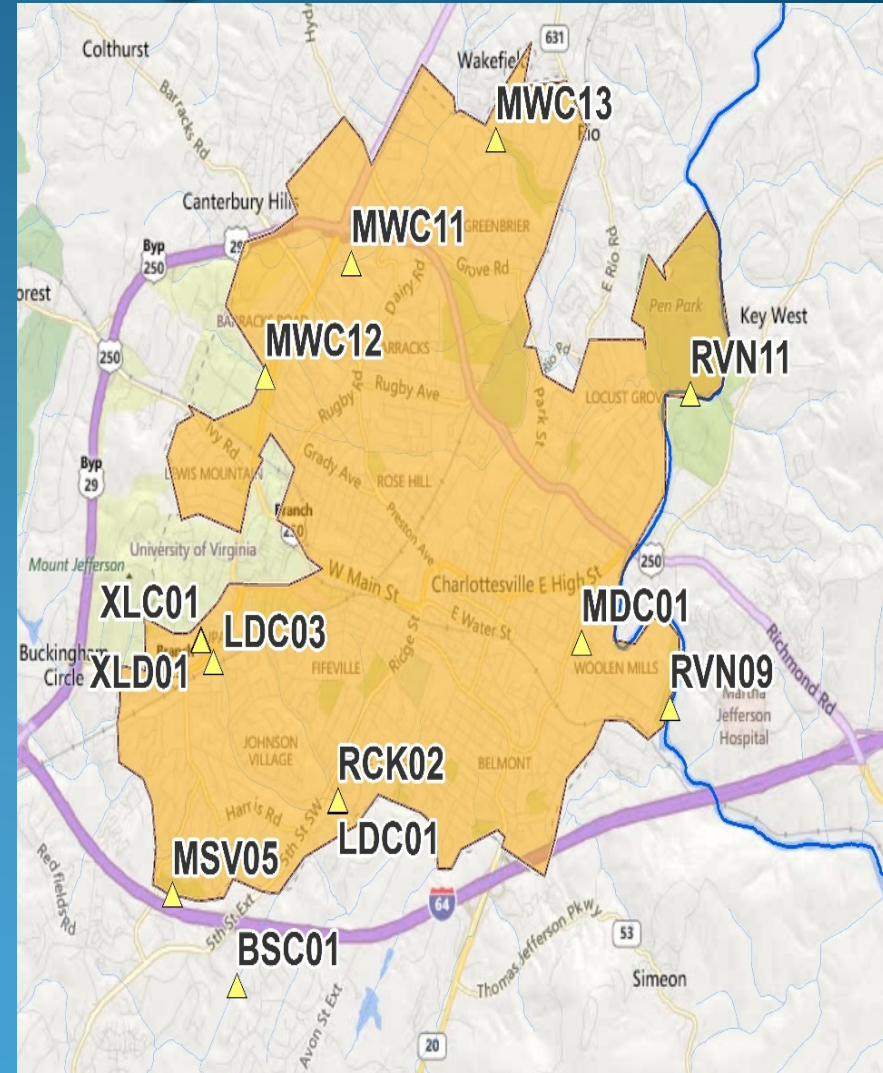
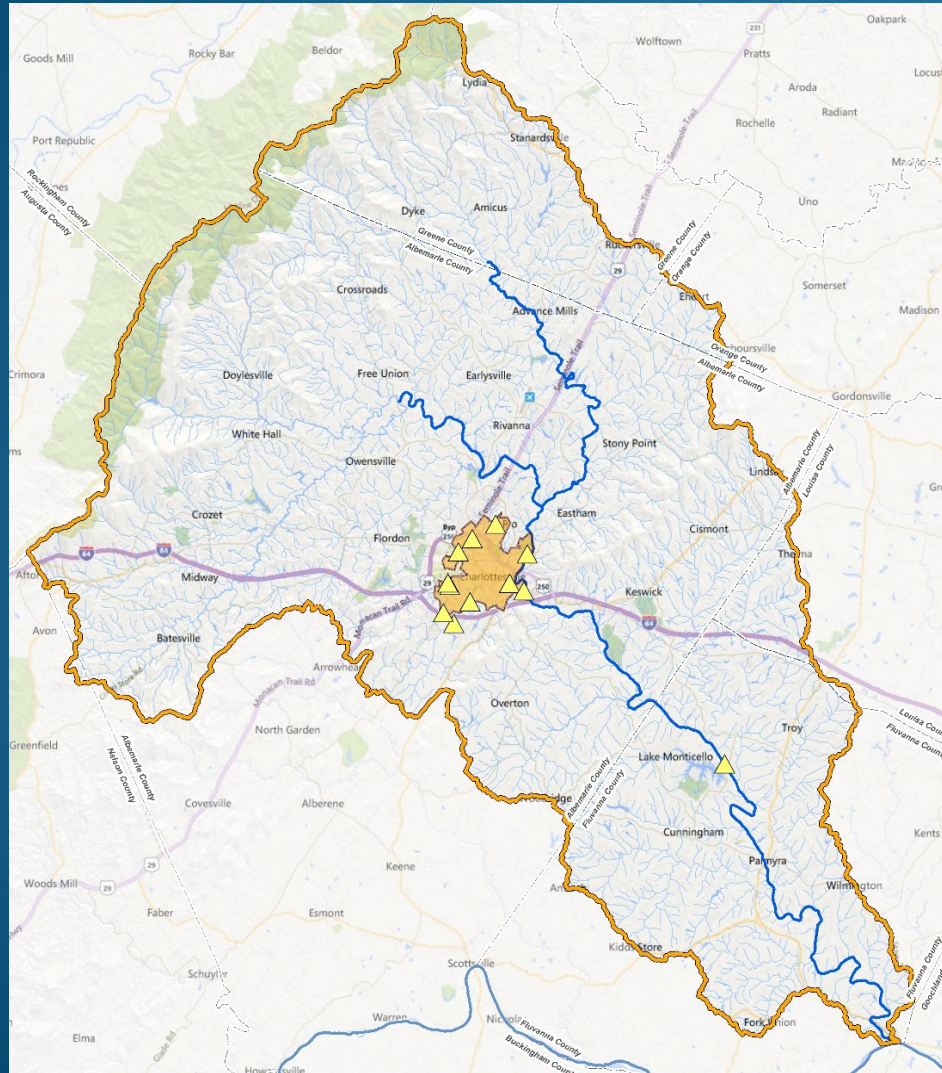
Stream Flow (compared to what is normal for this time of year):
☐ High ☒ Normal ☐ Low ☐ None

COMMENTS (e.g. wind, recent events, wildlife, dead fish, debris, anything unusual):
Hundreds of water beetles floating at the sampling spot; people were fishing upstream

Coliscan Easygel Plating and Counting Results: **FOR LAB USE ONLY**
 Incubation time: 22 hours (to nearest hour) Incubation temp: 100.4 °C (to nearest half degree)
 Amount of sample added to media bottle (use 3 ml): Sample 1: 3 ml (A1) Split 2: _____ ml (A2)
 Total # of E. coli colonies on plate (purple & navy): Sample 1: 0 (B1) Split 2: _____ (B2)
 Total Colonies of E. coli bacteria per 100 ml of water:
 1. Divide 100 by the ml of water used. 2. Multiply this quotient by the number of purple colonies counted
 Note: Round up results that end in a fraction. If zero colonies are counted, record result as if 1 colony was counted on the plate and use the less than (<) sign.
 Sample 1: $((100 / A1) \cdot B1) = < 3.3$ CFU/100ml Split 2: $((100 / A2) \cdot B2) =$ _____ CFU/100ml
 Turbidity: 4.63 NTU Turbidimeter last cal check value (Cal value/reading): _____ NTU
 Lab Comments (e.g. could not test due to ice in sample, Coliscan would not gel, incubator problems, etc): _____

Lab: _____ QC: _____ Data Entry: _____ Data Entry QC: _____
 Last Updated 1/20/2014

Bacteria Monitoring Sites



Bacteria Monitoring



RCA RIVER STEWARDS

Rivanna Stewards paddle the Rivanna watershed throughout the season to; document water quality, identify problem areas, highlight cultural, historic and scenic and wildlife.

RCA RIVER STEWARDS

The Stewards conduct weekly paddles between (March-November). They also lead community cleanup projects, coordinate river access improvements and investigate reported issues from the community.

RIVANNA VOLUNTEER GUARDIANS



THANK YOU!

PO BOX 1503
CHARLOTTESVILLE, VA
22902

434 97-RIVER
WWW.RIVANNARIVER.ORG

MEMORANDUM

**TO: RIVANNA WATER & SEWER AUTHORITY
BOARD OF DIRECTORS**

FROM: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: INTRODUCTION OF PROPOSED BUDGET FOR FY 2018-2019

DATE: MARCH 27, 2018

Please find enclosed the proposed FY 2018-2019 Budget for the Rivanna Water & Sewer Authority for the fiscal year beginning July 1, 2018. The proposed budget of \$33,277,000 includes \$17,505,000 for Operating expenses and \$15,772,000 for Debt Service charges. The Board will be asked at this meeting to adopt the attached Preliminary Rate Resolution which sets a public hearing on the proposed budget for Tuesday, May 22, 2018, and requests staff advertise the attached Public Notice showing the proposed changes to the wholesale rates to support the proposed budget. As required by Virginia law, staff will advertise the Public Notice twice in the local newspaper followed by a statutorily-required minimum 14-day period in advance of the scheduled public hearing. Adoption of the Preliminary Rate Resolution does not prejudice final Board actions on the budget, including amendments or changes to the proposed budget the Board may want to consider later. The Board's final deliberations and actions on the budget will not be requested until immediately after the public hearing, as required by the laws of the Commonwealth.

The proposed budget includes resources required to comply with the regulatory mandates, manage our infrastructure and meet debt service obligations. Wholesale water and wastewater services will be provided to the City of Charlottesville and the Albemarle County Service Authority (ACSA) in a collaborative, effective, and fiscally responsible manner. Costs to the City are proposed to increase 5% and 10.4% to the ACSA.

Highlights of the proposed budget include:

1. An increase of \$1,000,000 to support existing and planned water and wastewater programs to effectively address the service expectations of our growing community, including:
 - a. Strategic Plan Implementation
 - b. Reservoir Management
 - c. Urban Wastewater Improvements
 - d. Technology Systems Planning and Management
 - e. Personnel – Workforce Development
 - i. Merit pool of 3%
 - ii. Health insurance premium increases (10%)

- iii. Three additional positions
- 2. An increase of \$1,269,000 in Debt Service expenses to support our FY 2019-2023 CIP including:
 - a. Urban Drinking Water Management
 - Increasing drinking water treatment capacity at the Observatory plant
 - Renewal of our largest water treatment plant at South Rivanna
 - Replacing piping and pumping stations which convey raw water from the Ragged Mountain Reservoir to the Observatory Treatment Plant
 - Acquiring the right-of-way for a pipeline to connect the South Rivanna and Ragged Mountain Reservoirs
 - Installing a major water line from Avon Street to the Pantops area
 - b. Non-Urban Drinking Water Management
 - i. Increasing drinking water treatment capacity at the Crozet plant
 - ii. Modifying the Beaver Creek Dam to comply with new regulatory requirements

Staff will be happy to assist the Board or public with questions regarding the proposed budget.

Board Action Requested:

It is respectfully recommended that the Board of Directors adopt the attached Preliminary Rate Resolution, which calls for a public hearing on the budget during the Board's regular meeting on May 22, 2018, and authorizes the advertising of proposed wholesale rates to the public.

Attachments

PUBLIC NOTICE



RIVANNA WATER & SEWER AUTHORITY PUBLIC HEARING CONCERNING THE PROPOSED RATES FOR FY 2019, EFFECTIVE JULY 1, 2018

Public Hearing:

Rivanna Water & Sewer Authority will hold a Public Hearing on Tuesday, May 22, 2018, at 2:15 p.m. during the regular Rivanna Water & Sewer Authority Board of Directors meeting in the Rivanna Water & Sewer Authority Conference Room, Administration Building, 695 Moores Creek Lane, Charlottesville, Virginia. The public hearing is to consider the following wholesale water and wastewater rates and charges to the City of Charlottesville and Albemarle County Service Authority. Adopted rates may or may not be what are advertised.

URBAN RATE CENTERS			FY 2018	FY 2019	\$ Change	% Change
Operating Rates (\$ per 1,000 Gallons)						
	Operations	Water	\$ 1.969	\$ 2.070	\$ 0.101	5.13%
	Operations	Wastewater	1.951	2.146	0.195	9.99%
Debt Service Charges (\$ Monthly Charge)						
Water						
	Debt Service	CITY	\$ 160,039	\$ 181,008	\$ 20,969	13.10%
	Debt Service	ACSA	285,439	307,598	22,159	7.76%
Wastewater						
	Debt Service	CITY	\$ 392,841	\$ 408,260	\$ 15,419	3.92%
	Debt Service	ACSA	222,550	246,308	23,758	10.68%
OTHER RATE CENTERS (Monthly)			FY 2018	FY 2019	\$ Change	% Change
Crozet Water						
	Operations		\$ 76,278	\$ 79,782	\$ 3,504	4.59%
	Debt Service		57,623	82,964	25,341	43.98%
Scottsville Water						
	Operations		\$ 34,353	\$ 36,944	\$ 2,591	7.54%
	Debt Service		10,787	10,773	(14)	-0.13%
	Water Total		\$ 179,041	\$ 210,463	\$ 31,422	17.55%
Glenmore Wastewater						
	Operations		\$ 29,362	\$ 31,060	\$ 1,698	5.78%
	Debt Service		132	132	-	0.00%
Scottsville Wastewater						
	Operations		\$ 23,724	\$ 25,156	\$ 1,432	6.04%
	Debt Service		686	667	(19)	-2.77%
	Wastewater Total		\$ 53,904	\$ 57,015	\$ 3,111	5.77%
Total Monthly Other Rate Center Charges - ACSA			\$ 232,945	\$ 267,478	\$ 34,533	14.82%

The Rivanna Water & Sewer Authority (Rivanna) was created by the City of Charlottesville (City) and the County of Albemarle to supply and treat water for drinking and to provide wastewater treatment. The above fees represent Rivanna's fees and charges to the City and the Albemarle County Service Authority (ACSA) for these services and are not the same as the City and ACSA charges to individual residents and businesses. Debt Service covers capital related project costs and are different for the City and ACSA reflecting terms of contractual agreements.

The City and the ACSA distribute drinking water and collect wastewater from individual residents and businesses and charge retail rates that combine charges from the above schedule to reflect their service costs, including Rivanna's costs.

Information about the proposed budget may be obtained on the Rivanna website at rivanna.org. Please call 977-2970 ext. 0 or send e-mail to info@rivanna.org with any questions you may have.



695 MOORES CREEK LANE
CHARLOTTESVILLE, VA 22902-9016
TEL: 434.977.2970
FAX: 434.293.8858
WWW.RIVANNA.ORG

RESOLUTION

PRELIMINARY RATE SCHEDULE

WHEREAS, the Rivanna Water and Sewer Authority Board of Directors has reviewed the proposed budget and associated rate changes for Fiscal Year 2019; and

WHEREAS, Section 15.2-5136 (G) of the Code of Virginia requires the adoption of the preliminary rate schedule for notification of a public hearing prior to fixing rates for water and sewer charges; of which there is at least a 14 day requirement between the date of the last of two public notices and the actual date fixed for the public hearing;

NOW, THEREFORE, BE IT RESOLVED that the Rivanna Water and Sewer Authority hereby approves the preliminary rate schedule for purposes of notification of a public hearing to be held on May 22, 2018 at 2:15 p.m. during the regularly scheduled Board of Directors meeting.

Water Rates & Charges				Wastewater Rates & Charges			
Urban Area				Urban Area			
City & ACSA	Operating	\$2.070	Per 1,000 gallons	City & ACSA	Operating	\$2.146	Per 1,000 gallons
City	Debt Service	\$181,008	Per month	City	Debt Service	\$408,260	Per month
ACSA	Debt Service	\$307,598	Per month	ACSA	Debt Service	\$246,308	Per month
Crozet Water				Glenmore Wastewater			
ACSA	Operating & Debt Service	\$162,746	Per month	ACSA	Operating & Debt Service	\$31,192	Per Month
Scottsville Water				Scottsville Wastewater			
ACSA	Operating & Debt Service	\$47,717	Per month	ACSA	Operating & Debt Service	\$25,823	Per month

Proposed Budget

Fiscal Year 2018 – 2019



Presented by:
Bill Mawyer, Executive Director
March 27, 2018

Accomplishments in FY 2018

- Completed:
 - Granular Activated Carbon Project
 - Odor Control Project
 - Strategic Plan
 - Classification and Compensation Study
 - Recruitments for 17 positions
 - Improved staff credentials: 4 Water Operators increased licenses

Looking Ahead to FY 2019

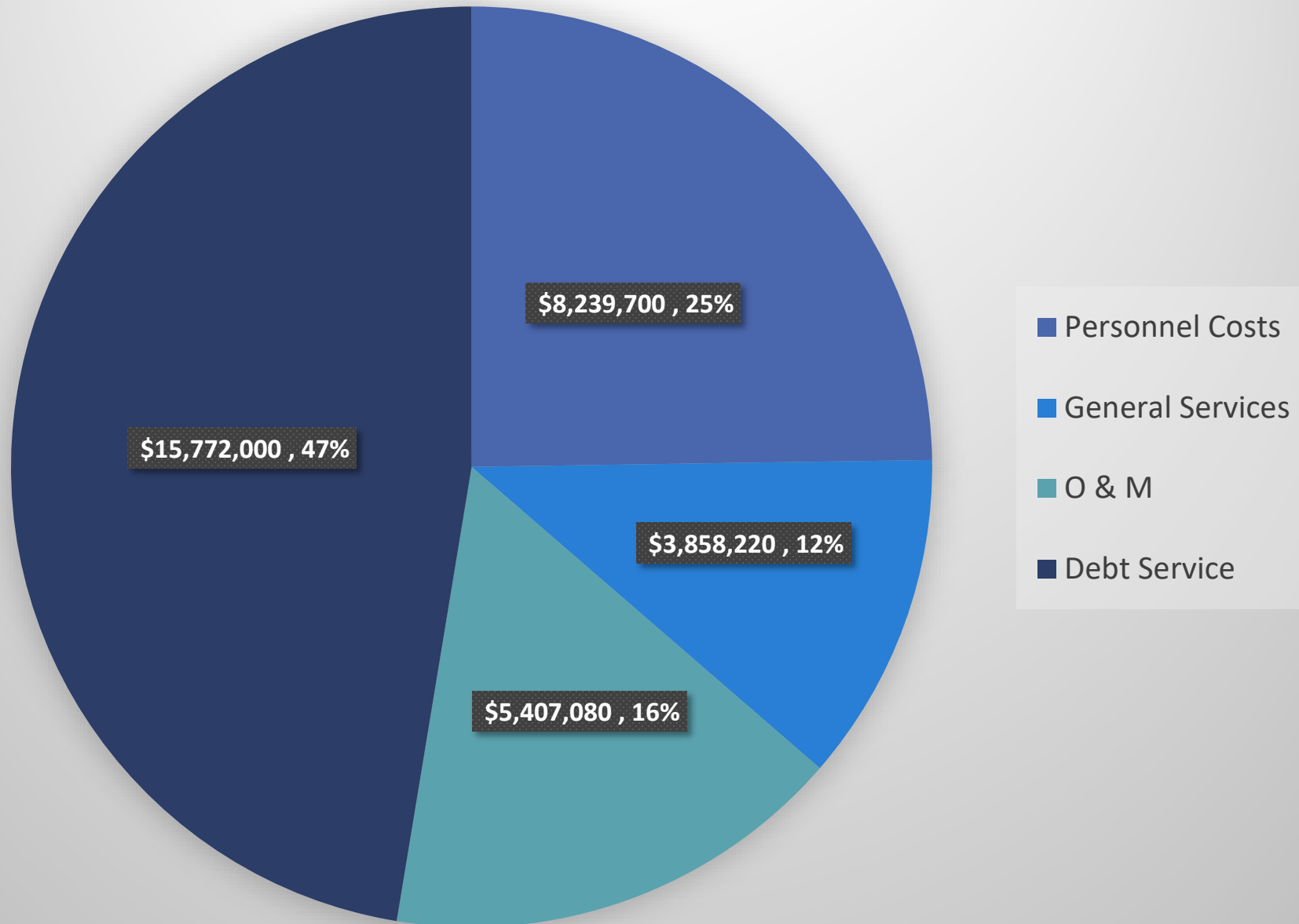
- Implement our Strategic Plan
- Continue Major Projects
 - S. Rivanna to RMR Pipeline Right-of-Way
 - Avon to Pantops Water Line
 - Water Treatment Plant Improvements
 - S. Rivanna and Observatory
 - Crozet Drinking Water Master Plan and Projects
 - Water Treatment Plant Upgrade, Water Pump Station Upgrade, WW Flow EQ Tank, Beaver Creek Dam Modifications

RWSA Assets: \$306 million

- 5 Water Supply Reservoirs: 3.4 billion gallons
- 5 Water Treatment Plants
 - 3 Urban Area: 18 MGD
 - 2 Rural Area: 1.25 MGD
- 4 Wastewater Treatment Plants
 - 1 Urban Area: 15 MGD
 - 3 Rural Area: 0.588 MGD
- 7 Wastewater Pump Stations
- 11 Water Pump Stations
 - 7 Raw Water
 - 4 Finished Water
- Water Distribution Pipe: 67 miles
- Wastewater Collection Pipe: 42 miles
- Stormwater Impoundment: Lickinghole Creek Basin
- Employees: 88

FY 2018-19 Budgeted Expenses

Total \$33,277,000



FY 2018 – 2019 Budget Summary

• \$33,277,000	\$2.3 M Increase	7.3%
• Operating	\$1 M Increase	6.1%
• Debt Service	\$1.3 M Increase	8.8%
• City Increase	\$681 K	5.0%
• ACSA Increase	\$1.6 M	10.4%

Operating Increase: \$1 M

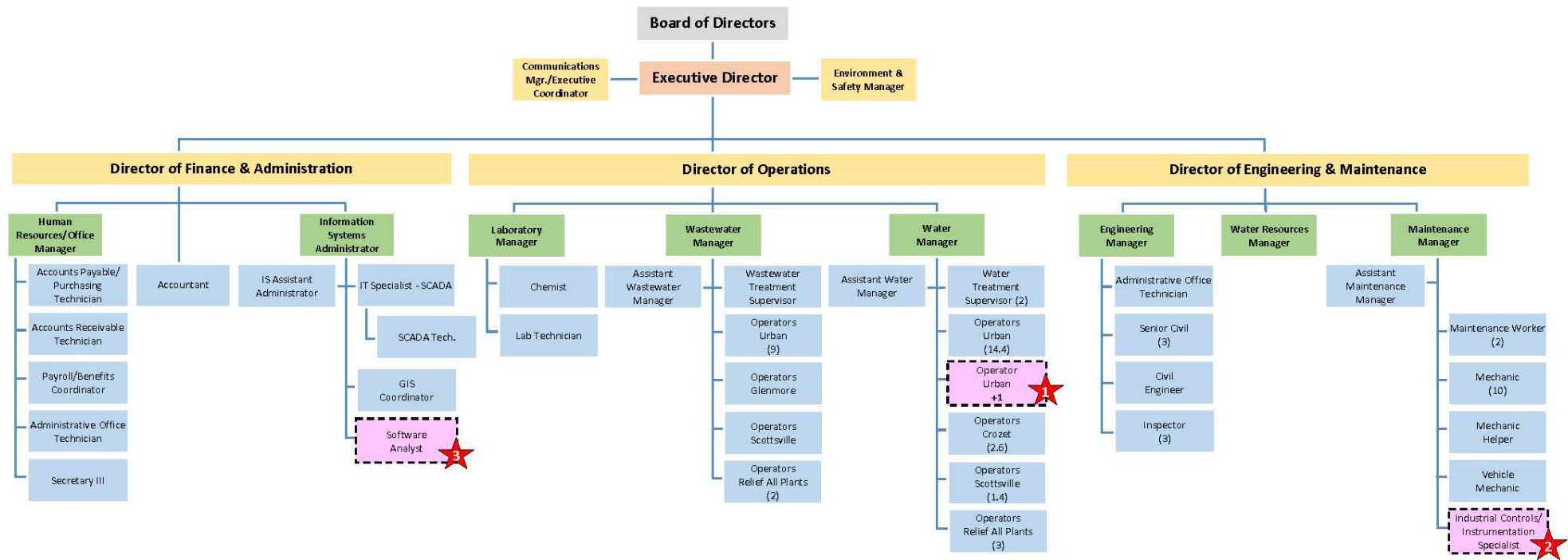
- Personnel
 - Merit Pool, 3% \$160 K
 - Additional Positions (3) \$200 K
 - Water Operator
 - Instrumentation Specialist
 - Software Analyst
 - Health Insurance, 10% \$97 K
 - *SPG: Workforce Development*
- Strategic Plan Implementation \$115 K
- Reservoir Management \$175 K
 - Bathymetric studies: RMR, SRR
 - *SPG: Environmental Stewardship*
- Urban Wastewater \$220 K
 - Rivanna SPS Utilities & Maintenance
 - Crozet Odor Control
 - *SPG: Operational Optimization*
- Technology Systems \$100 K
 - Master Plan
 - *SPG: Operational Optimization*
 - *SPG: Infrastructure and Master Planning*

Rivanna Water & Sewer Authority

Organizational Chart

Proposed FY 18-19 Budget

Revision No. 3



FTE Positions by Department

Department	Current FTE	Change	Proposed FTE
Administration	12	0	
IT/SCADA	4	+2	6
Engineering	12	-1	11
Laboratory	3	0	
Maintenance	16	+1	17
Wastewater	16	0	
Water	25.4	+1	26.4
Total	88.4	3	91.4

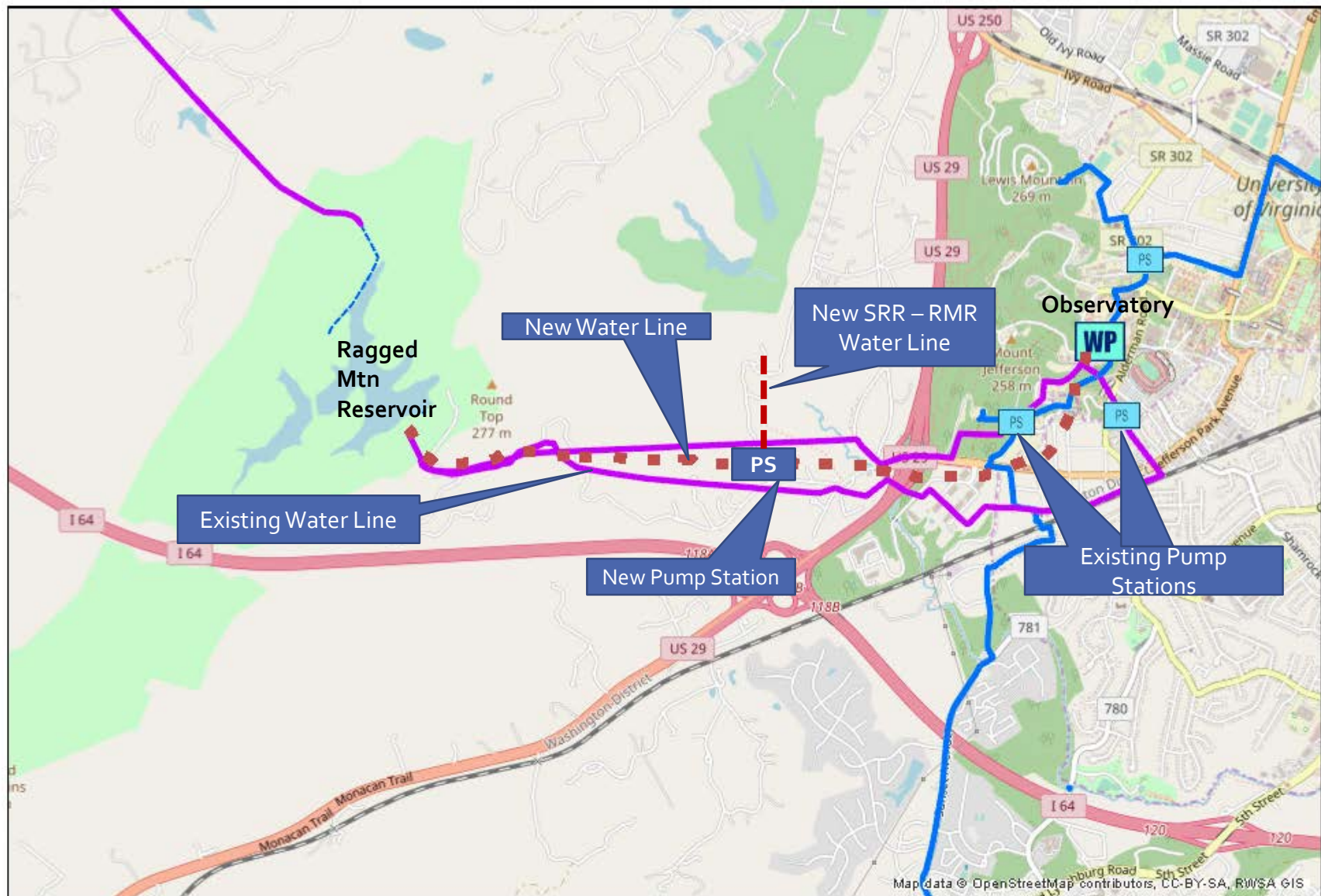


FY 2019 Proposed FTE Additions

1. Increase number of Urban Water Operators from 14.4 to 15.4 FTE.
2. Industrial Controls/Instrumentation Specialist, added to Maintenance Department.
3. Software Analyst, added to Information Systems Department.

Debt Service Increase: \$1.3 M

- Urban Water
 - Observatory WTP Upgrade
 - South Rivanna WTP Renovation
 - Avon – Pantops Water Line
 - RMR – OWTP Pipe and Pump Station Replacements
- Crozet Water
 - Finished Water Pump Station Replacement
 - Water Treatment Plant Upgrade
 - Beaver Creek Dam Modifications
- Urban Wastewater
 - Rivanna Sewer Pump Station and Tunnel
 - Odor Control Facilities



Proposed RMR to OWTP Pipeline



1 inch = 3,009 feet
0 1,050 2,100
Feet



695 Moores Creek Ln.
Charlottesville, VA 22902
434-977-2970
www.rivannagis.org

Data used in this map was provided by the RWSA, Albemarle Co. GDS, City of Charlottesville, ACSA, UVA FM, VGIN, and ESRI. Redistribution of this data without the permission of the RWSA Engineering Dept.

Date: 3/20/2018

Author: RWSA Staff

Questions?

FY 2019 Budget Proposal

	FY 2019	FY 2018	Increase	%
Total Budget	\$33,277,000	\$31,010,000	\$2,267,000	7.31%
Operating	\$17,505,000	\$16,507,000	\$998,000	6.05%
Debt Service	\$15,722,000	\$14,503,000	\$1,269,000	8.75%
Total	\$33,277,000	\$31,010,000		
Water	\$16,095,500	\$14,743,400	\$1,352,100	9.17%
Wastewater	\$17,181,000	\$16,266,600	\$914,400	5.62%
Total	\$33,277,000	\$31,010,000		

Charges to Customers

		FY 2019	FY 2018	Increase	%
ACSA	Urban Water	\$7,138,200	\$6,669,200	\$493,500	7.0%
	Urban Wastewater	\$6,521,500	\$5,810,400	\$703,500	12.2%
	Non-Urban Systems	\$3,209,700	\$2,795,300	\$413,300	14.8%
	ACSA Charges	\$16,869,400	\$15,274,900	\$1,610,300	10.4%
City	Urban Water	\$5,759,800	\$5,434,700	\$325,100	6.0%
	Urban Wastewater	\$8,610,400	\$8,254,700	\$355,700	4.3%
	City Charges	\$14,370,200	\$13,689,400	\$680,800	5.0%

Urban Rates & Charges

	FY 2019	FY 2018	Increase	%
Urban Operating Rates per 1,000 gallons:				
Water	\$2.070	\$1.969	\$0.101	5.13%
Wastewater	\$2.146	\$1.951	\$0.195	9.99%
Urban Debt Service Charges per Month:				
City				
Water	\$181,008	\$160,039	\$20,969	13.10%
Wastewater	\$408,260	\$392,841	\$15,419	3.92%
Total City	\$589,268	\$522,880		
ACSA				
Water	\$307,598	\$285,439	\$22,159	7.76%
Wastewater	\$246,308	\$222,550	\$23,758	10.68%
Total ACSA	\$553,906	\$507,989		

Non-Urban Charges (Monthly)

Water		FY 2019	FY 2018	Increase	%
Crozet	Operating	\$79,782	\$76,278	\$3,504	4.59%
Crozet	Debt Service	\$82,964	\$57,623	\$23,341	43.98%
Scottsville	Operating	\$36,944	\$34,353	\$2,591	7.54%
Scottsville	Debt Service	\$10,773	\$10,787	(\$14)	-0.13%
Total Non-Urban Water		\$210,463	\$179,041	\$31,422	17.55%

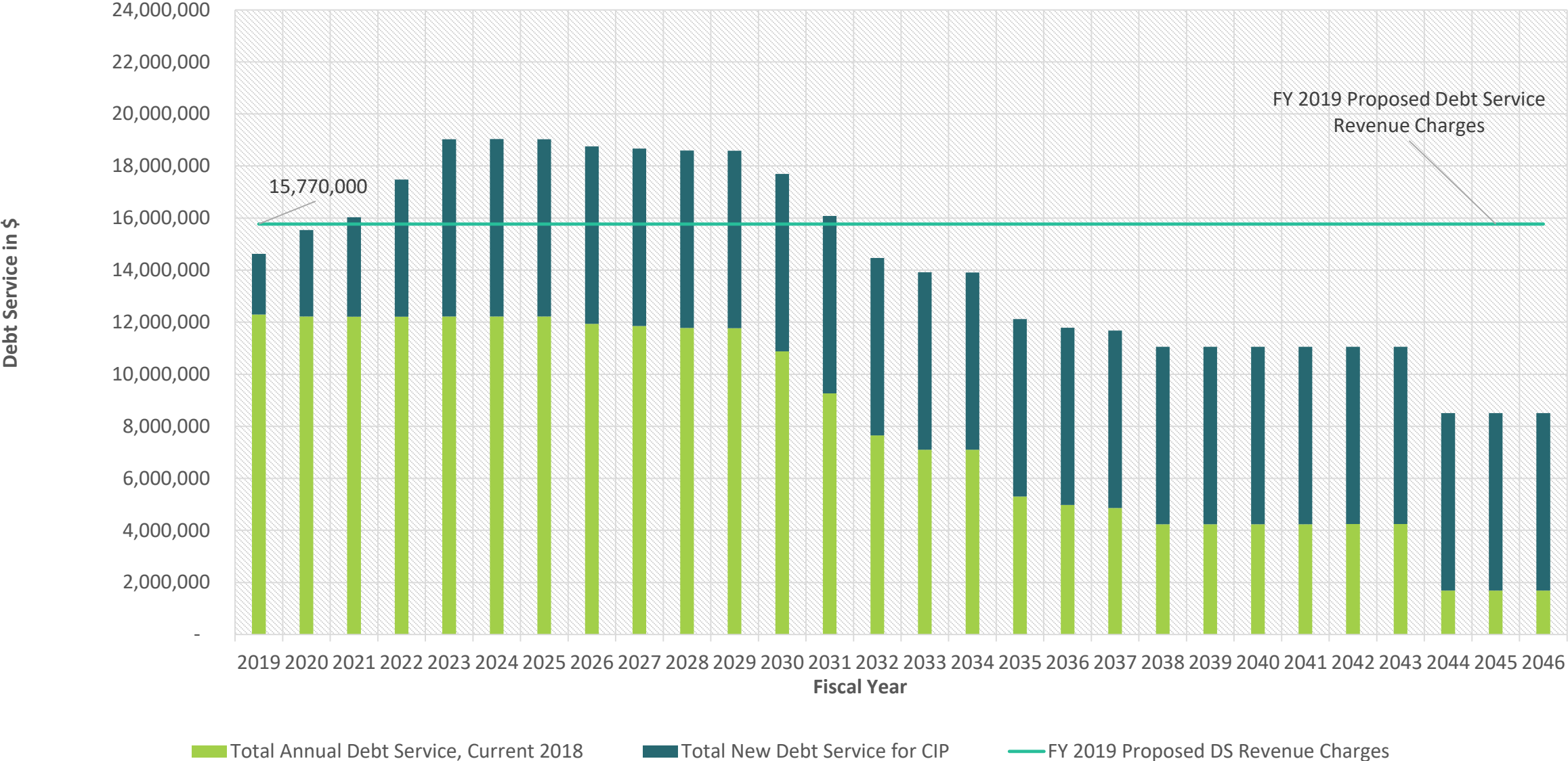
Wastewater		FY 2019	FY 2018	Increase	%
Glenmore	Operating	\$31,060	\$29,362	\$1,698	5.78%
Glenmore	Debt Service	\$132	\$132	\$0	0%
Scottsville	Operating	\$25,156	\$23,724	\$1,432	6.04%
Scottsville	Debt Service	\$667	\$686	(\$19)	-2.77%
Total Non-Urban Wastewater		\$57,015	\$53,904	\$3,111	5.77%

Revenue Summary

		FY 2019	FY 2018	% Change
<u>Charges to Customers</u>				
ACSA	Urban Water	\$7,138,200	\$6,669,200	7.0%
	Urban Wastewater	\$6,521,500	\$5,810,400	12.2%
	Non-Urban Systems	\$3,209,700	\$2,795,300	14.8%
ACSA Charges		\$16,869,400	\$15,274,900	10.4%
City	Urban Water	\$5,759,800	\$5,434,700	6.0%
	Urban Wastewater	\$8,610,400	\$8,254,700	4.3%
City Charges		\$14,370,200	\$13,689,400	5.0%
<u>All Other Revenues</u>				
Buck Mtn Charge		\$118,600	\$84,000	41.19%
Cell Leases		\$100,000	\$64,000	56.25%
Septage Acceptance		\$410,000	\$390,000	5.13%
Nutrient Credits		\$90,000	\$100,000	-10.00%
Stone Robinson		\$28,084	\$27,630	1.64%
County MOU – Septage		\$109,440	\$109,440	0.00%
Use of Reserves		\$300,000	\$664,000	-54.82%
All other revenues		\$882,155	\$606,630	45.42%
Total Other Revenues		\$2,038,279	\$2,045,700	-0.36%
Total Budgeted Revenues		\$33,277,879	\$31,010,000	7.31%

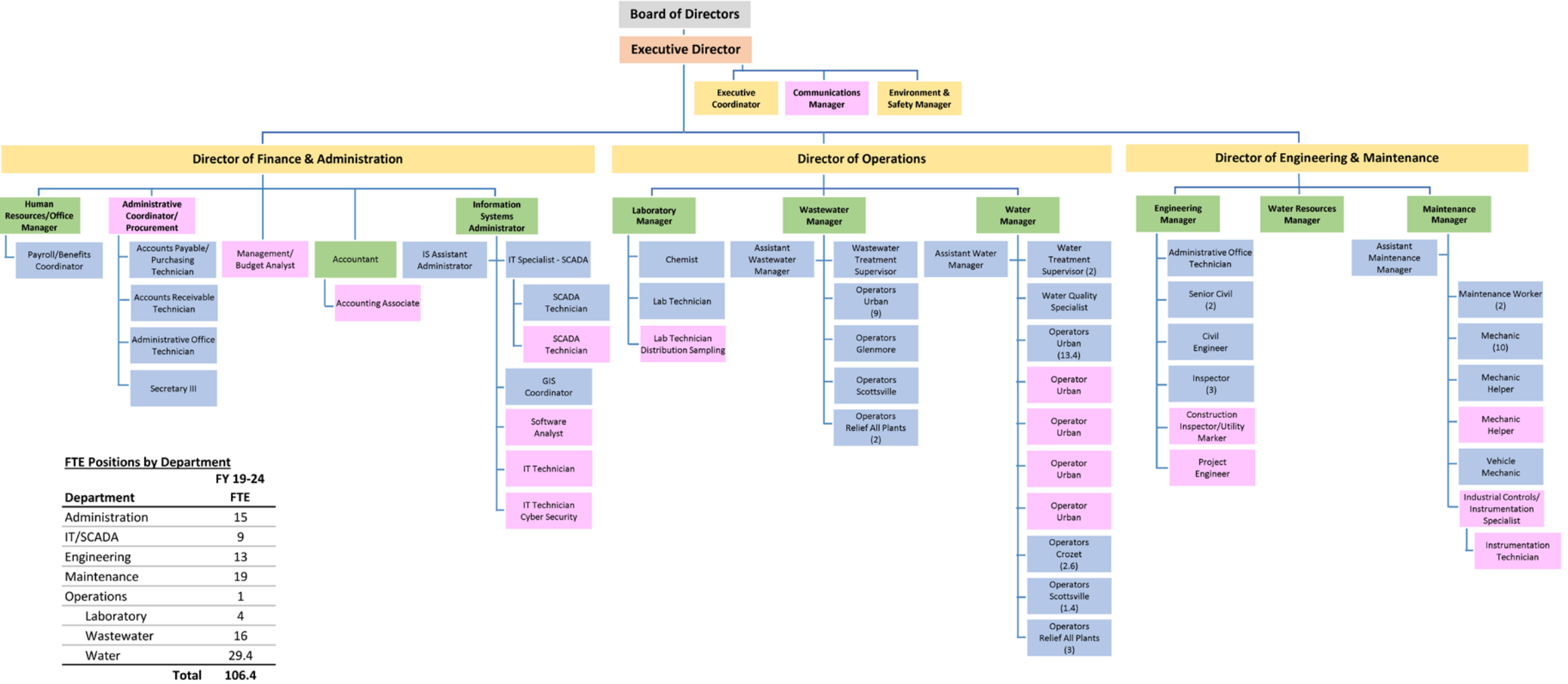
Current Debt Profile

Debt Service Profile FY 2019-2046



Rivanna Water & Sewer Authority
Organizational Chart

Six-Year Staffing Master Plan
Proposed Staffing Beginning FY 2019-2024
Six-Year Staffing Master Plan Complete



One employee per position unless otherwise noted in parenthesis ()



Fiscal Year 2018-2019 Budget Proposal

Board of Directors

March 27, 2018

RIVANNA WATER & SEWER AUTHORITY

FY 2019 Proposed Budget

Prepared: March 6, 2018

Adopted: Draft 4 - Staff Committee

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Budget Highlights

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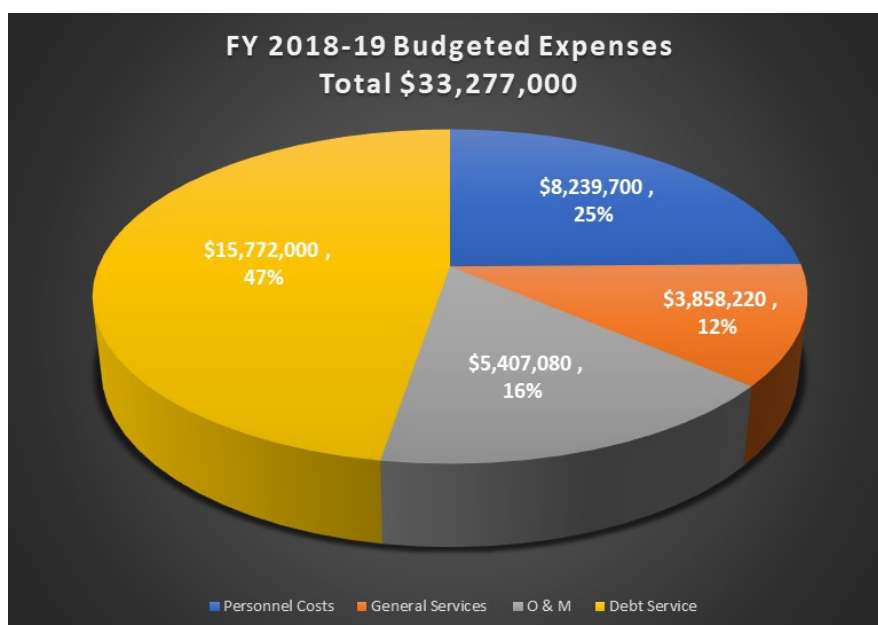
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**Rivanna Water and Sewer Authority
Proposed
FY 2018-2019 Budget**

Budget Overview

The Rivanna Water and Sewer Authority provides wholesale water supply, as well as drinking water and wastewater treatment services for the City of Charlottesville and the Albemarle County Service Authority (ACSA). An FY 2018-2019 budget of \$33,277,000 is proposed to strategically provide these water and wastewater services in a financially responsible manner for our customers and the community.

The proposed budget includes \$17,505,000 for Operating expenses and \$15,772,000 for Debt Service charges. Operating expenses include Personnel costs (staff salaries and benefits), General Services costs (professional fees, utilities, insurance, permits, and data and voice communications), and Operation and Maintenance costs (chemicals, building repairs, equipment maintenance, technology and communications). Debt Service charges represent 47% of our budget, and provide funding to construct and renew our major infrastructure including water and wastewater treatment plants, pumping stations, piping systems and reservoir dams.



In the Urban Rate Centers, Operating expenses are proposed to increase:

- \$0.101 per 1000 gallons (5.13%) for water
- \$0.195 per 1000 gallons (9.99%) for wastewater

Debt Service charges for the City are proposed to increase:

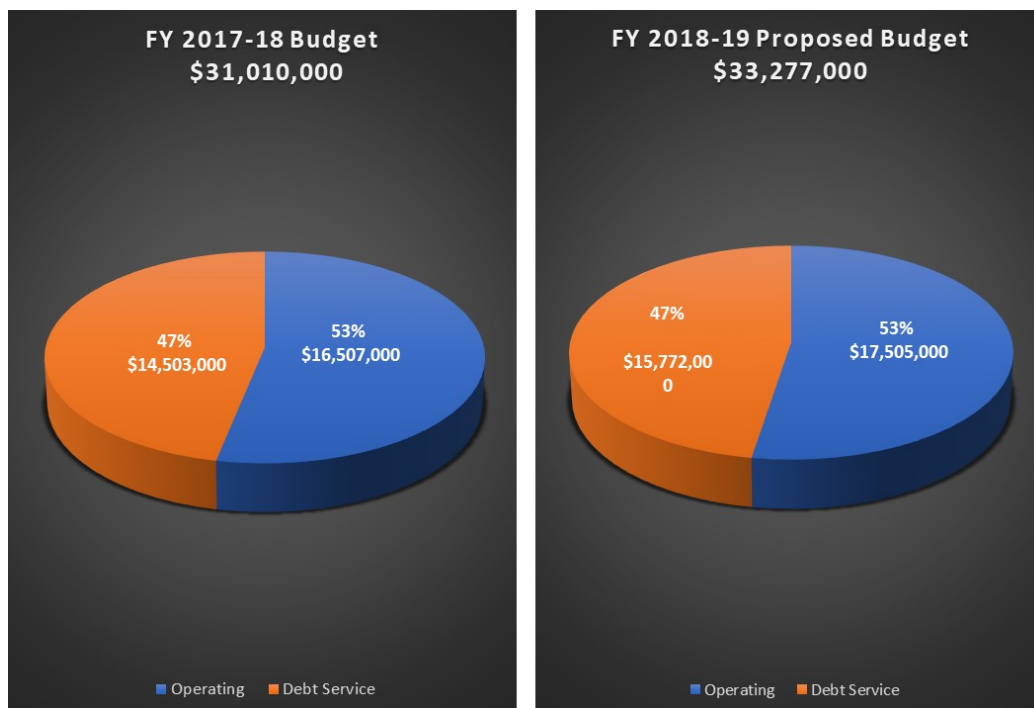
- 13.1 % for water
- 3.92 % for wastewater

Debt Service charges for the ACSA are proposed to increase:

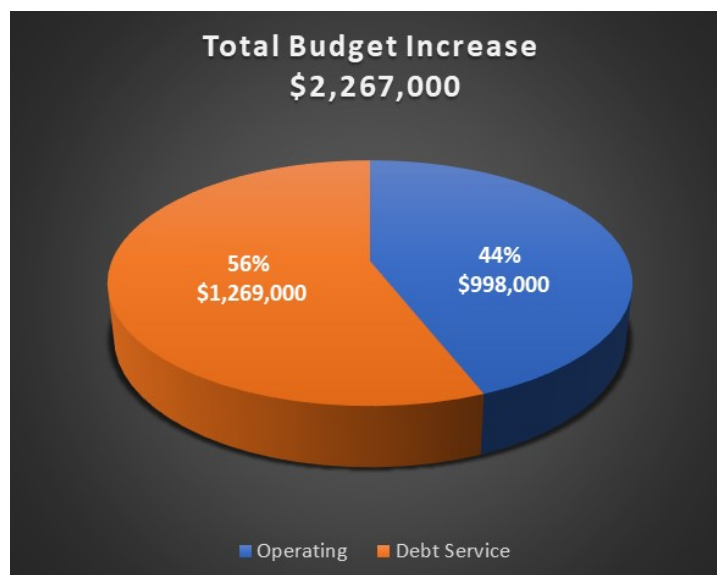
- 7.76% for water
- 10.68% for wastewater
- a composite Operating and Debt Service increase of 14.82% is proposed for water and wastewater services in the Non-Urban Rate Centers of the ACSA.

**Rivanna Water and Sewer Authority
Proposed
FY 2018-2019 Budget**

Overall, annual charges for the City are proposed to increase 5.0% (\$680,800), and 10.4 % (\$1,594,500) for the ACSA. A comparison of the FY 2018-2019 budget with the FY 2017-2018 budget is provided below:



The FY 2018-2019 budget proposes an increase of \$1 million in Operating expenses and an increase of \$1.3 million in Debt Service charges for a total budget increase of approximately \$2.3 million, or 7.4% above the FY 2017-2018 budget, as shown below:



Rivanna Water and Sewer Authority
Proposed
FY 2018-2019 Budget

Highlights

Proposed budget increases will support existing and planned water and wastewater programs to effectively address the service expectations of our growing community. A brief description of those programs follows:

1. Strategic Plan Implementation

Our Strategic Plan has been approved by both Authorities, and staff Goal Teams are developing specific strategies and tactics to achieve prioritized goals for the next year. Support will be required to complete many of the strategies.

2. Reservoir Management

Volume surveys (bathymetric surveys) of the Ragged Mountain and South Fork Rivanna Reservoirs will be completed to evaluate the Safe Yield of our urban water supply system. We continue to monitor reservoir water quality and complete treatments to reduce algae growth, if needed.

3. Urban Drinking Water Management

Water supply, redundancy and reliability will be improved by:

- Increasing drinking water treatment capacity at the Observatory plant
- Renewal of our largest water treatment plant at South Rivanna
- Replacing piping and pumping stations which convey raw water from the Ragged Mountain Reservoir to the Observatory Treatment Plant
- Acquiring the right-of-way for a pipeline to connect the South Rivanna and Ragged Mountain Reservoirs
- Installing a major water line from Avon Street to the Pantops area

4. Non-Urban Drinking Water Management

Water supply, redundancy and reliability will be improved by:

- Increasing drinking water treatment capacity at the Crozet plant
- Modifying the Beaver Creek Dam to comply with new regulatory requirements

5. Urban Wastewater Management

Additional electric power and maintenance costs will be required to operate the new Rivanna Sewer Pump Station, which has the capacity to pump 53 million gallons of wastewater per day. Support is also included to minimize odors in the piping system which conveys wastewater from Crozet to the Moores Creek Treatment Plant.

Rivanna Water and Sewer Authority
Proposed
FY 2018-2019 Budget

6. Technology Systems Planning and Management

Use of complex technology systems continues to expand and evolve as we leverage technology to achieve operational efficiencies. Additional support is programmed to complete a Technology Master Plan, which will provide strategic direction as we acquire and implement an Asset Management System and enhance the functionality of other technology systems including Supervisory Control and Data Acquisition, as well as Geographic Information Systems.

Personnel

a. Merit Pool

A 3% merit pool for our employees has been included in the budget, which is generally consistent with local and national trends.

b. Health Insurance

Based on recommendations from our insurance consultant, a 10% increase in health insurance premiums has been included in the FY 2019 budget. We will work with our health insurance provider (Anthem) in April 2018 to find the most cost-effective plan for the Authority and our employees.

c. Additional Positions in Priority Order:

1. Water Plant Operator – Additional licensed Operators are needed to maintain two Operators on every shift at the S. Rivanna and Observatory Water Treatment Plants, as required by the Virginia Department of Health, while also supporting the Crozet, N. Rivanna and Scottsville Water Treatment Plants. This additional position will provide increased reliability for treatment operations, safety for the staff, and security for our facilities.
2. Instrumentation Specialist – An instrumentation position is needed to maintain the large number of sensor devices used to manage and monitor the flows and chemicals in our water and wastewater treatment processes and distribution systems. Water and wastewater metering systems require calibration and maintenance along with many of the instrumentation and metering requirements at the dams, pump stations, storage tanks, and other related facilities. Basic diagnostics and repairs of industrial controls, preventative maintenance specific to metering and industrial control practice, and managing instrument service contractors will be some of the duties of this position.
3. Software Analyst – Current IT personnel are heavily involved in Supervisory, Control and Data Acquisition (SCADA) software, hardware and network communications with a need for more specialized skill set and end user support. The number of technology systems used by the Authority is significant and growing. Better communication and information delivery systems and platforms for employee information networks, asset management systems, front-end enterprise-wide and business systems (largely performed by finance staff), records management systems, and GIS integrations have reached a technical complexity requiring dedicated and specialized skill sets for support.

Rivanna Water and Sewer Authority

Proposed FY 2018-2019 Budget

Actual Water and Wastewater Flows

Actual water and wastewater wholesale flows are factors used to calculate the Urban Area operation rates and charges. The estimated wholesale flows will decrease for FY 2019 budgeted levels for both Urban Water and Wastewater by 1 % each, which is consistent with the ten-year trend.

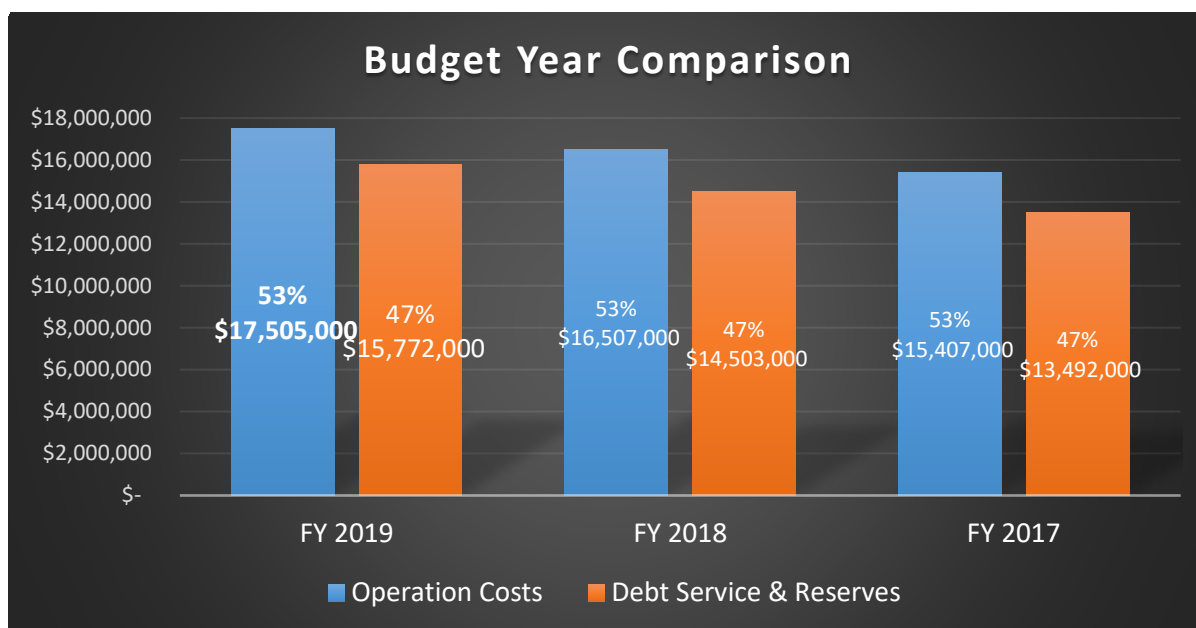
The other impact actual flows have on the charges to our customers is the allocation of wastewater costs between the City and ACSA for the Urban Area. These allocations are computed using retail flows reported by the City and ACSA. Based on FY 2017 actual retail flow data, the allocation for Urban Wastewater flow shifted two percentage points between the two customers, while the allocation for Urban Water flows shifted one percentage point for budget purposes as shown below.

Allocation of flows (based on retail flows):

	<u>FY 2019</u>	<u>FY 2018</u>
City Wastewater	51%	53%
ACSA Wastewater	49%	47%
City Water	51%	52%
ACSA Water	49%	48%

Revenues & Expenses

The Authority's overall ratio of Operating expenses and Debt Service costs are similar to last year with Operating expenses representing roughly 53% of the total budget and Debt Service costs being 47% of the total, as shown below:

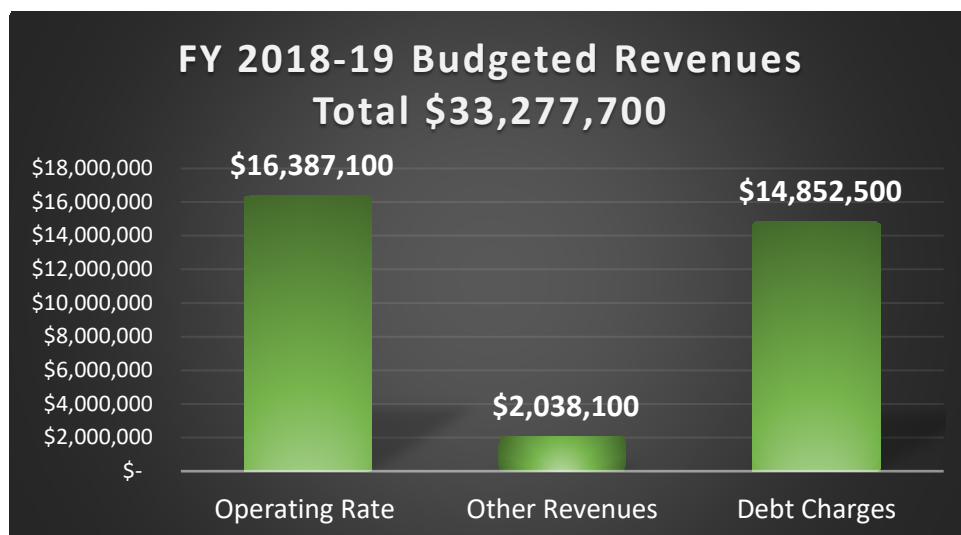


The Authority's annual Debt Service expenses are estimated to increase \$1,269,000 over the current year to support recent and future major projects including the Rivanna Sewer Pump Station, Odor Control

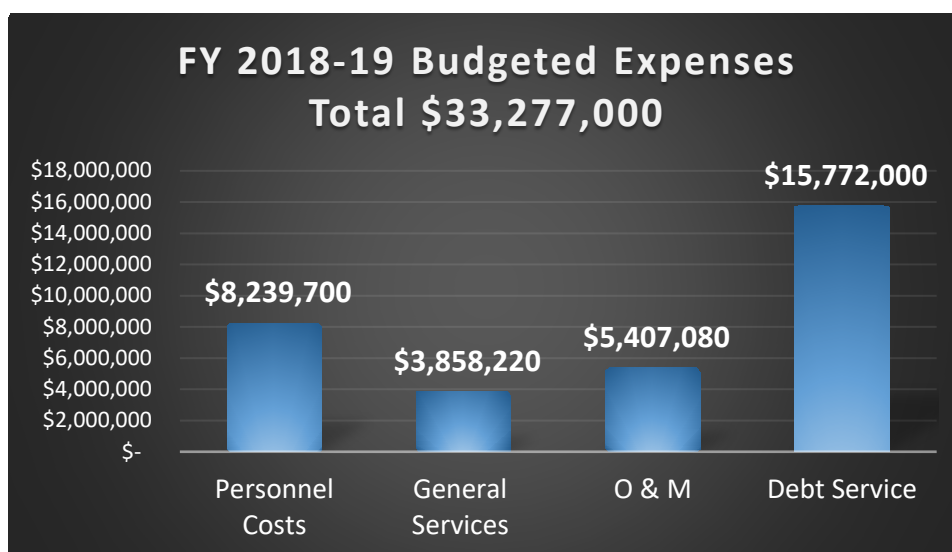
**Rivanna Water and Sewer Authority
Proposed
FY 2018-2019 Budget**

Facilities, Water Treatment Plant Upgrades and Water Line Installations. This is following an increase of \$1,011,000 in FY 2018 and \$701,000 in FY 2017.

Revenues for FY 2019 are driven by Operating Rate revenues of \$16,387,100 and Debt Service charges of \$14,852,500. Other non-customer revenues are anticipated to generate \$2,038,100.



Expenses are largely driven by three major categories. Debt Service costs related to capital expenses are \$15,772,000. Personnel and Benefit costs are the second largest expense with \$8,239,700 in estimated costs. General Service costs, which includes professional fees, utilities, insurance, permits, and data and voice communications are anticipated to cost \$3,858,220. All other costs for Operations and Maintenance, which includes chemicals, building repairs, equipment maintenance, IT/SCADA, supplies and materials will total approximately \$5,407,080.



A summary of the major cost changes compared to last year follows, and a detailed line-by-line comparison is provided in **Appendix 8** for the Authority as a whole.

Rivanna Water and Sewer Authority
Proposed
FY 2018-2019 Budget

	<u>Line Item</u>	<u>Notable Items</u>	<u>Budget Change over Prior year</u>
<u>Personnel cost in general</u>			
• Merit of 3.0%	11000		\$ 160,800
• Personnel/Position Changes:			
3 new positions (Software Analyst, Water Operator, Instrumentation Tech)	11000		\$ 151,000
Intern Program Funding	11000		\$ 10,000
Benefit costs related to Personnel Changes	11XXX		\$ 55,125
• Overtime & Holiday Pay Increase	11010		\$ 49,700
• Health care benefit Premium Renewal 10% increase	12020		\$ 96,790
• All other Personnel related changes			<u>\$ 38,785</u>
<i>Total change in personnel and benefit costs</i>			\$ 562,200
<u>General overall changes</u>			
• General Liability/Property Insurance - New facilities added	21100		\$ 21,650
• Governance and strategic support (Placeholder)	21430		\$ 115,000
\$5,000 each Lab, Maint. Eng. non-Urban			
\$15,000 each Urban Rate Center			
\$50,000 Admin.			
<u>Urban Water</u>			
• Engineering Services - Operational Support GAC	20300	\$ 40,000	
Lead and Copper Evaluations	20300	30,000	
RMD / 64 / SHD Inspections	20300	6,250	
Tank Inspections (Avon, Obs, SR, Piney)	20300	33,000	
Bathymetric Study (RM-\$75K, SFRR-100K)	20300	175,000	
North Rivanna lagoon evaluation	20300	<u>40,000</u>	
Total FY 2019 Request		324,250	
FY 2018 Budget	20300	<u>(137,450)</u>	
		\$ 186,800	\$ 186,800
• Water Quality Mgt. - Rivanna Conservation Alliance	21250	\$ 15,000	
Monitoring report for mitigation	21250	15,000	
Source water protection	21250	10,000	
Mitigation maintenance	21250	<u>60,000</u>	
Total FY 2019 Request		100,000	
FY 2018 Budget	21250	<u>(75,000)</u>	
		\$ 25,000	\$ 25,000
• Instrumentation & Metering			
Instrumentation Contract Services	41600	\$ 43,800	
Wholesale Metering Calibration	41600	40,000	
Plant Metering Calibrations	41600	<u>8,000</u>	
Total FY 2019 Request		\$ 91,800	
FY 2018 Budget	41600	<u>(43,800)</u>	
		\$ 48,000	\$ 48,000

Rivanna Water and Sewer Authority
Proposed
FY 2018-2019 Budget

	<u>Line Item</u>	<u>Notable Items</u>	<u>Budget Change over Prior year</u>
<u>Crozet Water</u>			
• Chemicals - Reservoir treatments	41450		\$ 16,520
• General Other Maintenance - Lagoon cleaning	41700		\$ 10,000
<u>Urban Wastewater</u>			
• Utilities - trending higher & new P.S.	21400		\$ 120,000
• General Other - Crozet Int. costs are trending much higher	21400		\$ 100,000
• Building & Grounds - 3 year trend	41100		\$ 38,600
• Pipeline/Appurtenances - Clearing and Mowing	41350	\$ 45,950	
Flow Meter Replacements	41350	79,200	
Contingency for line breaks	41350	69,850	
		<u>\$ 195,000</u>	
		<u>(215,000)</u>	
		\$ (20,000)	\$ (20,000)
• Vehicle Replacement Fund (new trailers & spotter truck)	81300		\$ 20,500
<u>Administration</u>			
• Financial and Admin Services - Several Studies completed	20200		\$ (43,900)
• Eng. and Technical Services - Technology Master Plan	20300		\$ 100,000
• IT / SCADA - PLC Version control software	31150		\$ 17,500
• Building & Grounds - Office changes and maintenance costs increases	41100		\$ 22,500
• Equipment over \$5,000 - New UPS Systems main server facility	81250		\$ 15,000
• Vehicle Replacement Fund - vehicle count increased	81300		\$ 4,200
<u>Maintenance</u>			
• Vehicle Replacement Fund - newer equipment purchased	81300		\$ 10,000
<u>Laboratory</u>			
• Equipment over \$5,000 - New BOD Incubator and algae monitor	81250		\$ 70,000
<u>Engineering</u>			
• Engineering & Technical Services - Office space/sustainable energy study one time costs prior year	20300		\$ (100,000)
All other budget changes			\$ (341,077)
TOTAL INCREASE IN OPERATING COSTS	Appendix 8		\$ 998,500

Rivanna Water and Sewer Authority
Proposed
FY 2018-2019 Budget

Debt Service & Capital

Debt service needs for the Capital Improvement Plan (CIP) are included in the budget request for the coming year. The overall CIP increased \$16.8 million compared to last year. There were \$38.5 million in completed projects and approximately \$55.4 million in new projects or adjustments to existing projects. A more detailed look at the new and adjusted costs can be found in the proposed FY 2019 – FY 2023 CIP, which is a separate document and can be reviewed at <http://www.rivanna.org/financials-and-procurement/>.

The table below shows the changes in estimated project costs reflected in the CIP:

<u>Project Cost</u>	<u>2017-2021 Adopted CIP</u>	<u>Projects Completed</u>	<u>New or Additional Project Costs</u>	<u>2019-2023 Proposed CIP</u>	<u>Change \$</u>	<u>Change %</u>
Urban Water Projects	\$ 60,829,500	\$ (5,626,000)	\$ 33,409,000	\$ 88,612,500	\$ 27,783,000	46%
Urban Wastewater Projects	58,968,100	(32,359,750)	4,836,800	31,445,150	(27,522,950)	-88%
Non-Urban Projects	16,072,900	(557,500)	17,109,000	32,624,400	16,551,500	51%
Total Project Cost Estimates	\$ 135,870,500	\$ (38,543,250)	\$ 55,354,800	\$ 152,682,050	\$ 16,811,550	11%

The Authority has programed into the FY 2019 budget charges that fund the additional debt service anticipated by the proposed CIP. Cumulatively, the Authority has built 38% of future debt service costs into the rates for all rate centers for FY 2019. This is done by using the CIP as a guide for future debt needs to include an average charge increase over that 5 year period. This helps to prevent the large spikes in charges for any given year in which new debt is actually issued - effectively leveling the impact on charges. For example, Urban Water current charges have nearly **37%** of the needed future debt service revenues already built into the charges to cover the total needed for the next five years (\$3.8 million in annual debt service is estimated to be needed in the next 5 years, and \$1.4 million will already be programmed into the charges). This would require the remaining \$2.4 million to be included in a debt service charge increase over the next five years to fund the Water projects within the CIP.

Next Five Years			
	<u>Annual Estimated NEW Debt Service related to 5-year CIP New Debt</u>	<u>New Debt Service Cost built into FY 2019 Rates</u>	<u>Percentage of Debt Service in proposed FY 2019 Rates</u>
Urban Water	\$ 3,827,400	\$ 1,410,675	36.9%
Urban Wastewater	1,196,000	426,200	35.6%
Rural Rate Centers	1,791,700	571,300	31.9%
	\$ 6,815,100	\$ 2,408,175	35.3%

Rivanna Water and Sewer Authority

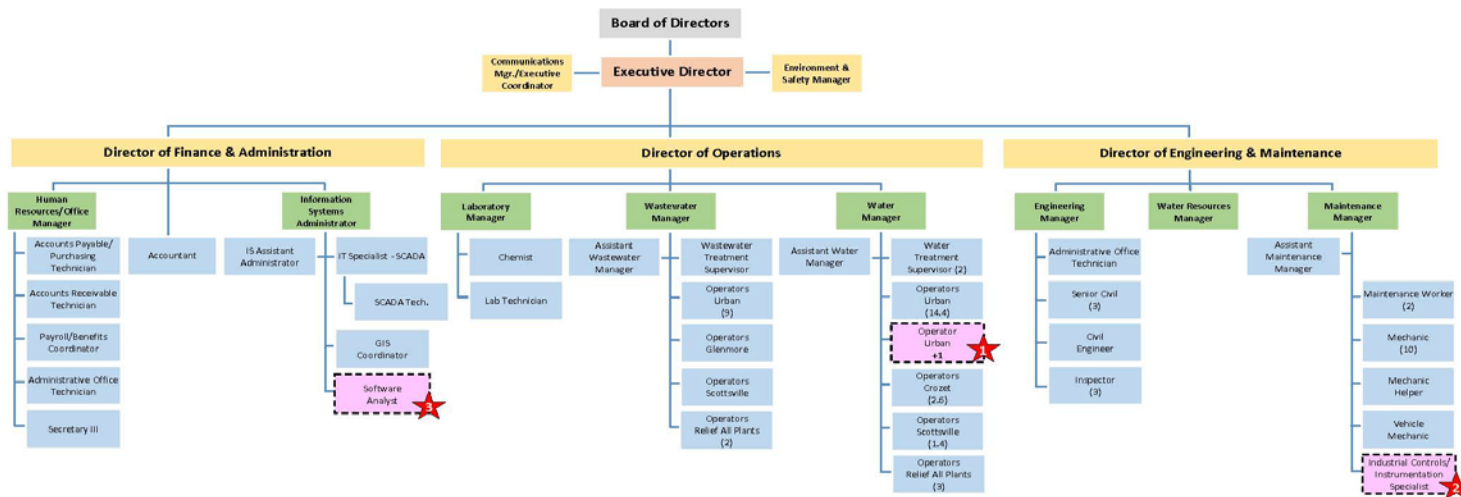
Proposed FY 2018-2019 Budget

Proposed FY 2018-2019 Organization Chart

Rivanna Water & Sewer Authority Organizational Chart

Proposed FY 18-19 Budget

Revision No. 3



FTE Positions by Department

Department	Current FTE	Change	Proposed FTE
Administration	12	0	
IT/SCADA	4	+2	6
Engineering	12	-1	11
Laboratory	3	0	
Maintenance	16	+1	17
Wastewater	16	0	
Water	25.4	+1	26.4
Total	88.4	3	91.4



FY 2019 Proposed FTE Additions

1. Increase number of Urban Water Operators from 14.4 to 15.4 FTE.
2. Industrial Controls/Instrumentation Specialist, added to Maintenance Department.
3. Software Analyst, added to Information Systems Department.

One employee per position unless otherwise noted in parenthesis ()

Budget Details

Pages 1 - 64

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Departmental Summary of Revenues and Expenses

Summary of Revenues

	FY 2018	FY 2019	\$ Change	% Change
Operations Revenues				
Urban Water	\$ 6,846,000	\$ 7,117,000	271,000	3.96%
Crozet Water	969,000	989,000	20,000	2.06%
Scottsville Water	429,000	444,000	15,000	3.50%
Urban Wastewater	7,215,000	7,818,000	603,000	8.36%
Glenmore Wastewater	353,000	373,000	20,000	5.67%
Scottsville Wastewater	285,000	302,000	17,000	5.96%
Administration	410,000	462,000	52,000	12.68%
Maintenance	-	-	-	-
Lab	-	-	-	-
Engineering	-	-	-	-
Total	\$ 16,507,000	\$ 17,505,000	\$ 998,000	6.05%
Debt Service Revenues				
Urban Water	\$ 5,467,000	\$ 6,185,000	718,000	13.13%
Crozet Water	696,000	1,004,000	308,000	44.25%
Scottsville Water	131,000	133,000	2,000	1.53%
Urban Wastewater	8,198,000	8,438,000	240,000	2.93%
Glenmore Wastewater	2,000	3,000	1,000	50.00%
Scottsville Wastewater	9,000	9,000	-	0.00%
Total	\$ 14,503,000	\$ 15,772,000	\$ 1,269,000	8.75%
Total Revenues	\$ 31,010,000	\$ 33,277,000	\$ 2,267,000	7.31%

Summary of Expenses

	FY 2018	FY 2019	\$ Change	% Change
Operations Expenses				
Urban Water	\$ 4,855,000	\$ 4,927,000	72,000	1.48%
Crozet Water	782,000	782,000	-	0.00%
Scottsville Water	311,000	314,000	3,000	0.96%
Urban Wastewater	4,835,000	5,177,000	342,000	7.07%
Glenmore Wastewater	261,000	272,000	11,000	4.21%
Scottsville Wastewater	200,000	209,000	9,000	4.50%
Administration	2,034,000	2,433,000	399,000	19.62%
Maintenance	1,345,000	1,518,000	173,000	12.86%
Lab	365,000	446,000	81,000	22.19%
Engineering	1,519,000	1,427,000	(92,000)	-6.06%
Total	\$ 16,507,000	\$ 17,505,000	\$ 998,000	6.05%
Debt Service Expenses				
Urban Water	\$ 5,467,000	\$ 6,185,000	718,000	13.13%
Crozet Water	696,000	1,004,000	308,000	44.25%
Scottsville Water	131,000	133,000	2,000	1.53%
Urban Wastewater	8,198,000	8,438,000	240,000	2.93%
Glenmore Wastewater	2,000	3,000	1,000	50.00%
Scottsville Wastewater	9,000	9,000	-	0.00%
Total	\$ 14,503,000	\$ 15,772,000	\$ 1,269,000	8.75%
Total Expenses	\$ 31,010,000	\$ 33,277,000	\$ 2,267,000	7.31%

Total Budgetary Surplus/ (Deficit)	\$ -	\$ -	\$ -
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These figures are rounded from the detail pages of this budget model and some immaterial differences will be present.

Summary of Itemized Rates

URBAN RATE CENTERS			FY 2018	FY 2019	\$ Change	% Change
<u>Operating Rates</u> (\$ per 1,000 Gallons)						
Operations	Water		\$ 1.969	\$ 2.070	\$ 0.101	5.13%
Operations	Wastewater		1.951	2.146	0.195	9.99%
<u>Debt Service Charges</u> (\$ Monthly Charge)						
<u>Water</u>						
Debt Service	CITY		\$ 160,039	\$ 181,008	\$ 20,969	13.10%
Debt Service	ACSA		285,439	307,598	22,159	7.76%
<u>Wastewater</u>						
Debt Service	CITY		\$ 392,841	\$ 408,260	\$ 15,419	3.92%
Debt Service	ACSA		222,550	246,308	23,758	10.68%
OTHER RATE CENTERS (Monthly)			FY 2018	FY 2019	\$ Change	% Change
<u>Crozet Water</u>						
Operations			\$ 76,278	\$ 79,782	\$ 3,504	4.59%
Debt Service			57,623	82,964	25,341	43.98%
<u>Scottsville Water</u>						
Operations			\$ 34,353	\$ 36,944	\$ 2,591	7.54%
Debt Service			10,787	10,773	(14)	-0.13%
Water Total			\$ 179,041	\$ 210,463	\$ 31,422	17.55%
<u>Glenmore Wastewater</u>						
Operations			\$ 29,362	\$ 31,060	\$ 1,698	5.78%
Debt Service			132	132	-	0.00%
<u>Scottsville Wastewater</u>						
Operations			\$ 23,724	\$ 25,156	\$ 1,432	6.04%
Debt Service			686	667	(19)	-2.77%
Wastewater Total			\$ 53,904	\$ 57,015	\$ 3,111	5.77%
Total Monthly Other Rate Center Charges - ACSA			\$ 232,945	\$ 267,478	\$ 34,533	14.82%

Summary of Charges to Customers

	<u>FY 2018</u>	<u>FY 2019</u>	<u>Change</u> <u>\$</u>	<u>Change</u> <u>%</u>
<u>City Charges From RWSA</u>				
Urban Water				
Operating Rate Charges	\$ 3,514,200	\$ 3,587,700	\$ 73,500	2.1%
Debt Service Charges	1,920,500	2,172,100	251,600	13.1%
	<u>\$ 5,434,700</u>	<u>\$ 5,759,800</u>	<u>\$ 325,100</u>	<u>6.0%</u>
Urban Wastewater				
Operating Rate Charges	\$ 3,540,600	\$ 3,711,300	\$ 170,700	4.8%
Debt Service Charges	4,714,100	4,899,100	185,000	3.9%
	<u>\$ 8,254,700</u>	<u>\$ 8,610,400</u>	<u>\$ 355,700</u>	<u>4.3%</u>
Total City Charges	<u>\$ 13,689,400</u>	<u>\$ 14,370,200</u>	<u>\$ 680,800</u>	<u>5.0%</u>

<u>ACSA Charges From RWSA</u>				
Urban Water				
Operating Rate Charges	\$ 3,243,900	\$ 3,447,000	\$ 203,100	6.3%
Debt Service Charges	3,425,300	3,691,200	265,900	7.8%
	<u>\$ 6,669,200</u>	<u>\$ 7,138,200</u>	<u>\$ 469,000</u>	<u>7.0%</u>
Urban Wastewater				
Operating Rate Charges	\$ 3,139,800	\$ 3,565,800	\$ 426,000	13.6%
Debt Service Charges	2,670,600	2,955,700	285,100	10.7%
	<u>\$ 5,810,400</u>	<u>\$ 6,521,500</u>	<u>\$ 711,100</u>	<u>12.2%</u>
Other Rate Centers				
Operating Charges	\$ 1,964,600	\$ 2,075,300	\$ 110,700	5.6%
Debt Service Charges	830,700	1,134,400	303,700	36.6%
	<u>\$ 2,795,300</u>	<u>\$ 3,209,700</u>	<u>\$ 414,400</u>	<u>14.8%</u>
Total ACSA Charges	<u>\$ 15,274,900</u>	<u>\$ 16,869,400</u>	<u>\$ 1,594,500</u>	<u>10.4%</u>

<u>RWSA Customer Revenue Charges</u>				
Operating Rate Revenue				
Urban Water	\$ 6,758,100	\$ 7,034,700	\$ 276,600	4.1%
Urban Wastewater	6,680,400	7,277,100	596,700	8.9%
Other Rate Centers	1,964,600	2,075,300	110,700	5.6%
	<u>\$ 15,403,100</u>	<u>\$ 16,387,100</u>	<u>\$ 984,000</u>	<u>6.4%</u>
Debt Service Charge Revenues				
Urban Water	\$ 5,345,800	\$ 5,863,300	\$ 517,500	9.7%
Urban Wastewater	7,384,700	7,854,800	470,100	6.4%
Other Rate Centers	830,700	1,134,400	303,700	36.6%
	<u>\$ 13,561,200</u>	<u>\$ 14,852,500</u>	<u>\$ 1,291,300</u>	<u>9.5%</u>
Total RWSA Customer Revenues	<u>\$ 28,964,300</u>	<u>\$ 31,239,600</u>	<u>\$ 2,275,300</u>	<u>7.9%</u>

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Water Rate Centers

Rivanna Water and Sewer Authority

Fiscal Year 2018-2019

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Urban Water Summary

FY 2018			FY 2019	Budget % Change
Budgeted FY 2018	Actual for 6 months	Projected 12 months	Proposed Budget	
Projected Flow (MGD)	9.403		9.309	-1.00%

Operations Budget

Projected Revenues

Operations Rate	\$	1,969			\$	2,070	5.13%
Revenue	\$	6,758,077	\$ 3,445,303	\$ 6,890,606	\$	7,034,788	4.09%
Lease Revenues		35,000	32,882	65,764		70,000	100.00%
Use of Reserves		40,000	23,156	40,000		-	-100.00%
Miscellaneous		7,000	-	-		-	-100.00%
Interest Allocation		6,300	6,682	13,364		12,000	90.48%
Total Operations Revenues	\$	6,846,377	\$ 3,508,023	\$ 7,009,734	\$	7,116,788	3.95%

Projected Expenses

Personnel Cost	\$	1,828,853	\$ 873,898	\$ 1,741,422	\$	1,903,778	4.10%
Professional Services		142,450	168,966	397,932		329,250	131.13%
Other Services and Charges		606,100	232,113	554,732		582,700	-3.86%
Communications		64,690	31,953	64,595		64,200	-0.76%
Information Technology		65,300	17,991	64,770		65,300	0.00%
Supplies		7,000	4,289	8,578		5,000	-28.57%
Operations and Maintenance		1,522,660	665,421	1,415,842		1,570,660	3.15%
Equipment Purchases		106,500	23,263	111,526		106,600	0.09%
Depreciation & Reserves		510,000	255,000	510,000		300,000	-41.18%
Subtotal Before Allocations	\$	4,853,553	\$ 2,272,894	\$ 4,869,397	\$	4,927,488	1.52%
Allocation of Support Departments		1,992,824	963,108	1,959,365		2,189,300	9.86%
Total Operations Expenses	\$	6,846,377	\$ 3,236,002	\$ 6,828,762	\$	7,116,788	3.95%

Operations Cost per 1,000 gallons	\$1.995	\$2.095	5.01%
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Debt Service Budget

Projected Revenue

Debt Service Rates	CITY	160,039		181,008		13.10%
	ACSA	285,439		307,598		7.76%
Debt Service Rate Revenue - CITY	\$	1,920,463	\$ 960,234	\$ 1,920,468	\$ 2,172,094	13.10%
Debt Service Rate Revenue - ACSA		3,425,267	1,712,634	3,425,268	3,691,177	7.76%
Trust Fund Interest		18,000	14,817	29,634	18,000	0.00%
Reserve Fund Interest		18,000	71,389	142,778	184,000	922.22%
Buck Mtn. Surcharge		84,000	63,200	126,400	118,600	41.19%
Lease Revenue		1,600	1,309	2,618	1,600	0.00%
Total Debt Service Revenue	\$	5,467,330	\$ 2,823,583	\$ 5,647,166	\$ 6,185,471	13.14%

Principal, Interest & Reserves

Total Principal & Interest	\$	4,242,130	2,121,065	\$ 4,242,130	\$	4,190,796	-1.21%
Reserve Additions - Interest		18,000	71,389	142,778		184,000	922.22%
Debt Service Ratio Charge		400,000	200,000	400,000		400,000	0.00%
Est. New Debt Service - CIP Growth		807,200	403,600	807,200		1,410,675	74.76%
Total Debt Principal and Interest	\$	5,467,330	\$ 2,796,054	\$ 5,592,108	\$	6,185,471	13.14%

Rate Center Summary

Total Revenues	\$	12,313,707	\$ 6,331,606	\$ 12,656,900	\$	13,302,259	8.03%
Total Expenses		12,313,707	6,032,056	12,420,870		13,302,259	8.03%
Surplus/(Deficit)	\$	-	\$ 299,550	\$ 236,030	\$	-	

Rivanna Water and Sewer Authority
Fiscal Year 2018-2019 Proposed Budget
Expense Detail

Rate Center: Urban Water

Object Code	Line Item	Adopted Budget FY 2017-2018	Current Year Activity		Proposed Budget FY 2018-2019	2018	2018
			Six Month Actual 12/31/2017	Projected Year end 6/30/2018		vs. 2019 Variance \$	vs. 2019 Variance %
10000	Salaries & Benefits						
11000	Salaries	\$ 1,198,452	\$ 553,605	\$ 1,107,210	\$ 1,200,800	\$ 2,348	0.20%
11010	Overtime & Holiday Pay	90,000	80,519	151,038	120,000	30,000	33.33%
12010	FICA	98,567	47,016	94,032	101,041	2,474	2.51%
12020	Health Insurance	238,792	99,147	198,294	267,140	28,348	11.87%
12026	Employee Assistance Program	300	153	306	300	-	0.00%
12030	Retirement	115,291	52,682	105,364	115,517	226	0.20%
12040	Life Insurance	15,700	6,953	13,906	15,730	30	0.19%
12050	Fitness Program	3,500	1,963	3,926	3,750	250	7.14%
12060	Worker's Comp Insurance	21,601	11,068	22,136	29,000	7,399	34.25%
	Subtotal	\$ 1,782,203	\$ 853,106	\$ 1,696,212	\$ 1,853,278	\$ 71,075	3.99%
13000	Other Personnel Costs						
13100	Employee Dues & Licenses	\$ 2,000	\$ 776	\$ 1,552	\$ 2,000	\$ -	0.00%
13150	Education & Training	17,850	7,638	15,276	21,700	3,850	21.57%
13200	Travel & Lodging	9,900	1,445	7,390	7,900	(2,000)	-20.20%
13250	Uniforms	15,400	8,589	17,178	15,400	-	0.00%
13325	Recruiting & Medical Testing	1,000	937	1,000	2,000	1,000	100.00%
13350	Other	500	1,407	2,814	1,500	1,000	200.00%
	Subtotal	\$ 46,650	\$ 20,792	\$ 45,210	\$ 50,500	\$ 3,850	8.25%
	Professional Services						
20100	Legal Fees	\$ 5,000	\$ 35,535	\$ 106,070	\$ 5,000	\$ -	0.00%
20200	Financial & Admin. Services	-	-	-	-	-	-
20250	Bond Issue Costs	-	-	-	-	-	-
20300	Engineering & Technical Services	137,450	133,431	291,862	324,250	186,800	135.90%
	Subtotal	\$ 142,450	\$ 168,966	\$ 397,932	\$ 329,250	\$ 186,800	131.13%
	Other Services and Charges						
21100	General Liability/Property Ins.	\$ 30,800	\$ 27,702	\$ 27,702	\$ 40,400	\$ 9,600	31.17%
21150	Advertising & Communication	-	-	-	-	-	-
21250	Watershed Management	75,000	10,000	110,000	100,000	25,000	33.33%
21252	EMS Programs/Supplies	500	-	500	500	-	0.00%
21253	Safety Programs/Supplies	15,800	10,520	21,040	15,800	-	0.00%
21300	Authority Dues/Permits/Fees	9,000	-	6,000	6,000	(3,000)	-33.33%
21350	Laboratory Analysis	55,000	31,874	63,748	55,000	-	0.00%
21400	Utilities	400,000	139,146	300,000	325,000	(75,000)	-18.75%
21420	General Other Services	20,000	12,871	25,742	25,000	5,000	25.00%
21430	Governance & Strategic Support	-	-	-	15,000	15,000	-
21450	Bad Debt	-	-	-	-	-	-
	Subtotal	\$ 606,100	\$ 232,113	\$ 554,732	\$ 582,700	\$ (23,400)	-3.86%
22000	Communication						
22100	Radio	\$ 4,690	\$ 4,311	\$ 4,311	\$ 4,700	\$ 10	0.21%
22150	Telephone & Data Service	52,000	22,840	50,680	50,000	(2,000)	-3.85%
22200	Cell Phones & Pagers	8,000	4,802	9,604	9,500	1,500	18.75%
	Subtotal	\$ 64,690	\$ 31,953	\$ 64,595	\$ 64,200	\$ (490)	-0.76%
31000	Information Technology						
31100	Computer Hardware	\$ 7,800	\$ 3,635	\$ 7,270	\$ 7,800	\$ -	0.00%
31150	SCADA Maint. & Support	55,000	13,515	55,000	55,000	-	0.00%
31200	Maintenance & Support Services	-	-	-	-	-	-
31250	Software Purchases	2,500	841	2,500	2,500	-	0.00%
	Subtotal	\$ 65,300	\$ 17,991	\$ 64,770	\$ 65,300	\$ -	0.00%
33000	Supplies						
33100	Office Supplies	\$ 3,000	\$ 2,688	\$ 5,376	\$ 3,000	\$ -	0.00%
33150	Subscriptions/Reference Material	1,000	77	154	500	(500)	-50.00%
33350	Postage & Delivery	3,000	1,524	3,048	1,500	(1,500)	-50.00%
	Subtotal	\$ 7,000	\$ 4,289	\$ 8,578	\$ 5,000	\$ (2,000)	-28.57%
41000	Operation & Maintenance						
41100	Building & Grounds	\$ 116,800	\$ 123,183	\$ 171,366	\$ 116,800	\$ -	0.00%
41150	Building & Land Lease	32,500	32,313	39,626	32,500	-	0.00%
41200	Pump Station Maintenance	5,000	19,429	38,858	5,000	-	0.00%
41300	Dam Maintenance	93,000	62,491	124,982	93,000	-	0.00%
41350	Pipeline/Appurtenances	146,560	13,787	77,574	146,560	-	0.00%
41400	Materials & Supplies	50,000	30,899	61,798	50,000	-	0.00%
41450	Chemicals	725,000	276,883	553,766	725,000	-	0.00%
41500	Vehicle Maintenance	5,000	5,102	10,204	5,000	-	0.00%
41550	Equipment Maint. & Repair	200,000	80,823	196,646	200,000	-	0.00%
41600	Instrumentation & Metering	43,800	7,407	44,814	91,800	48,000	109.59%
41650	Fuel & Lubricants	15,000	8,966	17,932	15,000	-	0.00%

Rivanna Water and Sewer Authority
Fiscal Year 2018-2019 Proposed Budget
Expense Detail

Rate Center: Urban Water

Object Code	Line Item	Adopted Budget FY 2017-2018	Current Year Activity		Proposed Budget FY 2018-2019	2018	2018
			Six Month Actual 12/31/2017	Projected Year end 6/30/2018		vs. 2019 Variance \$	vs. 2019 Variance %
41700	General Other Maintenance	90,000	4,138	78,276	90,000	-	0.00%
	<i>Subtotal</i>	\$ 1,522,660	\$ 665,421	\$ 1,415,842	\$ 1,570,660	\$ 48,000	3.15%
81000	Equipment Purchases						
81100	Small Equipment & Tools	\$ 19,000	\$ 14,583	\$ 29,166	\$ 19,000	\$ -	0.00%
81200	Rental & Leases	2,500	1,180	2,360	2,500	-	0.00%
81250	Equipment (over \$5000)	70,000	-	65,000	70,000	-	0.00%
81300	Vehicle Replacement Fund	15,000	7,500	15,000	15,100	100	0.67%
	<i>Subtotal</i>	\$ 106,500	\$ 23,263	\$ 111,526	\$ 106,600	\$ 100	0.09%
95000	Allocations from Departments						
95100	Administrative Allocation	\$ 714,625	\$ 362,379	\$ 746,035	\$ 867,157	\$ 152,532	21.34%
95300	Engineering Allocation	713,946	303,758	627,285	670,478	(43,468)	-6.09%
95150	Maintenance Allocation	403,517	201,050	393,261	455,257	51,740	12.82%
95200	Laboratory Allocation	160,736	95,921	192,784	196,408	35,672	22.19%
	<i>Subtotal</i>	\$ 1,992,824	\$ 963,108	\$ 1,959,365	\$ 2,189,300	\$ 196,476	9.86%
	Reserve Transfers-GAC Carbon	\$ 250,000	\$ 125,000	\$ 250,000	\$ -	\$ (250,000)	-100.00%
	Depreciation	260,000	130,000	260,000	300,000	40,000	15.38%
	<i>Subtotal</i>	\$ 510,000	\$ 255,000	\$ 510,000	\$ 300,000	\$ (210,000)	-41.18%
	Total	\$ 6,846,377	\$ 3,236,002	\$ 6,828,762	\$ 7,116,788	\$ 270,411	3.95%

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Crozet Water Summary

Projected Flow (MGD)

FY 2018			FY 2019	Budget % Change
Budgeted FY 2018	Actual for 6 months	Projected 12 months	Proposed Budget	
0.521			0.540	3.65%

Operations Budget

Projected Revenues

Operations Rate (monthly)

Revenue	\$ 915,336	\$ 457,668	\$ 915,336	\$ 957,384	4.59%
Leases	29,000	13,646	27,292	30,000	3.45%
Use of Reserves	24,000	17,009	24,000	-	
Interest Allocation	900	1,005	2,010	1,700	88.89%
Total Operations Revenues	\$ 969,236	\$ 489,328	\$ 968,638	\$ 989,084	2.05%

Projected Expenses

Personnel Cost	\$ 289,212	\$ 137,177	\$ 274,354	\$ 288,389	-0.28%
Professional Services	47,000	67,150	154,300	30,000	-36.17%
Other Services and Charges	121,480	49,546	98,812	126,960	4.51%
Communications	4,230	2,418	4,444	4,450	5.20%
Information Technology	14,200	509	13,458	14,200	0.00%
Supplies	670	689	1,378	620	-7.46%
Operations and Maintenance	233,630	115,811	251,554	261,150	11.78%
Equipment Purchases	26,400	20,694	41,388	26,450	0.19%
Depreciation	45,000	22,500	45,000	30,000	-33.33%
Subtotal Before Allocations	\$ 781,822	\$ 416,494	\$ 884,688	\$ 782,219	0.05%
Allocations of Support Departments	187,416	90,972	184,613	206,862	10.38%
Total Operations Expenses	\$ 969,238	\$ 507,466	\$ 1,069,301	\$ 989,081	2.05%

Operations Cost per 1,000 gallons \$5.097 \$5.018 -1.55%

Debt Service Budget

Projected Revenue

Debt Service Rates (monthly)

Debt Service Rate Revenue - ACSA	\$ 691,476	\$ 345,738	\$ 691,476	\$ 995,568	43.98%
Trust Fund Interest	1,800	1,433	2,866	1,800	0.00%
Reserve Fund Interest	2,700	2,002	4,004	6,700	148.15%
Total Debt Service Revenue	\$ 695,976	\$ 349,173	\$ 698,346	\$ 1,004,068	44.27%

Principal, Interest & Reserves

Total Principal & Interest - Existing	\$ 426,977	\$ 213,489	\$ 426,978	\$ 426,071	-0.21%
Estimated New Principal & Interest	266,300	133,150	266,300	571,300	114.53%
Reserve Additions - Interest	2,700	2,002	4,004	6,700	148.15%
Total Debt Principal and Interest	\$ 695,977	\$ 348,641	\$ 697,282	\$ 1,004,071	44.27%

Rate Center Summary

Total Revenues	\$ 1,665,212	\$ 838,501	\$ 1,666,984	\$ 1,993,152	19.69%
Total Expenses	1,665,215	856,107	1,766,583	1,993,152	19.69%
Surplus/(Deficit)	\$ (3)	\$ (17,606)	\$ (99,599)	\$ -	
Rates - (Monthly)					
ACSA	\$ 133,901			\$ 162,746	21.54%

Rivanna Water and Sewer Authority
Fiscal Year 2018-2019 Proposed Budget
Expense Detail

Rate Center: Crozet Water

Object Code	Line Item	Adopted Budget	Six Month Actual	Projected Year end	Proposed Budget	2019 Variance	2019 Variance
		FY 2017-2018	12/31/2017	6/30/2018	FY 2018-2019	\$	%
10000	Salaries & Benefits						
11000	Salaries	\$ 187,500	\$ 86,563	\$ 173,126	\$ 181,100	\$ (6,400)	-3.41%
11010	Overtime & Holiday Pay	18,000	12,935	25,870	20,000	2,000	11.11%
12010	FICA	15,721	7,381	14,762	15,384	(337)	-2.14%
12020	Health Insurance	37,907	15,761	31,522	40,891	2,984	7.87%
12026	Employee Assistance Program	50	24	48	50	-	0.00%
12030	Retirement	18,038	8,226	16,452	17,422	(616)	-3.42%
12040	Life Insurance	2,456	1,087	2,174	2,372	(84)	-3.42%
12050	Fitness Program	600	306	612	600	-	0.00%
12060	Worker's Comp Insurance	3,400	1,769	3,538	4,250	850	25.00%
	Subtotal	\$ 283,672	\$ 134,052	\$ 268,104	\$ 282,069	\$ (1,603)	-0.57%
13000	Other Personnel Costs						
13100	Employee Dues & Licenses	\$ 250	\$ 105	\$ 210	\$ 250	\$ -	0.00%
13150	Education & Training	2,900	1,196	2,392	2,900	-	0.00%
13200	Travel & Lodging	1,000	167	334	670	(330)	-33.00%
13250	Uniforms	1,300	1,376	2,752	2,000	700	53.85%
13325	Recruiting & Medical Testing	40	150	300	350	310	775.00%
13350	Other	50	131	262	150	100	200.00%
	Subtotal	\$ 5,540	\$ 3,125	\$ 6,250	\$ 6,320	\$ 780	14.08%
	Professional Services						
20100	Legal Fees	\$ -	\$ -	\$ -	\$ -	\$ -	
20200	Financial & Admin. Services	-	-	-	-	-	
20250	Bond Issue Costs	-	-	-	-	-	
20300	Engineering & Technical Services	47,000	67,150	154,300	30,000	(17,000)	-36.17%
	Subtotal	\$ 47,000	\$ 67,150	\$ 154,300	\$ 30,000	\$ (17,000)	
	Other Services and Charges						
21100	General Liability/Property Ins.	\$ 1,900	\$ 1,780	\$ 1,780	\$ 2,960	\$ 1,060	55.79%
21150	Advertising & Communication	-	-	-	-	-	
21250	Watershed Management	25,000	-	-	25,000	-	0.00%
21252	EMS Programs/Supplies	-	-	-	-	-	
21253	Safety Programs/Supplies	2,280	481	962	1,500	(780)	-34.21%
21300	Authority Dues/Permits/Fees	2,500	-	1,000	1,000	(1,500)	-60.00%
21350	Laboratory Analysis	26,000	13,641	27,282	30,000	4,000	15.38%
21400	Utilities	60,000	33,644	67,288	61,000	1,000	1.67%
21420	General Other Services	3,800	-	500	500	(3,300)	-86.84%
21430	Governance & Strategic Support	-	-	-	5,000	5,000	
21450	Bad Debt	-	-	-	-	-	
	Subtotal	\$ 121,480	\$ 49,546	\$ 98,812	\$ 126,960	\$ 5,480	4.51%
22000	Communication						
22100	Radio	\$ 430	\$ 392	\$ 392	\$ 450	\$ 20	4.65%
22150	Telephone & Data Service	2,900	1,474	2,948	3,000	100	3.45%
22200	Cell Phones & Pagers	900	552	1,104	1,000	100	11.11%
	Subtotal	\$ 4,230	\$ 2,418	\$ 4,444	\$ 4,450	\$ 220	5.20%
31000	Information Technology						
31100	Computer Hardware	\$ 1,000	\$ -	\$ 1,000	\$ 1,000	\$ -	0.00%
31150	SCADA Maint. & Support	12,400	480	12,400	12,400	-	0.00%
31200	Maintenance & Support Services	-	-	-	-	-	
31250	Software Purchases	800	29	58	800	-	0.00%
	Subtotal	\$ 14,200	\$ 509	\$ 13,458	\$ 14,200	\$ -	0.00%
33000	Supplies						
33100	Office Supplies	\$ 400	\$ -	\$ -	\$ 100	\$ (300)	-75.00%
33150	Subscriptions/Reference Material	10	12	24	20	10	100.00%
33350	Postage & Delivery	260	677	1,354	500	240	92.31%
	Subtotal	\$ 670	\$ 689	\$ 1,378	\$ 620	\$ (50)	-7.46%
41000	Operation & Maintenance						
41100	Building & Grounds	\$ 35,000	\$ 23,498	\$ 36,996	\$ 35,000	\$ -	0.00%
41150	Building & Land Lease	-	-	-	-	-	
41200	Pump Station Maintenance	-	-	-	-	-	
41300	Dam Maintenance	5,000	-	5,000	5,000	-	

Rivanna Water and Sewer Authority
Fiscal Year 2018-2019 Proposed Budget
Expense Detail

Rate Center: Crozet Water

Object Code	Line Item	Adopted Budget FY 2017-2018	Current Year Activity		Proposed Budget FY 2018-2019	2018	2018
			Six Month Actual 12/31/2017	Projected Year end 6/30/2018		vs. 2019 Variance \$	vs. 2019 Variance %
41350	Pipeline/Appurtenances	5,000	-	-	5,000	-	0.00%
41400	Materials & Supplies	5,000	2,624	5,248	5,000	-	0.00%
41450	Chemicals	117,480	74,498	148,996	134,000	16,520	14.06%
41500	Vehicle Maintenance	1,000	578	1,156	1,000	-	0.00%
41550	Equipment Maint. & Repair	40,000	8,503	32,006	40,000	-	0.00%
41600	Instrumentation & Metering	8,150	5,175	10,350	8,150	-	0.00%
41650	Fuel & Lubricants	7,000	901	1,802	7,000	-	0.00%
41700	General Other Maintenance	10,000	34	10,000	21,000	11,000	110.00%
Subtotal		\$ 233,630	\$ 115,811	\$ 251,554	\$ 261,150	\$ 27,520	11.78%
81000	Equipment Purchases						
81100	Small Equipment & Tools	\$ 4,000	\$ 10,519	\$ 21,038	\$ 4,000	\$ -	0.00%
81200	Rental & Leases	-	-	-	-	-	-
81250	Equipment (over \$5000)	20,000	8,975	17,950	20,000	-	0.00%
81300	Vehicle Replacement Fund	2,400	1,200	2,400	2,450	50	2.08%
Subtotal		\$ 26,400	\$ 20,694	\$ 41,388	\$ 26,450	\$ 50	0.19%
95000	Allocations from Departments						
95100	Administrative Allocation	\$ 64,966	\$ 32,944	\$ 67,821	\$ 78,832	\$ 13,866	21.34%
95300	Engineering Allocation	60,761	25,852	53,386	57,062	(3,699)	-6.09%
95150	Maintenance Allocation	47,077	23,456	45,880	53,113	6,036	12.82%
95200	Laboratory Allocation	14,612	8,720	17,526	17,855	3,243	22.19%
Subtotal		\$ 187,416	\$ 90,972	\$ 184,613	\$ 206,862	\$ 19,446	10.38%
Reserve Transfers-GAC Carbon		\$ 20,000	\$ 10,000	\$ 20,000	\$ -	\$ (20,000)	-100.00%
Depreciation		25,000	12,500	25,000	30,000	5,000	20.00%
Subtotal		\$ 45,000	\$ 22,500	\$ 45,000	\$ 30,000	\$ (15,000)	-33.33%
Total		\$ 969,238	\$ 507,466	\$ 1,069,301	\$ 989,081	\$ 19,843	2.05%

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Scottsville Water Summary

Projected Flow (MGD)

FY 2018			FY 2019	Budget % Change
Budgeted FY 2018	Actual for 6 months	Projected 12 months	Proposed Budget	
0.051			0.051	0.00%

Operations Budget

Projected Revenues

Operations Rate (monthly)

Revenue	\$ 412,236	\$ 206,118	\$ 412,236	\$ 443,328	7.54%
Use of reserves	16,000	6,147	16,000	-	
Interest Allocation	400	417	834	750	87.50%
Total Operations Revenues	\$ 428,636	\$ 212,682	\$ 429,070	\$ 444,078	3.60%

Projected Expenses

Personnel Cost	\$ 154,467	\$ 72,263	\$ 144,526	\$ 153,885	-0.38%
Professional Services	26,000	8,891	22,782	20,000	-23.08%
Other Services and Charges	19,490	10,180	20,666	28,680	47.15%
Communications	3,210	1,897	3,402	3,210	0.00%
Information Technology	7,000	1,130	6,838	7,000	0.00%
Supplies	750	74	148	750	0.00%
Operations and Maintenance	66,570	12,339	38,178	66,570	0.00%
Equipment Purchases	14,400	1,514	11,028	14,000	-2.78%
Depreciation	19,500	9,750	19,500	20,000	2.56%
Subtotal Before Allocations	\$ 311,387	\$ 118,038	\$ 267,068	\$ 314,095	0.87%
Allocations of Support Departments	117,247	57,214	115,247	129,988	10.87%
Total Operations Expenses	\$ 428,634	\$ 175,252	\$ 382,315	\$ 444,083	3.60%

Operations Cost per 1,000 gallons \$23.026 \$23.856 3.60%

Debt Service Budget

Projected Revenue

Debt Service Rates - Monthly

Debt Service Rate Revenue - ACSA	\$ 129,448	\$ 64,722	\$ 129,444	\$ 129,280	-0.13%
Trust Fund Interest	400	415	830	400	0.00%
Reserve Fund Interest	1,500	1,068	2,136	3,300	120.00%
Total Debt Service Revenue	\$ 131,348	\$ 66,205	\$ 132,410	\$ 132,980	1.24%

Principal, Interest & Reserves

Total Principal & Interest	\$ 129,848	\$ 64,924	\$ 129,848	\$ 129,680	-0.13%
Estimated New Principal & Interest	-	-	-	-	
Reserve Additions-Interest	1,500	1,068	2,136	3,300	120.00%
Total Debt Principal and Interest	\$ 131,348	\$ 65,992	\$ 131,984	\$ 132,980	1.24%

Rate Center Summary

Total Revenues	\$ 559,984	\$ 278,887	\$ 561,480	\$ 577,058	3.05%
Total Expenses	559,982	241,244	514,299	577,063	3.05%
Surplus/ (Deficit)	\$ 2	\$ 37,643	\$ 47,181	\$ (5)	
Rates - Monthly					
ACSA	\$ 45,140			\$ 47,717	5.71%

Rivanna Water and Sewer Authority
Fiscal Year 2018-2019 Proposed Budget
Expense Detail

Rate Center: Scottsville Water

Object Code	Line Item	Adopted Budget FY 2017-2018	Current Year Activity		Proposed Budget FY 2018-2019	2018	2018
			Six Month Actual 12/31/2017	Projected Year end 6/30/2018		vs. 2019 Variance \$	vs. 2019 Variance %
10000	Salaries & Benefits						
11000	Salaries	\$ 99,108	\$ 45,557	\$ 91,114	\$ 95,900	\$ (3,208)	-3.24%
11010	Overtime & Holiday Pay	10,000	6,819	13,638	11,000	1,000	10.00%
12010	FICA	8,347	3,886	7,772	8,178	(169)	-2.02%
12020	Health Insurance	20,055	8,303	16,606	21,670	1,615	8.05%
12026	Employee Assistance Program	25	13	26	25	-	0.00%
12030	Retirement	9,534	4,329	8,658	9,226	(308)	-3.23%
12040	Life Insurance	1,298	572	1,144	1,256	(42)	-3.24%
12050	Fitness Program	320	161	322	300	(20)	-6.25%
12060	Worker's Comp Insurance	1,800	979	1,958	2,350	550	30.56%
	Subtotal	\$ 150,487	\$ 70,619	\$ 141,238	\$ 149,905	\$ (582)	-0.39%
13000	Other Personnel Costs						
13100	Employee Dues & Licenses	\$ 180	\$ 55	\$ 110	\$ 180	\$ -	0.00%
13150	Education & Training	1,950	630	1,260	1,950	-	0.00%
13200	Travel & Lodging	500	86	172	500	-	0.00%
13250	Uniforms	1,200	725	1,450	1,200	-	0.00%
13325	Recruiting & Medical Testing	100	79	158	100	-	0.00%
13350	Other	50	69	138	50	-	0.00%
	Subtotal	\$ 3,980	\$ 1,644	\$ 3,288	\$ 3,980	\$ -	0.00%
	Professional Services						
20100	Legal Fees	\$ -	\$ -	\$ -	\$ -	\$ -	-
20200	Financial & Admin. Services	-	-	-	-	-	-
20250	Bond Issue Costs	-	-	-	-	-	-
20300	Engineering & Technical Services	26,000	8,891	22,782	20,000	(6,000)	-23.08%
	Subtotal	\$ 26,000	\$ 8,891	\$ 22,782	\$ 20,000	\$ (6,000)	-23.08%
	Other Services and Charges						
21100	General Liability/Property Ins.	\$ 700	\$ 694	\$ 694	\$ 760	\$ 60	8.57%
21150	Advertising & Communication	-	-	-	-	-	-
21250	Watershed Management	-	-	-	-	-	-
21252	EMS Programs/Supplies	-	-	-	-	-	-
21253	Safety Programs/Supplies	1,990	548	1,096	1,990	-	0.00%
21300	Authority Dues/Permits/Fees	1,000	-	1,000	1,000	-	0.00%
21350	Laboratory Analysis	6,000	2,295	4,590	8,730	2,730	45.50%
21400	Utilities	9,600	6,643	13,286	11,000	1,400	14.58%
21420	General Other Services	200	-	-	200	-	0.00%
21430	Governance & Strategic Support	-	-	-	5,000	5,000	-
21450	Bad Debt	-	-	-	-	-	-
	Subtotal	\$ 19,490	\$ 10,180	\$ 20,666	\$ 28,680	\$ 9,190	47.15%
22000	Communication						
22100	Radio	\$ 430	\$ 392	\$ 392	\$ 430	\$ -	0.00%
22150	Telephone & Data Service	2,000	1,036	2,072	2,000	-	0.00%
22200	Cell Phones & Pagers	780	469	938	780	-	0.00%
	Subtotal	\$ 3,210	\$ 1,897	\$ 3,402	\$ 3,210	\$ -	0.00%
31000	Information Technology						
31100	Computer Hardware	\$ 600	\$ -	\$ 600	\$ 600	\$ -	0.00%
31150	SCADA Maint. & Support	6,200	1,111	6,200	6,200	-	0.00%
31200	Maintenance & Support Services	-	-	-	-	-	-
31250	Software Purchases	200	19	38	200	-	0.00%
	Subtotal	\$ 7,000	\$ 1,130	\$ 6,838	\$ 7,000	\$ -	0.00%
33000	Supplies						
33100	Office Supplies	\$ 300	\$ -	\$ -	\$ 300	\$ -	0.00%
33150	Subscriptions/Reference Material	100	6	12	100	-	0.00%
33350	Postage & Delivery	350	68	136	350	-	0.00%
	Subtotal	\$ 750	\$ 74	\$ 148	\$ 750	\$ -	0.00%
41000	Operation & Maintenance						
41100	Building & Grounds	\$ 12,000	\$ 1,311	\$ 2,622	\$ 12,000	\$ -	0.00%
41150	Building & Land Lease	-	-	-	-	-	-
41200	Pump Station Maintenance	-	-	-	-	-	-
41300	Dam Maintenance	1,500	-	1,500	1,500	-	0.00%
41350	Pipeline/Appurtenances	100	-	-	100	-	0.00%

Rivanna Water and Sewer Authority
Fiscal Year 2018-2019 Proposed Budget
Expense Detail

Rate Center: Scottsville Water

Object Code	Line Item	Adopted Budget FY 2017-2018	Current Year Activity		Proposed Budget FY 2018-2019	2018	2018
			Six Month Actual 12/31/2017	Projected Year end 6/30/2018		vs. 2019 Variance \$	vs. 2019 Variance %
41400	Materials & Supplies	3,000	524	1,048	3,000	-	0.00%
41450	Chemicals	13,700	3,982	7,964	13,700	-	0.00%
41500	Vehicle Maintenance	700	305	610	700	-	0.00%
41550	Equipment Maint. & Repair	15,000	316	10,632	15,000	-	0.00%
41600	Instrumentation & Metering	7,170	-	2,000	7,170	-	0.00%
41650	Fuel & Lubricants	1,400	357	714	1,400	-	0.00%
41700	General Other Maintenance	12,000	5,544	11,088	12,000	-	0.00%
Subtotal		\$ 66,570	\$ 12,339	\$ 38,178	\$ 66,570	\$ -	0.00%
81000	Equipment Purchases						
81100	Small Equipment & Tools	\$ 200	\$ 664	\$ 1,328	\$ 200	\$ -	0.00%
81200	Rental & Leases	500	-	-	500	-	0.00%
81250	Equipment (over \$5000)	12,000	-	8,000	12,000	-	0.00%
81300	Vehicle Replacement Fund	1,700	850	1,700	1,300	(400)	-23.53%
Subtotal		\$ 14,400	\$ 1,514	\$ 11,028	\$ 14,000	\$ (400)	-2.78%
95000	Allocations from Departments						
95100	Administrative Allocation	\$ 32,483	\$ 16,472	\$ 33,911	\$ 39,416	\$ 6,933	21.34%
95300	Engineering Allocation	30,381	12,926	26,693	28,531	(1,850)	-6.09%
95150	Maintenance Allocation	47,077	23,456	45,880	53,113	6,036	12.82%
95200	Laboratory Allocation	7,306	4,360	8,763	8,928	1,622	22.20%
Subtotal		\$ 117,247	\$ 57,214	\$ 115,247	\$ 129,988	\$ 12,741	10.87%
Reserve Transfers-GAC Carbon		\$ 2,500	\$ 1,250	\$ 2,500	\$ -	(2,500)	-100.00%
Depreciation		17,000	8,500	17,000	20,000	3,000	17.65%
Subtotal		\$ 19,500	\$ 9,750	\$ 19,500	\$ 20,000	\$ 500	2.56%
Total		\$ 428,634	\$ 175,252	\$ 382,315	\$ 444,083	\$ 15,449	3.60%

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Wastewater Rate Centers

Rivanna Water and Sewer Authority

Fiscal Year 2018-2019

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Urban Wastewater Summary

Projected Flow (MGD)

FY 2018			FY 2019	Budget % Change
Budgeted FY 2018	Actual for 6 months	Projected 12 months	Proposed Budget	
9.383			9.289	-1.00%

Operations Budget

Projected Revenues

Operations Rate	\$ 1.951			\$ 2.146	9.99%
Revenue	\$ 6,680,446	\$ 2,846,835	\$ 5,693,670	\$ 7,277,082	8.93%
Stone Robinson WWTP	27,630	10,612	21,224	28,084	1.64%
Septage Acceptance	390,000	216,305	415,000	410,000	5.13%
Nutrient Credits	100,000	87,105	87,105	90,000	-10.00%
Miscellaneous Revenue	10,000	-	-	-	-100.00%
Interest Allocation	6,800	7,211	14,422	12,500	83.82%
Total Operations Revenues	\$ 7,214,876	\$ 3,168,068	\$ 6,231,421	\$ 7,817,666	8.35%

Projected Expenses

Personnel Cost	\$ 1,230,127	\$ 535,622	\$ 1,116,244	\$ 1,282,792	4.28%
Professional Services	54,000	10,700	36,400	54,000	0.00%
Other Services and Charges	1,571,400	978,006	1,885,764	1,816,225	15.58%
Communications	10,430	6,779	10,031	10,430	0.00%
Information Technology	57,300	13,086	53,816	57,250	-0.09%
Supplies	2,700	649	1,298	2,700	0.00%
Operations and Maintenance	1,390,300	834,911	1,489,544	1,408,900	1.34%
Equipment Purchases	54,000	25,935	51,870	74,500	37.96%
Depreciation & Reserves	465,000	232,500	465,000	470,000	1.08%
Subtotal before allocations	\$ 4,835,257	\$ 2,638,188	\$ 5,109,967	\$ 5,176,797	7.06%
Allocations of Support Departments	2,379,619	1,160,797	2,347,672	2,640,869	10.98%
Total Operations Expenses	\$ 7,214,876	\$ 3,798,985	\$ 7,457,639	\$ 7,817,666	8.35%

Operations Cost per 1,000 gallons \$2.107 \$2.306 9.44%

Debt Service Budget

Projected Revenue

Debt Service Rate	CITY 392,841			408,260	3.92%
	ACSA 222,550			246,308	10.68%
Debt Service Rate Revenue - CITY	\$ 4,714,093	\$ 2,357,046	\$ 4,714,092	\$ 4,899,122	3.93%
Debt Service Rate Revenue - ACSA	2,670,596	1,335,300	2,670,600	2,955,698	10.68%
Use of Reserves for 2016 Bond DS	600,000	300,000	600,000	300,000	-50.00%
County MOU - Septage	109,440	109,441	109,441	109,440	0.00%
Trust Fund Interest	26,200	21,001	42,002	26,200	0.00%
Reserve Fund Interest	77,300	58,312	116,624	148,000	91.46%
Total Debt Service Revenue	\$ 8,197,629	\$ 4,181,100	\$ 8,252,759	\$ 8,438,460	2.94%

Principal, Interest & Reserves

Total Principal & Interest	\$ 7,561,430	\$ 3,780,715	\$ 7,561,430	\$ 7,539,261	-0.29%
Reserve Additions - Interest	77,300	58,312	116,624	148,000	91.46%
Debt Service Ratio Charge	325,000	162,500	325,000	325,000	0.00%
Est. New Debt Service - CIP Growth	233,900	116,950	233,900	426,200	82.21%
Total Debt Principal and Interest	\$ 8,197,630	\$ 4,118,477	\$ 8,236,954	\$ 8,438,461	2.94%

Rate Center Summary

Total Revenues	\$ 15,412,505	\$ 7,349,168	\$ 14,484,180	\$ 16,256,126	5.47%
Total Expenses	15,412,506	7,917,462	15,694,593	16,256,127	5.47%
Surplus/(Deficit)	\$ (1)	\$ (568,294)	\$ (1,210,413)	\$ (1)	

Rivanna Water and Sewer Authority
Fiscal Year 2018-2019 Proposed Budget
Expense Detail

Rate Center: Urban Wastewater

Object Code	Line Item	Adopted Budget FY 2017-2018	Current Year Activity		Proposed Budget FY 2018-2019	2018 vs. 2019 Variance \$	2018 vs. 2019 Variance %
			Six Month Actual 12/31/2017	Projected Year end 6/30/2018			
10000	Salaries & Benefits						
11000	Salaries	\$ 821,502	\$ 343,653	\$ 732,306	\$ 837,300	\$ 15,798	1.92%
11010	Overtime & Holiday Pay	55,000	44,196	88,392	65,000	10,000	18.18%
12010	FICA	67,052	28,697	57,394	69,026	1,974	2.94%
12020	Health Insurance	163,633	67,509	135,018	180,849	17,216	10.52%
12026	Employee Assistance Program	220	93	186	200	(20)	-9.09%
12030	Retirement	79,028	31,302	62,604	80,548	1,520	1.92%
12040	Life Insurance	10,762	4,171	8,342	10,969	207	1.92%
12050	Fitness Program	1,500	339	678	700	(800)	-53.33%
12060	Worker's Comp Insurance	8,200	4,498	8,996	10,800	2,600	31.71%
	Subtotal	\$ 1,206,897	\$ 524,458	\$ 1,093,916	\$ 1,255,392	\$ 48,495	4.02%
13000	Other Personnel Costs						
13100	Employee Dues & Licenses	\$ 2,800	\$ 393	\$ 786	\$ 2,800	\$ -	0.00%
13150	Education & Training	6,830	3,463	6,926	10,900	4,070	59.59%
13200	Travel & Lodging	5,200	2,342	4,684	5,300	100	1.92%
13250	Uniforms	6,900	3,210	6,420	6,900	-	0.00%
13325	Recruiting & Medical Testing	1,000	1,020	2,040	1,000	-	0.00%
13350	Other	500	736	1,472	500	-	0.00%
	Subtotal	\$ 23,230	\$ 11,164	\$ 22,328	\$ 27,400	\$ 4,170	17.95%
	Professional Services						
20100	Legal Fees	\$ 4,000	\$ -	\$ -	\$ 4,000	\$ -	0.00%
20200	Financial & Admin. Services	-	-	-	-	-	-
20250	Bond Issue Costs	-	-	-	-	-	-
20300	Engineering & Technical Services	50,000	10,700	36,400	50,000	-	0.00%
	Subtotal	\$ 54,000	\$ 10,700	\$ 36,400	\$ 54,000	\$ -	-
	Other Services and Charges						
21100	General Liability/Property Ins.	\$ 63,400	\$ 58,882	\$ 58,882	\$ 74,800	\$ 11,400	17.98%
21150	Advertising & Communication	-	225	450	225	225	-
21250	Watershed Management	-	-	-	-	-	-
21252	EMS Programs/Supplies	-	-	-	-	-	-
21253	Safety Programs/Supplies	8,100	3,699	7,398	8,100	-	0.00%
21300	Authority Dues/Permits/Fees	37,000	25,131	40,262	35,200	(1,800)	-4.86%
21350	Laboratory Analysis	6,500	153	306	6,500	-	0.00%
21400	Utilities	750,000	459,678	919,356	870,000	120,000	16.00%
21420	General Other Services	704,400	428,555	857,110	804,400	100,000	14.20%
21430	Governance & Strategic Support	2,000	1,683	2,000	17,000	15,000	750.00%
21450	Bad Debt	-	-	-	-	-	-
	Subtotal	\$ 1,571,400	\$ 978,006	\$ 1,885,764	\$ 1,816,225	\$ 244,825	15.58%
22000	Communication						
22100	Radio	\$ 3,830	\$ 3,527	\$ 3,527	\$ 3,830	\$ -	0.00%
22150	Telephone & Data Service	1,800	962	1,924	1,800	-	0.00%
22200	Cell Phones & Pagers	4,800	2,290	4,580	4,800	-	0.00%
	Subtotal	\$ 10,430	\$ 6,779	\$ 10,031	\$ 10,430	\$ -	0.00%
31000	Information Technology						
31100	Computer Hardware	\$ 6,500	\$ 6,596	\$ 6,700	\$ 6,500	\$ -	0.00%
31150	SCADA Maint. & Support	50,000	6,432	47,000	50,000	-	0.00%
31200	Maintenance & Support Services	-	-	-	-	-	-
31250	Software Purchases	800	58	116	750	(50)	-6.25%
	Subtotal	\$ 57,300	\$ 13,086	\$ 53,816	\$ 57,250	\$ (50)	-0.09%
33000	Supplies						
33100	Office Supplies	\$ 2,500	\$ 228	\$ 456	\$ 2,500	\$ -	0.00%
33150	Subscriptions/Reference Material	-	-	-	-	-	-
33350	Postage & Delivery	200	421	842	200	-	0.00%
	Subtotal	\$ 2,700	\$ 649	\$ 1,298	\$ 2,700	\$ -	0.00%
41000	Operation & Maintenance						
41100	Building & Grounds	\$ 31,400	\$ 56,261	\$ 92,522	\$ 70,000	\$ 38,600	122.93%
41150	Building & Land Lease	-	-	-	-	-	-
41200	Pump Station Maintenance	78,000	37,589	75,178	78,000	-	0.00%
41300	Dam Maintenance	-	-	-	-	-	-
41350	Pipeline/Appurtenances	215,000	276,639	325,000	195,000	(20,000)	-9.30%
41400	Materials & Supplies	28,000	11,399	22,798	28,000	-	0.00%
41450	Chemicals	669,200	305,273	625,546	669,200	-	0.00%
41500	Vehicle Maintenance	10,000	3,433	6,866	10,000	-	0.00%
41550	Equipment Maint. & Repair	300,000	138,563	277,126	300,000	-	0.00%
41600	Instrumentation & Metering	58,700	15,130	68,260	58,700	-	0.00%
41650	Fuel & Lubricants	38,000	8,865	32,730	38,000	-	0.00%

Rivanna Water and Sewer Authority
Fiscal Year 2018-2019 Proposed Budget
Expense Detail

Rate Center: Urban Wastewater

Object Code	Line Item	Adopted Budget FY 2017-2018	Current Year Activity		Proposed Budget FY 2018-2019	2018	2018
			Six Month Actual 12/31/2017	Projected Year end 6/30/2018		vs. 2019 Variance \$	vs. 2019 Variance %
41700	General Other Maintenance	(38,000)	(18,241)	(36,482)	(38,000)	-	0.00%
	<i>Subtotal</i>	\$ 1,390,300	\$ 834,911	\$ 1,489,544	\$ 1,408,900	\$ 18,600	1.34%
81000	Equipment Purchases						
81100	Small Equipment & Tools	\$ 7,500	\$ 3,379	\$ 6,758	\$ 7,500	\$ -	0.00%
81200	Rental & Leases	10,000	4,306	8,612	10,000	-	0.00%
81250	Equipment (over \$5000)	-	-	-	-	-	-
81300	Vehicle Replacement Fund	36,500	18,250	36,500	57,000	20,500	56.16%
	<i>Subtotal</i>	\$ 54,000	\$ 25,935	\$ 51,870	\$ 74,500	\$ 20,500	37.96%
95000	Allocations from Departments						
95100	Administrative Allocation	\$ 779,591	\$ 395,322	\$ 813,856	\$ 945,989	\$ 166,398	21.34%
95300	Engineering Allocation	668,375	284,369	587,246	627,681	(40,694)	-6.09%
95150	Maintenance Allocation	759,957	378,645	740,642	857,400	97,443	12.82%
95200	Laboratory Allocation	171,696	102,461	205,928	209,799	38,103	22.19%
	<i>Subtotal</i>	\$ 2,379,619	\$ 1,160,797	\$ 2,347,672	\$ 2,640,869	\$ 261,250	10.98%
	Reserve Transfers	\$ -	\$ -	\$ -	\$ -	\$ -	-
	Depreciation	465,000	232,500	465,000	470,000	5,000	1.08%
	<i>Subtotal</i>	\$ 465,000	\$ 232,500	\$ 465,000	\$ 470,000	\$ 5,000	1.08%
Total		\$ 7,214,876	\$ 3,798,985	\$ 7,457,639	\$ 7,817,666	\$ 602,790	8.35%

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Glenmore Wastewater Summary

Projected Flow (MGD)

FY 2018			FY 2019	Budget % Change
Budgeted FY 2018	Actual for 6 months	Projected 12 months	Proposed Budget	
0.113			0.119	

Operations Budget

Projected Revenues

Operations Rate (monthly)

Revenue	\$ 352,344	\$ 176,172	\$ 352,344	\$ 372,720	5.78%
Interest Allocation	300	334	668	600	100.00%
Total Operations Revenues	\$ 352,644	\$ 176,506	\$ 353,012	\$ 373,320	5.86%

Projected Expenses

Personnel Cost	\$ 90,824	\$ 39,420	\$ 83,840	\$ 94,490	4.04%
Professional Services	3,000	-	-	3,000	0.00%
Other Services and Charges	31,490	16,991	30,545	39,510	25.47%
Communications	2,600	1,762	3,132	2,600	0.00%
Information Technology	3,500	-	4,200	3,350	-4.29%
Supplies	100	-	-	100	0.00%
Operations and Maintenance	121,450	41,201	91,902	121,450	0.00%
Equipment Purchases	3,100	1,300	2,600	2,900	-6.45%
Depreciation	5,000	2,500	5,000	5,000	0.00%
Subtotal before allocations	\$ 261,064	\$ 103,174	\$ 221,219	\$ 272,400	4.34%
Allocations of Support Departments	91,584	44,656	89,427	100,915	10.19%
Total Operations Expenses	\$ 352,648	\$ 147,830	\$ 310,646	\$ 373,315	5.86%

Operations Cost per 1,000 gallons

\$8.550

\$8.595

Debt Service Budget

Projected Revenue

Debt Service Rate (monthly)

Debt Service Rate Revenue - ACSA	\$ 1,582	\$ 792	\$ 1,584	\$ 1,586	0.25%
Trust Fund Interest	-	-	-	-	
Reserve Fund Interest	600	400	800	1,000	66.67%
Total Debt Service Revenue	\$ 2,182	\$ 1,192	\$ 2,384	\$ 2,586	18.52%

Principal, Interest & Reserves

Total Principal & Interest	\$ 1,582	\$ 791	\$ 1,582	\$ 1,586	0.25%
Reserve Additions - Interest	600	400	800	1,000	66.67%
Total Debt Principal and Interest	\$ 2,182	\$ 1,191	\$ 2,382	\$ 2,586	18.52%

Rate Center Summary

Total Revenues	\$ 354,826	\$ 177,698	\$ 355,396	\$ 375,906	5.94%
Total Expenses	354,830	149,021	313,028	375,901	5.94%
Surplus/(Deficit)	\$ (4)	\$ 28,677	\$ 42,368	\$ 5	
Rates (Monthly)					
ACSA	\$ 29,494			\$ 31,192	5.76%

Rivanna Water and Sewer Authority
Fiscal Year 2018-2019 Proposed Budget
Expense Detail

Rate Center: Glenmore Wastewater

Object Code	Line Item	Adopted Budget FY 2017-2018	Current Year Activity		Proposed Budget FY 2018-2019	2018 vs. 2019	
			Six Month Actual 12/31/2017	Projected Year end 6/30/2018		Variance \$	Variance %
10000	Salaries & Benefits						
11000	Salaries	\$ 60,422	\$ 25,106	\$ 55,212	\$ 61,600	\$ 1,178	1.95%
11010	Overtime & Holiday Pay	4,000	3,390	6,780	4,500	500	12.50%
12010	FICA	4,928	2,111	4,222	5,057	129	2.62%
12020	Health Insurance	12,324	5,090	10,180	13,620	1,296	10.52%
12026	Employee Assistance Program	15	7	14	15	-	0.00%
12030	Retirement	5,813	2,276	4,552	5,926	113	1.94%
12040	Life Insurance	792	304	608	807	15	1.89%
12050	Fitness Program	100	21	42	50	(50)	-50.00%
12060	Worker's Comp Insurance	600	325	650	800	200	33.33%
	Subtotal	\$ 88,994	\$ 38,630	\$ 82,260	\$ 92,375	\$ 3,381	3.80%
13000	Other Personnel Costs						
13100	Employee Dues & Licenses	\$ 230	\$ 19	\$ 38	\$ 230	\$ -	0.00%
13150	Education & Training	490	249	498	775	285	58.16%
13200	Travel & Lodging	375	146	292	375	-	0.00%
13250	Uniforms	600	244	488	600	-	0.00%
13325	Recruiting & Medical Testing	100	78	156	100	-	0.00%
13350	Other	35	54	108	35	-	0.00%
	Subtotal	\$ 1,830	\$ 790	\$ 1,580	\$ 2,115	\$ 285	15.57%
	Professional Services						
20100	Legal Fees	\$ -	\$ -	\$ -	\$ -	\$ -	-
20200	Financial & Admin. Services	-	-	-	-	-	-
20250	Bond Issue Costs	-	-	-	-	-	-
20300	Engineering & Technical Services	3,000	-	-	3,000	-	0.00%
	Subtotal	\$ 3,000	\$ -	\$ -	\$ 3,000	\$ -	-
	Other Services and Charges						
21100	General Liability/Property Ins.	\$ 300	\$ 315	\$ 315	\$ 300	\$ -	0.00%
21150	Advertising & Communication	-	-	-	-	-	-
21250	Watershed Management	-	-	-	-	-	-
21252	EMS Programs/Supplies	-	-	-	-	-	-
21253	Safety Programs/Supplies	800	210	420	800	-	0.00%
21300	Authority Dues/Permits/Fees	280	3,311	3,500	3,300	3,020	1078.57%
21350	Laboratory Analysis	1,500	31	62	1,500	-	-
21400	Utilities	28,500	13,124	26,248	28,500	-	0.00%
21420	General Other Services	110	-	-	110	-	-
21430	Governance & Strategic Support	-	-	-	5,000	5,000	-
21450	Bad Debt	-	-	-	-	-	-
	Subtotal	\$ 31,490	\$ 16,991	\$ 30,545	\$ 39,510	\$ 8,020	25.47%
22000	Communication						
22100	Radio	\$ 400	\$ 392	\$ 392	\$ 400	\$ -	0.00%
22150	Telephone & Data Service	1,700	1,069	2,138	1,700	-	0.00%
22200	Cell Phones & Pagers	500	301	602	500	-	0.00%
	Subtotal	\$ 2,600	\$ 1,762	\$ 3,132	\$ 2,600	\$ -	0.00%
31000	Information Technology						
31100	Computer Hardware	\$ 800	\$ -	\$ -	\$ 650	\$ (150)	-18.75%
31150	SCADA Maint. & Support	2,500	-	4,200	2,500	-	0.00%
31200	Maintenance & Support Services	-	-	-	-	-	-
31250	Software Purchases	200	-	-	200	-	0.00%
	Subtotal	\$ 3,500	\$ -	\$ 4,200	\$ 3,350	\$ (150)	-4.29%
33000	Supplies						
33100	Office Supplies	\$ 100	\$ -	\$ -	\$ 100	\$ -	0.00%
33150	Subscriptions/Reference Material	-	-	-	-	-	-
33350	Postage & Delivery	-	-	-	-	-	-
	Subtotal	\$ 100	\$ -	\$ -	\$ 100	\$ -	0.00%
41000	Operation & Maintenance						
41100	Building & Grounds	\$ 8,500	\$ -	\$ 4,000	\$ 8,500	\$ -	0.00%
41150	Building & Land Lease	-	-	-	-	-	-
41200	Pump Station Maintenance	9,000	1,510	3,020	9,000	-	0.00%
41300	Dam Maintenance	-	-	-	-	-	-
41350	Pipeline/Appurtenances	500	-	-	500	-	0.00%

Rivanna Water and Sewer Authority
Fiscal Year 2018-2019 Proposed Budget
Expense Detail

Rate Center: Glenmore Wastewater

Object Code	Line Item	Adopted Budget FY 2017-2018	Current Year Activity		Proposed Budget FY 2018-2019	2018	2018
			Six Month Actual 12/31/2017	Projected Year end 6/30/2018		vs. 2019 Variance \$	vs. 2019 Variance %
41400	Materials & Supplies	2,000	3,595	7,190	2,000	-	0.00%
41450	Chemicals	4,000	883	1,766	4,000	-	
41500	Vehicle Maintenance	750	248	496	750	-	0.00%
41550	Equipment Maint. & Repair	18,000	2,351	8,202	18,000	-	0.00%
41600	Instrumentation & Metering	5,100	-	2,000	5,100	-	0.00%
41650	Fuel & Lubricants	3,600	579	1,158	3,600	-	0.00%
41700	General Other Maintenance	70,000	32,035	64,070	70,000	-	0.00%
Subtotal		\$ 121,450	\$ 41,201	\$ 91,902	\$ 121,450	\$ -	0.00%
81000	Equipment Purchases						
81100	Small Equipment & Tools	\$ 500	\$ -	\$ -	\$ 500	\$ -	0.00%
81200	Rental & Leases	-	-	-	-	-	
81250	Equipment (over \$5000)	-	-	-	-	-	
81300	Vehicle Replacement Fund	2,600	1,300	2,600	2,400	(200)	-7.69%
Subtotal		\$ 3,100	\$ 1,300	\$ 2,600	\$ 2,900	\$ (200)	-6.45%
95000	Allocations from Departments						
95100	Administrative Allocation	\$ 16,241	\$ 8,236	\$ 16,955	\$ 19,708	\$ 3,467	21.35%
95300	Engineering Allocation	22,786	9,694	20,020	21,398	(1,388)	-6.09%
95150	Maintenance Allocation	47,077	23,456	45,880	53,113	6,036	12.82%
95200	Laboratory Allocation	5,480	3,270	6,572	6,696	1,216	22.19%
Subtotal		\$ 91,584	\$ 44,656	\$ 89,427	\$ 100,915	\$ 9,331	10.19%
Capital Reserve Transfers		\$ -	\$ -	\$ -	\$ -	\$ -	
Depreciation		5,000	2,500	5,000	5,000	-	0.00%
Subtotal		\$ 5,000	\$ 2,500	\$ 5,000	\$ 5,000	\$ -	0.00%
Total		\$ 352,648	\$ 147,830	\$ 310,646	\$ 373,315	\$ 20,667	5.86%

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Scottsville Wastewater Summary

Projected Flow (MGD)

FY 2018			FY 2019	Budget % Change
Budgeted FY 2018	Actual for 6 months	Projected 12 months	Proposed Budget	
0.058			0.055	

Operations Budget

Projected Revenues

Operations Rate (monthly)

Revenue	\$ 23,724			\$ 25,156	6.04%
Interest Allocation	\$ 284,688	\$ 142,344	\$ 284,688	\$ 301,872	6.04%
	300	271	542	500	66.67%
Total Operations Revenues	\$ 284,988	\$ 142,615	\$ 285,230	\$ 302,372	6.10%

Projected Expenses

Personnel Cost	\$ 90,849	\$ 39,420	\$ 83,840	\$ 94,515	4.04%
Professional Services	2,000	-	-	2,000	
Other Services and Charges	22,900	14,233	24,682	28,400	24.02%
Communications	2,630	2,046	3,701	2,630	0.00%
Information Technology	4,400	-	3,000	2,350	-46.59%
Supplies	100	-	-	100	0.00%
Operations and Maintenance	57,850	9,568	31,650	57,850	0.00%
Equipment Purchases	3,400	1,300	2,600	3,200	-5.88%
Depreciation	16,000	8,000	16,000	18,000	12.50%
Subtotal before allocations	\$ 200,129	\$ 74,567	\$ 165,473	\$ 209,045	4.46%
Allocations of Support Departments	84,859	41,305	82,873	93,328	9.98%
Total Operations Expenses	\$ 284,988	\$ 115,872	\$ 248,346	\$ 302,373	6.10%

Operations Cost per 1,000 gallons \$13.462 \$15.062 111.89%

Debt Service Budget

Projected Revenue

Debt Service Rate (monthly)

Debt Service Rate Revenue - ACSA	\$ 686			\$ 667	-2.77%
Trust Fund Interest	\$ 8,233	\$ 4,116	\$ 8,232	\$ 8,006	-2.76%
Reserve Fund Interest	-	38	76	-	
	400	297	594	1,000	150.00%
Total Debt Service Revenue	\$ 8,633	\$ 4,451	\$ 8,902	\$ 9,006	4.32%

Principal, Interest & Reserves

Total Principal & Interest	\$ 8,233	\$ 4,117	\$ 8,234	\$ 8,006	-2.76%
Estimated New Principal & Interest	-	-	-	-	
Reserve Additions - Interest	400	297	594	1,000	150.00%
Total Debt Principal and Interest	\$ 8,633	\$ 4,414	\$ 8,828	\$ 9,006	4.32%

Rate Center Summary

Total Revenues	\$ 293,621	\$ 147,066	\$ 294,132	\$ 311,378	6.05%
Total Expenses	293,621	120,286	257,174	311,379	6.05%
Surplus/(Deficit)	\$ -	\$ 26,780	\$ 36,958	\$ (1)	
Rates (Monthly)					
ACSA	\$ 24,410			\$ 25,823	5.79%

Rivanna Water and Sewer Authority
Fiscal Year 2018-2019 Proposed Budget
Expense Detail

Rate Center: Scottsville Wastewater

Object Code	Line Item	Adopted Budget FY 2017-2018	Current Year Activity		Proposed Budget FY 2018-2019	2018	2018
			Six Month Actual 12/31/2017	Projected Year end 6/30/2018		vs. 2019 Variance \$	vs. 2019 Variance %
10000	Salaries & Benefits						
11000	Salaries	\$ 60,422	\$ 25,106	\$ 55,212	\$ 61,600	\$ 1,178	1.95%
11010	Overtime & Holiday Pay	4,000	3,390	6,780	4,500	500	12.50%
12010	FICA	4,928	2,111	4,222	5,057	129	2.62%
12020	Health Insurance	12,324	5,090	10,180	13,620	1,296	10.52%
12026	Employee Assistance Program	15	7	14	15	-	0.00%
12030	Retirement	5,813	2,276	4,552	5,926	113	1.94%
12040	Life Insurance	792	304	608	807	15	1.89%
12050	Fitness Program	100	21	42	50	(50)	-50.00%
12060	Worker's Comp Insurance	600	325	650	800	200	33.33%
	Subtotal	\$ 88,994	\$ 38,630	\$ 82,260	\$ 92,375	\$ 3,381	3.80%
13000	Other Personnel Costs						
13100	Employee Dues & Licenses	\$ 230	\$ 19	\$ 38	\$ 230	\$ -	0.00%
13150	Education & Training	490	249	498	775	285	58.16%
13200	Travel & Lodging	375	146	292	375	-	0.00%
13250	Uniforms	600	244	488	600	-	0.00%
13325	Recruiting & Medical Testing	100	78	156	100	-	0.00%
13350	Other	60	54	108	60	-	0.00%
	Subtotal	\$ 1,855	\$ 790	\$ 1,580	\$ 2,140	\$ 285	15.36%
	Professional Services						
20100	Legal Fees	\$ -	\$ -	\$ -	\$ -	\$ -	-
20200	Financial & Admin. Services	-	-	-	-	-	-
20250	Bond Issue Costs	-	-	-	-	-	-
20300	Engineering & Technical Services	2,000	-	-	2,000	-	-
	Subtotal	\$ 2,000	\$ -	\$ -	\$ 2,000	\$ -	-
	Other Services and Charges						
21100	General Liability/Property Ins.	\$ 700	\$ 662	\$ 662	\$ 700	\$ -	0.00%
21150	Advertising & Communication	-	-	-	-	-	-
21250	Watershed Management	-	-	-	-	-	-
21252	EMS Programs/Supplies	-	-	-	-	-	-
21253	Safety Programs/Supplies	400	252	504	400	-	0.00%
21300	Authority Dues/Permits/Fees	2,800	3,311	3,500	3,300	500	17.86%
21350	Laboratory Analysis	4,000	190	380	4,000	-	0.00%
21400	Utilities	15,000	9,818	19,636	15,000	-	0.00%
21420	General Other Services	-	-	-	-	-	-
21430	Governance & Strategic Support	-	-	-	5,000	5,000	-
21450	Bad Debt	-	-	-	-	-	-
	Subtotal	\$ 22,900	\$ 14,233	\$ 24,682	\$ 28,400	\$ 5,500	24.02%
22000	Communication						
22100	Radio	\$ 430	\$ 391	\$ 391	\$ 430	\$ -	0.00%
22150	Telephone & Data Service	1,700	1,354	2,708	1,700	-	0.00%
22200	Cell Phones & Pagers	500	301	602	500	-	0.00%
	Subtotal	\$ 2,630	\$ 2,046	\$ 3,701	\$ 2,630	\$ -	0.00%
31000	Information Technology						
31100	Computer Hardware	\$ 700	\$ -	\$ 700	\$ 650	\$ (50)	-7.14%
31150	SCADA Maint. & Support	3,500	-	2,300	1,500	(2,000)	-57.14%
31200	Maintenance & Support Services	-	-	-	-	-	-
31250	Software Purchases	200	-	-	200	-	0.00%
	Subtotal	\$ 4,400	\$ -	\$ 3,000	\$ 2,350	\$ (2,050)	-46.59%
33000	Supplies						
33100	Office Supplies	\$ 100	\$ -	\$ -	\$ 100	\$ -	0.00%
33150	Subscriptions/Reference Material	-	-	-	-	-	-
33350	Postage & Delivery	-	-	-	-	-	-
	Subtotal	\$ 100	\$ -	\$ -	\$ 100	\$ -	0.00%
41000	Operation & Maintenance						
41100	Building & Grounds	\$ 4,800	\$ 1,405	\$ 2,810	\$ 4,800	\$ -	0.00%
41150	Building & Land Lease	-	-	-	-	-	-
41200	Pump Station Maintenance	10,500	845	1,690	10,500	-	0.00%
41300	Dam Maintenance	-	-	-	-	-	-
41350	Pipeline/Appurtenances	500	-	-	500	-	0.00%
41400	Materials & Supplies	1,500	-	-	1,500	-	0.00%

Rivanna Water and Sewer Authority
Fiscal Year 2018-2019 Proposed Budget
Expense Detail

Rate Center: Scottsville Wastewater

Object Code	Line Item	Adopted Budget FY 2017-2018	Current Year Activity		Proposed Budget FY 2018-2019	2018	2018
			Six Month Actual 12/31/2017	Projected Year end 6/30/2018		vs. 2019 Variance \$	vs. 2019 Variance %
41450	Chemicals	4,000	-	-	4,000	-	0.00%
41500	Vehicle Maintenance	750	248	496	750	-	0.00%
41550	Equipment Maint. & Repair	16,000	2,059	15,000	16,000	-	0.00%
41600	Instrumentation & Metering	10,000	684	3,000	10,000	-	0.00%
41650	Fuel & Lubricants	800	386	772	800	-	0.00%
41700	General Other Maintenance	9,000	3,941	7,882	9,000	-	0.00%
Subtotal		\$ 57,850	\$ 9,568	\$ 31,650	\$ 57,850	\$ -	0.00%
81000	Equipment Purchases						
81100	Small Equipment & Tools	\$ 500	\$ -	\$ -	\$ 500	\$ -	0.00%
81200	Rental & Leases	300	-	-	300	-	
81250	Equipment (over \$5000)	-	-	-	-	-	
81300	Vehicle Replacement Fund	2,600	1,300	2,600	2,400	(200)	-7.69%
Subtotal		\$ 3,400	\$ 1,300	\$ 2,600	\$ 3,200	\$ (200)	-5.88%
95000	Allocations from Departments						
95100	Administrative Allocation	\$ 16,241	\$ 8,236	\$ 16,955	\$ 19,708	\$ 3,467	21.35%
95300	Engineering Allocation	22,786	9,694	20,020	21,398	(1,388)	-6.09%
95150	Maintenance Allocation	40,352	20,105	39,326	45,526	5,174	12.82%
95200	Laboratory Allocation	5,480	3,270	6,572	6,696	1,216	22.19%
Subtotal		\$ 84,859	\$ 41,305	\$ 82,873	\$ 93,328	\$ 8,469	9.98%
Capital Reserve Transfers		\$ -	\$ -	\$ -	\$ -	\$ -	
Depreciation		16,000	8,000	16,000	18,000	2,000	12.50%
Subtotal		\$ 16,000	\$ 8,000	\$ 16,000	\$ 18,000	\$ 2,000	12.50%
Total		\$ 284,988	\$ 115,872	\$ 248,346	\$ 302,373	\$ 17,385	6.10%

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Support Departments

Fiscal Year 2018-2019

Rivanna Water and Sewer Authority

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Administration

FY 2018			FY 2019	Budget % Change
<i>Budgeted FY 2018</i>	Actual for 6 months	Projected 12 months	<i>Proposed Budget</i>	

Operations Budget

Projected Revenues & Sources

Payment for Services SWA	\$ 409,000	\$ 204,500	\$ 409,000	\$ 460,000	12.47%
Bond Proceeds Used for Closing Costs	-	-	-	-	
Miscellaneous Revenue	1,000	4,284	8,568	2,000	100.00%
Total Operations Revenues	\$ 410,000	\$ 208,784	\$ 417,568	\$ 462,000	12.68%

Projected Expenses

Personnel Cost	\$ 1,544,127	\$ 773,399	\$ 1,544,798	\$ 1,796,151	16.32%
Professional Services	171,900	81,223	162,446	228,000	32.64%
Other Services and Charges	111,940	89,121	182,058	140,980	25.94%
Communications	21,280	7,895	14,614	20,280	-4.70%
Information Technology	118,000	36,932	118,832	138,500	17.37%
Supplies	22,000	10,720	21,440	21,000	-4.55%
Operations and Maintenance	36,600	28,932	60,614	60,400	65.03%
Equipment Purchases	8,300	4,150	8,300	27,500	231.33%
Depreciation	-	-	-	-	
Total Operations Expenses	\$ 2,034,147	\$ 1,032,372	\$ 2,113,102	\$ 2,432,811	19.60%

Department Summary

Total Revenues		\$ 410,000	\$ 208,784	\$ 417,568	\$ 462,000	12.68%
Total Expenses		2,034,147	1,032,372	2,113,102	2,432,811	19.60%
Net Costs Allocable to Rate Centers		\$ (1,624,147)	\$ (823,588)	\$ (1,695,534)	\$ (1,970,811)	21.34%
<u>Allocations to the Rate Centers</u>						
Urban Water	44.00%	\$ 714,625	\$ 362,379	\$ 746,035	\$ 867,157	
Crozet Water	4.00%	64,966	32,944	67,821	78,832	
Scottsville Water	2.00%	32,483	16,472	33,911	39,416	
Urban Wastewater	48.00%	779,591	395,322	813,856	945,989	
Glenmore Wastewater	1.00%	16,241	8,236	16,955	19,708	
Scottsville Wastewater	1.00%	16,241	8,236	16,955	19,708	
	100.00%	\$ 1,624,147	\$ 823,589	\$ 1,695,533	\$ 1,970,810	

Rivanna Water and Sewer Authority
Fiscal Year 2018-2019 Proposed Budget
Expense Detail

Department: Administration

Object Code	Line Item	Adopted Budget FY 2017-2018	Current Year Activity		Proposed Budget FY 2018-2019	2018 vs. 2019 Variance \$	2018 vs. 2019 Variance %
			Six Month Actual 12/31/2017	Projected Year end 6/30/2018			
10000	Salaries & Benefits						
11000	Salaries	\$ 1,126,390	\$ 566,627	\$ 1,133,254	\$ 1,298,900	\$ 172,510	15.32%
11010	Overtime & Holiday Pay	800	553	1,106	1,500	700	87.50%
12010	FICA	86,230	37,753	75,506	99,481	13,251	15.37%
12020	Health Insurance	165,292	90,286	170,572	210,000	44,708	27.05%
12026	Employee Assistance Program	200	117	234	200	-	0.00%
12030	Retirement	108,359	54,621	109,242	124,954	16,595	15.31%
12040	Life Insurance	14,756	7,263	14,526	17,016	2,260	15.32%
12050	Fitness Program	2,800	1,168	2,336	2,700	(100)	-3.57%
12060	Worker's Comp Insurance	4,300	1,966	3,932	4,700	400	9.30%
	Subtotal	\$ 1,509,127	\$ 760,354	\$ 1,510,708	\$ 1,759,451	\$ 250,324	16.59%
13000	Other Personnel Costs						
13100	Employee Dues & Licenses	\$ 2,500	\$ 255	\$ 510	\$ 2,000	\$ (500)	-20.00%
13150	Education & Training	17,000	5,842	16,684	19,000	2,000	11.76%
13200	Travel & Lodging	6,200	1,373	5,746	5,000	(1,200)	-19.35%
13250	Uniforms	800	125	250	1,500	700	87.50%
13325	Recruiting & Medical Testing	1,000	477	954	1,200	200	20.00%
13350	Other	7,500	4,973	9,946	8,000	500	6.67%
	Subtotal	\$ 35,000	\$ 13,045	\$ 34,090	\$ 36,700	\$ 1,700	4.86%
20100	Professional Services						
20200	Legal Fees	\$ 60,000	\$ 30,329	\$ 60,658	\$ 60,000	\$ -	0.00%
20250	Financial & Admin. Services	111,900	50,894	101,788	68,000	(43,900)	-39.23%
20250	Bond Issue Costs	-	-	-	-	-	0.00%
20300	Engineering & Technical Services	-	-	-	100,000	100,000	0.00%
	Subtotal	\$ 171,900	\$ 81,223	\$ 162,446	\$ 228,000	\$ 56,100	32.64%
21100	Other Services and Charges						
21100	General Liability/Property Ins.	\$ 12,600	\$ 11,184	\$ 11,184	\$ 11,900	\$ (700)	-5.56%
21150	Advertising & Communication	15,000	6,166	12,332	15,000	-	0.00%
21250	Watershed Management	-	-	-	-	-	0.00%
21252	EMS Programs/Supplies	-	433	866	500	500	0.00%
21253	Safety Programs/Supplies	5,000	2,046	4,092	5,000	-	0.00%
21300	Authority Dues/Permits/Fees	33,250	20,948	41,896	35,000	1,750	5.26%
21350	Laboratory Analysis	-	-	-	-	-	0.00%
21400	Utilities	890	632	1,264	900	10	1.12%
21420	General Other Services	2,200	895	1,790	3,000	800	36.36%
21430	Governance & Strategic Support	38,000	46,817	103,634	64,680	26,680	70.21%
21450	Bad Debt	5,000	-	5,000	5,000	-	0.00%
	Subtotal	\$ 111,940	\$ 89,121	\$ 182,058	\$ 140,980	\$ 29,040	25.94%
22000	Communication						
22100	Radio	\$ 1,280	\$ 1,176	\$ 1,176	\$ 1,280	\$ -	0.00%
22150	Telephone & Data Service	14,000	3,210	6,420	12,000	(2,000)	-14.29%
22200	Cell Phones & Pagers	6,000	3,509	7,018	7,000	1,000	16.67%
	Subtotal	\$ 21,280	\$ 7,895	\$ 14,614	\$ 20,280	\$ (1,000)	-4.70%
31000	Information Technology						
31100	Computer Hardware	\$ 22,000	\$ 12,916	\$ 25,832	\$ 20,000	\$ (2,000)	-9.09%
31150	SCADA Maint. & Support	25,000	2,805	25,000	42,500	17,500	8.62%
31200	Maintenance & Support Services	58,000	18,289	58,000	63,000	5,000	8.62%
31250	Software Purchases	13,000	2,922	10,000	13,000	-	0.00%
	Subtotal	\$ 118,000	\$ 36,932	\$ 118,832	\$ 138,500	\$ 20,500	17.37%
33000	Supplies						
33100	Office Supplies	\$ 15,000	\$ 7,167	\$ 14,334	\$ 15,000	\$ -	0.00%
33150	Subscriptions/Reference Material	1,000	695	1,390	1,000	-	0.00%
33350	Postage & Delivery	6,000	2,858	5,716	5,000	(1,000)	-16.67%
	Subtotal	\$ 22,000	\$ 10,720	\$ 21,440	\$ 21,000	\$ (1,000)	-4.55%
41000	Operation & Maintenance						
41100	Building & Grounds	\$ 30,500	\$ 26,976	\$ 53,952	\$ 53,000	\$ 22,500	73.77%
41150	Building & Land Lease	-	-	-	-	-	0.00%
41200	Pump Station Maintenance	-	-	-	-	-	0.00%
41300	Dam Maintenance	-	-	-	-	-	0.00%
41350	Pipeline/Appurtenances	-	-	-	-	-	0.00%
41400	Materials & Supplies	400	(10)	230	400	-	0.00%
41450	Chemicals	-	-	-	-	-	0.00%

Rivanna Water and Sewer Authority
Fiscal Year 2018-2019 Proposed Budget
Expense Detail

Department: Administration

Object Code	Line Item	Adopted Budget FY 2017-2018	Current Year Activity		Proposed Budget FY 2018-2019	2018	2018
			Six Month Actual 12/31/2017	Projected Year end 6/30/2018		vs. 2019 Variance \$	vs. 2019 Variance %
41500	Vehicle Maintenance	3,000	143	2,786	3,000	-	0.00%
41550	Equipment Maint. & Repair	-	-	-	-	-	-
41600	Instrumentation & Metering	-	-	-	-	-	-
41650	Fuel & Lubricants	2,700	1,823	3,646	4,000	1,300	48.15%
41700	General Other Maintenance	-	-	-	-	-	-
Subtotal		\$ 36,600	\$ 28,932	\$ 60,614	\$ 60,400	\$ 23,800	65.03%
81000	Equipment Purchases						
81100	Small Equipment & Tools	\$ -	\$ -	\$ -	\$ -	\$ -	-
81200	Rental & Leases	-	-	-	-	-	-
81250	Equipment (over \$5000)	-	-	-	15,000	15,000	-
81300	Vehicle Replacement Fund	8,300	4,150	8,300	12,500	4,200	50.60%
Subtotal		\$ 8,300	\$ 4,150	\$ 8,300	\$ 27,500	\$ 19,200	231.33%
95000	Allocations from Departments						
95100	Administrative Allocation	\$ -	\$ -	\$ -	\$ -	\$ -	-
95300	Engineering Allocation	-	-	-	-	-	-
95150	Maintenance Allocation	-	-	-	-	-	-
95200	Laboratory Allocation	-	-	-	-	-	-
Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -	-
Capital Reserve Transfers		\$ -	\$ -	\$ -	\$ -	\$ -	-
Depreciation		-	-	-	-	-	-
Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -	-
Total		\$ 2,034,147	\$ 1,032,372	\$ 2,113,102	\$ 2,432,811	\$ 398,664	19.60%

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Maintenance

FY 2018			FY 2019	Budget % Change
Budgeted FY 2018	Actual for 6 months	Projected 12 months	Proposed Budget	

Operations Budget

Projected Revenues

Miscellaneous Revenue

\$ - \$ 4,610 \$ 9,220 \$ -

Total Operations Revenues

\$ - \$ 4,610 \$ 9,220 \$ -

Projected Expenses

Personnel Cost	\$ 1,150,821	\$ 564,297	\$ 1,128,594	\$ 1,304,247	13.33%
Professional Services	-	-	-	-	
Other Services and Charges	12,300	11,105	15,375	17,500	42.28%
Communications	15,635	12,315	1,000	17,325	10.81%
Information Technology	6,500	2,328	6,156	6,500	0.00%
Supplies	500	95	190	2,000	300.00%
Operations and Maintenance	64,450	42,148	78,796	64,300	-0.23%
Equipment Purchases	94,850	42,490	89,980	105,650	11.39%
Depreciation	-	-	-	-	

Total Operations Expenses

\$ 1,345,056 \$ 674,778 \$ 1,320,091 \$ 1,517,522 12.82%

Department Summary

Total Revenues	\$ -	\$ 4,610	\$ 9,220	\$ -
Total Expenses	1,345,056	674,778	1,320,091	1,517,522

Net Costs Allocable to Rate Centers

\$ (1,345,056) \$ (670,168) \$ (1,310,871) \$ (1,517,522)

Allocations to the Rate Centers

Urban Water	30.00%	\$ 403,517	\$ 201,050	\$ 393,261	\$ 455,257
Crozet Water	3.50%	47,077	23,456	45,880	53,113
Scottsville Water	3.50%	47,077	23,456	45,880	53,113
		-		-	
Urban Wastewater	56.50%	759,957	378,645	740,642	857,400
Glenmore Wastewater	3.50%	47,077	23,456	45,880	53,113
Scottsville Wastewater	3.00%	40,352	20,105	39,326	45,526
	100.00%	\$ 1,345,057	\$ 670,168	\$ 1,310,869	\$ 1,517,522

Rivanna Water and Sewer Authority
Fiscal Year 2018-2019 Proposed Budget
Expense Detail

Department: Maintenance

Object Code	Line Item	Adopted Budget FY 2017-2018	Current Year Activity		Proposed Budget FY 2018-2019	2018	2018
			Six Month Actual 12/31/2017	Projected Year end 6/30/2018		vs. 2019 Variance \$	vs. 2019 Variance %
10000	Salaries & Benefits						
11000	Salaries	\$ 787,559	\$ 382,724	\$ 765,448	\$ 880,100	\$ 92,541	11.75%
11010	Overtime & Holiday Pay	5,000	798	1,596	6,000	1,000	20.00%
12010	FICA	60,631	27,820	55,640	67,787	7,156	11.80%
12020	Health Insurance	176,311	93,195	186,390	210,000	33,689	19.11%
12026	Employee Assistance Program	250	118	236	250	-	0.00%
12030	Retirement	75,763	37,175	74,350	84,666	8,903	11.75%
12040	Life Insurance	10,317	4,930	9,860	11,529	1,212	11.75%
12050	Fitness Program	400	-	-	-	(400)	-100.00%
12060	Worker's Comp Insurance	14,300	7,473	14,946	17,000	2,700	18.88%
	Subtotal	\$ 1,130,531	\$ 554,233	\$ 1,108,466	\$ 1,277,332	\$ 146,801	12.99%
13000	Other Personnel Costs						
13100	Employee Dues & Licenses	\$ -	\$ 160	\$ 320	\$ 500	\$ 500	
13150	Education & Training	6,000	3,920	7,840	11,000	5,000	83.33%
13200	Travel & Lodging	500	-	-	500	-	
13250	Uniforms	13,790	4,906	9,812	13,915	125	0.91%
13325	Recruiting & Medical Testing	-	610	1,220	500	500	
13350	Other	-	468	936	500	500	
	Subtotal	\$ 20,290	\$ 10,064	\$ 20,128	\$ 26,915	\$ 6,625	32.65%
20100	Professional Services						
20100	Legal Fees	\$ -	\$ -	\$ -	\$ -	\$ -	
20200	Financial & Admin. Services	-	-	-	-	-	
20250	Bond Issue Costs	-	-	-	-	-	
20300	Engineering & Technical Services	-	-	-	-	-	
	Subtotal	\$ -	\$ -	\$ -	\$ -	\$ -	
21100	Other Services and Charges						
21100	General Liability/Property Ins.	\$ 7,300	\$ 6,835	\$ 6,835	\$ 7,500	\$ 200	2.74%
21150	Advertising & Communication	-	-	-	-	-	
21250	Watershed Management	-	-	-	-	-	
21252	EMS Programs/Supplies	-	-	-	-	-	
21253	Safety Programs/Supplies	2,500	4,150	8,300	2,500	-	0.00%
21300	Authority Dues/Permits/Fees	-	-	-	-	-	
21350	Laboratory Analysis	-	-	-	-	-	
21400	Utilities	-	-	-	-	-	
21420	General Other Services	2,500	120	240	2,500	-	0.00%
21430	Governance & Strategic Support	-	-	-	5,000	5,000	
21450	Bad Debt	-	-	-	-	-	
	Subtotal	\$ 12,300	\$ 11,105	\$ 15,375	\$ 17,500	\$ 5,200	42.28%
22000	Communication						
22100	Radio	\$ 6,810	\$ 6,696	\$ 6,696	\$ 6,900	\$ 90	1.32%
22150	Telephone & Data Service	825	288	576	825	-	0.00%
22200	Cell Phones & Pagers	8,000	5,331	10,662	9,600	1,600	20.00%
	Subtotal	\$ 15,635	\$ 12,315	\$ 17,934	\$ 17,325	\$ 1,690	10.81%
31000	Information Technology						
31100	Computer Hardware	\$ 2,000	\$ -	\$ 1,500	\$ 2,000	\$ -	0.00%
31150	SCADA Maint. & Support	-	-	-	-	-	
31200	Maintenance & Support Services	2,500	2,250	4,500	2,500	-	0.00%
31250	Software Purchases	2,000	78	156	2,000	-	0.00%
	Subtotal	\$ 6,500	\$ 2,328	\$ 6,156	\$ 6,500	\$ -	0.00%
33000	Supplies						
33100	Office Supplies	\$ 500	\$ 95	\$ 190	\$ 2,000	\$ 1,500	300.00%
33150	Subscriptions/Reference Material	-	-	-	-	-	
33350	Postage & Delivery	-	-	-	-	-	
	Subtotal	\$ 500	\$ 95	\$ 190	\$ 2,000	\$ 1,500	300.00%
41000	Operation & Maintenance						
41100	Building & Grounds	\$ 9,300	\$ 9,352	\$ 14,704	\$ 9,300	\$ -	0.00%
41150	Building & Land Lease	-	-	-	-	-	
41200	Pump Station Maintenance	-	-	-	-	-	
41300	Dam Maintenance	-	-	-	-	-	
41350	Pipeline/Appurtenances	2,500	-	1,000	2,500	-	0.00%
41400	Materials & Supplies	8,000	4,376	8,752	8,000	-	0.00%
41450	Chemicals	-	-	-	-	-	
41500	Vehicle Maintenance	11,150	16,489	27,978	11,000	(150)	-1.35%
41550	Equipment Maint. & Repair	13,500	4,427	8,854	13,500	-	0.00%
41600	Instrumentation & Metering	1,500	684	1,368	1,500	-	0.00%
41650	Fuel & Lubricants	18,500	6,820	16,140	18,500	-	0.00%
41700	General Other Maintenance	-	-	-	-	-	

Rivanna Water and Sewer Authority
Fiscal Year 2018-2019 Proposed Budget
Expense Detail

Department: Maintenance

Expense Detail						2018	2018
Department: Maintenance		Current Year Activity				vs.	vs.
Object Code	Line Item	Adopted Budget FY 2017-2018	Six Month Actual 12/31/2017	Projected Year end 6/30/2018	Proposed Budget FY 2018-2019	2019 Variance \$	2019 Variance %
Subtotal		\$ 64,450	\$ 42,148	\$ 78,796	\$ 64,300	\$ (150)	-0.23%
81000	Equipment Purchases						
81100	Small Equipment & Tools	\$ 12,850	\$ 6,028	\$ 12,056	\$ 12,850	\$ -	0.00%
81200	Rental & Leases	1,000	462	924	1,000	-	0.00%
81250	Equipment (over \$5000)	9,000	-	5,000	9,800	800	8.89%
81300	Vehicle Replacement Fund	72,000	36,000	72,000	82,000	10,000	13.89%
Subtotal		\$ 94,850	\$ 42,490	\$ 89,980	\$ 105,650	\$ 10,800	11.39%
95000	Allocations from Departments						
95100	Administrative Allocation	\$ -	\$ -	\$ -	\$ -	\$ -	-
95300	Engineering Allocation	-	-	-	-	-	-
95150	Maintenance Allocation	-	-	-	-	-	-
95200	Laboratory Allocation	-	-	-	-	-	-
Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -	-
Capital Reserve Transfers		\$ -	\$ -	\$ -	\$ -	\$ -	-
Depreciation		-	-	-	-	-	-
Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -	-
Total		\$ 1,345,056	\$ 674,778	\$ 1,337,025	\$ 1,517,522	\$ 172,466	12.82%

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Laboratory Summary

FY 2018			FY 2019	Budget % Change
Budgeted FY 2018	Actual for 6 months	Projected 12 months	Proposed Budget	

Operations Budget

Projected Revenues

N/A

Projected Expenses

Personnel Cost	\$ 293,948	\$ 182,123	\$ 364,246	\$ 301,101	2.43%
Professional Services	-	-	-	-	
Other Services and Charges	10,412	4,650	11,513	14,230	36.67%
Communications	600	500	-	800	33.33%
Information Technology	2,200	269	1,438	2,500	13.64%
Supplies	1,650	1,176	2,378	2,150	30.30%
Operations and Maintenance	55,000	28,785	57,570	53,500	-2.73%
Equipment Purchases	1,500	500	1,000	72,100	4706.67%
Depreciation	-	-	-	-	
Total Operations Expenses	\$ 365,310	\$ 218,003	\$ 438,145	\$ 446,381	22.19%

Department Summary						
Total Revenues	\$	-	\$	-	\$	-
Total Expenses		365,310		218,003		438,145
						446,381
						22.19%
Net Costs Allocable to Rate Centers	\$	(365,310)	\$	(218,003)	\$	(438,145)
						(446,381)
Allocations to the Rate Centers						
Urban Water	44.00%	\$ 160,736	\$ 95,921	\$ 192,784	\$	196,408
Crozet Water	4.00%	14,612	8,720	17,526		17,855
Scottsville Water	2.00%	7,306	4,360	8,763		8,928
		-	-	-		
Urban Wastewater	47.00%	171,696	102,461	205,928		209,799
Glenmore Wastewater	1.50%	5,480	3,270	6,572		6,696
Scottsville Wastewater	1.50%	5,480	3,270	6,572		6,696
	100.00%	\$ 365,310	\$ 218,002	\$ 438,145	\$	446,382

Rivanna Water and Sewer Authority
Fiscal Year 2018-2019 Proposed Budget
Expense Detail

Department: Laboratory

Expense Detail							2018	2018
Department: Laboratory							vs.	vs.
Object Code	Line Item	Adopted Budget FY 2017-2018	Current Year Activity		Proposed Budget FY 2018-2019	2019 Variance \$	2019 Variance %	
			Six Month Actual 12/31/2017	Projected Year end 6/30/2018				
10000	Salaries & Benefits							
11000	Salaries	\$ 208,684	\$ 133,397	\$ 266,794	\$ 204,800	\$ (3,884)	-1.86%	
11010	Overtime & Holiday Pay	5,000	4,668	9,336	9,000	4,000	80.00%	
12010	FICA	16,347	10,155	20,310	16,356	9	0.06%	
12020	Health Insurance	33,058	14,724	29,448	36,400	3,342	10.11%	
12026	Employee Assistance Program	50	25	50	50	-	0.00%	
12030	Retirement	20,075	9,862	19,724	19,702	(373)	-1.86%	
12040	Life Insurance	2,734	1,297	2,594	2,683	(51)	-1.87%	
12050	Fitness Program	500	260	520	500	-		
12060	Worker's Comp Insurance	3,600	1,866	3,732	4,500	900	25.00%	
Subtotal		\$ 290,048	\$ 176,254	\$ 352,508	\$ 293,991	\$ 3,943	1.36%	
13000	Other Personnel Costs							
13100	Employee Dues & Licenses	\$ 500	\$ 275	\$ 550	\$ 500	\$ -	0.00%	
13150	Education & Training	1,500	2,300	4,600	1,680	180	12.00%	
13200	Travel & Lodging	500	2,136	4,272	1,930	1,430	286.00%	
13250	Uniforms	1,000	202	404	2,000	1,000	100.00%	
13325	Recruiting & Medical Testing		283	566	600	600	0.00%	
13350	Other	400	673	1,346	400	-	0.00%	
Subtotal		\$ 3,900	\$ 5,869	\$ 11,738	\$ 7,110	\$ 3,210	82.31%	
Professional Services								
20100	Legal Fees	\$ -	\$ -	\$ -	\$ -	\$ -		
20200	Financial & Admin. Services	-	-	-	-	-		
20250	Bond Issue Costs	-	-	-	-	-		
20300	Engineering & Technical Services	-	-	-	-	-		
Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -		
Other Services and Charges								
21100	General Liability/Property Ins.	\$ 500	\$ 481	\$ 481	\$ 530	\$ 30	6.00%	
21150	Advertising & Communication	-	-	-	-	-		
21250	Watershed Management	-	-	-	-	-		
21252	EMS Programs/Supplies	-	-	-	-	-		
21253	Safety Programs/Supplies	662	4	8	700	38	5.74%	
21300	Authority Dues/Permits/Fees	3,000	3	2,700	3,000	-	0.00%	
21350	Laboratory Analysis	750	4,162	8,324	4,500	3,750	500.00%	
21400	Utilities	5,000	-	-	-	(5,000)	-100.00%	
21420	General Other Services	500	-	-	500	-	0.00%	
21430	Governance & Strategic Support		-	-	5,000	5,000		
21450	Bad Debt		-	-	-	-		
Subtotal		\$ 10,412	\$ 4,650	\$ 11,513	\$ 14,230	\$ 3,818	36.67%	
Communication								
22000	Radio	\$ -	\$ -	\$ -	\$ -	\$ -		
22150	Telephone & Data Service	-	-	-	-	-		
22200	Cell Phones & Pagers	600	500	1,000	800	200	33.33%	
Subtotal		\$ 600	\$ 500	\$ 1,000	\$ 800	\$ 200		
Information Technology								
31000	Computer Hardware	\$ 1,200	\$ 50	\$ 1,000	\$ 1,500	\$ 300	25.00%	
31150	SCADA Maint. & Support	-	-	-	-	-		
31200	Maintenance & Support Services	800	200	400	800	-	0.00%	
31250	Software Purchases	200	19	38	200	-	0.00%	
Subtotal		\$ 2,200	\$ 269	\$ 1,438	\$ 2,500	\$ 300	13.64%	
Supplies								
33000	Office Supplies	\$ 1,500	\$ 417	\$ 1,200	\$ 1,500	\$ -	0.00%	
33150	Subscriptions/Reference Material	-	420	500	300	300		
33350	Postage & Delivery	150	339	678	350	200	133.33%	
Subtotal		\$ 1,650	\$ 1,176	\$ 2,378	\$ 2,150	\$ 500	30.30%	
Operation & Maintenance								
41000	Building & Grounds	\$ -	\$ -	\$ -	\$ -	\$ -		
41150	Building & Land Lease	-	-	-	-	-		
41200	Pump Station Maintenance	-	-	-	-	-		
41300	Dam Maintenance	-	-	-	-	-		
41350	Pipeline/Appurtenances	-	-	-	-	-		
41400	Materials & Supplies	30,000	18,007	36,014	30,000	-	0.00%	

Rivanna Water and Sewer Authority
Fiscal Year 2018-2019 Proposed Budget
Expense Detail

Department: Laboratory

Object Code	Line Item	Adopted Budget FY 2017-2018	Current Year Activity		Proposed Budget FY 2018-2019	2018	2018
			Six Month Actual 12/31/2017	Projected Year end 6/30/2018		vs. 2019 Variance \$	vs. 2019 Variance %
41450	Chemicals	15,000	9,215	18,430	15,000	-	0.00%
41500	Vehicle Maintenance	-	-	-	-	-	-
41550	Equipment Maint. & Repair	10,000	1,223	2,446	6,000	(4,000)	-40.00%
41600	Instrumentation & Metering	-	-	-	2,000	2,000	-
41650	Fuel & Lubricants	-	340	680	500	500	-
41700	General Other Maintenance	-	-	-	-	-	-
Subtotal		\$ 55,000	\$ 28,785	\$ 57,570	\$ 53,500	\$ (1,500)	-2.73%
81000	Equipment Purchases						
81100	Small Equipment & Tools	\$ 500	\$ -	\$ -	\$ 500	\$ -	0.00%
81200	Rental & Leases	-	-	-	-	-	-
81250	Equipment (over \$5000)	-	-	-	70,000	70,000	-
81300	Vehicle Replacement Fund	1,000	500	1,000	1,600	600	60.00%
Subtotal		\$ 1,500	\$ 500	\$ 1,000	\$ 72,100	\$ 70,600	4706.67%
95000	Allocations from Departments						
95100	Administrative Allocation	\$ -	\$ -	\$ -	\$ -	\$ -	-
95300	Engineering Allocation	-	-	-	-	-	-
95150	Maintenance Allocation	-	-	-	-	-	-
95200	Laboratory Allocation	-	-	-	-	-	-
Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -	-
Capital Reserve Transfers		\$ -	\$ -	\$ -	\$ -	\$ -	-
Depreciation		-	-	-	-	-	-
Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -	-
Total		\$ 365,310	\$ 218,003	\$ 439,145	\$ 446,381	\$ 81,071	22.19%

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Engineering Summary

FY 2018			FY 2019	Budget % Change
Budgeted FY 2018	Actual for 6 months	Projected 12 months	Proposed Budget	

Operations Budget

Projected Revenues

Payment for Services SWA

\$ - \$ 3,117 \$ 6,234 \$ -

Total Operations Revenues

\$ - \$ 3,117 \$ 6,234 \$ -

Projected Expenses

Personnel Cost	\$ 1,168,295	\$ 519,591	\$ 1,039,182	\$ 1,210,438	3.61%
Professional Services	144,000	4,907	59,814	44,000	-69.44%
Other Services and Charges	45,150	32,498	61,370	19,550	-56.70%
Communications	17,300	8,732	13,153	17,180	-0.69%
Information Technology	46,000	34,346	68,692	44,500	-3.26%
Supplies	9,500	3,167	6,334	9,500	0.00%
Operations and Maintenance	64,940	34,460	68,920	54,880	-15.49%
Equipment Purchases	23,850	11,709	23,418	26,500	11.11%
Depreciation	-	-	-	-	

Total Operations Expenses

\$ 1,519,035 \$ 649,410 \$ 1,340,883 \$ 1,426,548 -6.09%

Department Summary					
Total Revenues	\$	-	\$ 3,117	\$ 6,234	\$ -
Total Expenses		1,519,035	649,410	1,340,883	1,426,548
					-6.09%
Net Costs Allocable to Rate Centers	\$	(1,519,035)	\$ (646,293)	\$ (1,334,649)	\$ (1,426,548)
<u>Allocations to the Rate Centers</u>					
Urban Water	47.00%	\$ 713,946	\$ 303,758	\$ 627,285	\$ 670,478
Crozet Water	4.00%	60,761	25,852	53,386	57,062
Scottsville Water	2.00%	30,381	12,926	26,693	28,531
Urban Wastewater	44.00%	668,375	284,369	587,246	627,681
Glenmore Wastewater	1.50%	22,786	9,694	20,020	21,398
Scottsville Wastewater	1.50%	22,786	9,694	20,020	21,398
	100.00%	\$ 1,519,035	\$ 646,293	\$ 1,334,650	\$ 1,426,548

Rivanna Water and Sewer Authority
Fiscal Year 2018-2019 Proposed Budget
Expense Detail

Department: Engineering

Object Code	Line Item	Adopted Budget FY 2017-2018	Current Year Activity		Proposed Budget FY 2018-2019	2018 vs. 2019 Variance \$		2018 vs. 2019 Variance %	
			Six Month Actual 12/31/2017	Projected Year end 6/30/2018					
10000	Salaries & Benefits								
11000	Salaries	\$ 834,815	\$ 382,162	\$ 764,324	\$ 861,350	\$ 26,535		3.18%	
11010	Overtime & Holiday Pay	6,000	2,040	4,080	6,000	-		0.00%	
12010	FICA	64,322	28,578	57,156	66,352	2,030		3.16%	
12020	Health Insurance	132,233	44,099	88,198	134,700	2,467		1.87%	
12026	Employee Assistance Program	140	72	144	140	-		0.00%	
12030	Retirement	80,309	35,612	71,224	82,862	2,553		3.18%	
12040	Life Insurance	10,936	4,735	9,470	11,284	348		3.18%	
12050	Fitness Program	2,000	1,038	2,076	2,000	-		0.00%	
12060	Worker's Comp Insurance	15,740	7,865	15,730	18,800	3,060		19.44%	
	Subtotal	\$ 1,146,495	\$ 506,201	\$ 1,012,402	\$ 1,183,488	\$ 36,993		3.23%	
13000	Other Personnel Costs								
13100	Employee Dues & Licenses	\$ 1,800	\$ 1,509	\$ 3,018	\$ 2,200	\$ 400		22.22%	
13150	Education & Training	7,500	7,146	14,292	8,450	950		12.67%	
13200	Travel & Lodging	7,500	2,193	4,386	11,300	3,800		50.67%	
13250	Uniforms	3,500	830	1,660	3,500	-		0.00%	
13325	Recruiting & Medical Testing	500	1,373	2,746	500	-		0.00%	
13350	Other	1,000	339	678	1,000	-		0.00%	
	Subtotal	\$ 21,800	\$ 13,390	\$ 26,780	\$ 26,950	\$ 5,150		23.62%	
20100	Professional Services								
20200	Legal Fees	\$ 25,000	\$ 3,243	\$ 6,486	\$ 25,000	\$ -		0.00%	
20250	Financial & Admin. Services	4,000	-	-	4,000	-		0.00%	
20300	Bond Issue Costs	-	-	-	-	-		-	
	Engineering & Technical Services	115,000	1,664	53,328	15,000	(100,000)		-86.96%	
	Subtotal	\$ 144,000	\$ 4,907	\$ 59,814	\$ 44,000	\$ (100,000)		-69.44%	
21100	Other Services and Charges								
21150	General Liability/Property Ins.	\$ 4,900	\$ 3,626	\$ 3,626	\$ 4,900	\$ -		0.00%	
21250	Advertising & Communication	200	-	-	200	-		0.00%	
21252	Watershed Management	-	-	-	-	-		-	
21253	EMS Programs/Supplies	-	-	-	-	-		-	
21300	Safety Programs/Supplies	4,000	630	1,260	4,000	-		0.00%	
21350	Authority Dues/Permits/Fees	1,500	1,215	2,430	1,500	-		0.00%	
21400	Laboratory Analysis	250	-	-	250	-		0.00%	
21420	Utilities	300	171	342	300	-		0.00%	
21430	General Other Services	34,000	26,856	53,712	3,400	(30,600)		-90.00%	
21450	Governance & Strategic Support	-	-	-	5,000	5,000		-	
	Bad Debt	-	-	-	-	-		-	
	Subtotal	\$ 45,150	\$ 32,498	\$ 61,370	\$ 19,550	\$ (25,600)		-56.70%	
22000	Communication								
22100	Radio	\$ 8,000	\$ 4,311	\$ 4,311	\$ 8,000	\$ -		0.00%	
22150	Telephone & Data Service	1,500	629	1,258	1,500	-		0.00%	
22200	Cell Phones & Pagers	7,800	3,792	7,584	7,680	(120)		-1.54%	
	Subtotal	\$ 17,300	\$ 8,732	\$ 13,153	\$ 17,180	\$ (120)		-0.69%	
31000	Information Technology								
31100	Computer Hardware	\$ 9,000	\$ 7,725	\$ 15,450	\$ 7,000	\$ (2,000)		-22.22%	
31150	SCADA Maint. & Support	-	-	-	-	-		-	
31200	Maintenance & Support Services	34,000	26,485	52,970	34,500	500		1.47%	
31250	Software Purchases	3,000	136	272	3,000	-		0.00%	
	Subtotal	\$ 46,000	\$ 34,346	\$ 68,692	\$ 44,500	\$ (1,500)		-3.26%	
33000	Supplies								
33100	Office Supplies	\$ 5,000	\$ 2,815	\$ 5,630	\$ 5,000	\$ -		0.00%	
33150	Subscriptions/Reference Material	4,000	119	238	4,000	-		0.00%	
33350	Postage & Delivery	500	233	466	500	-		0.00%	
	Subtotal	\$ 9,500	\$ 3,167	\$ 6,334	\$ 9,500	\$ -		0.00%	
41000	Operation & Maintenance								
41100	Building & Grounds	\$ 33,940	\$ 10,862	\$ 31,724	\$ 18,940	\$ (15,000)		-44.20%	
41150	Building & Land Lease	-	-	-	-	-		-	
41200	Pump Station Maintenance	-	-	-	-	-		-	
41300	Dam Maintenance	-	-	-	-	-		-	
41350	Pipeline/Appurtenances	15,000	5,519	11,038	19,690	4,690		31.27%	
41400	Materials & Supplies	4,000	1,968	3,936	4,250	250		6.25%	

Rivanna Water and Sewer Authority
Fiscal Year 2018-2019 Proposed Budget
Expense Detail

Department: Engineering

Object Code	Line Item	Adopted Budget FY 2017-2018	Current Year Activity		Proposed Budget FY 2018-2019	2018	2018
			Six Month Actual 12/31/2017	Projected Year end 6/30/2018		vs. 2019 Variance \$	vs. 2019 Variance %
41450	Chemicals	-	-	-	-	-	
41500	Vehicle Maintenance	6,000	13,646	17,292	6,000	-	0.00%
41550	Equipment Maint. & Repair	1,000	74	148	1,000	-	0.00%
41600	Instrumentation & Metering	-	-	-	-	-	
41650	Fuel & Lubricants	5,000	2,391	4,782	5,000	-	0.00%
41700	General Other Maintenance	-	-	-	-	-	
Subtotal		\$ 64,940	\$ 34,460	\$ 68,920	\$ 54,880	\$ (10,060)	-15.49%
81000	Equipment Purchases						
81100	Small Equipment & Tools	\$ 2,500	\$ 1,034	\$ 2,068	\$ 8,000	\$ 5,500	220.00%
81200	Rental & Leases	-	-	-	-	-	
81250	Equipment (over \$5000)	-	-	-	-	-	
81300	Vehicle Replacement Fund	21,350	10,675	21,350	18,500	(2,850)	-13.35%
Subtotal		\$ 23,850	\$ 11,709	\$ 23,418	\$ 26,500	\$ 2,650	11.11%
95000	Allocations from Departments						
95100	Administrative Allocation	\$ -	\$ -	\$ -	\$ -	\$ -	
95300	Engineering Allocation	-	-	-	-	-	
95150	Maintenance Allocation	-	-	-	-	-	
95200	Laboratory Allocation	-	-	-	-	-	
Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -	
Capital Reserve Transfers		\$ -	\$ -	\$ -	\$ -	\$ -	
Depreciation		-	-	-	-	-	
Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -	
Total		\$ 1,519,035	\$ 649,410	\$ 1,340,883	\$ 1,426,548	\$ (92,487)	-6.09%

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APPENDICES

Rivanna Water and Sewer Authority

Fiscal Year 2018-2019

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Flow Projections

		(1,000 GALLONS)			(MILLION GALLONS PER DAY)		
		<i>FY 2018</i>	<i>FY 2019</i>	<i>% Change</i>	<i>FY 2018</i>	<i>FY 2019</i>	<i>% Change</i>
Water							
	Urban	3,432,018	3,397,700	-1.00%	9.403	9.309	-1.00%
	Crozet	190,066	196,946	3.62%	0.521	0.540	3.65%
	Scottsville	18,629	18,738	0.59%	0.051	0.051	0.00%
Total		<u>3,640,713</u>	<u>3,613,384</u>	<u>-0.75%</u>	<u>9.9750</u>	<u>9.9000</u>	<u>-0.75%</u>
Wastewater							
	Urban	3,424,639	3,390,400	-1.00%	9.383	9.289	-1.00%
	Glenmore	41,088	43,412	5.66%	0.113	0.119	5.31%
	Scottsville	21,335	19,966	-6.42%	0.058	0.055	-5.17%
Total		<u>3,487,062</u>	<u>3,453,778</u>	<u>-0.95%</u>	<u>9.5540</u>	<u>9.4630</u>	<u>-0.95%</u>

Allocation (Urban Area Only)

		<i>FY 2018</i>	<i>FY 2019</i>	<i>% Change</i>
<u>Water</u>				
	City	52%	51%	-1.92%
	ACSA	48%	49%	2.08%
<u>Wastewater</u>				
	City	53%	51%	-3.77%
	ACSA	47%	49%	4.26%

FY 2019 allocations are based on FY 2017 retail flows reported by the City and ACSA.

		(1,000 GALLONS)			(MILLION GALLONS PER DAY)		
		<i>FY 2018</i>	<i>FY 2019</i>	<i>% Change</i>	<i>FY 2018</i>	<i>FY 2019</i>	<i>% Change</i>
Allocation (Urban Area Only)							
<u>Water</u>							
	City	1,784,649	1,732,827	-2.90%	4.889	4.747	-2.90%
	ACSA	1,647,369	1,664,873	1.06%	4.513	4.561	1.06%
		<u>3,432,018</u>	<u>3,397,700</u>				
<u>Wastewater</u>							
	City	1,815,059	1,729,104	-4.74%	4.973	4.737	-4.75%
	ACSA	1,609,580	1,661,296	3.21%	4.410	4.551	3.20%
		<u>3,424,639</u>	<u>3,390,400</u>				

URBAN WATER DEBT SERVICE COSTS

Summary of Debt Service Budget to be included in Monthly Charges

City Allocation of Debt Service Costs		Estimated Debt Service Budget FY 2019	City %	City Amount	Annual Total
ALLOCATION BASED ON FLOWS					
<i>Regional Water System Projects:</i>					
47% of 2012A Refunding Bond		171,075	51.00%	87,248	
14.20% of 2015B Bond - New Projects		239,878	51.00%	122,338	209,586
<i>Revenues that offset Debt Service</i>					
Trust Fund Interest		(18,000)	51.00%	(9,180)	
Buck Mountain Surcharge		(118,600)	FIXED	(28,300)	
Lease Revenues		(1,600)	51.00%	(816)	(38,296)
RATES BASED ON FIXED AGREEMENTS					
<i>2003 & 2012 Urban Water Agreement</i>					
<i>Water Supply Expansion (15%/85%)</i>					
100% of 2012B Revenue Bond		1,337,656	15.00%	200,648	
9.00% of 2015B Bond - Refunding		142,745	15.00%	21,412	
<i>Non-Water Supply - Other Projects (48%/52%)</i>					
47.40% of 2015B Bond - Refunding		751,791	48.00%	360,860	
77.80% of 2015B Bond - New Projects		1,314,261	48.00%	630,845	
<i>South Rivanna Expansion of 1999</i>					
10.30% of 2015B Bond - Refunding		163,364	0.00%	-	1,213,765
<i>Southern Loop Water Line, West Branch</i>					
3.9% of 2012A Refunding Bond		14,184	24.51%	3,476	3,476
<i>South Rivanna Connector Main</i>					
15.3% of 2012A Refunding Bond		55,842	52.00%	29,038	29,038
DEBT SERVICE PROJECTED FROM 5-YEAR CIP					
CIP Growth Rate from 2016-2020 CIP		1,410,675	FIXED	606,525	606,525
Debt Service Coverage Ratio / Policy Charge		400,000	37.00%	148,000	148,000
Total Debt Service For Rate Computation		\$ 5,863,271		\$ 2,172,094	\$ 2,172,094

ACSA Allocation of Debt Service Costs		Estimated Debt Service Budget FY 2019	ACSA %	ACSA Amount	Annual Total
ALLOCATION BASED ON FLOWS					
<i>Regional Water System Projects:</i>					
47% of 2012A Refunding Bond		171,075	49.00%	83,827	
14.20% of 2015B Bond - New Projects		239,878	49.00%	117,540	201,367
<i>Revenues that offset Debt Service</i>					
Trust Fund Interest		(18,000)	49.00%	(8,820)	
Buck Mountain Surcharge		(118,600)	FIXED	(90,300)	
Lease Revenues		(1,600)	49.00%	(784)	(99,904)
RATES BASED ON FIXED AGREEMENTS					
<i>2003 & 2012 Urban Water Agreement</i>					
<i>Water Supply Expansion (15%/85%)</i>					
100% of 2012B Revenue Bond		1,337,656	85.00%	1,137,008	
9.00% of 2015B Bond - Refunding		142,745	85.00%	121,333	
<i>Non-Water Supply - Other Projects (48%/52%)</i>					
47.40% of 2015B Bond - Refunding		751,791	52.00%	390,931	
77.80% of 2015B Bond - New Projects		1,314,261	52.00%	683,416	
<i>South Rivanna Expansion of 1999</i>					
10.30% of 2015B Bond - Refunding		163,364	100.00%	163,364	2,496,052
<i>Southern Loop Water Line, West Branch</i>					
3.9% of 2012A Refunding Bond		14,184	75.49%	10,708	10,708
<i>South Rivanna Connector Main</i>					
15.3% of 2012A Refunding Bond		55,842	48.00%	26,804	26,804
DEBT SERVICE PROJECTED FROM 5-YEAR CIP					
CIP Growth Rate from 2016-2020 CIP		1,410,675	FIXED	804,150	804,150
Debt Service Coverage Ratio / Policy Charge		400,000	63.00%	252,000	252,000
Total Debt Service For Rate Computation		\$ 5,863,271		\$ 3,691,177	\$ 3,691,177

SUMMARY OF DEBT SERVICE REVENUES:		
CITY SHARE OF TOTAL DEBT SERVICE	\$ 2,172,094	37%
ACSA SHARE OF TOTAL DEBT SERVICE	3,691,177	63%
	\$ 5,863,271	100%

URBAN WASTEWATER DEBT SERVICE COSTS

Summary of Debt Service Budget to be Included in Charges

City Allocation of Debt Service Costs		Estimated Debt Service Budget FY 2019	City %	City Amount	
ALLOCATION BASED ON FLOWS					
<i>System Projects Rate</i>					
22.9% of 2015B Bond Refunding		363,207	51%	185,236	
100% 2005A Bond VRA/VRLF		159,339	51%	81,263	
88.5% of 2009A Bond VRA/VRLF		1,419,716	51%	724,055	
37.9% of 2011 A,B Bond VRA/VRLF		192,130	51%	97,986	
30.6% of 2012A Bond (new money)		369,811	51%	188,604	
100% of 2016 Bond		626,924	51%	319,731	1,596,875
<i>Revenues/Reserves that offset Debt Service</i>					
County MOU - Septage		(109,440)	51%	(55,814)	
Use of reserves for 2016 Bond DS		(300,000)	51%	(153,000)	
Trust Fund Interest		(26,200)	51%	(13,362)	(222,176)
ALLOCATION BASED ON FIXED AGREEMENTS					
<u>2014 Wastewater Agreement</u>					
Meadowcreek	97.9% of 2010A, and 13.6% of 2012A Bonds	1,107,062	Segments	920,044	
Wet Weather MCWWTP	11.5% of 2009A, and 62.1% of 2011 A/B Bonds	499,293	Segments	332,808	
Moore's Creek Pump Stn.	100% of 2011 D/E Bond	296,944	Segments	190,926	
Rivanna Pump Stn. & F.M.	7.2% of 2012A Bond & 100% of 2014A Bond	1,969,350	Segments	1,286,637	
Albemarle Berkley Pump Stn.	4.2% of 2012A Bond	50,758	0%	-	
Crozet Interceptor	2.9% of 2012A Bond	35,047	0%	-	
Schenks Branch Agreement	20.0% of 2012A, 2.1% of 2010A Bonds and 100% of 2015A	332,119	100%	332,119	3,062,534
<u>Four Party Rate</u>					
Regional System Projects	19.6% of 2012A Refunding Bond	71,370	N/A	24,429	
Crozet Interceptor	3.9% of 2012A Refunding Bond	14,221	N/A	4,868	
Facilities Purchase	7.2% of 2012A Refunding Bond	26,047	N/A	8,915	38,212
Moore's Creek Relief IS, Pt 1	1.6% of 2012A Refunding Bond	5,923	30%	1,777	1,777
DEBT SERVICE PROJECTED FROM 5-YEAR CIP					
CIP Growth Charge from 2016-2020 CIP		426,200	Fixed	220,400	220,400
Debt Service Coverage Ratio / Policy Charge		325,000	62%	201,500	201,500
Total		\$ 7,854,821		\$ 4,899,122	\$ 4,899,122

ACSA Allocation of Debt Service Costs		Estimated Debt Service Budget FY 2019	ACSA %	ACSA Amount	
ALLOCATION BASED ON FLOWS					
<i>System Projects Rate</i>					
22.9% of 2015B Bond Refunding		363,207	49%	177,971	
100% 2005A Bond VRA/VRLF		159,339	49%	78,076	
88.5% of 2009A Bond VRA/VRLF		1,419,716	49%	695,661	
37.9% of 2011 A,B Bond VRA/VRLF		192,130	49%	94,144	
30.6% of 2012A Bond (new money)		369,811	49%	181,207	
100% of 2016 Bond		626,924	49%	307,193	1,534,252
<i>Revenues that offset Debt Service</i>					
County MOU - Septage		(109,440)	49%	(53,626)	
Use of reserves for 2016 Bond DS		(300,000)	49%	(147,000)	
Trust Fund Interest		(26,200)	49%	(12,838)	(213,464)
ALLOCATION BASED ON FIXED AGREEMENTS					
<u>2014 Wastewater Agreement</u>					
Meadowcreek	97.9% of 2010A, and 13.6% of 2012A Bonds	1,107,062	Segments	187,018	
Wet Weather MCWWTP	11.5% of 2009A, and 62.1% of 2011 A/B Bonds	499,293	Segments	166,484	
Moore's Creek Pump Stn.	100% of 2011 D/E Bond	296,944	Segments	106,018	
Rivanna Pump Stn. & F.M.	7.2% of 2012A Bond	1,969,350	Segments	682,713	
Albemarle Berkley Pump Stn.	4.2% of 2012A Bond	50,758	100%	50,758	
Crozet Interceptor	2.9% of 2012A Bond	35,047	100%	35,047	
Schenks Branch Agreement	20.0% of 2012A, 2.1% of 2010A Bonds and 100% of 2015A	332,119	0%	-	1,228,038
<u>Four Party Rate</u>					
Regional System Projects	19.6% of 2012A Refunding Bond	71,370	N/A	46,941	
Crozet Interceptor	3.9% of 2012A Refunding Bond	14,221	N/A	9,353	
Facilities Purchase	7.2% of 2012A Refunding Bond	26,047	N/A	17,132	73,426
Moore's Creek Relief IS, Pt 1	1.6% of 2012A Refunding Bond	5,923	70%	4,146	4,146
DEBT SERVICE PROJECTED FROM 5-YEAR CIP					
CIP Growth Charge from 2016-2020 CIP		426,200	Fixed	205,800	205,800
Debt Service Coverage Ratio / Policy Charge		325,000	38%	123,500	123,500
Total		\$ 7,854,821		\$ 2,955,698	\$ 2,955,698

SUMMARY OF DEBT SERVICE REVENUES:

CITY SHARE OF TOTAL DEBT SERVICE	\$ 4,899,122	62%
ACSA SHARE OF TOTAL DEBT SERVICE	2,955,698	38%
	\$ 7,854,820	100%

OTHER RATE CENTERS DEBT SERVICE RATES

Summary of Debt Service Payments Due

	Existing Estimated Debt Service Budget FY 2019	Estimated New Debt Service	Total Annual Debt Service	ACSA Monthly Rate
<u>WATER</u>				
<u>Crozet Water</u>				
<i>System Upgrades</i>				
1.0% of 2012A Refunding Bond	\$ 3,585			
17.0% of 2012A Bond (new money)	205,450			
7.4% of 2015B Bond Refunding	117,368			
5.9% of 2015B Bond New Projects	99,668			
Estimated DS - CIP Growth in Rate	266,300	\$ 305,000		
<i>Revenues that offset Debt Service</i>				
Trust Fund Interest	(1,800)			
	<u>\$ 690,571</u>	<u>\$ 305,000</u>	<u>\$ 995,571</u>	<u>\$ 82,964</u>
<u>Scottsville Water</u>				
<i>System Upgrades</i>				
0.2% of 2012A Refunding Bond	\$ 623			
4.2% of 2012A Bond (new money)	50,758			
2.7% of 2015B Bond Refunding	42,824			
2.1% of 2015B Bond New Projects	35,475			
Estimated DS - CIP Growth in Rate		-		
<i>Revenues that offset Debt Service</i>				
Trust Fund Interest	(400)			
	<u>\$ 129,280</u>	<u>\$ -</u>	<u>\$ 129,280</u>	<u>\$ 10,773</u>
<u>WASTEWATER</u>				
<u>Glenmore Wastewater</u>				
<i>System Upgrades</i>				
0.10% of 2015B Bond Refunding	\$ 1,586			
<i>Revenues that offset Debt Service</i>				
Trust Fund Interest	-			
	<u>1,586</u>	<u>-</u>	<u>\$ 1,586</u>	<u>\$ 132</u>
<u>Scottsville Wastewater</u>				
<i>Facilities Purchase</i>				
0.3% of 2012A Refunding Bond	\$ 1,208			
<i>System Upgrades</i>				
0.3% of 2012A Bond (new money)	3,626			
0.20% of 2015B Bond Refunding	3,172			
Estimated DS - CIP Growth in Rate		-		
<i>Revenues that offset Debt Service</i>				
Trust Fund Interest	-			
	<u>\$ 8,006</u>	<u>\$ -</u>	<u>\$ 8,006</u>	<u>\$ 667</u>
TOTAL	<u>\$ 829,443</u>	<u>\$ 305,000</u>	<u>\$ 1,134,443</u>	<u>\$ 94,536</u>

DEBT SUMMARY

	Total Revenue Bond Debt	Total FY 2019 Debt Service
<u>CURRENT EXISTING DEBT</u>		
<u>DEBT BY BOND ISSUE</u>		
2005 A Bond VRA/VRLF	1,187,686	159,339
2009A Bond	16,974,889	1,604,199
2010A Bond	10,566,205	962,521
2011A Bond	5,540,057	443,608
2011B Bond	743,565	63,331
2011D,E Bond	3,597,969	296,944
2012A Bond (refunding & new money)	19,070,000	1,572,609
2012B Bond	23,345,000	1,337,656
2014A Bond	27,265,527	1,882,336
2015A Bond	1,109,956	70,593
2015B Bond (refunding & new money)	41,870,000	3,275,338
2016 Bond	9,604,000	626,924
	\$ 160,874,854	\$ 12,295,398

PRINCIPAL AND INTEREST PAYMENTS BY CENTER - Annual

Urban Water	4,190,796
Crozet Water	426,071
Scottsville Water	129,680
Urban Wastewater	7,539,261
Glenmore Wastewater	1,586
Scottsville Wastewater	8,006
	\$ 12,295,398

Stone Robinson School WWTP Estimated Charges

	<i>Total</i>	<i>Monthly</i>
Expenses		
<i>Fixed Costs</i>		
Wages	\$ 10,023	
Benefits	3,943	
Mileage	1,837	
Subtotal	\$ 15,803	
Overhead at 35%	5,531	
Total Fixed Charge	<u>\$ 21,334</u>	
 <i>Variable Costs</i>		
Repairs, Maintenance, Other	\$ 5,000	
Overhead at 35%	1,750	
Total Variable Charge	<u>\$ 6,750</u>	
Total Annual Charge Estimate	<u>\$ 28,084</u>	<u>\$ 2,340</u>

All Rate Centers

Detailed Summary of Revenues

	<i>FY 2018</i>	<i>FY 2019</i>	<i>\$ Change</i>	<i>% Change</i>
<u>OPERATIONS</u>				
Operations Rate Revenues	\$ 15,403,127	\$ 16,387,174	\$ 984,047	6.39%
Other Operations Revenues				
Interest Allocation	\$ 15,000	\$ 28,050	\$ 13,050	87.00%
Stone Robinson WWTP	27,630	28,084	454	1.64%
Septage/Sludge Acceptance	390,000	410,000	20,000	5.13%
Leases	64,000	100,000	36,000	56.25%
Administration	410,000	462,000	52,000	12.68%
Nutrient Credits	100,000	90,000	(10,000)	-10.00%
Use of Reserves	80,000	-	(80,000)	0.00%
Miscellaneous	17,000	-	(17,000)	-100.00%
	<u>\$ 1,103,630</u>	<u>\$ 1,118,134</u>	<u>\$ 14,504</u>	<u>1.31%</u>
Total Operations Revenues	<u>\$ 16,506,757</u>	<u>\$ 17,505,308</u>	<u>\$ 998,551</u>	<u>6.05%</u>
<u>DEBT SERVICE</u>				
Debt Service Rate Revenues				
City	\$ 6,634,556	\$ 7,071,216	\$ 436,660	6.58%
ACSA	6,926,602	7,781,315	854,713	12.34%
	<u>\$ 13,561,158</u>	<u>\$ 14,852,531</u>	<u>\$ 1,291,373</u>	<u>9.52%</u>
Other Debt Service Revenues				
Interest	146,900	390,400	243,500	165.76%
Urban WW Reserves used	600,000	300,000	(300,000)	
County MOU - Septage	109,440	109,440	-	0.00%
Buck Mountain Surcharge	84,000	118,600	34,600	41.19%
Leases	1,600	1,600	-	0.00%
	<u>\$ 941,940</u>	<u>\$ 920,040</u>	<u>\$ (21,900)</u>	<u>-2.32%</u>
Total Debt Service Revenues	<u>\$ 14,503,098</u>	<u>\$ 15,772,571</u>	<u>\$ 1,269,473</u>	<u>8.75%</u>
Total Revenues	<u>\$ 31,009,855</u>	<u>\$ 33,277,879</u>	<u>\$ 2,268,024</u>	<u>7.31%</u>

Rivanna Water and Sewer Authority
Fiscal Year 2018-2019 Proposed Budget
Expense Detail

Authority as a Whole

Authority as a Whole		Current Year Activity			vs.		vs.	
Object Code	Line Item	Adopted Budget FY 2017-2018	Six Month Actual 12/31/2017	Projected Year end 6/30/2018	Proposed Budget FY 2018-2019	2019 Variance \$	2019 Variance %	
10000	Salaries & Benefits							
11000	Salaries	\$ 5,384,854	\$ 2,544,500	\$ 5,144,000	\$ 5,683,450	\$ 298,596	5.55%	
11010	Overtime Pay	197,800	159,308	308,616	247,500	49,700	25.13%	
12010	FICA	427,073	195,508	391,016	453,719	26,646	6.24%	
12020	Health Insurance	991,929	443,204	876,408	1,128,890	136,961	13.81%	
12026	Employee Assistance Program	1,265	629	1,258	1,245	(20)	-1.58%	
12030	Retirement	518,023	238,361	476,722	546,749	28,726	5.55%	
12040	Life Insurance	70,543	31,616	63,232	74,453	3,910	5.54%	
12050	Fitness Program	11,820	5,277	10,554	10,650	(1,170)	-9.90%	
12060	Worker's Comp Insurance	74,141	38,134	76,268	93,000	18,859	25.44%	
Subtotal		\$ 7,677,448	\$ 3,656,537	\$ 7,348,074	\$ 8,239,656	\$ 562,208	7.32%	
13000	Other Personnel Costs							
13100	Employee Dues & Licenses	\$ 10,490	\$ 3,566	\$ 7,132	\$ 10,890	\$ 400	3.81%	
13150	Education & Training	62,510	32,633	70,266	79,130	16,620	26.59%	
13200	Travel & Lodging	32,050	10,034	27,568	33,850	1,800	5.62%	
13250	Uniforms	45,090	20,451	40,902	47,615	2,525	5.60%	
13325	Recruiting & Medical Testing	3,840	5,085	9,296	6,450	2,610	67.97%	
13350	Other	10,095	8,904	17,808	12,195	2,100	20.80%	
Subtotal		\$ 164,075	\$ 80,673	\$ 172,972	\$ 190,130	\$ 26,055	15.88%	
Professional Services								
20100	Legal Fees	\$ 94,000	\$ 69,107	\$ 173,214	\$ 94,000	\$ -	0.00%	
20200	Financial & Admin. Services	115,900	50,894	101,788	72,000	(43,900)	-37.88%	
20250	Bond Issue Costs	-	-	-	-	-	0.00%	
20300	Engineering & Technical Services	380,450	221,836	558,672	544,250	163,800	43.05%	
Subtotal		\$ 590,350	\$ 341,837	\$ 833,674	\$ 710,250	\$ 119,900	20.31%	
Other Services and Charges								
21100	General Liability/Property Ins.	\$ 123,100	\$ 112,161	\$ 112,161	\$ 144,750	\$ 21,650	17.59%	
21150	Advertising & Communication	15,200	6,391	12,782	15,425	225	1.48%	
21250	Watershed Management	100,000	10,000	110,000	125,000	25,000	25.00%	
21252	EMS Programs/Supplies	500	433	1,366	1,000	500	100.00%	
21253	Safety Programs/Supplies	41,532	22,540	45,080	40,790	(742)	-1.79%	
21300	Authority Dues/Permits/Fees	90,330	53,919	102,288	89,300	(1,030)	-1.14%	
21350	Laboratory Analysis	100,000	52,346	104,692	110,480	10,480	10.48%	
21400	Utilities	1,269,290	662,856	1,347,420	1,311,700	42,410	3.34%	
21420	General Other Services	767,710	469,297	939,094	839,610	71,900	9.37%	
21430	Governance & Strategic Support	40,000	48,500	105,634	131,680	91,680	229.20%	
21450	Bad Debt	5,000	-	5,000	5,000	-	-	
Subtotal		\$ 2,552,662	\$ 1,438,443	\$ 2,885,517	\$ 2,814,735	\$ 262,073	10.27%	
Communication								
22000								
22100	Radio	\$ 26,300	\$ 21,588	\$ 21,588	\$ 26,420	\$ 120	0.46%	
22150	Telephone & Data Service	78,425	32,862	70,724	74,525	(3,900)	-4.97%	
22200	Cell Phones & Pagers	37,880	21,847	43,694	42,160	4,280	11.30%	
Subtotal		\$ 142,605	\$ 76,297	\$ 136,006	\$ 143,105	\$ 500	0.35%	
Information Technology								
31000								
31100	Computer Hardware	\$ 51,600	\$ 30,922	\$ 60,052	\$ 47,700	\$ (3,900)	-7.56%	
31150	SCADA Maint. & Support	154,600	24,343	152,100	170,100	15,500	10.03%	
31200	Maintenance & Support Services	95,300	47,224	115,870	100,800	5,500	5.77%	
31250	Software Purchases	22,900	4,102	13,178	22,850	(50)	-0.22%	
Subtotal		\$ 324,400	\$ 106,591	\$ 341,200	\$ 341,450	\$ 17,050	5.26%	
Supplies								
33000								
33100	Office Supplies	\$ 28,400	\$ 13,410	\$ 27,186	\$ 29,600	\$ 1,200	4.23%	
33150	Subscriptions/Reference Material	6,110	1,329	2,318	5,920	(190)	-3.11%	
33350	Postage & Delivery	10,460	6,120	12,240	8,400	(2,060)	-19.69%	
Subtotal		\$ 44,970	\$ 20,859	\$ 41,744	\$ 43,920	\$ (1,050)	-2.33%	
Operation & Maintenance								
41000								
41100	Building & Grounds	\$ 282,240	\$ 252,848	\$ 410,696	\$ 328,340	\$ 46,100	16.33%	
41150	Building & Land Lease	32,500	32,313	39,626	32,500	-	0.00%	
41200	Pump Station Maintenance	102,500	59,373	118,746	102,500	-	0.00%	
41300	Dam Maintenance	99,500	62,491	131,482	99,500	-	0.00%	
41350	Pipeline/Appurtenances	385,160	295,945	414,612	369,850	(15,310)	-3.97%	
41400	Materials & Supplies	131,900	73,382	147,014	132,150	250	0.19%	
41450	Chemicals	1,548,380	670,734	1,356,468	1,564,900	16,520	1.07%	
41500	Vehicle Maintenance	38,350	40,192	67,884	38,200	(150)	-0.39%	

Rivanna Water and Sewer Authority
Fiscal Year 2018-2019 Proposed Budget
Expense Detail

Authority as a Whole

Authority as a Whole

Object Code	Line Item	Adopted Budget FY 2017-2018	Current Year Activity		Proposed Budget FY 2018-2019	vs.	vs.
			Six Month Actual 12/31/2017	Projected Year end 6/30/2018		2019 Variance \$	2019 Variance %
41550	Equipment Maint. & Repair	613,500	238,339	551,060	609,500	(4,000)	-0.65%
41600	Instrumentation	134,420	29,080	131,792	184,420	50,000	37.20%
41650	Fuel & Lubricants	92,000	31,428	80,356	93,800	1,800	1.96%
41700	General Other Maintenance	153,000	27,451	134,834	164,000	11,000	7.19%
Subtotal		\$ 3,613,450	\$ 1,813,576	\$ 3,584,570	\$ 3,719,660	\$ 106,210	2.94%
81000	Equipment Purchases						
81100	Small Equipment & Tools	\$ 47,550	\$ 36,207	\$ 72,414	\$ 53,050	\$ 5,500	11.57%
81200	Rental & Leases	14,300	5,948	11,896	14,300	-	0.00%
81250	Equipment (over \$5000)	111,000	8,975	95,950	196,800	85,800	77.30%
81300	Vehicle Replacement Fund	163,450	81,725	163,450	195,250	31,800	19.46%
Subtotal		\$ 336,300	\$ 132,855	\$ 343,710	\$ 459,400	\$ 123,100	36.60%
95000	Allocations from Departments						
95100	Administrative Allocation	\$ -	\$ -	\$ -	\$ -	\$ -	-
95300	Engineering Allocation	-	-	-	-	-	-
95150	Maintenance Allocation	-	-	-	-	-	-
95200	Laboratory Allocation	-	-	-	-	-	-
Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -	-
Reserve Transfers-GAC Carbon		\$ 272,500	\$ 136,250	\$ 272,500	\$ -	\$ (272,500)	-100.00%
Depreciation		788,000	394,000	788,000	843,000	55,000	6.98%
Subtotal		\$ 1,060,500	\$ 530,250	\$ 1,060,500	\$ 843,000	\$ (217,500)	-20.51%
Total		\$ 16,506,760	\$ 8,197,918	\$ 16,747,967	\$ 17,505,306	\$ 998,546	6.05%

Audit Check	
Less revenue allocation in Admin.	(462,000)
Less revenue allocation in Maint.	-
Less revenue allocation in Eng.	-
Detail Check on Expenses	\$ 17,043,306
Total Summary Sheet Rate Center Only	\$ 17,043,306

RWSA Staffing by Department

	Approved Positions FY 2018	Changes	Positions FY 2019
OPERATIONS			
<u>Engineering & Maintenance</u>			
Director of Engineering & Maintenance	1		1
Engineering Department			
Senior Civil, Civil Engineers	5		5
Water Resources Manager (moved from Water)	1		1
Engineering Technician/Inspector/GIS	3		3
GIS Coordinator	1	-1	0
Administrative Office Technician	1		1
(Director FTE included) Subtotal	12	-1	11
Maintenance Department			
Maintenance Manager	1		1
Maintenance Supervisor	1		1
Mechanics	10		10
Industrial Controls/Instrumentation Specialist	0	1	1
Vehicle Equipment Mechanic	1		1
Mechanic Helper	1		1
Maintenance Workers	2		2
Subtotal	16	1	17
<u>Operations</u>			
Director of Operations	1		1
Laboratory			
Laboratory Manager	1		1
Chemist	1		1
Lab Technician	1		1
Subtotal	3		3
Wastewater Department			
Wastewater Manager	1		1
Wastewater Assistant Manager	1		1
Treatment Supervisor	1		1
<u>Plant Operators (14 total)</u>			
Operators - Relief Shift Differential all plants	2		2
Operators - Urban	9		9
Operator - Glenmore	1		1
Operator - Scottsville	1		1
Subtotal	16		16
Water Department			
Water Manager	1		1
Water Assistant Manager	1		1
Water Resources Manager	1		1
Water Treatment Plant Supervisor	2		2

RWSA Staffing by Department

	Approved Positions FY 2018	Changes	Positions FY 2019
OPERATIONS			
<u>Plant Operators</u>			
Operators - Relief Shift Differential all plants	3		3
Operators - Urban	14.4	1	15.4
Operators - Crozet	2.6		2.6
Operators - Scottsville	1.4		1.4
Subtotal	26.4	1	27.4
Subtotal	74.4	1	75.4

Joint Administrative Staff

			FTE Split		
			RWSA	SWA	
Executive Director	1		0.85	0.15	1.00
Communications Manager/Executive Coordinator	1		0.65	0.35	1.00
Director of Finance & Administration	1		0.85	0.15	1.00
Office/HR Manager	1		0.85	0.15	1.00
Accountant	1		0.75	0.25	1.00
Payroll & Benefits Coordinator	1		0.75	0.25	1.00
Accounts Payable/Purchasing Technician	1		0.90	0.10	1.00
Accounts Receivable Technician	1		0.30	0.70	1.00
Reception/Secretary III	1		0.85	0.15	1.00
Administrative Office Technician	1		0.60	0.40	1.00
Environmental & Safety Manager	1		0.50	0.50	1.00
<u>IT/SCADA</u>					
Information Systems Administrator	1		0.80	0.20	1.00
Information Systems Asst. Administrator	1		0.60	0.40	1.00
GIS Coordinator (moved from Engineering)	0	1	1.00	0.00	1.00
Software Analyst	0	1	0.80	0.20	1.00
IT Specialist - SCADA	1		1.00	0.00	1.00
SCADA Technician	1		1.00	0.00	1.00
Administration and allocation with RSWA	15	2	13.05	3.95	
Total all positions	89.40	3.00			92.40
FTE Position Allocated to RSWA	-3.5				-3.95
Total Adjusted FTEs	85.90				88.45

Data for ACSA

	<u>FY 2018</u>	<u>FY 2019</u>	<u>Change</u>
Total RWSA Expenses			
Water	\$ 14,539,000	\$ 15,872,000	\$ 1,333,000
Wastewater	16,061,000	16,943,000	882,000
Add Administration revenue allocation	410,000	462,000	52,000
Add Maintenance revenue allocation	-	-	-
Add Engineering revenue allocation	-	-	-
			-
Total	<u>\$ 31,010,000</u>	<u>\$ 33,277,000</u>	<u>\$ 2,267,000</u>

**RWSA Rate Charges Allocated to
ACSA, by Service Area****Water**

Urban	\$ 6,669,144	\$ 7,138,223	\$ 469,079
Crozet	1,606,812	1,952,952	346,140
Scottsville	541,684	572,608	30,924
Total	<u>\$ 8,817,640</u>	<u>\$ 9,663,783</u>	<u>\$ 846,143</u>

Wastewater

Urban	\$ 5,810,406	\$ 6,521,468	\$ 711,062
Scottsville	292,921	309,878	16,957
Stone Robinson School	27,630	28,084	454
Glenmore	353,926	374,306	20,380
			-
Total	<u>\$ 6,484,883</u>	<u>\$ 7,233,736</u>	<u>\$ 748,853</u>

Total for ACSA	<u>\$ 15,302,523</u>	<u>\$ 16,897,519</u>	<u>\$ 1,594,996</u>
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