





# Board of Directors Meeting & Public Hearing


May 28, 2019  
2:15pm



695 Moores Creek Lane | Charlottesville, Virginia 22902-9016

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www.rivanna.org 

## **BOARD OF DIRECTORS**

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

**DATE:** May 28, 2019

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

**TIME:** 2:15 p.m.

## **AGENDA**

### **1. CALL TO ORDER**

- a. Welcome to New Board Member, Dr. Tarron Richardson, City Manager*

### **2. ELECTION OF VICE CHAIR**

### **3. MINUTES OF PREVIOUS BOARD MEETINGS**

- a. Minutes of Regular Board Meeting on April 23, 2019*

### **4. RECOGNITION**

- a. Government Finance Officers Association – Certificate of Achievement for Excellence in Financial Reporting: Director of Finance, Mr. Lonnie Wood*

### **5. EXECUTIVE DIRECTOR'S REPORT**

### **6. ITEMS FROM THE PUBLIC**

### **7. RESPONSES TO PUBLIC COMMENTS**

### **8. CONSENT AGENDA**

- a. Staff Report on Finance*
- b. Staff Report on Ongoing Projects*
- c. Staff Report on Operations*
- d. Sugar Hollow Dam – Rubber Crest Gate Replacement and Intake Tower Repairs – Engineering Design, Bid, and Construction Phase Services*

### **9. OTHER BUSINESS**

*(JOINT SESSION WITH THE RSWA)*

- a. Presentation: Quarterly Strategic Plan Update – Year 1 Wrap-Up; Goal Team Leaders*

- b. Presentations; Lonnie Wood, Director of Finance and Administration*
  - i. Personnel Management Plan Update*
  - ii. FY 2020 Pay Scale Adjustment*
  - iii. Virginia Retirement System Long Term Care Program*

*(RECESS RWSA TO COMPLETE THE RWSA MEETING)*

*(RECONVENE THE RWSA MEETING)*

- c. Presentation and Public Hearing: Rate Resolution Adoption, Approval of FY 2019 – 2020 Budget and FY 2020-2024 CIP; Bill Mawyer, Executive Director*

***10. OTHER ITEMS FROM BOARD/STAFF NOT ON AGENDA***

***11. CLOSED MEETING***

***12. 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)



**RWSA BOARD OF DIRECTORS**  
**Minutes of Regular Meeting**  
**April 23, 2019**

A regular meeting of the Rivanna Water & Sewer Authority (RWSA) Board of Directors was held on Tuesday, April 23, 2019 at 2:15 p.m. in the 2<sup>nd</sup> floor conference room, Administration Building, 695 Moores Creek Lane, Charlottesville, Virginia.

**Board Members Present:** Lauren Hildebrand, Mike Gaffney, Mike Murphy, Jeff Richardson (left at 3:19 p.m.), Liz Palmer.

**Board Members Absent:** Kathy Galvin, Gary O'Connell.

**Staff Present:** Lonnie Wood, Jennifer Whitaker, Phil McKalips, David Rhoades, Steven Miller, Liz Coleman, Scott Schiller, Bill Morris, Victoria Fort, Dyon Vega, Austin Marrs, Andrea Terry, David Tungate, Michelle Simpson, Bill Mawyer, Katie McIlwee.

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

**1. CALL TO ORDER**

Mr. Gaffney called the regular meeting of the Board of Directors of the Rivanna Water and Sewer Authority at 2:59 p.m.

**2. MINUTES OF PREVIOUS BOARD MEETINGS**

*a. Minutes of Regular Board Meeting on March 26, 2019*

**Dr. Palmer moved that the Board approve the minutes of the meeting of March 26, 2019. The motion was seconded by Mr. Richardson and passed unanimously (5-0). Ms. Galvin and Mr. O'Connell were absent from the meeting and the vote.**

**3. RECOGNITION**

*a. Joint Resolution of Appreciation for Mike Murphy*

The resolution of appreciation was adopted by the RWSA's action as follows:

**WHEREAS**, Mr. Murphy has served as a member of the Rivanna Water & Sewer Authority and Solid Waste Authority Boards of Directors since August of 2018; and

**WHEREAS**, over that same period Mr. Murphy has demonstrated leadership in water and sewer, solid waste and recycling services; and has been a valuable member of the Boards of Directors and a resource to the Authorities; and

**WHEREAS**, Mr. Murphy's understanding of the water, sewer, solid waste and recycling operations of the City of Charlottesville, the Water & Sewer Authority and the Solid Waste

Authority has supported a strategic decision-making process that provided benefits to the customers served by the City of Charlottesville as well as the community as a whole.

**WHEREAS**, the Water & Sewer Authority and Solid Waste Authority Boards of Directors are most grateful for the professional and personal contributions Mr. Murphy has provided to both Authorities and to the community; and

**NOW, THEREFORE, BE IT RESOLVED** that the Rivanna Water & Sewer Authority and the Rivanna Solid Waste Authority Boards of Directors recognize, thank, and commend Mr. Murphy for his distinguished service, efforts, and achievements as a member of the Rivanna Water & Sewer Authority and the Rivanna Solid Waste Authority, and present this Resolution as a token of esteem, with their best wishes in his future endeavors.

**BE IT FURTHER RESOLVED** that this Resolution be entered upon both the permanent Minutes of the Rivanna Water & Sewer Authority and the Rivanna Solid Waste Authority.

#### ***4. EXECUTIVE DIRECTOR'S REPORT***

Mr. Mawyer reported that they continued with safety training programs and were pleased that this was part of the strategic plan for workforce development. He stated that Tom Corrice had updated his wastewater license from Class IV to Class III, and they conducted an Earth Day event as part of their environmental stewardship. He stated the State was moving forward with Phase III of the watershed improvement plan to clean up the Chesapeake Bay and was not likely to achieve its goals within the allotted time period, with legislation proposed to reduce the nutrient output from wastewater plants to 4 mg for nitrogen and 0.3 mg for phosphorous. He stated the RWSA had been doing a good job in reducing nitrogen and believed that, with additional treatment, it can meet the goals.

Mr. Mawyer mentioned that they had discussed the new FOIA laws and requirements at the last VAWWA meeting, and they learned there could be penalties for individuals for not following FOIA rules, and for a board if it did not follow closed session requirements.

Mr. Murphy noted that City Attorney John Blair and Meghan Ryan of the Virginia Coalition on Open Government had recently conducted a FOIA training that was open to the public. He asked if there were Board members who didn't feel they knew enough about the FOIA obligation, the City could likely provide it to them.

Mr. Krueger responded that for the last 20 years, the City representatives on the Board have been given FOIA training by the City Attorney, and the County representatives on the Board by the County Attorney. He stated he worked with Mr. Mawyer, Mr. Wood, and Mike Gaffney, and he had not conducted repetitive training for the Board as everyone else already had the training.

Mr. Murphy stated that it continued to evolve and for boards that had a lot of citizens, it was an extremely important part of their orientation to service.

Mr. Krueger commented that it was also very important when they had a Citizens Advisory Council.

93 Mr. Mawyer resumed his presentation with photos of the recent Earth Day cleanup event. He  
94 next reviewed the Birdwood waterline, noting that they have completed about 4,300 feet and  
95 were two-thirds completed and somewhat ahead of schedule. He stated they were working on  
96 erosion control issues with the County, UVA Foundation, and residents of the neighborhoods. He  
97 presented a picture with the route of the new waterline, pointing out the locations that had been  
98 completed.

99  
100 Mr. Mawyer stated they continued to work with the UVA Foundation, other businesses, and  
101 residents on the South Rivanna to Ragged Mountain waterline easements. He stated they had a  
102 surveyor in the field currently and were conducting appraisals, and they hoped to make offers in  
103 late May to private owners at Ingleridge Farm.

104  
105 Mr. Mawyer reported they were working with the University on the Observatory Water  
106 Treatment Plant leases, and had done community outreach in April with UVA, Western  
107 Albemarle High School, and Hollymead Elementary School. He stated he would make a budget  
108 presentation to the Albemarle County Service Authority in May and they were on the agenda for  
109 an upcoming meeting with the Crozet CAC in June. He stated they have issued a press release  
110 about the granular activated carbon project and would conduct an open house on May 9 at the  
111 South Rivanna Treatment Plant to demonstrate the system.

112  
113 Dr. Palmer noted that the state's draft of Phase III of the Watershed Implementation Plan was  
114 already up for public review and comment, and she asked if the legislation was supposed to  
115 come through next year and if the legislation had passed.

116  
117 Mr. Mawyer clarified that the closing date for comments was June 7 and stated they wanted the  
118 legislation as soon as possible to meet 2025 goals, and he did not think the legislation had passed  
119 yet. He stated he did not know if Phase III of the Watershed Implementation Plan could be made  
120 without the approval of the General Assembly, though he would find out.

121  
122 Mr. Krueger interjected that he thought this might be through the adoption of regulations to  
123 change the timetable and may not result in an actual bill.

124  
125 Mr. Gaffney commented that he had come across a chart of the Chesapeake Bay watershed,  
126 graded by locations – with a lot of Fs and Ds – but the James River watershed had a C+.

127  
128 Mr. Mawyer added that he had learned that the James River watershed was the only one to have  
129 met its goals thus far. He stated that he had asked why the requirements were changing since the  
130 James River watershed was meeting its goals, and he was told that this was because it was a  
131 statewide program and they wanted everyone to participate.

132  
133 Mr. Mawyer reported on the monthly wastewater allocations for nitrogen and phosphorous.

134  
135 Mr. Krueger commented that this was traditionally a battle that the dischargers into the James  
136 River had lost.

137  
138 Dr. Palmer stated she'd like to see other groups join.

Mr. Mawyer stated the legislation exempts Lynchburg, Richmond, and Hopewell wastewater plants from the restrictions – so the equity challenge continued.

## **5. ITEMS FROM THE PUBLIC**

Mr. Harry Wellons, owner of Danwell Farm, addressed the Board. He stated the farm was located on Buck Mountain Creek and he has come to address the 82 acres the RWSA took in the 1980s. He stated his understanding was that the RWSA intended to build a reservoir at Buck Mountain Creek, which had not happened as the land had been used to mitigate for expansion of the Ragged Mountain Reservoir, and he requested that he be allowed to reacquire some of this taken land. He distributed copies of an aerial photograph of the property and surrounding land, which he stated was originally 312 acres, with 82 acres taken out of the center. He stated there were also 38 acres of buffer zone that had all been fenced, with cattle having access to waterers in the fields so they did not get into any of the waterways. He pointed out the fence line and areas that have been used for mitigation, including plastic sleeves, the area of the house site, and fields they use for hay.

Dr. Wellons asked that he be permitted to buy back the land should it not be used by RWSA to reunite the property. He stated he was willing to abide by all the restrictions in place to keep cattle from the water and to be a good steward of the land. He noted that when he had the house constructed in 1979, he was not aware of plans to make use of Buck Mountain for a reservoir, and could have used other sites on the property to construct the house if he had known. He expressed concern that the take line ran along the western side of the fence around the yard and may eventually obstruct their view with future growth.

## **6. RESPONSES TO PUBLIC COMMENTS**

Mr. Gaffney stated that the Board would likely have a response for Dr. Wellons at their May meeting, or possibly at the end of the current meeting.

Mr. Gaffney stated that several times over the last 17-18 years, Rivanna decided to expand Ragged Mountain and had discussions of the property – and it may be good for staff to refresh the Board's memory as there were new members. He stated that it would be helpful to have background and how they got to the current point.

Dr. Palmer noted that they should also discuss whether they were supposed to be replanting the trees on that site.

Mr. Mawyer responded that it was a mitigation site for the Ragged Mountain Dam, and Andrea Terry took care of the Buck Mountain property – but there were some extenuating circumstances with people living in the area, and a pond dam with regulatory requirements. He mentioned that he knew Dr. Wellons was coming to this meeting. Mr. Mawyer stated that there were 1,312 acres and 38 parcels purchased as part of the property, with two parcels condemned, including Dr. Wellons' property. He stated there were about 600 acres in the mitigation area, and staff would bring back a presentation and review all of this for the Board in May.



Mr. Peter Wiley, Dr. Wellons' real estate agent, stated that people in the area – considering the mitigation had taken place and the reservoir would not be constructed – wanted to know what the purpose would be for holding on to the land.

Mr. Mawyer responded that it could become a reservoir in the distant future, and the mitigation site could be relocated with approval from the Department of Environmental Quality. He noted that if there were a reservoir there that would inundate the mitigation, they would have to find a replacement mitigation and rebuild it somewhere else. Mr. Mawyer stated that the mitigation didn't prevent it from becoming a reservoir in the future, but the James River spiny mussel was an environmental impediment and no one knew if the current regulations would continue into the future.

## **7. CONSENT AGENDA**

*a. Staff Report on Finance*

*b. Staff Report on Ongoing Projects*

*c. Staff Report on Operations*

*d. Proposed Additional Holiday: July 5, 2019*

*e. Approval of Easement Acquisition Services, SRR to RMR Pipeline; ERM & Associates*

**Dr. Palmer moved that the Board approve the Consent Agenda. The motion was seconded by Mr. Richardson and passed unanimously (5-0). Ms. Galvin and Mr. O'Connell were absent from the meeting and the vote.**

## **8. OTHER BUSINESS**

*a. Presentation: Rivanna Conservation Alliance - Lisa Wittenborn, Program Director and Julia Ela, Operations Director*

### **Rivanna Conservation Alliance**

Program Director Lisa Wittenborn and Operations Director Julia Ela of the Rivanna Conservation Alliance presented.

Ms. Wittenborn stated that they have taken over for Robbi Savage and would update the Board on monitoring programs and items they were working on. She stated her organization was formed in 2016 by a merger of Rivanna Conservation Society and Streamwatch. She explained that their vision is to have a healthy and thriving community that valued rivers and streams, and they worked to protect the Rivanna River and its tributaries through a number of programs. She noted that the Rivanna watershed is part of the Chesapeake Bay watershed and presented a map of the river system. She stated they involve schoolchildren in classroom and outdoor educational activities such as stream water quality monitoring, and would take students from Burley Middle School to do a buffer planting along Schenks Branch.

231  
232 Ms. Wittenborn stated their new Pop-Ups program would include river activity programs at local  
233 parks, kiosks at boat landings, the 100-acre Schier Natural Area and Nature Center in Fluvanna  
234 County, and they would participate in public events such as the May 11 Riverfest. She explained  
235 that the River Steward program has two stewards who look for safety and water quality issues  
236 and work with partners like the County to remedy situations. She stated that her organization  
237 participates in stream cleanups, paddling experiences for kids, a river race, and conservation  
238 projects such as tree plantings, rain gardens, and buffer restoration. She introduced Julia Ela to  
239 present on monitoring programs.

240  
241 Ms. Julia Ela stated that in addition to visual monitoring performed by the river stewards, they  
242 have two scientifically rigorous watershed water quality monitoring programs for which they  
243 have been certified as level three monitors by Virginia Department of Environmental Quality,  
244 which is equivalent to those collected by the state agency itself, and can be used to list and delist  
245 impaired water and in TMDL processes, the MS4 stormwater permitting programs, and help to  
246 inform and guide water quality improvement decisions. She explained that state certification  
247 adds a lot of value and creates more investment by volunteers.

248  
249 Ms. Ela reported that the first monitoring program is the Benthic Macroinvertebrate Streams  
250 Monitoring Program, for which they have a full-time staff member and volunteers dedicated to  
251 sampling the organisms that live in stream bottoms and whose presence or absence can indicate  
252 long-term stream health. She stated there are 50 sites throughout the watershed that they sample  
253 each spring and fall. She stated their other level three program is the Bacteria Monitoring  
254 Program, in which volunteers test for E-Coli bacteria, with some sites sampled monthly and  
255 others weekly, with information posted on their website. She presented a map of the sampling  
256 locations and indicated that pink dots represent benthic monitoring sites, yellow dots represent  
257 16 established bacteria sites, and they plan to add four additional sites. She noted that the benthic  
258 sites present a long-term picture while bacteria monitoring presents a snapshot in time, with the  
259 two programs together providing a good indication of stream health. She stated they are looking  
260 into the addition of a chemical monitoring program to measure Ph and conductivity.

261  
262 Mr. Murphy asked what the orange squares on the map represented.

263  
264 Ms. Ela responded that these represented educational kiosk locations.

265  
266 Dr. Palmer asked Ms. Ela what the land use categories were that the 50 benthic sampling sites  
267 represented.

268  
269 Ms. Ela explained that four locations are reference sites located near the headwaters and within  
270 or adjacent to Shenandoah National Park. She stated the other sites represent agricultural, urban,  
271 and forested land uses.

272  
273 Dr. Palmer asked if any sites are near traditional illegal dumping areas.

274  
275 Ms. Wittenborn explained that the sites were selected almost 15 years ago by Streamwatch and  
276 she is not sure of the rationale for why they were chosen. She stated they have been talking about

277 updating the internal land use study to consider whether they need to adjust the site locations or  
278 to add sites, though they don't want to eliminate existing ones because they have a long legacy of  
279 data available.

280  
281 Dr. Palmer suggested they consider adding some traditional dump sites if they decide to increase  
282 the number of sampling locations and she offered to provide a list.

283  
284 Ms. Ela remarked that they are looking to work with partners that are doing significant  
285 restoration activities to conduct before and after monitoring at additional sites.

286  
287 Ms. Ela stated she would review monitoring highlights from last year. She stated 2018 was the  
288 first year they used the Level 3 monitoring program throughout the sampling season. She stated  
289 their bacteria monitors detected some sewer line leaks, which led to very quick repairs and which  
290 may have gone unnoticed for a long time. She stated they moved to a new location on River  
291 Road so that all staff and volunteers are now located in one space, which has created more  
292 cohesion. She noted that they won the USDA NRCS Virginia and Southeast Region awards for  
293 outstanding volunteer group.

294  
295 Ms. Ela explained that their 2019 monitoring goals are determined by staff, as recommended  
296 from their scientific advisory committee, and work with community partners to make sure the  
297 goals align. She stated they would add habitat assessments at the benthic locations to obtain a  
298 more complete picture of what is going on in the surrounding area to inform them of what is  
299 occurring with the benthic community in the stream. She stated they hope to conduct a trend  
300 analysis utilizing 15 years of data to determine if there have been land use changes or anything  
301 else that may have contributed to changes, they are looking to establish a new Level 3 program  
302 for PH dissolved oxygen and conductivity, and would take data from a 2007 study of fish in  
303 conjunction with the Woolen Mills Dam removal and hope to replicate it in conjunction with  
304 Department of Game and Inland Fisheries. She stated they publish an annual Watershed Stream  
305 Health Report and would update date this at the end of the summer.

306  
307 Mr. Gaffney asked what conductivity was in this context.

308  
309 Ms. Wittenborn replied that they would look at salinity conductivity with an interest in the use of  
310 road salt and have been able to make linkages to conductivity and the health of the benthic  
311 community.

312  
313 Ms. Ela interjected that it is a measure of ion concentration in the water to see how strongly the  
314 conductivity correlates to road salts vs. other things.

315  
316 Dr. Palmer asked how many paid employees they have.

317  
318 Ms. Wittenborn replied that there is one full-time employee plus two three quarters time  
319 employees and two part-time river stewards, one of whom also serves as the education manager.

320  
321 Ms. Ela added that they are about three FTEs spread over five people.

322

323 Dr. Palmer remarked that they do amazing work with a small number of employees. She asked if  
324 they have attended Board of Supervisors or City Council meetings.

325  
326 Ms. Wittenborn stated they have not.

327  
328 Dr. Palmer invited her to attend a Board of Supervisors meeting.

329  
330 Mr. Mawyer added that they would continue to support the RCA in the 2020 budget.

331  
332 *b. Presentation: Annual Reservoir Report – Andrea Terry, Water Resources Manager*  
333

334 Ms. Andrea Terry, Water Resources Manager, presented. She stated she would talk about water  
335 quality, monitoring, quantity, and the results of the bathymetric surveys completed this year.

336  
337 She reminded the Board that South Fork Rivanna, Sugar Hollow, and Ragged Mountain make up  
338 the urban area reservoirs, Totier Creek serves Scottsville, and Beaver Creek serves Crozet. She  
339 stated they began a reservoir water quality and management assessment in 2015 with DiNatale  
340 Water Consultants, which looked at data from various studies and created a long-term  
341 monitoring plan for each reservoir in order to develop a robust database and understand what is  
342 happening. She stated they learned that the reservoirs differ from one another and looked at  
343 potential water quality management strategies.

344  
345 Ms. Terry stated Phase 2 focused mainly on Beaver Creek and South Fork Rivanna Reservoirs,  
346 since they have had issues with algae blooms, and involved sampling and flow studies including  
347 identifying the source of nutrients, with refined reservoir management methods recommended.  
348 She stated the primary method recommended is the hypolimnetic oxygenation system for Beaver  
349 Creek. She stated that, though the consultant's work is done, they continue to collect data bi-  
350 weekly from April – November from three reservoirs and have learned a lot from the samples.  
351 She stated the monitoring data from the past year indicates they are trending similar to what they  
352 had been.

353  
354 Ms. Terry stated that stratification occurs early in May at Beaver Creek and lasts through  
355 November, with the surface water becoming warmer and setting up temperature gradients that  
356 lead to algae blooms as a result of nutrients at the bottom, including an algae bloom at Beaver  
357 Creek last December. She explained that Beaver Creek has a ten square mile watershed and they  
358 want to know how long the water remains in the reservoir, which is known as residence time,  
359 which they estimate ranges from 39–135 days, with shorter times during periods of high flows.  
360 She stated they are investigating the possibility of installing a water quality sonde in Beaver  
361 Creek to continuously monitor the water.

362  
363 Ms. Terry characterized South Fork Rivanna as a run-of-the-river reservoir, as it operates like a  
364 river, with residence times of less than one day during a storm, which does not provide a lot of  
365 time for nutrients to accumulate. She noted that 2018 was a very wet year, the reservoir never  
366 fell below the crest, and they did not experience any algae blooms above the triggers. She stated  
367 they have not seen any blue-green algae blooms at Ragged Mountain since it was filled, though  
368 they have seen green algae and Totier Creek and Sugar Hollow have not had any algae blooms

369 that required treatment. She presented a slide with information on algae treatments at the  
370 reservoirs and noted that they treated Beaver Creek with algaecide last week and are monitoring  
371 the reservoirs and will continue to collaborate with the County, Rivanna Soil and Water  
372 Conservation District, RCA and other organizations.

373  
374 Ms. Terry addressed an earlier question about mitigation at Buck Mountain, explaining they are  
375 working with a consultant who is doing studies of mitigation sites and providing data on what is  
376 and what is not living.

377  
378 Ms. Terry presented slides with data on useable storage volumes for the reservoirs before the  
379 bathometric study was established in 2018, followed by slides with current data. She stated that  
380 South Fork changed from 883M gallons to 885M, and Ragged Mountain from 1.5B to 1.4B  
381 gallons.

382  
383 Ms. Palmer emphasized that there may be questions about accuracy as there were several years  
384 in between and different people were conducting the study.

385  
386 Ms. Terry pointed out that there has been a net decrease of 70M gallons in total useable storage  
387 in the urban water system. She stated the last time they had a study from which they could make  
388 a stage storage curve was the 2016 as-built for the Ragged Mountain dam, based on the as-built  
389 drawings of the dam itself.

390  
391 Ms. Palmer asked if the decrease was statistically significant.

392  
393 Ms. Whitaker responded that it was from the perspective of Ragged Mountain, and she pointed  
394 out that this is the first true baseline. She explained that they flew the site in 2009, conducted a  
395 survey, excavation, and estimates based on drawings, whereas recently they conducted a detailed  
396 analysis above and below the water using LIDAR, and suggested that they use this baseline  
397 going forward as it provides greater accuracy with respect to lake volume. She opined that the  
398 reservoir shifts and sediment is flushed out in storms.

399  
400 Ms. Terry noted that the last time they did this at South Fork was 2009, and the 883MG  
401 estimates came from that effort– and past estimates suggested they would be reducing storage by  
402 15M gallons a year, but the latest data indicated that has not happened.

403  
404 Mr. Gaffney commented that the sand bars seemed to be getting bigger.

405  
406 Ms. Terry emphasized that the sediment shifts around, and the 2018 May storm flushed out a lot  
407 of sediment. She noted that the recent information reduces the capacity by 70M gallons, and  
408 assuming consumption of 10 MGD, that would be 7 days of usable storage.

409  
410 Mr. Murphy commented that as the City moved forward with its new comprehensive plan, with  
411 conversations about density and consumption, he was curious as to usage today versus in the  
412 future when populations in both the City and County increased. He asked how difficult it would  
413 be to obtain that number.

414

415 Ms. Whitaker and Mr. Mawyer responded that they were working on a study now.

416  
417 Mr. Mawyer stated that they would do projections of City and County growth, and from that data  
418 they would establish projections – including the maximum safe yield available – as part of the  
419 urban water demand study, which would be brought back to the Board in the fall.

420  
421 Mr. Gaffney stated they used Weldon Cooper’s information, which was based on interviews with  
422 the City and developers, etc.

423  
424 Ms. Terry pointed out that Rivanna’s consultants interviewed City staff and County staff to try to  
425 get all the necessary input.

426  
427 Mr. Murphy asked if the projections would be available in six months or so.

428  
429 Ms. Whitaker replied that it would be by the end of the year.

430  
431 Mr. Mawyer noted that the Ragged Mountain agreement stated that every 10 years they must  
432 check the community demand versus supply, and 2020 was the next year a check was required.

433  
434 Ms. Whitaker stated that since the South Fork Reservoir was built in 1966, Rivanna had mapped  
435 this out – and average loss was consistently 15 million gallons a year. She stated that this was a  
436 virtual straight line, and staff intentionally waited until after the storm to do this work. She noted  
437 that in 2006, one of the big hydrology discussions they had about dredging and reservoir health  
438 was what happened when lakes filled up with more sediment, possibly reaching equilibrium. Ms.  
439 Whitaker stated that this showed that a big storm could disrupt the equilibrium equation – and  
440 one storm could effectively undo a decade of deposits.

441  
442 Mr. Gaffney asked if that big storm was a 100-year storm.

443  
444 Ms. Whitaker responded that it was a 500-year storm localized, and because it was right over the  
445 watershed, it created the scour.

446  
447 Ms. Terry emphasized that rivers move, and storms over time would do different things – but  
448 staff was confident in the numbers they were using now, with the same one used for stage  
449 storage in South Rivanna.

450  
451 Mr. Gaffney asked if they were losing 15 MGD before that storm.

452  
453 Ms. Whitaker and Ms. Terry responded that they did not know.

454  
455 Ms. Whitaker stated if they had been using the 15 MGD a year loss, they would have lost 150  
456 million gallons in the reservoir.

457  
458  
459 **9. OTHER ITEMS FROM BOARD/STAFF NOT ON AGENDA**

460 There were no other items presented.

461

462 ***10. CLOSED MEETING***

463 There was no closed meeting held.

464

465 ***11. ADJOURNMENT***

466 **Dr. Palmer moved to adjourn the meeting. Ms. Hildebrand seconded the motion, which**  
467 **passed unanimously (5-0). Ms. Galvin and Mr. O'Connell were absent from the meeting**  
468 **and the vote.**

DRAFT



**Government Finance Officers Association**  
203 North LaSalle Street, Suite 2700  
Chicago, Illinois 60601-1210  
312.977.9700 fax: 312.977.4806

May 14, 2019

Michael A. Gaffney  
Chairman of the Board  
Rivanna Water & Sewer Authority  
695 Moores Creek Lane  
Charlottesville, VA 22902-9016

Dear Mr. Gaffney:

We are pleased to notify you that your comprehensive annual financial report (CAFR) for the fiscal year ended 2018 qualifies for GFOA's Certificate of Achievement for Excellence in Financial Reporting. The Certificate of Achievement is the highest form of recognition in governmental accounting and financial reporting, and its attainment represents a significant accomplishment by a government and its management.

When a Certificate of Achievement is awarded to a government, an Award of Financial Reporting Achievement (AFRA) is also presented to the individual(s) or department designated by the government as primarily responsible for its having earned the Certificate. This award has been sent to the submitter as designated on the application.

We hope that you will arrange for a formal presentation of the Certificate and Award of Financial Reporting Achievement, and that appropriate publicity will be given to this notable achievement. A sample news release is enclosed to assist with this effort.

We hope that your example will encourage other government officials in their efforts to achieve and maintain an appropriate standard of excellence in financial reporting.

Sincerely,

Michele Mark Levine  
Director, Technical Services Center





## MEMORANDUM

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

**FROM: BILL MAWYER, EXECUTIVE DIRECTOR**

**SUBJECT: EXECUTIVE DIRECTOR'S REPORT**

**DATE: MAY 28, 2019**

### *STRATEGIC PLAN GOAL: WORKFORCE DEVELOPMENT*

#### **Recognitions**

The professional qualifications of our staff continue to improve and enhance our services. The following employee has successfully completed the experience and examination requirements in the safety, health and environmental disciplines, and has received the following certification from the Board of Certified Safety Professionals:

- Liz Coleman, RSWA/RWSA Safety Manager –Certified Associate Safety Professional

#### **Benefits and Safety**

The Authorities recently completed our Benefits and Safety Meeting with all staff. This meeting is held over two dates and gives all employees the opportunity to hear from our Executive Director, Safety Manager, and insurance and retirement providers; also present at the meeting are other benefit providers, such as ACAC, Optima Employee Assistance Program. This meeting allows employees to ask questions directly to these representatives prior to our open enrollment period.

### *STRATEGIC PLAN GOAL: COMMUNICATION AND COLLABORATION; ENVIRONMENTAL STEWARDSHIP*

#### **Drinking Water Week**

The American Water Works Association (AWWA) Drinking Water Week was May 5-11, 2019. As part of these celebrations, RWSA hosted an open house at the South Rivanna Water Treatment Plant to showcase the GAC system.

Additionally, Katie McIlwee, Communications Manager, and Andrea Terry, Water Resources Manager, joined with Rivanna Conservation Alliance, Albemarle County Service Authority, City of Charlottesville Utilities Department, Rivanna River Company, and others to host the First Annual Rivanna RiverFest. This event included the City's Fix-a-Leak 5k Race, RCA's Regatta race, and other activities along the Rivanna River at Darden Towe Park.

#### *STRATEGIC PLAN GOAL: INFRASTRUCTURE AND MASTER PLANNING*

##### **Birdwood Water Line**

This project has been substantially and successfully completed, well ahead of the schedule crafted with the UVA Foundation and completion of golf course reconstruction. Installation of 5900 LF of 36" raw water piping was completed from January – May of this year.

##### **South Rivanna to Ragged Mountain Water Line**

Meetings are in progress with the UVA Foundation, VDOT, City staff and Albemarle School Board staff about locations for the water line easements. Surveying and appraisals are underway, and we expect to begin making offers to acquire easements in late May/early June.

##### **Observatory Water Treatment Plant Lease**

Discussions continue with UVA staff to finalize updated lease and easement documents. Our goal is to complete these documents and obtain signatures this summer.

#### *STRATEGIC PLAN GOAL: COMMUNICATION AND COLLABORATION*

##### **Community Outreach**

Mr. Rob Haacke, Wastewater Manager, and Mr. Matt Bussell, Water Manager, provided a tour of the Moores Creek Facility and the South Rivanna Water Treatment Plant to a group from the City of Charlottesville's Utilities Department and the Albemarle County Service Authority.

Mr. Rob Haacke also lead of tour of Moores Creek for a group of high school students from the Renaissance School.

Mr. David Tungate, Director of Operations, lead of tour of the Crozet Water Treatment Plant for the Crozet Volunteer Fire Department. The Department requested the tour in order to familiarize themselves with the site, as well as the chemicals used in order to better respond were an emergency to arise.



## MEMORANDUM

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

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

**REVIEWED: BILL MAWYER, EXECUTIVE DIRECTOR**

**SUBJECT: APRIL MONTHLY FINANCIAL SUMMARY – FY 2019**

**DATE: MAY 28, 2019**

Urban Water flow and rate revenues are 5% under budget estimates for the first ten months of this fiscal year, and Urban Wastewater flow and rate revenues are 40% over budget. Revenues and expenses are summarized in the table below:

	Urban Water	Urban Wastewater	Total Other Rate Centers	Total Authority
<b>Operations</b>				
Revenues	\$ 5,662,103	\$ 9,008,831	\$ 1,802,232	\$ 16,473,166
Expenses	(6,511,148)	(7,100,037)	(1,802,571)	(15,413,756)
Surplus (deficit)	<u>\$ (849,045)</u>	<u>\$ 1,908,794</u>	<u>\$ (339)</u>	<u>\$ 1,059,410</u>
<b>Debt Service</b>				
Revenues	\$ 5,397,746	\$ 7,280,222	\$ 975,880	\$ 13,653,848
Expenses	(5,345,275)	(7,184,693)	(970,260)	(13,500,228)
Surplus (deficit)	<u>\$ 52,471</u>	<u>\$ 95,529</u>	<u>\$ 5,620</u>	<u>\$ 153,620</u>
<b>Total</b>				
Revenues	\$ 11,059,849	\$ 16,289,053	\$ 2,778,112	\$ 30,127,014
Expenses	(11,856,423)	(14,284,730)	(2,772,831)	(28,913,984)
Surplus (deficit)	<u><u>\$ (796,574)</u></u>	<u><u>\$ 2,004,323</u></u>	<u><u>\$ 5,281</u></u>	<u><u>\$ 1,213,030</u></u>

Despite overall operating revenues being \$2.29 million higher than budget estimates, operating expenses are running \$1.39 million over budget as well resulting in a net surplus of \$1.06 million for the operating category. This is mostly related to the significant amount of flow resulting from record amounts of rainfall and the related revenues from Urban Wastewater, as noted above. Overall, debt service revenues are higher than projected due to interest earnings being greater related to the rising interest rate environment causing a net surplus of \$154,000 for the debt service category.

- A. Professional Services (Urban Water, Scottsville Water, Urban Wastewater – pages 2, 4, 5)  
– The Urban Water rate center incurred some unbudgeted expenditures for Engineering and Technical Services related to safe yield modeling. This rate center has also spent

\$41,000 more than the annual budget for legal fees related to the Observatory plant lease. Scottsville Water has exceeded the prorated budget for Engineering and Technical Services for the Red Hill Community Water System, but ACSA is being billed for these costs. Urban Wastewater has paid \$47,300 for an analysis of the Moores Creek AWWRF Cogeneration System that was not budgeted.

- B. Other Services & Charges (Urban Water, Scottsville Water, Urban Wastewater, Engineering – pages 2, 4, 5, 11) – Urban Water and Urban Wastewater are over budget on the cost of hauling biosolids to Waverly, Virginia to be composted. Urban Wastewater is also over budget on odor control costs for the Crozet Interceptor/Pump Stations, and utilities are running high. Scottsville Water is over budget on laboratory analysis fees.
- C. Equipment Purchases (Urban Water, Scottsville Water, Administration, Maintenance – pages 2, 4, 8, 9) – Scottsville Water spent \$50,000 in October for the unbudgeted purchase of a replacement flocculator. Urban Water is \$124,000 over the prorated budget in this category primarily due to the unexpected need to replace a finished water pump at the South Rivanna plant and a high service pump at the North Rivanna plant. The Administration and Maintenance departments are also over budget on equipment purchases.
- D. Operations & Maintenance (Urban Water, Crozet Water, Urban Wastewater, Lab, Maintenance, Engineering – pages 2-5, 9-11) – Urban Water paid about \$200,000 for last June's North Rivanna Waterline emergency repairs. Urban Water has spent \$355,000 more than the prorated budget for chemicals, related to underbudgeting for GAC chemical purchases. Chemical cost overages for algae treatments of the Beaver Creek Reservoir and for the purchase of GAC chemicals are the main reasons Crozet Water is \$124,000 over budget in the Operations & Maintenance expense category. Urban Wastewater is \$128,000 over the prorated budget for chemical purchases related to the significant flows for the year. Urban Wastewater spent over \$118,000 to replace UV lamps at the Moores Creek plant, and \$154,000 for a Moores Creek stream bank repair. The January payment to renew annual service contracts for instrumentation pushed Urban Wastewater and the Lab department over budget for instrumentation costs. The Lab, Maintenance and Engineering departments are over the prorated budget on vehicle and equipment repairs.
- E. Communications (Urban Water – page 2) – Urban Water's telephone and data service charges are running higher than estimated.
- F. Information Technology (Administration – page 8) – The Administration department made an unbudgeted purchase of optical character recognition (OCR) software in March.

Attachments

**Rivanna Water & Sewer Authority**  
**Monthly Financial Statements - April 2019**  
**Fiscal Year 2019**

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

## Notes

**Revenues**

	<i>Budget FY 2019</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	\$ 16,387,174	\$ 13,655,978	\$ 15,780,599	\$ 2,124,621	15.56%
Lease Revenue	100,000	83,333	89,642	6,309	7.57%
Admin., Maint. & Engineering Revenue	462,000	385,000	408,461	23,461	6.09%
Other Revenues	528,084	440,070	561,761	121,691	27.65%
Interest Allocation	28,050	23,375	41,163	17,788	76.10%
<b>Total Operating Revenues</b>	<b>\$ 17,505,308</b>	<b>\$ 14,587,757</b>	<b>\$ 16,881,627</b>	<b>\$ 2,293,870</b>	<b>15.72%</b>

**Expenses**

Personnel Cost	\$ 8,429,784	\$ 6,867,942	\$ 6,447,189	\$ 420,753	6.13%
Professional Services	<b>A</b> 710,250	591,875	730,616	(138,741)	-23.44%
Other Services & Charges	<b>B</b> 2,814,735	2,345,613	2,736,710	(391,098)	-16.67%
Communications	<b>E</b> 143,105	119,254	134,315	(15,061)	-12.63%
Information Technology	<b>F</b> 341,450	284,542	272,814	11,728	4.12%
Supplies	43,920	36,600	38,415	(1,815)	-4.96%
Operations & Maintenance	<b>D</b> 3,719,660	3,099,717	4,208,767	(1,109,050)	-35.78%
Equipment Purchases	<b>C</b> 459,400	382,833	550,892	(168,058)	-43.90%
Depreciation	843,000	702,500	702,500	-	0.00%
Reserve Transfers	-	-	-	-	
<b>Total Operating Expenses</b>	<b>\$ 17,505,304</b>	<b>\$ 14,430,875</b>	<b>\$ 15,822,217</b>	<b>\$ (1,391,342)</b>	<b>-9.64%</b>
<b>Operating Surplus/(Deficit)</b>	<b>\$ 4</b>	<b>\$ 156,881</b>	<b>\$ 1,059,410</b>		

**Debt Service Budget vs. Actual****Revenues**

Debt Service Rate Revenue	\$ 14,852,531	\$ 12,377,109	\$ 12,377,100	\$ (9)	0.00%
Use of Reserves for 2016 Bond DS	300,000	250,000	250,000	-	0.00%
Septage Receiving Support - County	109,440	91,200	109,441	18,241	20.00%
Buck Mountain Surcharge	118,600	98,833	110,300	11,467	11.60%
Buck Mountain Lease Revenue	1,600	1,333	1,691	358	26.83%
Trust Fund Interest	46,400	38,667	162,234	123,567	319.57%
Reserve Fund Interest	344,000	286,667	643,082	356,415	124.33%
<b>Total Debt Service Revenues</b>	<b>\$ 15,772,571</b>	<b>\$ 13,143,809</b>	<b>\$ 13,653,848</b>	<b>\$ 510,039</b>	<b>3.88%</b>

**Debt Service Costs**

Total Principal & Interest	\$ 12,295,400	\$ 10,246,167	\$ 10,246,167	\$ -	0.00%
Reserve Additions-Interest	344,000	286,667	643,082	(356,415)	-124.33%
Debt Service Ratio Charge	725,000	604,167	604,167	-	0.00%
Reserve Additions-CIP Growth	2,408,175	2,006,813	2,006,813	-	0.00%
<b>Total Debt Service Costs</b>	<b>\$ 15,772,575</b>	<b>\$ 13,143,813</b>	<b>\$ 13,500,228</b>	<b>\$ (356,415)</b>	<b>-2.71%</b>
<b>Debt Service Surplus/(Deficit)</b>	<b>\$ (4)</b>	<b>\$ (3)</b>	<b>\$ 153,620</b>		

**Summary**

<b>Total Revenues</b>	\$ 33,277,879	\$ 27,731,566	\$ 30,535,475	\$ 2,803,909	10.11%
<b>Total Expenses</b>	33,277,879	27,574,688	29,322,445	(1,747,757)	-6.34%
<b>Surplus/(Deficit)</b>	<b>\$ 0</b>	<b>\$ 156,878</b>	<b>\$ 1,213,030</b>		

**Rivanna Water & Sewer Authority**  
**Monthly Financial Statements - April 2019**

**Urban Water Rate Center**  
**Revenues and Expenses Summary**

<i>Budget FY 2019</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	\$ 7,034,788	\$ 5,862,323	\$ 5,548,877	\$ (313,446)	-5.35%
Lease Revenue	70,000	58,333	65,420	7,087	12.15%
Miscellaneous	-	-	30,316	30,316	
Interest Allocation	12,000	10,000	17,489	7,489	74.89%
<b>Total Operating Revenues</b>	<b>\$ 7,116,788</b>	<b>\$ 5,930,657</b>	<b>\$ 5,662,103</b>	<b>\$ (268,554)</b>	<b>-4.53%</b>

**Expenses**

Personnel Cost	\$ 1,903,779	\$ 1,553,337	\$ 1,447,922	\$ 105,415	6.79%
Professional Services	A 329,250	274,375	451,935	(177,560)	-64.71%
Other Services & Charges	B 582,700	485,583	510,559	(24,976)	-5.14%
Communications	E 64,200	53,500	64,485	(10,985)	-20.53%
Information Technology	65,300	54,417	40,124	14,293	26.27%
Supplies	5,000	4,167	8,296	(4,130)	-99.11%
Operations & Maintenance	D 1,570,660	1,308,883	1,796,702	(487,819)	-37.27%
Equipment Purchases	C 106,600	88,833	270,208	(181,374)	-204.17%
Depreciation	300,000	250,000	250,000	-	0.00%
Reserve Transfers	-	-	-	-	
<b>Subtotal Before Allocations</b>	<b>\$ 4,927,489</b>	<b>\$ 4,073,095</b>	<b>\$ 4,840,230</b>	<b>\$ (767,135)</b>	<b>-18.83%</b>
Allocation of Support Departments	2,189,298	1,787,690	1,670,917	116,773	6.53%
<b>Total Operating Expenses</b>	<b>\$ 7,116,787</b>	<b>\$ 5,860,785</b>	<b>\$ 6,511,148</b>	<b>\$ (650,362)</b>	<b>-11.10%</b>
<b>Operating Surplus/(Deficit)</b>	<b>\$ 1</b>	<b>\$ 69,871</b>	<b>\$ (849,045)</b>		

**Debt Service Budget vs. Actual**

**Revenues**

Debt Service Rate Revenue	\$ 5,863,271	\$ 4,886,059	\$ 4,886,060	\$ 1	0.00%
Trust Fund Interest	18,000	15,000	55,646	40,646	270.98%
Reserve Fund Interest	184,000	153,333	344,049	190,716	124.38%
Buck Mountain Surcharge	118,600	98,833	110,300	11,467	11.60%
Lease Revenue	1,600	1,333	1,691	358	26.83%
<b>Total Debt Service Revenues</b>	<b>\$ 6,185,471</b>	<b>\$ 5,154,559</b>	<b>\$ 5,397,746</b>	<b>\$ 243,187</b>	<b>4.72%</b>

**Debt Service Costs**

Total Principal & Interest	\$ 4,190,796	\$ 3,492,330	\$ 3,492,330	\$ -	0.00%
Reserve Additions-Interest	184,000	153,333	344,049	(190,716)	-124.38%
Debt Service Ratio Charge	400,000	333,333	333,333	-	0.00%
Reserve Additions-CIP Growth	1,410,675	1,175,563	1,175,563	-	0.00%
<b>Total Debt Service Costs</b>	<b>\$ 6,185,471</b>	<b>\$ 5,154,559</b>	<b>\$ 5,345,275</b>	<b>\$ (190,716)</b>	<b>-3.70%</b>
<b>Debt Service Surplus/(Deficit)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 52,471</b>		

**Rate Center Summary**

<b>Total Revenues</b>	\$ 13,302,259	\$ 11,085,216	\$ 11,059,849	\$ (25,367)	-0.23%
<b>Total Expenses</b>	13,302,258	11,015,344	11,856,422	(841,078)	-7.64%
<b>Surplus/(Deficit)</b>	<b>\$ 1</b>	<b>\$ 69,871</b>	<b>\$ (796,573)</b>		
<b>Costs per 1000 Gallons</b>	2.09		2.43		
<b>Operating and DS</b>	3.92		4.42		
<b>Thousand Gallons Treated or Flow (MGD)</b>	3,397,700	2,831,417	2,680,617	(150,800)	-5.33%
	9.309		8.818		

**Rivanna Water & Sewer Authority**  
**Monthly Financial Statements - April 2019**

**Crozet Water Rate Center**  
**Revenues and Expenses Summary**

<i>Budget FY 2019</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	\$ 957,384	\$ 797,820	\$ 797,820	\$ -	0.00%
Lease Revenues	30,000	25,000	24,222	(778)	-3.11%
Interest Allocation	1,700	1,417	2,473	1,056	74.55%
<b>Total Operating Revenues</b>	<b>\$ 989,084</b>	<b>\$ 824,237</b>	<b>\$ 824,515</b>	<b>\$ 278</b>	<b>0.03%</b>

**Expenses**

Personnel Cost	\$ 288,389	\$ 235,326	\$ 218,741	\$ 16,585	7.05%
Professional Services	30,000	25,000	2,175	22,825	91.30%
Other Services & Charges	126,960	105,800	103,442	2,358	2.23%
Communications	4,450	3,708	4,948	(1,239)	-33.42%
Information Technology	14,200	11,833	400	11,433	96.62%
Supplies	620	517	1,082	(565)	-109.32%
Operations & Maintenance	261,150	217,625	350,243	(132,618)	-60.94%
Equipment Purchases	26,450	22,042	9,503	12,539	56.89%
Depreciation	30,000	25,000	25,000	-	0.00%
Reserve Transfers	-	-	-	-	
<b>Subtotal Before Allocations</b>	<b>\$ 782,219</b>	<b>\$ 646,851</b>	<b>\$ 715,533</b>	<b>\$ (68,682)</b>	<b>-10.62%</b>
Allocation of Support Departments	206,863	168,924	157,965	10,960	6.49%
<b>Total Operating Expenses</b>	<b>\$ 989,082</b>	<b>\$ 815,775</b>	<b>\$ 873,498</b>	<b>\$ (57,723)</b>	<b>-7.08%</b>
<b>Operating Surplus/(Deficit)</b>	<b>\$ 2</b>	<b>\$ 8,462</b>	<b>\$ (48,983)</b>		

**Debt Service Budget vs. Actual**

**Revenues**

Debt Service Rate Revenue	\$ 995,568	\$ 829,640	\$ 829,640	\$ -	0.00%
Trust Fund Interest	1,800	1,500	5,678	4,178	278.55%
Reserve Fund Interest	6,700	5,583	12,803	7,220	129.31%
<b>Total Debt Service Revenues</b>	<b>\$ 1,004,068</b>	<b>\$ 836,723</b>	<b>\$ 848,121</b>	<b>\$ 11,398</b>	<b>1.36%</b>

**Debt Service Costs**

Total Principal & Interest	\$ 426,071	\$ 355,059	\$ 355,059	\$ -	0.00%
Reserve Additions-Interest	6,700	5,583	12,803	(7,220)	-129.31%
Reserve Additions-CIP Growth	571,300	476,083	476,083	-	0.00%
<b>Total Debt Service Costs</b>	<b>\$ 1,004,071</b>	<b>\$ 836,726</b>	<b>\$ 843,946</b>	<b>\$ (7,220)</b>	<b>-0.86%</b>
<b>Debt Service Surplus/(Deficit)</b>	<b>\$ (3)</b>	<b>\$ (3)</b>	<b>\$ 4,176</b>		

**Rate Center Summary**

<b>Total Revenues</b>	\$ 1,993,152	\$ 1,660,960	\$ 1,672,636	\$ 11,676	0.70%
<b>Total Expenses</b>	1,993,153	1,652,501	1,717,443	(64,943)	-3.93%
<b>Surplus/(Deficit)</b>	<b>\$ (1)</b>	<b>\$ 8,459</b>	<b>\$ (44,807)</b>		
<b>Costs per 1000 Gallons</b>	5.02		5.23		
<b>Operating and DS</b>	10.12		10.28		
<b>Thousand Gallons Treated</b>	196,946	164,122	167,046	2,924	1.78%
<b>Flow (MGD)</b>	0.540		0.549		

Rivanna Water & Sewer Authority  
Monthly Financial Statements - April 2019

**Scottsville Water Rate Center**  
Revenues and Expenses Summary

<i>Budget FY 2019</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	\$ 443,328	\$ 369,440	\$ 369,440	\$ -	0.00%
Red Hill	-	-	43,362	43,362	
Interest Allocation	750	625	1,110	485	77.66%
<b>Total Operating Revenues</b>	<b>\$ 444,078</b>	<b>\$ 370,065</b>	<b>\$ 413,912</b>	<b>\$ 43,847</b>	<b>11.85%</b>

**Expenses**

Personnel Cost	\$ 153,885	\$ 125,590	\$ 115,415	\$ 10,175	8.10%
Professional Services	A 20,000	16,667	26,440	(9,774)	-58.64%
Other Services & Charges	B 28,680	23,900	32,728	(8,828)	-36.94%
Communications	3,210	2,675	3,762	(1,087)	-40.63%
Information Technology	7,000	5,833	7,178	(1,345)	-23.05%
Supplies	750	625	-	625	100.00%
Operations & Maintenance	66,570	55,475	56,663	(1,188)	-2.14%
Equipment Purchases	C 14,000	11,667	60,402	(48,735)	-417.73%
Depreciation	20,000	16,667	16,667	(0)	0.00%
Reserve Transfers	-	-	-	-	
<b>Subtotal Before Allocations</b>	<b>\$ 314,095</b>	<b>\$ 259,099</b>	<b>\$ 319,255</b>	<b>\$ (60,157)</b>	<b>-23.22%</b>
Allocation of Support Departments	129,988	106,167	99,412	6,756	6.36%
<b>Total Operating Expenses</b>	<b>\$ 444,083</b>	<b>\$ 365,266</b>	<b>\$ 418,667</b>	<b>\$ (53,401)</b>	<b>-14.62%</b>
<b>Operating Surplus/(Deficit)</b>	<b>\$ (5)</b>	<b>\$ 4,799</b>	<b>\$ (4,755)</b>		

**Debt Service Budget vs. Actual**

**Revenues**

Debt Service Rate Revenue	\$ 129,280	\$ 107,733	\$ 107,730	\$ (3)	0.00%
Trust Fund Interest	400	333	1,622	1,289	386.70%
Reserve Fund Interest	3,300	2,750	6,407	3,657	133.00%
<b>Total Debt Service Revenues</b>	<b>\$ 132,980</b>	<b>\$ 110,817</b>	<b>\$ 115,760</b>	<b>\$ 4,943</b>	<b>4.46%</b>

**Debt Service Costs**

Total Principal & Interest	\$ 129,680	\$ 108,067	\$ 108,067	\$ -	0.00%
Reserve Additions-Interest	3,300	2,750	6,407	(3,657)	
Reserve Additions-CIP Growth	-	-	-	-	
<b>Total Debt Service Costs</b>	<b>\$ 132,980</b>	<b>\$ 110,817</b>	<b>\$ 114,474</b>	<b>\$ (3,657)</b>	<b>-3.30%</b>
<b>Debt Service Surplus/(Deficit)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,286</b>		

**Rate Center Summary**

<b>Total Revenues</b>	\$ 577,058	\$ 480,882	\$ 529,672	\$ 48,790	10.15%
<b>Total Expenses</b>	577,063	476,083	533,141	(57,058)	-11.98%
<b>Surplus/(Deficit)</b>	<b>\$ (5)</b>	<b>\$ 4,799</b>	<b>\$ (3,469)</b>		
<b>Costs per 1000 Gallons</b>	23.70		32.12		
<b>Operating and DS</b>	30.80		40.90		
<b>Thousand Gallons Treated</b>	18,738	15,615	13,036	(2,579)	-16.52%
<b>or</b>					
<b>Flow (MGD)</b>	0.051		0.043		



**Rivanna Water & Sewer Authority**  
**Monthly Financial Statements - April 2019**

**Urban Wastewater Rate Center**  
**Revenues and Expenses Summary**

<b>Budget FY 2019</b>	<b>Budget Year-to-Date</b>	<b>Actual Year-to-Date</b>	<b>Budget vs. Actual</b>	<b>Variance Percentage</b>
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**Operating Budget vs. Actual**

Notes

**Revenues**

Operations Rate Revenue	\$ 7,277,082	\$ 6,064,235	\$ 8,502,302	\$ 2,438,067	40.20%
Stone Robinson WWTP	28,084	23,403	18,561	(4,842)	-20.69%
Septage Acceptance	410,000	341,667	364,571	22,904	6.70%
Nutrient Credits	90,000	75,000	104,060	29,060	38.75%
Miscellaneous Revenue	-	-	891	891	
Interest Allocation	12,500	10,417	18,446	8,029	77.08%
<b>Total Operating Revenues</b>	<b>\$ 7,817,666</b>	<b>\$ 6,514,722</b>	<b>\$ 9,008,831</b>	<b>\$ 2,494,109</b>	<b>38.28%</b>

**Expenses**

Personnel Cost	\$ 1,282,792	\$ 1,045,882	\$ 978,728	\$ 67,153	6.42%
Professional Services	A 54,000	45,000	67,057	(22,057)	-49.02%
Other Services & Charges	B 1,816,225	1,513,521	1,891,491	(377,970)	-24.97%
Communications	10,430	8,692	9,546	(854)	-9.83%
Information Technology	57,250	47,708	34,828	12,880	27.00%
Supplies	2,700	2,250	919	1,331	59.14%
Operations & Maintenance	D 1,408,900	1,174,083	1,653,892	(479,808)	-40.87%
Equipment Purchases	74,500	62,083	53,649	8,434	13.59%
Depreciation	470,000	391,667	391,667	(0)	0.00%
Reserve Transfers	-	-	-	-	
<b>Subtotal Before Allocations</b>	<b>\$ 5,176,797</b>	<b>\$ 4,290,886</b>	<b>\$ 5,081,778</b>	<b>\$ (790,892)</b>	<b>-18.43%</b>
Allocation of Support Departments	2,640,868	2,156,671	2,018,259	138,411	6.42%
<b>Total Operating Expenses</b>	<b>\$ 7,817,665</b>	<b>\$ 6,447,556</b>	<b>\$ 7,100,037</b>	<b>\$ (652,481)</b>	<b>-10.12%</b>
<b>Operating Surplus/(Deficit)</b>	<b>\$ 1</b>	<b>\$ 67,165</b>	<b>\$ 1,908,794</b>		

**Debt Service Budget vs. Actual**

**Revenues**

Debt Service Rate Revenue	\$ 7,854,820	\$ 6,545,683	\$ 6,545,680	\$ (3)	0.00%
Use of Reserves for 2016 Bond DS	300,000	250,000	250,000	-	0.00%
Septage Receiving Support - County	109,440	91,200	109,441	18,241	20.00%
Trust Fund Interest	26,200	21,833	99,125	77,292	354.01%
Reserve Fund Interest	148,000	123,333	275,976	152,642	123.76%
<b>Total Debt Service Revenues</b>	<b>\$ 8,438,460</b>	<b>\$ 7,032,050</b>	<b>\$ 7,280,222</b>	<b>\$ 248,172</b>	<b>3.53%</b>

**Debt Service Costs**

Total Principal & Interest	\$ 7,539,261	\$ 6,282,718	\$ 6,282,718	\$ -	0.00%
Reserve Additions-Interest	148,000	123,333	275,976	(152,642)	-123.76%
Debt Service Ratio Charge	325,000	270,833	270,833	-	0.00%
Reserve Additions-CIP Growth	426,200	355,167	355,167	-	0.00%
<b>Total Debt Service Costs</b>	<b>\$ 8,438,461</b>	<b>\$ 7,032,051</b>	<b>\$ 7,184,693</b>	<b>\$ (152,642)</b>	<b>-2.17%</b>
<b>Debt Service Surplus/(Deficit)</b>	<b>\$ (1)</b>	<b>\$ (1)</b>	<b>\$ 95,529</b>		

**Rate Center Summary**

<b>Total Revenues</b>	\$ 16,256,126	\$ 13,546,772	\$ 16,289,053	\$ 2,742,281	20.24%
<b>Total Expenses</b>	16,256,126	13,479,607	14,284,730	(805,123)	-5.97%
<b>Surplus/(Deficit)</b>	<b>\$ (0)</b>	<b>\$ 67,164</b>	<b>\$ 2,004,322</b>		
<b>Costs per 1000 Gallons</b>	2.31		1.79		
<b>Operating and DS</b>	4.79		3.61		
<b>Thousand Gallons Treated</b>	3,390,400	2,825,333	3,961,930	1,136,597	40.23%
<b>or</b>					
<b>Flow (MGD)</b>	9.289		13.033		

**Rivanna Water & Sewer Authority**  
**Monthly Financial Statements - April 2019**

**Glenmore Wastewater Rate Center**  
**Revenues and Expenses Summary**

<i>Budget FY 2019</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	\$ 372,720	\$ 310,600	\$ 310,600	\$ -	0.00%
Interest Allocation	600	500	905	405	80.91%
<i>Total Operating Revenues</i>	<b>\$ 373,320</b>	<b>\$ 311,100</b>	<b>\$ 311,505</b>	<b>\$ 405</b>	<b>0.13%</b>

**Expenses**

Personnel Cost	\$ 94,490	\$ 77,041	\$ 72,352	\$ 4,689	6.09%
Professional Services	3,000	2,500	-	2,500	
Other Services & Charges	39,510	32,925	29,045	3,880	11.78%
Communications	2,600	2,167	2,781	(614)	-28.36%
Information Technology	3,350	2,792	-	2,792	100.00%
Supplies	100	83	-	83	100.00%
Operations & Maintenance	121,450	101,208	100,469	739	0.73%
Equipment Purchases	2,900	2,417	2,000	417	17.24%
Depreciation	5,000	4,167	4,167	0	0.00%
<i>Subtotal Before Allocations</i>	<b>\$ 272,400</b>	<b>\$ 225,299</b>	<b>\$ 210,813</b>	<b>\$ 14,486</b>	<b>6.43%</b>
Allocation of Support Departments	100,915	82,446	77,161	5,284	6.41%
<i>Total Operating Expenses</i>	<b>\$ 373,315</b>	<b>\$ 307,745</b>	<b>\$ 287,975</b>	<b>\$ 19,770</b>	<b>6.42%</b>
<i>Operating Surplus/(Deficit)</i>	<b>\$ 5</b>	<b>\$ 3,355</b>	<b>\$ 23,530</b>		

**Debt Service Budget vs. Actual**

**Revenues**

Debt Service Rate Revenue	\$ 1,586	\$ 1,322	\$ 1,320	\$ (2)	-0.13%
Trust Fund Interest	-	-	-	-	
Reserve Fund Interest	1,000	833	1,929	1,096	131.51%
<i>Total Debt Service Revenues</i>	<b>\$ 2,586</b>	<b>\$ 2,155</b>	<b>\$ 3,249</b>	<b>\$ (2)</b>	<b>-0.08%</b>

**Debt Service Costs**

Total Principal & Interest	\$ 1,586	\$ 1,322	\$ 1,322	\$ -	0.00%
Reserve Additions-Interest	1,000	833	1,929	(1,096)	-131.51%
<i>Total Debt Service Costs</i>	<b>\$ 2,586</b>	<b>\$ 2,155</b>	<b>\$ 3,251</b>	<b>\$ (1,096)</b>	<b>-50.85%</b>
<i>Debt Service Surplus/(Deficit)</i>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (2)</b>		

**Rate Center Summary**

<b>Total Revenues</b>	\$ 375,906	\$ 313,255	\$ 314,754	\$ 1,499	0.48%
<b>Total Expenses</b>	375,901	309,900	291,226	18,675	6.03%
<b>Surplus/(Deficit)</b>	<b>\$ 5</b>	<b>\$ 3,355</b>	<b>\$ 23,528</b>		
<b>Costs per 1000 Gallons</b>	8.60		6.41		
<b>Operating and DS</b>	8.66		6.49		
<b>Thousand Gallons Treated</b>	43,412	36,177	44,898	8,721	<b>24.11%</b>
<b>or</b>					
<b>Flow (MGD)</b>	0.119		0.148		

Rivanna Water & Sewer Authority  
Monthly Financial Statements - April 2019

**Scottsville Wastewater Rate Center**  
**Revenues and Expenses Summary**

<i>Budget FY 2019</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	\$ 301,872	\$ 251,560	\$ 251,560	\$ -	0.00%
Interest Allocation	500	417	740	323	77.57%
<b>Total Operating Revenues</b>	<b>\$ 302,372</b>	<b>\$ 251,977</b>	<b>\$ 252,300</b>	<b>\$ 323</b>	<b>0.13%</b>

**Expenses**

Personnel Cost	\$ 94,515	\$ 77,062	\$ 72,352	\$ 4,710	6.11%
Professional Services	2,000	1,667	-	1,667	100.00%
Other Services & Charges	28,400	23,667	17,433	6,234	26.34%
Communications	2,630	2,192	3,216	(1,024)	-46.71%
Information Technology	2,350	1,958	-	1,958	100.00%
Supplies	100	83	446	(362)	-434.61%
Operations & Maintenance	57,850	48,208	40,012	8,197	17.00%
Equipment Purchases	3,200	2,667	2,650	17	0.63%
Depreciation	18,000	15,000	15,000	-	0.00%
<b>Subtotal Before Allocations</b>	<b>\$ 209,045</b>	<b>\$ 172,503</b>	<b>\$ 151,107</b>	<b>\$ 21,397</b>	<b>12.40%</b>
Allocation of Support Departments	93,328	76,244	71,324	4,920	6.45%
<b>Total Operating Expenses</b>	<b>\$ 302,372</b>	<b>\$ 248,748</b>	<b>\$ 222,431</b>	<b>\$ 26,316</b>	<b>10.58%</b>
<b>Operating Surplus/(Deficit)</b>	<b>\$ (0)</b>	<b>\$ 3,229</b>	<b>\$ 29,869</b>		

**Debt Service Budget vs. Actual**

**Revenues**

Debt Service Rate Revenue	\$ 8,006	\$ 6,672	\$ 6,670	\$ (2)	-0.02%
Trust Fund Interest	-	-	162	162	
Reserve Fund Interest	1,000	833	1,918	1,084	130.10%
<b>Total Debt Service Revenues</b>	<b>\$ 9,006</b>	<b>\$ 7,505</b>	<b>\$ 8,750</b>	<b>\$ 1,245</b>	<b>16.59%</b>

**Debt Service Costs**

Total Principal & Interest	\$ 8,006	\$ 6,672	\$ 6,672	\$ -	0.00%
Reserve Additions-Interest	1,000	833	1,918	(1,084)	
Estimated New Principal & Interest	-	-	-	-	
<b>Total Debt Service Costs</b>	<b>\$ 9,006</b>	<b>\$ 7,505</b>	<b>\$ 8,589</b>	<b>\$ (1,084)</b>	<b>-14.45%</b>
<b>Debt Service Surplus/(Deficit)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 161</b>		

**Rate Center Summary**

<b>Total Revenues</b>	\$ 311,378	\$ 259,482	\$ 261,050	\$ 1,568	0.60%
<b>Total Expenses</b>	311,378	256,253	231,021	25,232	9.85%
<b>Surplus/(Deficit)</b>	<b>\$ (0)</b>	<b>\$ 3,229</b>	<b>\$ 30,029</b>		
<b>Costs per 1000 Gallons</b>	15.14		8.16		
<b>Operating and DS</b>	15.60		8.48		
<b>Thousand Gallons Treated</b>	19,966	16,638	27,244	10,606	<b>63.74%</b>
<b>or</b>					
<b>Flow (MGD)</b>	0.055		0.090		

**Rivanna Water & Sewer Authority**  
**Monthly Financial Statements - April 2019**

**Administration**

<i>Budget FY 2019</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	\$	460,000	\$	383,333	\$	383,333	\$	(0)	0.00%
Miscellaneous Revenue		2,000		1,667		8,286		6,619	397.13%
<b>Total Operating Revenues</b>	<b>\$</b>	<b>462,000</b>	<b>\$</b>	<b>385,000</b>	<b>\$</b>	<b>391,619</b>	<b>\$</b>	<b>6,619</b>	<b>1.72%</b>

**Expenses**

Personnel Cost	\$	1,796,150	\$	1,460,939	\$	1,409,705	\$	51,234	3.51%
Professional Services		228,000		190,000		165,913		24,087	12.68%
Other Services & Charges		140,980		117,483		86,225		31,259	26.61%
Communications		20,280		16,900		17,303		(403)	-2.39%
Information Technology	<b>F</b>	138,500		115,417		153,372		(37,955)	-32.89%
Supplies		21,000		17,500		18,769		(1,269)	-7.25%
Operations & Maintenance		60,400		50,333		34,758		15,575	30.94%
Equipment Purchases	<b>C</b>	27,500		22,917		27,966		(5,049)	-22.03%
Depreciation		-		-		-		-	
<b>Total Operating Expenses</b>		<b>\$ 2,432,810</b>		<b>\$ 1,991,489</b>		<b>\$ 1,914,012</b>		<b>\$ 77,477</b>	<b>3.89%</b>

**Department Summary**

<b>Net Costs Allocable to Rate Centers</b>		<b>\$ (1,970,810)</b>	<b>\$ (1,606,489)</b>	<b>\$ (1,522,393)</b>	<b>\$ (84,096)</b>	<b>5.23%</b>
<b><u>Allocations to the Rate Centers</u></b>						
Urban Water	44.00%	\$ 867,157	\$ 706,855	\$ 669,853	\$ 37,002	
Crozet Water	4.00%	\$ 78,832	\$ 64,260	\$ 60,896	\$ 3,364	
Scottsville Water	2.00%	\$ 39,416	\$ 32,130	\$ 30,448	\$ 1,682	
Urban Wastewater	48.00%	\$ 945,989	\$ 771,115	\$ 730,749	\$ 40,366	
Glenmore Wastewater	1.00%	\$ 19,708	\$ 16,065	\$ 15,224	\$ 841	
Scottsville Wastewater	1.00%	\$ 19,708	\$ 16,065	\$ 15,224	\$ 841	
	100.00%	\$ 1,970,810	\$ 1,606,489	\$ 1,522,393	\$ 84,096	

Rivanna Water & Sewer Authority  
Monthly Financial Statements - April 2019

**Maintenance**

<i>Budget FY 2019</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*

-	-	2,597	2,597	
<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,597</b>	<b>\$ 2,597</b>	

**Expenses**

Personnel Cost

Professional Services

Other Services & Charges

Communications

Information Technology

Supplies

Operations & Maintenance

Equipment Purchases

Depreciation

*Total Operating Expenses*

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C

\$ 1,304,247	\$ 1,062,579	\$ 968,132	\$ 94,447	8.89%
-	-	-	-	
17,500	14,583	16,381	(1,797)	-12.32%
17,325	14,438	15,388	(950)	-6.58%
6,500	5,417	5,275	142	2.62%
2,000	1,667	361	1,306	78.36%
64,300	53,583	70,296	(16,712)	-31.19%
105,650	88,042	94,155	(6,113)	-6.94%
-	-	-	-	
<b>\$ 1,517,522</b>	<b>\$ 1,240,308</b>	<b>\$ 1,169,987</b>	<b>\$ 70,321</b>	<b>5.67%</b>

**Department Summary**

**Net Costs Allocable to Rate Centers**

<b>\$ (1,517,522)</b>	<b>\$ (1,240,308)</b>	<b>\$ (1,167,391)</b>	<b>\$ (67,724)</b>	<b>5.46%</b>
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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%

\$ 455,256	\$ 372,092	\$ 350,217	\$ 21,875
53,113	43,411	40,859	2,552
53,113	43,411	40,859	2,552
857,400	700,774	659,576	41,198
53,113	43,411	40,859	2,552
45,526	37,209	35,022	2,188
<b>\$ 1,517,522</b>	<b>\$ 1,240,308</b>	<b>\$ 1,167,391</b>	<b>\$ 72,918</b>

Rivanna Water & Sewer Authority  
Monthly Financial Statements - April 2019

Laboratory

Budget FY 2019	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	\$	301,100	\$	245,264	\$	234,728	\$	10,536	4.30%
Professional Services		-		-		-		-	
Other Services & Charges		14,230		11,858		4,239		7,620	64.25%
Communications		800		667		1,835		(1,168)	
Information Technology		2,500		2,083		-		2,083	100.00%
Supplies		2,150		1,792		936		856	47.78%
Operations & Maintenance	D	53,500		44,583		67,671		(23,088)	-51.79%
Equipment Purchases		72,100		60,083		11,351		48,732	81.11%
Depreciation		-		-		-		-	
<b>Total Operating Expenses</b>		<b>\$ 446,380</b>		<b>\$ 366,331</b>		<b>\$ 320,760</b>		<b>\$ 45,571</b>	<b>12.44%</b>

**Department Summary**

<b>Net Costs Allocable to Rate Centers</b>		<b>\$ (446,380)</b>	<b>\$ (366,331)</b>	<b>\$ (320,760)</b>	<b>\$ (45,571)</b>	<b>12.44%</b>
<u><b>Allocations to the Rate Centers</b></u>						
Urban Water	44.00%	\$ 196,407	\$ 161,185	\$ 141,134	\$ 20,051	
Crozet Water	4.00%	17,855	14,653	12,830	1,823	
Scottsville Water	2.00%	8,928	7,327	6,415	911	
Urban Wastewater	47.00%	209,799	172,175	150,757	21,418	
Glenmore Wastewater	1.50%	6,696	5,495	4,811	684	
Scottsville Wastewater	1.50%	6,696	5,495	4,811	684	
	100.00%	<b>\$ 446,380</b>	<b>\$ 366,331</b>	<b>\$ 320,760</b>	<b>\$ 45,571</b>	

Rivanna Water & Sewer Authority  
Monthly Financial Statements - April 2019

**Engineering**

<i>Budget FY 2019</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*

\$ -	\$ -	\$ 14,246	\$ 14,246	
<b>\$ -</b>	<b>\$ -</b>	<b>\$ 14,246</b>	<b>\$ 14,246</b>	

**Expenses**

Personnel Cost

Professional Services

Other Services &amp; Charges

Communications

Information Technology

Supplies

Operations &amp; Maintenance

Equipment Purchases

Depreciation &amp; Capital Reserve Transfers

*Total Operating Expenses*

	\$ 1,210,438	\$ 984,923	\$ 929,114	\$ 55,809	5.67%
	44,000	36,667	17,095	19,571	53.38%
<b>B</b>	19,550	16,292	45,168	(28,877)	-177.25%
	17,180	14,317	11,051	3,265	22.81%
	44,500	37,083	31,637	5,446	14.69%
	9,500	7,917	7,607	310	3.92%
	54,880	45,733	38,061	7,673	16.78%
	26,500	22,083	19,008	3,075	13.93%
	-	-	-	-	
	<b>\$ 1,426,548</b>	<b>\$ 1,165,014</b>	<b>\$ 1,098,741</b>	<b>\$ 66,273</b>	<b>5.69%</b>

**Department Summary**

Net Costs Allocable to Rate Centers

\$ (1,426,548)	\$ (1,165,014)	\$ (1,084,495)	\$ (52,027)	4.47%
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**Allocations to the Rate Centers**

Urban Water

47.00%

Crozet Water

4.00%

Scottsville Water

2.00%

Urban Wastewater

44.00%

Glenmore Wastewater

1.50%

Scottsville Wastewater

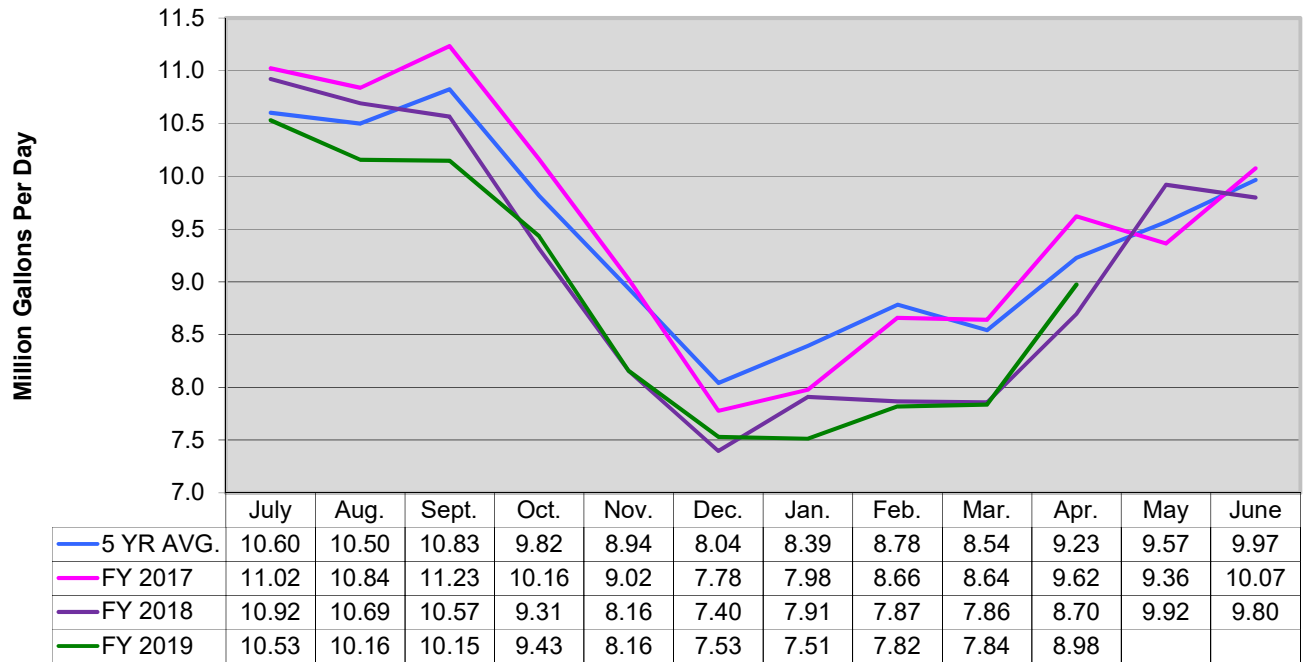
1.50%

100.00%

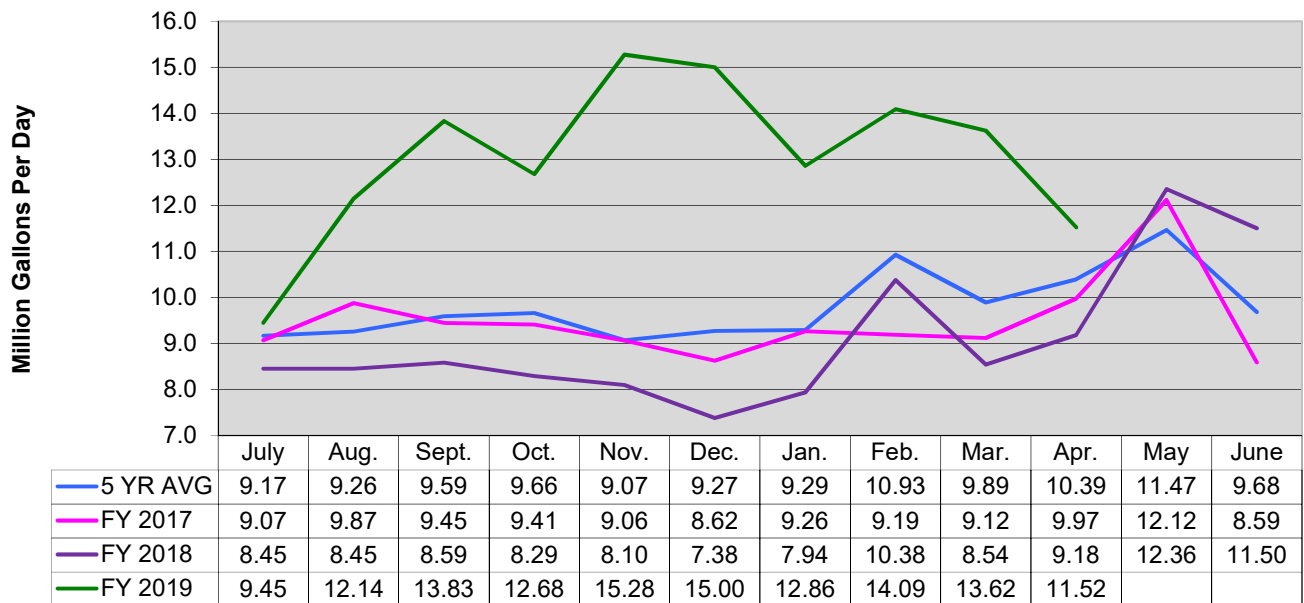
\$ 670,477	\$ 547,557	\$ 509,713	\$ 37,844	
57,062	46,601	43,380	3,221	
28,531	23,300	21,690	1,610	
627,681	512,606	477,178	35,428	
21,398	17,475	16,267	1,208	
21,398	17,475	16,267	1,208	
<b>\$ 1,426,548</b>	<b>\$ 1,165,014</b>	<b>\$ 1,084,495</b>	<b>\$ 80,519</b>	

**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: MAY 28, 2019**

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

### Under Construction

1. Birdwood Raw Water Main
2. Crozet Water Treatment Plant Expansion
3. Wholesale Water Master Metering
4. Sugar Hollow Reservoir to Ragged Mountain Reservoir Transfer Flow Meter
5. Interceptor Sewer & Manhole Repair
6. Valve Repair – Replacement (Phase 2)
7. Piney Mountain Tank Rehabilitation
8. Urgent and Emergency Repairs

### Design and Bidding

9. Observatory Water Treatment Plant Expansion
10. South Rivanna Water Treatment Plant Improvements
11. Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line and Raw Water Pump Station
12. Crozet Flow Equalization Tank
13. Beaver Creek Dam Alterations
14. Beaver Creek Raw Water Pump Station
15. Crozet Interceptor Pump Station Rebuilds
16. Buck's Elbow Ground Storage Tank Chlorination System
17. MCAWRRF Digester Sludge Storage Improvements
18. MCAWRRF Aluminum Slide Gate Replacements
19. Glenmore Secondary Clarifier Coating

- 20. Sugar Hollow Dam – Rubber Crest Gate Replacement and Intake Tower Repairs
- 21. Scottsville WTP – Finished Water Metering Improvements
- 22. South Rivanna Dam – Gate Repairs
- 23. Moores Creek Wetland Hydrology Improvements

#### Planning and Studies

- 24. Avon to Pantops Water Main (on hold until completion of the Urban Water Master Plan)
- 25. South Fork Rivanna Reservoir to Ragged Mountain Reservoir Water Line Right-of-Way
- 26. Urban Water Demand and Safe Yield Study
- 27. Urban Finished Water Infrastructure Master Plan
- 28. South Rivanna River Crossing and North Rivanna Transmission Main
- 29. Route 29 Pump Station
- 30. South Rivanna Hydropower Plant Decommissioning
- 31. Security Enhancements
- 32. Upper Schenks Branch Interceptor, Phase II
- 33. Asset Management Plan

#### O&M Related Projects

- 34. NRWTP Raw Metering Improvements
- 35. NRWTP Sludge Lagoon Study and Needs Assessment
- 36. MCAWRRF Cogeneration System Analysis
- 37. SRWTP Future Site Development Analysis

### **1. Birdwood Raw Water Main**

Design Engineer:	Michael Baker International (Baker)
Construction Contractor:	E.C. Pace (Roanoke)
Construction Start:	November 2018
Percent Complete:	90%
Base Construction Contract + Change Orders to Date = Current Value:	\$2,593,726
Expected Completion:	June 2019
Total Capital Project Budget:	\$4,000,000

#### Current Status:

A Notice to Proceed was issued to the contractor on November 26, 2018. The project has progressed well ahead of schedule, and all 5,900 feet of 36” pipe has been installed. The Contractor intends to complete the water line pressure testing, cleanup, final grading and seeding, and demobilization of remaining equipment by June 2019.

#### History:

RWSA and the UVA Foundation decided to expedite construction of the portion of the 36-inch raw

water main through the Birdwood property. This would enable pipeline work to proceed just ahead of the golf course reconstruction project to prevent subsequent disruption to the property and adjacent neighbors, as well as increased water line construction costs. The golf course reconstruction project started in November 2018. Our work includes installation of approximately 6,100 linear feet of 36-inch raw water main along the eastern property boundary of the golf course.

## **2. Crozet Water Treatment Plant Expansion**

Design Engineer:	Short Elliot Hendrickson (SEH)
Construction Contractor:	Orders Construction Co. (WVA)
Construction Start:	December 2018
Percent Completion:	7%
Base Construction Contract + Change Order to Date = Current Value:	\$7,170,000- \$285,000 = \$6,885,000
Expected Completion Date:	December 2020
Total Capital Project Budget:	\$8,500,000

### **Current Status:**

A Notice to Proceed was issued on December 13, 2018 and the contractor mobilized on February 26, 2019. Electrical work and required site demolition activities have begun as they worked towards completion of their first contract milestone. Planning has begun for the first major shutdown of the plant to install temporary measures and isolate a section of the plant for construction activities, which is a significant part of the first contract milestone.

### **History:**

This project was created to increase the supply capacity of the existing Crozet WTP by modernizing plant systems. The goal was to not drastically increase the plant footprint in regard to the existing filter plant, flocculation tanks, and sedimentation basins. By modernizing the outdated equipment within these treatment systems, the plant discharge capacity will be improved by approximately 100% (from 1 to 2 mgd). SEH completed a Preliminary Engineering Report (PER); watershed data collection; raw water jar testing; pilot scale testing, as well as preliminary and final design.

## **3. Wholesale Water Master Metering**

Design Engineer:	Michael Baker International (Baker)
Construction Contractor:	Linco, Inc.
Construction Start:	January 2016
Percent Complete:	97%
Base Construction Contract + Change Orders to Date = Current Value:	\$2,228,254 - \$284,104.24 = \$1,944,149.76
Expected Completion Date:	August 2019
Total Capital Project Budget:	\$3,200,000

### **Current Status:**

Three water treatment plant flow meters, and all 25 distribution system flow meters have been installed. Of those 25 meters, 8 are currently functional, 10 are resolving calibration accuracy, 4 have been replaced and will be calibrated, and the final 3 replacement meters will be installed and calibrated upon receipt in late June. Staff hopes to have a fully functioning metering system by the end of August 2019, if no additional unforeseen issues arise.

#### 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.

In May 2018, a final version of the *Wholesale Metering Administration and Implementation Policy* was completed and forwarded to the ACSA and the City. RWSA terminated the construction contract with Linco, Inc. on April 2, 2018 and is coordinating the remaining work in-house.

#### **4. Sugar Hollow to Ragged Mountain Reservoir Transfer Flow Meter**

Design Engineer:	Michael Baker International (Baker)
Construction Contractor:	G.L. Howard
Construction Start:	October 2018
Percent Complete	95%
Base Construction Contract + Change Orders to Date = Current Value:	\$354,905
Expected Completion:	May 2019
Total Capital Project Budget:	\$383,241

#### Current Status:

All onsite above-ground structures, including the Gatekeeper's House, existing sheds, Chlorine Contact Building, and existing Meter House, have been demolished. Improvements to the Sugar Hollow to Ragged Mountain Reservoir transfer line have been completed, which include the replacement of a 90+ year old gate valve, and installation of a new flow meter and automated control valve. The electrical subcontractor has finished their work at the site, and the flow meter and

automated control valve were tested during the week of April 22, 2019. RWSA Engineering staff is currently working with RWSA Information Systems and Operations staff to ensure that the automated control valve is programmed to protect the Sugar Hollow Raw Waterline from surges or “water hammer.” Site restoration is mostly complete, but the contractor will be returning to the site in the coming weeks to address the remaining punch list items.

#### 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 four existing small utility structures and sheds 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. As a result, there will be some special abatement work required. Several long lead items were purchased by the contractor as a result of the initial Work Authorization. A subsequent Work Authorization covering the purchase of all remaining materials, construction and demolition was issued to the contractor on September 28, 2018.

The Notice to Proceed (NTP) was issued to the contractor on October 1, 2018. A Demolition Permit was issued for the Sugar Hollow Gatekeeper’s House by Albemarle County during the week of November 12, 2018. Demolition of the Sugar Hollow Gatekeeper’s House began during the week of November 26, 2018 and was completed during the week of December 3, 2018. All other site demolition was completed by the week of January 14, 2019. Installation of the new gate valve was completed on February 5, 2019. Installation of the flow meter and automated control valve was completed during the week of February 18, 2019. Electrical work was completed during the week of April 22, 2019.

#### **5. Interceptor Sewer and Manhole Repair**

Design Engineer:	Frazier Engineering
Construction Contractor:	IPR Northeast
Construction Start:	November 2017
Percent Complete:	20%
Base Construction Contract +	
Change Orders to Date = Current Value:	\$1,244,337.19
Expected Completion:	2020
Total Capital Project Budget:	\$1,941,000

#### Current Status:

Frazier Engineering continues to conduct condition assessment activities and has reviewed CCTV results from investigation activities performed by IPR Northeast. The results from these investigations

and previous investigations are being compiled into an initial construction work authorization for rehabilitation work on portions of the Crozet and Morey Creek Interceptor. Some additional CCTV work will also be performed following the cleaning of certain sections of the interceptor system. The contractor anticipates mobilizing in mid May to begin this work. Additional investigation and rehabilitation work will follow after the initial round of CCTV investigations.

#### 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.

#### **6. Valve Repair – Replacement (Phase 2)**

Design Engineer:	N/A
Construction Contractor:	Garney Construction
Construction Start:	April 2019
Percent Complete:	5%
Base Construction Contract + Change Orders to Date = Current Value:	\$843,460.00 + (\$75,637.00) + \$2,269.90 = \$770,092.90
Expected Completion:	October 2019
Total Capital Project Budget:	\$882,914

#### Current Status:

The Contractor mobilized during the week of April 29, 2019, and the Notice to Proceed was issued by RWSA on May 6, 2019. The first valve replacement was completed on May 7, 2019, with two additional replacements scheduled for the weeks of May 13 and May 20, 2019.

#### History:

Isolation valves are critical for normal operation of the water distribution system and timely emergency response to water main breaks. Staff continuously reviews results from an ongoing Valve Exercising and Condition Assessment Program. This project will replace the highest-priority valves that are identified during the condition assessment as not operable and not repairable. In addition, valves that are identified in the condition assessment as being inoperable and repairable will be repaired as a part of the project. Phase 1 of the Valve Repair-Replacement Project replaced several inoperable and unrepairable valves in the North Rivanna Finished Water System. Phase 2 will continue replacing inoperable and unrepairable valves in the North Rivanna Finished Water System, but it will also replace (and potentially repair) valves on the South Rivanna, Crozet, Pantops, and Southern Loop Finished Water Systems. Once all specified valves have been repaired/replaced in Phase 2, the focus will shift to replacing older isolation valves in subsequent phases. Numerous valves in the North Rivanna and South Rivanna Finished Water Systems are 50+ years old and replacing these valves will enhance the resiliency and reliability of the two systems.

A Request for Bids (RFB) was issued on November 6, 2018. A Pre-Bid Conference was held on November 19, 2018. The first (and only) Addendum was issued on November 30, 2018. RWSA staff opened bids for the project on December 11, 2018, and Garney Companies, Inc. was the apparent low bidder (\$843,460). The RWSA Board of Directors approved the bid award recommendation and Capital Improvement Plan Budget Amendment on January 22, 2019. A Notice of Award was sent to Garney Companies, Inc. on February 6, 2019. A Pre-Construction Conference was held with the Contractor, VDOT, ACSA, and RWSA on March 11, 2019.

## **7. Piney Mountain Tank Rehabilitation**

Design Engineer:	Johnson, Mirmiran & Thompson (JMT)
Construction Contractor:	Utility Service Co, Inc.
Construction Start:	April 2019
Percent Complete:	10%
Base Construction Contract +	
Change Orders to Date = Current Value:	$\$251,700 + \$12,585 = \$264,285$
Expected Completion:	August 2019
Total Capital Project Budget:	\$570,000

### **Current Status:**

The Piney Mountain Tank was taken offline during the week of April 22, 2019 and has a substantial completion date in late July 2019. Utility Service Co., Inc is the general contractor for this project and will be mobilizing to the site during the week of May 13, 2019. Due to unforeseen complications with an extended tank shutdown and other ongoing construction activities in the North Rivanna Water System in spring of 2018, construction of the Piney Mountain Tank repairs was postponed to spring of 2019. It is anticipated that the Piney Mountain Tank will be placed back online in late July or early August 2019.

### **History:**

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.

The project was advertised for bid on November 28, 2017 and bids were opened on January 9, 2018. At its January 2018 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 RWSA Board of Directors approved an amendment to the Capital Improvement Plan Budget at its March 2019 meeting.

## **8. 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
2019-02	UWL-ARV-25 and UWL-040 Repair	\$250,000
2019-01	Pantops Water Line River Bank Repair	\$170,000
2017-03	Crozet Sewer Force Main Air Release Valve Repair	\$135,000
2018-01	Rivanna Interceptor – RVI-MH-32 Erosion Repair	\$50,000
2018-06	South Rivanna Dam Apron and River Bank Repairs	\$200,000

- UWL-ARV-25 and UWL-040 Repair

On March 14<sup>th</sup> RWSA was notified of a leak coming from UWL-ARV-25, located approximately at the intersection of 7<sup>th</sup> Street NW and 8<sup>th</sup> Street NW. In order to repair the air release valve, surrounding isolation valves were closed with assistance from City personnel. We were not able to get all of the pressure off the line, but it was reduced enough to perform the repair. In the process of closing valves for the repair of the air release valve, UWL-040 became stuck in the closed position. This is the main valve that isolates the Urban Water Line from the City distribution system and it is located in West Main Street. In order to evaluate the issues with the valve, excavation work was performed to determine if the valve needed to be replaced or simply repaired. Unfortunately, the valve needed to be replaced and a line stop on one of the City water lines was necessary to completely remove pressure from that location. These repairs were declared emergencies and UWL-ARV-25 was replaced on March 15<sup>th</sup> and UWL-040 was finally replaced on April 4<sup>th</sup>. Road restoration work on 7<sup>th</sup> Street NW and 8<sup>th</sup> Street NW is now also complete.

- Pantops Water Line River Bank Repair

RWSA was made aware by a local resident of an eroded section of the river bank along the Rivanna River that has exposed a section of the Pantops water line. This eroded section is near a previously repaired section of the river bank. RWSA personnel visited the site and the Maintenance department quickly reinforced the area with sand bags. This issue was identified as an emergency and an on-call contractor was contacted to begin to mobilize and prep the area for the repair. Prior to beginning repair activities, permits were required by the U.S. Army Corps of Engineers and the Virginia Marine Resources Commission. Those permits have been obtained, repair work commenced on April 15<sup>th</sup>, and was completed on May 3<sup>rd</sup>. Final site restoration activities are ongoing.

- 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 was contacted to begin development of a method to address the issue and a site meeting was conducted. The contractor has provided estimated pricing and a work authorization is being developed. Coordination with the property owner is underway and this repair will be scheduled sequentially



with the Rivanna Interceptor manhole repair this spring/summer as work is completed on the Pantops Water Line repair.

- 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, located near Meadow Creek Golf Course. A site meeting was held with the contractor and the City of Charlottesville to confirm the cause of the erosion and determine the preferred method of repair, as the repair will impact a section of the Rivanna Trail. The contractor has provided estimated pricing and a work authorization is being developed. This repair will be scheduled sequentially with the Crozet Sewer Force Main repair this spring/summer as work is completed on the Pantops Water Line repair.

- South Rivanna Dam Apron and River Bank Repairs

Intense rainfall between May 30-31, 2018 resulted in extensive flooding throughout Charlottesville and parts of Albemarle County, with flows over the South Fork Rivanna Dam reaching more than 7 feet over the spillway crest at its peak. Staff has inspected the dam and abutments to determine the extent of damage resulting from the extreme flooding. Although there is no discernible damage to the dam itself, staff found erosion damage to the north downstream river bank and substantial displacement of large stone downstream of the dam to form a rock dam and pool below the north apron. Additionally, some damage to concrete structures on both aprons was noted, including possible creation of voids beneath the concrete and loss of concrete joint filler. Repairs to the river bank and removal of the rock dam are scheduled to begin in late May 2019 and will be complete by the end of June 2019 under RWSA's on-call construction contract. Repairs to the north and south concrete aprons will be designed by Schnabel Engineering and those services will be procured separately from the on-call contract.

## **9. Observatory Water Treatment Plant Expansion**

Design Engineer:	Short Elliot Hendrickson, Inc. (SEH)
Project Start:	October 2017
Project Status:	50% Design
Construction Start:	December 2019
Completion:	2023
Approved Capital Budget:	\$18,630,000
Current Project Estimate:	\$19,700,000

### Current Status:

A project kickoff meeting with staff was held on November 14, 2018 and 30% design documents were provided in February. A Value Engineering Workshop took place the week of April 8<sup>th</sup> and a memo summarizing the results has been completed. Any agreed upon results will be incorporated into the project. 60% design documents will be completed by June 2019 with the intent of advertising the project for bids in September 2019.

### History:

This project will consider the design and costs for upgrading the plant systems to achieve a consistent 7.7 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 PER has been finalized, as well as a Work Authorization with the design engineer for design, bidding and construction administration services.

#### **10. South Rivanna Water Treatment Plant Improvements**

Design Engineer:	Short Elliot Hendrickson (SEH)
Project Start:	October 2017
Project Status:	50% Design
Construction Start:	December 2019
Completion:	December 2022
Approved Capital Budget:	\$7,500,000
Current Project Estimate:	\$15,000,000

##### **Current Status:**

A project kickoff meeting with staff was held on November 13, 2018 and 30% design documents were provided in February. A Value Engineering Workshop took place the week of April 8<sup>th</sup> and a memo summarizing the results has been completed. Any agreed upon results will be incorporated into the project. 60% design documents will be completed by June 2019 with the intent of advertising the project for bids in September 2019. Project scope and budget have increased to address treatment system and building needs identified during the PER phase.

##### **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. The PER has been finalized, as well as a Work Authorization with the design engineer for design, bidding and construction administration services.

## **11. Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line and Raw Water Pump Station**

Design Engineer:	Michael Baker International (Baker)
Project Start:	August 2018
Project Status:	Prelim Engineering in Progress
Construction Start:	2022
Completion:	2026
Approved Capital Budget:	\$6,526,000
Current Project Estimate:	\$18,000,000

### **Current Status:**

A Work Authorization was executed in December 2018 with Michael Baker International for the raw water line routing study, preliminary design, plat creation and the easement acquisition process for this portion of the project. A site evaluation study to recommend a location for the raw water pipe and pump station has been completed and is currently under review. Survey has been completed for portions of this alignment and other easement acquisition activities are currently underway.

### **History:**

Raw water is transferred from the Ragged Mountain Reservoir (RMR) to the Observatory Water Treatment Plant by way of two 18-inch cast iron pipelines, which have been in service for more than 110 and 70 years, respectively. The increased frequency of emergency repairs and expanded maintenance requirements are one impetus for replacing these pipelines. The proposed water line will be able to reliably transfer water to the expanded Observatory plant, which may eventually have the capacity to treat 10 million gallons per day (mgd). The new pipeline is expected to be constructed of 36-inch ductile iron and will approximately 14,000 feet in length. The opportunity to integrate the Observatory WTP raw water supply line with the proposed South Rivanna Reservoir to RMR raw water main project is currently being investigated as part of the approved 50-year Community Water Supply Plan.

The RMR to Observatory WTP raw water pump station is planned to replace the existing Stadium Road and Royal pump stations, which have exceeded their design lives or will require significant upgrades with the Observatory WTP expansion. The pump station will pump up to 10 million gallons per day (mgd) of raw water to the Observatory WTP. Integration of the new pump station with the planned South Rivanna Reservoir (SRR) to RMR pipeline is being considered in the interest of improved operational and cost efficiencies. An integrated pump station would also include the capacity to transfer up to 16 mgd of raw water from RMR back to the SRR WTP.

## **12. Crozet Flow Equalization Tank**

Design Engineer:	Schnabel Engineering
Project Start:	October 2016
Project Status:	60% Design
Construction Start:	December 2019
Completion:	2021
Approved Capital Budget:	\$3,300,000
Current Project Estimate:	\$4,860,000

### Current Status:

60% plans have been submitted for review and final design documents will be completed by July 2019.

### History:

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.

Greeley and Hansen completed a siting study to determine the location for the flow equalization tank based on the results of the comprehensive model update. The results of the siting study were reviewed with ACSA and a final tank location was determined.

A work authorization with Schnabel Engineering was finalized and a Project Kick-off Meeting was held on July 12, 2018. A data collection period has begun which includes a wetlands investigation of the project site and a topographic survey of the site has also been completed. An inspection of the existing Pump Station No. 4 is scheduled for September 20, 2018 where information on the control and electrical systems will be gathered.

## **13. Beaver Creek Dam Alterations**

Design Engineer:	Schnabel Engineering
Project Start:	February 2018
Project Status:	5% Design
Construction Start:	2023
Completion:	2026
Approved Capital Budget:	\$8,830,000
Current Project Estimate:	\$15,000,000

### Current Status:

A Preliminary Engineering Report has been completed for the selected design alternative. Final design

of the dam improvements is underway. Staff is also currently pursuing alternate sources of funding for the project.

#### History:

RWSA operates the Beaver Creek Dam and reservoir as the sole raw water supply for the Crozet Area. In 2011, an analysis of the Dam Breach inundation areas and changes to Virginia Department of Conservation and Recreation (DCR) *Impounding Structures Regulations* prompted a change in hazard classification of the dam from Significant to High Hazard. This change in hazard classification requires that the capacity of the spillway be increased. This CIP project includes investigation, preliminary design, public outreach, permitting, easement acquisition, final design, and construction of the anticipated modifications. Work for this project will be coordinated with the new relocated raw water pump station and intake and a reservoir oxygenation system project.

Schnabel Engineering developed three alternatives for upgrading the capacity of the Beaver Creek Dam Spillway in 2012. Following the adoption of a new Probable Maximum Precipitation (PMP) Study on December 9, 2015 and the release of DCR guidelines for implementing the PMP study in March of 2016, RWSA determined it would proceed with an updated alternatives analysis and Preliminary Engineering Report for upgrading the dam spillway. In 2017, RWSA entered into a term contract with Schnabel Engineering for dam-related engineering services. The design work for this project is being completed under Schnabel's term contract.

Following the completion of an updated alternatives analysis by Schnabel Engineering, staff met with members of Albemarle County and ACSA staff to discuss the preferred alternative. It was determined that staff would proceed with design of a labyrinth spillway and chute through the existing dam with a bridge to allow Browns Gap Turnpike to cross over the new spillway.

#### **14. Beaver Creek Raw Water Pump Station and Intake**

Design Engineer:	Hazen & Sawyer
Project Start:	August 2018
Project Status:	Work Authorization Under Negotiation
Construction Start:	2023
Completion:	2026
Approved Capital Budget:	\$6,100,000
Current Project Estimate:	\$8,000,000

#### Current Status:

Hazen and Sawyer has begun work on a site selection study for the new Raw Water Pump Station and intake. Development of a Joint Permit Application for the new Pump Station, Intake, and Beaver Creek Dam Spillway Upgrades is also underway and is expected to be completed in the summer of 2020.

#### History:

The Drinking Water Infrastructure Plan for the Crozet water service area, developed by Hazen and Sawyer, recommends installation of a new Raw Water Pump Station and Intake at the Beaver Creek Dam in order to meet new minimum instream flow requirements and provide adequate raw water pumping capacity to serve the growing Crozet community for the next 50 years. The pump station will

be moved out of its existing location at the toe of the dam to a new location, to be determined during design. The new intake structure will include enhanced controls to allow for access to the best quality water at any given time.

#### **15. Crozet Interceptor Pump Station Rebuilds**

Design Engineer:	TBD
Project Start:	July 2018
Project Status:	25% Design
Construction Start:	2019
Completion:	2023
Total Capital Project Budget:	\$525,000

##### **Current Status:**

The Maintenance Department has begun pump replacement work associated with this overall project. Staff is reviewing the overall scope of work for the project and will be coordinating other items with the Maintenance Department regarding schedule and preferred equipment and materials. Work will be performed via quote packages and the need for consultant assistance is being determined.

##### **History:**

The Crozet Interceptor Pump Stations were constructed in the 1980's and many of the components are still original. The project will include the replacement of pumps and valves at Pump Station No. 2 in order to improve pumping capabilities at this location and provide spare parts for the pumps at Pump Station No. 1. This work will also include roof replacements at all four pump stations, siding replacement for the wet well enclosure at Pump Station No. 3, and installation of a new water well at Pump Station No. 3. Components of this project will be coordinated and timed to properly coincide with the Crozet Flow Equalization Tank project.

#### **16. Buck's Elbow Ground Storage Tank Chlorination System**

Design Engineer:	Short Elliot Hendrickson (SEH)
Project Start:	Winter 2017
Project Status:	50% Design
Construction Start:	Summer 2019
Completion:	Fall 2019
Approved Capital Budget:	\$1,200,000
Current Project Estimate:	\$187,000

##### **Current Status:**

SEH completed an update to the project's original Alternatives Analysis (completed in Winter 2017 as an O&M Project) and held a review meeting with RWSA Engineering and Operations staff during the week of May 6, 2019. Of the alternatives presented, RWSA staff has selected a stationary chemical feed station, rather than a portable system that must remain on a truck/trailer and hauled to the site. The document was submitted to the Virginia Department of Health (VDH) for preliminary review. Once all design documents have been finalized and approved by RWSA, they will be submitted to VDH for final regulatory approval. Staff anticipates that bidding documents will be finalized by the

end of May, with the bidding process taking place in June and a bid award recommendation being presented to the Board of Directors in July.

History:

The two million-gallon Bucks Elbow Ground Storage Tank provides finished water storage for the Crozet Area. Historically, RWSA has experienced low chlorine residuals in the tank during the warm weather months due to water age and stratification. When chlorine residuals drop, RWSA must manually feed chlorine into the tank. Previously, this meant that staff had to bring all required pumping infrastructure to the site and climb the tank to access the injection point(s). To enhance the efficiency and safety of this process, SEH is assisting RWSA with the design of a chlorine feed system that is capable of one-person operation, will not require tank climbing or confined space entry into the adjacent altitude valve vault, and will minimize overall chemical exposure risk to RWSA staff. An active mixing system will also be installed at the Buck's Elbow Ground Storage Tank as a part of the work to supplement the existing passive mixing system. This will ensure that the tank is being appropriately mixed during the chlorine feed process and will decrease overall stratification in the tank.

**17. MCAWRRF Digester Sludge Storage Improvements**

Design Engineer:	TBD
Project Start:	Spring 2019
Project Status:	Preliminary Design
Construction Start:	Summer 2019
Completion:	Fall 2019
Total Capital Project Budget:	\$265,000

Current Status:

We are currently scheduling an engineer to perform an interior inspection of the sludge storage tank. Preparation of construction documents will begin after an inspection is completed and scope of repair work better defined. Implementation of this work will commence after Digester No. 3 is coated and back in service. Coating of Digester No. 3 has begun with completion anticipated in June 2019.

History:

With the second centrifuge installation, additional capacity for storage of digested sludge would provide the Authority operational flexibility it does not currently have. Additionally, the sole sludge storage tank at the MCAWRRF was constructed in 1959 of reinforced concrete and is in need of repairs. This project would convert one of the three existing anaerobic digesters (Digester No. 1) into a sludge storage tank through piping modifications, and would provide redundancy to the existing sludge storage tank so it can be removed from service, cleaned, inspected, and repaired with minimal impact to the existing sludge dewatering operations. The piping configuration would also allow flexibility for the anaerobic digester to be used as either an anaerobic digester or sludge storage tank as needed for operations. The scope of work would include piping modifications, hydraulic improvements, tank safety improvements such as handrail and lights, and structural improvements to the existing sludge storage tank roof.

**18. MCAWRRF Aluminum Slide Gate Replacements**

Design Engineer:	Hazen and Sawyer
Project Start:	November 2018
Project Status:	70% Design (for UV Facility work)
Construction Start:	June 2019
Completion:	August 2019
Total Capital Project Budget:	\$470,000

Current Status:

Staff is currently reviewing the design for the UV Facility Slide Gate Replacement Project for which a quote package will be advertised in late May.

History:

Several large aluminum slide gates are located at the influent side of the Moores Creek Pump Station. These gates allow staff to stop or divert flow to perform maintenance activities. After repeated attempts to access and repair the gates, it is now necessary to replace and modify the gate arrangement. The replacement includes new gates for greater flexibility and resiliency as well as significant influent flow bypass pumping. Likewise, there are several gates at the Ultraviolet disinfection facility that leak water, causing a reduced capacity of the facility. Replacement of these gates will restore the process to full capacity.

**19. Glenmore Secondary Clarifier Coating**

Design Engineer:	Short Elliot Hendrickson (SEH)
Project Start:	Fall 2018
Project Status:	Fee negotiation
Construction Start:	June/July 2019
Completion:	September 2019
Approved Capital Budget:	\$50,000
Current Project Estimate:	\$110,000

Current Status:

Engineering staff has developed specifications and is negotiating a fee with Lytle Utilities for a change order to their MCAWRRF Digester Coating project for blasting and coating both clarifiers.

History:

The secondary clarifiers at the Glenmore facility were painted over 10-years ago. The clarifier environment is a particularly harsh environment subject to corrosive gases, grit abrasion and mechanical wear. Based on observations by operations staff, the coating system is in need of replacement to prevent deterioration and failure of the underlying metal superstructure. This project includes the cleaning and full coating of the clarifier.

**20. Sugar Hollow Dam – Rubber Crest Gate Replacement and Intake Tower Repairs**

Design Engineer:	Schnabel Engineering
Project Start:	January 2019



Project Status:	Work Authorization Under Negotiation
Construction Start:	2020
Completion:	2021
Approved Capital Budget:	\$940,000
Current Project Estimate:	\$1,140,000

Current Status:

A work authorization for design, bidding, and construction services has been negotiated with Schnabel Engineering and is included in this month's consent agenda for approval. An evaluation will be performed in spring of 2019 with design work to follow. Construction is anticipated to begin in spring or summer of 2020.

History:

In 1998, the Sugar Hollow Dam underwent a significant upgrade to improve structural stability and spillway capacity. The original metal spillway gates were replaced with a manufactured five-foot-high inflatable rubber dam that is bolted to the existing concrete structure. This rubber dam allows for the normal storage of water in the reservoir with the ability to be lowered during extreme storm events. The rubber dam has an approximate service life of twenty years and is therefore now due for replacement. The aging intake tower structure will be inspected and evaluated. Recommended repairs may include issues relating to the intake gate valves and tower walls, including repair or replacement of intake trash racks, and sealing/grouting of minor concrete wall cracks.

**21. Scottsville WTP – Finished Water Metering Improvements**

Design Engineer:	Short Elliot Hendrickson (SEH)
Project Start:	September 2018
Project Status:	Bidding
Construction Start:	August 2019
Completion:	November 2019
Total Capital Project Budget:	\$145,000

Current Status:

Final design documents have been completed and the project was advertised for bids on May 1, 2019 and bids will be opened on May 29, 2019.

History:

The Scottsville WTP is permitted to provide up to 0.25 MGD of potable drinking water to RWSA customers in the Scottsville service area. After water has been treated in the plant it is collected in an existing clearwell, which was constructed with the original facility. From the clearwell, the water is pumped into the distribution system by one of the two high service pumps. The flow from these pumps is not metered. In order to keep a record of the total flow entering the Scottsville system, plant operators must periodically conduct draw-down tests to verify the pumping rate of each of the two pumps. The total flow is then calculated based on the run time of each pump. This method of measuring flow is not accurate, as the pumping rate will vary based on the clearwell level and the hydraulic grade line of the distribution system. In addition, the Virginia Department of Health has

indicated that the flow should be metered during recent conversations related to the disinfection profile calculation throughout the plant. The purpose of this project is to install a finished water meter at the plant.

## **22. South Rivanna Dam – Gate Repairs**

Design Engineer:	Schnabel
Project Start:	July 2019
Project Status:	Work Authorization Development
Construction Start:	Spring- Fall 2020
Completion:	2020
Total Capital Project Budget:	\$900,000

### **Current Status:**

Design will begin in July 2019 with construction in 2020, pending preliminary findings.

### **History:**

The South Rivanna Dam, originally constructed in 1965, is equipped with two 36” diameter slide gates and conduits, one each on the north and south abutments of the dam, which can be utilized to dewater the facility or to meet minimum instream flow (MIF) requirements when the dam is not spilling. These gates are original to the dam and while they are operable and are exercised regularly, they can no longer provide a complete seal, therefore allowing some leakage through the dam. RWSA has protocols in place to temporarily stop leakage through the gates when necessary to conserve water; however, there is a desire to repair or replace the gates and components as needed to restore full functionality. The project includes other repairs to the facility, including improvements to the concrete wall adjacent to the Raw Water Pump Station as well as improvements to the north dam tower to provide safer access by staff while still discouraging access by the general public.

## **23. Moores Creek Wetland Hydrology Improvements**

Design Engineer:	VHB/ECS, Mid-Atlantic
Project Start:	March 2019
Project Status:	Kick-off
Construction Start:	Summer 2019
Completion:	Fall 2019
Total Capital Project Budget:	\$95,000

### **Current Status:**

A kick-off meeting was held in March. Work is currently underway and the consultant will be providing design plans and an Erosion and Sediment Control permit application in May 2019.

### **History:**

As part of the Ragged Mountain project, RWSA was required to mitigate for impacts to streams and wetlands. The wetland mitigation site is located along Moores Creek on Franklin St. RWSA has been

monitoring the mitigation sites, as required by the project permit, since construction in 2014. Reports on the success of the site are submitted to the Department of Environmental Quality (DEQ) at intervals during the first 10 year of the project construction. From this monitoring it was determined that the wetland is holding more water than is ideal for its function. VHB designed a Hydrology Improvement Plan for the site, which was approved by DEQ. RWSA is now working with ECS Mid-Atlantic, to obtain the necessary County permits for the improvements (i.e., Erosion and Sediment Control permit).

#### **24. Avon to Pantops Water Main (on hold until completion of the Urban Water Master Plan)**

Design Engineer:	Michael Baker International (Baker)
Project Start:	August 2017
Project Status:	Preliminary Engineering Report
Construction Start:	TBD
Completion:	TBD
Total Capital Project Budget:	\$13,000,000

##### Current Status:

Route alignment determination, hydraulic modeling, and preliminary design were underway. Due to the complicated nature of our finished water systems, it was decided at the August 2018 Board meeting that a more comprehensive approach is warranted and we should complete the Finished Water Master Plan prior to moving forward with final design and construction of the Avon to Pantops Water Main. This project is on hold.

##### History:

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

#### **25. 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:	Easement Acquisition Underway
Completion:	2021
Total Capital Project Budget:	\$2,295,000

##### Current Status:

A Draft PER was completed in January 2019. Survey work began in late March to begin preparation of easement plats. Easement acquisition negotiations with private property owners are expected to begin in late May 2019. Several of the properties are owned by the VDOT, Albemarle School Board,

UVA Foundation and the City of Charlottesville. A work authorization for easement acquisition services with ERM and Associates was approved by the Board in April. Appraisal work is ongoing for any easements with an estimated value over \$10,000 in accordance with RWSA policy.

History:

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.

Baker is now completing the routing study. Preliminary design, plat creation and the acquisition of easements will take place as soon as the final route determination has been made. Property owners have been contacted to request permission to access properties for topographical surveying which will take place following completion of the PER. A recommendation for a tentative final alignment was presented at a community information meeting in June 2018.

**26. Urban Water Demand and Safe Yield Study**

Design Engineer:	Hazen and Sawyer
Project Start:	November 2018
Project Status:	50% complete
Completion:	August 2019
Total Capital Project Budget:	\$154,000

Current Status:

Bathymetric studies of the South Rivanna and Ragged Mtn Reservoirs were completed in March 2019. Initial demand projections are expected in May 2019.

History:

The City of Charlottesville, Albemarle County Service Authority, and RWSA entered into the Ragged Mountain Dam Project Agreement in 2012. This Agreement included provisions to monitor the bathymetric capacity of the Urban water reservoirs as well as a requirement to conduct reoccurring demand analysis, demand forecasting and safe yield evaluations. This study will evaluate and calculate current and future demands and present safe yield. Per the project Agreement, these analyses shall be completed by calendar year 2020.

**27. Urban Finished Water Infrastructure Master Plan**

Design Engineer:	Michael Baker International (Baker)
Project Start:	November 2018
Project Status:	35% complete
Completion:	January 2020
Total Capital Project Budget:	\$253,000

#### Current Status:

Work on this project is on-going and is being coordinated with flow projections being provided by Hazen and Sawyer under the Urban Water Demand and Safe Yield Study.

#### History:

As identified in the 2017 Strategic Plan, the Authority has a goal to plan, deliver and maintain dependable infrastructure in a financially responsible manner. Staff has identified asset master planning as a priority strategy to improve overall system development. Many previously identified projects in the urban finished water treatment and distribution system are in preliminary engineering, design or construction. As such, staff have identified a need to develop a current and ongoing finished water master plan.

### **28. South Rivanna River Crossing and North Rivanna Transmission Main**

Design Engineer:	Michael Baker International (Baker)
Project Start:	July 2020
Project Status:	Planning
Construction Start:	2021
Completion:	2023
Total Capital Project Budget:	\$5,340,000

#### Current Status:

An update to the Airport Zone Study Report was completed in summer of 2018, confirming the need for and timing of the river crossing and transmission main. Design of the project will begin in summer 2020.

#### History:

RWSA has previously identified through master planning that a 24-inch water main will be needed from the South Rivanna Water Treatment Plant (SRWTP) to Hollymead Town Center to meet future water demands. Two segments of this water main were constructed as part of the VDOT Rt. 20 Solutions projects, including approximately 10,000 LF of 24-inch water main along Rt. 29 and 600 LF of 24-inch water main along the new Berkmar Drive Extension, behind the Kohl's department store. To complete the connection between the SRWTP and the Airport Road Pump Station Site, RWSA plans to construct a new river crossing at the South Fork Rivanna River and two "gap" sections of 24-inch water main between the already completed sections. Much of the new water main route is within VDOT right-of-way; however, acquisition of right-of-way will be required at the river crossing and on the Kohl's Property at Hollymead Town Center.

### **29. Route 29 Pump Station**

Design Engineer:	Michael Baker International (Baker)
Project Start:	July 2019
Project Status:	Planning
Construction Start:	2021

Completion:	2022
Total Capital Project Budget:	\$2,300,000

Current Status:

Design of the pump station is anticipated to begin in the summer of 2019.

History:

The Rt. 29 Pipeline and Pump Station master plan was developed in 2007 and originally envisioned a multi-faceted project that reliably connected the North and South Rivanna pressure bands; reduced excessive operating pressures, and developed a new Airport pressure zone to serve the highest elevations near the Airport and Hollymead Town Center. The master plan update was completed in June of 2018 to reflect the changes in the system and demands since 2007. This project, along with the South Rivanna River Crossing and North Rivanna Transmission Main project, will provide a reliable and redundant finished water supply to the North Rivanna area. The proposed pump station will be able to serve system demands at both the current high pressure and future low pressure conditions. These facilities will also lead to future phase implementation which will include a storage tank and the creation of the Airport water pressure zone.

**30. 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
Approved Capital Budget:	\$400,000
Current Project Estimate:	\$750,000

Current Status:

A consultation document was provided to local regulatory agencies and a meeting was held on May 21, 2018 with the agencies to discuss the decommissioning process. Minor comments were provided by those agencies and development of the surrender application for submission to FERC is underway. As part of the application, a draft decommissioning plan has been developed and is being reviewed by RWSA. Due to a recent significant wet weather event, returning the 72-inch diameter penstock to a reservoir drain has been evaluated by Gomez and Sullivan. Modifications to the decommissioning plan are being developed to incorporate that into the project.

History:

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. 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.

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.

### **31. Security Enhancements**

Design Engineer:	TBD
Project Start:	July 2018
Project Status:	Planning
Construction Start:	2019
Completion:	2021
Total Capital Project Budget:	\$2,400,000

#### **Current Status:**

RWSA Engineering staff has begun addressing priority items discussed during the meeting it held with RWSA Operations staff in October 2018 and determining which portions of the project will require additional input from various RWSA departments. RWSA staff has met with ACSA and City staff to discuss how access control and intrusion detection systems have been implemented into the day-to-day operations of the respective utilities. Meetings with additional utilities and organizations will be conducted as needed to gain additional perspective on access control and other security measures. It is expected that a Request for Proposal (RFP) will be issued by RWSA staff in order to facilitate the selection of an integrator to facilitate incorporation of an access control system throughout the Authority. The recommended access control system will be implemented into the CZWTP, OBSWTP, and SRWTP expansion/improvement projects as an initial measure, with additional facilities to follow. RWSA staff anticipates advertising the access control RFP in May 2019, with the integrator selection process occurring in June and a recommendation being presented to the Board of Directors in July. As the project’s scope of work is refined, a consultant will be selected to provide project assistance where needed.

#### **History:**

As required by the Federal Bioterrorism Act of 2002, water utilities must conduct Vulnerability

Assessments and have Emergency Response Plans. RWSA recently completed an updated Risk Assessment of its water system in collaboration with the Albemarle County Service Authority (ACSA), City of Charlottesville (City), and University of Virginia (UVA). A number of security improvements that could be applied to both the water and wastewater systems were identified. The purpose of this project will be to install security improvements at RWSA facilities including additional security gate and fencing components, vehicle bollards, facility signage, camera system enhancements, additional security lighting, intrusion detection systems, door and window hardening, installation of industrial strength locks, communication technology and cable hardening, and an enhanced access control program.

### **32. Upper Schenks Branch Interceptor, Phase II**

Design Engineer:	Frazier Engineering, P.A.
Project Start:	TBD
Project Status:	Planning
Construction Start:	TBD
Completion:	TBD
Approved Capital Budget:	\$4,485,000
Current Project Estimate:	\$3,985,000

#### **Current Status:**

Discussions are underway to determine an alignment for the replacement sewer line, generally located between the McIntire Recycling Center and Preston Avenue along McIntire Road. As part of this process, some additional subsurface exploration work will be conducted starting this summer to gather rock information along the alignment in McIntire Road as well as across the ballfield.

#### **History:**

The Schenks Branch Sanitary Sewer interceptor is a pipeline operated by RWSA that serves the City of Charlottesville. The 21-inch sewer line was originally constructed by the City in the 1950s. Evaluations from the flow metering and modeling from the Comprehensive Sanitary Sewer Interceptor Study, and negotiations with the ACSA and City, resulted in an inflow and infiltration reduction plan from which it was concluded that increased capacity of the Schenks Branch Interceptor was needed for wet weather peak flow. Due to several road construction projects and the construction of the Meadow Creek Interceptor project along the sewer alignment, Schenks Branch was to be constructed in multiple phases. The completed sections, collectively known as the Lower Schenks Branch Interceptor, include the Tie-in to Meadow Creek, the section along McIntire Road Ext, and the section through the Route 250 Interchange.

The remaining sections, which are considered the Upper Schenks Branch Interceptor, were split into 2 phases. The first phase has been completed and is located within City-owned Schenks Greenway adjacent to McIntire Road and the second phase is to be located on County property (baseball field and County Office Building) adjacent to McIntire Road or within McIntire Road. Both phases are included in a DEQ Consent Order. As a result of discussions between RWSA and DEQ, DEQ approved a milestone schedule for completing the Phase 1 section by March 31, 2017 and set in “abeyance” a schedule for completing work on Phase 2 as a result of complications associated with



the execution of the necessary easements. Phase 2, preliminary construction drawings and specifications have been developed. No new agreements concerning right-of-way have been reported to RWSA regarding Phase 2. No bidding or construction can take place until one of the following two options occur: (1) County grants RWSA a suitable easement on County property; or (2) City grants RWSA permission and a street cut permit to install the sewer directly under McIntire Road.

### **33. Asset Management Plan**

Design Consultant:	GHD, Inc.
Project Start:	July 2018
Project Status:	85% Complete (Phase 1)
Completion:	2020
Total Capital Project Budget:	\$500,000

#### **Current Status:**

As part of the first phase, Asset Management awareness training and workshops related to Asset Management Program Development, the Gap Assessment process, and development of an Asset Management Policy have been conducted. A draft report documenting the Gap Assessment has been submitted and various other documents associated with policy and business processes are being reviewed as well. Completion of this first phase is anticipated in June 2019.

#### **History:**

Asset management is the practice of managing our infrastructure to minimize the total cost of owning and operating these assets while providing desired service levels. In doing so, it is used to make sure planned maintenance activities take place and that capital assets are replaced, repaired or upgraded at the right time, while ensuring that the money necessary to perform those activities is available. RWSA has some components of an asset management program in place (i.e. GIS, work order system), but has identified the need to further develop the program as part of our Strategic Planning process. In order to continue to build the program, a consultant has been procured to assist with a three-phase process that will include facilitation and development of an asset management strategic plan, development and management of a pilot study where the results of the strategic plan will be applied to a specific class of assets, and assistance through a full implementation process. As part of this three-phase process, the consultant will also assist RWSA with the procurement of a software package to facilitate the overall program.

### **O&M Related Projects**

Staff is currently working on several O&M related projects within the water and wastewater systems as listed below:

#	Project Description	Total Approx. Value
35	NRWTP Raw Water Metering Improvements	\$135,000
36	NRWTP Sludge Lagoon Study and WTP Needs Assessment	\$60,100
37	MCAWRRF Cogeneration System Analysis	\$48,300
38	SRWTP Future Site Development Analysis	\$15,000

- NRWTP Raw Water Metering Improvements

The NRWTP is permitted to provide up to 2.0 MGD of potable drinking water to customers located in the Urban service area. After water is pumped from the raw water pump station on the North Fork Rivanna River, the raw water flow is metered by an orifice plate, or insert style meter, prior to entering the rapid mix chamber. The meter is located behind the existing powdered activated carbon feed system and is difficult to access. In addition, RWSA recognizes that the accuracy of this style of meter is reduced by laying length conditions in comparison to modern magnetic flow meters which have been installed at other locations. RWSA is working with SEH to develop contract documents to have a magnetic flow meter installed on the raw water line in an exterior below grade vault. The schedule for bidding of this work will be dependent on the availability of funds.

- NRWTP Sludge Lagoon Study and WTP Needs Assessment

The two lagoons or settling ponds at the plant are earthen basins designed to capture and hold residuals generated through the treatment process as well as periodic draining and washdown of the sedimentation and flocculation basins. The basins were designed to allow all the residuals and solids to settle out and then the clarified water to be decanted and conveyed to the river. The operational use of these lagoons is not as originally intended, and the Virginia Department of Environmental Quality has concerns regarding their condition. A study is being performed to determine how they can be improved, and other locations on site that may be less prone to flood waters. Under this project, a needs assessment at the plant will be also be performed and updated. Construction activities associated with these improvements have been proposed in the FY20 CIP.

- MCAWRRF Cogeneration System Analysis

The MCAWRRF currently utilizes a cogeneration facility which accepts digester gas and uses it to create electricity and heat. The facility was put into operation in 2011. The generator supplies power back to the plant electrical distribution system providing energy usage savings through offsetting usage through the electric utility. Unfortunately, there have been a number of issues associated with operation of the generator including, expensive and proprietary maintenance services and temperature issues. With a significant and expensive scheduled maintenance event forthcoming, RWSA wanted to conduct a study to determine if these issues could be resolved or if there was a more efficient way to utilize the digester gas. This study will evaluate options for improvements to the existing system or new systems that could be implemented along with estimated costs and returns on investment. A final report was submitted on February 22<sup>nd</sup> and RWSA is evaluating the final conclusions.

- SRWTP Future Site Development Analysis

As future water demands increase, facility expansions and additions at the SRWTP site are proposed to continue. At some point in the future, RWSA plans to increase the capacity at the SRWTP to 16 MGD along with preliminary plans for a 41 MGD raw water pump station and a 25 MGD pretreatment facility associated with the future transfer of raw water from the South Rivanna Reservoir to the Ragged Mountain Reservoir. With property development activity increasing near the plant, the intent of this analysis is to confirm what approximate space would be needed to meet the plant's future needs in order to better determine future property requirements. The analysis is expected to be completed

by June 2019.

## MEMORANDUM

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

**FROM: DAVE TUNGATE, DIRECTOR OF OPERATIONS**

**REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR**

**SUBJECT: OPERATIONS REPORT FOR APRIL 2019**

**DATE: MAY 28, 2019**

### WATER OPERATIONS:

The average daily/monthly total water distributed for April 2019 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	1.61	48.39	2.10 (4/24/19)
South Rivanna	7.18	215.36	8.51 (4/19/19)
North Rivanna	<u>0.18</u>	<u>5.51</u>	0.38 (4/04/19)
<b>Urban Total</b>	8.97	269.26	10.26 (4/29/19)
Crozet	0.536	16.08	0.785 (4/24/19)
Scottsville	<u>0.041</u>	<u>1.23</u>	0.057 (4/30/19)
<b>RWSA Total</b>	9.55	286.57	---

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

### Status of Reservoirs (as of May 10, 2019):

- Urban Reservoirs: 100 % of Total Useable Capacity
- Ragged Mountain Reservoir is full (100%)
- 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 April 2019. Performance of the WRRFs in April was as follows compared to the respective VDEQ permit limits:

<b>WRRF</b>	<b><i>Average Daily Effluent Flow (mgd)</i></b>	<b><i>Average CBOD<sub>5</sub> (ppm)</i></b>		<b><i>Average Total Suspended Solids (ppm)</i></b>		<b><i>Average Ammonia (ppm)</i></b>	
		<b><i>RESULT</i></b>	<b><i>LIMIT</i></b>	<b><i>RESULT</i></b>	<b><i>LIMIT</i></b>	<b><i>RESULT</i></b>	<b><i>LIMIT</i></b>
<b>Moore's Creek</b>	11.08	2.0	10	1.1	22	0.06	7.0
<b>Glenmore</b>	0.096	5.0	15	6.0	30	NR	NL
<b>Scottsville</b>	0.095	5.0	25	10.0	30	NR	NL
<b>Stone Robinson</b>	0.002	NR	30	NR	30	NR	NL

NR = Not Required

NL = No Limit

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

Nutrient discharges at the Moore's Creek AWWRF were as follows for April 2019.

<b><i>State Annual Allocation (lb./yr.)</i></b>		<b><i>Average Monthly Allocation (lb./mo.) *</i></b>	<b><i>Moore's Creek Discharge (lb./mo.)</i></b>	<b><i>Performance as % of Average Allocation*</i></b>
<b>Nitrogen</b>	282,994	23,583	8488	36%
<b>Phosphorous</b>	18,525	1,544	641	41%

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

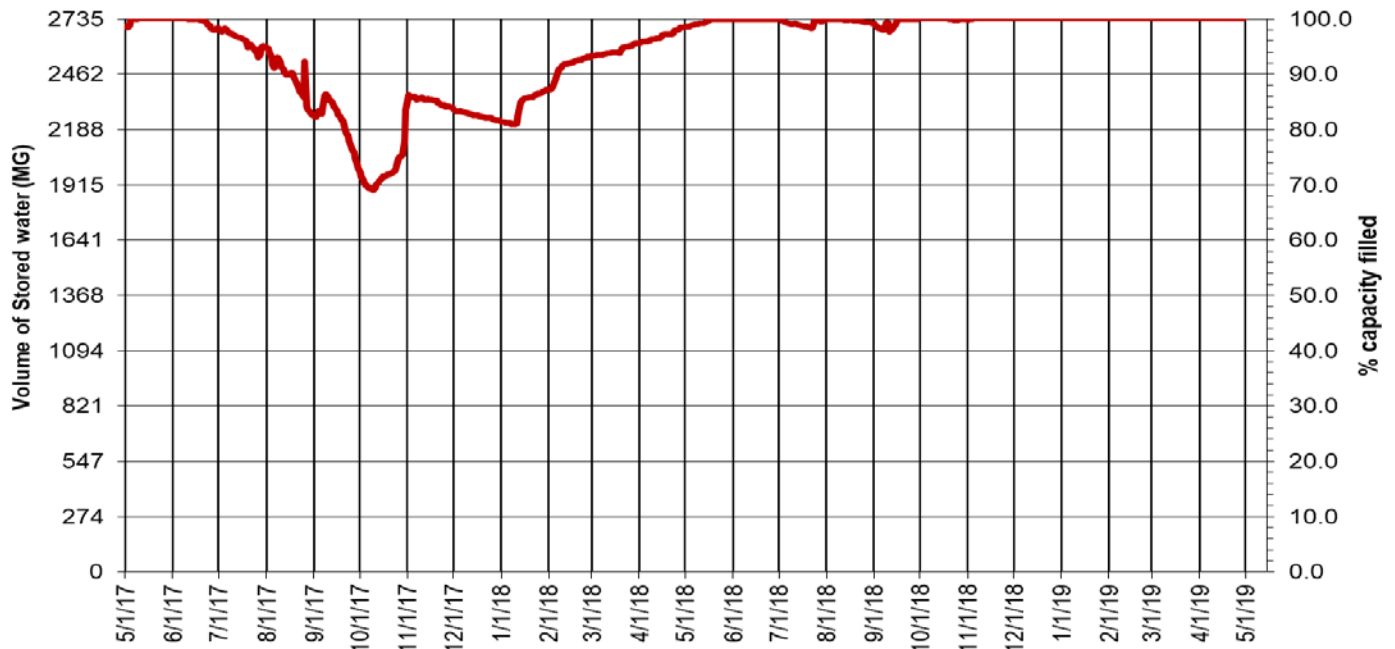
## **WATER AND WASTEWATER DATA:**

The following graphs are provided for review:

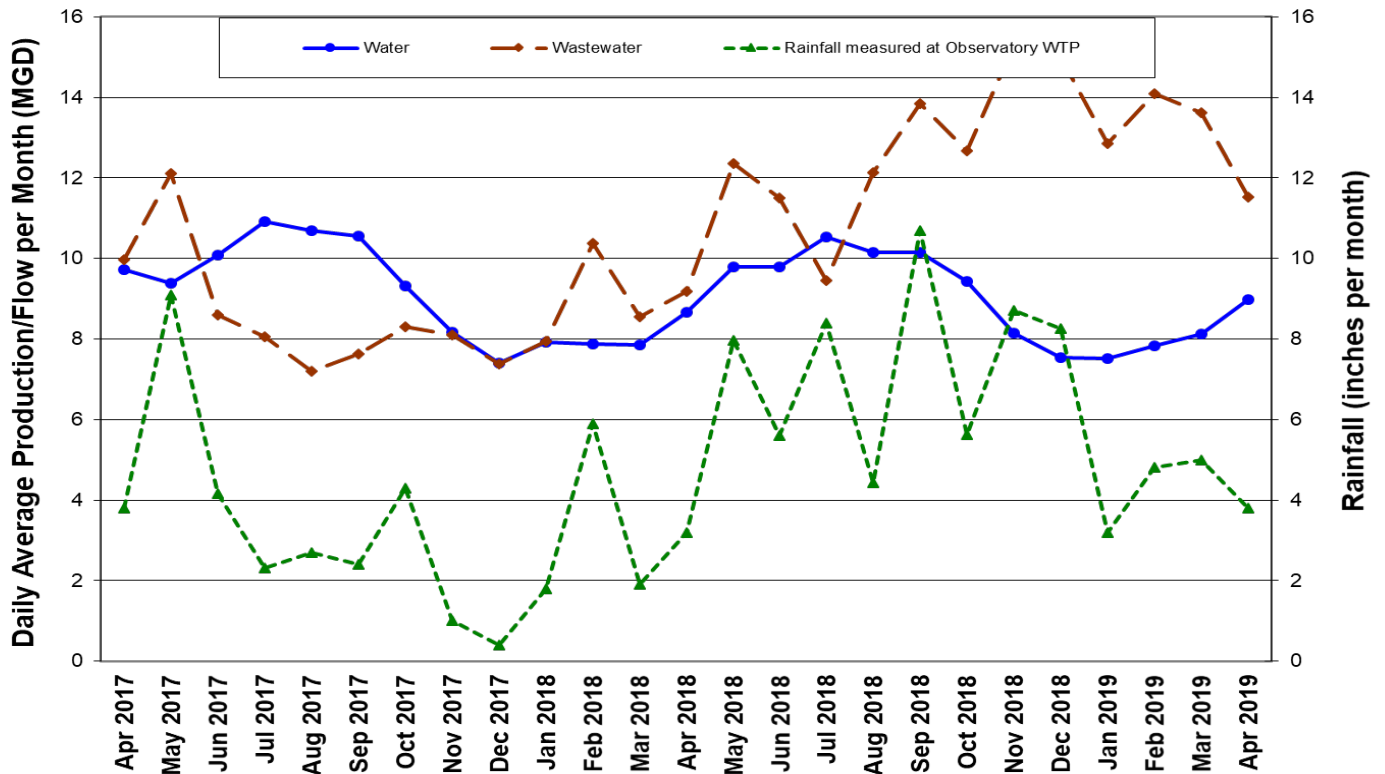
- Usable Urban Reservoir Water Storage
- Urban Water and Wastewater Flows versus Rainfall

## Usable Urban Reservoir Water Storage

Maximum 2,735 MG after 10/1/16



## Urban Water and Wastewater Flows versus Rainfall





## MEMORANDUM

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

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

**REVIEWED BY:** BILL MAWYER, EXECUTIVE DIRECTOR

**SUBJECT:** SUGAR HOLLOW DAM – RUBBER CREST GATE  
REPLACEMENT AND INTAKE TOWER REPAIRS –  
ENGINEERING DESIGN, BID, AND CONSTRUCTION PHASE  
SERVICES

**DATE:** MAY 28, 2019

In 1998, the Sugar Hollow Dam underwent a significant upgrade to improve structural stability and spillway capacity. The original metal spillway gates were replaced with a manufactured five-foot-high inflatable rubber dam that is bolted to the existing concrete structure. This rubber dam allows for the normal storage of water in the reservoir with the ability to be lowered during extreme storm events. The rubber dam has an approximate service life of twenty years and is therefore now due for replacement. The aging intake tower structure will also be inspected and evaluated as part of this project. Recommended repairs may include issues relating to the intake gate valves and tower walls, including repair or replacement of intake trash racks, and sealing/grouting of minor concrete wall cracks.

RWSA has worked with Schnabel Engineering to develop a scope and fee proposal for investigation, design, bid-phase, and construction management and inspection services for the Sugar Hollow Dam Rubber Crest Gate Replacement and Intake Tower Repairs project. Compensation for design and bid-phase services is proposed on a lump sum basis with a total fee of \$99,640.00. Compensation for construction phase services is proposed on a time and materials basis with total fee not to exceed \$102,820.00. The total estimated fee for the Work Authorization is \$202,460.00.

Recent market trends indicate that construction costs may be higher than initially anticipated due to the limited number of manufacturers for the crest gate. Additionally, expansion of the scope of the necessary improvements to the Sugar Hollow Dam, to include possible replacement of the electrical and mechanical equipment to operate the rubber dam, is contributing to higher design costs than the initial budget anticipated. Any adjustments needed to the \$1.1 M CIP budget for this project will be requested once more information becomes available during design and bidding.

**Board Action Requested:**

Staff requests that the Board of Directors authorize the Executive Director to execute a work authorization with Schnabel Engineering under their existing term agreement for Dam Engineering Services for \$202,460.00, and that the Executive Director be authorized to execute necessary amendments in additional amounts, if deemed necessary to complete the work identified above, not to exceed 10% of the initial authorization.





# STRATEGIC PLAN QUARTERLY UPDATE

Year One Wrap-Up

Report to the Board of Directors  
May 28, 2019

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**RIVANNA**  
WATER AND SEWER AUTHORITY  
& SOLID WASTE AUTHORITY

# Year 1 Review

Goal	Champion
Communication & Collaboration	Katie McIlwee
Workforce Development	Betsy Nemeth / Lonnie Wood
Operational Optimization	David Tungate
Environmental Stewardship	Andrea Terry
Solid Waste Services	Phil McKalips
Infrastructure & Master Planning	Scott Schiller

Overall plan completion  
for Year 1: 100%



# Communication & Collaboration Tactics

## Strategies:

- A. Create & maintain internal communication platforms
  - B. Create & implement a comprehensive public outreach plan
- 

## Recent Activity:

- A. Continued coordination with IT to research and test internal communications platforms
- B. Continued coordination with Admin and IT to research document workflow and management software

## Year 1 Highlights:

- A. Completed Employee Portal
- B. Enhanced usability of the Rivanna website
- C. Coordinated with Environmental Stewardship Goal Team and community partners to host events, such as Imagine A Day Without Water and RiverFest

# Workforce Development Tactics

## Strategies:

- A. Develop a comprehensive staffing, classification, & compensation plan
  - B. Conduct a training needs assessment & enhance the training program
- 

## Recent Activity:

- A. Recommend grade scale adjustment and new staffing positions
- B. Final Draft of Personnel Management Plan ready for approval, plan addresses policy changes and consolidates separate manuals each both Authorities
- C. Supported trainings – LOTO, Confined Space, Fall Protection and upcoming CPR/First Aid trainings via PVCC and outside vendors

## Year 1 Highlights:

- A. Implemented recommendations of compensation plan
- B. Presented and communicated multi-year Staffing Master Plan
- C. Updated and consolidated Personnel Management Plan

# Operational Optimization Tactics

## Strategies:

- A. Continually evaluate, prioritize, & improve key business & operational processes
  - B. Protect our workforce & the public through continually growing a culture of safety
- 

## Recent Activity:

- A. Continued study to further optimize the corrosion inhibitor project
- B. Started the American Water Infrastructure Act project (AWIA)
- C. Continued with design of the South Rivanna and Observatory WTP Renovation project

## Year 1 Highlights:

- A. Hired safety consultant to develop Safety Master Plan
- B. Installed security systems in South Rivanna and Crozet WTPs; new web based cameras purchased for safety and security

# Environmental Stewardship Tactics

## **Strategies:**

- A. Increase internal environmental engagement
  - B. Designate resources to support environmental outreach & green initiatives
- 

## **Recent Activity:**

- A. Participated and supported Rivanna RiverFest
- B. Completed stream clean-up at Moores Creek

## **Year 1 Highlights:**

- A. Increased internal environmental awareness and catalogued RWSA green activities
- B. Increased outside collaboration on green initiatives

# Solid Waste Services Tactics

## **Strategies:**

- A. Determine community needs & preferred service levels
  - B. Enhance partnerships with local governments & the University of Virginia
- 

## **Recent Activity:**

- A. Completed list of community partners and reached out for feedback on services
- B. Started a Composting Program study

## **Year 1 Highlights:**

- A. Completed Ivy Master Plan
- B. Increased hours of operation at IMUC
- C. Lowered MSW and CDD tipping fees

# Infrastructure & Master Planning Tactics

## **Strategies:**

- A. Implement an Authority-wide asset management program
  - B. Develop & maintain long-term master plans for all critical asset classes
- 

## **Recent Activity:**

- A. Developed an Asset Management Policy
- B. Reviewed inventory of Master Plans and developed a list of gaps

## **Year 1 Highlights:**

- A. Contracted with a consulting firm to guide development of Asset Management Plan
- B. Organized asset information
- C. Created a comprehensive list of existing Master Plans



# Looking Ahead to Year Two

- Examine current team membership
  - Replacing vacant positions
  - Allowing additional employees the opportunity to serve on a Goal Team
- Assess YR-1 tactics to decide if they are complete or need to be carried into YR-2
- Develop new YR-2 tactics for Strategies not completed
- Expand focus to remaining Strategies and develop tactics



# QUESTIONS?

---

# Strategies

## 1. Workforce Development

- A. Develop a comprehensive staffing, classification, & compensation plan
- B. Conduct a training needs assessment & enhance the training program

## 2. Operational Optimization

- A. Continually evaluate, prioritize, & improve key business & operational processes
- B. Protect our workforce & the public through continually growing a culture of safety

## 3. Communication & Collaboration

- A. Create & maintain internal communication platforms
- B. Create & implement a comprehensive public outreach plan

## 4. Environmental Stewardship

- A. Increase internal environmental engagement
- B. Designate resources to support environmental outreach & green initiatives

## 5. Solid Waste Services

- A. Determine community needs & preferred service levels
- B. Enhance partnerships with local governments & the University of Virginia

## 6. Infrastructure & Master Planning

- A. Implement an Authority-wide asset management program
- B. Develop & maintain long-term master plans for all critical asset classes

# Workforce Development Tactics

## Develop a comprehensive staffing, classification, & compensation plan

- Implement approved pay grade schedule - July 1
- Develop Master Staffing Plan
- Review staffing plans with BOD, gain approval (CONCEPTUALLY) of plan, formal approval will occur in budget approval for next fiscal year's new positions
- Continued annual review of staffing needs at an executive level

## Conduct a training needs assessment & enhance the training program

- 12 month training calendar
- PVCC Leadership Training
- Employee Development Plans
- New Employee Training - scheduling, comm., trainers, ON-BOARDING specific to positions
- Training communication and scheduling

# Operational Optimization Tactics

## Continually evaluate, prioritize, & improve key business & operational processes

- Inventory and prioritize critical business and operational processes
- Identify key performance indicators for each department
- Research appropriate benchmarks/best practices
- Select one key business or operational process to improve as a pilot
- Create training to support efficiency and effectiveness improvements

## Protect our workforce & the public through continually growing a culture of safety

- Identify and prioritize 10 safety concerns in each department regarding design engineering, operations, and preventative maintenance
- Research successful public-sector safety programs, including health and safety audits for project design
- Develop and communicate guidance for safety incident reporting, near misses, and suggestions
- Monitor and evaluate the outcomes from the vulnerability assessment
- Develop recommendations to improve cyber security

# Communication & Collaboration Tactics

## Create & maintain internal communication platforms

- Inventory current internal communications efforts and ensure all employees have equal access to internal communications
- Collaborate with Employee Council
- Create internal communication “trees” for specific types of information (e.g. safety, emergency information, on-boarding/off-boarding, etc.)
- Research and develop a digital communications protocol"
- Review SOPs for job duties
- Standardize records management protocols

## Create & implement a comprehensive public outreach plan

- Inventory current public outreach activities
- Research communication planning best practices
- Develop communication service level agreements with ACSA and the City of Charlottesville
- Create communication contact lists (names, roles, responsibilities) for City of Charlottesville, Albemarle County, ACSA, and UVA
- Evaluate social media outreach options, including Facebook
- Partner with local schools and civic groups for facility tours and environmental education

# Environmental Stewardship Tactics

## Increase internal environmental engagement

- Inventory green initiatives
- Partner with Community/env'l groups
- Research other Organizations on green initiatives
- Identify Environmental Engagement goals
- Develop communication tools
- Create Green Road shows

## Designate resources to support environmental outreach & green initiatives

- Create a standing Employee Environmental Committee (structure)
- Create a staffing plan (existing and potential new position) Coordinate with Workforce Development
- Develop an annual budget for green initiatives and activities

# Solid Waste Services Tactics

## Determine community needs & preferred service levels

- Research Existing Solid Waste and Recycling Practices/Data
- Communicate Data and Existing Services to Public
- Design Outreach
- Conduct Outreach
- Analyze Outreach Data
- Report on Outreach Results to Exec. Dir. & Board

## Enhance partnerships with local governments & the University of Virginia

- List Potential Partnership Organizations (POs)
- Identify Points of Contact for each PO
- Craft Message (what we are, resources we have, what we do)
- Contact Pos; discuss our resources, operations, needs; define their resources, needs, operations
- Evaluation Process (turn #4 into possible Programs and evaluate)
- Present possible Programs to Exec. Dir. and Board for action (and, if needed, funding)
- Implement



# Infrastructure & Master Planning Tactics

## Implement an Authority-wide asset management program

- Develop an RFP for an Asset Management Plan
- Create an Asset Management Committee and Prepare for AM
- Identify and Meet Short Term Software Needs
- Procure Consultant Assistance (Phase 1 - Strategic Plan)
- Organize Current Asset Information
- Develop an Asset Management Strategic Plan

## Develop & maintain long-term master plans for all critical asset classes

- Inventory all existing master plans
- Identify existing master plan obligations
- Conduct gap analysis to get to comprehensive master plans
- Classify all critical asset classes, functions, and departments that require master planning (in conjunction with Strategy 1, Tactic 5)
- Assign champions to asset class master plans
- Create a process to ensure that master plan-prioritized recommendations are linked to capital improvement program



RIVANNA SOLID WASTE AUTHORITY  
RIVANNA WATER & SEWER AUTHORITY

695 Moores Creek Lane  
Charlottesville, Virginia 22902-9016

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www.rivanna.org

## MEMORANDUM

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

**FROM: LONNIE WOOD, DIRECTOR OF FINANCE &  
ADMINISTRATION  
BETSY NEMETH, HUMAN RESOURCES MANAGER**

**REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR**

**SUBJECT: COMBINED AND UPDATED RSWA & RWSA PERSONNEL  
MANAGEMENT PLAN**

**DATE: MAY 28, 2019**

Attached to this memo you will find the Personnel Management Plan for both Rivanna Solid Waste Authority and the Rivanna Water & Sewer Authority (the Authorities). Currently we have two separate policy manuals that are similar but have some variances.

Both current versions of the policy manual have not been updated in whole for over 15 years. Staff has had a goal over that time to combine the two into a new manual that will work for both Authorities. Parts of the policy had been updated over the years, but it was clear that a wholesale update was needed. There have been many changes such as Hybrid VRS changes that affected sick leave policy and FLSA overtime guidance that cross-over throughout the policy that were not address adequately in partial updates.

The other goals were to update the policy for changes in regulatory guidance, overall policy changes, and to streamline the management plan to focus more on policy and regulations, and to limit language concerning procedures as they are task driven to meet the policy and change over time which does not require Board approval. The Personnel Management Plan can only be changed with Board approval.

Major changes from the current two policy manuals is noted below:

- Compensation Section (D) was updated to address changes in premium pay and blended overtime pay. Overtime (OT) will now be calculated on a weekly basis and at a blended OT rate. This will benefit any non-exempt staff (operator, maintenance staff, attendants, etc.) who happen to work overtime. Blended OT takes into account all compensation, other than leave, earned in a weekly period in determining the pay at the required rate.

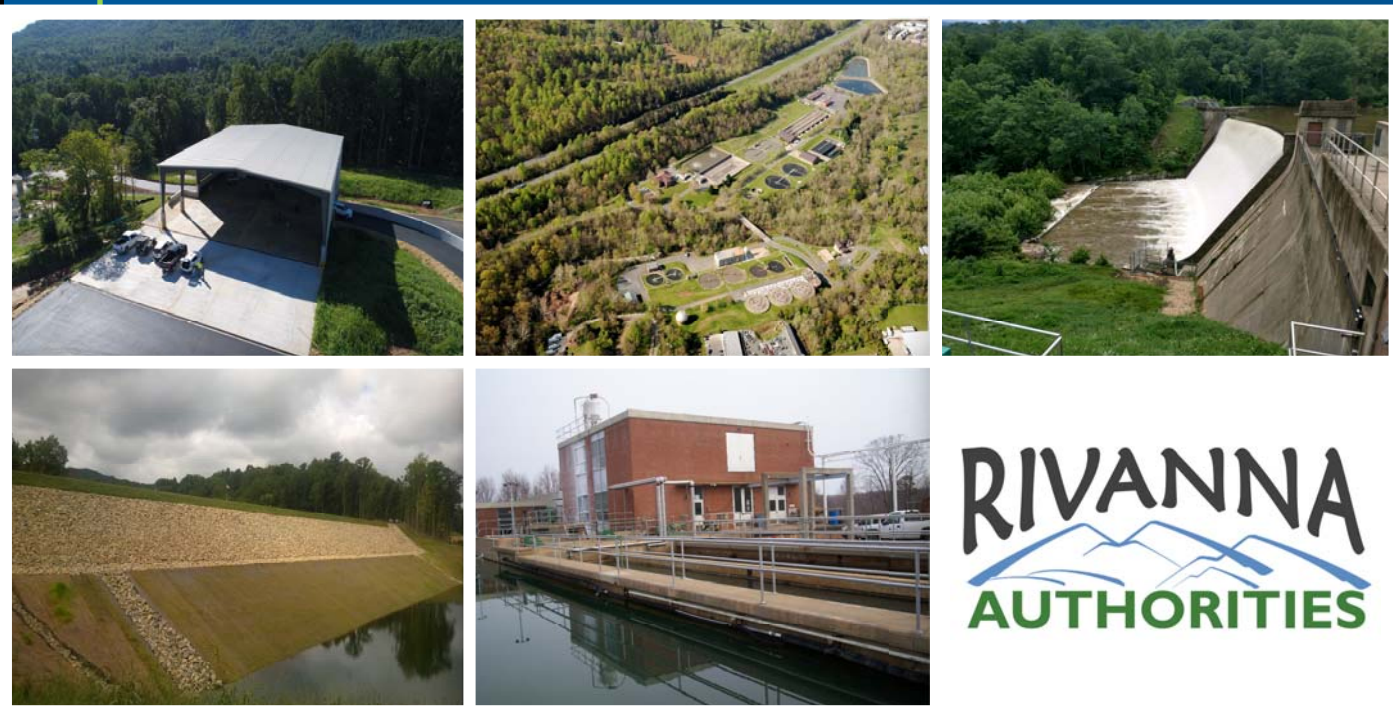
- Compensation Section (D) includes a new compensation differential for Night Shift Operators, much like the current Relief Operator differential. The Water (South Rivanna Plant only) and Wastewater (Moore's Creek Plant only) departments have operators that work 12-hour shifts on a rotating or rolling day/night weekly schedule. This is done so no group of operators is required to work the night shift only. The Night Shift differential (2%) is compensation for the practical and medical challenges of Operators who work this schedule. This challenge was identified by our Employee Council. The pay differential will contribute to our Workforce Development Goal to hire and retain highly qualified and dedicated water and wastewater treatment Operators.
- Compensation Section (D) includes a retirement payout policy for VRS designated Hybrid employees to receive \$200 for every year of service up to a maximum of \$5,000. Hybrid employees are not eligible for the current policy of accrued sick leave because Hybrid employees are not allowed to carry over, or accrue, sick leave like VRS Plan 1 & 2 employees are allowed. Again, this relates to our Workforce Development Goal of staff retention.
- Harassment Policy Section (E) is a new section setting forth policy, duties and remedies for all forms of workforce harassment.
- Leave Policy and Rules Section (F) added the 4<sup>th</sup> Wednesday in November from 12:30 - 4:30 p.m. (half-day before Thanksgiving) as a holiday. In addition, the revisions converted Jefferson's Birthday, April 13<sup>th</sup> to a floating holiday for staff. Our offices will be open on that day.
- Disciplinary Policy Section (G) was updated to include stronger reviews by the Executive Director in certain disciplinary actions up to termination.
- Employee Training, Development and Education Assistance Section (J) was written to change the titles of the types of training clarifying the definition of each but are essentially the same in content as they are in the current policy. Degree programs are better defined and the yearly (fiscal) tuition reimbursement was increased from \$2,625 in the current policy to \$5,250 in the proposed policy. This is relevant to our Workforce Development Goal of developing a highly skilled team.
- Travel Policy Section (K) is a new stand-alone policy. The current manual addresses travel policy within the Employee Training policy and wasn't always clear. Some travel outside the service area is not connected to employee training and a separate policy was needed.
- The Forms and Attachments Section (M) was created to have all attachments and forms in one section rather than scattered throughout the management plan. The forms section is meant to be flexible to updating forms and attachments as needed.

Overall, the Personnel Management Plan is streamlined from an operational optimization standpoint and meets many of our workforce development objectives, both goals within the Authorities' Strategic Plan.

**Board Action Requested:**

It is recommended that the Board of Directors of both Authorities, after consideration of the proposed revisions to the Personnel Management Plan, adopt the Plan effective July 1, 2019.

# Personnel Management Plan



Proposed Adoption May 2019

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DRAFT - BOD Review

## A. Introduction and Organization Chart

It is the policy of the Rivanna Water & Sewer Authority and the Rivanna Solid Waste Authority that a fair and uniform personnel management system be established and maintained in order to ensure effective service to our customers and community.

### 1. Authority

The policies and procedures in this Manual are intended to cover all aspects of the Rivanna Water & Sewer Authority and the Rivanna Solid Waste Authority (the Authority) personnel management system. They have been adopted or revised by the Authority's Boards of Directors (Boards) on the dates noted in each chapter or section. Administrative authority has been delegated to the Executive Director. The authority to revise or add to this manual remains with the Boards with day to day supervision by the department managers, or as delegated, with the exception that *Section D.3., "Compensation Plan and Administration, Job Descriptions"* may be revised as needed by the Executive Director. The power to create positions and departments remains with the Boards. Nothing in this Personnel Manual is to be construed as a contract of employment. The personnel management system and the Manual are subject to change at any time, with or without notice, by the Boards. The Boards retain the right to take whatever actions they believe to be in the best interest of the Rivanna Water & Sewer Authority and/or the Rivanna Solid Waste Authority and its clients and customers.

### 2. Work Service

All employees work under these policies as approved by the Authority's Boards and administered by the Executive Director. The followings categories of work service do not fall under these provisions:

- a. Consultants, contractors, and counsel;
- b. Volunteers, or persons appointed to serve without pay;
- c. Members of Boards, commissions, or committees;
- d. Other positions as designated by the Board.

### 3. Organizational Chart

The Executive Director may request or recommend changes to the organizational charts from time to time. When this occurs, the organizational charts shall be presented to the Board for review and approval. Once approved, the organizational charts will be updated accordingly. For Authority organizational charts see *Section M. Forms and Attachments*.

## B. Recruitment and Hiring Policy

### 1. Policy

It is the policy of the Authority to hire employees through a systematic recruitment and selection process that identifies, attracts, and selects the most qualified applicants for employment. All applicants are considered on the basis of job requirements and applicant qualifications and otherwise without regard to race, color, religion, sex, sexual orientation, national or ethnic origin, age, marital status, status as a veteran, disability, or any other non-job-related factor. The Authority's programs and practices seek to foster internal advancement opportunities for current employees. The Human Resources Department is responsible for overseeing the recruitment and selection process. All recruitment and selection will be done in accordance with applicable policies and laws and no selection decision will be made that would constitute unlawful discrimination in violation of state or federal laws.

### 2. Job Posting

- a. Open positions can be posted in one of the following ways:
  - 1) The job may be opened to Authority personnel only, in which case interested employees will notify the appropriate department manager or the Human Resources Manager of their interest.
  - 2) The job may be filled by evaluating applications already filed by qualified persons.
  - 3) The job may be advertised by contacting local schools, agencies, the Virginia Employment Commission, or by paid advertisements in appropriate newspapers, journals or Web posting and/or television.
- b. All open positions will be posted for a minimum of ten business days.
- c. The closing date of the posting will be listed as a part of the posting.
- d. Job advertisement is under the direct supervision of the Human Resources Manager. No position may be opened and filled without notifying the Human Resources Manager and following one of the above procedures. This policy is to ensure that job openings are publicized adequately, both in the interest of fairness and of finding the best candidate for a job opening.

### 3. Application Policy

- a. All applicants must complete an Authority employment application, either an online application or a paper application. All employment applications are submitted to the Human Resources Manager.
- b. Applicants must complete an employment application for a position before the closing date of the job posting.
- c. All applications received for any position must be retained as stated in the retention policy of the Library of Virginia. Destruction of employment applications at the end of the retention period must be confidential.

- d. All applicant data will be tracked by the Human Resources Department.

#### **4. Job Offer Policy**

The Executive Director has final approval of all hiring decisions. A recommendation will be made to the Executive Director by the hiring department manager and/or the Human Resources Manager for all open positions.

#### **5. Criminal Background Checks**

All applicants who are offered positions shall be required, as a condition of employment, to authorize the Authority to have a criminal background check investigation performed and additionally a motor vehicle investigation check when driving a motor vehicle is an essential function of the position.

- a. When an applicant has a prior conviction, the Executive Director will consider the nature of the offense, the date of the offense, and the relationship between the offense and the position for which application is sought.
- b. If an applicant should refuse to permit a background check, the applicant will be removed from further employment consideration.
- c. Applicants who omit criminal convictions from their employment application may be denied employment for falsification of the application. A new application may be filed after three (3) calendar years provided the person at the time lists their convictions.

#### **6. Post-Offer Physicals**

- a. A post offer physical is required of the successful candidate. The candidate must meet the physical requirements of the position and must successfully pass a medical examination prior to the first day of employment. All medical records are confidential and shall comply with HIPPA guidelines.
- b. A post offer drug screening is required of the successful candidate. At the time of the physical examination the candidate will submit a urine specimen for drug screening purposes. The candidate must test negative for any illegal drug use to be eligible for employment. All drug and alcohol records are confidential and are maintained in a file separate from the employee's personnel file. *See Section L, "Substance Abuse Policy"* for additional information on the Authority's drug testing policy.

#### **7. Orientation Policy**

All new employees will receive a copy of the Authority Employee Handbook prior to their first day of employment. New employees will attend an orientation session with the Human Resources Manager and the Payroll and Benefits Coordinator on their first day of employment, during which all of their employment documentation, to include Employment Eligibility forms, will be completed.

## C. Personnel File Policy

### 1. Policy

This policy establishes guidelines for the personnel files for each employee of the Authority and governs the access, dissemination, and purging of information contained within this file.

### 2. Description

The Personnel File contains personal information relevant to the individual's employment. These files are maintained under the supervision of the Human Resources Manager and are kept in a file cabinet which is locked at all times except when the files are inspected, or materials are added.

The personnel file shall be the only file which is to be considered official and complete in matters related to wages and salary, employee selection, employee relations, and arbitration hearings. Information pertaining to any personnel related aspect of employment (personnel action forms, letters of reprimand, letters of commendation, unemployment compensation requests, and any other pertinent information) shall be contained within the file.

All documents containing employee health information shall be maintained in a separate locked file and only those individuals with a need to know shall have access to these files as defined in the HIPAA Security Rule.

### 3. Access

The access, dissemination, and purging of information contained within a personnel file shall be in accordance with the federal Privacy Protection Act of 1974 and may from time to time be amended.

- a. The following individuals or agencies shall be designated as having regular access to the personnel files:
  - 1) The Executive Director.
  - 2) The Director of Finance and Administration, the Human Resources Manager, and the Payroll & Benefits Coordinator (for administrative purposes).
  - 3) Federal, State, or local law enforcement agencies during a properly warranted investigation of a violation or potential violation of the law.
- b. The following individuals or agencies may inspect a limited number of personnel files:
  - 1) An individual employee or former employee may inspect his or her own official personnel file after presenting proof of identity.
  - 2) An immediate department manager or Divisional Director may inspect portions of the official personnel file of any employee under their supervision.
  - 3) The members of a Grievance Appeals Board may inspect relevant files.
  - 4) The Virginia Employment Commission Unemployment Compensation Division may inspect relevant files.



All personnel files shall be reviewed in the presence of the Executive Director, the Director of Finance and Administration or the Human Resources Manager. No files shall be removed from the Administration Building unless needed for a grievance or court hearing.

There will be no release of any personal information contained within a personnel file to any individual or organization not having regular or limited access unless the employee has authorized the release of the information. The authorization from the employee must be in writing and signed by the employee.

Wage and salary information is not considered confidential under Freedom of Information Act laws and may be released as a part of a Freedom of Information Act (FOIA) request.

#### **4. Official Personnel Forms**

- a. The following forms will be maintained in an employee's personnel file:
  - 1) Performance Evaluation forms
  - 2) Personnel Action forms
  - 3) Employee pay history
  - 4) Tax forms
  - 5) Any policy sign-off forms
  - 6) Any documentation of performance issues, to include reprimands and suspensions
  - 7) Original hiring documents such as offer letters and applications
  - 8) Any other confidential documents pertaining to that specific employee
- b. The following forms will not be maintained in an employee's personnel file:
  - 1) Any health-related documents, to include health insurance applications, doctor's notes, physical and drug testing results and Family & Medical Leave forms
  - 2) Employment Eligibility Verification Form I-9
  - 3) Requests for employment verification

## D. Compensation Plan and Administration

### 1. Policy

By these rules and regulations, the Authority intends to establish a means of providing fair compensation to its employees while ensuring orderly and cost-effective operations. Employees shall be paid based on the value of work that they perform. Job performance shall be the major factor in determining wage and salary adjustments. Requests and appeals by employees regarding the application of these rules and regulations are to be submitted through appropriate channels, reaching to the Executive Director if necessary.

### 2. Definitions

Base Pay: An employee's normal hourly rate or annual salary, to include merit and administrative increases through the tenure of their employment. Base pay does not include overtime rates and premium rates. Base pay does include any relief or night shift operator differential pay.

Employee: Individual within a position.

Full-time Employee: A person with a work schedule of 40 hours per week. Treatment plant operators who work the 12-hour rotating shift schedule are also considered full time. Full time employees are eligible to receive benefits.

Intern: A student/trainee who works in a particular position full time for a restricted period of time or part-time, in order to gain work experience in a particular field. All interns will be paid at least the federal minimum wage and are considered temporary employees.

Job Title: A specific job that may have more than one position within it. (Note: a job title is defined by its job description that details the duties, qualifications and skills needed to perform the work.)

Part-time Employee: A part-time employee is an employee with a work schedule of less than 30 hours per week.

Position: An individual job. All positions must be approved by the Board of Directors.

Night Shift Operator – A water or wastewater operator who works a rotating schedule of shifting from day shifts to overnight shifts on a regular basis. Night shift operators must be permanent employees.

*The Manager of each Water and Wastewater Department or the Divisional Director shall designate for each department the employees assigned as Night Shift Operators. There shall be only 8 designated night shift operators at any given time in each of the two operating departments, for a total of 16 designated night shift operators.*

Pay Grade/Grade: A single pay range within a pay scale to which one or more job titles may be assigned.

Pay Range: The minimum, midpoint and maximum annual salary range within a pay grade paid for a specific job/position.

Pay Scale: A system that determines how much an employee in a job/job title can or may be paid as a base wage/salary for the job/position.

Performance or Merit Increase: An increase within grade to reward performance which meets or exceeds expectations of the position.

Separation or Termination: An employee ceasing to be employed by the Authority, either by resigning or by being dismissed.

Temporary Employee: A person whose employment with the Authority will last no longer than 90 days. These employees are not eligible for participation in the Authority benefits program.

Workweek: A fixed and regular recurring period of 168 hours – seven consecutive 24-hour periods. Different workweeks may be established for different employees or groups of employees.

The Authority uses a pay scale of numbered pay grades, with each grade approximately 5% above the previous grade. The pay range for each position has a total spread from the minimum to the maximum of approximately 66%. The determination of a pay grade in which a particular position falls will take into account pay equity for work performed and consistency in pay with positions that perform similar work. The assignment of positions to pay ranges and the pay rates within each grade may be modified both by reclassification, such as through a classification study, or by across-the-board adjustments added to all pay rates as approved by the Authority Boards.

The Executive Director will recommend adjustments to the pay scale annually as needed. All adjustments to the pay scale must be approved by the Board of Directors.

The Authority will conduct a Compensation and Classification Study a minimum of every five years, or sooner as needed, to ensure the internal and external equity of the pay scale.

### 3. Job Descriptions

Each job title has a specific job description. In the job description, the following items are outlined:

- a. **Job Summary:** A statement that contains overall job function/duties, department manager responsibilities, if any, and the job title of the department manager of the position.
- b. **Essential Job Functions:** A detailed list of job responsibilities for the job title.
- c. **Minimum Education and Experience:** A list of the minimum education and work experience expected of the employee in the job.
- d. **Knowledge, Skills and Ability:** A list of the basic abilities an employee must possess in order to effectively perform the job.
- e. **Physical Requirements:** A list of physical acts that the employee must be able to perform in the job.
- f. **Work Environment:** A summary of the working conditions in which the job is performed.
- g. **Special Requirements:** Any requirements for the job that are not listed elsewhere in the job description or that are unique to the job.

#### 4. Determination of Pay Grade

All job titles are assigned a pay grade based on:

a. Complexity of the Work

- 1) Unskilled: Work requiring the performance of uncomplicated tasks, physical work.
- 2) Semi-Skilled: Work requiring the performance of uncomplicated work, specialized physical work.
- 3) Skilled: Work requiring specialized physical skills used in the performance of complicated tasks.
- 4) Clerical: Work requiring the use of basic language, mathematical and social skills in orderly duplication, processing, recordation and maintenance of information documents.
- 5) Skilled Clerical: Work requiring the use of basic language, mathematical and social skills in orderly duplication, processing, recordation and maintenance of information and financial documents and requiring typing skills.
- 6) Technical: Work requiring the specific application of detailed procedures and techniques to recurring situations or problems. Work may also require specialized physical skills.
- 7) Paraprofessional: Work requiring the application of advanced knowledge and often advanced social skills in support of professional activities and may include research and data collection, client assistance or other activities.
- 8) Professional: Work requiring the application of advanced knowledge and personal ingenuity, creativity, estimation or related input and often advanced social skills, to the solution of complex problems or situations.
- 9) Administrative: Work requiring the application of general procedural knowledge and advanced social skills in the planning, organizing, coordinating, directing and/or control of agency activities, procedures and practices.

b. Level of Work

- 1) Routine: This is the lowest level of the type of work performed requiring the employee to handle a restricted scope of simple or more basic assignments or problems.
- 2) Responsible: This is the senior and often department manager level of this type of work requiring the employee to handle a variety of typical assignments or problems.
- 3) Difficult: This is the senior and often department manager level of this type of work requiring the employee to handle all assignments or problems except those requiring unit or departmental policy or procedural change.
- 4) Complex: This is the highest level of mastery of this type of work and is often a managerial position. It requires the employee to handle or direct the handling of all assignments or problems.

c. Supervision Received

- 1) Immediate Supervision: The employee works under close supervision and work is checked regularly.
- 2) Regular Supervision: The employee generally works independently, following standard practices requiring only occasional supervision, work is checked periodically for quality accuracy and quantity; department manager normally available for consultation and advice upon request.
- 3) General Supervision: The employee requires only general direction, working from broad policies and on general objectives. Refer specific matters to superior only when interpretation of municipal or agency policies is deemed necessary; sets own standard of performance, limited only by general policies and budget; direct responsibility for final results.
- 4) Supervision Exercised: The employee is responsible for the supervision of others. This is determined by the number of employees supervised – a small group being less than six employees, a medium group being between six and twenty employees and a large group being over 20 employees supervised.

d. Knowledge, Skills, and Abilities

- 1) Some Knowledge: the employee has sufficient familiarity with the subject to know elementary principles and terminology and to understand simple problems.
- 2) General Knowledge: The employee has sufficient knowledge of the subject to enable the employee to work effectively in a limited range of work situations.
- 3) Thorough Knowledge: The employee has almost complete coverage of the subject matter; work calls for sufficient comprehension to solve unusual as well as common-place work problems.
- 4) Comprehensive Knowledge: The employee has the most advanced degree of knowledge likely to be found; work calls for complete mastery and understanding of the subject.

e. Education and Experience

Level of education required for the job, as stated in the job description.

- 1) Some Experience: Sufficient to enable employee to acquire some familiarity with methods and nomenclature in common work situations of the occupational field (usually six months to two years).
- 2) Considerable Experience: Sufficient experience in an occupational field to perform work as assigned with little direct supervision, work calls for a journeyman comprehension of standard work situations (usually two to five years).
- 3) Administrative Experience: Extensive experience as defined and develop or advise on major policy matters and independently direct the operations of a major agency.

f. Special Job Requirements

These are specific requirements that must be met by an employee working in a particular job, such as licensing and specific physical requirements.

g. Current Pay Scale & Position Table

For current pay scale and position table, *see Section M., "Forms and Attachments"*.

h. The Authority will conduct a comprehensive classification and compensation study every five years at a minimum. The Executive Director may, if warranted, recommend an adjustment to the overall pay scale during a year that a survey is not completed, which must be approved by the Board of Directors.

## 5. Pay Rates

a. Starting Pay

The Executive Director is authorized to hire employees at any point within the salary range based on market conditions and the qualifications of the individual.

Original appointment above the minimum pay rate for a class may be recommended, subject to approval by the Executive Director, if any of the following conditions exist:

- 1) The qualifications and/or experience of the applicant exceed the basic requirements for the position.
- 2) The applicant is a former employee.
- 3) Difficulty of recruitment requires offering a higher pay rate.

b. Promotion, Demotion and Transfer

When an employee is promoted from one job to another having a higher pay range/pay grade and additional responsibilities, the employee shall receive an increase of at least ten percent (10%).

*See 7.d. of this Section, "Other Forms of Compensation, Operator License Incentive Program"* regarding license increases, which are not considered promotions under these rules and regulations.

When a position is filled by demotion, the employee shall be paid at any rate in the pay grade assigned to the position the employee is demoted to, as determined by the Executive Director.

When a position is filled by a transfer of an employee from a position assigned the same grade, the base pay rate normally shall not change. When an employee chooses to apply and transfers to a position in a lower pay grade, that employee may receive a reduction in base pay, as determined by the Executive Director.

c. Former Employee Hiring

A former employee who is hired to fill a position in the same pay grade in which they previously served, shall be paid the current base pay rate within the grade commensurate with their current work experience and qualifications.

A former employee who is hired to fill a position in a pay grade other than which they previously served, shall be paid the current base pay rate within the pay grade commensurate with his/her current work experience and qualifications, at the discretion of the Executive Director.

d. Reclassification

A reclassification is the reassignment of a job title to a different pay grade to a position whose previous pay grade/pay range no longer accurately reflects the duties performed. A new pay grade within the pay scale may be established if necessary, with the approval of the Board.

An employee whose regular and continuing duties are reclassified from one pay grade into a higher pay grade will receive a 5% pay increase in their base pay for reclassification resulting in a one pay grade increase and a 10% increase in their base pay for reclassification resulting in a two or more pay grade increase or the minimum in the new grade, whichever is higher.

An employee whose regular and continuing duties are reclassified to a lower pay grade shall not incur any base pay rate reduction even if the employee's current base pay rate is higher than the maximum in the new pay grade when not related to less than expected performance.

Any employee whose position is reclassified into a higher pay grade as the result of a Compensation/Classification study or market survey will not automatically be entitled to an increase in base pay, unless their current rate of base pay is below the minimum of the new pay grade.

## 6. Employee Performance Appraisal and Merit Pay

a. Purpose

The annual employee performance appraisal is a process that allows an employee and their department manager to discuss the employee's performance from the prior year, as well as to set performance expectations for the following year. Employee performance that meets or exceeds expectations can result in an annual merit increase. Merit increases will take effect on July 1 for the review period of April 1 through March 31. Merit increase funding is a function of the annual budget process and must be reviewed and approved by the Boards of Directors. The total merit pool is a percentage of total salaries.

Specific policy and procedures related to the execution of employee performance appraisals are found in the Performance Evaluation System Manual, a separate manual from this policy, which is approved by the Board of Directors.

b. Appraisal Procedure and Merit Increase Eligibility

If the Boards approve a merit increase with the adopted annual budget, increases can be awarded to all eligible employees, to be allocated based on each employee's performance appraisal by a calculation method stated in the Performance Evaluation System Manual and formally approved by the Board or Directors.

No employee shall receive a salary increase that would cause the employee's base pay rate to exceed the maximum pay rate in the employee's pay grade. If an employee is ineligible for a salary increase because an increase would cause their annual salary to exceed to top of their pay grade; the employee may receive a performance bonus. *See Section 7.b.1. of this Section, "Other Forms of Compensation, Bonuses, Performance Bonus".*

New employees in a probationary status as of March 31 are not eligible for a merit increase in the next fiscal year; however, the same employee may be eligible of a one-time administrative increase after a successful six-month probation period, pending Executive Director approval. *See 7.c. of this Section, "Other Forms of Compensation, Administrative Increase".*

Eligibility for performance increases shall not be affected by other salary increases, including administrative, promotion, and bonus increases or by a transfer or reclassification provided there remain sufficient range in the grade.

Employee performance information is personal information and shall be handled in a confidential manner and retained in their personnel file.

## 7. Other Forms of Compensation

a. On-Call Pay

Certain positions are required to participate in an after-hours on-call schedule. In the event of an emergency, the on-call employee is expected to respond immediately and be fit for duty. Employees that are on-call will receive a wage rate of 10% of their hourly base pay rate for every hour waiting to be called outside of their normal work schedule. Lunchtime during the normal workweek is not considered on-call time. Should the employee be required to come into work during their on-call schedule, he/she will receive Unscheduled Premium pay for two hours or the actual hours worked out of schedule. In the case of an emergency operation status, as determined by the Executive Director, other positions may temporarily be included in the on-call schedule. Department Managers shall designate any employee that is in On-Call status for each pay period.

b. Bonuses

1) Performance Bonus. An employee who is at the maximum of his or her pay grade shall be eligible for a performance bonus. If an employee is ineligible for a salary increase because an increase would cause their annual salary to exceed to top of their pay grade; the employee may receive a performance bonus as determined by the merit-based pay increases, if any. *See Section D.6.b., "Compensation Plan and*



*Administration, Employee Performance Appraisal and Merit Pay, Appraisal Procedure and Merit Increase Eligibility”.*

- 2) Meritorious Bonus Award. The Executive Director may make a cash award to an employee(s) for extraordinary events; such as, extraordinary performance or significant money saving suggestions conceived outside the usual and normal expectations of their position(s). The award is a one-time, lump sum bonus of \$100 to \$3000. Only the Executive Director has the authority to award such a bonus.

c. Administrative Increase

An employee who performs the duties and responsibilities of his position in a consistently superior manner deserving recognition beyond what is provided through pay for performance increases, as determined by the Executive Director, shall be eligible to be considered for an administrative increase where a promotion may not be possible and/or may not be warranted. An administrative increase may also be used to adjust any inequities, which may arise from the application of these rules and regulations. An administrative increase shall have no effect upon eligibility for pay for performance increases.

An administrative increase to advance an employee when such action seems justifiable may be recommended to or by a divisional director and/or the Executive Director. Such a recommendation shall be submitted in writing to the Executive Director for approval and shall state the reason for the recommendation.

An administrative increase shall not exceed 15% within grade.

An administrative increase may be granted in the case of a temporary promotion or transfer, limited to the duration of the temporary assignment. *See 7.c. of this Section, “Other Forms of Compensation, Administrative Increase”.*

d. Operator License Incentive Program

Persons in an Operator position who pass a licensing exam for a higher-class license than the one currently held will be reclassified and be paid either the minimum for the new pay grade or a rate in the new range 5% above the current salary/base pay, whichever is greater, if the experience requirements have been met.

Granting of a license increase shall not be considered a promotion under these rules and regulations.

e. Overtime

Overtime shall be utilized to relieve specific occasional peak workloads or emergencies, and as a part of the Authority’s day-to-day operations.

Non-exempt employees are paid overtime for hours worked in excess of 40 hours in a workweek. Overtime pay is based on the employee’s base rate of pay for hours actually worked. This includes compensation for hours worked while in unscheduled premium and

compensation while in on-call pay status; which is added to the base rate of pay (or blended). It also includes compensation for relief operator differential pay and night time shift differential pay within in any given week. It does not include compensation or time for sick, vacation, holiday or other leave granted, holiday premium pay, or bonuses received within the workweek. Pay for these items is added after overtime is calculated.

This will result in non-exempt employees receiving a Blended Overtime rate each week there is applicable time worked beyond the statutorily required 40 hours per week.

Regular part-time employees and interns receive overtime pay for work hours exceeding 40 hours in a workweek.

All overtime specified above, must be preauthorized by the immediate department manager on a daily basis.

Vacation leave is available to non-exempt employees in lieu of overtime pay. In all instances of overtime, the employee may request in lieu of overtime pay, a vacation leave credit at a rate of 1.5 times the overtime hours worked. An employee may request up to a total of 30 hours of vacation leave time instead of overtime pay (instead of 20 hours of overtime pay) per calendar year as allowed by law. An employee's department manager must approve the request for vacation leave in lieu of overtime.

f. Premium Pay

Holiday Premium Pay: Hourly employees will receive premium pay at the rate of 0.5 times their hourly rate of base pay, in addition to their regular base pay for any hours worked in the workweek that are on an Authority designated regular holiday.

Unscheduled Premium Pay: Hourly employees will receive premium pay at the rate of 0.5 times their hourly base pay rate, in addition to their regular base pay, for any hours worked in the workweek that are unscheduled hours worked due to emergency call-in, special work load needs or covering another employee's work schedule. (Examples: line breaks, plant shutdowns, special construction needs requiring night time work.)

g. Pay Differential – Relief Operators

In recognition of the additional demands with the Relief Operator assignment and to implement an incentive to retain qualified operators in Relief Operator assignment, the Relief Operator will be eligible to receive a 10% pay differential above their hourly base pay rate once fully trained at all related facilities as determined by the department manager. This new pay rate becomes their base pay.

At such time when a water or wastewater operator ceases to perform the assignment of a Relief Operator, the 10% pay differential for the Relief Operator assignment will no longer be paid.

h. Night Shift Pay Differential – Water and Wastewater Night Shift Operators

In recognition of the additional demands on water and wastewater operators who are working overnight shift schedules, these operators will be eligible to receive a 2% pay differential above their hourly base pay rate. This new pay rate becomes their base pay. Overnight shift operators must be designated by the Water and Wastewater Managers.

When a water or wastewater operator no longer works the overnight shift schedule, the 2% pay differential for the shift assignment will no longer be paid.

## 8. Benefits Briefly Explained

### a. Retirement

The Authority is a member of the Virginia Retirement System (VRS). The Authority makes contributions into the plan as determined and instructed by VRS. In addition, the employee pays a minimum 5% employee member contribution as a pre-tax deduction from their creditable compensation. An employee's creditable compensation is their annual salary, or their hourly base pay rate multiplied by 2,080 hours (which is 40 hours per week for a year). Participation in VRS is a condition of employment for all eligible employees.

### b. Retirement Pay Out

In recognition of employee service to the Authority, employees who are eligible to retire under the Virginia Retirement System will be paid one of the following upon their retirement based on the VRS Plan in which they participate:

- 1) VRS Hybrid Plan participants will be paid a Service Bonus of \$200 per year of continuous service to the Authority, up to a maximum of \$5,000.
- 2) VRS Plan 1 and Plan 2 participants will be paid a percentage of their accrued sick leave time at the time of retirement, based on the table below, up to a maximum of \$5,000.

Years of Service	%	Benefit Calculation
<3	0	No cash benefit
3 to <5	10	Sick leave balance x employee hourly rate x 10%
5 to <10	15	Sick leave balance x employee hourly rate x 15%
10 to <15	20	Sick leave balance x employee hourly rate x 20%
15 to <20	25	Sick leave balance x employee hourly rate x 25%
20 +	30	Sick leave balance x employee hourly rate x 30%

### c. Life Insurance

All Authority employees must participate in a group life insurance plan tied to the retirement plan. The premium and benefits are based upon each employee's base gross salary. The Authority pays the premium cost. The contribution made by the Authority is subject to change as part of the Authority's annual budget. Employees may also elect to purchase additional life insurance and extend coverage to family members. This additional optional life insurance is at the employee's expense.

### d. Medical/Dental Insurance

The Authority participates in a major medical and dental plan for employees and their families. The Authority makes a contribution towards the premiums and the employee pays the remaining amount through a payroll deduction. The specific features of this plan are normally subject to change annually.

e. Workers' Compensation

Under State Law, the Authority maintains workers' compensation insurance to pay for treatment of work-related injuries and to protect against loss of income resulting from a job-related injury. See Section F.10., *"Leave Policy and Rules, Workers' Compensation Leave"*.

f. Leave

The various types of leave are covered in Section F., *"Leave Policy and Rules"*.

g. Other Optional Benefits

In addition to optional life insurance noted above, other optional benefits include dependent and health care flexible spending accounts, health savings accounts, optional critical care insurance, a 457 Deferred Compensation Account and gym memberships at a reduced rate.

The Authority retains the right to change, alter or discontinue benefits offered where applicable.

## E. Harassment Policy

### 1. Policy

It is the policy of the Authority to provide a working environment that is free from all forms of discrimination and conduct that is considered harassing, coercive or disruptive, to include sexual harassment. Actions, words, jokes or comments based on an individual's sex (including pregnancy), race, color, national origin, age (over 40), religion, disability, genetic information, sexual orientation and any other legally protected characteristic will not be tolerated. This policy includes reporting procedures and remedies in the event of harassing behavior.

### 2. Workplace Harassment

Offensive behavior toward an employee may constitute workplace harassment if:

- a. The conduct occurs because of a person's inclusion in a legally protected class;
- b. The conduct is unwelcome;
- c. The conduct results in a tangible employment action against the alleged victim (termination, demotion, denial of promotion, decrease in pay, or altering that individual's duties in a way that blocks the individual's opportunity for promotion or salary increase);
- d. Or if the conduct is sufficiently severe or pervasive to create a hostile, intimidating or offensive work environment, to unreasonably interfere with a person's work performance, or to otherwise adversely affect terms, conditions, or opportunities of a person's employment.

Such behavior can include, but is not limited to:

- a. Repeating stereotypical jokes or making stereotypical comments related to race, age, sex, sexual orientation, national origin, religion or disability or any other legally protected characteristic;
- b. Displaying derogatory pictures or offensive printed material;
- c. Insults, name-calling, and any other words or comments that demean, stigmatize, intimidate, or single out a person because of one's sex, sexual orientation, race, religion, national origin, age, disability or other legally protected status;
- d. Physical contact, invading one's physical space, damaging one's personal property, offensive gestures, or any other demeaning physical act directed at someone based on their legally protected status.

### 3. Sexual Harassment

Sexual harassment is defined as unwanted sexual advances, or visual, verbal, or physical conduct of a sexual nature. This definition includes many forms of offensive behavior and includes gender-based harassment. The following is a partial list of sexual harassment examples:

- a. Unwanted sexual advances;
- b. Offering employment benefits in exchange for sexual favors;

- c. Making or threatening reprisals after a negative response to sexual advances;
- d. Visual conduct that includes leering, making sexual gestures, or displaying sexually suggestive objects or pictures, cartoons, or posters;
- e. Verbal conduct that includes making or using derogatory comments, epithets, slurs or jokes;
- f. Verbal sexual advances or propositions;
- g. Verbal abuse of a sexual nature, graphic verbal commentaries about an individual's body, sexually degrading words used to describe an individual, or suggestive or obscene letters, notes or invitations;
- h. Physical conduct that includes touching, assaulting, or impeding or blocking movements.

Unwelcome sexual advances (either verbal, written, online or physical), requests for sexual favors, and other verbal, written, online or physical conduct of a sexual nature constitute sexual harassment when:

- a. submission to such conduct is made either explicitly or implicitly a term or condition of employment;
- b. submission or rejecting of the conduct is used as a basis for making employment decisions; or
- c. the conduct has the purpose or effect of interfering with work performance or creating an intimidating, hostile, or offensive work environment.

#### **4. Employee Responsibilities**

All employees are responsible for assisting in the prevention of harassment by refraining from participation in, or encouragement of, actions that could be perceived as harassment. An employee who feels they have experienced or witnessed sexual or other unlawful harassment in the workplace is required to immediately report such incidents. Employees are required to report incidents to either their immediate department manager, their divisional director or any other divisional director, the Human Resources Manager, or the Executive Director. Employees are assured that concerns and reports can be made without fear of reprisal or retaliation.

#### **5. Department Manager Responsibilities**

Each department manager and divisional director is responsible for assisting in the prevention of harassment by monitoring the work environment for signs that harassment may be occurring, counseling employees on the types of behavior prohibited, and knowing and following procedures for reporting and resolving complaints of harassment.

#### **6. Complaint Procedures**

All allegations of sexual or other unlawful harassment will be quickly and discreetly investigated. To the extent possible, confidentiality of the complainant and any other witnesses, as well as the harasser, will be protected against unnecessary disclosure.

- a. Any employee encountering harassment is encouraged to tell the person directly responsible that their actions are unwelcome and offensive. The employee should document all incidents of harassment in order to provide the fullest basis for investigation.
- b. If the incident is serious (i.e., physical advance), unacceptable or repeated, especially if the employee has asked the offender to refrain from such behavior in the past, a written complaint should be filed immediately.
- c. A complaint should be reported to one's immediate department manager, a department manager from another department, their divisional director or any other divisional director, the Human Resources Manager, or the Executive Director. The employer representative taking such complaint must document all information including dates, times, places, names, and quotes.
- d. The employee will be informed as to how and when the employer representative intends to follow up on the complaint. If the situation warrants, immediate steps to protect the employee from further harassment may be taken.

## **7. Corrective and/or Disciplinary Action**

Any employee engaging in sexual or other unlawful harassment will be subject to disciplinary action, including one or more of the following:

- a. A verbal reprimand
- b. A written reprimand
- c. Suspension with or without pay
- d. Discharge Dismissal

In addition, the filing of a false complaint, or false statements during an investigation will be subject to disciplinary action as stated above.

## **8. Recourse Through Other Policies/Agencies**

Employees who have encountered harassment, or employees accused of harassment, are not precluded by this policy from filing a complaint with the Equal Employment Opportunity Commission (EEOC). Employees may also file an appeal or grievance through the Authority's grievance policy, see *Section H., "Grievance Procedure"*.

## F. Leave Policy and Rules

### 1. Policy

Department managers shall grant leave in accordance with these policies, on the basis of the work requirements, and whenever possible in accordance with the wishes of the employee. Employees are encouraged to plan use of their cumulated annual leave far enough in advance that full consideration can be given to their requests.

### 2. Holiday Leave

It is the policy of the Authority to ensure that all regular employees enjoy the same number of holidays each year, irrespective of the provisions of the section below on granting holiday leave. The standard shall be the number of holidays in a year which will be celebrated by regular employees.

The following holidays are observed by the Authority and shall be granted to all full-time employees with pay, and to part-time, non-benefited employees without pay, unless such employees are required to be on duty as scheduled:

- New Year's Day, January 1
- Martin Luther King Day, Third Monday in January
- Presidents' Day, Third Monday in February
- \*Jefferson's Birthday, April 13 (Floating)
- Memorial Day, Last Monday in May
- Independence Day, July 4
- Labor Day, First Monday in September
- Veterans Day, November 11
- Thanksgiving, close at 12:00 pm the fourth Wednesday, closed on fourth Thursday and Friday of November
- Christmas Eve, December 24
- Christmas Day, December 25

\*The RWSA/RSWA offices will be open on Jefferson's Birthday, April 13. Holiday leave may be taken on the formal holiday with the department manager's approval. If leave is not taken on the holiday, it will become 8 hours of annual leave and will be treated as such. Holiday premium pay will not be paid for time worked on April 13.

Holidays observed by the Authority shall be subject to the following rules:

- a. Holiday on weekend. In the case of non-shift employees when a holiday falls on Saturday, it shall be observed on the preceding Friday. When a holiday falls on a Sunday, it shall be observed on the following Monday. Employees working shift schedules (water operators, wastewater operators) will observe the holiday on the actual day and be paid accordingly.
- b. Holiday on a mandatory work day. Any hours worked on a holiday will be paid at a rate noted in *Section D., "Compensation and Plan Administration"*. The employee will also



receive 8 hours of pay at their base pay rate. Temporary employees are not eligible for holiday pay.

- c. Holidays during paid leave. A holiday falling within a period of paid leave shall not be counted as a work day when computing the amount of leave debited. When an employee takes unauthorized leave on a holiday, time shall be deducted from his/her sick leave or annual leave or be charged as leave without pay. *See Item 9. of this Section, "Unauthorized Absence/Leave".*
- d. Holiday during unpaid leave. When a holiday falls within a period of leave without pay or immediately preceding or following such leave, the employee shall receive no pay for the holiday.
- e. Employment or separation on a holiday. The employment or separation of a regular or part-time employee shall not be affected by a holiday, except when the employee works that day.

### 3. Annual Leave

Annual leave is intended to be used for personal leave and for vacations. Annual leave must be scheduled with and approved by the appropriate department manager at least one business day prior to the employee taking the leave time. Final approval rests with the department manager, divisional director or as delegated.

#### a. Accrual

Annual leave shall normally be accrued to regular full-time employees at the following rates (employees on unpaid leave will not receive an accrual during leave):

Years of Service	<5 Years	5 to <10 Years	10 to <15 Years	15 to <20 Years	20 to <25 Years	25 + Years
Annual Accrual Rate	96 hours	120 hours	144 hours	168 hours	192 hours	216 hours

#### b. Annual Carry Over

Annual leave may be carried over to the next calendar year at the following rates:

Years of Service	<5 Years	5 to <10 Years	10 to <15 Years	15 to <20 Years	20 to <25 Years	25 + Years
December 31 Maximum	192 hours	240 hours	288 hours	336 hours	384 hours	432 hours

Employees may carry over twice their annual accrual as of January 1st each year. Annual leave in excess of these limits on January 1st shall be lost. Only the Executive Director or his designate may grant an extension to this date.

#### c. Taking

The following rules pertain to taking annual leave:

- 1) In most cases, annual leave may not be taken until an employee has completed their 6-month probation period. This is at the department manager's discretion.
- 2) Annual leave shall normally be granted each calendar year. Any annual leave taken should be approved by the employee's department manager prior to the leave being taken.
- 3) Annual leave taken shall not exceed the annual leave time that has been accrued by the employee at the time they are taking annual leave. Exceptions must be approved by the Executive Director. Such excess leave granted will be debited against future annual leave credits. Any such negative accumulation at the time of separation must be reimbursed.
- 4) Failure to return from an approved annual leave may result in an unauthorized leave or in disciplinary action, up to and including termination.

d. Debiting

The amount of annual leave debited will be computed on the basis of the days or hours an employee is scheduled to work during the period when leave is taken. Holidays and other regular days off will not be included.

e. Effect of Separation

- 1) Provided that an employee has given a two week notice at the time of resignation, any unused annual leave shall be paid to the employee at their current hourly base pay.
- 2) Annual leave credits shall be prorated through the employee's effective date of separation.
- 3) Upon separation, all annual leave hours shall be cleared from the employee's leave record.
- 4) Employees shall reimburse the Authority for any unearned or excess leave taken, regardless of leave type, upon separation. Any reimbursement to the Authority or any nonpayment for hours taken shall be documented for the record and appropriate action taken in accordance with these rules and regulations and the documentation filed in the employee's personnel file.

#### 4. Sick Leave

Sick leave is leave with pay granted to an employee for an illness, bodily injury resulting in temporary disability, medically required confinement and medical/dental appointments. Sick leave may also be used for bereavement leave and immediate family sick leave. Immediate family in this event includes spouse, children, parents, step-siblings, foster children, siblings, grandparents, grandchildren, step-children, step-parents, guardian or same relative of spouse and any other relatives or individuals residing with the employee. The FMLA policy may apply in some instances of sick leave after the first 12 months of employment.

A doctor's certificate or other documentation of illness may be required by a department manager should absence exceed three days or when misuse of sick leave is suspected. This certificate or

documentation will include the nature of the employee's condition and the expected date on which the employee will be able to return to work and perform their normal job duties.

a. Accrual

- 1) VRS Plan 1 and VRS Plan 2 participating employees will accrue sick leave time at a rate of 12 days annually or 3.69 hours per pay period.
- 2) VRS Hybrid Plan participating employees will receive annual sick leave based on the following:

Months of Service	Sick Leave Accruals (hours)
Less than 60	96 (8 hours per month)
60 to 119	104
120 or more	120

b. Annual Carry Over

- 1) VRS Plan 1 and VRS Plan 2 participating employees do not have any limit to the amount of sick time that they may carry over.
- 2) VRS Hybrid Plan participating employees may not carry over sick leave.

c. Taking

The following rules pertain to taking sick leave:

- 1) Sick leave taken shall not exceed the total cumulated sick leave hours earned by the employee.
- 2) Leave without pay may be granted for sickness extending beyond the use of all sick or other leave. *See Item 5 of this Section, "Family and Medical Leave Act (FMLA) Provisions".*
- 3) Employees who have completed six months of service may use annual leave hours when sick leave hours have been exhausted.

d. Debiting

The amount of sick leave debited will be computed on the basis of the days or hours an employee is scheduled to work during the period when the leave is taken. Holidays and other regular days off will not be included when computing debits.

e. Other Rules and Regulations Regarding Sick Leave

- 1) Reporting of sickness

- a) An employee who is absent from duty for reasons which entitle them to sick leave shall notify his/her department manager at least four (4) hours before his/her usual reporting time, or as required by his/her department manager, if physically able. Failure to do so may result in unauthorized *leave*. See *Items 2.b. and 3.a. below*.
- 2) Investigation of sickness
  - a) A department manager may verify the questionable illness of an employee using sick leave by requesting a note from the employee's physician.
  - b) Failure by the employee to cooperate in sick leave investigating or to return from sick leave when expected may result in an unauthorized leave or in disciplinary action.
- 3) False or fraudulent use of sick leave
  - a) Use of sick leave for other than the purposes stated above shall be cause of disciplinary action (including suspension or dismissal) against the offending employee.
- 4) Conversion of sick leave
  - a) the use of sick leave for annual leave purposes shall not be permitted.
- f. Sick Leave Pay Out Upon Separation

Accrued sick leave will not be paid out in the event of a termination or resignation. For sick leave pay out upon retirement, see *Section D.8.b., "Compensation Plan and Administration, Benefits Briefly Explained, Retirement Pay Out"*.

## 5. Family and Medical Leave Act (FMLA) Provisions

Notwithstanding any other provision of this Manual, eligible employees may take up to 12 workweeks of paid or unpaid leave under the provisions of the Family and Medical Leave Act, subject to the following rules and regulations. The twelve (12) month period during which an employee may take up to twelve (12) workweeks of leave under the Family and Medical Leave Act will begin on the first day that leave is taken. *In this Section, see: Item 3, "Annual Leave"; Item 4, "Sick Leave"; and, if eligible, Item 6, "Sick Leave Bank"*.

### a. General Description

An eligible employee may take family/medical leave, continue any paid medical/dental insurance during such leave and be restored to the same position upon their return (or a position equivalent in pay, benefits and terms of employment) in any of the cases of:

- 1) Birth, adoption or foster placement of a child;
- 2) Care of a spouse, child or parent with a serious medical condition;
- 3) Serious health condition of the employee rendering the employee unable to perform an essential function of his/her position;

- 4) Covered military active duty; and
- 5) Care of a covered service member with a serious injury or illness when the employee is the spouse, child, parent or next of kin of the service member, as defined by the Family and Medical Leave Act. This type of leave may be for up to 26 workweeks.

b. Definitions

Child: Includes son or daughter under the age of 18 or son or daughter over 18 who is disabled and cannot care for themselves, legal wards, stepchildren and others for whom the employee stands in the place of parent.

Eligible employee: An employee who has been employed at least one year and has worked at least 1,250 hours during the 12 months immediately preceding the proposed leave.

Health Care Provider: A licensed medical doctor or any other person determined by the U.S. Secretary of Labor to be capable of providing health care service.

Parent: Biological parents as well as any others who have acted in the place of a parent to the employee. This does not include parents-in-law.

Serious Medical Condition: A physical or mental illness or an injury requiring inpatient care at a hospital, hospice, or residential medical care facility; or continued treatment by a health-care provider.

Leave due to the birth or adoption must be completed within the 12-month period beginning on the date of birth or adoption. In addition, in cases where the married couple are both employed by the Authority, the two together may be limited to a combined total of twelve (12) workweeks of leave during any 12-month period for the birth or adoption of a child, or for the care of the same son, daughter, or parent.

c. Notice of Leave

If the need for family/medical leave is foreseeable, the employee must give his/her immediate department manager written notice at least 30 days prior to leave, except in extraordinary circumstances. Additionally, if medical treatment is planned the employee must first consult with his/her immediate department manager regarding the dates of such treatment. If this is not possible, the employee must at least give notice as soon as practicable (within one or two business days of learning of the need for leave). Failure to provide such notice may be grounds for delay of leave. As in all cases of leave, a leave request form must be submitted to the immediate department manager. Family/medical leave forms are available from department managers or the Human Resources Manager. These forms must be used when specifically requesting family/medical leave. In cases where family/medical leave has not been specifically requested, but has been determined as FMLA-qualifying leave, a family/medical leave form will be provided and must be completed as soon as possible so that FMLA leave may be approved.

d. Medical Certification

If leave is requested due to the employee's or a covered relation's serious health condition, the employee and relevant health care provider must supply appropriate medical certification. Medical Certification forms are available from the Human Resources Manager. When leave is requested, the Authority will notify employees of the requirement for medical certification and when it is due. Failure to provide requested medical certification in a timely manner may result in delay of leave until such time as it is received. The Authority, at its expense, may require an examination by a second health care provider designated by the Authority, if initial medical certification is deemed incomplete or unsatisfactory. If the second health care provider's opinion conflicts with the original medical certification, the Authority, at its expense, may require a third, mutually agreeable, health care provider to conduct an examination and provide a final binding opinion. The Authority may require subsequent medical recertification.

e. Reporting While on Leave

In cases of leave for the employee's own serious health condition, or to care for a covered relation, the employee and the Human Resources Manager will determine how often the employee should contact their department manager regarding the status of their condition and their intention to return to work. In addition, notice must be given as soon as is practicable (within two business days if feasible) if the dates of leave change or are extended, or initially unknown.

f. Pay During FMLA Leave

Family/medical leave is legally unpaid leave (with the exception of worker's compensation benefits). The Authority requires an employee taking a leave covered by the FMLA to use first, their sick leave hours, and then their annual leave hours during their FMLA leave. Family/medical leave runs concurrently with other type of leave, including leave for work-related injury or illness.

g. Medical and Other Benefits

During an approved family/medical leave, the Authority will maintain health benefits for the employee, as in cases of active employment. The Authority will continue to deduct the health and dental insurance premiums from the employees pay. If the employee does not have leave time to use during their family/medical leave and the family/medical leave is unpaid, the employee is responsible to pay by the 25th of each month, the monthly employee portion of the premium. Employees will be notified if payments are more than 15 days late. If payments are not received within 15 days from the date of the late notice, coverage will cease, effective on the last day for which premiums have been paid.

Membership with the Virginia Retirement System will not be affected by family/medical leave; however, no wages will be reported during periods of unpaid leave. In addition, life insurance premiums will not be paid by the Authority during periods of unpaid leave and must be paid by the employee, as well as applicable premiums for optional life insurance, as set forth above. Upon return to work, the employee may be eligible to purchase the

lost service with VRS, if the leave is necessitated by birth or adoption, as defined by VRS policies. The Authority will resume its contribution to life insurance and wage reporting to VRS, with no lapse in credited service.

h. Exemption for Highly Compensated/Key Employees

Highly compensated or key employees (the highest paid 10 percent of employees) may not be returned to their former or equivalent position following a leave if the employee's restoration to their position will cause substantial and grievous economic injury to the Authority. This determination is not based on whether the absence of the employee will cause such substantial and grievous injury to the Authority. The Authority will make this fact-specific determination on a case-by-case basis. The Authority will notify the employee at the time of a leave request if he/she qualifies as a "highly compensated" employee, if the Authority believes that the restoration of the employee to their position may be denied, and of the employee's rights in such instances.

i. Intermittent and Reduced-Schedule Leave

Leave due to a serious health condition, or to care for a covered relation with a serious health condition, can be taken intermittently (in separate blocks of time, due to a single health condition) or on a reduced-leave schedule (reducing the usual number of hours worked per workday or workweek), if medically necessary. Requests for intermittent or reduced leave schedule for birth or adoption of a child must be approved in advance and will be approved on a case-by-case basis. If leave is unpaid, the Authority will reduce the employee's salary based on the amount of time actually worked. In addition, while on intermittent or reduced-schedule leave, the Authority may temporarily transfer the employee to an available alternative position that better accommodates the recurring leave, and which has equivalent pay and benefits.

j. Record Keeping and Anti-Retaliation

The Human Resources Manager shall maintain records necessary to demonstrate compliance with FMLA. A doctor's note is not required for each absence under a FMLA leave. FMLA requires that no employee be subject to any penalty for seeking rights under FMLA or for testifying for or otherwise helping other employees seek rights under FMLA.

## **6. Sick Leave Bank**

Each Authority will maintain a sick leave bank to be used when a member of the bank becomes incapacitated by long-term and/or chronic illness or injury as long as one-third of the eligible employees agree to participate in accordance with the terms contained herein. The sick leave bank is not for use for any other type of illness or injury leave, such as that of a family member.

Membership in the sick leave bank shall be voluntary and open to all eligible personnel who accrue sick leave. Each employee of the Authority who accumulates sick leave is eligible for membership and agrees to donate eight (8) hours of their sick leave to join the bank.

The Human Resources Manager is designated as the administrator of the sick leave bank.

a. Enrollment Procedures

- 1) An eligible employee may enroll within the first thirty days of employment by completing a Sick Bank Donation Form.
- 2) An employee who does not enroll when first eligible may do so between any subsequent January 1 to January 31 period by completing a Sick Bank Donation Form and providing satisfactory evidence of good health from a doctor to the Human Resources Manager.
- 3) An employee gains membership into the sick leave bank by contributing eight (8) hours of their sick leave time to the bank and eight (8) hours thereafter whenever an assessment is required. The donated leave will be deducted from the employee's accumulated days of sick leave. Employees will be notified of an assessment two (2) weeks prior to any deduction to their sick leave hours.

b. Rules of Use

- 1) The first twenty (20) working days of illness or disability will not be covered by the bank and must be covered by the member's own accumulated leave or leave without pay.
- 2) Requests for use of the sick leave bank must be made in writing by the employee (or representative if the employee is unable to submit the request) prior to the absence for which the leave days are to be used. In extenuating circumstances, retroactive request may be considered. Requests must be supported by a medical doctor's certification.
- 3) A maximum of 180 hours each rolling 12-month period can be used by any one member.
- 4) Hours drawn from the sick leave bank for any one period of eligibility do not need to be used consecutively but must be for the same illness.
- 5) A member of the bank will not be able to use the sick leave bank benefit until all of the employee's leave balances decline to zero.
- 6) Members of the bank will be assessed an additional eight (8) hours of sick leave when the bank is depleted to 40 hours, unless they choose not to participate further in the bank. Members who have no sick leave to contribute at the time of assessment will be assessed eight (8) hours and allowed to temporarily maintain a negative balance. Should an employee drop membership at the time of an assessment, the member will not be eligible to rejoin the bank until open enrollment in January of each year and only after providing satisfactory evidence of good health.
- 7) Members utilizing sick leave from the bank will not have to replace hours used except as a regular contributing member of the bank.

c. Termination

Upon termination of employment or membership in the sick leave bank, a participating employee may not withdraw the hours he/she has contributed to the bank.



## 7. Military Leave

This policy provides employees with the time required to perform any form of military service for the Armed Forces of the United States, National Guard or Naval Militia whether voluntary or involuntary, called or activated, such as being placed on active duty and for training.

Any full-time employee who is also a member of the organized reserve forces of any of the armed services of the United States, National Guard, or Naval Militia, is entitled to a leave of absence from their duties without loss of accumulated leave or regular salary on all days when in training or when called to duty by the Governor of Virginia, in accordance with the Code of Virginia, Article 10, Section 44-93 and Title 38 of the United States Code, Chapter 43, Section 2024 (d). Up to fifteen (15) days, or time as required by federal law, of Military Leave per calendar year is available to those employees who are called for training with their military units. Employees are required to submit a copy of their orders, prior to the effective date of the leave, to the Executive Director for approval. The Authority will pay to the employee the difference between the employee's military pay and their regular Authority base pay for the period of time that the employee is on Military Leave. It is not intended that the employee receive an amount of compensation greater than he would normally have received from their regular employment for the period of the Military Leave.

The Authority will make all efforts to accommodate National Guard weekend drills.

## 8. Court Leave

A regular employee shall be granted court leave when summoned to jury duty. Employees serving jury duty will receive full salary and may retain compensation received from the court. Employees are expected to give their department manager notice of jury duty and submit a copy of the official summons for jury duty. If the employee's presence is required for less than a full work day, the employee is required to contact the department manager concerning return to work.

Employees who are subpoenaed to appear as witnesses in legal proceedings in their capacity as an Authority employee will be entitled to treat time spent in such proceedings as compensable working time. However, employees who initiate or are otherwise involved in private legal actions of any kind (excluding employee grievance proceedings) will not be permitted to treat time spent during working hours in connection with such actions as compensable working time. Employees will be required to use accrued annual or compensatory time for all hours spent in connection with such action that occur during working hours.

## 9. Unauthorized Absence/Leave

Unauthorized absence includes:

- a. Failure to report for a scheduled shift without notifying your department manager.
- b. Failure to report to work at the end of an authorized leave.
- c. Absence without leave time available.

An employee shall receive no pay for the duration of any unauthorized leave and may be subject to disciplinary action, using the following procedure as a guide:

- a. The first occurrence of absence without approved leave shall result in a written reprimand.

- b. The second occurrence of absence without approved leave shall result in a suspension without pay.
- c. The third occurrence of absence without approved leave shall result in immediate dismissal.
- d. Failure to report for three consecutive scheduled shifts without department manager notification shall be considered a voluntary resignation.

## 10. Workers' Compensation Leave

All Authority employees receive benefits provided by the Virginia Workers' Compensation Act (referred to in this policy as "WCA") if they suffer a work-related injury or disease, and covered employees who are entitled to benefits under the WCA also are eligible for supplemental benefits provided by the Authority.

If an employee suffers a workplace injury that causes them to miss time from work, they will be placed on sick leave. If the disability continues past seven working days, workers' compensation insurance will provide compensation from that point forward. An employee may not receive payment from worker's compensation and sick leave at the same time. If an employee does not have enough sick and/or annual leave hours to cover the first seven days of absence, the employee will be placed on leave without pay.

Temporary modified duty or a reasonable accommodation (a modification or adjustment to the work environment, or to the manner or circumstances under which the position held is customarily performed, that enable a qualified individual with a disability to perform the essential functions of that position) may be offered to an injured employee, once the treating physician states that it is safe for the employee to return to work and once the physician provides information in regard to the employee's capabilities. When an employee is released to modified duty the Authority:

- a. May assign a temporary modified/light duty work assignment for the employee.
- b. May offer temporary modified duty at a reduced wage.
- c. May offer temporary modified duty in a different department than the employee's pre-injury job.
- d. May offer temporary modified duty at a reduced number of hours.
- e. May modify an employee's pre-injury job to accommodate the employee's restrictions.

The Authority will make every effort to place the employee in an available position for which he/she is qualified for. In all cases, the Authority will comply with the American's With Disabilities Act and will make reasonable accommodations to maintain the individual as an employee.

## 11. Procedures for Requesting Leave

For all leave except holiday and unplanned sick leave, a request indicating the type of leave, and duration of leave to include start date and time and end date and time must be approved in advance by the appropriate department manager. The request should be made at least one business day prior to the planned leave time that is being requested. This time is to allow the

department manager to make any schedule or workload adjustments necessary to accommodate the request. Unless an absence for voluntary leave is approved by the appropriate department manager, the absence will be regarded as unauthorized leave.

## **12. Maintenance of Leave Records**

The Human Resources Manager is responsible for maintaining accurate leave records in a form acceptable to the Executive Director. Questions regarding leave should be addressed to the Human Resources Manager or the appropriate department manager.

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## G. Disciplinary Policy

### 1. Policy

This policy provides a guideline to effectively correct an employee's unsatisfactory work performance or misconduct in an effort to promote maximum employee potential. All employees will be covered under this policy. Any disciplinary matters involving drugs or alcohol are covered in *Section L, "Substance Abuse Policy"*.

### 2. Unsatisfactory Work Performance or Misconduct

Each need for discipline has varying circumstances and requires the exercise of discretion on the part of the employee's department manager. Disciplinary action may be taken for any of the following examples of unsatisfactory work performance and misconduct. These examples are not in any way to be construed as a comprehensive listing of possible violations nor are they to be considered as rigid guidelines.

- a. Recurring tardiness
- b. Absence without leave
- c. Violation of the Substance Abuse Policy
- d. Sleeping on the job
- e. Serious neglect of work
- f. Serious neglect of duty
- g. Insubordination, defined as refusal to comply with a direct order from a department manager
- h. Deliberate or careless conduct endangering the safety of oneself or other employees
- i. Pattern(s) of safety violations, severity of risk to be determined
- j. Negligence in the care and handling of Authority or customer property
- k. Theft or unauthorized use of Authority property or of another employee's property
- l. Incompetence or inefficiency in the performance of required job duties
- m. Use of offensive, abusive, threatening, coercive, indecent or discourteous language toward department managers, divisional directors, other employees, or members of the public
- n. Intentional falsification of personnel records, time records, or any other Authority records or reports
- o. Provoking, instigating or participating in a fight while on duty or on Authority property or in an Authority vehicle
- p. Harassing other employees
- q. Carrying of a firearm during work hours or on Authority property or in Authority vehicles
- r. Violation of *Section I.1., "Administrative Policies, Conflict of Interest/Accepting Gifts"*.

s. Violation of Authority Policies

**3. Progressive Discipline Policy**

The Authority will support the practice whereby all employees will be disciplined by the same process. The discipline of an employee will be a progressive process in most cases, where disciplinary actions of lesser severity than dismissal/involuntary separation can be taken in an attempt to correct an employee's unsatisfactory work performance or misconduct before a dismissal/involuntary separation is initiated. However, the Authority reserves the right to bypass the progressive discipline policy to address breaches of law, Authority policy and actions by employees which hinder the goals and or public perception of the Authority. Disciplinary actions may take any of the following forms and are not necessarily restricted to the order set forth below:

- a. Verbal reprimand
- b. Written reprimand
- c. Suspension
- d. Executive Director Inquiry
- e. Administrative decrease
- f. Demotion
- g. Dismissal/Involuntary Separation

All formal disciplinary actions, as listed above, should be documented. In the case of all of the above, except for a verbal reprimand, the employee should receive a copy of the written notice that will be placed in their personnel file. Any written notice should contain a statement of reasons for the disciplinary action, a warning of what further disciplinary action could result if the situation is not corrected and a statement of the employee's right to appeal in accordance with the Authority's Grievance Procedure, *See Section H., "Grievance Procedure"*.

- a. Verbal Reprimand: A verbal reprimand is a discussion between the department manager and the employee during which the employee is advised and cautioned in reference to unsatisfactory work performance or misconduct. Department managers are required to document the date, subject and details of the conversation for future reference if needed.
- b. Written Reprimand: A written reprimand is a written documentation to the employee from the department manager during which the employee is advised and cautioned with reference to unsatisfactory work performance or misconduct. A copy of the written reprimand should be signed by the employee and retained in their personnel file.
- c. Suspension: A suspension is the temporary prohibiting of an employee to perform his/her duties. The suspension period shall be without pay for just cause or with pay for investigative purposes. All suspensions must be approved by the Executive Director. A copy of the suspension letter should be signed by the employee and retained in their personnel file.

- d. **Executive Director Inquiry:** Prior to any demotion or dismissal recommendation from the department manager or divisional director, the Human Resources Manager/Director of Finance & Administration and the Executive Director will conduct a formal interview with the employee and applicable management staff regarding the merits of the recommendation regarding the employee's unsatisfactory work performance or misconduct. Any disciplinary action that takes place will be approved by the Executive Director and documented in the employees personnel file.
- e. **Administrative Decrease:** An administrative decrease is a reduction in an employee's pay. All administrative decreases must be approved by the divisional director and the Executive Director. The letter of notification of an administrative decrease stating the specific reason for the decrease and signed by the employee should be retained in the employee's personnel file.
- f. **Demotion:** A demotion is a reduction in the pay range of an employee in conjunction with a change in job duties and responsibilities. All demotions must be approved by the divisional director and the Executive Director. The letter of notification of a demotion stating the specific reason for the demotion and signed by the employee should be retained in the employee's personnel file.
- g. **Dismissal/Involuntary Separation:** A dismissal is an involuntary termination from employment initiated by the Authority as a result of the employee's unsatisfactory work performance or misconduct. All dismissals/involuntary separations must be approved by the divisional director and the Executive Director and are subject to appeal or Loudermill hearing/grievance.

All formal disciplinary actions, as listed above, should be documented. In cases above, except for a verbal reprimand, the employee should receive a copy of the written notice that will be placed in their personnel file. Any written notice should contain a statement of reasons for the disciplinary action, a warning of what further disciplinary action could result if the situation is not corrected and a statement of the employee's right to appeal in accordance with the Authority's Grievance Policy. See Section H., "Grievance Procedure".

## H. Grievance Procedure

### 1. Policy

The Authority Grievance Procedure affords an immediate and impartial method for the resolution of disputes that may arise between the Authority and employees in the Authority service.

### 2. Coverage of Grievance Procedure

This procedure applies to all non-probationary employees in permanent full-time and permanent part-time positions in the Authority.

This procedure shall not apply to the following employees:

- a. Appointees of the Board of Directors;
- b. Employees in temporary or seasonal positions;
- c. Student interns, volunteers, or persons appointed to serve without pay;
- d. Probationary employees; and
- e. The Executive Director

### 3. Definitions

Executive Director: shall mean either the Executive Director or his/her designee.

Grievance: shall mean a complaint or dispute by an employee eligible to use this procedure relating to his or her employment, including but not limited to:

- a. disciplinary actions, including dismissals, demotions and suspensions, provided that dismissals shall be grievable only when resulting from formal discipline or unsatisfactory job performance;
- b. the application of personnel policies, procedures, rules and regulations;
  - 1) acts of retaliation as the result of using the grievance procedure or of participation in the grievance of another Authority employee;
- c. acts of retaliation because the employee has complied with any law of the United States or of the Commonwealth of Virginia, has reported any violation of such law to a governmental authority, or has reported an incidence of fraud, abuse, or gross mismanagement; and
- d. complaints of discrimination on the basis of race, color, creed, political affiliation, age, disability, national origin or sex.
- e. Grievant: shall mean an eligible employee who has filed a complaint under this procedure.

Human Resources Manager: shall mean either the Human Resources Manager or his/her designee.

Management: shall mean the Board of Directors and its designees who establish policy for the Authority.

#### 4. Management Responsibilities

Management retains the exclusive right to manage the affairs and operations of the Authority. Accordingly, the following complaints are non-grievable:

- a. establishment and revision of wages or salaries, position classification or general benefits;
- b. work activity accepted by the employee as a condition of employment or work activity which may reasonably be expected to be a part of the job content;
- c. the contents of established personnel policies, procedures, rules and regulations;
- d. failure to promote except where the employee can show that established promotional policies or procedures were not followed or applied fairly;
- e. the methods, means and personnel by which or by whom work activities are to be carried out;
- f. termination, layoff, demotion or suspension from duties because of lack of work, reduction in work force, or job elimination, except where such action affects an employee who has been reinstated within the previous six months as the result of the final determination of a grievance;
- g. the hiring, promotion, transfer, assignment and retention of employees within the Authority; and
- h. the relief of employees from duties of the Authority in emergencies.

In any grievance brought under the exception to Section 4.f above, the Authority's action shall be upheld upon a showing by the Authority that:

- a. there was a valid business reason for the action, and
- b. the employee was notified of the reason in writing prior to the effective date of the action.

#### 5. Human Resources Department Responsibilities

The Authority Human Resources Department shall serve as an impartial administrator of this process. Upon the filing of a grievance, the Human Resources Department shall do the following:

- a. establish and maintain a file;
- b. ensure that all parties are aware of the process;
- c. monitor procedures and time frames;
- d. notify either party of noncompliance;
- e. be informed of the status of the grievance by both parties at each step;
- f. maintain appropriate documentation; and
- g. perform all other responsibilities as specified in this Procedure.



## 6. Grievance Procedure Generally

For purposes of this procedure, “days” shall be defined as calendar days and time periods shall begin to run on the day following that on which any action is taken, or report rendered, without regard to weekends or Authority-observed holidays. If a time period specified in this procedure ends on a weekend or holiday, the last day of the time period shall be the next full business day following the weekend or holiday.

For example, a written grievance under Step 1 must be presented to the grievant’s immediate department manager within five (5) days of the department manager’s verbal reply to the informal grievance. The five (5) days shall begin to run on the day after receipt of the department manager’s verbal reply and shall terminate on the fifth day following. If the fifth day is a weekend or holiday, the time period shall terminate at the end of the next full business day.

Time limits established under this procedure are intended to be strictly construed and enforced. However, in the interests of fairness, such time limits may be extended if both parties agree to such extensions in writing.

All stages of this procedure beyond Step 1 shall be reduced to writing on forms supplied by the Human Resources Department. With the exception of the final management step, the only persons who may normally be present in the management step meetings are the grievant, the appropriate Authority official and appropriate witnesses for each side. Witnesses shall be present only while actually providing testimony. At Step 4 and above, the grievant may, at his option, choose to have a representative of his choice, including legal counsel. If the grievant is represented by legal counsel or other person(s), the Authority likewise has the option of being represented by legal counsel, provided that a person may not serve as both a witness and a representative at any Step under this procedure.

The grievant shall bear any and all costs involved in employing representation and preparing his case at all steps of this procedure, including but not limited to attorneys’ fees and expenses and any costs of judicial filings or appeals.

After the initial filing of a written grievance, failure of either party to comply with all substantial procedural requirements of this procedure, without just cause, shall result in a decision in favor of the other party on any grievable issue, provided that the noncomplying party fails to correct the noncompliance within five (5) days of receipt of written notification by the other party of the compliance violation.

However, the right of the grievant to correct compliance violations shall not apply to any determinations under Steps 1 through 3, or to grievability determinations, provided that the grievant has previously received written notice of the applicable deadlines for appealing such determinations at the time the determination was rendered but has failed to respond in a timely fashion.

The Executive Director may require a clear written explanation of the basis for any requests for just cause extensions or exceptions and shall determine all compliance issues. Such determinations by the Executive Director are subject to appeal by the grievant by filing a petition with the Circuit

Court of Albemarle County within thirty (30) days of the compliance determination. The grievant shall be solely responsible for filing such petition.

## **7. Grievability**

Decisions regarding grievability, including the question of access to this procedure, shall be made by the Executive Director. Grievability decisions shall be made at the request of the grievant or his divisional director or immediate department manager within ten (10) days of such request. A copy of the Executive Director's decision concerning grievability shall be sent to the grievant, to the divisional director and/or immediate department manager and to the Human Resources Manager.

Decisions by the Executive Director that an issue or complaint is not grievable may be appealed by the grievant to the Circuit Court of Albemarle County for a hearing de novo on the issue of grievability as provided in Virginia Code § 15.2-1507(A)(9).

Proceedings for the review of the Executive Director's decision regarding grievability shall be instituted by filing a notice of appeal with the Executive Director within ten (10) days from the date of receipt of the decision and giving a copy thereof to all other parties. Within ten (10) days thereafter, the Executive Director shall transmit to the Clerk of the Circuit Court of Albemarle County a copy of his decision, a copy of the notice of appeal, and any exhibits that may have been provided in connection with the resolution of the issue of grievability. A list of the evidence furnished to the court shall also be furnished to the grievant.

The failure of the Executive Director to transmit the record shall not prejudice the rights of the grievant. If the Executive Director fails to transmit the record within the time required, the Circuit Court, on motion of the grievant, may issue a writ of certiorari requiring the Executive Director to transmit the record on or before a certain date.

The Circuit Court, sitting without a jury, shall hear the appeal on the record transmitted by the Executive Director and such additional evidence as may be necessary to resolve any controversy as to the correctness of the record. The Court, in its discretion, may receive such other evidence as the ends of justice require. The Court may affirm, reverse or modify the decision of the Executive Director. The decision of the Court is final and is not appealable.

The issue of grievability may be raised at any step of the Grievance Procedure prior to the panel hearing provided in Section 13 of this procedure, or it shall be deemed waived by all parties. Once raised, the issue shall be resolved before further processing of the complaint. A request that grievability be determined shall toll the time limits under this procedure. Time limits shall begin to run again the day after the decision on grievability is made by the Executive Director or the Circuit Court.

The classification of a complaint as nongrievable by either the Executive Director or the Circuit Court of Albemarle County shall not be construed to restrict any employee's right to seek, or management's right to provide, customary administrative review of complaints outside the scope of the Grievance Procedure.

## 8. Consolidation of Grievances

If more than one grievance is filed arising from the same factual circumstances, the Executive Director may, at any time prior to a panel hearing, consolidate those grievances for joint processing, including grievability determinations. If consolidation occurs, all time limits set forth in this procedure shall thereafter be calculated from the date of the last filed grievance. Once consolidated, the grievances shall all be processed as a single matter pursuant to this procedure.

## 9. Step 1 Procedure - Immediate Department Manager

No later than fifteen (15) days after the occurrence or condition giving rise to the grievance, the employee affected shall identify the grievance verbally to his immediate department manager. Within ten (10) days of such identification, the immediate department manager shall give his response to the employee with respect to the particular grievance. The failure of an employee to identify the grievance within the time specified above shall constitute forfeiture and a waiver of any rights to proceed further and shall terminate the grievance.

If a satisfactory resolution is not reached by this informal process, the employee shall notify the Human Resources Department of the intent to file a grievance and shall obtain a copy of Grievance Form, see *Section M., "Forms and Attachments"*. The employee shall reduce the grievance to writing on the Grievance Form, Part A, identifying specifically and in detail the nature of the grievance and the requested remedy. Should he prevail in the grievance, an employee is entitled only to the relief specifically requested. Such written grievance shall be presented to the immediate department manager within five (5) days of the department manager's verbal reply to the oral grievance. The department manager shall then reply in writing to this written grievance within five (5) days of receiving it.

If the employee's immediate department manager is also his department manager, he shall pass by Step 2 of this procedure and proceed immediately to Step 3. If the employee's immediate department manager is the divisional director, he shall pass by Steps 2 and 3 and proceed to Step 4. If the employee's immediate department manager is the Executive Director, he shall pass by Steps 2, 3 and 4 and proceed to Step 5.

## 10. Step 2 Procedure - Department Manager

If a satisfactory resolution is not reached at the conclusion of Step 1 as outlined above, the grievant shall have the right to appeal as follows. Within five (5) days following receipt of the Step 1 (written reply), the grievant shall notify his department manager and the Human Resources Department in writing on the Grievance Form, Part A that resolution has not occurred and shall supply the reasons why the grievant believes that resolution has not occurred. The department manager shall schedule and hold a meeting with the grievant to review the grievance within five (5) days of receipt of such submission, or on such other date as the parties may mutually agree.

The only persons who may be present at this meeting are the grievant and the department manager. The Human Resources Manager may be present if requested by either party. The meeting may be adjourned to another time or place by agreement of the parties. A written reply to the grievance shall be provided to the employee and the Human Resources Department within five (5) days after the meeting.

**11. Step 3 Procedure - Divisional Director**

If a satisfactory resolution is not reached at the conclusion of Step 2 as outlined above, the grievant shall have the right to appeal as follows. Within five (5) days following receipt of the Step 2 written reply, the grievant shall notify the divisional director and the Human Resources Department in writing on the Grievance Form, Part A that resolution has not occurred and shall supply the reasons why the grievant believes that resolution has not occurred. The divisional director shall schedule and hold a meeting with the grievant to review the grievance within five (5) days of receipt of such submission, or on such other date as the parties may mutually agree.

The only persons who may be present at this meeting are the grievant and the divisional director. The Human Resources Manager may be present if requested by either party. The meeting may be adjourned to another time or place by agreement of the parties.

A written reply to the grievance shall be provided to the employee and the Human Resources Department within five (5) days after the meeting.

**12. Step 4 Procedure - Executive Director Level (Final Management Step)**

If a satisfactory resolution is not reached at the termination of Step 3 as outlined above in Section 11, the grievant shall notify the Human Resources Department, indicate on the Grievance Form, Part A that resolution has not occurred and submit the grievance to the Executive Director within five (5) days following receipt of the Step 3 reply. The Executive Director or his designee shall schedule and hold a meeting with the grievant to review the grievance within ten (10) days of receipt of such submission, or on such other date as the parties may mutually agree.

The grievant may have legal representation or another representative present at the Step 4 meeting. If the grievant is represented by legal counsel or another representative, the Executive Director may also have legal counsel or another representative present. The grievant shall inform the Authority in writing of the name of his legal counsel or other representative at least five (5) days prior to the Step 4 meeting and failure to do so shall result in a waiver by the employee of his right to representation. The Executive Director or designee shall, in his sole discretion, determine whether the testimony of a witness is relevant or, if witnesses have testified, whether additional testimony by other witnesses is necessary.

A written reply to the grievance shall be provided to the grievant and the Human Resources Department within ten (10) days after the Step 4 meeting, or on such other date as the parties may mutually agree.

**13. Step 5 Procedure - Grievance Panel**

If a satisfactory resolution is not reached at the termination of Step 4 as outlined above in Section 12, the grievant shall notify the Human Resources Department, indicate on the Grievance Form, Part A that resolution has not occurred and request a hearing before a Grievance Panel ("Panel"). The request shall be submitted to the Human Resources Manager within five (5) days following receipt of the Step 4 reply.

An impartial Grievance Panel shall be constituted and selected for each grievance hearing. The Human Resources Manager shall arrange for the Panel selection. If the Human Resources Manager

is a party to the grievance, the request form shall be submitted to the Director of Administration, who shall make the necessary arrangements.

#### **14. Composition of the Grievance Panel**

The Panel shall be composed of three (3) members who shall be chosen in the following manner: one member shall be appointed by the grievant, one member shall be appointed by the Executive Director and a third member shall be selected by the first two Panel members. To ensure an objective, impartial Panel, no persons having direct involvement with the grievance being heard by the Panel, or with the complaint or dispute giving rise to the grievance, shall serve on the Panel. Managers who are in a direct line of supervision of a grievant, persons residing in the same household as the grievant and the following relatives of a participant in the grievance process or a participant's spouse are prohibited from serving as panel members: spouse, parent, child, descendants of a child, sibling, niece, nephew and first cousin.

Both the grievant and the Executive Director shall make their appointments to the Panel within ten (10) days after the request for a panel hearing is filed. The Human Resources Manager shall be notified of the appointments on the Grievance Form Part B. The two panel members chosen by the grievant and Executive Director shall select the third panel member within ten (10) days after the request for a panel hearing is filed and shall notify the Human Resources Manager of their selection. Unless it is necessary to involve the Circuit Court in the selection of the third member, a complete panel shall be selected within ten (10) days after the request for a panel hearing is filed.

In all cases where the first two members cannot reach an agreement as to the third member within ten (10) days, the Human Resources Manager, after confirming such fact, shall immediately notify the Director of Administration who shall request the Chief Judge of the Circuit Court of Albemarle County to appoint the third member pursuant to the selection procedures outlined in paragraph one of this section. The Authority and grievant shall share equally in the costs and expenses, if any, of the third panel member.

The Authority, at its sole option, may use an administrative hearing officer in employee termination or retaliation cases. When the Authority elects to use an administrative hearing officer as the third panel member in an employee termination or retaliation case, the administrative hearing officer shall be appointed by the Executive Secretary of the Supreme Court. The appointment shall be made from the list of administrative hearing officers maintained by the Executive Secretary pursuant to Va. Code § 9-6.14:14.1. If the Authority elects to use an administrative hearing officer, it shall bear the expense of such officer's services.

In all cases, the third member shall serve as chairperson of the panel. The chairperson shall set the time for the hearing and notify the Human Resources Manager, who shall in turn notify the grievant and Executive Director. The grievant and the Executive Director shall each be responsible for arranging the presence of their respective witnesses. The hearing shall be held as soon as possible after the date of the original request for a hearing, allowing sufficient time for access to records as specified in paragraph six below. Either party may have an attorney or other representative of his choice present at the Panel hearing.

The Human Resources Manager shall provide the Panel with copies of the grievance record prior to the hearing and provide the grievant with a list of documents furnished to the Panel. At least ten (10) days prior to the hearing, the grievant and his attorney or other representative shall be allowed access to and copies of all relevant documents intended by the Authority to be used in the hearing. At least five (5) days prior to the hearing, the grievant and the Authority shall exchange lists of witnesses and exhibits to be called or introduced at the proceeding.

## **15. Conduct of Grievance Panel Hearing**

The Panel is constituted solely for the purpose of determining whether a grievance filed by an employee is substantiated and what remedy, if any, should be provided. The Panel may not formulate or change Authority policy, rules or procedures. The Panel shall determine whether the grievant has demonstrated, by a preponderance of the evidence, that the action complained of was without cause, or done in violation of a law, rule, regulation or other policy. The Panel shall not otherwise substitute its judgment for that of management.

The Panel shall conduct the hearing as follows:

- a. At the request of either party, the hearing shall be private and limited to the grievant, the Panel members, the legal counsel or other representative of the grievant and the Authority, appropriate witnesses as they testify, and any court reporters or other official recorders of the hearing. At the request of either party, witnesses shall be separated from the hearing room and allowed to be present only during the time that they actually testify.
- b. The Panel shall consider the grievance without regard to any proposed disposition (including offers of settlement) by any lower authority, unless the grievant and the Executive Director shall agree in writing that the issue(s) shall be so limited. In all other cases, the Panel shall consider the matter as if presented to it in the first instance.

The Panel may at any time ask the parties or their representatives for statements clarifying the issues involved in the grievance.

Exhibits, when offered by the grievant or the Authority, may be received as evidence by the Panel, and when so received shall be marked and made a part of the record.

Both parties shall have the right to make opening statements, starting with the grievant. After opening statements, the order of the hearing shall be as follows: the grievant shall proceed first and shall bear the ultimate burden of persuasion. At the conclusion of the grievant's evidence, the Authority shall have the opportunity to present its evidence. At the conclusion of the Authority's presentation, the Chairperson shall specifically inquire of all parties whether they have any further evidence to offer or witnesses to be heard. Upon receiving a negative response, the Chairperson shall permit the parties to summarize their cases (beginning with the grievant) and shall then declare the hearing closed.

Both parties have the right to offer evidence, cross-examine witnesses, and shall produce such additional evidence as the Panel deems necessary for understanding and ruling upon the dispute. There shall be no formal rules of evidence at the hearing; however, the Panel shall have the right

to determine the relevancy of any evidence offered. All evidence shall be taken in the presence of the Panel and the parties, except by mutual consent of the parties.

The hearing may be reopened by the Panel on its own motion or upon application of either party for good cause shown at any time before a final decision is made.

Upon the request of the Panel, the Authority or the grievant, the Human Resources Manager shall insure that a verbatim record of the hearing is made and retained in his/her custody for not less than 12 months. The record may be in writing or by a taped recording. The party requesting the record shall bear the costs of preparation and transcription, including any costs associated with attendance of a court reporter. If both the grievant and the Authority request such a record, they shall share equally in all costs incurred.

The Human Resources Manager or his/her designee may be called upon by the Panel or either party as a witness at any time to provide specific policy interpretation or clarification of applicable Authority policy and these procedures.

In any matters not covered by this section, the Panel shall determine the applicable procedures to be followed.

## **16. Decision of Grievance Panel Hearing**

The decision of the Panel shall be filed in writing by the Chairperson with the Executive Director and the grievant no later than thirty (30) days after the completion of the hearing. The decision shall summarize the grievance and the evidence, shall make specific findings of fact, and shall state in full the reasons for the decision, and the remedy (if any) to be granted. Decisions shall be made by majority vote of the entire Panel. The decision of the Panel shall be final and binding and shall be consistent with law and written policy.

The question of whether the relief granted by the Panel is consistent with written policy shall be determined by the Executive Director, or his designee, unless such person has a direct personal involvement with the event or events giving rise to the grievance, in which case the decision shall be made by the Commonwealth's Attorney of Albemarle County. The Executive Director or Commonwealth's Attorney shall request the Panel to reconsider any decision which in his judgment is inconsistent with the laws or written policy applicable to grievance resolution. He shall not disturb any decision consistent with the laws or written policy.

If the Panel determines that the grievant prevails on any grievable complaint or dispute, it may remedy that complaint or dispute by ordering that the grievant be reinstated to a former position; awarding back pay; or ordering expungement of information contained in the grievant's personnel file(s) maintained by the Authority Human Resources Department or individual department; or rendering opinions specifying the application or interpretation of Authority personnel policies and procedures as they may relate to the specific facts of the grievance. The grievant shall not, however, be entitled to any relief that he has not specifically requested in the original written grievance form, unless the parties have mutually agreed otherwise as to alternative relief.

If, in response to a grievable complaint or dispute, the Panel finds that a divisional director or other Authority official failed to follow established procedures governing promotion, demotion, transfer,



hiring or layoff, the Panel shall remand the grievance back to the divisional director or official with instructions that the actions taken be rescinded, and proper procedures be followed for the matter at issue. In connection with such remand, the Panel may make appropriate provisional orders concerning the case.

#### **17. Implementation of Grievance Panel Decision**

The Executive Director shall implement any remedy that may be ordered by the Panel, provided that such remedy is consistent with applicable law and Authority personnel policies. If the Executive Director determines that the Panel decision is not consistent with applicable law or Authority personnel policies, the following steps shall be taken:

- a. The Executive Director shall inform the Panel and the grievant of his determination within ten (10) days of his receipt of the Panel's written decision; and,
- b. The Executive Director shall not implement the decision of the Panel.

Either party may petition the Albemarle County Circuit Court for an order requiring implementation of the Panel decision. The review of the Circuit Court shall be limited to the question of whether the panel's decision is consistent with provisions of law and written policy.



## **I. Administrative Policies**

### **1. Conflict of Interest/Accepting Gifts**

All employees are expected to make business decisions that are in the best interest of the Authority and the customers it serves. Employees are prohibited from engaging in any private business or professional activity, or having a financial interest in such activity, which would be or appear to be in conflict with their public responsibilities. Any employees having official responsibility for procurement transactions will conduct themselves in a manner that avoids the appearance of impropriety or unlawful conflicts of interest.

An employee cannot accept money, loans, trips, gifts, gift cards, reward cards, favor, service, business or professional opportunity of any value that might influence them in the performance of their official duties, or when it is known there is a reasonable likelihood that the item is being offered to influence an Authority employee in the performance of their duties. Employees are responsible for avoiding any impropriety or the appearance of impropriety. If there is a question as to what is permissible, the final decision will be made by the Executive Director.

### **2. Service Awards**

This is a program that recognizes employees' years of work service. Awards are presented for service in five-year increments. All awards are presented annually in a mass setting.

Gift cards or cash are fully taxable under IRS regulations; all appropriate federal, state and other taxes will be withheld from the employee's next payroll.

### **3. De Minimis Fringe Benefits**

De minimis fringe benefits are defined by the Internal Revenue Service as any property or service given to an employee by the employer which, after taking into account the frequency provided, whose value is so small as to make accounting for it unreasonable or administratively impracticable. Any benefit, with the exception of cash or gift cards, with a value of under \$25 will be considered as a de minimis fringe benefit by the Authority and will not be subject to taxation. In accordance with Internal Revenue Service regulations, any cash or gift cards given to employees as awards or benefits will be subject to taxation.

### **4. Termination of Employment**

Any employee who voluntarily terminates their employment with the Authority is expected to give two-weeks' notice to their department manager. All Authority property, to include phones, uniforms and any other equipment supplied to the employee by the Authority, is to be returned prior to any employee's last day of employment. If the employee fails to return any Authority property, they will be expected to reimburse the Authority for the cost of the property through a payroll deduction from their last pay check.

## 5. Voluntary Early Retirement Incentive Program (VERIP)

### a. Eligibility

Participants in the VERIP must be regular full-time employees eligible for benefits and meet the following requirements:

- 1) Be eligible for early or full retirement under the provisions of the Virginia Retirement System (VRS). Part-time employees must meet the same criteria as if covered under VRS.
- 2) Have been employed by the Authority for 10 of the last 13 years prior to retirement and meet the VRS requirements.
- 3) Employees retiring under the disability provisions of VRS and/or Social Security shall not be eligible for the VERIP.

### b. Benefits

VERIP benefits shall be paid monthly for a period of five years after retirement or until age 65, whichever comes first.

Benefits under VERIP will be calculated as follows:

- 1) Compute the annual VRS benefit. This computation shall include any reductions for early VRS retirement if appropriate;
- 2) Recompute the annual VRS benefit with the addition of five more years of service or the number of additional years needed to reach age 65, whichever is the lesser;
- 3) The difference between these two calculations shall be the annual VERIP benefit to be paid on a monthly basis.

The Board will pay the employee the amount of the Board's contribution toward an individual employee's health insurance as long as the employee is covered by VERIP benefits. The benefit will be paid to the retiree on a monthly basis.

If the retiree returns to work in a part-time position with the Authority and chooses to participate in the Authority's health care program while receiving VERIP benefits, there will be no additional Board contribution towards the individual's health insurance.

### c. Application

Applications for VERIP must be made to the Executive Director prior to December 1st of the year preceding the fiscal year the VERIP takes effect. Applications received after December 1 may be approved based on the needs of the Authority.

### d. VERIP Contract

Any employee retiring under the VERIP program must read and sign a VERIP Contract. The contract is administered by the Human Resources Manager and it reviews all of the provisions and rules of the VERIP program, as well as information specific to the employee.

e. Administration

Administration of the VERIP policy is delegated by the Board of Directors to the Executive Director.

f. Duration

Once an employee has been approved for VERIP, the benefits will continue without interruption as outlined in this policy. Subsequent alternations or deletion of this policy shall not affect the benefits of those who have retired under these provisions.

This policy automatically continues unless the Board acts to discontinue the policy for another year.

## 6. Anti-Nepotism Policy

No administrator or any other person in a department manager position shall have under his or her direct supervision any employee whose relationship is that of father, mother, brother, sister, spouse, son, daughter, son in law or daughter in law, aunt, uncle, or same relative of spouse and any other relatives or individuals residing with the employee. In the event of a promotion which brings about the conditions thus described, the employee of lower rank shall be transferred to another position for which he or she is qualified when and if such a vacancy occurs.

## 7. Inclement Weather Policy

The objective of this policy is to establish procedures and guidelines for all Authority employees concerning the potential closings or delays in opening Authority facilities.

a. Roles and Responsibilities

- 1) The Executive Director will be responsible for determining whether a delayed opening or closing of some or all of the Authority facilities is necessary due to inclement weather.
- 2) Essential employees will be expected to report to work regardless of the weather. It is the department manager's responsibility to ensure their employees know whether they are considered essential employees. Essential employees are employees who are designated to work, even when offices are closed, because they work in operations that provide services to the community around the clock.
- 3) Notice of delayed opening or closing may be announced via local radio and local television announcements for the public. The number that non-essential employees should call to ascertain weather-related instructions is (434) 977-2970, ext. 333.

b. Use of Leave during Inclement Weather Incidents

- 1) Employees will not be required to make up time missed due to weather-related delayed openings or early closings that have been authorized by the Executive Director.
- 2) Employees will not be required to make up lost time if offices are authorized to be closed for the entire day by the Executive Director.

- 3) Employees who are delayed due to weather conditions on days when the offices are opened at the regular time or who need to leave early due to weather-related concerns when the facility remains open until its normal closing time will be expected to account for time missed within the same workweek or use annual leave time to account for the time missed.

## **8. Personal Use of Authority Vehicles**

Personal use of Authority vehicles is not permitted. Employees who use vehicles for personal errands or chores not incidental to work assignments are subject to disciplinary action.

## **9. Technology System Acceptable Use Policy**

All employees will have access to the Authority's Technology System, which can include computers, printers, phones, cell phones, networks, software, internet access, email, voicemail, radios, Supervisory Control and Data Acquisition systems for industrial process control and any other technology used by the Authority. The following policies apply to all employees of the Authority:

- a. All employees are expected to follow the Technology System Acceptable Use Policy.
- b. All employees will receive a copy of this policy during their new hire orientation and will sign an acknowledgement of receipt of this policy at that time.
- c. All employees will maintain their secure passwords to the Technology System, and they will keep them confidential.
- d. Use of these systems by any employee implicitly consents to the Authority's right to monitor their activity on the systems.
- e. All employees using these systems to communicate are acting as representatives of the Authority.
- f. All information/communications must be retained as required to comply with the Library of Virginia Records Retention and Disposition Guidelines.
- g. No electronic communication is assured to be confidential. Sensitive and/or confidential information should not be sent electronically unless it is encrypted.

Further details as related to the Technology System Acceptable Use Policy can be found in the policy document (see Section M., "Forms and Attachments"). Any violation of this policy can result in disciplinary action, up to and including termination of employment.

## **10. Effect of Criminal Conviction or Arrest**

It is the policy of the Board not to employ or to continue the employment of personnel who may be deemed unsuited for service by reason of arrest and/or criminal conviction. Individuals applying for employment with the Authority for any position shall be required to disclose prior convictions of law other than minor traffic violations or juvenile offenses. Information provided by applicants may be certified by work history, personal reference or criminal record inquiries to determine the applicant's acceptability for employment. In the case of a prior criminal conviction, the Authority will consider the nature of the offense, the date of the offense, and the relationship between the

offense and the position for which application is sought. If an applicant makes any misrepresentation or willful omissions of fact regarding prior criminal history, such misrepresentation or omission shall be sufficient cause for disqualification of the applicant or termination of employment.

Any employee who is arrested for a criminal violation of any kind, whether misdemeanor or felony, is required to report such arrest promptly to their department manager or divisional director within one (1) business day unless mitigating circumstances exist. This reporting requirement applies regardless of whether such arrest has occurred on-duty or off-duty. Failure to comply with this reporting requirement shall be grounds for disciplinary action, up to and including dismissal. In addition, all employees shall have the continuing duty to notify the Authority of any arrest or criminal conviction that occurs subsequent to being hired by the Authority.

Department managers or divisional directors shall contact the Executive Director or designee upon receiving notification that an employee has been arrested. The Authority reserves the right to determine appropriate disciplinary action in such cases, up to and including dismissal, depending upon the facts and circumstances surrounding the arrest.

## **11. Fitness for Duty**

All job descriptions will clearly state the minimum physical and emotional health requirements of the particular job. Employees are responsible for familiarizing themselves with these requirements.

All new employees are required to have a fit for duty medical examination within two days of signing their job offer and prior to their first day of work. The results must be received by the Human Resources Manager before the employee begins working.

Results of the fitness for duty examination will be shared with the employee. If the fitness for duty examination indicates that the employee requires some treatment prior to resuming their employment responsibilities, the employee is responsible for obtaining treatment sufficient to qualify as again fit for duty before returning to work. The employee may use leave authorized by this policy during the period of absence to the extent leave is available. If the Authority physician or the EAP counselor indicates that the employee is not fit for duty on a permanent basis, the employee may also have benefits such as retirement disability.

If the fitness for duty examination indicates that the employee could perform their responsibilities with some reasonable accommodation to the job, the Executive Director will determine whether or not such modifications to the job can be made.

When employees return to work after hospitalization or prolonged absence for health reasons, a doctor's release to return to duty is required. Should circumstances dictate, the Executive Director may require that the employee be examined by the Authority physician prior to allowing the employee to return to duty.

## **12. ID Badges**

As a vital part of the Authority's security system, an identification badge with the employee's name, photo and department will be issued to employees on their first day of employment. All employees

are required to carry an ID badge during their shift or while conducting any Authority business on or off premises. All employees are required to produce said ID badge when requested.

If an identification badge is lost or stolen, the employee must obtain a replacement. A fee of \$5.00 will be assessed for all replacement badges. Lost or stolen cards should be reported to the department manager as soon as possible. Failure to be able to display or produce your ID badge when requested or excessive loss or damage to cards can lead to disciplinary action.

Upon termination, employees will be required to return ID badges to the Human Resources Department.

### **13. Dress Code/Personal Hygiene**

All employees are expected to dress neat and professionally based on the needs of their position.

- a. Uniforms are provided to certain departments. Employees in those departments are expected to wear their uniforms. Uniforms are to be returned to the Authority upon termination of employment.
- b. Any Personal Protective Equipment required in a certain location or work environment must be worn.

### **14. Safety Shoe Program**

The Authority will provide all employees required to wear steel toed shoes with \$125 per fiscal year (July 1 – June 30) towards the purchase of their shoes. An employee may carry over up to \$250 by not using their annual voucher.

### **15. Prescription Safety Glasses Program**

The Authority will provide all employees required to wear prescription safety glasses a voucher for \$250 for the purchase of those glasses. This program is administered by the Safety Manager.

### **16. Social Media Policy**

The primary online presence for the Authority will be the Authority's website. If it is deemed necessary to establish an additional online presence via social media, the Communications Manager will be responsible for maintaining that presence. This policy will be further amended at that time.

### **17. Smoking/Vaping**

Smoking and vaping are not permitted in any Authority building or vehicle. Additionally, employees are not permitted to smoke or vape at building entrances. Smoking and vaping will be permitted in designated areas and employees are expected to dispose of cigarette butts in the appropriate receptacles.

### **18. Transferring Between Authority**

Employees may apply for open positions in the other Authority. If an employee transfers to the other Authority, they will maintain their years of service with the Authority. At the time of transfer,

all annual and sick leave balances will be transferred to that Authority with no loss of accrued time. The employee will continue to accrue leave time based on their combined years of service.

DRAFT - BOD Review

## J. Employee Training, Development and Educational Assistance Program

### 1. Policy

The Authority promotes professional excellence and encourages employees to achieve their highest potential through education, training, and mentoring. The Authority encourages employees to use developmental opportunities to enhance their career progression, develop fully in their current position, and/or prepare for and become eligible to seek promotional opportunities within the organization. Training and education are separated into three categories: Essential Training, Advanced Development Training and Degree Programs.

### 2. Definitions

Advanced Development Training: Voluntary training and education that will assist the employee in their pursuit towards an advanced skill or licensing level.

Degree Program: Training and education that will result in credit or credit hours towards a college degree.

Essential Training: All training that is determined by the employee's department manager or divisional director to be necessary to perform duties of the employee's current position.

Financial Assistance: Financial assistance offered and paid for by the Authority, available to an employee participating in approved Advanced Development Training and Degree Programs.

Work Schedule: An employee's assigned hours to work as required by their position.

### 3. Employee Eligibility

Employees who have been employed for six months or less, are eligible to apply for Essential Training but are not eligible to participate in Advanced Development Training or Degree Programs. Employees who have been employed for more than six months are eligible to apply for Essential Training, Advanced Development Training and Degree Programs.

### 4. Essential Training

- a. All training and education that is determined by the department manager and/or the divisional director as necessary to perform the duties of the employee's current position to include:
  - 1) Training and education necessary to maintain and/or improve the employee's knowledge, skills and ability to perform the required job tasks;
  - 2) Training and education mandated by law; and
  - 3) Training and education necessary to keep up with technological or process changes.
- b. Types of Essential Training includes:
  - 1) Authority sponsored in-house training;
  - 2) Off-site training;



- 3) Seminars or conferences; and
- 4) Webinars.
- c. Textbooks or study materials purchased for Essential Training may be:
  - 1) Prepaid and purchased by the Authority; or
  - 2) Prepaid and purchased by the employee, who will then be reimbursed by the Authority.
- d. Registration or Enrollment Fees will be:
  - 1) Paid for in advance by the Authority if possible; or
  - 2) Paid for by the employee and be reimbursed.
- e. Expense Reimbursement

Expenses paid by the employee related to the approved Essential Training are reimbursable. Request for reimbursement must be submitted to the Authority within 60 days after the expenses were incurred. Request for reimbursement must be clear, concise, itemized and include original receipts.

## **5. Advanced Development Training**

- a. All training and education that will assist the employee in their pursuit towards an advanced skill or licensing level as well as enhancing the employee's contribution to the Authority.
- b. Types of Advanced Development Training includes but is not limited to:
  - 1) Authority pre-approved training and education programs for operator correspondence courses (Sacramento); and
  - 2) Authority pre-approved mechanic training programs.
- c. Textbooks and/or study materials purchased for Advanced Development Training may be:
  - 1) Prepaid and purchased by the Authority; or
  - 2) Prepaid and purchased by the employee.
- d. Registration or Enrollment Fees will be:
  - 1) Paid for in advance by the Authority if possible; or
  - 2) Paid for by the employee and to reimbursed.
- e. Expense Reimbursement

Expenses paid by the employee related to the approved Advanced Development Training are reimbursable. Request for reimbursement must be submitted to the Authority within 60 days after the expenses were incurred. Request for reimbursement must be clear, concise, itemized and include original receipts.

## 6. Degree Program

- a. All training and education that will result in the earning of credit or credit hours towards a college degree and will enhance the employee's contribution to the Authority.
  - 1) A Degree Program is not required to maintain the employee's current position.
  - 2) A Degree Program must be directly related to the employee's current position.
- b. Registration, enrollment, tuition, textbooks and study materials must be paid for by the employee.
- c. Financial Assistance & Reimbursement Requirements

The Authority offers financial assistance to those employees participating in an approved Degree Program. Through the financial assistance program, employees may request reimbursement for expenses related to an approved Degree Program to include registration/enrollment/tuition fees, textbooks, study materials or other degree related expenses.

- 1) All reimbursements are conditional upon the approval of the Authority's annual budget;
  - 2) The Authority will reimburse up to a maximum of \$5,250 per fiscal year (July 1 through June 30) for eligible educational expenses paid for by the employee.
  - 3) Reimbursements that exceed the maximum of \$5,250 per fiscal year will be held and reimbursed in upcoming fiscal years until all expenses have been reimbursed.
- d. Employee Requirements for Education Reimbursement
  - 1) The employee's Degree Program and request for financial assistance must be pre-approved by the employee's department manager and divisional director;
  - 2) The employee must complete all course requirements within the prescribed timeframe;
  - 3) The employee must receive a passing grade of a C or higher for all undergraduate or business courses;
  - 4) The employee must receive a passing grade of a B or higher for all graduate college courses;
  - 5) The employee must submit an official grade transcript within 30 days of course completion;
  - 6) The employee must remain employed by the Authority; and
  - 7) In the event of voluntarily separation of employment the employee shall be required to repay all received reimbursed expenses from the prior 12-month period.

e. **Tax Liability for Tuition Reimbursements**

In some circumstances, education aid or reimbursement may be considered taxable income under the IRS regulations. Generally, educational assistance for job-related courses is not counted as taxable income. If an employee receives more than the annual IRS maximum allowable amount for educational assistance, the amount exceeding the IRS maximum will be subject to payroll taxes.

**7. Pre-Approval**

All employee requests for training, regardless of type, must be pre-approved by the employee's department manager or divisional director before registration.

**8. Work Schedule Adjustment**

Provided it is in the best interest of both the employee and the Authority, an adjusted work schedule may be approved if the Essential Training or Advanced Development Training is not allowed to be conducted during the normal work schedule hours. All requests will be approved on a case by case basis and must occur before training registration. Adjusted work schedules will not be granted for Degree Programs.

**9. Authority Responsibilities**

- a. Provide for the training and education necessary for employees to obtain or renew required certificates and licenses necessary for the position.
- b. Provide for the training and education necessary to keep up with changing work requirements.
- c. Provide for the training and education which is mandated by law.
- d. Provide timely payment and/or reimbursement upon receipt of all required expense reimbursement requests and transcripts if applicable.
- e. Register employees for training and education provided employee gives ample time to process. See employee's responsibilities below.

**10. Employee Responsibilities**

- a. Must submit a completed training request form to the department manager in enough time to process request.
- b. Complete all registration forms and if necessary, register in person at the training site.
- c. Complete all the required applications related to examinations.
- d. Employees seeking assistance from the Administration Office with registration, fees, travel and/or lodging arrangements must be made 30 days prior to travel and/or registration date.
- e. Must provide proof of successful completion.

- f. Expense Reimbursement Requests for reimbursement must be submitted to the Authority within 60 days after the expenses were incurred. Reimbursement requests must be clear, concise, itemized and include original receipts.

#### **11. Human Resources Responsibilities**

The Human Resources Manager or designee will maintain records of training, education and related requirements.

#### **12. Department Manager Responsibilities**

- a. The department manager will promptly review all employee requests for training and consistently apply the rules relating to this policy.
- b. The department manager will monitor the employee's progress.
- c. The department manager will develop an annual training and education needs assessment and request funds need in the department budget.

#### **13. Divisional Director Responsibilities**

The divisional director will ensure the rules of this policy are consistently applied.

## K. Travel Policy

### 1. Policy

This policy establishes guidelines for the approval and reimbursement of travel related expenses. The Authority will reimburse employees traveling on official Authority business for reasonable and necessary expenses incurred. It is the policy of the Authority to limit travel costs to expenses that are necessary for providing essential services to its customers. The use of Authority funds to accommodate personal comfort and convenience is not permitted. Travelers and travel planners must seek ways to reduce the cost of travel.

### 2. Travel Reimbursement Requirements

#### a. Travel Request

All travel outside of the Authority's service area (Charlottesville or Albemarle County) requiring reimbursable travel expenses must be approved in advance by the employee's department manager or divisional director. The employee traveling must complete a Travel Request Form. (Please note – if travel expenses are related to properly approved training, education or conference attendance, then the appropriate form for that approval will suffice for approval of related travel request. This is for the form approval only and all policies herein apply.) Each Travel Request Form should detail anticipated or estimated expenses for the trip. The USGSA can be used to estimate travel costs.

The Authority has a policy of reimbursement for reasonable costs actually incurred to exempt such payments to employees from federal and state taxation. When an employee is seeking reimbursement of expenses incurred during a trip, they should complete an Expense Reimbursement Form, and have it approved by their department manager. An approved Travel Request Form should be attached to all Expense Reimbursement Forms that include overnight trips.

#### b. Reservations

Whenever possible, travel reservations should be made in advance through the Administration department. This would include airline tickets, hotel reservations, conference fees and any other travel cost that can be paid in advance.

Itemized receipts must be provided for all reimbursed travel. Any travel costs submitted without an itemized receipt will not be reimbursed, to include meals. An Expense Reimbursement Form should be completed with all receipts attached.

#### c. Expense Submittal

- 1) An Expense Reimbursement Form must be submitted to an employee's department manager within 14 days of the completion of the trip. The following expenses are reimbursable for overnight stays:

- a) Mileage
  - b) Transportation (airfare, rail, bus, rental car, taxi)
  - c) Tolls and Parking
  - d) Lodging
  - e) Meals
  - f) Registration Fees (conferences)
- 2) The following expenses are not reimbursable:
- a) Lost or stolen property
  - b) Alcoholic beverages
  - c) Damages to personal items
  - d) Movies charged to hotel bill
  - e) All expenses related to personal negligence such as fines
  - f) Entertainment expenses
  - g) Towing charges
  - h) Expenses for children, spouses or other companions while traveling
  - i) Travel insurance

This list is not all inclusive and traveler should use prudent judgement regarding travel expenses. Department managers have a responsibility to question any costs that seem to be unreasonable and deny any costs that are unreasonable or undocumented.

### **3. Authority Vehicles**

Employees are encouraged to use Authority vehicles for business travel whenever possible. Vehicles can be reserved in advanced and can be used for overnight travel. All Authority vehicles must be signed out by the employee who is driving the vehicle. Authority vehicles must be returned immediately when the employee returns from a trip.

Employees who have take-home Authority vehicles should use those vehicles for all business travel.

Authority vehicles should not be used for any personal travel unless approved by the Executive Director or the Divisional Director.

### **4. Mileage**

When traveling outside the service area, employees are permitted to use their personally owned vehicle when an Authority owned vehicle is not available, or when the use of a personally owned vehicle is cost-beneficial to the Authority. Employees electing to use their personal vehicle as a matter of convenience will not be reimbursed for mileage unless approved by their department manager.

Mileage will be reimbursed (when traveling outside of the service area) at the current same rate as the Federal IRS published rate for business travel deduction.

Round trip mileage for reimbursement purposes will be total miles traveled to and from the destination from the employee's home or Administration Office location, whichever is shorter. (i.e any normal commuting costs are not reimbursable.)

## **5. Transportation**

### **a. Air Travel**

- 1) Any air travel booked should be at economy airfare unless approved by the Executive Director or if the difference between the airfare purchased and economy airfare is paid for by the employee.
- 2) All flight reservations must be made by the Administration department.
- 3) Any baggage fees incurred will be reimbursed for a checked bag. Any baggage fees that are incurred due to a bag being over the air carriers weight limits or multiple bags checked must have a legitimate business reason or they will not be reimbursed.
- 4) Any change fees incurred due to flight changes made by the employee must have a legitimate business reason or they will not be reimbursed.

### **b. Other Transportation**

Other forms of transportation can be used for business travel is permissible if the reduction in cost is beneficial to the Authority.

### **c. Rental Cars**

- 1) Employees traveling to attend conferences should book the hotel where the conference is being held or a hotel within walking distance whenever possible.
- 2) All rental car reservations will be made through the Administration department.
- 3) Any fees, other than basic car rental expenses will not be reimbursed.

## **6. Lodging**

- a. Reimbursement for lodging will include hotel nightly rate and any hotel taxes, fees or surcharges. Any other charges will not be reimbursed unless approved by the employee's department manager and/or divisional director. An itemized hotel bill must be provided.
- b. If travel plans change and a hotel reservation needs to be cancelled, it is the responsibility of the employee to notify either the Administration department so that the reservation can be cancelled or to cancel it themselves so as to not incur a cancellation charge.

## **7. Meals and Incidentals**

- a. The employee must provide itemized receipts in order to be reimbursed for meals and incidentals.
- b. Employees will be reimbursed for tips up to 15% on meals.

- c. Any meal or incidental expenses deemed excessive will not be reimbursed. The Authority will use the U.S. GSA per diem as a guideline when appropriate.

## **8. Compensation While Traveling, Overnight Travel**

- a. Overnight travel is travel away from home community, as defined by the FLSA and the Code of Virginia.
- b. An employee will be compensated for travel away from home when it clearly cuts across the employee's normal workday or the hours that correspond to an employee's normal work hours on nonworking days.
- c. An employee will be compensated for any hours spent in a class or training that was mandated by a department manager or divisional director.
- d. An employee will be compensated for time spent driving other employees to a location in an Authority vehicle if the employee was directed to do so by a department manager or divisional director.
- e. If an employee is offered transportation (air, rail, etc.) for travel away from home and chooses to use his/her own vehicle, either the time spent driving their own vehicle or the time it would have taken to use the offered transportation will be compensated if the time clearly cuts across the employee's normal workday.

## **9. Travel Advances**

Cash advance for travel should be avoided; however, occasionally there is a need for an employee to estimate the costs of travel and obtain a cash advance. Once a cash advance has been approved (request must be made 30 days in advance of need) the employee is responsible for handing in all receipts to document the costs incurred like any other travel event. If the cash advance was more than the documented receipts, the employee will be required to pay the difference to the Authority. If, however, there were more costs (documented by receipts turned in) than the cash advance, the Authority will pay the employee the difference.

Then all the rules for submitting the documentation of costs will apply per 4 above. Any excess the employee will have to reimburse the Authority any shortage the Authority will pay the employee.



## L. Substance Abuse Policy

The goal of the Rivanna Solid Waste Authority and the Rivanna Water & Sewer Authority, collectively the “Authority”, through this policy is to establish and maintain a safe and healthy workplace that is free from alcohol abuse and illegal drug use for its employees and to protect the safety of its customers by providing the highest quality service.

This policy contains all the Authority’s policies relating to substance abuse as it affects the workplace.

This policy is separated into and will be detailed into the following sections:

Section I - General Policy, Provisions and Definitions

Section II - Federal Highway Administration (FHWA) Coverage—Commercial Driver’s License (CDL)

Section III - All Other Authority Coverage—Non-CDL

Section IV – Appendixes

## Section I: General Policy, Provisions and Definitions

### 1. Policy

This policy establishes guidelines and procedures for the detection of on the job alcohol use and illegal drug use within the workplace. All Authority employees shall be responsible for reporting any evidence of illegal drug use or the use of alcohol in the workplace by any co-worker or supervisor. All such reports shall be thoroughly investigated and reported to the Executive Director or designee and appropriate action will be taken as necessary. The Authority's Executive Director, or his/her designee, shall be the person responsible for the administration, evaluation, and oversight of the Substance Abuse Policy and all its components.

For purposes of this policy, "illegal drugs" shall mean any controlled substance, or imitation controlled substance, whose unauthorized manufacture, distribution, dispensing, possession, consumption, use, or sale is prohibited by federal or state law. "Unauthorized use of prescription drugs" means use of a drug by anyone other than the person for whom the drug was prescribed, or in any manner that is prohibited by federal or state laws.

The Authority will not tolerate any violation of the law and, in accordance with the law, will fully support any employee who, in good faith and with probable cause acts to report the activities of other employees as they relate to the use of alcohol or drugs on Authority property. Any Authority employee determined to have violated this policy will be subject to disciplinary action up to and including dismissal.

In the event of conflict between federal or state law and the policy stated herein, federal and/or state law shall prevail.

### 2. Employee Rules of Conduct

All employees are expected to adhere to the following guidelines as a condition of their employment with the Authority, and any violation of this policy may subject the employee to discipline, up to and including dismissal from employment and can include a first offense.

- a. The manufacture, distribution, dispensing, possession, consumption, use, transportation, or sale of illegal drugs at anytime and anywhere on the Authority property, at an Authority sponsored function or event, or in any other manner while performing duties or obligations related to the Authority employment, is strictly prohibited.
- b. No employee shall report to work, perform assigned duties, or otherwise engage in the Authority's business, with detectable amounts of alcohol, illegal drugs, unauthorized prescription drugs, or illegal drug metabolites in his or her system. Whether the employee has alcohol, illegal drugs, unauthorized prescription drugs, or illegal drug metabolites in his or her system shall be determined in accordance with medically established standards for detectable amounts of these substances. The only limited exception to the foregoing pertains to employees who are not on an official on-call roster and who are called in to work outside their normal duty hours to perform emergency or unscheduled work. No such employee will be disciplined for off duty consumption of alcohol that results in reporting to duty with alcohol in his or her system so long as the employee first reports that

consumption of alcohol to the supervisor making the work request prior to the commencement of any work activity, and such consumption does not impair the employee's ability to safely perform his/her job functions.

- c. Employee must submit to substance detection testing (alcohol and drug tests) when requested to do so by management pursuant to this policy.
- d. Employee must provide within one day (24 hours) of request evidence of a current valid prescription for any drug found to be in his/her possession or identified in a positive drug screen analysis. Failure to provide a valid prescription shall give rise to a presumption that the employee did not legally possess or use the drug.
- e. Employee must notify the employer of any criminal drug or alcohol charge or conviction no later than five (5) days after such charge or conviction. Failure to notify the Authority of such charge or conviction is grounds for dismissal.
- f. Employees must notify his/her supervisor of any suspension, revocation, or other loss of driver's license privileges within one (1) work day (24 hours) of the event, provided the employee must drive an Authority vehicle as part of their job duties. This notice to Supervisor shall also precede any use of a motor vehicle for Authority business after the time the employee becomes aware of the lost license privilege.

### 3. Selection Process

- a. All employees are subject to unannounced testing based on random selection.
- b. The random selection procedure will be a computer-based number generator and conducted by the Medical Review Officer (MRO) facility.
- c. The Authority will maintain two separate random drug testing pools. "Covered positions" include both Commercial Driver's License (CDL) positions and Non-Commercial Driver's License (Non-CDL) positions from which selection will take place. The Non-CDL pool selection will be 10% for the first twelve months after the adoption of this policy, and will remain 10% in subsequent years unless the Executive Director determines on a year-to-year basis that the percentage needs to be increased, not to exceed 25% without Board of Directors' approval, on the basis of statistics showing increased number of positive Non-CDL alcohol or drug tests in the preceding year. The CDL pool selection will be based on the requirements from the United States Department of Transportation.
- d. Within every twelve (12) month calendar period, the Authority shall randomly test from each pool. An employee may be randomly picked more than once or not picked at all during a twelve-month period.
- e. An employee shall only be tested for alcohol while the employee is performing, just before the employee is to perform, or just after the employee has performed their work tasks. It is the Authority's position that covered employees are expected to perform their work functions any time that they are on duty or on paid on-call to report to duty.

#### 4. Leave During Testing

The following provisions will apply when persons are waiting to be tested for alcohol or drugs and when employees refuse tests:

- a. If an employee refuses to take a test, he shall be deemed “not qualified” for duty. Employees deemed “not qualified” for duty as a result of refusal to take their test, in addition to any disciplinary action, shall have their time charged as unauthorized absence without pay.
- b. When employees are sent to be tested, awaiting tests to be conducted by the medical provider, he/she shall remain in pay status and no leave time is charged, unless there is an unrelated reason for the Authority to suspend pay or charge leave time.
- c. Employees who are awaiting the results of a substance detection test shall have time away from the job handled on a case-by-case basis giving consideration to the total circumstance.

#### 5. Physical Searches

- a. Supervisors may not physically search employees or employee personal property under any circumstances.
- b. Supervisors may search without employee consent, all areas and property in which the Authority maintains either joint control with the employee or full control. All Authority vehicles, equipment and Authority owned property are subject to full search without the employee’s consent.
- c. If illegal drugs are found in an employee’s possession or in any area under their control, the police will be immediately summoned, and the drugs will not be touched, moved, or confiscated by the supervisor. All reasonable efforts short of physical force shall be used to prevent the employee from disposing of the drugs before the police arrive.

#### 6. Disciplinary Actions

All employees, who engage in any of the following conduct, will be subject to disciplinary action up to and including dismissal in accordance with due process:

- a. Violate any of the foregoing rules regarding manufacturing, distributing, dispensing, possessing, consuming, using, or selling drugs or alcohol;
- b. Have drugs or alcohol in their systems in violation of this policy;
- c. Refuse to submit to or cooperate with drug and/or alcohol testing which includes, but is not limited to:
  - 1) tampering with or attempting to adulterate the specimen or collection procedure;
  - 2) not reporting directly and immediately to the collection site;
  - 3) not accurately signing in and reporting the arrival and departure times at the test site; and

- 4) leaving the scene of an accident without a valid reason before the tests have been concluded;
- d. Fail to report their consumption of over-the-counter or prescribed medication(s) that could impair their ability to perform their duties safely; or
- e. Fail to report any drug or alcohol conviction or charge as required by this policy.

This policy shall be administered consistently with the Authority's obligations under federal, state and local laws and regulations. Recommendations for disciplinary actions, including dismissal for violation of this policy, will be consistent with standard operating procedures to ensure that due process is observed throughout all proceedings. Disciplinary actions affecting employment status shall be reviewed by the Executive Director or designee, before a final decision with respect to continued employment status or disciplinary actions is reached. An employee who is charged with a drug-related felony or convicted of any criminal offense shall notify his or her immediate supervisor who shall report the information to the Human Resources Manager within five (5) days of the charge or arrest or prior to reporting for duty, whichever is earlier.

## **7. Multi-Function Position (CDL and Non-CDL employees)**

Employees may be responsible for performing different functions (i.e. job duties which are covered under both CDL and Non-CDL provisions). When these cases arise, the following rules generally apply:

- a. Federal Highway Administration (FHWA) provisions which apply to post-accident testing under the CDL licensing requirement and the Authority provisions which apply to post-accident testing for Non-CDL employees are the same. Therefore, all employees are subject to same set of testing guidelines regardless of class vehicle the employee may be driving (i.e. commercial motor vehicle or other licensed or unlicensed vehicles).
- b. Employees who perform duties requiring a CDL license shall be placed in the CDL pool for random selection testing and only those CDL employees are subject to all of the pre-employment requirements of the federal agency rules.

## **8. Severability**

If any part of this policy is held to be unconstitutional, illegal, or otherwise unenforceable, that part shall be deemed severable and the hold shall not affect the validity and enforceability of the remaining parts.

## **9. Definitions**

**Accident - CDL (FHWA):** an incident involving a commercial motor vehicle in which there is either:

- a fatality; or
- the employee driver receives (or is expected to receive) a citation under state or local law for a moving violation arising from the accident which also includes at least one of the following:
  - o bodily injury to any person who immediately receives medical treatment away from the scene; and/or

- one or more motor vehicles incur damage requiring the vehicle(s) to be towed away from the scene.

**Accident - Non-CDL:** an incident involving a state licensed or unlicensed vehicle in which there is either:

- a fatality; or
- the employee driver receives (or is expected to receive) a citation under state or local law for a moving violation arising from the accident which also includes at least one of the following:
  - bodily injury to any person who immediately receives medical treatment away from the scene; and/or
  - one or more motor vehicles incur damage requiring the vehicle(s) to be towed away from the scene.

**Air Blank:** a reading by an evidential breath testing device (EBT) of ambient air containing no alcohol.

**Alcohol:** the intoxicating agent in beverage alcohol, ethyl alcohol or other low molecular weight alcohol including methyl or isopropyl alcohol.

**Alcohol Concentration:** the alcohol in a volume of breath expressed in terms of grams of alcohol per 210 liters of breath as indicated by an evidential breath test conducted under Federal regulations.

**Alcohol Misuse Prevention Plan (AMPP):** the portion of the Authority's Substance Abuse Policy that outlines the employer's policy on alcohol misuse in the workplace.

**Alcohol Program Manager (APM):** the person designated by the Authority who is primarily responsible for the administration of the AMPP as it relates to the Substance Abuse Policy.

**Alcohol Use:** the consumption of any beverage, mixture, or preparation, including any medication, containing alcohol.

**Anti-Drug Plan (ADP):** Anti-Drug Plan portion of the Authority's Substance Abuse Policy.

**Authority:** shall mean Rivanna Water & Sewer Authority and/or Rivanna Solid Waste Authority.

**Breath Alcohol Technician (BAT):** an individual who instructs and assists individuals in the alcohol testing process and operates an evidential breath testing device (EBT).

**Code of Federal Regulations (CFR):** the United States Code of Federal Regulations.

**Canceled Test:** a drug or alcohol test that has a problem identified by a Medical Review Officer that cannot be or has not been corrected, or which this part otherwise required to be canceled. A canceled test is neither a positive nor a negative test. A sample that has been rejected for testing by a laboratory is treated the same as a canceled test.

**Chain of Custody:** the procedure used to document the handling of the urine specimen from the time the employee gives the specimen to the collector until the specimen is destroyed. This procedure uses the Federal Drug Testing Custody and Control Form (CCF).

**Collection Container:** a container into which the employee urinates to provide the specimen for a drug test.

**Collection Site:** a place selected by the employer where employees present themselves for the purpose of providing a urine specimen for a drug test.

**Collector:** a person who instructs and assists employees at a collection site, who receives and makes an initial inspection of the specimen provided by those employees, and who initiates and completes the CCF.

**Commercial Driver's License (CDL):** a license issued by a government agency that allows an individual to operator a commercial motor vehicle.

**Commercial Motor Vehicle (CMV):** a motor vehicle or combination of motor vehicles used in commerce to transport passengers or property if the motor vehicle: (1) has a gross combination weight rating of 26,001 or more pounds inclusive of a towed unit with a gross vehicle weight rating of more than 10,000 pounds; (2) has a gross vehicle weight rating of 26,001 or more pounds; (3) is designed to transport 16 or more passengers, including the driver; or, (4) is of any size and is used in the transportation of hazardous materials requiring placards. This includes all qualifying vehicles in all departments.

**Confirmation Test:** a second alcohol test, following a screening test with a result of 0.02 or greater that provides quantitative data of alcohol concentration. For controlled substances, confirmation testing means a second analytical procedure to identify and quantify the presence of a specific drug or metabolite and reviewed by the Medical Review Officer.

**Confirmed Drug Test:** a confirmation test result.

**Consortium/Third-party Administrator (C/TPA):** a service agent that provides or coordinates the provision of a variety of drug and alcohol testing services to employers.

**Controlled Substance:** shall mean the same as "drug" unless another meaning is clear from context and shall include marijuana, cocaine, opiates, phencyclidine (PCP), and amphetamines.

**Covered Employee:** any full-time, part-time or temporary employee to include both CDL and Non-CDL positions.

**Designee:** an agency, firm, individual, or other party contacted by the Authority to provide services under this program.

**Department of Health and Human Services (DHHS):** United States Department of Health and Human Services.

**Director, Staff:** Executive Director, Director of Finance and Administration, Director of Operations (RWSA only), Director of Maintenance and Engineering (RWSA only), Director of Solid Waste (RWSA only).

**DOT Agency:** in agency of the United States Department of Transportation administering regulations related to drug or alcohol testing. The Federal Highway Administration and Federal Transit Administration are DOT agencies.

**Driver:** an employee who operates a motor vehicle owned by the Authority.

**Driver-CDL:** any employee who operates a commercial motor vehicle (CMV) requiring a commercial driver license (CDL) or is in a position which requires a CDL as an eligibility criterion because they must drive or be on-call and ready to drive if necessary. This includes full-time, part-time, and temporary personnel. In every position requiring a CDL, the employee is either driving or in a state of readiness on call if required to drive. Drivers are subject to drug and alcohol testing under federal and Authority policy. For purposes of pre-employment/pre-duty testing only, the term “driver” includes a person applying to the Authority to drive a commercial motor vehicle.

**Drug:** shall mean the same as “controlled substance” unless another meaning is clear from the context and shall include marijuana, cocaine, opiates, phencyclidine (PCP), and amphetamines. Additionally, the use of any substance for the purpose of achieving a drug-like effect will fall under the prohibition against drugs.

**Drug Metabolite:** the specific substance produced when the human body metabolizes a given drug as it passes through the body and is excreted in the urine.

**Drug Program Designee (DPD):** the person designated by the Authority who is primarily responsible for the administration of the ADP as it relates to the Substance Abuse Policy.

**Drug Test:** the laboratory analysis of urine specimen collected in accordance with 49 CFR part 40 and analyzed in a DHHS approved laboratory.

**Employee Assistance Program (EAP):** a program provided to assist employees in dealing with drug or alcohol dependency and other personal problems. Rehabilitation and reentry to the work force are usually arranged through an EAP.

**Evidential Breath Testing Device (EBT):** an EBT approved by the National Highway Traffic Safety Administration (NHTSA) for evidential testing of breath and placed on NHTSA's conforming products list of evidential breath measurement devices (CPL), and identified on the CPL as conforming with the model specifications available from the National Highway Traffic Safety Administration, Office of Alcohol and State Programs.

**Employee:** any full-time, part-time, temporary or intern status person who is employed by the Authority and receives some form of compensation.

**Federal Highway Administration (FHWA):** the DOT operating authority that regulates commercial motor vehicles.

**Invalid Drug Test:** the result of a drug test for a urine specimen that contains an unidentified adulterant or an unidentified interfering substance, has abnormal physical characteristics, or has an endogenous substance at an abnormal concentration that prevents the laboratory from completing or obtaining a valid drug test result.



**Medical Review Officer (MRO):** a licensed physician responsible for receiving laboratory results generated by an employer's drug testing program who has knowledge of substance abuse disorders and has appropriate medical training to interpret and evaluate an individual's confirmed positive test result together with his or her medical history and any other relevant biomedical information.

**Medical Service Provider (MSP):** Authority Medical Services Provider.

**Motor Vehicle:** motorized equipment, either licensed or unlicensed, capable of carrying one or more passengers, including the driver.

**Non-DOT Test:** drug or alcohol testing conducted for employees who do not hold a CDL but drive other non-CDL Authority vehicles as part of job duties and responsibilities.

**Omnibus Transportation Employees Testing Act of 1991:** the federal law that requires drug and alcohol testing of drivers in various industries. By the authority of this act, the Office of the Secretary of Transportation, U.S. Department of Transportation (DOT) on February 15, 1994, has published rules requiring employers to test each applicant for employment or employee who is required to obtain a CDL for the illegal use of alcohol and controlled substances.

**Prohibited Drugs:** any of the following substances specified in Schedule I or Schedule II of the Controlled Substances Act, 21 U.S.C. 801.812 (1981 & 1987 Cum. P.O.): marijuana, cocaine, opiates, amphetamines, and phencyclidine (PCP).

**Refusal to Submit (to an alcohol or controlled substance test):** a covered employee fails to provide an adequate breath sample for testing without a valid medical explanation after receiving notice of the requirement to be tested; or fails to provide an adequate urine specimen for controlled substances testing without a valid medical explanation after he has received notice of the requirement for drug testing; or engages in conduct that clearly obstructs the testing process.

**Safety-Sensitive Function:** an employee is performing a safety-sensitive function whenever he/she is engaged in driving a commercial motor vehicle (CDL required) or working in any employment capacity which could affect the safe operation of the vehicle and the safety and welfare of others. This includes any period in which the employee is actually performing, ready to perform or immediately available to perform any safety sensitive functions.

**Substance Abuse Professional (SAP):** a licensed physician (Medical Doctor or Doctor of Osteopathy), or a licensed or certified psychologist, social worker, employee assistance professional, or addiction counselor (certified by the National Association of Alcoholism and Drug Abuse Counselors Certification Commission), with knowledge of and clinical experience in the diagnosis and treatment of alcohol or drug abuse related disorders.

**Screening Test (or initial test):** an analytic procedure to determine whether an employee may have a prohibited concentration of alcohol in a breath specimen. In controlled substances testing, an immunoassay test on urine specimens to eliminate "negative" specimens from further testing.

**Split Sample Testing:** division of the urine specimen in controlled substance testing into two separate containers, the primary specimen used for the screening test and the split specimen used

if the employee requests a second test after being informed of a verified positive screening test of the primary specimen or a verified adulterated or substituted test result.

**Stand-down:** the practice of temporarily removing an employee from the performance of their safety-sensitive functions based only on a report from a laboratory to the MRO of a confirmed positive test for a drug or drug metabolite, an adulterated test, or a substituted test, before the MRO has completed verification of the test result.

**Verified Positive (drug test result):** a drug test result reviewed by a Medical Review Officer and determined to have evidence of prohibited drug use.

**Workplace:** any Authority facility, vehicle, equipment, site or location as well as any other facility, vehicle, equipment or other site or location where an Authority employee is on duty or performing work tasks.

**49 CFR, Part 40:** refers to the U.S. Department of Transportation Drug Testing Program Procedures (laboratory testing, specimen collection, etc.) in the federal register.

**49 CFR, Part 382:** refers to the regulations issued by the U.S. Department of Transportation relating to alcohol and drug testing for commercial motor vehicles and commercial driver's licenses.

## 10. Federal Mandates

This Policy applies to all employees. Federal law provides standards for creating a workplace free of illegal drugs with the passage of the Drug Free Workplace Act of 1988. In addition, required standardized tests have been established by the government with the passage of the Omnibus Transportation Employee Testing Act of 1991 (Omnibus Act) for employees who are drivers of commercial motor vehicles. The Authority has exceeded these minimum requirements to establish and maintain a drug-free workplace for all employees.

- a. The Drug Free Workplace Act of 1988 requires that an organization receiving federal funds through grants or other means shall maintain a drug free workplace. The Authority from time to time receives such funds. Under this Act the employee must notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction. Failure to notify the Authority of drug related convictions is grounds for dismissal. The Authority must notify any federal contracting agency within ten (10) days of having received notice that an employee engaged in the performance of such contract has had any criminal drug statute conviction for a violation occurring in the workplace. The Authority will impose a sanction on any employee who is so convicted.
- b. Under the U.S. Department of Transportation final rules implementing the Omnibus Transportation Employee Testing Act of 1991, the Authority is required to establish a program to conduct pre-employment/pre-duty, reasonable suspicion, random and post-accident alcohol and controlled substances testing of each applicant for employment or employee who is required to obtain a commercial driver's license (CDL).

## **11. Revision Dates**

The policy was originally implemented in January 1, 1996 and has been revised on the following effective dates:

November 25, 1996

September 24, 1999

July 25, 2005

April 2019

DRAFT - BOD Review

## **Section II: Federal Highway Administration (FHWA) Coverage, US Department of Transportation, CDL Positions**

Section II of the Authority Substance Abuse Policy applies to all those employees who are required to maintain a commercial driver's license (CDL) to perform any portion of their job duties. It is the Authority policy to comply with all Federal and State laws rules, and regulation relating to commercial driving safety. This section incorporates those policies and procedures found in the US Department of Transportation Federal Highway Administration (FHWA) Regulations 49 CFR, Part 40 and 49 CFR, Part 382.

In the event of any conflicts between Federal Law and the Policy stated herein, Federal Law shall prevail.

This section is separated into two categories:

Part A – Alcohol Misuse and Prevention Plan (AMPP)

Part B – Anti-Drug Plan

## Part A - Alcohol Misuse and Prevention Plan (AMPP)

The goal of the Authority is to establish and maintain a safe and healthy workplace that is free from alcohol abuse by all employees and to protect the safety of its customers by providing the highest quality of service. Therefore, the Authority maintains a zero-tolerance policy for levels of alcohol use that could imperil the health and well-being of its employees or threaten the safety and reliability of service to its customers and the public.

There are mandates that require employers to test all employees who must maintain a commercial driver's license (CDL) to perform any portion of their job duties. The Authority require testing for misuse of alcohol under the following conditions:

- Random
- Post-Accident
- Reasonable Suspicion
- Return-to-Duty
- Follow-Up

The US Department of Transportation Federal Highway Administration (FHWA) Regulations 49 CFR, Part 40 and 49 CFR, Part 382 specifies procedures which must be followed.

The purpose of this policy is to:

- Set consistent guidelines and procedures for the detection and deterrence of alcohol abuse within the Authority;
- Identify management and employees' responsibilities; and
- Comply with the US Department of Transportation (DOT), Federal Highway Administration (FHWA) Drug Testing Regulations.

In the event of any conflicts between Federal Law and the Policy stated herein, Federal Law shall prevail.

This document in providing specific information and guidance to employees is used for complying with Federal Regulations. Employees may view a copy of these Federal Regulations for specific requirements of compliance during normal business hours at the Administration Office, 695 Moores Creek Lane, Charlottesville, Virginia.

### 1. Responsibilities

- a. **Alcohol Program Manager (APM):** Appendix A contains the name and phone number of the individual(s) who are responsible for the preparation of an alcohol misuse plan which complies with requirements of the Department of Transportation regulations as set for the in 49 CFR, Parts 40 and 382. The APM shall be responsible for providing oversight and evaluation of the plan; providing guidance and counseling in regards to the plan; ensuring that all discipline applied under this plan is consistent and conforms to human resources policies and procedures; scheduling for types of testing (i.e. random); maintaining a locked file system on all alcohol test results; and overseeing the referral of employees for evaluation and treatment. The Authority shall ensure that all covered employees are aware of the provisions and coverage of the Authority AMPP. All employees will have access to the current Substance Abuse Policy.

- b. **Supervisor(s):** Supervisors are responsible for observing the performance and behavior of employees; observation and documentation of events suggestive of reasonable suspicion; and requesting post-accident testing if determined that it is applicable.
- c. **Employees:** Covered employees shall be knowledgeable of the provisions of the Authority AMPP and fully comply with the provisions of the plan.

## 2. Applicability

- a. **Individuals Subject to Alcohol Testing:** Any employee who is required to maintain a commercial driver's license (CDL) to perform any portion of his/her duties is subject to alcohol testing under Section 2, Part A of the Policy. A complete copy of all covered positions is maintained in Main Office for inspection.
- b. **Procedure for Notifying Covered Employees:** Upon receipt of the Authority's Substance Abuse Policy which contains the AMPP, each manager and/or supervisor shall post a copy of the Policy in a prominent location that is readily accessible to all covered employees. All covered employees will have access to a copy of the Substance Abuse Policy.
- c. **Employee Notification Criteria:** Each new employee will be informed of the Authority's testing policy and will be required to sign an Employee Notification Letter which will tell them which drug testing pool they are in. In addition, all employees will be notified of any changes and/or revision through notices.

When requested, Human Resources shall provide information to all covered employees on the following elements:

- a. Name of representative designated to answer questions for covered employees about the alcohol regulations (See Appendix A).
- b. List covered employees who are subject to the alcohol regulations. A detailed position listing of all covered positions is maintained in the Administration Office.
- c. Circumstances under which a covered employee will be tested for alcohol under the AMPP portion of the Substance Abuse Policy.
- d. Procedures that cover:
  - 5) testing for presence of alcohol,
  - 6) protection of employee rights;
- e. Information concerning requirements for covered employees to submit to various types of alcohol tests.
- f. Information detailing what constitutes a refusal and consequences of such refusal.
- g. Information detailing consequences of covered employees who violate the prohibitions as set forth in the AMPP portion of the Substance Abuse Policy. This information addresses the removal from performing covered functions and guidance on referral for evaluation and/or treatment.

- h. Information detailing consequences of covered employees who test at an alcohol concentration of 0.02 or greater.

### 3. Types of Testing

- a. Random

All FHWA employees covered by this Policy are subject to random alcohol testing.

The refusal of an employee who is on duty to report and submit to a random test within thirty (30) minutes of such a request and notification shall be considered as a refusal and shall be deemed equivalent to failure of the test and lead to disciplinary action up to and including termination.

- b. Post-Accident

As soon as possible following an accident involving a commercial motor vehicle, the Authority shall test the employee driver for alcohol when either:

- 1) The accident involved a fatality; or
- 2) The employee driver receives (or is expected to receive) a citation under state or local law for a moving violation arising from the accident which also includes at least one of the following:
  - a) bodily injury to any person who immediately receives medical treatment away from the scene; or
  - b) one or more motor vehicles incur damage requiring the vehicle(s) to be towed away from the scene.
- 3) It is the employee's immediate supervisor's responsibility to ensure that the provisions of post-accident testing are followed.
- 4) Each employee shall be required to submit to an alcohol test within two (2) hours of the accident. If a test is not administered within eight (8) hours following the accident, the Authority shall cease all attempts to conduct an alcohol test and shall prepare and maintain on file written documentation indicating why the alcohol test was not conducted. A copy of all such determinations shall be forwarded to the APM and, upon request, made available to FHWA officials.
- 5) An employee who is subject to post-accident testing who fails to remain readily available for such testing, including notifying the supervisor or department representative of his/her location if he/she leaves the scene of the accident prior to submission to such test, shall be deemed by the Authority to have refused to submit to testing.
- 6) The employee must remain available for alcohol testing and may not consume any alcohol for either (8) hours following the accident or until the alcohol test has been conducted. Notwithstanding the previous statement, nothing in this Policy shall

prevent employees from seeking and obtaining emergency medical care whenever necessary.

#### **4. Reasonable Suspicion**

Reasonable suspicion testing is designed to provide the Authority with a tool, in conjunction with the supervisor training on the signs and symptoms of alcohol misuse, to identify employees affected by/under the influence of alcohol who may pose a danger to themselves and others in their job performance. Supervisors must make a decision as to whether there is reasonable suspicion to believe an employee is using or has used alcohol.

The supervisor's determination that reasonable suspicion exists to require a covered employee to undergo an alcohol test shall be based on specific, articulated observations concerning the appearance, behavior, and speech or body odors of the employee who is just reporting for duty, currently on duty, or has immediately finished duty.

In making a determination of reasonable suspicion, some factors to be considered include, but are not limited to the following:

- a. Adequately documented pattern of unsatisfactory work performance for which no apparent non-impairment related reason exists, or a change in an employee's prior pattern of work performance, especially where there is some evidence of alcohol related behavior on or off the work site.
- b. Physical signs and symptoms consistent with alcohol abuse.
- c. Evidence of prohibited alcohol use while on duty or on paid on-call for duty.
- d. Occurrence of a serious or potentially serious accident that may have been caused by flagrant violation of established safety, security or other operational procedures.

The potentially affected employee should not be allowed to proceed alone to or from the collection site. Supervisor or other appropriate personnel shall accompany him/her to and from the collection site.

The Supervisor shall not permit a covered employee to report for duty or remain on duty while the employee is under the influence of or impaired by alcohol, as shown by the behavioral, speech, or performance indicators of alcohol misuse, nor shall the employee be permitted to perform or continue to perform work duties until:

- a. An alcohol test is administered and the employee's alcohol concentration measures 0.00; or
- b. The start of the employee's next regularly scheduled duty period, but not less than eight (8) hours following the determination that there is reasonable suspicion to believe that the employee has violated the prohibitions as contained in the AMPP portion of this Policy.

#### **5. Return-to-Duty**

Before an employee may return-to-duty to perform covered functions after engaging in prohibited conduct, he shall undergo a return-to-duty alcohol test with a result indicating an alcohol



concentration of 0.00. The Authority or their designated supervisors, managers, or agents shall not permit an employee who refuses to submit to an alcohol test to perform or continue to perform their job duties.

*Note: Return-to-Duty Testing presumes that the Authority has elected to retain the employee and has not exercised its authority to dismiss the employee under this Policy or under any other Authority disciplinary rules and regulations.*

## 6. Follow-Up

The Authority shall ensure that the employee is subject to unannounced random follow up alcohol testing as directed by a substance abuse professional (SAP).

Follow up testing shall be conducted when the employee is performing job functions; just before the employee is to perform job functions; or just after the employee has ceased performing job functions.

A minimum of six (6) unannounced, follow up alcohol tests must be administered within the first twelve (12) months after the employee has returned to duty. The SAP can direct additional testing during this period or for an additional period up to a maximum of 60 months from the date that the employee returned to duty. The SAP can terminate the requirement for the follow up testing in excess of the minimum at any time, if the SAP determines that the testing is no longer necessary.

*Note: Return-to-Duty Testing presume that the Authority has elected to retain the employee and has not exercised its authority to dismiss the employee under this Policy or under any other Authority disciplinary rules and regulations.*

## 7. Alcohol Prohibited Conduct

- a. **Alcohol Concentration:** A covered employee shall be prohibited from reporting for duty or remaining on duty requiring the performance of covered functions while having an alcohol concentration of 0.02 or greater. If an Authority representative has actual knowledge that a covered employee has an alcohol concentration of 0.02 or greater, the employee shall not be permitted to perform or continue to perform job duties.
- b. **Pre-Duty Use:** Federal Regulations prohibit a covered employee from using alcohol within four (4) hours prior to performing covered function, or, if an employee is called to duty to respond to an emergency, within the time period after the employee has been notified to report to duty. If the Authority or their agents has actual knowledge that a covered employee has used alcohol within four (4) hours prior to performing covered functions or within the time period after the employee has been notified to report for duty, the employee will not be permitted to perform or continue to perform job duties.
- c. **Possession of Alcohol:** All covered employees are prohibited while on duty from possessing alcohol including the possession of medicines containing alcohol unless the seal is unbroken.
- d. **On-Duty Use:** Federal Regulations prohibit a covered employee from using alcohol while performing covered functions. If the Authority or their agents have actual knowledge that

a covered employee is using alcohol while performing covered functions, the employee shall not be permitted to perform or continue to perform covered functions.

## 8. Refusal to Submit to Alcohol Tests

Compliance with this the alcohol testing policy is a condition of employment. Refusal to take a required alcohol test may be deemed equivalent to failure of the test and lead to disciplinary action up to and including termination.

## 9. Disciplinary Actions for FHWA Covered Position

- a. **Refusal to Report for Assessment with a Substance Abuse Professional:** If an employee refuses to report for assessment, evaluation, and/or referral for treatment with the Authority's substance abuse professional, the employee shall be dismissed.
- b. **Refusal to Enter or Successfully Complete a Rehabilitation or Counseling Program:** If an employee is referred for rehabilitation or counseling and the employee refuses to enter or fails to successfully complete such a program, the employee shall be dismissed.
- c. **Refusal to Submit to an Alcohol Test:** An employee who refuses to provide an adequate breath sample for alcohol testing without a valid medical explanation after he has received notice of the requirement to be tested, or who engages in conduct that clearly obstructs the testing procedure, shall be dismissed.
- d. **On-Duty Use of Alcohol:** On-duty use of alcohol during work time shall result in removal from performing a covered function and will result in disciplinary action up to an including dismissal.
- e. **Alcohol (Confirmation) Test with a Concentration of 0.02 or Greater, but less than 0.04:** When an employee has tested for alcohol at a concentration of 0.02 or greater, but less than 0.04, that employee will be immediately suspended or placed on leave. Such employee may conditionally return-to-duty after he/she has retested at an alcohol concentration of 0.00. Mandatory referral to the Authority EAP, participation for counseling is required as a condition of continued employment upon return-to-duty.
- f. **Alcohol (Confirmation) Test with a Concentration of 0.04 or Greater:** When an employee has tested for alcohol at a concentration of 0.04 or greater that employee will be immediately suspended or placed on leave. Such employee may conditionally return-to-duty after he/she has retested at an alcohol concentration of 0.00. Mandatory referral to the Authority EAP, participation in and successful completion of rehabilitation is required as a condition of continued employment upon return-to-duty.
- g. **Repeat Usage:** In all cases where an employee tests positive a second time during their employment with the Authority at an alcohol concentration of 0.02 or greater, the employee shall be dismissed.
- h. **Re-employment:** Any covered employee, who violates the provisions of this Part of the Authority Substance Abuse Policy, which results in a dismissal from Authority employment, that individual shall be barred from re-employment in any position for a period of three (3) years from the date of dismissal. Any employee rehired and dismissed a second time for

violation of the Substance Abuse Policy shall be ineligible for re-employment in any position with the Authority.

## **10. Alcohol Testing Requirements**

The alcohol testing procedures contained herein and in Appendix B shall be complied with by the designated alcohol testing sites. These procedures address the requirements contained in 49 CFR, Parts 40 and 382.

The alcohol testing site shall have all necessary personnel, materials, equipment, facilities, and supervision to provide for the testing and processing of alcohol test results.

## **11. Disclosure of Alcohol Information and Records**

The Authority will maintain all alcohol related testing information including all test results and other appropriate records in a secure manner to prevent the disclosure of such information to unauthorized personnel. The APM will maintain a locked file system which will contain the alcohol testing information and records. This file shall be maintained as confidential. Employee files will be handled on a strict "need to know" basis. Alcohol test results shall not be included in personnel files.

The Authority shall not release covered employee information that is contained in records in accordance with federal requirements except as required by law or when expressly authorized or required by 49 CFR, Part 382.

A covered employee is entitled, upon written request, to receive copies of any records pertaining to his/her use of alcohol, including any records pertaining to his/her alcohol tests. Access to an employee's records shall not be contingent upon payment for records other than those specifically requested.

The Authority shall make available copies of all results for alcohol testing and any other information pertaining to the administrative process of the Authority' AMPP portion of the Substance Abuse Policy as required by 49 CFR, Part 40 and 382 when requested by any FHWA or state agency with regulatory authority over the Authority.

When requested by the National Transportation Safety Board as part of an accident investigation, the Authority shall disclose information related to its administration of any post-accident alcohol test administered following the accident under investigation.

The Authority shall make alcohol records available to a subsequent employer, upon receipt of the written request from the covered employee. Disclosure by the subsequent employer is permitted only as expressly authorized by the terms of the employee's written request.

The Authority may disclose information required to be maintained under this program pertaining to an employee, the decision maker in a lawsuit, grievance, or other proceeding initiated by or on behalf of the individual, and arising from the results of an alcohol and/or controlled substance test, or from the employer's determination that the employee engaged in conduct prohibited by this program (including, but not limited to worker's compensation, unemployment compensation, or other proceeding relating to a benefit sought by the employee.)

The Authority shall release information regarding a covered employee's records as directed by the specific, written consent of the employee authorizing release of the information to an identified person. Release of such information by the person receiving the information is permitted only in accordance with the terms of the employee's consent.

## **12. Employee Assistance Program (EAP)**

The Authority contract with an Employee Assistance Program (EAP). EAP services are available to all employees. The EAP staff shall be available to provide employees with the appropriate education regarding the use of alcohol. Alcohol information will be periodically distributed and/or displayed in Authority work areas. The telephone number of the EAP office is located in Appendix D and is displayed in the work areas.

Supervisory personnel responsible for those employees covered under FHWA regulations will receive training under the alcohol misuse prevention plan. This training shall include at least one sixty (60) minute period of training on the specific, contemporaneous, physical, behavior, speech and performance indications of probable alcohol misuse. This training shall be for any supervisor who may determine whether an employee must be alcohol tested for reasonable suspicion.

## **13. Recordkeeping Procedures**

The Authority maintains testing records in compliance with 49 CFR, Part 382. All recordkeeping requirements and guidelines may be found in Appendix E.

## Part B - Anti-Drug Plan (ADP)

Section II, Part B of the Substance Abuse Policy has been developed by the Authority for those employees who are required to maintain a commercial driver's license (CDL) in order to perform any portion of their duties as outlined by Regulation administered by the Federal Highway Administration (FHWA). Our goal is to establish and maintain a safe, healthy and productive working environment. Therefore, the Authority maintains a policy of non-tolerance for any drug use that imperils the health and well-being of its employees or threatens the safety and quality of services to its customers or citizens.

This policy requires all CDL employees be subject to the following testing for detection of illegal drug use under the following conditions:

- Pre-Employment
- Random
- Post-Accident
- Reasonable Suspicion
- Return-To-Duty
- Follow-Up

The purpose of the FHWA Anti-Drug Plan (ADP) is to:

- Set consistent guidelines and procedures for the detection and deterrence of drug abuse within the Authority;
- Identify management and employee responsibilities; and
- Comply with the US Department of Transportation (DOT), Federal Highway Administration (FHWA) Drug Testing Regulations.

It is the policy of the Authority to comply with all Federal, State and Municipal laws, rules and regulations relating to commercial driving safety.

The Federal Highway Administration (FHWA) Anti-Drug Plan (ADP) incorporates those policies and procedures found in the US Department of Transportation, Federal Highway Administration Regulations, 49 CFR, Part 40 and Part 382 and this information is the foundation for this Section of the Substance Abuse Policy.

In the event of any conflicts between Federal Law and the Policy stated herein, Federal Law shall prevail.

This document provides specific information and guidance to employees and is used for complying with Federal Regulations. Employees may view a copy of these Regulations for specific requirements of compliance during normal business hours at the Main Office, 695 Moores Creek Lane, Charlottesville, Virginia.

## 1. Responsibilities

- a. **Drug Program Designee (DPD):** Appendix A contains the name and phone number of the individual(s) who are responsible for the preparation of a drug testing and anti-drug plan which complies with requirements of the US Department of Transportation regulations as set for the in 49 CFR, Parts 40 and 382. The DPD shall be responsible for providing oversight and evaluation of the plan; providing guidance and counseling; reviewing discipline applied under this plan for consistency and conformance to human resources policies and procedures; scheduling for types of testing, random and return-to-duty testing; overseeing the referral of employees for evaluation and treatment; and maintaining a locked file system on all drug testing results. The Authority shall ensure that all covered employees are aware of the provisions of the Authority's Anti-Drug Plan. All covered employees will be provided a copy of the current Substance Abuse Policy.
- b. **Supervisor(s):** Authority individuals responsible for observing the performance and behavior of employees; observation and documentation of events suggestive of reasonable cause; and making requests of second supervisor for substantiation and concurrence for reasonable cause testing, if applicable.
- c. **Employees:** Each employee has the responsibility to be knowledgeable of the requirements of the Authority's ADP and fully comply with the provisions of the plan.

## 2. Applicability

- a. **General:** All FHWA covered employees who fall under the "persons covered" section of 49 CFR, Part 382 will be subject to random drug testing. "Persons covered" include all persons listed under the definition of "FHWA Covered Employee" as stated earlier in the Authority's Substance Abuse Policy.
- b. **Covered Employees:** A complete listing of positions which will be required to adhere to FHWA random drug testing requirements is maintained in the Main Office and is available for review during normal business hours. Routinely, Human Resources will review the list of "covered persons" to ensure it is up-to-date and accurate. Names and positions may be added or deleted as jobs and circumstances change.
- c. **Notifying Employees of Plan:** The goal of the Authority is to establish and maintain a workplace that is free from drug use; one that is safe and healthy, and one that is a model for others to follow. Therefore, as early as the interview process, all job applicants will be informed as to whether or not the position/job they are seeking is a "FHWA" position, subject to the FHWA rules and procedures regarding drug testing. Each new employee will be informed of the Authority' testing policy and will be required to sign an "Acknowledgement Form" after receiving and reading their individual copy (see Appendix C). In addition, all employees will be notified of any changes and/or revision through notices.
- d. **FHWA Unauthorized Substances:** FHWA employees covered under the FHWA Regulations, 49 CFR, Part 30 and Part 382 will be tested for the following unauthorized substances:
  - 1) Marijuana (THC)

- 2) Cocaine
- 3) Opiates (Morphine and Codeine)
- 4) Phencyclidine (PCP); and
- 5) Amphetamines (Amphetamine, Methamphetamine)

### 3. Types of Testing

#### a. Pre-Employment

- 1) The Authority will not hire any person unless that person successfully passes a drug test.
- 2) All job applicants selected for employment under this Part shall undergo a drug test as part of a pre-employment physical at the Authority's expense. It is the Authority's policy, that any persons testing positive will be denied employment in any position with the Authority for a period of three (3) years from the date of the drug test results. Any applicant testing positive a second time shall be ineligible for employment.
- 3) A drug test will be conducted when a current employee moves from a Non-CDL position into an FHWA covered position.
- 4) An employee who previously was moved from an FHWA covered position will be subject to another pre-employment test prior to returning to his/her former position or in any other FHWA covered position.
- 5) All pre-employment job applicants who test positive shall have the right to have their original sample re-tested by a laboratory approved by the Medical Review Officer, at the applicant's own expense.
- 6) Employees moving into a FHWA covered position who test positive have the right to have their original sample re-tested at their own expense. Employees who fail the re-test will not be moved to an FHWA position and are subject to disciplinary action under the Non-CDL Parts of the Substance Abuse Policy.
- 7) An employee, who moves from one Authority FHWA position to another Authority FHWA position without interruption of service, shall not require testing under this Part of the Authority's Substance Abuse Policy.

#### b. Post-Accident

As soon as possible following an accident involving a commercial motor vehicle, the Authority shall test the employee driver for drugs when either:

- 1) The accident involved a fatality; or
- 2) The employee driver receives (or is expected to receive) a citation under state or local law for a moving violation arising from the accident which also includes at least one of the following:

- a) bodily injury to any person who immediately receives medical treatment away from the scene; or
    - b) one or more motor vehicles incur damage requiring the vehicle(s) to be towed away from the scene.
  - 3) It is the applicable employee's immediate supervisor's responsibility to ensure that the provisions of post-accident testing are followed.
  - 4) All covered employees shall be required to submit to a drug test within two (2) hours or as soon as possible after the accident. If a test is not administered within 32 hours following the accident, the Authority shall cease all attempts to conduct a drug test and shall prepare and maintain on file written documentation indicating why the drug test was not conducted. A copy of all such determinations shall be forwarded to the DPD and upon request, made available to FHWA officials.
  - 5) An employee who is subject to post-accident testing who fails to remain readily available for such testing, including notifying the supervisor or department representative of his/her location if he/she leaves the scene of the accident prior to submission to such test, shall be deemed by the Authority to have refused to submit to testing.
  - 6) The employee must remain available for drug testing until the drug test has been conducted. Notwithstanding the previous statement, nothing in this Policy shall prevent employees from seeking and obtaining emergency medical care whenever necessary.
  - 7) If an employee is injured, unconscious, or otherwise unable to grant consent to the drug test, all reasonable steps must be taken to obtain a urine sample. The Authority or their agents may decide not to test under this paragraph; however, such a decision must be based on the best information available immediately after the accident that the employee's performance could not have contributed to the accident, or that because of the time between that performance and the accident, it is not likely that a drug test would reveal whether the performance was affected by drug use.
- c. Random Testing
- 1) Once notified for random testing, the employee must report no later than the time it takes to travel from the work site to the testing site, plus 30 minutes. There are no exceptions and the employee will report to the designated facility.
  - 2) A covered employee who tests positive for drug use will be removed from performing job duties. Such employee shall be disciplined in accordance with the provisions of the Substance Abuse Policy.
- d. Reasonable Suspicion Testing
- 1) The Authority will test an FHWA covered employee when there is reasonable cause to believe the employee is under the influence and/or using prohibited drugs.



- 2) Reasonable suspicion is a belief based on objective and clearly stated facts sufficient to lead a supervisor, exercising sound judgment, to suspect that an employee is under the influence of drugs.
  - 3) Every supervisor covered by this Policy, who will determine whether or not an employee will be subject to a reasonable suspicion drug test, will receive at least a one-hour training period on the specific physical, behavioral and performance indicators of probable drug use.
  - 4) In making a determination of reasonable suspicion, some factors to be considered include, but are not limited to the following:
    - a) Adequately documented pattern of unsatisfactory work performance for which no apparent non-impairment related reason exists, or a change in an employee's prior pattern of work performance, especially where there is some evidence of alcohol related behavior on or off the work site.
    - b) Physical signs and symptoms consistent with alcohol abuse.
    - c) Evidence of prohibited alcohol use while on duty or on paid on-call for duty.
    - d) Occurrence of a serious or potentially serious accident that may have been caused by flagrant violation of established safety, security or other operational procedures.
- e. Return-to-Duty
- 1) Before an employee may return-to-duty to perform job duties after engaging in prohibited conduct, the employee shall undergo a return-to-duty drug screening test with a negative result.
  - 2) The Authority or their designated supervisors, managers, or agents shall not permit an employee who refuses to submit to a drug screening test to return-to-duty.
- f. Follow-Up
- 1) The Authority shall ensure that the employee is subject to unannounced random follow up drug screening tests as directed by a substance abuse professional (SAP).
  - 2) Follow up testing shall be conducted when the employee is performing job tasks; just before the employee is to perform job tasks; or just after the employee has ceased performing job tasks.
  - 3) A minimum of six (6) unannounced, follow up drug tests must be administered within the first twelve (12) months after the employee has returned to duty. The SAP can direct additional testing during this period or for an additional period up to a maximum of 60 months from the date that the employee returned to duty. The SAP can terminate the requirement for the follow up testing in excess of the minimum at any time, if the SAP determines that the testing is no longer necessary.

#### 4. Disciplinary Actions for FHWA Covered Positions

Once the Medical Review Officer (MRO) makes a determination that there is no legitimate medical explanation for a confirmed positive test result other than the unauthorized use of a prohibited drug, the Authority will not knowingly use such employee or person in any capacity. The employee shall be suspended or placed on leave immediately. The employee may return to work only after a Substance Abuse Professional has determined the employee is fit for duty and has successfully completed the prescribed drug rehabilitation program. The employee must also have a negative drug screening under return-to-duty testing.

An employee will be dismissed immediately:

- a. if an employee refuses to report to a substance abuse professional for assessment, evaluation, and/or referral for treatment with the Authority's abuse professional;
- b. if an employee is referred for rehabilitation and the employee refuses to enter or fails to successfully complete such a rehabilitation assessment program;
- c. if an employee refuses to provide an adequate urine sample for drug testing without a valid medical explanation after he has received notice of the requirement to be tested, or who engages in conduct that clearly obstructs the testing procedure; or
- d. if an employee tests positive a second time during their employment with the Authority.

**If an employee uses or has in their possession illegal drugs on Authority property or in an Authority vehicle, the Authority may impose discipline on the employee up to and including dismissal, even for a first offense.**

Any covered employee, who violates the provisions of this Part of the Authority Substance Abuse Policy, which results in a dismissal from Authority employment, that individual shall be barred from re-employment in any position for a period of three (3) years from the date of dismissal. Any employee rehired and dismissed a second time for violation of the Substance Abuse Policy shall be ineligible for re-employment in any position with the Authority.

#### 5. Specimen Collection Requirements

A complete copy of the specimen collection requirements may be found in Appendix F.

#### 6. Drug Testing Laboratory

The Authority uses a laboratory certified by the DHHS to conduct the analysis of urine samples. These documents contain specific Drug Testing Procedures and may be found in Appendix F. The testing laboratory will comply with all methods and procedures of 49 CFR and will provide annual reports to the contracting agency, and to the DPD showing compliance. The designated collection agency and testing laboratory information for the Authority ADP is listed in Appendix G.

#### 7. Blind Sample Performance Test Procedures

Regulations regarding the submission of blind samples may be found in Appendix F of this Policy. The Authority's Medical Services Provider (MSP) shall be responsible for the submission of blind samples in compliance with Federal Regulations.

## **8. Review of Drug Testing Results**

The Authority contract for the services of a Medical Review Officer (MRO). The name, address and general responsibilities of the MRO for the Authority are listed in Appendix H.

## **9. Retention of Samples**

All FHWA covered applicants and employees who test positive may challenge the test results by notifying the DPD in writing within seventy-two (72) hours of receiving the test results. If a test result is challenged, the original sample will then be re-tested by a certified DHHS laboratory other than the Authority's medical provider primary laboratory. The selection of the certified laboratory must be made from a list of laboratories maintained by the MSP provider and approved by DPD.

- a. Because some analytes deteriorate or are lost during freezing and/or storage, quantitation for a retest is not subject to a specific cutoff requirement but must provide data sufficient to confirm the presence or absence of the drug or metabolite.
- b. All costs associated with a positive re-test will be borne by the applicant or employee raising the challenge and must be prepaid.

## **10. Disclosure of Drug Information and Records**

Except as provided in the following paragraphs, the MRO shall not disclose to any third-party medical information provided by the individual to the MRO as a part of the testing verification process.

The MRO may disclose such information to the DPD in Human Resources; FHWA, or other Federal safety agency officials; or to a physician responsible for determining the medical qualification of the applicant or employee under the appropriate FHWA regulations, as applicable, only if:

- a. An applicable FHWA regulation permits or requires such disclosure;
- b. In the MRO's reasonable medical judgment, the information could result in the employee being determined to be medically unqualified under an applicable FHWA rule; or
- c. In the MRO's reasonable medical judgment, in a situation, in which there is not a FHWA rules establishing physical qualification standards applicable to the employee, the information indicates that continued performance by the employee of his/her covered function could pose a significant safety risk.
- d. Before obtaining medical information from an applicant or employee as part of the verification process, the MRO shall inform the applicant or employee that information may be disclosed to third parties as provided in this section and the identity of any parties to whom information may be disclosed.

## **11. Employee Assistance Program (EAP)**

The Authority contracts with an Employee Assistance Program (EAP). EAP services are available to all FHWA employees covered under this Policy. The EAP staff shall be available to provide employees with the appropriate education regarding the use of prohibited drugs. Drug information

will be periodically distributed and/or displayed in Authority work areas. The telephone number of the EAP office is located in Appendix D and is displayed in the work areas.

## **12. Record Keeping Procedures**

The Authority maintains testing records in compliance with 49 CFR, Part 382. All recordkeeping requirements and guidelines may be found in Appendix E.

DRAFT - BOD Review

### **Section III: All Other Authority Coverage, Non-CDL Employees**

Section III of the Authority Substance Abuse Policy applies to all employees other than those employees who are required to maintain a commercial driver's license (CDL). For purposes of this policy, all employees other than CDL employees will be referred to as Non-CDL employees. It is Authority policy to comply with all Federal and State laws, rules, and regulations relating to driving safety.

This section is separated into two categories:

Part A - Alcohol Misuse and Prevention Plan

Part B - Anti-Drug Plan

DRAFT - BOD Review

### **Part A - Alcohol Misuse Prevention Plan (AMPP)**

The goal of the Authority is to establish and maintain a safe and healthy workplace that is free from alcohol abuse by all employees and to protect the safety of its customers by providing the highest quality of service. Therefore, the Authority maintains a zero-tolerance policy for levels of alcohol use that imperil the health and well-being of its employees or threaten the safety and reliability of service to its customers and the public.

This policy requires all Non-CDL employees be subject to the following testing for misuse of alcohol under the following conditions:

- Random
- Post-Accident
- Reasonable Suspicion
- Return-to-Duty
- Follow-Up

The purpose of this policy is to:

- Set consistent guidelines and procedures for the detection and deterrence of alcohol abuse within the Authority relating to all covered employees; and
- Identify management and employee responsibilities.

## 1. Responsibilities

- a. **Alcohol Program Manager (APM):** Appendix A contains the name and phone number of the individual(s) who are responsible for the preparation of an alcohol misuse plan which applies to all covered employees. The APM shall be responsible for providing oversight and evaluation of the plan; providing guidance and counseling in regards to the plan; ensuring that all discipline applied under this plan is consistent and conforms to human resources policies and procedures; scheduling for types of testing (i.e. random); maintaining a locked file system on all alcohol test results; and overseeing the referral of employees for evaluation and treatment. The Authority shall ensure that all covered employees are aware of the provisions of the Authority's AMPP. All employees will have access to the current Substance Abuse Policy.
- b. **Supervisor(s):** Supervisors are responsible for observing the performance and behavior of employees; observation and documentation of events suggestive of reasonable suspicion; and requesting post-accident testing if determined that it is applicable.
- c. **Employees:** Covered employees shall be knowledgeable of the provisions of the Authority AMPP and fully comply with the provisions of the plan.

## 2. Applicability

- a. **Individuals Subject to Alcohol Testing:** All Non-CDL employees are subject to alcohol testing under this section.
- b. **Procedure for Notifying Covered Employees:** Upon receipt of the Authority's Substance Abuse Policy which contains the AMPP, each manager and/or supervisor shall post a copy of the Policy in a prominent location that is readily accessible to all employees. All employees will have access to a copy of the Substance Abuse Policy.
- c. **Employee Notification Criteria:** Each new employee will be informed of the Authority's testing policy and will be required to sign an Employee Notification Letter, which will tell them which drug testing pool they are in. In addition, all employees will be notified of any changes and/or revision through notices.

When requested, Human Resources shall provide information to all covered employees on the following elements:

- a. Name of representative designated to answer questions for covered employees about the alcohol regulations (see Appendix A).
- b. List employees who are subject to the alcohol regulations. A detailed position listing of all covered positions is maintained in the Main Office.
- c. Circumstances under which a covered employee will be tested for alcohol under the AMPP portion of the Substance Abuse Policy.
- d. Procedures that cover:

- 1) testing for presence of alcohol,
- 2) protection of employee rights,
- e. Information concerning requirements for covered employees to submit to various types of alcohol tests.
- f. Information detailing what constitutes a refusal and consequences of such refusal.
- g. Information detailing consequences of covered employees who violate the prohibitions as set forth in the AMPP portion of the Substance Abuse Policy. This information addresses the removal from performing job assignments and guidance on referral for evaluation and/or treatment.
- h. Information detailing consequences of covered employees who test at an alcohol concentration of 0.02 or greater.

### 3. Types of Testing

#### a. Random

- 1) All employees covered by this Policy are subject to random alcohol testing.
- 2) The refusal of an employee who is on duty to report and submit to a random test within thirty (30) minutes of such a request and notification shall be considered as a refusal and shall be deemed equivalent to failure of the test and lead to disciplinary action up to and including termination.

#### b. Post-Accident

As soon as possible following an accident involving an Authority motor vehicle, the Authority shall test the employee driver for alcohol when either:

- 1) The accident involved a fatality; or
- 2) The employee driver receives (or is expected to receive) a citation under state or local law for a moving violation arising from the accident which also includes at least one of the following:
  - a) bodily injury to any person who immediately receives medical treatment away from the scene; or
  - b) one or more motor vehicles incur damage requiring the vehicle(s) to be towed away from the scene.
- 3) It is the employee's immediate supervisor's responsibility to ensure that the provisions of post-accident testing are followed.
- 4) Each employee shall be required to submit to an alcohol test within two (2) hours of the accident. If a test is not administered within eight (8) hours following the accident, the Authority shall cease all attempts to conduct an alcohol test and shall prepare and maintain on file written documentation indicating why the alcohol test was not conducted. A copy of all such determinations shall be forwarded to the APM.



- 5) An employee who is subject to post-accident testing who fails to remain readily available for such testing, including notifying the supervisor or department representative of his/her location if he/she leaves the scene of the accident prior to submission to such test, shall be deemed by the Authority to have refused to submit to testing.
- 6) The employee must remain available for alcohol testing and may not consume any alcohol for either (8) hours following the accident or until the alcohol test has been conducted. Notwithstanding the previous statement, nothing in this Policy shall prevent employees from seeking and obtaining emergency medical care whenever necessary.

c. Reasonable Suspicion

- 1) Reasonable suspicion testing is designed to provide the Authority with a tool, in conjunction with the supervisor training on the signs and symptoms of alcohol misuse, to identify employees affected by/under the influence of alcohol who may pose a danger to themselves and others in their job performance. Supervisors must make a decision as to whether there is reasonable suspicion to believe an employee is using or has used alcohol.
- 2) The supervisor's determination that reasonable suspicion exists to require a covered employee to undergo an alcohol test shall be based on specific, articulated observations concerning the appearance, behavior, and speech or body odors of the employee who is just reporting for duty, currently on duty, or has immediately finished duty.
- 3) In making a determination of reasonable suspicion, some factors to be considered include, but are not limited to the following:
  - a) Adequately documented pattern of unsatisfactory work performance for which no apparent non-impairment related reason exists, or a change in an employee's prior pattern of work performance, especially where there is some evidence of alcohol related behavior on or off the work site.
  - b) Physical signs and symptoms consistent with alcohol abuse.
  - c) Evidence of prohibited alcohol use while on duty or on paid on-call for duty.
  - d) Occurrence of a serious or potentially serious accident that may have been caused by flagrant violation of established safety, security or other operational procedures.
- 4) The potentially affected employee should not be allowed to proceed alone to or from the collection site. A supervisor, or other appropriate personnel, shall accompany the employee to and from the collection site.
- 5) The Supervisor shall not permit a covered employee to report for duty or remain on duty while the employee is under the influence of or impaired by alcohol, as shown by

the behavioral, speech, or performance indicators of alcohol misuse, nor shall the employee be permitted to perform job duties until:

- a) An alcohol test is administered and the employee's alcohol concentration measures less than 0.00; or
- b) The start of the employee's next regularly scheduled duty period, but not less than eight (8) hours following the determination that there is reasonable suspicion to believe that the employee has violated the prohibitions as contained in the AMPP portion of this Policy.

d. Return to Duty Testing

Before an employee may return-to-duty to perform job duties after engaging in prohibited conduct, the employee shall undergo a return-to-duty alcohol test with a result indicating an alcohol concentration of 0.00. The Authority or their designated supervisors, managers, or agents shall not permit an employee who refuses to submit to an alcohol test to perform or continue to perform their job duties.

e. Follow-Up Testing

- 1) The Authority shall ensure that the employee is subject to unannounced random follow up alcohol testing as directed by a substance abuse professional (SAP).
- 2) Follow up testing shall be conducted when the employee is performing job tasks; just before the employee is to perform job tasks; or just after the employee has ceased performing job tasks.
- 3) A minimum of six (6) unannounced, follow up alcohol tests must be administered within the first twelve (12) months after the employee has returned to duty. The SAP can direct additional testing during this period or for an additional period up to a maximum of 60 months from the date that the employee returned to duty. The SAP can terminate the requirement for the follow up testing in excess of the minimum at any time, if the SAP determines that the testing is no longer necessary.

#### 4. Alcohol Prohibited Conduct

- a. **Alcohol Concentration:** A covered employee shall be prohibited from reporting for duty or remaining on duty requiring the performance of covered functions while having an alcohol concentration of 0.02 or greater. If an Authority representative has actual knowledge that a covered employee has an alcohol concentration of 0.02 or greater, the employee shall not be permitted to perform or continue to perform job duties.
- b. **Pre-Duty Use:** This policy prohibits a covered employee from using alcohol within four (4) hours prior to performing job duties, or, if an employee is called to duty to respond to an emergency, within the time period after the employee has been notified to report to duty. If the Authority or its agents has actual knowledge that a covered employee has used alcohol within four (4) hours prior to performing covered functions or within the time period after the employee has been notified to report for duty, the employee will not be permitted to perform or continue to perform their work duties.

- c. **Possession of Alcohol:** All covered employees are prohibited while on duty from possessing alcohol including the possession of medicines containing alcohol unless the seal is unbroken.
- d. **On-Duty Use:** The policy prohibits an employee from using alcohol while performing job duties. If the Authority or their agents has actual knowledge that an employee is using alcohol while performing work duties, the employee shall not be permitted to perform or continue to perform work duties.

## 5. Refusal to Submit to Alcohol Tests

Compliance with the alcohol testing policy is a condition of employment. Refusal to take a required alcohol test may be deemed equivalent to failure of the test and lead to disciplinary action up to and including termination.

## 6. Disciplinary Actions for All Non-CDL Employees

- a. **Refusal to Report for Assessment with a Substance Abuse Professional:** If an employee refuses to report for assessment, evaluation, and/or referral for treatment with the Authority's substance abuse professional, the employee shall be dismissed.
- b. **Refusal to Enter or Successfully Complete a Rehabilitation or Counseling Program:** If an employee is referred for rehabilitation or counseling and the employee refuses to enter or fails to successfully complete such a program, the employee shall be dismissed.
- c. **Refusal to Submit to an Alcohol Test:** An employee who refuses to provide an adequate breath sample for alcohol testing without a valid medical explanation after he has received notice of the requirement to be tested, or who engages in conduct that clearly obstructs the testing procedure, shall be dismissed.
- d. **On-Duty Use of Alcohol:** On-duty use of alcohol shall result in removal from performing job duties. The policy prohibits an employee from using alcohol while performing job duties and shall be disciplined up to and including dismissal.
- e. **Alcohol (Confirmation) Test with a Concentration of 0.02 or Greater, but less than 0.04:** When an employee has tested for alcohol at a concentration of 0.02 or greater, but less than 0.04, that employee will be immediately suspended or placed on leave. Such employee may conditionally return-to-duty after he/she has retested at an alcohol concentration of 0.00. Mandatory referral to the Authority EAP, participation in counseling is required as a condition of continued employment upon return-to-duty.
- f. **Alcohol (Confirmation) Test with a Concentration of 0.04 or Greater:** When an employee has tested for alcohol at a concentration of 0.04 or greater that employee will be immediately suspended or placed on leave. Such employee may conditionally return-to-duty after he/she has retested at an alcohol concentration of 0.00. Mandatory referral to the Authority' EAP, participation in and successful completion of rehabilitation is required as a condition of continued employment upon return-to-duty.

- g. **Repeat Usage:** In all cases where an employee tests a second time during their employment with the Authority at an alcohol concentration of 0.02 or greater, the employee shall be dismissed.
- h. **Re-employment:** Any covered employee, who violates the provisions of this Part of the Authority's Substance Abuse Policy, which results in a dismissal from Authority employment, shall be barred from re-employment in any position for a period of three (3) years from the date of dismissal. Any employee rehired and dismissed a second time for violation of the Substance Abuse Policy shall be ineligible for re-employment in any position with the Authority.

## 7. Alcohol Testing Requirements

The alcohol testing procedures contained herein and in Appendix B shall be complied with by the designated alcohol testing sites. These procedures mirror the requirements contained in 49 CFR, Parts 40 and 382.

The alcohol testing site shall have all necessary personnel, materials, equipment, facilities, and supervision to provide for the testing and processing of alcohol test results.

## 8. Disclosure of Alcohol Information and Records

The Authority will maintain all alcohol related testing information including all test results and other appropriate records in a secure manner to prevent the disclosure of such information to unauthorized personnel. The APM will maintain a locked file system which will contain the alcohol testing information and records. This file shall be maintained as confidential. Employee files will be handled on a strict "need to know" basis. Alcohol test results shall not be included in personnel files.

The Authority shall not release covered employee information that is contained in records except as required by law or when expressly authorized by the employee.

A covered employee is entitled, upon written request, to receive copies of any records pertaining to his/her use of alcohol, including any records pertaining to his/her alcohol tests. Access to an employee's records shall not be contingent upon payment for records other than those specifically requested.

The Authority shall make alcohol records available to a subsequent employer, upon receipt of the written request from the covered employee. Disclosure by the subsequent employer is permitted only as expressly authorized by the terms of the employee's written request.

The Authority may disclose information required to be maintained under this program pertaining to an employee, the decision maker in a lawsuit, grievance, or other proceeding initiated by or on behalf of the individual, and arising from the results of an alcohol and/or controlled substance test, or from the employer's determination that the employee engaged in conduct prohibited by this program (including, but not limited to worker's compensation, unemployment compensation, or other proceeding relating to a benefit sought by the employee.)

The Authority shall release information regarding a covered employee's records as directed by the specific, written consent of the employee authorizing release of the information to an identified person. Release of such information by the person receiving the information is permitted only in accordance with the terms of the employee's consent.

#### **9. Employee Assistance Program (EAP)**

The Authority contracts with an Employee Assistance Program (EAP). EAP services are available to all covered employees. The EAP staff shall be available to provide employees with the appropriate education regarding the use of alcohol. Alcohol information will be periodically distributed and/or displayed in Authority work areas. The telephone number of the EAP office is located in Appendix D and is displayed in the work areas.

Supervisory personnel responsible will receive training under the alcohol misuse prevention plan. This training shall include at least one sixty (60) minute period of training on the specific, contemporaneous, physical, behavior, speech and performance indications of probable alcohol misuse. This training shall be for any supervisor who may determine whether an employee must be alcohol tested for reasonable suspicion.

#### **10. Recordkeeping Procedures**

The Authority maintains testing records. All recordkeeping requirements and guidelines may be found in Appendix E

### Part B - Anti-Drug Plan (ADP)

The goal of the Authority is to establish and maintain a safe and healthy workplace that is free from drug abuse by all employees and to protect the safety of its customers by providing the highest quality of service. Therefore, the Authority maintains a zero-tolerance policy for any drug use that imperils the health and well-being of its employees or threatens the safety and reliability of service to its customers and the public.

This policy requires all employees be subject to the following testing for illegal drug use under the following conditions:

- Pre-Employment
- Post-Accident
- Random
- Reasonable Suspicion
- Return-to-Duty
- Follow-Up

The purpose of the Anti-Drug Plan (ADP) is to set consistent guidelines and procedures for the detection and deterrence of drug abuse within the Authority and identify management and employee responsibilities.

## 1. Responsibilities

- a. **Drug Program Designee (DPD):** Appendix A contains the name and phone number of the individual(s) who are responsible for the preparation of a drug testing and anti-drug plan. The DPD shall be responsible for providing oversight and evaluation of the plan; providing guidance and counseling in regards to the plan; ensuring that all discipline applied under this plan is consistent and conforms to human resources policies and procedures; scheduling for types of testing random and return-to-duty testing; overseeing the referral of employees for evaluation and treatment; and maintaining a locked file system on all drug testing results. The Authority shall ensure that all covered employees are aware of the provisions and coverage of the Authority's Anti-Drug Plan. All covered employees will have access to a copy of the current Substance Abuse Policy.
- b. **Supervisor(s):** Supervisors are responsible for observing the performance and behavior of employees; observation and documentation of events suggestive of reasonable cause; and making requests of second supervisor for substantiation and concurrence for reasonable cause testing, if applicable.
- c. **Employees:** Covered employees shall be knowledgeable of the requirements of the Authority's ADP and fully comply with the provisions of the plan.

## 2. Applicability

- a. **General:** All employees will be subject to random drug testing. Section 3, "Persons covered" include all employees other than those covered under Section 2, FHWA Covered Employee as stated earlier in the Authority's Substance Abuse Policy.
- b. **Notifying Covered Employees of Plan:** The goal of the Authority is to establish and maintain a workplace that is free from drug use. Therefore, as early as the interview process, all job applicants will be informed that all Authority employees are subject to these rules and procedures regarding drug testing. Each new employee will be informed of the Authority's testing policy and will be required to sign an Employee Notification Letter which tells them which drug testing pool they are in. In addition, all employees will be notified of any changes and/or revision through notices.

Following is a list of unauthorized substances that are subject to drug detection:

- c. Marijuana (THC)
- d. Cocaine
- e. Opiates (Morphine and Codeine)
- f. Phencyclidine (PCP)
- g. Amphetamines (Amphetamine, Methamphetamine)

## 3. Types of Testing

- a. Pre-Employment

- 1) The Authority will not hire any person, unless that person successfully passes a drug test.
- 2) All job applicants selected for employment under this Part shall undergo a drug test as part of a pre-employment physical at the Authority's expense. It is the Authority's policy, that any persons testing positive will be denied employment in any position with the Authority for a period of three (3) years from the date of the drug test results. Any applicant testing positive a second time shall be ineligible for employment.
- 3) A drug test will be conducted when a current employee moves from a Non-CDL position into a CDL-FHWA covered position.
- 4) All pre-employment job applicants who test positive shall have the right to have their original sample re-tested by a laboratory approved by the Medical Review Officer, at the applicant's own expense.
- 5) Employees moving into an FHWA covered position who test positive have the right to have their original sample re-tested at their own expense. Employees who fail the re-test will not be moved to an FHWA position and are subject to disciplinary action under the Substance Abuse Policy.

b. Post-Accident

As soon as possible following an accident involving a motor vehicle, the Authority shall test the employee driver for drugs when either:

- 1) The accident involved a fatality; or
- 2) The employee driver receives (or is expected to receive) a citation under state or local law for a moving violation arising from the accident which also includes at least one of the following:
  - a) bodily injury to any person who immediately receives medical treatment away from the scene, or
  - b) one or more motor vehicles incur damage requiring the vehicle(s) to be towed away from the scene.
- 3) It is the applicable employee's immediate supervisor's responsibility to ensure that the provisions of post-accident testing are followed.
- 4) Each employee shall be required to submit to a drug test within two (2) hours or soon as possible. If a test is not administered within 32 hours following the accident, the Authority shall cease all attempts to conduct a drug test and shall prepare and maintain on file written documentation indicating why the drug test was not conducted.
- 5) An employee who is subject to post-accident testing who fails to remain readily available for such testing, including notifying the supervisor or department representative of his/her location if he/she leaves the scene of the accident prior to submission to such test, shall be deemed by the Authority to have refused to submit to testing.



- 6) The employee must remain available for drug testing until the drug test has been conducted. Notwithstanding the previous statement, nothing in this Policy shall prevent employees from seeking and obtaining emergency medical care whenever necessary.
  - 7) If an employee is injured, unconscious, or otherwise unable to grant consent to the drug test, all reasonable steps must be taken to obtain a urine sample. The Authority or their agents may decide not to test under this paragraph; however, such a decision must be based on the best information available immediately after the accident that the employee's performance could not have contributed to the accident, or that because of the time between that performance and the accident, it is not likely that a drug test would reveal whether the performance was affected by drug use.
- c. Random
- 1) Once notified for random testing, the employee must report no later than the time it takes to travel from the work site to the testing site, plus 30 minutes. There are no exceptions and the employee will report to the designated facility.
  - 2) A covered employee who tests positive for drug use will be removed from performing job duties. Such employee shall be disciplined in accordance with the provisions of the Substance Abuse Policy.
- d. Reasonable Suspicion
- 3) The Authority will test a covered employee when there is reasonable cause to believe the employee is under the influence and/or using prohibited drugs.
  - 4) Reasonable suspicion is a belief based on objective and clearly stated facts sufficient to lead a supervisor, exercising sound judgment, to suspect that an employee is under the influence of drugs while just reporting for duty, while on duty or having immediately finished duty.
  - 5) Every supervisor covered by this Policy, who will determine whether or not an employee will be subject to a reasonable suspicion drug test, will receive at least a one-hour training on the specific physical, behavioral and performance indicators of probable drug use.
  - 6) In making a determination of reasonable suspicion, some factors to be considered include, but are not limited to the following:

- a) Adequately documented pattern of unsatisfactory work performance for which no apparent non-impairment related reason exists, or a change in an employee's prior pattern of work performance, especially where there is some evidence of alcohol related behavior on or off the work site.
- b) Physical signs and symptoms consistent with alcohol abuse.
- c) Evidence of prohibited alcohol use while on duty or on paid on-call for duty.
- d) Occurrence of a serious or potentially serious accident that may have been caused by flagrant violation of established safety, security or other operational procedures.
- e. Return-to-Duty
  - 1) Before an employee may return-to-duty after engaging in prohibited conduct, the employee shall undergo a return-to-duty drug screening test with a negative result.
  - 2) The Authority or their designated supervisors, managers, or agents shall not permit an employee who refuses to submit to a drug screening test to return-to-duty.
- f. Follow-Up
  - 3) The Authority shall ensure that the employee is subject to unannounced random follow up drug screening tests as directed by a substance abuse professional (SAP).
  - 4) Follow up testing shall be conducted when the employee is performing job tasks; just before the employee is to perform job tasks; or just after the employee has ceased performing job tasks.
  - 5) A minimum of six (6) unannounced, follow up drug tests must be administered within the first twelve (12) months after the employee has returned to duty. The SAP can direct additional testing during this period or for an additional period up to a maximum of 60 months from the date that the employee returned to duty. The SAP can terminate the requirement for the follow up testing in excess of the minimum at any time, if the SAP determines that the testing is no longer necessary.

#### **4. Disciplinary Actions for Non-CDL Positions**

Once the Medical Review Officer (MRO) makes a determination that there is no legitimate medical explanation for a confirmed positive test result other than the unauthorized use of a prohibited drug, the Authority will not knowingly use such employee or person in any capacity. The employee shall be suspended or placed on unpaid leave immediately. The employee may return to work only after a Substance Abuse Professional has determined the employee is fit for duty and has successfully completed the prescribed drug rehabilitation program. The employee must also have a negative drug screening under return-to-duty testing.

An employee will be dismissed immediately:

- a. if an employee refuses to report to a substance abuse professional for assessment, evaluation, and/or referral for treatment with the Authority's abuse professional;

- b. if an employee is referred for rehabilitation and the employee refuses to enter or fails to successfully complete such a rehabilitation assessment program;
- c. if an employee refuses to provide an adequate urine sample for drug testing without a valid medical explanation after he has received notice of the requirement to be tested, or who engages in conduct that clearly obstructs the testing procedure;
- d. if an employee tests positive a second time during their employment with the Authority, the employee will be dismissed.

**If an employee uses or has in their possession illegal drugs on Authority property or in an Authority vehicle, the Authority may impose discipline on the employee up to and including dismissal, even for a first offense.**

Any covered employee, who violates the provisions of this Part of the Authority's Substance Abuse Policy, which results in a dismissal from Authority employment, that individual shall be barred from re-employment in any position for a period of three (3) years from the date of dismissal. Any employee rehired and dismissed a second time for violation of the Substance Abuse Policy shall be ineligible for re-employment in any position with the Authority.

## **5. Specimen Collection Requirements**

A complete copy of the specimen collection requirements may be found in Appendix F.

## **6. Drug Testing Laboratory**

The Authority use a laboratory certified by the DHHS to conduct the analysis of urine samples. These documents contain specific drug testing procedures and may be found in Appendix F. The testing laboratory will comply with all methods and procedures of 49 CFR and will provide annual reports. The designated collection agency and the testing laboratory information for the Authority ADP is listed in Appendix G.

## **7. Blind Sample Performance Test Procedures**

Regulations regarding the submission of blind samples may be found in Appendix F of this Policy. The Authority Medical Services Provider (MSP) shall be responsible for the submission of blind samples in compliance with Federal Regulations.

## **8. Review of Drug Testing Results**

The Authority contract for the services of a Medical Review Officer (MRO). The name, address and general responsibilities of the MRO for the Authority are listed in Appendix H.

## **9. Retention of Samples**

All applicants and employees who test positive may challenge the test results by notifying the DPD in writing within seventy-two (72) hours of receiving the test results. If a test result is challenged, the original sample will then be re-tested by a certified DHHS laboratory other than the Authority's medical provider primary laboratory. The selection of the certified laboratory must be made from a list of laboratories maintained by the MSP provider and approved by DPD.

Because some analytes deteriorate or are lost during freezing and/or storage, quantitation for a retest is not subject to a specific cutoff requirement but must provide data sufficient to confirm the presence or absence of the drug or metabolite.

All costs associated with a positive re-test will be borne by the applicant or employee raising the challenge and must be prepaid.

## **10. Disclosure of Drug Information and Records**

Except as provided in the following paragraphs, the MRO shall not disclose to any third-party medical information provided by the individual to the MRO as a part of the testing verification process.

The MRO may disclose such information to the DPD in Human Resources; or other Federal safety agency officials; or to a physician responsible for determining the medical qualification of the applicant or employee, as applicable, only if:

- a. In the MRO's reasonable medical judgment, the information could result in the employee being determined to be medically unqualified; or
- b. In the MRO's reasonable medical judgment, the information indicates that continued work performance by the employee could pose a significant safety risk.

Before obtaining medical information from an applicant or employee as part of the verification process, the MRO shall inform the applicant or employee that information may be disclosed to third parties as provided in this section and the identity of any parties to whom information may be disclosed.

## **11. Employee Assistance Program (EAP)**

The Authority contracts with an Employee Assistance Program (EAP). EAP services are available to all employees. The EAP staff shall be available to provide employees with the appropriate education regarding the use of prohibited drugs. Drug information will be periodically distributed and/or displayed in Authority work areas. The telephone number of the EAP office is located in Appendix D and is displayed in the work areas.

## **12. Recordkeeping Procedures**

All recordkeeping requirements and guidelines may be found in Appendix E.

## APPENDIX

The Appendixes of the Substance Abuse Policy may be changed without prior Board approval in response to changes in process and operational controls, medical providers, substance abuse professionals, and personnel turnover.

DRAFT - BOD Review

**A. Substance Abuse Policy Personnel**

The following individuals are responsible for the administration of the Authority's Substance Abuse Policy and each of its Sections and Sub-parts and may be contacted for information regarding the Policy.

<b>Executive Director</b> (434) 977-2970, ext. 103 (434) 293-8858, Fax (434) 906-2623, Cell	<b>Director of Finance/Administration</b> (434) 977-2970, ext. 198 (434) 293-8858, Fax (434) 906-0759, Cell	<b>Human Resources Manager</b> (434) 977-2970, ext. 111 (434) 977-9507, Fax (434) 981-9583, Cell
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## **B. Alcohol Testing Procedures, Evidential Breath Testing (EBT) Procedures**

### **1. Scope**

The evidential breath testing procedures set forth in this appendix address all the requirements as set forth in 49 CFR, Part 40, and specifies the required form and disposition of such testing forms.

### **2. Alcohol Testing Form and Log Book**

The BAT shall utilize the Breath Alcohol Testing form. The alcohol testing form must comply with the provisions as contained in 49 CFR, Part 40, with regard to the information that must be contained on the form. The form must address the specific requirements contained in §40.59.

The Authorities and their EMS contractors may utilize a form that is directly generated by an EBT and may omit the space for affixing a separate printed result to the testing form. The form shall provide triplicate or three consecutive identical copies with copy 1 being retained by the APM in the Authority's Human Resources Office, copy 2 shall be provided to the employee, and copy 3 shall be retained by the BAT.

The medical provider shall use a log book in conjunction with any EBT used for screening tests that does not meet the requirements listed in the AMPP.

The breath alcohol testing form may include such additional information as may be required for billing or other legitimate purposes necessary to the testing, provided that personal identifying information on the individual (other than the social security number or employee identification number) may not be provided.

### **3. Breath Testing Locations**

The Authorities shall ensure that there are sufficient breath testing sites or that the breath testing sites are located within a reasonable proximity to various work locations.

Testing shall be conducted in a location that affords visual and audio privacy to the employee being tested. The location shall prevent unauthorized personnel from seeing or hearing test results. All necessary equipment, personnel, and materials for conducting the alcohol testing shall be provided at the testing site.

No unauthorized persons shall be permitted access to the testing site when the EBT remains unsecured, or in order to prevent such individuals from seeing or hearing a test result.

The BAT shall supervise only employee's use of the EBT at a time. The BAT shall not leave the alcohol testing site while the testing process is in progress.

### **4. Breath Alcohol Testing Preparations**

When an employee arrives at the alcohol testing site, the BAT shall ensure that the individual is positively identified as the employee selected for alcohol testing (e.g. through presentation of photo identification or identification by the department's representative). If the employee's

identity cannot be established, the BAT shall not proceed with the alcohol test. If the employee requests, the BAT shall show proper identification to the employee.

The BAT shall explain the alcohol testing process to the employee.

## 5. Screening Test Procedures

The BAT shall begin the alcohol testing process by completing Step 1 on the Alcohol Breath Testing form. The employee shall then complete Step 2 by signing the certification. Refusal by the employee to sign the certification shall be regarded as a refusal to take the alcohol test.

The BAT shall select an individually sealed mouthpiece and it shall be opened in full view of the employee and attached to the EBT in accordance with the manufacturer's instructions.

The BAT shall instruct the employee to blow forcefully into the mouthpiece for at least 6 seconds or until the EBT instrument indicates that an adequate amount of breath has been obtained.

If the EBT does not meet the requirements of the AMPP, the BAT shall show the employee the result displayed on the EBT. The BAT shall record the displayed result, test number, testing device, serial number of the testing device, time and quantified result in Step 3 of the form. The BAT shall record in the log book the test number, date of the test, name of the BAT, location, and quantified test result. The employee shall then initial the log book entry.

If the EBT provides a printed result but does not print the results directly onto the form, the BAT shall show the employee the result displayed on the EBT. The BAT shall then affix the test result printout to the breath alcohol test form in the designated space. The result shall be secured in such a manner that will provide clear evidence of removal, such as the use of tamper-evident tape.

If the EBT prints the test result directly onto the alcohol form, then the BAT shall show the employee the result displayed on the EBT.

If the result of the screening alcohol test is a breath alcohol concentration of less than 0.02, the BAT shall date the form and sign the certification in Step 3 of the form. The employee shall then sign the certification and fill in the date in Step 4 of the form. If the employee does not sign the certification in Step 4 or does not initial the log book entry for a test, it shall not be considered a refusal to be tested. In this event, the BAT shall note the employee's failure to sign or initial in the "Remarks" section of the form.

If a test result printed by the EBT does not match the displayed result, the BAT shall note the disparity in the "Remarks" section. Both the BAT and the employee shall initial or sign the notation. The alcohol test is invalid and the APM and the employee shall be so advised.

At this point, no further testing is authorized. The BAT shall transmit the result of less than 0.02 to the APM or other designated representative in a confidential manner. The Authorities shall receive and store the information ensuring that confidentiality is maintained as required in the AMPP.

If the result of the screening test is an alcohol concentration of 0.02 or greater, then the BAT shall perform a confirmation test. If the confirmation test will be conducted by a different BAT, then the BAT who conducts the screening test shall complete and sign the form and log entry. The BAT



will upon completion of the alcohol test, provide the employee with Copy 2 of the breath alcohol testing form.

## 6. Confirmation Test Procedures

When a BAT other than the one who conducted the screening test is required to conduct the confirmation test, the new BAT will require the employee to provide positive identification such as photo ID card or identification by a representative. The BAT will, upon request of the employee being tested, provide such identification.

The BAT shall instruct the employee not to eat, drink, put any object or substance in his/her mouth and, to the extent possible, not belch during the waiting period just prior to the confirmation test being conducted. This waiting period shall begin with completion of the screening test and shall not be less than 15 minutes but must be within 20 minutes of the completion of the screening test. The BAT shall explain to the employee that the reason for this is to prevent any accumulation of mouth alcohol leading to an artificially high reading and that it is for the benefit of the employee to comply with these instructions. The BAT shall also explain that the test will be conducted at the end of the required waiting period, even if the employee has disregarded the instructions. Should the BAT become aware that the employee has not complied with the instructions as provided, the BAT shall note the observations in the "Remarks" section of the form.

When a BAT other than the one who conducted the screening test is required to conduct the confirmation test, the new BAT shall initiate a new Breath Alcohol Testing form. The BAT shall then complete Step 1 on the form and the employee shall then complete Step 2 by signing the certification. If the employee should choose not to sign the certification, the BAT shall then make an appropriate notation in the "Remarks" section indicating the employee's refusal to take the alcohol test. The BAT shall note in the "Remarks" section that a different BAT conducted the screening test.

The BAT shall open, in the presence of the employee, a new individually-sealed mouthpiece and attach the mouthpiece to the EBT in accordance with the manufacturer's instructions. The BAT will then instruct the employee to blow forcefully into the mouthpiece for at least 6 seconds or until the EBT indicates that an adequate amount of breath has been obtained.

The BAT shall ensure, prior to the confirmation test being administered to the employee, that the EBT shall register 0.00 on an air blank. If the reading is greater, the BAT shall conduct one more air blank. Should the EBT again register greater than 0.00, the testing shall not proceed using that EBT. An EBT taken out of service because of failure to perform an air blank accurately shall not be used for testing until a check of external calibration is conducted and the EBT is found to be within the accepted tolerance limits. Alcohol testing using another EBT may proceed.

In the event that the screening and confirmation test results are not identical, the confirmation test result shall be deemed to be the final result on which disciplinary action is taken in order to comply with the requirements of the AMPP and any applicable federal requirements.

If the EBT provides a printed result but does not print the results directly onto the form, the BAT shall show the employee the result displayed on the EBT. The BAT shall then affix the test result

printout to the breath alcohol test form in the designated space. The result shall be secured in such a manner that will provide clear evidence of removal, such as the use of tamper-evident tape.

If the EBT prints the test result directly onto the alcohol form, then the BAT shall show the employee the result displayed on the EBT.

After the confirmation test is completed, the BAT shall date the form and sign the certification in Step 3 of the form. The employee shall then be instructed to sign the certification and fill in the date in Step 4. If the employee should elect not to sign the certification or to provide his/her initials in the log book entry for the test conducted, it shall not be considered as a refusal to be tested. The BAT shall then note the employee's failure to sign or initial the log book entry in the "Remarks" section of the testing form.

If a test result printed by the EBT does not match the displayed result, the BAT shall note the disparity in the "Remarks" section. Both the BAT and employee shall initial or sign the notation on the testing form. The test shall be considered "invalid" and the APM and the employee shall be so advised.

The BAT shall transmit all alcohol testing results to the APM or other designated Authority representative in a confidential manner. All communications by BATs shall be to the APM or designee only and may be provided in writing, in person, or by telephone or electronic means. The BAT shall ensure that immediate transmission of test results to the Human Resources Manager in order to prevent the employee from performing any covered functions.

Should the initial transmission not be accomplished in writing, but via telephone notification, the APM or designee shall establish a mechanism to verify the identity of the BAT providing the information. The BAT shall follow the initial transmission by providing to the APM or designee the Authorities' copy of the breath alcohol testing form. The test results shall be stored in such a manner so as to protect the confidentiality of the results and to eliminate the disclosure of information to unauthorized persons.

## **7. Refusals to Test and Uncompleted Tests**

Refusal by an employee to complete and sign Step 2 of the breath alcohol testing form, to provide breath, to provide an adequate amount of breath, or to otherwise cooperate with the testing process in a way that prevents the completion of the test, shall be noted by the BAT in the "Remarks" section of the form. The testing process shall be dismissed and the BAT shall immediately notify the APM or designee without delay.

If a screening or confirmation test cannot be completed or if an event occurs to invalidate the test, the BAT shall, if practicable, begin a new screening or confirmation test using a new breath alcohol testing form with a new sequential test number.

## **8. Inadequate Amount of Breath**

If the employee is unable, or alleges that he is unable, to provide a sufficient amount of breath to permit a valid breath test because of a medical condition, the BAT shall again instruct the employee

to attempt to provide an adequate amount. If the employee refuses to make the attempt, the BAT shall immediately inform the APM.

If the employee attempts and fails to provide an adequate amount of breath, the BAT shall so note in the "Remarks" section of the testing form and shall immediately inform the APM. The APM shall direct the employee to obtain, as soon as practical after the attempt, an evaluation from a licensed physician who is acceptable to the Authorities concerning the employee's medical ability to provide an adequate amount of breath.

If the physician determines, in his/her reasonable medical judgment, that a medical condition has or could have precluded the employee from providing an adequate amount of breath, the employee's failure to provide an adequate amount of breath shall not be deemed as a refusal to take an alcohol test. The physician shall provide to the APM a written statement for the basis of his/her conclusion.

If the physician, in his/her reasonable medical judgment, is unable to make the determination that a medical condition has precluded the employee from providing an adequate amount of breath, the employee's failure to provide an adequate amount of breath shall be regarded as a refusal to take a test. The physician shall provide a written statement for the basis of his/her conclusion to the APM.

## **9. Invalid Tests**

A breath alcohol test shall be invalid under the following circumstances:

- a. The EBT does not pass its next external calibration check. This invalidates all test results of 0.02 or greater on tests conducted since the last valid external calibration test. This would not invalidate any negative tests conducted.
- b. The BAT does not observe the minimum 15-minute waiting period prior to conducting the confirmation test.
- c. The BAT does not perform an air blank of the EBT before a confirmation test, or an air blank does not result in a reading of 0.00 prior to the administration of an alcohol test.
- d. The BAT does not sign the breath alcohol testing form.
- e. The BAT fails to note in the "remarks" section of the form that the employee has failed or refused to sign the form following the recording or printing on or attachment to the form of the test results.
- f. An EBT fails to print a confirmation test result.
- g. The sequential test number or alcohol concentration displayed on the EBT is not the same as the sequential test number or alcohol concentration on the printed result.

## **10. Alcohol Testing Equipment**

The Authorities' Employee Medical Services (EMS) provider shall use only approved evidential breath testing (EBTs) devices for conducting the alcohol testing.

a. Screening Devices

The Authorities' EMS provider shall utilize a log book to record information relative to screening alcohol tests, if the EBT being utilized does not have:

- 1) capabilities to be attached independently or by direct link to a separate printer, print a result in triplicate (or three consecutive identical copies) of each breath test;
- 2) capabilities to assign a unique and sequential number to each completed test so that the number can be read by the breath alcohol technician (BAT) and the employee before each test and be printed out on each copy of the result;
- 3) capabilities of printing out the manufacturer's name of the device, serial number and time of the test.

A log book shall be used for each device that does not meet the above criteria and the log book shall include the following information: test number, date of test, name of BAT, location of test, test result and initials of the employee taking each test.

b. Confirmation Devices

The Authorities' Employee Medical Services provider shall utilize an EBT for confirmation testing that has the required capabilities. The EBT shall also be able to distinguish alcohol from acetone; be capable of testing an air blank prior to each collection of breath; and perform an external calibration.

c. NHTSA Conforming Products List

All devices that will be used by the Authorities' Employee Medical Services provider for alcohol testing shall be National Highway Transportation Safety Administration (NHTSA) approved evidential breath testing (EBT) devices. NHTSA has model specifications for evidential breath testing devices and periodically publishes an updated Conforming Products List, which states which devices have met NHTSA standards.

## 11. Breath Alcohol Technician (BAT) Guidance

The Authorities' Employee Medical Services provider breath alcohol technician (BAT) shall receive sufficient training and be certified to proficiency in the specific operation of the evidential breath testing (EBT) device he uses in the required alcohol testing procedures as outlined in the Substance Abuse Policy. These products include the following:

- a. Each BAT used by the EMS shall be able to demonstrate by successful completion of a course of instruction which, at a minimum, provides training in the principles of EBT methodology, operation, and calibration checks; the fundamentals of breath analysis for alcohol content; and the procedures required for obtaining a breath sample, and interpreting and recording EBT results.
- b. The EMS provider shall ensure that only courses of instruction that are equivalent to the National Highway Traffic Safety Administration (NHTSA), as amended, model course may

be used to train BATs to proficiency. Upon request to NHTSA, they will review a BAT instruction to determine equivalency.

- c. The EMS provider shall ensure that the course of instruction shall provide documentation that the BAT has demonstrated competence in the operation of the specific EBT(s) to be used.

The EMS provider shall ensure that any BAT who will perform an external calibration check of an EBT shall be trained to proficiency in conducting the check:

- a. on the particular model of the EBT to be used. The BAT training shall also include practical experience and demonstrated competence in preparing the breath alcohol simulator or alcohol standard, and in the maintenance and calibration of the particular EBT.
- b. The EMS provider shall ensure the BAT(s) receives sufficient additional training to ensure proficiency concerning any new or additional devices or changes in technology for equipment used.
- c. The EMS provider and/or its designated agent, who are involved in conducting alcohol testing, shall establish documentation regarding the training and proficiency testing of any BAT it uses to test employees. The documentation shall be maintained in accordance with the requirements of federal regulations.

### **C. Employee Assistance Program (EAP)**

The Authorities maintain a provider of employee assistance services. Services provided by this program include all employees of the Authorities.

The Authorities' Employee Assistance Program (EAP) provider is:

**OPTIMA HEALTH**  
**[www.OptimaEAP.com](http://www.OptimaEAP.com)**  
(800) 899-8174  
or  
(757) 363-6777

This program is available to both the employee and your immediate family. The program is easily accessible with convenient appointment scheduling and emergency access to counselors 24 hours, seven days a week, through the 800 Helpline (800-932-0034).

## **D. Recordkeeping Procedures**

### **Alcohol Records**

#### **1. General**

The APM shall maintain the alcohol testing records in accordance with the provisions set out in the Substance Abuse Policy. Records shall be maintained for the specified periods of time as required in 49 CR, 382 and 40. In addition, the Authorities' Employee Medical Services (EMS) provider will maintain the alcohol testing records as specified in the Federal Regulations and the Authority Records Retention Guidelines.

#### **2. Record Retention Provisions**

- a. The following types of records shall be maintained for a minimum period of five years.
  - 1) Records of employee alcohol test results with results indicating an alcohol concentration of 0.02 or greater.
  - 2) Documentation of refusals to take required alcohol tests.
  - 3) Calibration documentation of each EBT used in alcohol testing, including records of the results of external calibration checks.
  - 4) Employee referrals and evaluations.
  - 5) Annual alcohol misuse report data.
- b. The following types of records shall be maintained for a minimum period of two years.
  - 1) Records related to the collection process (except calibration of EBT devices).
  - 2) Records related to training.
  - 3) Records of the inspection and maintenance of each EBT used in employee testing.
  - 4) Documentation of the Authorities' EMS provider compliance with the Quality Assurance Plan (QAP) for each EBT it uses for alcohol testing under the AMPP.
  - 5) Records of the training and proficiency testing of each BAT used in employee testing.
  - 6) Log books used in conjunction with EBTs.
- c. The following types of records shall be maintained for a minimum period of one year.
  - 1) Records of all test results below 0.02.

#### **3. Maintenance of Specific Types of Records**

- a. The following types of records related to the collection process shall be maintained:
  - 1) Collection log books, if used.
  - 2) Calibration documentation of EBT devices.
  - 3) Documentation of BAT training.

- 4) Documents generated in connection with decisions to administer reasonable suspicion alcohol tests.
  - 5) Documents generated in connection with decisions to administer post-accident alcohol test.
  - 6) Documents verifying existence of a medical explanation of the inability of a covered employee to provide adequate breath for alcohol testing.
- b. The following types of records related to test results:
- 1) EMS copy of the alcohol test form, including the results of the test.
  - 2) Documents related to the refusal of any covered employee to submit to a required alcohol test.
  - 3) Documents presented by a covered employee to dispute the result of an alcohol test administered under the AMPP.
- Records related to other violations outlined in the AMPP.
- c. The following types of records related to referrals and evaluations:
- 1) Records pertaining to a determination by an SAP concerning a covered employee's need for assistance.
  - 2) Records concerning a covered employee's compliance with the recommendations of the SAP.
  - 3) Records related to the annual alcohol misuse testing data. The Authorities shall submit the required alcohol misuse MIS testing data and FHWA as prescribed by the regulations.
- d. The following types of records related to education and training of employees and supervisors:
- 1) Materials on alcohol misuse awareness, including a copy of the Authorities' policy on alcohol misuse.
  - 2) Documentation of compliance with the requirements of Part 382.
  - 3) Documentation of training provided to supervisors for the purpose of qualifying the supervisors to make a determination concerning the need for alcohol testing based on reasonable suspicion.
  - 4) Certification that any training conducted under the AMPP be in compliance with the requirements of 49 CFR, Parts 199, 382 and 40.

## Drug Records

### 1. General

The DPD shall maintain the drug testing records in accordance with the provisions set out in the Substance Abuse Policy. Records shall be maintained for the specified periods of time as required



in 49 CFR, Parts 382 and 40. In addition, the Authorities' Employee Medical Services (EMS) provider will maintain drug testing records as specified in the Federal Regulations.

## 2. Record Retention Provisions

Records that demonstrate the collection process conforming to 49 CFR, Part 382, will be kept for a minimum of three (3) years by the program contractor.

Records of employee drug test results that show employees who had a positive test, and the type of test (e.g., post-accident), and records that demonstrate rehabilitation, if any, must be kept for at least five (5) years, and include the following information:

- a. The function performed by each employee who had a positive drug test.
- b. The prohibited drugs that were used by an employee who had a positive drug test.
- c. The disposition of each employee who had a positive drug test or refused a drug test (e.g. dismissal, rehabilitation, removed from covered function, other).

Records of employee drug test results that show employees passed a drug test must be kept for at least one (1) year.

A record of the number of employee tests, by type of test (e.g., post-accident), must be kept for at least five (5) years

Records confirming that supervisors and employees have been trained as required by federal regulations must be kept for at least three (3) years.

Information regarding an employee's drug test results or rehabilitation may be released only upon the written consent of the employee, except that such information must be released regardless of consent to the federal agency or the representative of a state agency upon request as part of an accident investigation. Statistical data related to drug testing and rehabilitation that is not name-specific and training records must be made available to FHWA or the representative of a state agency upon request.

## E. Specimen Collection Procedures

### Policy

The Authorities' Employee Medical Services provider will provide collection of urine drug screens based on guidelines by the Department of Transportation Procedures for Transportation Workplace Drug Testing Programs. The EMS will send all Drug Screens to an NIDA certified laboratory for testing based on DOT guidelines.

### References

- a. Federal Register, Volume 53, Number 224
- b. Federal Register, Volume 59, Number 110
- c. U.S. Department of Transportation's Specimen Collection Workbook, May, 1992.

### Procedure

#### 1. Collection Site Security

The following conditions will be maintained to ensure that the collection site is secured for the purpose of drug testing:

- a. Doors to the collection rooms (bathrooms) will remain locked at all times. Access codes will be limited to department staff responsible for urine sample collections.
- b. All collection rooms will be inspected for paraphernalia which could be used to tamper with or adulterate the urine sample at the beginning of each workday and randomly throughout the day.
- c. Bluing agent will be added to the toilet water.
- d. During the collection process, all water faucets will be secured by the collector.

#### 2. Employee and Collector Identification

- a. The collector of the urine specimen will be a licensed medical professional or technician who has been instructed in the collection process.
- b. All employees/donors will present valid photo identification at the time they are scheduled for the drug screening procedure. (Driver's license, employee ID, or identification by the employer's representative.)
- c. If the employee's/donor's identity cannot be established, the collection site person shall not proceed with the collection.

#### 3. Collection Procedure

- a. Complete Step 1 (A, B, C, D and E) on Chain of Custody form.
- b. The employee/donor is directed to remove any unnecessary outer garments, such as a coat or jacket, that might conceal items or substances that could be used to tamper with

or adulterate the urine specimen. The employee/donor is directed to leave all personal belongings, such as a purse or briefcase, with the outer garments. The employee/donor may retain his/her wallet.

- c. The donor is instructed to wash his/her hands using soap from a dispenser outside the bathroom.
- d. The water is then turned off from a remote-control switch outside the bathroom.
- e. A sealed split specimen sample COC box is handed to the donor for sample collection.
  - 1) Collect an adequate amount of urine (45 ml minimum).
  - 2) If the amount of urine is less than 45 ml, the collection is void and the urine sample is discarded.
  - 3) The donor is provided not more than 24 ounces of fluid, and after a period of up to two hours, is instructed to provide a complete sample using a fresh collection kit.
  - 4) If, after another attempt to collect, the specimen is less than 45 ml of urine, notify the employer and discard the urine.
- f. Both the donor and the collector shall keep the specimen in full view at all times prior to its being sealed and labeled.
- g. Check temperature. This must be done within four minutes after collection. The collector shall also inspect the specimen to determine its color and look for any signs of contamination.
  - 1) If temperature sensor is not within 90-100 degrees, record actual temperature with thermometer in aliquot. Fill out Step 2 on COC Form.
  - 2) A donor may volunteer to have his/her temperature taken to provide evidence to counter the reason to believe the donor may have altered or substituted the specimen caused by the specimen's temperature falling outside the prescribed range.
- h. Open sealed bottle in kit and pour off 15 ml into it from the first bottle. This is now sample bottle B (split). Cap both bottles firmly.
- i. Seal containers with numbered bottle seals provided with the form. Specimen A should contain at least 30 ml. Collector dates both bottle seals. Donor initials both bottle seals. Place in COC bags and seal.
- j. Have donor complete Step 4 and Copy 4 (pink page) of COC form. Instruct donor to read certification statement before printing and signing name.
- k. Collector fills out Step 5 on Copy 1. Remarks section can be used for comments, type of ID, suspicious behavior or witness's signature if indicated.
- l. Collector prints and signs name on RECEIVED BY line on the first line of Step 6, signs and prints name again under RELEASED BY line. Under RECEIVED BY, line 2, write COC box/AML Courier (or other delivery service used). Under PURPOSE OF CHANGE write "ship specimen to lab."

- m. Give DOT copy 5 (green) to donor. Place sealed specimens and top 3 copies of form in COC box. Place red security seal over opening and initial and date. Place box in secure area.

#### 4. Direct Observation Collection

- a. Direct observation collection may be conducted in the following circumstances:
    - 1) The donor has provided a specimen that falls outside the acceptable temperature range (90-100 degrees).
    - 2) The collector observes conduct clearly indicating an attempt to substitute or adulterate the sample (i.e. substitute urine in plain view, blue dye in specimen presented, adulterated substance in view).
- NOTE: In both of the above described circumstances the collector must obtain, in advance of the direct observation collection, the review and concurrence of the collection site supervisor or the designated employer representative. The person directly observing the specimen collection shall be of the same gender.
- b. The DOT regulations permit a subsequent collection to be collected under direct observation if:
    - 1) The last specimen provided by the donor (i.e. on a previous occasion) was determined by the laboratory to have a specific gravity of less than 1.003 and Creatinine concentration below 2.g/l.
    - 2) The donor has had a verified positive result on a previous drug test and is subject to return-to-duty or follow-up testing under DOT regulations.
  - c. The decision to conduct a direct observation collection in the two circumstances described above is made by the employer, not the collection site personnel. In these cases, it is the responsibility of the employer to notify the collection site personnel when a direct observation collection is warranted.

#### 5. Reporting and Reviewing of Results

- a. The Medical Review Officer (MRO) shall be a licensed physician with knowledge of substance abuse disorders.
- b. The MRO will review and interpret confirmed positive test results. If the test of the first specimen bottle (bottle A) is verified positive by the MRO, the MRO shall report the result to Human Resources Manager.
  - 1) Prior to making a final decision to verify a positive test result of an individual, the MRO shall give the individual an opportunity to discuss the test results with him.
  - 2) The MRO shall contact the individual directly, on a confidential basis, to determine whether the employee wishes to discuss the test results with him.
  - 3) If, after making all reasonable efforts and documenting them, the MRO is unable to reach the individual directly, the MRO shall contact a designated management official who shall direct the individual to contact the MRO as soon as possible.

- 4) If, after making all reasonable efforts, the designated management official is unable to contact the employee, the employer may place the employee on temporary medically unqualified status or medical leave.
- c. The MRO may verify a test as positive without having communicated directly with the employee about the test in two circumstances.
  - 1) The employee expressly declines the opportunity to discuss the test.
  - 2) The designated employer representative has successfully made and documented a contact with the employee and instructed the employee to contact the MRO, and more than five days have passed since the date the employee was contacted by the designated employer representative.
    - a) If a test is verified positive under the circumstances specified in subparagraph (C-2) of this paragraph, the employee may present to the MRO information documenting the serious illness, injury or other circumstances which unavoidably prevented the employee from timely contacting the MRO. The MRO, on the basis of such information, may reopen the verification, allowing the employee to present information concerning a legitimate explanation for the confirmed positive test. If the MRO concludes that there is a legitimate explanation, the MRO declares the test to be negative.
- d. Following verification of a positive test result, the MRO shall, as provided in the employer's policy, refer the case to the employer's employee assistance or rehabilitation program and, if applicable, to the management official empowered to recommend or take administrative action (or the official's designated agent), or both.

## 6. Verification for Opiates

Review for prescription medication. Before the MRO verifies a confirmed positive result for opiates, he or she shall determine that there is clinical evidence, in addition to the urine test, of unauthorized use of any opium, opiate or opium derivative (e.g., Morphine, Codeine): (This requirement does not apply if the employer's GC/MS confirmation testing of opiates confirms the presence of 6-Monoacetylmorphine.)

## 7. Reanalyzes Authorized

- a. Should any questions arise as to the accuracy or validity of a positive test result, only the MRO is authorized to reanalyze the original sample and such retests are authorized only at laboratories certified by DHHS. The MRO shall authorize a reanalysis of the original sample if requested to do so by the employee within 72 hours of the employee's having received actual notice of the positive test. If the retest is negative, the MRO shall cancel the test.
- b. Only the donor may request, through the MRO, that the second specimen bottle (Bottle B) be tested in a DHHS certified lab for presence of the drug for which a positive result was obtained in the test of the first specimen bottle (Bottle A). The MRO shall honor such a request if it is made within 72 hours of the donor having received notice that he/she tested positive.

- c. The result of this test is transmitted to the MRO without regard to the cutoff levels used to test the first specimen bottle (Bottle A).

## **8. Result Consistent with Legal Drug Use**

If the MRO determines there is a legitimate medical explanation for the positive test results, the MRO shall report the test to the employer as negative.

## **9. Result Scientifically Insufficient**

Additionally, the MRO based on review of inspection reports, quality control data, multiple samples, and other pertinent results, may determine the result as scientifically insufficient for further action and declare the test specimen negative. In this situation the MRO may request reanalysis of the original sample before making this decision. (The MRO may request that reanalysis as provided in S40.22 (e) be performed by the same laboratory or, that an aliquot of the original specimen be sent for reanalysis to an alternate laboratory which is certified in accordance with the DHHS Guidelines.) The laboratory shall assist in this review process as requested by the MRO by making available the individual responsible for day-to-day management of the urine drug testing laboratory or other employee who is a forensic toxicologist or who has equivalent forensic experience in urine drug testing, to provide specific consultation as required by the employer. The employer shall include, in any required annual report to a DOT agency, a summary or any negative findings based on scientific insufficiency but shall not include any personal identifying information in such reports.

## **10. Disclosure of Information**

- a. Except as provided in this paragraph, the MRO shall not disclose to any third-party medical information provided by the individual to the MRO as part of the testing verification process.
- b. The MRO may disclose such information to the employer, a DOT agency or other Federal Safety Agency, or physician responsible for determining the medical qualification of the employee under an applicable DOT agency regulation, as applicable, only if:
  - 1) An applicable DOT regulation permits or requires such disclosure.
  - 2) In the MRO's reasonable medical judgment, the information could result in the employee being determined to be medically unqualified under an applicable DOT agency rule.
  - 3) In the MRO's medical judgment, in a situation in which there is no DOT agency rule establishing physical qualification standards applicable to the employee, the information by the employee of his or her safety sensitive function could pose a significant safety risk.
- c. Before obtaining medical information from the employee as part of the verification process, the MRO shall inform the employee that information may be disclosed to third parties as provided in this paragraph and the identity of any parties to whom information may be disclosed.

- d. Protection of Employee Records - The EMS provider contract with laboratories shall require that the laboratory maintain employee test records in confidence as provided in DOT agency regulations. The contracts shall provide that the laboratory shall disclose information related to a positive drug test of an individual to the individual, the employer, or the decision maker in a lawsuit, grievance, or other proceeding initiated by or on behalf of the individual and arising from a certified positive drug test.
- e. Individual Access to Test and Laboratory Certification Results - Any employee who is the subject of a drug test conducted under this part shall, upon written request, have access to any records relating to his or her drug test and any records relating to the revocation of certification proceedings.

DRAFT - BOD Review

## **F. Designated Collection Agency/Medical Services Provider and Testing Laboratories**

### **Collection Agency and Medical Services Provider**

MedExpress Urgent Care Pantops  
260 Pantops Center  
Charlottesville, VA 22901  
Monday - Friday, 9:00 AM - 5:00 PM

### **All Other Times**

University of Virginia Emergency Room  
1215 Lee Street  
Charlottesville, VA 22902  
(434) 924-0000 (ask Operator to page #1616)\*

- Supervisor must call ahead
- Stay on line while #1616 is paged
- Tell answering Respiratory Therapy Supervisor that answers page that an after-hours substance testing is coming to them
- Employee reports directly to the ER at UVA Medical Center and tell desk they are there for after-hours substance screening provided through UVA Work Med
- Tell ER registration to page #1616 and tell them of their arrival
- Employee Must show picture ID

### **Name and Address of Testing Laboratory:**

Quest Diagnostics-Philadelphia  
400 Egypt Road  
Norristown, PA 19403



## G. Medical Review Officer

MedExpress Urgent Care Pantops  
260 Pantops Center  
Charlottesville, VA 22901

### MEDICAL REVIEW OFFICER GENERAL RESPONSIBILITIES:

The Medical Review Officer is generally responsible for the following:

- a. Although the laboratory analysis will determine whether the specimen is positive, any confirmed positive test results from the laboratory must be reviewed and interpreted by a Medical Review Officer (MRO) prior to transmission of the results to the Authority's DPD. The MRO's review must include a review of the chain of custody to ensure that it is complete and sufficient on its face.
- b. Prior to confirming a positive result for opiates, the MRO must determine that there is clinical evidence (in addition to the urine test) of unauthorized use of any opium, opiate or opium derivative (e.g., morphine/codeine).
- c. The MRO must be a licensed physician with knowledge of both substance abuse disorders and possible alternate medical explanations for a positive test result. The MRO may not be an employee of the laboratory conducting the controlled substances test(s).
- d. As part of his/her responsibilities, the MRO must examine alternate medical explanations for any positive test results and review all medical records made available by the tested individual when a confirmed positive test could have resulted from legally prescribed medication. The MRO may not consider results of urine samples that were not obtained or processed in accordance with the DOT controlled substances testing program requirements.

Additional detailed rules governing the responsibilities of the MRO may be found in 49 CRF, 40.33.

## H. Alcohol & Drug Testing Percentages

In accordance with federal and Authority mandates, the Authority shall test the following percentages of employees for calendar year 2005:

### ALCOHOL TESTING

Testing Type	Percentage, FHWA - CDL	Percentage, All Non-CDL Employees
Pre-employment	0%	0%
Post-Accident	100% of who met requirements	100% of who met requirements
Random	10%	10%
Movement/Transfer	100% of those who move into a CDL position from a Non-CDL position	0% of those who move into a Non-CDL position from a CDL position
Return-To-Duty	100%	100%
Follow-Up	100%	100%
Reasonable Suspicion	100% based on specific, contemporaneous, and articulated observations	100% based on specific, contemporaneous, and articulated observations

### DRUG TESTING

Testing Type	Percentage, FHWA - CDL	Percentage, All Non-CDL Employees
Pre-employment	100%	100%
Post-Accident	100% of who met requirements	100% who met requirements
Random	50%	10%
Movement/Transfer	100% of those who move into a CDL position from a Non-CDL position	0% of those who move into a Non-CDL position from a CDL position
Return-To-Duty	100%	100%
Follow-Up	100%	100%
Reasonable Suspicion	100% based on specific, contemporaneous, and articulated observations	100% based on specific, contemporaneous, and articulated observations

## I. Quality Assurance Plan for Intoximeters, Inc - RBT IV/Alco-Sensor IV

### 1. Designated Methods for External Calibration ("Accuracy") Checks

Assuming that they are approved for use by NHTSA, Intoximeters, Inc. recommends that external accuracy checks be performed using either an approved compressed dry gas standard made up of  $105 \pm 2$  ppm ethanol in nitrogen or any NHTSA-approved wet bath simulator in conjunction with a properly certified and maintained ethanol solution that has been manufactured to produce an apparent breath alcohol concentration of  $0.040 \pm .002$  grams per 210 liters of breath.

In all cases the compressed gas tanks, simulators and simulator solutions should be used and maintained only in accordance with the quality assurance plans provided by their respective manufacturers in order to ensure that they produce consistent and reliable samples.

Instruction for use of these accuracy check standards with the instrument can be found in the documentation provided with the instrument.

### 2. Minimum Intervals for Accuracy Checks

In order to maintain the highest level of integrity for all alcohol breath tests performed, an accuracy check would have to be performed before and after every breath test. For most employers this will be a cumbersome requirement that will not offer much benefit.

When a test is run, an accuracy check must be run prior to that test if an accuracy check has not occurred within the past 31 days.

Intoximeters, Inc. also highly recommends that an accuracy check be run on the instrument as soon after a positive confirmation test as is practical.

Because an accuracy check that produces a result outside of the expected tolerances outlined below throws into doubt the validity of all previous breath tests since the last successful accuracy check, this procedure ensures that only one positive test (the last one) will be comprised. Also, if the accuracy check is run immediately, it gives the BAT an opportunity to test the subject again.

Intoximeters, Inc. suggests, if practical, that an accuracy check be run before the first test on each day that the instrument is used. This procedure offers additional assurances that the instrument is functioning properly especially when there is a long period during which there are no positive tests and an accuracy check would not otherwise be run according to the procedures outlined above.

### 3. Acceptance Tolerances on an External Accuracy Check

The result of an accuracy check must be within  $\pm 0.005$  grams per 210 liters of breath inclusive of the expected value.

For wet bath simulators, the requirement is measured by using simulator solution manufactured to produce an apparent breath alcohol concentration of  $0.040 \pm .002$  grams per 210 liters of breath. The value of a sample from the wet breath simulator, as read by the Alco-Sensor IV, should be  $0.040 \pm 0.005$  grams per 210 liters of breath inclusive.

For compressed dry gas standards, the requirement is met by using compressed dry gas tanks containing 105 + 2ppm of ethanol in nitrogen. The value of a sample of this gas delivered at 760mm of Hg. absolute barometric pressure as read by the Alco-Sensor IV should be 0.038 + 0.005 grams per 210 liters of breath inclusive. However, both weather conditions and higher elevations for operation will change the barometric pressure and cause the expected value of the dry gas standard to change. For instance, in Santa Fe at 7000 ft. the compressed dry gas tank will have a value of approximately 0.025. To accommodate these variations, the TRUE-CAL device is supplied with compressed dry gas tanks for manual accuracy checks and calibrations.

The TRUE-CAL device contains a precision pressure sensor which monitors the barometric pressure and automatically corrects the expected value of the dry gas standard at that moment. The information is available by pushing a button on the TRUE-CAL device.

Altitude tables may be used for this correction, but weather extremes may cause variations of up to + .002 grams per 210 liters in the expected value.

This value must be entered into the memory of the RBT IV/Alco-Sensor IV by the BAT before the standard is run and is recorded on the test record, along with the result obtained from running the standard.

If the instrument does fail an accuracy check, the employer shall take the instrument out of service as per 49 CFR, Part 40.55(b)(2) and re-calibrate it.

#### **4. Inspection, Maintenance and Calibration Requirements**

The instrument should be calibrated when the result of an accuracy check is + 0.005 grams per 210 liters of breath or more from the expected value as outlined above.

The instrument should be taken out of service if:

- a. The instrument repeatedly fails to maintain its calibration (i.e., if after two successful attempts to calibrate the device a successful accuracy check was not obtained);
- b. the instrument fails to maintain its calibration on three consecutive monthly accuracy checks;
- c. the instrument consistently takes more than two minutes to perform a breath analysis on a sample with a concentration less than 0.100 grams per 210 liters of breath.

The instrument should be inspected by a certified technician at least once every two years in service.

Routine maintenance procedures are specified in the manuals of each instrument and must be followed in order to ensure accurate test results.

## **J. The Effects of Alcohol, Controlled Substances, Prescription Drugs and Over the Counter Medications**

Testing for controlled substances is done for the following five drugs and their metabolites: Amphetamines, Cocaine, Marijuana, Opiates and Phencyclidines (PCP). Alcohol testing is also required. Each of these substances, as well as prescription and over the counter medications are discussed in detail in this section.

### **Alcohol**

#### **1. Description**

Alcohol is a drug. It is a depressant, not a stimulant as is commonly believed, which slows down physical responses and progressively impairs mental functions. Ethyl alcohol is the alcohol which is contained in beer, wine and liquor. Medically, alcohol is found in elixirs, cough syrups, cold medicines, and in such items as breath spray, mouthwash, etc. Alcohol is alcohol whether it is found in an over the counter medication or a beer and has the same effect at the same level. It is immaterial how it got in the individual's system it has the same effect. Although alcohol is legally and socially acceptable in our society, it is not legally acceptable to consume alcohol prior to or while on duty or subject to a call to report to duty. Commonly you hear that a cutoff defined as a decimal such as 0.02 breath alcohol concentration, which means 2 drops of pure alcohol to 10,000 drops of blood.

#### **2. Health Effects**

The effects are dependent on many factors – the amount consumed, a person's body weight, whether the person is rested or tired, sick or healthy, stomach content, age, altitude, gender, and metabolism. Malnutrition, lower resistance to infections, irreversible damage to brain, liver, pancreas, kidneys, pancreas, and nutritional deficiencies occur with long term use; as do birth defects, increased cancers of the mouth, malignant melanoma of the tongue, etc. Alcohol also carries a high risk of psychological and physical dependence.

It is necessary to have an understanding of what “a drink” is since the regulation prohibits consuming alcohol within four hours of reporting to work. A drink is defined as 1/2 oz. of pure alcohol. A five-ounce glass of 12% wine, a 12 oz. can of beer and a 1 oz. (a shot glass) of 100 proof liquor, all contain 1/2 oz. of pure alcohol. The body takes about two hours to eliminate the alcohol that has been consumed in a 1/2 oz. of alcohol.

A 150 lb. man could drink two 1 oz. shots of 100 proof liquor OR two beers OR two glasses of wine and measure and register a 0.05% on the breathalyzer. Two hours later, he may still register at the 0.02% breath alcohol content.

#### **3. Symptoms of Use**

Glazed eyes, flushing, slurred speech, emotional instability, decreased inhibitions, stupor, impaired coordination, slowed reflexes, odor of alcohol, hangover, sweating, blackouts, impaired thinking, aggressiveness, tunnel vision, slowed reaction times, nausea, memory loss, unsteadiness, short attention span, blurred vision, hostility, drowsiness, distorted sense of time and distance. Except for the odor, these are the signs and symptoms of any depressant substance.

#### 4. Performance Effects

The first part of the brain to be affected is the part which controls judgment and self-control. Once judgment and self-control have been disrupted, the impaired individual is unable to recognize that he/she is impaired and is unable to make rational decisions. This is what ultimately leads to the decision to get behind the wheel when impaired. Reaction time decreases as much as 60% after just two drinks. Some performance problems would include faulty judgment, reasoning and lack of coordination, inability to watch other vehicles as they approach or pass, excessive braking, inability to make rapid decisions, loss of peripheral vision, takes more risks, swerving, emotional instability and increased aggressiveness, distorted sense of time and distance and blurred vision. It is important to know that the number of drinks consumed compared to body weight is only a small portion of the equation used when determining the impairment level in an individual.

#### 5. Other Issues

Two to three percent of the driving population is legally drunk at any one time this rate is doubled at night and on weekends. More than 60% of burns, 40% of falls, 69% of boating accidents, and 76% of private aircraft accidents are alcohol related. Each year 24,000 people will die on the highway due to the legally impaired driver (0.08 blood alcohol content) and 12,000 more will die on the highway due to the alcohol affected driver (less than 0.08 blood alcohol content). The rate of separation and divorce in families with alcohol dependency problems is seven times the average. Coffee and exercise do not help a drinker sober up only time. Food slows the absorption of alcohol.

### Amphetamines

#### 1. Description

Amphetamines ("speed," "white cross," "black beauties") may be taken orally in the form of pills or capsules. Methamphetamines ("meth," "crank," or "crystal") is usually a granular powder or lumps, and may be taken orally, injected or snorted into the nose. The physical sense of energy at lower doses and the mental exhilaration of higher doses are the reasons for their abuse. Although widely prescribed at one time for weight reduction and mood elevation, the legal use of amphetamines is not limited to a very narrow range of medical conditions.

#### 2. Health Effects

Amphetamines are stimulants, which speed up breathing and heart rate and raise blood pressure. Low doses produce increased alertness and talkativeness, feelings of power and energy, and decreased appetite and desire for sleep. Larger doses are associated with impaired judgment, insomnia, irritability, anxiety, tremors and, with long term or high dose usage, transient psychotic episodes, and paranoia. Chronic use may cause heart, brain, dental, bones, lungs, liver, and kidney damage, and seriously deplete the body of vitamins and nutrients. The legal use is limited to a very narrow range of medical conditions. Detection time in urine is 1 2 days for light use to 2 4 days for chronic use.

### 3. Symptoms of Use

Dilated pupils, rapid breathing, jerky eye movements, impaired coordination, decrease in appetite, weight loss, excessive talking, insomnia, hyperactivity, sweating, confusion, panic, inability to concentrate, mood elevations.

### 4. Performance Effects

Amphetamines will cause a short-term improvement in fatigue or alertness. However, with greater usage the effect reverses and has an impairing effect physical fatigue and depression. Work performance would be affected by impaired judgment, delayed reaction time, greater tendency to take risks, and impaired muscle coordination.

## Cocaine

### 1. Description

Cocaine is a stimulant. It is also called crack, rock, coke, toot, blow, nose or freebase. Cocaine Hydrochloride is a white to creamy granular or lumpy powder that is chopped into a fine powder before use. It is snorted into the nose, rubbed on the gums, or injected in veins. The effect is felt within minutes and lasts 10 to 60 minutes per 1 inch line. Cocaine Base ("crack") is a small crystalline rock about the size of a small pebble or in tablet form for smoking. Crack is smoked in a pipe, mixed with marijuana or tobacco or doused with PCP. Crack is beige or slightly brownish; white or yellowish white. It boils at low temperature and is heated in a glass pipe and the vapor is inhaled. The effect is felt within several seconds. Medically, cocaine is used as a local anesthetic.

### 2. Health Effects

Cocaine causes the strongest mental dependency of any known drug. It is a stimulant which causes the heart to beat faster and harder, increases blood pressure, causes muscles to become more tense, etc. "Crack" cocaine is a more potent form of the drug and is especially addicting and dangerous. It produces an intense high almost instantly. The high is always followed by a low so unpleasant that the user will do almost anything to get more crack. Larger doses are associated with restlessness, headache, rapid pulse, irregular respiration, chills, rise in body temperature and nausea. Chronic uses or overdoses include delirium, convulsions, unconsciousness, and death from stroke or heart attack. Because crack dulls pain, users may ignore conditions that require medical attention. Detection time in urine is 1 2 days for light use and 4 6 days for chronic use.

### 3. Symptoms of Use

Nasal redness, increased physical activity and fatigue, extreme mood swings, violent, depression, short attention span, sensitive to noises, irritable, forgetfulness, weight loss, running nose, nose bleeds, sniffing, hyperactivity, bad breath, dilated pupils and visual impairment, anxiety.

### 4. Performance Effects

Absenteeism, tardiness, missed assignments or forgetfulness; difficulty in concentration, impairment of performance and judgment. Because the addiction is costly and the "high" so important, it's hard for the person to think about anything but how to get the next "high" financial

problems and theft or dealing may occur. Slower reaction time and ability to make decisions, distorted vision and depth perceptions, unable to judge time and distance.

## **Marijuana**

### **1. Description**

Marijuana comes from the hemp plant, cannabis sativa. It is a depressant which primarily affects the brain. Leaf marijuana ranges in color from green to light tan and the leaves are usually dry and broken into small pieces. Hashish is a compressed tar-like substance ranging in color from pale yellow to black and is sold in small chunks. Marijuana has a distinct pungent smell. Marijuana, hashish, hash, oil are forms of cannabis which are smoked. Nicknames include pot, dope, grass, joint or reefer. Marijuana is usually smoked in a cigarette or pipe and can also be eaten. Marijuana contains hundreds of different chemicals, which produce many different effects on the mind and body.

### **2. Health Effects**

Increases heart rate, lowers blood pressure and causes reddening of the eyes. One marijuana cigarette (joint) contains cancer causing substances equal to one half pack of cigarettes. Low to moderate dose effects range from relaxation and euphoria, talkativeness, and gaiety to mild fatigue, perceptual changes, and feelings of heightened sensitivity. High or repeated doses can produce panic reactions, reduced motivation, and distortions of body image. Medically, marijuana has been used in glaucoma treatment, epileptic spasms and seizures treatment, and relief of nausea associated with cancer chemotherapy. Marijuana poses a moderate potential for psychological dependence and some tolerance may develop with long term usage. Long term effects include lung cancer, immune system problems impaired memory, concentration and motivation, reduction in hormonal levels which regulate growth, reproduction and sexual development, and pregnancy problems. Because of the effect on the immune system, there is research on the possible connection between marijuana smoking and the activation of AIDS in positive HIV carriers. The potency of the active chemical, THC, in marijuana makes smoking 3 5 joints a week today equivalent to 15 40 joints a week in 1978. Detection time in urine is 2 7 days for light use and more than 30 days for chronic use.

### **3. Symptoms of Use**

Bloodshot eyes, persistent cough, sore throat, or respiratory infection, increased appetite, memory lapses, reduced attention span, fatigue, slowed speech, odor on clothing, lack of motivation, paranoia, confusion and aggression.

### **4. Performance Effects**

Produces a number of changes in perceptions, memory and thought processes including reduced concentration, impairment of judgment and coordination, reaction time, tracking ability, distorted vision and depth perception, inability to correctly measure time and distance all of which can linger up to 24 hours after use. Marijuana poses serious risks on the road or in jobs involving heavy or complicated equipment.



## Opiates

### 1. Description

Opiates are classified as a narcotic analgesic that alleviate pain and depress body functions and reactions. Opium derivatives are more commonly known as morphine, codeine, and heroin. Nicknames are junk, smack, horse and brown sugar. Synthetic narcotics are methadone, meperidine (Demerol), hydromorphone (Dilaudid), oxycodone (Percodan), pentazocine (Talwin), propoxyphene (Darvon). Opiates have a sedating, calming effect, and act as a depressant to the central nervous system. They are taken either orally, by injection or smoked.

### 2. Health Effects

Narcotics slow down body systems, reduce sensitivity to pain and induce sleep. Low dose or infrequent use produces euphoria, fatigue, lower sensitivity to pain, and impaired concentration, while wiping out desire for food, sex and most physical activity. Higher dose or regular use promotes sleep and triggers a sense of detachment and reduced motivation. Medically, opiates are prescribed to relieve pain, cough and diarrhea and reduce pain in the terminally ill. Unwanted side effects include itchiness, constipation, nausea and vomiting, restlessness, abdominal pain and visual problems and if taken in excess, can cause coma or death. Users quickly build tolerance and risks of overdose are particularly high. Narcotics effects are multiplied when used in combination with other depressant drugs and alcohol, causing increased risk for an overdose. Detection time in urine is 2-4 days for light use and more than one week for chronic use.

### 3. Symptoms of Use

Pinpoint pupils, mood changes, confusion, shallow and slow breathing, sleepiness, unresponsiveness to pain, nausea and vomiting, memory loss, dry mouth, raspy speech, depressed reflexes, excess talking, cold, moist or bluish skin, slurred speech, hostility, euphoria, short attention span, unsteadiness, depression. High doses impair judgment and coordination.

### 4. Performance Effects

Work performance problems would include daydreaming or lack of concentration, drowsiness, distorted vision, distorted sense of time and distance, depressed reflexes, potential visual problems.

## Phencyclidine (PCP)

### 1. Description

Phencyclidine is known as a dissociative anesthetic. Street names include hog, crystal, angel dust, embalming fluid, tic and THC. It is sold as pills, powder, and liquid, or sprinkled on marijuana or tobacco cigarettes. PCP may be smoked, snorted or injected. PCP is easily the most unpredictable of all psychoactive drugs and effects vary widely depending on the user and the dose.

### 2. Health Effects

PCP users may experience hallucinations and signs of intoxication. They will be unable to focus their attention or will experience confusion and lack of coordination. Although it has short term effects, it is known for its long-term effect of causing psychotic behavior often associated with violent acts.

Low doses produce stimulation, numbness, and reduced inhibitions along with flushing, sweating, impaired coordination and judgment and slurred speech. Moderate doses of PCP act as a depressant, with a sense of detachment and being excited and confused. High doses of PCP effects resemble powerful hallucinogens, including agitation, increased aggression, paranoia, and near complete insensitivity to pain. Originally developed as an anesthetic, the side effects limited its use to a large animal tranquilizer but have no current medical use. Detection time in urine is 2-7 days.

### **3. Symptoms of Use**

Lack of coordination, panic, loss of sensitivity to pain, imprecise eye movements, delusions, severe confusion, agitation, increased blood pressure, anxiety, flashbacks, muscle rigidity, blank stare, cyclic behavior, disorientation, perspiring, extreme mood shifts, dilated pupils, sweating, dizziness, depression, paranoia, inability to carry on a conversation, bizarre behavior.

### **4. Performance Effects**

Work performance problems would include increased likelihood to take risks, powerfully impaired judgment and coordination, aggressive actions with vehicle, severe disorientation, hallucinations, distortion of size, shape and distance.

#### **Over the Counter and Prescription Drugs**

While it is legal to purchase nonprescription medicines over the counter, such medicines are not necessarily safe to use while driving or performing other duties. The Department of Transportation regulations do not permit drivers to take anything that can affect their ability to drive. For example, certain cold remedies contain antihistamines. Antihistamines may make the driver drowsy. If the warning on the box or label clearly states: "product may cause drowsiness. Do not operate heavy equipment or machinery while taking", it is a violation of the Department of Transportation regulations to take it and drive a commercial motor vehicle. Carefully examine the ingredients in any over-the-counter medication---alcohol, for instance, may be an ingredient.

Over the counter stimulants such as "No Doz" or "Stay Awake", are all considered legal and are used by drivers to stay awake. These products only keep the driver's eyes open, however. They cannot overcome the effects of fatigue on the body. Thought processes and reaction speed are still those of a person who is fatigued and tired. In an emergency, this driver may not be able to perform as well as if he or she were well rested.

Is it OK to take prescription medicine as long as it has been prescribed by the doctor? Maybe... but not if the prescription medication contains ingredients which may make you drowsy or affect your performance. While talking to the doctor, it is YOUR RESPONSIBILITY to make sure the doctor knows what kind of work you do so a medicine can be prescribed that won't affect your ability to safely perform your work tasks. The Authority has the right to require that you inform us of any medications you are taking that may affect on-the-job-performance.

## M. Attachments and Forms

- a. Rivanna Water & Sewer Authority Organizational Chart (*Section A*)
- b. Rivanna Solid Waste Authority Organizational Chart (*Section A*)
- c. Authority Pay Grade and Scale, Table 1 (*Section D*)
- d. Authority Pay Grade and Scale with Title, Table 2 (*Section D*)
- e. Sick Leave Bank Enrollment Form (*Section F*)
- f. Grievance Procedure Form Part A & Part B (*Section H*)
- g. Technology System Acceptable Use Policy (*Section I*)
- h. Employee Expense Reimbursement Form (*Section J*)
- i. Employee Training and Development Form (*Section J*)
- j. Employee Mileage Reimbursement Form (*Section K*)
- k. Employee Travel Request Form (*Section K*)
- l. Employee Drug and Alcohol Testing Pool Designation Letter (*Section L*)
- m. Employee Handbook



TABLE 1  
**PAY GRADE & RANGE**  
Effective July 1, 2018

Pay Grade	Minimum	Midpoint	Maximum
10	\$25,490	\$33,902	\$42,314
20	\$26,765	\$35,597	\$44,429
30	\$28,103	\$37,377	\$46,651
40	\$29,508	\$39,246	\$48,983
50	\$30,983	\$41,208	\$51,433
60	\$32,533	\$43,268	\$54,004
70	\$34,159	\$45,432	\$56,704
80	\$35,867	\$47,703	\$59,540
90	\$37,661	\$50,089	\$62,517
100	\$39,544	\$52,593	\$65,642
110	\$41,521	\$55,223	\$68,925
120	\$43,597	\$57,984	\$72,371
130	\$45,777	\$60,883	\$75,989
140	\$48,066	\$63,927	\$79,789
150	\$50,469	\$67,123	\$83,778
160	\$52,992	\$70,480	\$87,967
170	\$55,642	\$74,004	\$92,365
180	\$58,424	\$77,704	\$96,984
190	\$61,345	\$81,589	\$101,833
200	\$64,240	\$85,439	\$106,638
210	\$67,633	\$89,952	\$112,271
220	\$70,825	\$94,197	\$117,569
230	\$74,366	\$98,907	\$123,447
240	\$78,084	\$103,852	\$129,620
250	\$82,208	\$109,337	\$136,466



RIVANNA SOLID WASTE AUTHORITY  
RIVANNA WATER & SEWER AUTHORITY



695 Moores Creek Lane  
Charlottesville, Virginia 22902-9016

434.977.2970

434.293.8858

www.rivanna.org

**TABLE 2**  
**POSITION TITLE, PAY GRADE & RANGE**  
Effective July 1, 2018

Position Title	Pay Grade	Minimum	Midpoint	Maximum	FLSA Status
Maintenance Worker	10	\$25,490	\$33,902	\$42,314	Non-Exempt
Operator Attendant -Ivy / Recycling	20	\$26,765	\$35,597	\$44,429	Non-Exempt
Scale Clerk	30	\$28,103	\$37,377	\$46,651	Non-Exempt
Administrative Assistant	30	\$28,103	\$37,377	\$46,651	Non-Exempt
Mechanic Helper	40	\$29,508	\$39,246	\$48,983	Non-Exempt
Plant Operator 4	50	\$30,983	\$41,208	\$51,433	Non-Exempt
Plant Operator Trainee	50	\$30,983	\$41,208	\$51,433	Non-Exempt
Mechanic 4	60	\$32,533	\$43,268	\$54,004	Non-Exempt
Mechanic 3	70	\$34,159	\$45,432	\$56,704	Non-Exempt
Plant Operator 3	70	\$34,159	\$45,432	\$56,704	Non-Exempt
Heavy Equipment Operator/Attendant	80	\$35,867	\$47,703	\$59,540	Non-Exempt
Acct Tech / AP	80	\$35,867	\$47,703	\$59,540	Non-Exempt
Acct Tech / AR	80	\$35,867	\$47,703	\$59,540	Non-Exempt
Administrative Office Technician	80	\$35,867	\$47,703	\$59,540	Non-Exempt
Payroll & Benefits Coordinator	80	\$35,867	\$47,703	\$59,540	Non-Exempt
Vehicle Equipment Mechanic	80	\$35,867	\$47,703	\$59,540	Non-Exempt
Driver/Equipment Operator	80	\$35,867	\$47,703	\$59,540	Non-Exempt
Lab Tech	90	\$37,661	\$50,089	\$62,517	Non-Exempt
Water Quality Specialist	90	\$37,661	\$50,089	\$62,517	Non-Exempt
Mechanic 2	90	\$37,661	\$50,089	\$62,517	Non-Exempt
Plant Operator 2	90	\$37,661	\$50,089	\$62,517	Non-Exempt
Executive Assistant	100	\$39,544	\$52,593	\$65,642	Non-Exempt
Plant Operator 1	110	\$41,521	\$55,223	\$68,925	Non-Exempt
Communication Manager/Executive Coord.	110	\$41,521	\$55,223	\$68,925	Exempt
SCADA Technician	110	\$41,521	\$55,223	\$68,925	Non-Exempt
Engineering Technician/Inspector	120	\$43,597	\$57,984	\$72,371	Non-Exempt
Instrumentation Specialist	120	\$43,597	\$57,984	\$72,371	Non-Exempt
Mechanic 1	120	\$43,597	\$57,984	\$72,371	Non-Exempt
Chemist	120	\$43,597	\$57,984	\$72,371	Non-Exempt
Software Analyst	120	\$43,597	\$57,984	\$72,371	Exempt
Wastewater Treatment Plant Supervisor	130	\$45,777	\$60,883	\$75,989	Non-Exempt
Water Treatment Plant Supervisor	130	\$45,777	\$60,883	\$75,989	Non-Exempt
Information Systems Assistant Administrator	140	\$48,066	\$63,927	\$79,789	Exempt
GIS Coordinator	140	\$48,066	\$63,927	\$79,789	Exempt
SCADA Systems Administrator	140	\$48,066	\$63,927	\$79,789	Exempt

Position Title	Pay Grade	Minimum	Midpoint	Maximum	FLSA Status
Senior Accountant	150	\$50,469	\$67,123	\$83,778	Exempt
Maintenance Assistant Manager	160	\$52,992	\$70,480	\$87,967	Exempt
Ivy MUC Assistant Manager	160	\$52,992	\$70,480	\$87,967	Exempt
Wastewater Department Assistant Manager	160	\$52,992	\$70,480	\$87,967	Exempt
Water Department Assistant Manager	160	\$52,992	\$70,480	\$87,967	Exempt
Civil Engineer	170	\$55,642	\$74,004	\$92,365	Exempt
Lab Manager	170	\$55,642	\$74,004	\$92,365	Exempt
Water Resources Manager	170	\$55,642	\$74,004	\$92,365	Exempt
Safety Manager	180	\$58,424	\$77,704	\$96,984	Exempt
Human Resources Manager	190	\$61,345	\$81,589	\$101,833	Exempt
Ivy MUC Manager	190	\$61,345	\$81,589	\$101,833	Exempt
Information Systems Administrator	190	\$61,345	\$81,589	\$101,833	Exempt
Maintenance Manager	190	\$61,345	\$81,589	\$101,833	Exempt
Senior Civil Engineer	190	\$61,345	\$81,589	\$101,833	Exempt
Wastewater Department Manager	190	\$61,345	\$81,589	\$101,833	Exempt
Water Department Manager	190	\$61,345	\$81,589	\$101,833	Exempt
Engineering Manager	210	\$67,633	\$89,952	\$112,271	Exempt
Director of Solid Waste	230	\$74,366	\$98,907	\$123,447	Exempt
Director of Engineering & Maintenance	250	\$82,208	\$109,337	\$136,466	Exempt
Director of Finance & Administration	250	\$82,208	\$109,337	\$136,466	Exempt
Director of Operations	250	\$82,208	\$109,337	\$136,466	Exempt

Adopted February 2018

# BENEFITS & WELLNESS

## SICK LEAVE BANK ENROLLMENT



### REQUIREMENTS

The Authority will maintain a Sick Leave Bank to be used when a member of the Bank becomes incapacitated by long-term and/or chronic illness or injury as long as one-third of the eligible employees agree to participate in accordance with the terms contained in the Personnel Manual. The Sick Leave Bank is not for use for any other type of illness or injury leave, such as that of a family member.

### ELIGIBILITY

Membership in the Sick Leave Bank shall be voluntary and open to all eligible personnel who accrue sick leave. Each employee of the Authority who accumulates sick leave is eligible for membership and agrees to donate eight (8) hours of their sick leave to join the Bank.

### ENROLLMENT

1. An eligible employee may enroll within the first thirty days of employment.
2. An employee who does not enroll when first eligible may do so between any subsequent January 1 to January 31 period by making application and providing satisfactory evidence of good health from a doctor to the Human Resources Manager.
3. Membership in the Bank may be earned by contributing eight (8) hours of sick leave upon joining and eight (8) hours thereafter whenever an assessment is required. The donated leave will be deducted from the donor's accumulated days of sick leave.

### RULES OF USE

1. The first twenty (20) working days of illness or disability will not be covered by the Bank and must be covered by the member's own accumulated leave or leave without pay.
2. Requests for use of the Sick Leave Bank must be made in writing by the employee (or representative if the employee is unable to submit the request) prior to the absence for which the leave days are to be used. In extenuating circumstances, retroactive request may be considered. Requests must be supported by a medical doctor's certification.
3. A maximum of 180 hours each rolling 12-month period can be drawn by any one member.
4. Days drawn from the Bank for any one period of eligibility do not need to be consecutive but must be for the same illness.
5. A member of the Bank will not be able to use the Sick Leave Bank benefit until all of the employee's leave balances decline to zero.
6. Members of the Bank will be assessed an additional eight (8) hours of sick leave when the Bank is depleted to 40 hours, unless they choose not to participate further in the Bank. Members who have no sick leave to contribute at the time of assessment will be assessed eight (8) hours and allowed to temporarily maintain a negative balance. Should an employee drop membership at the time of an assessment, the member will not be eligible to rejoin the Bank until open enrollment in January of each year and only after providing satisfactory evidence of good health.
7. Members utilizing sick leave from the Bank will not have to replace these days except as a regular contributing member of the Bank.
8. Members may not be compensated through both the Worker's Compensation and the Sick Leave Bank.

### TERMINATION

Upon termination of employment or membership in the Sick Leave Bank, a participating employee may not withdraw the days he/she has contributed to the Bank.

**IF YOU WISH TO PARTICIPATE IN THE SICK LEAVE BANK, COMPLETE THE ENROLLMENT FORM ON THE REVERSE.**

# BENEFITS & WELLNESS

## SICK LEAVE BANK ENROLLMENT



### EMPLOYEE NAME

Please Print

\_\_\_\_\_  
LAST NAME

\_\_\_\_\_  
FIRST NAME

\_\_\_\_\_  
MI

### SOCIAL SECURITY No.

### WORK PHONE No.

### EMPLOYEE DEPARTMENT

☐ Administration ☐ Engineering ☐ Laboratory ☐ Maintenance ☐ Solid Waste ☐ Wastewater ☐ Water

## I WISH TO DONATE 8 HOURS OF SICK LEAVE TO THE SICK LEAVE BANK

**DONOR'S CERTIFICATION:** I understand and agree to the following provisions:

- Donations shall be made in eight (8) hour increments;
- I can reclaim my donation only if my donation form has not yet been processed; and
- I have read and understand the Sick Leave Bank Policy rules and regulations found in the Authority Personnel Manual.

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
DATE

**Submit completed form to the office of the Human Resources Manager or mail to:**

Rivanna Authorities  
Attention: Human Resources Manager  
695 Moores Creek Lane  
Charlottesville, VA 22902-9016

### OFFICE USE ONLY

DONATION FORM RECEIVED

SICK LEAVE TRANSFERRED

DATE	TIME

\_\_\_\_\_  
HUMAN RESOURCES MANAGER SIGNATURE

\_\_\_\_\_  
DATE



# GRIEVANCE PROCEDURE FORM PART A & PART B

## PART A

### EMPLOYEE INFORMATION

FIRST NAME		MIDDLE NAME		LAST NAME	
HOME ADDRESS			CITY	STATE	ZIP CODE
AUTHORITY <input type="checkbox"/> Rivanna Solid Waste Authority <input type="checkbox"/> Rivanna Water & Sewer Authority		DEPARTMENT <input type="checkbox"/> Administration <input type="checkbox"/> Engineering <input type="checkbox"/> Laboratory <input type="checkbox"/> Maintenance <input type="checkbox"/> Solid Waste <input type="checkbox"/> Wastewater <input type="checkbox"/> Water			
JOB TITLE			PRIMARY WORK LOCATION		
WORK PHONE No.	HOME OR CELL PHONE No.		EMAIL		

**For guidance refer to Section H., "Grievance Procedure" in the Personnel Manual.**

### INSTRUCTIONS:

1. If a satisfactory resolution is not reached during the informal (verbal) process, the employee shall notify the Human Resources Manager of the intent to file a grievance.
2. Below, identify specifically and in detail the nature of the grievance and the requested remedy. Should you prevail in the grievance, you are entitled only to the relief/resolution specifically requested below.
3. Written grievance shall be presented to the Immediate Department Manager (IDM) within five (5) days of the IDM's verbal replay to the oral grievance with two exceptions:
  - a. If the grievance alleges discrimination or retaliation by the IDM; or
  - b. If the grievance involves termination, demotion, suspension without pay or lost wages, the grievance may be submitted to the Human Resources Manager.

### GRIEVANCE DETAILS

DATE OF OCCURRENCE OR CONDITION		DATE VERBALLY NOTIFIED IDM		DATE RECEIVED VERBAL RESPONSE FROM IDM	
THE ISSUES ARE (USE ATTACHMENTS IF NECESSARY)					
THE FACTS SUPPORTING THIS ARE (USE ATTACHMENTS IF NECESSARY)					
THE RESOLUTION I WANT IS (USE ATTACHMENTS IF NECESSARY)					

### GRIEVANCE ROUTING

Check appropriate box:

- ☐ I have forwarded this completed Grievance Form to my Immediate Department Manager, Step 1
- ☐ I have forwarded this completed Grievance Form to the Human Resources Manager

DATE WRITTEN GRIEVANCE FILED	EMPLOYEE/GRIEVANT SIGNATURE
------------------------------	-----------------------------

**The employee is responsible for routing and delivering grievance form to the proper person or office within five (5) work days.**

# GRIEVANCE PROCEDURE FORM PART A & PART B

## PART A

Was written grievance received within five (5) days of verbal response? ☐ YES ☐ NO

### STEP 1 PROCEDURE – IMMEDIATE DEPARTMENT MANAGER

DATE WRITTEN GRIEVANCE RECEIVED	MEETING DATE & TIME	IMMEDIATE DEPARTMENT MANAGER NAME (PRINT)
WRITTEN RESPONSE TO GRIEVANCE (USE ATTACHMENTS IF NECESSARY)		
DATE RESPONSE FORWARDED TO GRIEVANT	IMMEDIATE DEPARTMENT MANAGER SIGNATURE	PHONE NUMBER

DATE GRIEVANT RECEIVED RESPONSE FROM IDM

Was response to written grievance received within five (5) days? ☐ YES ☐ NO

EMPLOYEE'S STATEMENT REGARDING IMMEDIATE DEPARTMENT MANAGER'S RESPONSE/RESOLUTION TO GRIEVANCE (USE ATTACHMENTS IF NECESSARY)

Grievant statement: *I have reviewed the response received from my IDM and I have determined that I will be:*

- ☐ concluding my grievance and I am returning this form to the Human Resources Manager.  
☐ advancing my grievance.

### IF ADVANCING GRIEVANCE, CHECK THE APPROPRIATE BOX BELOW

- ☐ I have forwarded this completed Grievance Form to the Department Manager, Step 2.  
☐ My Immediate Department Manager is the Department Manager – skip Step 2. Forwarded to the Divisional Director, Step 3.  
☐ My Immediate Department Manager is the Divisional Director – skip Steps 2 and 3. Forwarded to the Executive Director, Step 4.  
☐ My Immediate Department Manager is the Executive Director – skip Steps 2, 3 and 4. Forward to Grievance Panel, Step 5.

DATE GRIEVANCE ADVANCED

EMPLOYEE/GRIEVANT SIGNATURE

The employee is responsible for routing and delivering grievance form to the proper person or office within five (5) work days.

# GRIEVANCE PROCEDURE FORM PART A & PART B

## PART A

Was grievance document received within five (5) days of last action? ☐ YES ☐ NO

## STEP 2 PROCEDURE – DEPARTMENT MANAGER

DATE GRIEVANCE RECEIVED

MEETING DATE & TIME

DEPARTMENT MANAGER NAME (PRINT)

WRITTEN RESPONSE TO GRIEVANCE (USE ATTACHMENTS IF NECESSARY)

DATE RESPONSE FORWARDED TO GRIEVANT

DEPARTMENT MANAGER SIGNATURE

PHONE NUMBER

DATE GRIEVANT RECEIVED RESPONSE FROM DEPARTMENT MANAGER

Was response received within five (5) days? ☐ YES ☐ NO

EMPLOYEE'S STATEMENT REGARDING DEPARTMENT MANAGER'S RESPONSE/RESOLUTION TO GRIEVANCE (USE ATTACHMENTS IF NECESSARY)

Grievant statement: *I have reviewed the response received from my Department Manager and I have determined that I will be:*

☐ concluding my grievance and I am returning this form to the Human Resources Manager.

☐ advancing my grievance to the Divisional Director, Step 3.

DATE GRIEVANCE ADVANCED

EMPLOYEE/GRIEVANT SIGNATURE

The employee is responsible for routing and delivering grievance form to the proper person or office within five (5) work days.

# GRIEVANCE PROCEDURE FORM PART A & PART B

## PART A

Was grievance document received within five (5) days of last action? ☐ YES ☐ NO

### STEP 3 PROCEDURE – DIVISIONAL DIRECTOR

DATE GRIEVANCE RECEIVED

MEETING DATE & TIME

DIVISIONAL DIRECTOR NAME (PRINT)

WRITTEN RESPONSE TO GRIEVANCE (USE ATTACHMENTS IF NECESSARY)

DATE RESPONSE FORWARDED TO GRIEVANT

DIVISIONAL DIRECTOR SIGNATURE

PHONE NUMBER

DATE GRIEVANT RECEIVED RESPONSE FROM DIVISIONAL DIRECTOR

Was response received within five (5) days? ☐ YES ☐ NO

EMPLOYEE'S STATEMENT REGARDING DIVISIONAL DIRECTOR'S RESPONSE/RESOLUTION TO GRIEVANCE (USE ATTACHMENTS IF NECESSARY)

Grievant statement: I have reviewed the response received from my Divisional Director and I have determined that I will be:

- ☐ concluding my grievance and I am returning this form to the Human Resources Manager.  
☐ advancing my grievance to the Executive Director, Step 4.

DATE GRIEVANCE ADVANCED

EMPLOYEE/GRIEVANT SIGNATURE

The employee is responsible for routing and delivering grievance form to the proper person or office within five (5) work days.

# GRIEVANCE PROCEDURE FORM PART A & PART B

## PART A

Was grievance document received within five (5) days of last action? ☐ YES ☐ NO

### STEP 4 PROCEDURE – EXECUTIVE DIRECTOR

DATE GRIEVANCE RECEIVED

MEETING DATE & TIME

EXECUTIVE DIRECTOR NAME (PRINT)

WRITTEN RESPONSE TO GRIEVANCE (USE ATTACHMENTS IF NECESSARY)

DATE RESPONSE FORWARDED TO GRIEVANT

EXECUTIVE DIRECTOR SIGNATURE

PHONE NUMBER

DATE GRIEVANT RECEIVED RESPONSE FROM EXECUTIVE DIRECTOR

Was response received within five (5) days? ☐ YES ☐ NO

EMPLOYEE'S STATEMENT REGARDING EXECUTIVE DIRECTOR'S RESPONSE/RESOLUTION TO GRIEVANCE (USE ATTACHMENTS IF NECESSARY)

Grievant statement: I have reviewed the response received from the Executive Director and I have determined that I will be:

- ☐ concluding my grievance and I am returning this form to the Human Resources Manager.  
☐ advancing my grievance and hereby request a hearing before a Grievance Panel, Step 5.

DATE GRIEVANCE ADVANCED

EMPLOYEE/GRIEVANT SIGNATURE

The employee is responsible for routing and delivering grievance form to the proper person or office within five (5) work days.

# GRIEVANCE PROCEDURE FORM PART A & PART B

## PART A

Was grievance document received within five (5) days of last action? ☐ YES ☐ NO

### STEP 5 PROCEDURE – GRIEVANCE PANEL

DATE GRIEVANCE RECEIVED BY HUMAN RESOURCES MANAGER

HUMAN RESOURCES MANAGER NAME (PRINT)

The Employee (Grievant) has indicated that a satisfactory resolution was not reached during the grievance procedure (Steps 1-4) and has requested their grievance be heard by an impartial Grievance Panel.

YES

NO

☐
☐

### GRIEVANCE PANEL APPOINTMENT

1. The Grievant has ten (10) days to appoint a Grievance Panel member of their choosing. Grievant has been provided Part B and is aware of selection deadline.

SELECTION DEADLINE

☐
☐

2. The Executive Director has ten (10) days to appoint a Grievance Panel member of their choosing. The Executive Director has been provided Part B and is aware of selection deadline.

SELECTION DEADLINE

☐
☐

3. The appointed Panel members have (10) days to appoint a third Grievance Panel member of their choosing. The appointed Panel members have been provided Part B and are aware of selection deadline.

SELECTION DEADLINE

☐
☐

4. The appointed Panel members have selected the third Grievance Panel member who will also serve as the Chairperson.

DATE NOTIFIED

☐
☐

5. If the third Panel member was not selected by the Panel members appointed by the Grievant and Executive Director, was the third Panel member appointed by the Chief Judge of the Circuit Court of Albemarle County?

☐
☐

ATTACH COMPLETED GRIEVANCE PROCEDURE FORM PART B WHEN RECEIVED

### GRIEVANCE PANEL HEARING

1. The Grievance Panel Chairperson has set the time for the hearing and the Human Resources Manager has notified the Grievant and Executive Director.

HEARING DATE & TIME

☐
☐

2. The Grievance Panel has been provided copies of the grievance record and the Grievant has been provided a list of the documents furnished to the Panel.

DATE DOCUMENTS PROVIDED

☐
☐

3. The Grievant and his/her attorney or other representatives have been granted access (at least ten days prior to hearing date) to all relevant documents intended to be used by the Authority in the hearing.

DATE ACCESS GRANTED

☐
☐

4. The Authority and the Grievant have exchanged a list of witnesses and exhibits to be used during the hearing (at least five days before hearing date).

DATE

☐
☐

### GRIEVANCE PANEL DECISION & IMPLEMENTATION

The Panel has filed their decision in writing with the Executive Director and the Grievant (this is to occur no later than thirty days after the completion of the Hearing).

DATE DECISION RECEIVED

☐
☐

ATTACH DECISION TO GRIEVANCE PROCEDURE FORM PART A & B

The Executive Director shall implement any remedy that may be ordered by the Panel, provided such remedy is consistent with applicable law and Authority personnel policies.

☐ The Executive Director accepts and shall implement the remedy ordered by the Panel.

☐ The Executive Director rejects the decision of the Panel and shall not implement.

DATE DECISION RENDERED

EXECUTIVE DIRECTOR SIGNATURE

Either party may petition the Albemarle County Circuit Court for an order requiring implementation of the Panel decision. The review of the Circuit Court shall be limited to the question of whether the panel's decision is consistent with provisions of law and written policy.

# GRIEVANCE PROCEDURE FORM PART A & PART B

## PART B

COMPLETE YOUR RESPECTIVE SECTION AND RETURN TO THE HUMAN RESOURCES MANAGER

### GRIEVANCE PANEL MEMBER APPOINTMENTS

#### PANEL MEMBER No. 1 - Employee/Grievant Appointment

FIRST & LAST NAME		<p>To ensure an objective, impartial Panel, no persons having direct involvement with the grievance being heard by the Panel, or with the complaint or dispute giving rise to the grievance, shall serve on the Panel. Managers who are in a direct line of supervision of a grievant, persons residing in the same household as the grievant and the following relatives of a participant in the grievance process or a participant's spouse are prohibited from serving as panel members: spouse, parent, child, descendants of a child, sibling, niece, nephew and first cousin.</p> <p><b><i>I have read and confirm that my Panel selection has been made in accordance with the above statement.</i></b></p> <p>_____</p> <p>GRIEVANT/EMPLOYEE SIGNATURE <span style="float: right;">DATE</span></p>
ADDRESS		
CITY, STATE & ZIP		
WORK PHONE No.	HOME OR CELL PHONE No.	
EMAIL ADDRESS		

#### PANEL MEMBER No. 2 - Executive Director Appointment

FIRST & LAST NAME		<p>To ensure an objective, impartial Panel, no persons having direct involvement with the grievance being heard by the Panel, or with the complaint or dispute giving rise to the grievance, shall serve on the Panel. Managers who are in a direct line of supervision of a grievant, persons residing in the same household as the grievant and the following relatives of a participant in the grievance process or a participant's spouse are prohibited from serving as panel members: spouse, parent, child, descendants of a child, sibling, niece, nephew and first cousin.</p> <p><b><i>I have read and confirm that my Panel selection has been made in accordance with the above statement.</i></b></p> <p>_____</p> <p>EXECUTIVE DIRECTOR SIGNATURE <span style="float: right;">DATE</span></p>
ADDRESS		
CITY, STATE & ZIP		
WORK PHONE No.	HOME OR CELL PHONE No.	
EMAIL ADDRESS		

#### PANEL MEMBER No. 3 – Selected by Panel Member No. 1 and No. 2

FIRST & LAST NAME		<p><b>Was Panel Member No. 3 appointed by the Chief Judge of the Circuit Court of Albemarle County?</b> <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>Panel Member No. 3 will serve as the Chairperson on the Panel.</p> <p>The Chairperson shall set the time for the hearing and notify the Human Resources Manager, who shall notify the Grievant and the Executive Director.</p>
ADDRESS		
CITY, STATE & ZIP		
WORK PHONE No.	HOME OR CELL PHONE No.	
EMAIL ADDRESS		

# AUTHORITY TECHNOLOGY SYSTEM

## ACCEPTABLE USE POLICY



### EMPLOYEE ACKNOWLEDGEMENT

EMPLOYEE INFORMATION			
FIRST NAME	MI	LAST NAME	SUFFIX
AUTHORITY		EMPLOYEE DEPARTMENT	
<input type="checkbox"/> Rivanna Solid Waste Authority	<input type="checkbox"/> Administration	<input type="checkbox"/> Laboratory	<input type="checkbox"/> Solid Waste <input type="checkbox"/> Water
<input type="checkbox"/> Rivanna Water & Sewer Authority	<input type="checkbox"/> Engineering	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Wastewater

### AUTHORITY TECHNOLOGY SYSTEM | ACCEPTABLE USE POLICY

Please read the following statement. When finished, please sign along with today's date at the bottom of form.

*I acknowledge receiving, reading and having an opportunity to ask any questions regarding the Authority Technology System Acceptable Use Policy adopted by the Authority Board of Directors on April 2019. I understand and agree to abide by the Policy.*

\_\_\_\_\_  
EMPLOYEE SIGNATURE

\_\_\_\_\_  
TODAY'S DATE



# TECHNOLOGY ACCEPTABLE USE POLICY

## A. POLICY

This document serves as the Authority's "Technology Acceptable Use Policy" (Policy) for the Rivanna Water & Sewer Authority and the Rivanna Solid Waste Authority (the Authority). This Policy applies to all employees, contract personnel, and volunteers who have access to or use of technology equipment that is owned by the Authority. An employee's right to access and use Authority technology equipment immediately ceases upon termination of employment.

## B. DEFINITIONS

Confidential Information: Information that is protected or prohibited by law from public disclosure under the Virginia Freedom of Information Act.

Electronic Communications: Any message or other information sent, received, posted, accessed or stored on any Technology System, including e-mail, instant messaging, internet, social networking sites, web logs ("blogs") and printed copies of electronic information.

Technology Equipment: Any equipment that facilitates the transmission, receipt or storage of information electronically. This is to include but not limited to: computers, printers, networks, software, internet, e-mail, voicemail, telephones, cellular telephones, two-way radios, instant messaging, and Supervisory Control and Advanced Data Acquisition (SCADA).

Technology System: The system consisting of Authority owned technology equipment used to conduct business by users authorized by the Authority to perform on business tools owned by the Authority and provided as business tools

User: Any person, employee, contract personnel and volunteer who has access to and uses Authority technology equipment.

## C. OWNERSHIP, PRIVACY AND USE

The Technology System consists of all technology equipment funded, owned and provided by the Authority to be used as business tools. All components of the Technology System are property of the Authority and are not to be considered private property by the employee or user.

Users must have no expectation of privacy with respect to usage of the Technology System. Electronic communications generated through the Technology System is considered Authority property regardless of nature. The Authority has a legitimate interest in protecting confidential information, preventing abuse of the Technology System, and maintaining employee productivity.

By using the Authority Technology System, the user implicitly consents to the Authority's right to monitor, review and audit all usage at any time. The Authority may also disclose the contents of electronic communications for any purpose consistent with the business interest of the Authority without the permission of the user.

## D. ACCEPTABLE USE

Acceptable uses of the Technology System include but is not limited to the following:

1. Communicating with federal, state, and local government personnel or agencies, and private businesses on behalf of the Authority;
2. Communicating for professional development;
3. Communicating for administrative purposes;
4. Communicating for personal purposes in an occasional and incidental manner which does not infringe or intrude upon the employee's or the department's productivity, incur additional cost to the Authority and/or is not otherwise unacceptable.

## E. UNACCEPTABLE USE

Unacceptable uses of the Technology System include but is not limited to the following:

1. Any use that conflicts with the Authority's purpose, goal, or mission;
2. Any use that conflicts with the user's job duties or responsibilities.

Examples of unacceptable uses and/or Technology System abuse include but is not limited to the following:

1. Downloading, installing or allowing installation of software without prior authorization from the Information Systems Administrator or SCADA System Administrator;
2. Unnecessary or intrusive personal use of the Technology System;
3. Communicating to promote personal business ventures (e.g. consulting for pay, or sale of goods) or to advertise or solicit funds for political, religious, or other personal causes, or to solicit funds for charitable/non-profit causes except when such cause has been specifically approved as business of the Authority through the Executive Director;
4. The use of the Authority Technology System to generate, send or receive any electronic communication for illegal, inappropriate or obscene purposes including but not limited to:
  - a. violating copyright laws;
  - b. using or copying unauthorized software; or
  - c. accessing restricted systems
5. Interfering with or disrupting network users, services, or equipment including but is not limited to:
  - a. damaging or destroying technology equipment;
  - b. knowingly spreading viruses;
  - c. impersonating another user;
  - d. accessing a system without authorization;
  - e. altering or removing security software of technology equipment to include networks, workstations or electronic files.
6. Access to or distribution of any communication which may constitute or contain harassing, intimidating, hostile, pornographic, offensive or discriminatory material.
7. Communications by two-way radio that are not in compliance with the rules and regulations of the Federal Communications Commission.

8. Personal use of the Authority's telephone, fax or cell phone equipment in a manner that incurs additional costs to the Authority, such as long-distance telephone charges or excessive personal use of an Authority provided cell phone.
9. Use of encryption. Users are not permitted to use encryption devices without the Authority's express written authorization.
10. Unauthorized sharing of passwords. Users are responsible for protecting their own passwords. Users may be held responsible for misuse that occurs because they did not keep their passwords confidential.
11. Unauthorized communication attributed to the Authority.
12. Disclosure of confidential information except as required in performance of work for the Authority.

## F. RESPONSIBILITIES

Any user who utilizes the Technology System to perform tasks, to include but not limited to industrial control processes, transmission of communications, is a representative of the Authority and is aware of and understands that:

1. No electronic communication is assured to be confidential.
2. Electronic communications are public records and may be the object of discovery requests in litigation matters. Employees should exercise awareness when creating Authority documents. E-mail communications are also subject to the Freedom of Information Act and may be required to be produced for inspection the same as written correspondence.
3. Electronic media and electronic communications are subject to copyright and trademark laws. Employees should ensure that they are entitled to any file or software they download, message they circulate, or product they use prior to appropriating or distributing the item in question.
4. All electronic communication records, including e-mail, must be retained as required to comply with Library of Virginia Records Retention and Disposition Guidelines. Electronic communication records must be retained in accordance with the Library of Virginia guidelines for e-mail under General Schedule No. 19.
5. All passwords shall be protected to prevent unauthorized use and access to the Technology System. Disclosure of passwords is strictly prohibited. Authorized passwords will routinely be created and made available to employees. The use of a password does not create any right of privacy nor guarantee an employee's privacy. All passwords must be disclosed to department managers or divisional directors upon request.
6. Confidential information should only be shared via encrypted email when necessary.
7. All use of the Technology System shall be in compliance with this policy. The user must be familiar with such policies prior to utilizing the Technology System.
8. Any violation of this Policy shall be subject to disciplinary action up to and including termination of employment.

The Authority expressly reserves the right to access, retrieve, read and delete any electronic communication created, received or sent using the Technology System at any time without notice.

The Authority will cooperate fully in any investigation which deems appropriate in connection with any user's conduct or use of the Technology System and further reserves the right to turn over any evidence of illegal or improper activity to the appropriate authorities.

# EMPLOYEE TRAINING & DEVELOPMENT REQUEST FORM



## SECTION 1

### EMPLOYEE INFORMATION (Please print)

FIRST NAME	MI	LAST NAME	JOB TITLE
AUTHORITY <input type="checkbox"/> RSWA <input type="checkbox"/> RWSA		DEPARTMENT <input type="checkbox"/> Administration <input type="checkbox"/> Engineering <input type="checkbox"/> Laboratory <input type="checkbox"/> Maintenance <input type="checkbox"/> Solid Waste <input type="checkbox"/> Wastewater <input type="checkbox"/> Water	

## SECTION 2

### TRAINING PROGRAM (Please print)

PROGRAM TYPE <input type="checkbox"/> ESSENTIAL TRAINING <input type="checkbox"/> ADVANCED DEVELOPMENT TRAINING <input type="checkbox"/> DEGREE PROGRAM	TRAINING/PROGRAM TITLE	START DATE
	TRAINING/PROGRAM LOCATION	END DATE
IS TRAINING OUTSIDE OF SERVICE AREA? <input type="checkbox"/> YES <input type="checkbox"/> NO IS TRANSPORTATION, LODGING AND MEALS REQUIRED? <input type="checkbox"/> YES <input type="checkbox"/> NO If yes, complete a Travel Request Form and attach.		

## SECTION 3

### TRAINING PROGRAM FEES (Please print)

	ESSENTIAL TRAINING	ADVANCED DEVELOPMENT TRAINING	DEGREE PROGRAM
Registration/Enrollment Fees	\$ _____	\$ _____	Please refer to "Section J. Employee Training, Development and Educational Assistance Program" in the Personnel Manual for more information.
Books, Study Materials, etc.	\$ _____	\$ _____	
Other (explain below)	\$ _____	\$ _____	
<b>TOTAL \$</b>	<b>\$ _____</b>	<b>\$ _____</b>	
<input type="checkbox"/> I would like the Authority to register and prepay for the training program fees on my behalf ( <i>preferred</i> ). <input type="checkbox"/> I have/will register myself and pay for the training program fees and request reimbursement.			

## SECTION 4

### ADJUSTED WORK SCHEDULE (Please print)

#### NOTE: DEGREE PROGRAMS ARE NOT ELIGIBLE FOR AN ADJUSTED WORK SCHEDULE

Is there a need for an adjusted work schedule to accommodate the requested training? ☐ YES ☐ NO If yes, use space below to explain.

See reverse for responsibilities and additional information regarding the Authority's education policy.

EMPLOYEE SIGNATURE

DATE

#### REQUEST

☐ APPROVED  
☐ DENIED

DEPARTMENT MANAGER SIGNATURE

DATE

### FOR OFFICE USE ONLY

DATE REQUEST RECEIVED	TRAVEL REQUIRED? <input type="checkbox"/> YES <input type="checkbox"/> NO	REGISTRATION COMPLETED BY: <input type="checkbox"/> AUTHORITY <input type="checkbox"/> EMPLOYEE	TRAINING PAID FOR BY: <input type="checkbox"/> AUTHORITY <input type="checkbox"/> EMPLOYEE	TRAINING REQUEST PROCESSED BY:
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## **EMPLOYEE ELIGIBILITY**

Employees who have been employed for six months or less, are eligible to apply for Essential Training but are not eligible to participate in Advanced Development Training or Degree Programs. Employees who have been employed for more than six months are eligible to apply for Essential Training, Advanced Development Training and Degree Programs.

## **DEFINITIONS**

Advanced Development Training: Voluntary training and education that will assist the employee in their pursuit towards an advanced skill or licensing level

Degree Program: Training and education that will result in credit or credit hours towards a college degree.

Essential Training: All training that is determined by the employee's supervisor or department head to be necessary to perform duties of the employee's current position.

Financial Assistance: Financial assistance offered and paid for by the Authority, available to an employee participating in approved Advanced Development Training and Degree Programs.

Work Schedule: An employee's assigned hours to work as required by their position.

## **AUTHORITY RESPONSIBILITIES**

- a. Provide for the training and education necessary for employees to obtain or renew required certificates and licenses necessary for the position.
- b. Provide for the training and education necessary to keep up with changing work requirements.
- c. Provide for the training and education which is mandated by law.
- d. Provide timely payment and/or reimbursement upon receipt of all required expense reimbursement requests and transcripts if applicable.
- e. Register employees for training and education provided employee gives ample time to process. See employee's responsibilities below.

## **EMPLOYEE RESPONSIBILITIES**

- a. Must submit a completed training request form to the department manager in enough time to process request.
- b. Complete all registration forms and if necessary, register in person at the training site.
- c. Complete all the required applications related to examinations.
- d. Employees seeking assistance from the Administration Office with registration, fees, travel and/or lodging arrangements must be made 30 days prior to travel and/or registration date.
- e. Must provide proof of successful completion.
- f. Expense Reimbursement Requests for reimbursement must be submitted to the Authority within 60 days after the expenses were incurred. Reimbursement requests must be clear, concise, itemized and include original receipts.

## **HUMAN RESOURCES RESPONSIBILITIES**

The Human Resources Manager or designee will maintain records of training, education and related requirements.

## **DEPARTMENT MANAGER RESPONSIBILITIES**

- a. The department manager will promptly review all employee requests for training and consistently apply the rules relating to this policy.
- b. The department manager will monitor the employee's progress.
- c. The department manager will develop an annual training and education needs assessment and request funds need in the department budget.

## **DIVISIONAL DIRECTOR RESPONSIBILITIES**

The divisional director will ensure the rules of this policy are consistently applied.

*See Section J., Employee Training, Development and Educational Assistance Program, of the Authority Personnel Manual for more information.*

# EXPENSE REIMBURSEMENT REQUEST FOR FUNDS



## EMPLOYEE INFORMATION

FIRST NAME	MI	LAST NAME	SUFFIX
AUTHORITY		EMPLOYEE DEPARTMENT	
<input type="checkbox"/> Rivanna Solid Waste Authority	<input type="checkbox"/> Administration	<input type="checkbox"/> Laboratory	<input type="checkbox"/> Solid Waste <input type="checkbox"/> Water
<input type="checkbox"/> Rivanna Water & Sewer Authority	<input type="checkbox"/> Engineering	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Wastewater

## REASON FOR EXPENDITURE

--

## ITEMIZED EXPENDITURES

Expense Date	Item	Code	(if applicable) Estimated Cost	Actual Cost
TOTAL				\$

EMPLOYEE SIGNATURE	DATE	DEPARTMENT MANAGER SIGNATURE	DATE

**SUBMIT COMPLETED FORM AND DOCUMENTATION TO:**

***Bridgit Gianakos, Accounts Payable Technician***

[bgianakos@rivanna.org](mailto:bgianakos@rivanna.org) • (434) 977-2970, ext. 126

*Reimbursement checks will be issued on or about the 10<sup>th</sup> and 25<sup>th</sup> of each month*

# EMPLOYEE TRAVEL REQUEST FORM



For all travel outside of the Authority's service area (Charlottesville or Albemarle County) requiring reimbursable travel expenses, employee must complete an Employee Travel Request Form to be approved in advance by the employee's department manager or divisional director.

## SECTION 1

### EMPLOYEE INFORMATION (Please print)

FIRST NAME	MI	LAST NAME	JOB TITLE
AUTHORITY <input type="checkbox"/> RSWA <input type="checkbox"/> RWSA		DEPARTMENT <input type="checkbox"/> Administration <input type="checkbox"/> Engineering <input type="checkbox"/> Laboratory <input type="checkbox"/> Maintenance <input type="checkbox"/> Solid Waste <input type="checkbox"/> Wastewater <input type="checkbox"/> Water	

## SECTION 2

### TRAVEL INFORMATION (Please print)

TRAVEL START DATE	TRAVEL RETURN DATE	TRAVEL DESTINATION
PURPOSE FOR TRAVEL REQUEST		

## SECTION 3

### EXPENSE DETAIL (Please print)

Employees can estimate travel costs by visiting the U.S. General Services Administration (USGSA) website at [www.gsa.gov/travel-resources](http://www.gsa.gov/travel-resources) or downloading the Per Diem Mobile App on the AppStore or Google Play.

Whenever possible, travel reservations should be made in advance through the Administration department. This includes airline tickets, hotel reservations, conference fees and any other travel cost that can be paid in advance.

Attached all necessary documentation with request for travel and expense approval.

ESTIMATED EXPENSES	COST
Airline Tickets:	\$
Hotel Reservations:	\$
Registration Fees:	\$
Meals and Incidentals: <input type="checkbox"/> I request a cash advance <input type="checkbox"/> I will request a reimbursement after travel	\$
<b>TOTAL</b>	\$

***I acknowledge that the information provided is accurate and abides by the guidelines on the reverse.***

EMPLOYEE SIGNATURE
MANAGER SIGNATURE

DATE
DATE

TRAVEL REQUEST:	<input type="checkbox"/> APPROVED
	<input type="checkbox"/> DENIED

### ADMIN OFFICE USE ONLY

DATE REQUEST RECEIVED	RESERVATIONS MADE BY AUTHORITY <input type="checkbox"/> Airline <input type="checkbox"/> Hotel <input type="checkbox"/> Event	RESERVATIONS MADE BY EMPLOYEE <input type="checkbox"/> Airline <input type="checkbox"/> Hotel <input type="checkbox"/> Event	RESERVATIONS PAID FOR BY <input type="checkbox"/> AUTHORITY <input type="checkbox"/> EMPLOYEE	CASH ADVANCE GRANTED <input type="checkbox"/> YES \$ .00 <input type="checkbox"/> NO	REQUEST COMPLETED BY
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## **RESPONSIBILITIES:**

### **Employee**

1. Complete this form and any third-party registration. Submit with all necessary documentation to your Manager. Submit within a time frame that allows for Manager approval.
2. Discuss requests for and obtain approval for any schedule changes with your Manager.
3. All requests for Administration assistance with registration, travel or lodging arrangements must be received at a minimum of 30 days in advance to travel.
4. Please attach any cost estimates or brochures.
5. Please refer to the U.S. General Services Administration website when determining meal and/or lodging costs. Use the GSA per diem rates for the area of travel.  
[www.gsa.gov/travel/plan-book/per-diem-rates](http://www.gsa.gov/travel/plan-book/per-diem-rates)
6. When requesting the Authority to pre-pay travel expenses:
  - a. Complete this form and return a legible third-party registration (if applicable) that includes all necessary information. Incomplete registrations will be returned to your Manager and will prevent timely enrollment.
  - b. Booking air or rail travel is best handled through the Authority and should be coordinated with Administration at least 30 days prior to travel.
7. When requesting the Authority to provide a cash advance:
  - a. Submit requests no earlier than 30 days prior to the anticipated expense being incurred.
  - b. Provide accounting of cash advance within 120 days after expense(s) were incurred during the trip:
    - i. Include original receipts for purchases/expenses
    - ii. Return any unused funds
    - iii. Reimburse the Authority for any expenses deemed to be in excess
    - iv. Request reimbursement from the Authority if cash advance did not cover all expenses
8. When requesting reimbursement for expenses you paid out-of-pocket during travel:
  - a. Submit an Expense Reimbursement Form within 14 days after the completion of the trip.
  - b. The Expense Reimbursement Form must be clear, concise and itemized, including the original receipts.
  - c. Reimbursement for expenses deemed excessive will be denied.

### **Manager**

1. Review request and substantiating documentation; including registration.
2. Review and make any pre-determination with the employee regarding requests for schedule accommodations which are approved on a case-by-case basis provided it is in the best interest of the Authority.

*See Section K., Travel Policy, of the Authority Personnel Manual for more information.*



# MILEAGE REIMBURSEMENT REQUEST FOR FUNDS



## EMPLOYEE INFORMATION

FIRST NAME	MI	LAST NAME		SUFFIX
AUTHORITY		EMPLOYEE DEPARTMENT		
<input type="checkbox"/> Rivanna Solid Waste Authority <input type="checkbox"/> Rivanna Water & Sewer Authority		<input type="checkbox"/> Administration <input type="checkbox"/> Laboratory <input type="checkbox"/> Solid Waste <input type="checkbox"/> Water <input type="checkbox"/> Engineering <input type="checkbox"/> Maintenance <input type="checkbox"/> Wastewater		

## MILEAGE RECORD

Date	Location Traveled To	Total Miles (round trip)
TOTAL MILES		
<i>IRS Standard Mileage Rate \$0.580</i> <i>IRS Standard Mileage Rate valid 1/01/19-12/31/19</i>		<b>X \$0.58</b> \$

EMPLOYEE SIGNATURE	DATE	DEPARTMENT MANAGER SIGNATURE	DATE

**SUBMIT COMPLETED FORM AND DOCUMENTATION TO:**

***Bridgit Gianakos, Accounts Payable Technician***

[bgianakos@rivanna.org](mailto:bgianakos@rivanna.org) • (434) 977-2970, ext. 126

*Reimbursement checks will be issued on or about the 10<sup>th</sup> and 25<sup>th</sup> of each month*

## DRUG & ALCOHOL TESTING EMPLOYEE POOL DESIGNATION



### EMPLOYEE NOTIFICATION LETTER

EMPLOYEE NAME	JOB TITLE
AUTHORITY	EMPLOYEE DEPARTMENT
<input type="checkbox"/> Rivanna Solid Waste Authority <input type="checkbox"/> Rivanna Water & Sewer Authority	<input type="checkbox"/> Administration <input type="checkbox"/> Laboratory <input type="checkbox"/> Solid Waste <input type="checkbox"/> Wastewater <input type="checkbox"/> Engineering <input type="checkbox"/> Maintenance <input type="checkbox"/> Water

#### EMPLOYEE POOL DESIGNATION

**In accordance with the Authority's Substance Abuse Policy, please be advised that you have been placed in the following pool of employees for random drug/alcohol testing:**

☐ CDL Pool   ☐ Non-CDL Pool

Attached is a complete copy of the Authority's Substance Abuse Policy, which is also available in the Personnel Manual, Section L.

Please contact the Human Resources Manager at (434) 977-2970, ext. 111 if you have any questions.

#### EMPLOYEE ACKNOWLEDGEMENT

*My signature below certifies that I have received, read, and understand the current Authority Substance Abuse Policy.*

\_\_\_\_\_  
EMPLOYEE SIGNATURE

\_\_\_\_\_  
DATE

**RIVANNA WATER & SEWER AUTHORITY**

**RIVANNA SOLID WASTE AUTHORITY**

# **EMPLOYEE HANDBOOK**



May 2019

WELCOME! As an employee of the Rivanna Water and Sewer Authority or the Rivanna Solid Waste Authority (Authority), we hope that you will find your association with this organization to be both pleasant and rewarding. This handbook is intended to give you basic information about personnel policies, operating rules, and benefits. Nothing in this handbook is to be construed as a contract of employment. Please talk to your immediate department manager or the Human Resources Manager if you have any questions not fully answered by this handbook or the Personnel Manual. Copies of the Personnel Manual are maintained by the department managers and divisional directors, a current copy can be found on our network in Admin X: Personnel\Personnel Manuals.

## AUTHORITY

The Rivanna Water and Sewer Authority (RWSA) and Rivanna Solid Waste Authority (RSWA) are independent public agencies that serve the citizens of Charlottesville and Albemarle County.

The Rivanna Water & Sewer Authority is a wholesale agency with two customers, the City of Charlottesville and the Albemarle County Service Authority, which in turn provide service to individual retail customers. We provide clean drinking water to the community and treat wastewater and return it to the environment. We operate several water treatment plants and wastewater treatment plants throughout the Charlottesville and Albemarle County area.

The Rivanna Solid Waste Authority is an independent public agency formed to develop and operate regional garbage and refuse disposal services, including systems and facilities for transferring, recycling, waste reduction and other disposal alternatives, for the Charlottesville and Albemarle County area as well as to acquire and operate current facilities. The RSWA provides disposal services and does not collect solid waste.

The Authority has an Executive Director who is appointed and supervised by a Board of Directors. Under the supervision of the Executive Director are the Director of Operations, who supervises the Water, Wastewater, and Laboratory Departments; the Director of Engineering and Maintenance, who supervises the Maintenance and Engineering Departments; the Director of Finance and Administration, who handles administrative functions, including finance, data processing, accounting, budget, personnel, and purchasing; and the Director of Solid Waste who manages all solid waste services. All employees are expected to carry out the practices and policies established by the Board of Directors and administered by the Executive Director.

## EMPLOYMENT

The Authority seeks to employ people who seek the challenge and rewards of meeting our critical public service needs. In return, the Authority offers on-the-job training, opportunity for advancement in most positions, good benefits and working conditions, and a fair wage.

Job applicants are evaluated for the ability, training, and experience necessary to perform the tasks for the position applied for. Race, color, sex, religion, national origin, age, marital status or non-job related disabilities are not considered in the selection or promotion of employees.

Employees are hired as either: 1) Full-time for a position of at least 2,080 hours annually and are eligible to receive benefits; 2) Part-time for positions either working less than 32 hours a week. Part-time employees do not receive benefits. Work hours are specified at the time of employment. They may vary for each employee depending upon the position, the shift schedule, or the work site.

The Main Office maintains a Personnel File for each employee dating from time of employment. It contains copies

of all promotions, merit reviews, pay changes, commendations, reprimands, tax withholding forms, retirement and life insurance forms, and other materials. It is available for your inspection, by appointment. Any and all changes to your vital information, such as address, home phone number, marital status, emergency contact and the like must be reported immediately to the Human Resources Manager.

## COMPENSATION PLAN

The Authority uses a pay scale and each position has a range from entry level to maximum as defined in the Personnel Manual (*Section D. Compensation Plan and Administration*). Positions are classified to a pay range according to job requirements and responsibilities. All employees are paid biweekly on Fridays. Paychecks may be automatically deposited. All new employees are requested to have their paychecks automatically deposited into a checking or savings account.

Work schedules vary by department and position. Non-exempt employees are paid overtime for hours worked in excess of forty in a workweek. Overtime pay at blended rate based on hours actually worked and compensation on those hours actually worked. Overtime does not include time for sick, vacation, or other leave. Additionally, employees will be paid a premium rate of 50% their hourly base pay rate regardless of the number of hours worked in the workweek for unscheduled hours worked due to emergency call-in or covering another employee's work schedule. Part-time employees receive overtime pay for work hours exceeding 40 in a workweek. Any other overtime which is not specified above, must be preauthorized by your immediate department manager on a daily basis. In all instances of overtime, the employee may request in lieu of overtime pay an annual leave credit at a rate of 1.5 times the overtime hours worked for up to 20 overtime hours per calendar year.

Certain positions are required to participate in an on-call rotating schedule. Currently, only one mechanic and one engineering staff member is on-call during the normal off-duty hours. In the event of an emergency, this on-call employee is expected to respond promptly and be fit for duty. Non-exempt employees that are placed on-call will receive a wage rate of 10% of their normal hourly rate for every hour waiting to be called outside of their normal work schedule. Lunchtime during the normal workweek is not considered on-call time. Should the employee be required to come into work during their on-call schedule, he/she will receive overtime pay for two hours or the actual hours worked, whichever is greater. In the case of emergency operation status, as determined by the Executive Director, other positions may temporarily be included in the on-call schedule.

Your performance is evaluated annually by your immediate department manager. Evaluations determine annual merit increases and also give you a concrete idea of job performance standards. The evaluation gives you an opportunity to discuss strengths and weaknesses in job performance and to express to the immediate department manager any problems found in performing the job. Further details of the performance evaluation/merit increase plan are available from your department manager or the Personnel Manual (*Section D. Compensation Plan and Administration*). Please remember that you do not have to wait for an evaluation to discuss how you are doing with your immediate department supervisor. The job descriptions used in performance evaluation have been worked out with contributions from all levels of employees. If you have suggestions for improving them let your department manager or the Human Resources Manager know.

## PROBATION PERIOD

New employees must successfully complete a six-month probation period. During probation your immediate department supervisor has the opportunity to observe you on the job and determine your suitability for the job. Your performance will be evaluated in writing after 3 months and after 6 months, with minimum scores of 1.5

points after 3 months and 1.75 points after 6 months required for success during probation. Lower scores are grounds for termination. Accrued annual balances will not be paid should you terminate during initial probation. Dismissals during probation cannot be appealed under the Authority's grievance procedure. Employees who score below 1.60 on any subsequent evaluation after the initial probation period will reenter the probation period.

## **BENEFITS**

The following benefits are provided or are available to all full-time employees. Further, medical insurance and prorated annual leave are offered to part-time employees working at least 30 hours per week. Nothing in this manual shall prevent the Authority from changing, altering or discontinuing Authority provided benefits.

## **HOLIDAYS**

The following 12 and a half days are paid holidays:

- New Year's Day
- Martin Luther King Jr. Day (3rd Monday in January)
- Washington's Birthday/Presidents' Day (3rd Monday in February)
- Thomas Jefferson's Birthday (April 13, Floating Holiday)
- Memorial Day (Last Monday in May)
- Independence Day (July 4)
- Labor Day (1st Monday in September)
- Veterans Day (November 11)
- Thanksgiving (half day on the 4<sup>th</sup> Wednesday, 4<sup>th</sup> Thursday and Friday in November)
- Christmas Eve and Christmas Day (December 24 and 25)

In the case of Monday-Friday work schedules, if a holiday falls on a Sunday, it is observed the following Monday. If it falls on a Saturday, it is observed the preceding Friday. An employee scheduled to work on the actual day on which a holiday falls, will receive holiday premium pay for each hour worked. All employees will receive 8 hours of regular holiday pay. Thomas Jefferson's Birthday is a floating holiday and can be taken any time during the year. Holiday premium pay is not paid for work on this day.

## **ANNUAL LEAVE**

Full-time employees accumulate annual leave at the following rates:

<b>Years of Service</b>	<b>&lt;5 Years</b>	<b>5 to &lt;10 Years</b>	<b>10 to &lt;15 Years</b>	<b>15 to &lt;20 Years</b>	<b>20 to &lt;25 Years</b>	<b>25 + Years</b>
<b>Annual Accrual Rate</b>	96 hours	120 hours	144 hours	168 hours	192 hours	216 hours

Annual leave hours may be accumulated until they equal twice the annual accrual rate. Annual leave accumulations over the allowed amount will be lost as of January 1 of each year. Unused annual leave hours are paid upon separation provided that at least two-weeks' notice is given if the separation is voluntary.

**SICK LEAVE**

Full-time employees who participate in Plan 1 or Plan 2 of the Virginia Retirement System accrue 96 hours of sick leave per year. Sick leave is accrued at a rate of 3.69 hours per pay period. Full-time employees who participate on the Virginia Retirement System Hybrid Plan earn sick time every January 1<sup>st</sup> based on their service (see the chart below).

Sick leave is for personal illness, medical and dental appointments, or after exposure to a contagious disease. Sick leave used to attend members of your immediate family for the reasons above is limited to 40 hours per year (January 1 – December 31). Immediate family includes spouse, parents, parents-in-law, children, step-children, foster children, or other relatives or individuals residing in the same household. A supervisor may require a medical certificate for sick leave when leave is taken before or after a holiday or other scheduled day off, or when leave taken is in excess of three working days. A supervisor may also require a medical certificate when a sick leave occurrence exceeds one sick leave occurrence per three months.

Sick leave may also be used as bereavement leave in the event of a death in the immediate family, for up to 24 hours per occurrence. Your immediate family in this case includes spouse, children, parents, foster children, siblings, grandparents, grandchildren, step-children, step-parents, guardian or same relative of spouse and any other relatives or individuals residing with the employee.

**SICKNESS DISABILITY AND PERSONAL TIME OFF POLICY (SDPTO)**

This policy applies to all employees that are enrolled in the VRS Hybrid Plan. Full-time employees earn SDPTO hours as follows:

Months of Service	Sick Leave Accruals (hours)
Less than 60	96 (8 hours per month)
60 to 119	104
120 or more	120

SDPTO can be used for personal illness, medical and dental appointments, or after exposure to contagious diseases. SDPTO can be used for family illness or injury, or bereavement. The first year of employment, a new hire will be credited for the accruals based on their anticipated months of service; thereafter, the employee will receive their annual accrual on January 1. SDPTO cannot be carried forward year-to-year.

**SHORT-TERM LONG-TERM DISABILITY INSURANCE**

Disability insurance is provided to employees enrolled in the VRS Hybrid Plan. After meeting specific eligibility requirements, an employee receives partial salary for a maximum of 26-weeks each year beginning the 8<sup>th</sup> calendar day after illness/disability. A disability lasting longer than 26-weeks requires coverage to transition to a Long-Term Disability Plan.

**FAMILY AND MEDICAL LEAVE**

All employees are eligible for up to 12 weeks per year of Family and Medical Leave in the circumstances of birth, adoption or foster placement of child, and of serious medical condition of a family member or the employee. In many cases, use of annual and sick leave will count toward the twelve weeks. Any Family and Medical Leave not covered by current paid leave benefits will be Leave Without Pay. Please see the Personnel Manual, (*Section F,*

*Leave Policy and Rules*) your immediate department manager, or the Human Resources Manager if you have questions.

### **WORKER'S COMPENSATION**

If you are hurt on the job and the injury is considered compensable under the Worker's Compensation Act, the costs of your treatment, medicines, supplies, therapy, hospital, and other items will be paid through our Worker's Compensation insurance. This insurance also provides for 66<sup>2/3</sup> pay during time lost from the job should the lost time exceed seven calendar days. It is important that employee:

- Report every injury immediately to your immediate department manager and go to a doctor if necessary. Get help, don't tough it out. The Authority has a panel of physicians that handle all employee injuries or illnesses. Going to a physician other than a panel physician may result in you being personally responsible for these bills.
- Tell the doctor and others you were injured on the job and make sure the Authority receives the bill, not you. Do not provide your personal insurance information. If you do get a bill, give it to the Human Resources Manager as soon as possible for payment or reimbursement; and
- Cooperate with your immediate department manager, the insurance company and the Safety Committee in investigating the accident.

You are also required to review the Safety Manual and sign an acknowledgement.

### **MEDICAL INSURANCE**

You as an employee may participate in the Authority group health, dental and vision insurance plans. Please see the plan handbook for more details. You will be provided a copy of the summary plans on your first day of employment. The Authority contributes toward whichever option and plan you choose. The Authority will not contribute to any other insurance plan you may wish to substitute for this group plan.

### **RETIREMENT**

Full-time employees must participate in the Virginia Retirement System (VRS). On a biannual basis, the VRS actuarially determines the Authority's contribution rate. This contribution is a percentage of the employee's monthly credible compensation and is paid by the Authority into the VRS retirement funds for each employee. In addition, depending on an employee's enrollment in VRS Plan 1, VRS Plan 2 or VRS Hybrid the employee is required to make a minimum payment of 5% of their compensation into the VRS retirement fund. This member contribution is deducted on a pre-tax basis from the employee's biweekly pay. Please see the current VRS handbook for information on retirement, disability, and death benefits and options. There is no mandatory retirement age. A copy of the handbook can be found at [www.varetire.org](http://www.varetire.org).

### **SOCIAL SECURITY (FICA)**

Social Security is another part of our retirement benefit. A payment is withheld from your gross pay and this payment is matched by the Authority.

### **LIFE INSURANCE**

Participation in VRS includes a group life insurance plan, paid for by the Authority. The amount of insurance provided is your annual wage rounded to the next higher thousand and then multiplied by two. See the VRS



booklet for details. Employees may also elect to purchase additional life insurance for family members through optional insurance.

### **OPTIONAL BENEFITS**

The Authority supplements its core benefits package with various voluntary or optional benefits. The optional benefits currently offered include a 457 Deferred Compensation plan, Flexible Dependent and Medical Spending Accounts, Health Savings Accounts, health club membership at reduced rates, Legal Resources and Liberty Mutual group auto and homeowners group discounted rates. These benefits are subject to review and may be altered, changed or discontinued.

### **OTHER BENEFITS**

Military leave, court leave (jury or witness duty), supplemental leave, leave without pay, and educational assistance are described in the Personnel Manual, available from your immediate department manager, or can be viewed on our network in Admin X: Personnel\Personnel Manual.

Further information is available from your immediate department manager or the Human Resources Manager.

### **DEDUCTIONS**

The following deductions must be taken from your pay: Federal and State tax withholding, Social Security taxes, VRS member contributions, garnishments, and mandated child support payments. Voluntary deductions may be taken for the following: optional medical and dental insurance, AFLAC insurance, Credit Union, Deferred Compensation, Flexibility Spending Accounts, Health Club memberships, Health Savings Accounts, or others as the need arises.

### **DEPARTMENT MANAGERS**

Every employee has an immediate department manager (IDM) to whom he or she is responsible for the effective job performance. Your IDM's main responsibility is to see that the job gets done and that you are treated fairly. Together you and your IDM can work out most problems. You are expected to carry out your duties thoughtfully and thoroughly in accordance with the performance standards for your position. Disciplinary problems are handled through the Disciplinary Policy in the Personnel Manual (*Section G., Disciplinary Policy*).

Disciplinary action options include reprimands, suspension, demotion, reduction in pay, or dismissal for such offenses as (examples only and not limited to):

- Tardiness
- Absenteeism
- Neglect of duty
- Sleeping on the job
- Dishonesty
- Insubordination
- Fighting
- Incompetence
- Criminal convictions
- Harassment
- Work rules violations
- Unauthorized use of Authority Property

### **UNIFORMS**

Uniforms are provided to all operators, maintenance and certain engineering employees. You are expected to report to work in uniform and to remain in uniform until relieved of duty. You are required to wear your complete uniform while on the job and to wear appropriate shoes at all times. Failure to wear the complete uniform may result in disciplinary action. Uniforms may be worn home, but it is your responsibility to turn in uniforms for cleaning on the scheduled days so that clean uniforms will be available. Employees who prefer to launder their

uniforms may do so. If you leave the Authority, all uniforms and other equipment must be returned. You will be expected to reimburse the Authority for the cost of items not returned.

Operators, maintenance employees and certain other employees are required to wear approved steel-toe safety shoes on the job. The Authority gives an allowance credited July 1<sup>st</sup> of each year as set out in the Personnel Manual (*Section I., Administrative Policies*).

## **SAFETY**

Safety is important to everyone at the Authority. Your immediate department manager is expected to train you in the safety rules for your position and make sure that you have the proper equipment, use it properly, and follow the safety rules. Department managers are expected to provide continuing safety education. On-the-job accidents must be reported promptly to your department manager to ensure treatment and proper reporting. Employees must promptly report all accidents and injuries, no matter how slight. You are expected and encouraged to report to your department manager any unsafe conditions immediately and to bear safety in mind both on the job and at home. You may take safety concerns directly to the Safety Manager and/or the Safety Committee if you are not satisfied with your immediate department manager's response.

Our safety program is administered and advised by the Employee Safety Committee. Members serve two-year terms. This committee is charged with maintaining and improving our safety consciousness as well as improving the safety rules and safety education. Each accident is investigated to determine unsafe acts or unsafe conditions. The Authority has a safety incentive program. Please refer to the Safety Manual to which you will be provided access on your first day of employment.

## **SPECIAL INFORMATION FOR TREATMENT PLANT OPERATORS**

Most operators are expected to remain at the plant while on duty and are not to leave the plant site during their shift without the plant supervisor's or department manager's permission. The operator on duty is expected to remain on duty and in uniform until he/she has been relieved. Every effort will be made to minimize overtime and shift schedule changes, but the plant has to be staffed at all scheduled times. Acceptance of overtime to fill in for sickness, vacation, and emergencies is expected.

A good work habit is to report to work sufficiently early to receive any special instructions from the operator on duty or to learn of any equipment problems so that the operator being relieved can leave on time. Repeated tardiness will result in disciplinary action. The fact that treatment plants operate around the clock puts special requirements on the operators to ensure good control of the process. It is your responsibility to notify your plant supervisor or department manager with as much advance notice as possible (a minimum of four hours) when you will be absent or late to work. Having some other person call the operator on duty is not acceptable and may result in disciplinary action. Only rare exceptions will be made to this policy.

Operators who pass a licensing exam for a higher class license than the one currently held will be reclassified and be paid either the minimum for the new class or a rate in the new range 5% above the current salary, whichever is greater, provided the experience requirements have been met.

These provisions are intended to help insure proper training and qualification of water and wastewater treatment plant operators. Each operator is required to earn a Class 1 license level. Failure to obtain the required license will be grounds for termination or other disciplinary action.

## GRIEVANCES

The Authority hopes that all complaints and grievances can be resolved between you and your immediate department manager. If not, you deserve and have the right to submit grievances resulting from work situations and have them resolved speedily. The Personnel Manual contains a grievance procedure (*Section H., Grievance Procedure*) to be used when a grievable instance, situation or condition arises. Grievances cannot be used to change policy, but in general may be used to resolve interpretation/application of rules and policies, acts of reprisal for filing a grievance, certain disciplinary matters, or complaints of discrimination.

## INCLEMENT WEATHER POLICY

The objective of this policy is to establish procedures and guidelines for all Authority employees concerning the potential closings or delays in opening Authority facilities. For more information, refer to the Personnel Manual (*Section I., Administrative Policies*).

### ROLES AND RESPONSIBILITIES

The Executive Director will be responsible for determining whether a delayed opening or closing of some or all Authority facilities is necessary due to inclement weather.

Essential employees will be expected to report to work regardless of the weather. It is immediate department manager's responsibility to ensure their employees know whether they are considered essential or non-essential employees.

Notice of delayed opening or closing may be announced via local radio and local television announcements. These announcements are opening and closing notices to the general public that use these facilities and not Authority employee work schedule announcements. Non-essential employees should call (434) 977-2970 extension 333 for weather-related delays or closings that effect their work schedules.

### SNOW/ICE REMOVAL

Snow and ice removal will be based on the following priorities:

- Public parking and travel ways into and around all Authority facilities;
- Employee parking areas and travel ways;
- Main pedestrian walkways and ramps; and
- Other Authority driveways and facilities that are not maintained by other outside agencies.

These priorities may be altered as deemed necessary by the Department Manager when considering special events or circumstances.

### USE OF LEAVE DURING INCLEMENT WEATHER INCIDENTS

In order to address the questions regarding time that has to be made up or leave debited, the following shall apply:

- **Delayed Opening and/or Early Closing**  
Non-essential employees will not be required to make up time missed due to weather-related delayed opening or early closing. However, if the employee leaves work prior to an early closing, the time between the departure and the early closing time must be made up in the same payroll week or annual leave or comp time debited. Should the employee report to work after the delayed opening time, the time between

the delayed opening time and the actual time the employee reported to work must be made up in the same payroll week or annual leave debited.

- **Closed for the Entire Day**

Non-essential employees will not be required to make up lost time if offices are closed for the entire day.

- **Open or Close on Regular Scheduled Time**

Non-essential employees who are delayed due to weather conditions on days when the offices are opened at its regular time or who need to leave early due to weather-related concerns when the facility remains open until its normal closing time will be expected to account for time missed. Any time missed can be accounted for through either making up time or using annual leave. All time made up must be within the same payroll week.

- **Employee on Leave**

When an individual is on leave during a day that there is a delayed opening, early closing, or a complete closing, the time assessed for such leave is not adjusted for the changed schedule. An individual will be charged the full time that they are not at work.

## GENERAL INFORMATION AND BEHAVIOR GUIDELINES

The following information summarizes miscellaneous Authority policies from the Personnel Manual, previously written directives, and policy interpretations. It is not all-inclusive, and some information applies only to certain groups of employees, but the intent is to answer some of the more common questions as to what is expected with respect to attendance, work habits, and the like. All employees are expected to abide by these rules and guidelines and violation may result in disciplinary action.

Every effort will be made to minimize overtime and schedule changes, but certain staffing requirements must be met regardless of circumstances. Acceptance of overtime when necessary for operations is expected but immediate department managers are expected to be reasonable and fair in scheduling overtime and in making schedule changes.

Employees are expected to report to work on time. Repeated tardiness will result in disciplinary action. It is your responsibility to notify your immediate department manager with as much advance notice as possible, but a minimum of 4 hours before your shift starts, when you will be absent or late to work.

It is understood that treatment plant operators are to take time to eat between duties during their shifts. All other departments have a scheduled non-paid meal break. Limited kitchen facilities are available, but extensive meals should be prepared at home, not on the job. Normal work schedules vary from 8-hour, 9-hour, 10-hour to a 12-hour work day. The workweek may also vary among position and department.

Outside interests that conflict with your ability to be alert and attentive to your job are discouraged. Any employee that has another job outside of the Authority must advise their immediate department manager of this. It may be necessary that your extra employment be reviewed by the Executive Director for any conflicts of interests with your Authority position. Working a second job may not allow you sufficient rest to do a satisfactory job here and may result in poor performance evaluations. Should your outside interests or other job have an adverse impact on the Authority, you may be asked to terminate your outside job or activity if you wish to remain with the Authority.

Telephones are for Authority business and personal calls should be minimized. No personal long-distance calls may be charged to the Authority. You are expected to handle incoming calls politely and efficiently. Entertaining visitors while on duty is not permitted. If you want to show friends or relatives where you work, schedule visits on daylight hours during weekdays. You are not permitted to carry firearms while on duty or on Authority premises without prior permission from the Executive Director.

Employees who use, are under the influence of, or have possession of intoxicants or controlled substances (as defined by the Code of Virginia) while on duty either on or off Authority premises or in an Authority vehicle are subject to immediate dismissal. See Section L., Substance Abuse Policy of the Personnel Manual for further information.

You are responsible for the proper use and maintenance of equipment and vehicles used in your work. You are expected to report any defect you cannot fix to your immediate department manager as soon as possible. Do not operate any equipment or vehicle if its safety is questionable.

The personal use of Authority equipment or facilities is permitted to a reasonable extent; however, permission must be obtained from a department manager each time something is borrowed or used. The personal use of Authority vehicles is not permitted. Abuse of this privilege or of the equipment may result in the loss of this privilege for everyone. Use of Authority equipment or facilities, including personal car washing, is limited to off-duty hours or scheduled breaks.

Computers, internet, e-mail and voicemail are tools available to employees to perform the duties of their position. No user should presume that any file or message generated, received, transmitted or stored on any Authority system is private. This includes, but is not limited to, e-mail, voicemail, text documents, graphics files, executable files, audio files and printouts. No web page viewed using the Authority equipment or accounts are private. The Authority reserves the right to inspect any hardware, software or file at any time for any reason. The Authority reserves the right to monitor internet usage, including the logging of sites visited. If password protection is used on any file, directory, software package or machine, a copy of the password used must be forwarded to the appropriate department manager and the Human Resources Manager. Before any software or hardware is purchased or installed, you must check with the Information Systems Administrator first. Personal use of computers, printers, e-mail and the internet must be kept to a minimum. In addition, personal use should be confined to personal time. Excessive personal use may, at your immediate department manager's discretion, result in loss of the privilege of personal use. E-mail attachments should only be opened if they are from a trusted source. Users will be held responsible for damage done by computer viruses that come in attached to personal e-mail. The use of any of the Authority's equipment, e-mail or internet connections for any illegal, discriminatory, offensive, obscene, threatening, harassing, intimidating, or disruptive purpose is strictly prohibited and will result in disciplinary action. See Personnel Manual for more information (*Section I-9, Administrative Policies, Technology System Acceptable Use Policy*).

As a vital part of the Authority's security system, an identification badge with the employee's name, photo and department will be issued to employees on their first day of employment. All employees are required to carry an ID badge during their shift or while conducting any Authority business on or off premises. All employees are required to produce their ID badge when requested.

If an identification badge is lost or stolen, the employee must obtain a replacement. A fee of \$5.00 will be assessed for all replacement badges. Lost or stolen cards should be reported to your immediate department manager, as soon as possible. Failure to be able to display or produce your ID badge when requested or excessive loss or damage to cards can lead to disciplinary action.

Upon termination, employees will be required to return ID badges to Human Resources.

## STANDARDS OF CONDUCT

The Authority is a public corporation and thus special demands and responsibilities must be met by its employees. We are always in the public eye, with our work subject to critical review by the people who pay our wages through their water and wastewater rates. Also, our facilities by their nature lie across the property of many landowners who have their own expectations of our conduct. We are required by these facts to conduct ourselves with courtesy, fairness, honesty, and efficiency while maintaining our own dignity.

Our function in the community is a critical one. This great responsibility requires conduct that not only meets the demands and responsibilities above but also helps ensure safe, effective, and efficient operations. The standards of conduct below define general and specific behavioral guides to which all employees are expected to conform. You are hired with this expectation and breaches of these standards will be met by a range of disciplinary actions. It is the intent of this policy to establish fair and objective process means for correcting and treating unacceptable conduct and to distinguish between less serious and more serious misconduct and provide for timely correct action. While the standards cannot cover all circumstances, you should remember that your actions with the public and your co-workers are expected to be and to appear to be courteous, fair, honest, non-discriminatory and efficient.

All employees are expected to have timely and regular attendance, their time at work applied to the duties of their position, satisfactory work performance, and appropriate work attire. See the Personnel Manual (*Section I., Administrative Policies*).

## CONFLICT OF INTEREST

Employees must not have a material financial interest in or engage in any business or profession that conflicts or appears to conflict with job responsibilities or that tends to impair independence of judgment or action on the job. Likewise, employees must not use their positions for personal gain beyond wages and benefits and must keep confidential all information acquired through employment when that information is not available to the public. See the Personnel Manual (*Section I., Administrative Policies*).

- **Gifts**

Employees must not accept gifts of goods, favors, services, or money from any person or firm which would influence or could be inferred to influence the impartial discharge of duties. Employees also must not accept such gifts for services the Authority pays them to provide. If such gifts cannot be gracefully declined, the employee should either donate them to charity or in some cases make them available department-wide or Authority-wide. Promotional items such as individual caps, pens, pencils and the like can usually be accepted without fear of violating this standard. Likewise, acceptance of occasional meals or attendance at social activities provided by business contacts or vendors can usually be accepted. Favoritism will not be tolerated. Employees should remember that donors of gifts will probably expect or seek preferential treatment. If you have **any** doubts as to what to do, ask your department manager or the Executive Director before accepting any gift.

- **Nepotism**

No employee in a supervisory position shall have under his or her direct supervision any employee whose relationship is of the first or second degree either by blood or marriage. In the event of a promotion which brings about the conditions thus described, the employee of lower rank shall be transferred to another position for which he or she is qualified when a vacancy occurs.

Relationship of the first or second degree shall mean: father, mother, brother, sister, spouse, son, daughter, aunts, uncles, son-in-law or daughter-in-law, brother-in-law, step-family members and any other relatives or individuals residing with the employee.

- **Discrimination**

Employees must not discriminate on the basis of race, color, religion, age, sex, disability, political affiliation, or national ancestry. Equal employment opportunity is not just a set of words but a commitment by the Authority to make affirmative action to provide a work place in which employee qualifications, merit, and fairness are the governing rules regarding hiring, assigning work schedules, promotion, compensation, benefits, educational opportunities, and disciplinary actions. If you see an apparent act of discrimination or feel you have been discriminated against, speak up or use the Grievance Procedure. The Human Resources Manager is available as a sounding board and any charges brought forth will be held in confidence as much as is legally allowable.

- **Harassment**

The Authority is committed to provide a work environment that is free from all forms of conduct that can be considered harassing, coercive, or disruptive, including sexual harassment. Actions, words, jokes, or comments based on an individual's sex, race, color, national origin, age, religion, disability, or any other legally protected characteristic will not be tolerated. Specifically related to sexual harassment, it is illegal for any employee, male or female, to harass another employee by (1) making unwelcome sexual advances or requests for sexual favors, or engaging in other verbal or physical conduct of a sexual nature; (2) making submission to or rejection of such conduct a basis for employment decisions affecting the employee; or, (3) creating an intimidating, hostile, or offensive working environment by such conduct. See the Personnel Manual for more information (*Section E., Harassment Policy*).

If you see an apparent act of harassment of any nature or feel you have been harassed, speak up and/or use the Grievance Procedure. The Human Resources Manager is available as a sounding board and any charges brought forth will be held in confidence as much as is legally allowable.

- **Outside Activities**

Employees are encouraged to be active in professional, civic, and charitable organizations. With department manager approval, employees may occasionally work for such organizations (other than religious or partisan political organizations) during working hours, provided there is a reasonable relationship to work duties.

- **Ethics in Purchasing**

Those employees responsible for purchasing, that is, divisional directors, department managers, and the Accounting/Purchasing Technician are expected to be familiar with the code of ethics incorporated into the Authority's Purchasing Manual.

- **Other Standards of Conduct**

See the Personnel Manual for additional expectations for standards of conduct.

- **Violations**

Any employee, who is found in violation of the Standards of Conduct after the appropriate investigation, will be subject to disciplinary action depending upon the circumstances, from a warning in his or her personnel file up to and including immediate dismissal from employment.

## **FURTHER INFORMATION**

The Human Resources Manager, the Director of Finance and Administration, and your department manager are the people to contact for general information about topics in this Handbook. They can also give you copies of such material as the Grievance Procedure if you need them. Don't hesitate to call, because there are no "silly" questions if you are concerned about work matters.



**MEMORANDUM**

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

**FROM: LONNIE WOOD, DIRECTOR OF FINANCE &  
ADMINISTRATION  
BETSY NEMETH, HUMAN RESOURCES MANAGER**

**REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR**

**SUBJECT: FY 2020 PAY SCALE ADJUSTMENT**

**DATE: MAY 28, 2019**

Last year, staff successfully completed and presented a compensation plan study to the Boards of both Authorities that ultimately lead to approval of a new salary/wage pay scale for both Authorities.

The study was initiated in the second half of 2017, which means the data to support our current pay scale is roughly 2-3 years old. We have included in the new Personnel Management Plan the opportunity for the Executive Director to recommend adjustments to the pay scale in those years when we do not conduct a salary study. There are several factors we considered in developing a recommendation to increase our current pay scale by an overall 5%:

- The first factor was the increase in the CPI-U from the Bureau of Labor Statistics. The chart below shows that the changes in the index over the last 3 years would support a 5.0 - 7.0% increase in the pay scale solely based on inflation.

CPI - U

January Index published by Bureau of Labor Statistics

	<u>Index</u>	<u>Yearly Change</u>	<u>3-Year Cumulative Change</u>	<u>2-Year Cumulative Change</u>
Jan-16	236.916	-		
Jan-17	242.839	2.50%		
Jan-18	247.867	2.07%		
Mar-19	254.202	2.56%	7.30%	4.68%

- The second factor was the unemployment rate in the Charlottesville area of 2.9% in March of this year, which was lower than the national average (3.6%) and one of the lowest in the State. This factor indicates both recruiting new employees and retaining current employees may be more difficult because the employment market is tight in terms of the supply of job seekers and the demand from other employers also competing to hire and retain quality employees.

Attached is a comparison of the current pay scale compared to the recommended scale. This adjustment has no budget impact for FY 2020.

**Board Action Requested:**

It is requested that the Board of Directors of Both Authorities adopt the recommended 5% increase in the pay scale effective July 1, 2019.

Current Pay Grade Scale FY 2018-2019				Proposed Pay Grade Scale FY 2019 - 2020 (+5%)			
Grade	Min	Mid	Max	Grade	Min	Mid	Max
10	\$25,490	\$33,902	\$42,314	10	\$26,765	\$35,597	\$44,429
20	\$26,765	\$35,597	\$44,429	20	\$28,103	\$37,377	\$46,651
30	\$28,103	\$37,377	\$46,651	30	\$29,508	\$39,246	\$48,983
40	\$29,508	\$39,246	\$48,983	40	\$30,983	\$41,208	\$51,433
50	\$30,983	\$41,208	\$51,433	50	\$32,533	\$43,268	\$54,004
60	\$32,533	\$43,268	\$54,004	60	\$34,159	\$45,432	\$56,704
70	\$34,159	\$45,432	\$56,704	70	\$35,867	\$47,703	\$59,540
80	\$35,867	\$47,703	\$59,540	80	\$37,661	\$50,089	\$62,517
90	\$37,661	\$50,089	\$62,517	90	\$39,544	\$52,593	\$65,642
100	\$39,544	\$52,593	\$65,642	100	\$41,521	\$55,223	\$68,925
110	\$41,521	\$55,223	\$68,925	110	\$43,597	\$57,984	\$72,371
120	\$43,597	\$57,984	\$72,371	120	\$45,777	\$60,883	\$75,989
130	\$45,777	\$60,883	\$75,989	130	\$48,066	\$63,927	\$79,789
140	\$48,066	\$63,927	\$79,789	140	\$50,469	\$67,123	\$83,778
150	\$50,469	\$67,123	\$83,778	150	\$52,992	\$70,480	\$87,967
160	\$52,992	\$70,480	\$87,967	160	\$55,642	\$74,004	\$92,365
170	\$55,642	\$74,004	\$92,365	170	\$58,424	\$77,704	\$96,984
180	\$58,424	\$77,704	\$96,984	180	\$61,345	\$81,589	\$101,833
190	\$61,345	\$81,589	\$101,833	190	\$64,412	\$85,668	\$106,925
200	\$64,412	\$85,668	\$106,925	200	\$67,633	\$89,952	\$112,271
210	\$67,633	\$89,952	\$112,271	210	\$71,015	\$94,449	\$117,884
220	\$71,015	\$94,449	\$117,884	220	\$74,565	\$99,172	\$123,779
230	\$74,565	\$99,172	\$123,779	230	\$78,294	\$104,131	\$129,967
240	\$78,294	\$104,131	\$129,967	240	\$82,208	\$109,337	\$136,466
250	\$82,208	\$109,337	\$136,466	250	\$86,319	\$114,804	\$143,289



RIVANNA SOLID WASTE AUTHORITY  
RIVANNA WATER & SEWER AUTHORITY



695 Moores Creek Lane  
Charlottesville, Virginia 22902-9016

434.977.2970 434.293.8858   
[www.rivanna.org](http://www.rivanna.org)

## MEMORANDUM

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

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

**REVIEWED BY:** BILL MAWYER, EXECUTIVE DIRECTOR

**SUBJECT:** VIRGINIA RETIREMENT SYSTEM LONG TERM CARE INSURANCE PROGRAM

**DATE:** MAY 28, 2019

The Commonwealth of Virginia, through the Virginia Retirement System, offers a Voluntary Group Long Term Care Insurance Program. This program, which is underwritten by Genworth Life Insurance Company, provides a monthly benefit for covered long term care expenses to participating employees. Participation in the program is voluntary, and all premiums are directly paid by the employee with no cost to the Authority.

Political sub-division employers who did not adopt this program in 2010 or 2011 can now adopt the program. If adopted, beginning on September 16, 2019, employees and their eligible family members would be eligible to apply for the Voluntary Group Long Term Care Insurance Program. The open enrollment for this program would begin on September 16, 2019 and last through October 11, 2019.

The Voluntary Group Long Term Care Insurance Program helps employees cover the cost of long-term care services, such as nursing home care or at-home care to assist with the activities of daily living. Employees would have several different coverage options to choose from at different costs.

### **Board Action Requested:**

Staff recommends that the Board approve the Authority's participation in the Commonwealth of Virginia's Voluntary Group Long Term Care Insurance Program.

# **Commonwealth of Virginia Voluntary Group Long Term Care Insurance Program**

## **Adoption Agreement Process Instructions**

If you wish to offer the Commonwealth of Virginia Voluntary Group Long Term Care program to your eligible employees, please follow the instructions below.

1. Two original, signed adoption agreements must be submitted to VRS in order to elect the program.
2. Once your governing body adopts the program using the provided VRS agreement, your Primary Administrative Authority or your governing body chairperson should sign both copies and send them to ZaeAnne Allen, VRS employer coverage coordinator, P.O. Box 2500, Richmond, VA 23218-2500.
3. VRS Director Patricia Bishop will sign both agreements. VRS will keep one of the originals for its records and the second fully signed original will be returned to you for your records.
4. All adoption agreements must be postmarked no later than June 14.

If you have questions about the adoption process, contact ZaeAnne Allen, VRS employer coverage coordinator, at [zallen@varetire.org](mailto:zallen@varetire.org) or 804-775-3514.



VIRGINIA RETIREMENT SYSTEM  
P.O. Box 2500  
Richmond, VA 23218-2500

## Commonwealth of Virginia Voluntary Group Long Term Care Insurance Program Employer Adoption Agreement

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THIS AGREEMENT (the “Agreement”), executed this [insert date] \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, is by and between [insert Locality, School Division, or Other Political Subdivision] \_\_\_\_\_ (the “Employer”) and the Virginia Retirement System (the “Plan Sponsor”) (hereinafter collectively referred to as the “Parties”).

### WITNESSETH

WHEREAS, the Commonwealth of Virginia has established, and the Plan Sponsor is responsible for, the Commonwealth of Virginia Voluntary Group Long Term Care Insurance Program (the “Plan”) in which employees of local governments, local officers, and teachers, as defined in § 51.1-513.3 of the *Code of Virginia* (the “Code”), as amended, may participate; and

WHEREAS, pursuant to the same section of the *Code*, the Employer desires to enter into this Agreement with the Plan Sponsor to permit participation in the Plan by its eligible employees; and

WHEREAS, the official entering into this Agreement is duly authorized on behalf of the Employer’s governing body.

NOW, THEREFORE, in consideration of the premises herein, the Parties agree as follows:

- 1) The Plan Sponsor represents and warrants to the Employer that it will comply with all applicable laws affecting the Plan.
- 2) The Plan Sponsor represents to the Employer that it will provide sufficient services to administer the Plan and to appropriately respond to inquiries by employees and participants.
- 3) The Employer acknowledges and agrees to the terms and conditions established in the Plan.
- 4) The Employer agrees to provide the Plan Sponsor’s selected long term care insurance carrier with a mail file of all active employees, in the format provided by the insurance carrier.

- 
- 5) When requested by the Plan Sponsor or the insurance carrier, the Employer agrees to permit the Plan Sponsor's selected long term care insurance carrier to conduct group and individual meetings for the purpose of explaining the Plan or enrolling employees on the Employer's premises during normal working hours subject to such reasonable restrictions that the Employer communicates in writing to the Plan Sponsor and that are accepted by the Plan Sponsor.
- 6) This Agreement may be amended from time to time by written agreement between the Plan Sponsor and the Employer.
- 7) The term of this Agreement shall be for three years beginning on the date of its execution, and thereafter may be terminated by either party upon 60 days written notice to the other party.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed, intending to be bound thereby.

**Employer****Virginia Retirement System**

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_, 20\_\_

Date: \_\_\_\_\_, 20\_\_



## MEMORANDUM

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

**FROM: BILL MAWYER, EXECUTIVE DIRECTOR**

**SUBJECT: APPROVAL OF PROPOSED FY 19-20 BUDGET AND FY 20 – 24 CAPITAL  
IMPROVEMENT PROGRAM, ADOPTION OF FY 20 RATE RESOLUTION**

**DATE: MAY 28, 2019**

The FY 2019-2020 Budget totaling \$36,167,000 was introduced to the Board on March 26, 2019. The proposed Budget includes \$19,221,000 for Operating expenses and \$16,946,000 for Debt Service charges. The Budget includes resources required to manage our infrastructure, meet debt service obligations, and comply with regulatory mandates, all in a financially responsible manner. Costs to the City of Charlottesville are proposed to increase 3.4%, with a proposed increase of 9% to the Alb Co Serv Auth (ACSA).

The proposed FY 2020 - 2024 Capital Improvement Plan (CIP) was introduced to the Board on February 26, 2019, and an updated CIP was reviewed with the Board on March 26, 2019. The proposed five-year CIP totals \$92.7 M to support 42 construction, maintenance and planning projects.

Highlights of the proposed CIP and Budget include:

1. An increase of \$1,174,000 in Debt Service expenses to support our FY 2020-2024 CIP including:
  - a. Urban Drinking Water Management
    - Renovation and capacity increase at the Observatory Water Treatment Plant
    - Renovation 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
    - Constructing a second water pipe under the S. Rivanna River to serve the north Rt. 29 area
    - Acquiring easements for a pipeline to connect the South Rivanna and Ragged Mountain Reservoirs
  - 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, and replacement of the raw water pumping station.



2. An increase of \$1,716,000 in operating expenses to support existing water and wastewater programs including:
  - a. Granular Activated Carbon replacement to enhance drinking water quality
  - b. Biosolids Transportation and Disposal
  - c. Regulatory Permits and Studies
  - d. Instrumentation Maintenance and Replacements
  - e. Personnel – Workforce Development
    - i. Merit pool of 3%
    - ii. Health insurance premium increase (2 %)
    - iii. Two additional positions
      - Construction Inspector
      - Laboratory Chemist

A Preliminary Rate Schedule to establish wholesale water and wastewater rates for FY 2019 - 2020 was reviewed with the Board during the March meeting, and authorized for publication and a public hearing. A Public Notice of the Proposed Rates and Public Hearing was advertised twice in the local newspaper followed by a minimum 14-day period in advance of the scheduled public hearing, in accordance with the laws of the Commonwealth. The Public Notice was posted in the Daily Progress on May 7 and May 13, 2019.

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

**Board Action Requested:**

It is respectfully requested that the Board of Directors:

1. Hold a public hearing, and after considering comments, adopt wholesale water and wastewater rates and charges to the City and the ACSA for FY 2019 – 2020, to be effective on July 1, 2019.
2. Approve the FY 2019 - 2020 Budget.
3. Approve the FY 2020 – 2024 CIP.

Attachments

# Proposed Budget Fiscal Year 2019-2020

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PRESENTED BY:

BILL MAWYER, EXECUTIVE DIRECTOR

MAY 28, 2019



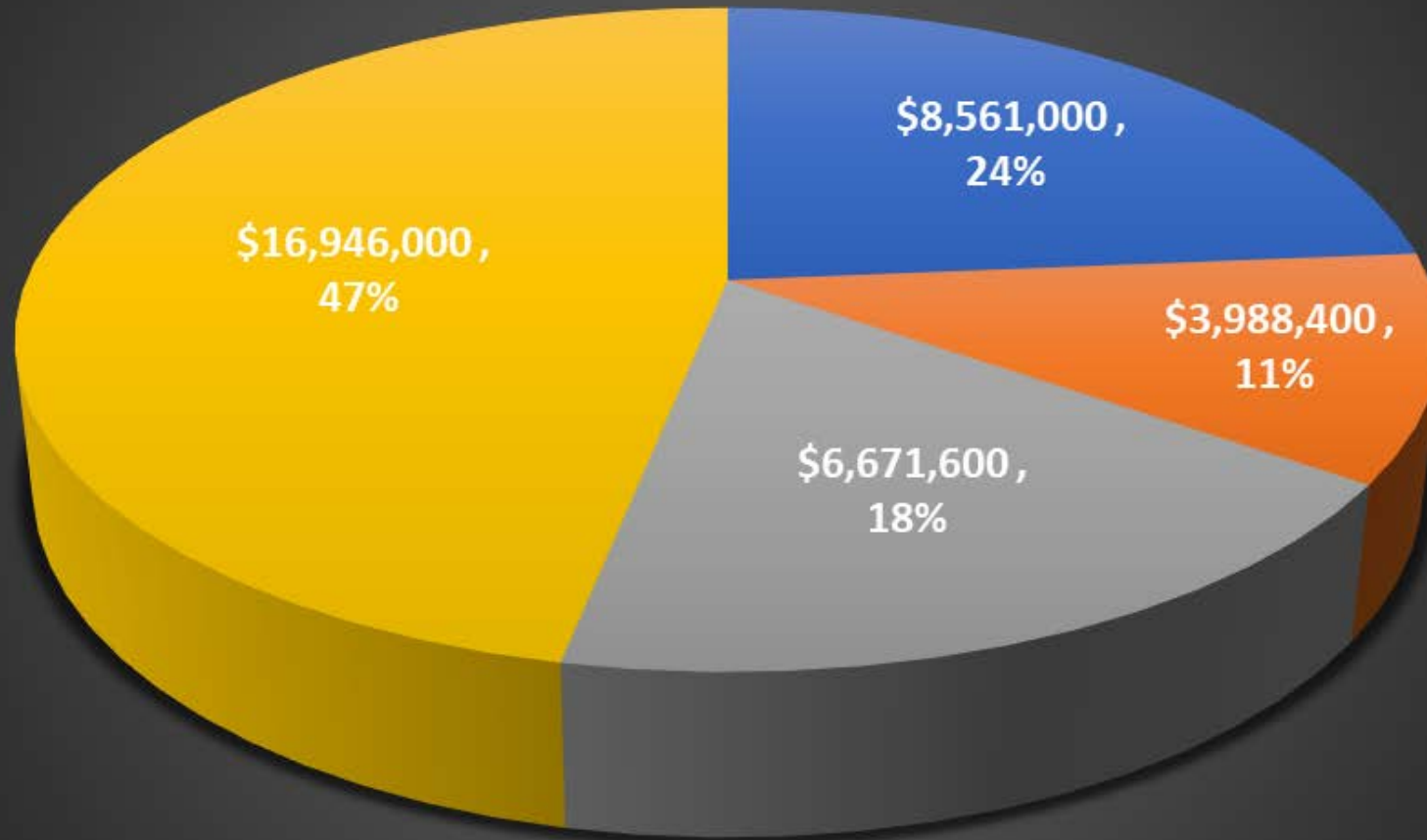
# Proposed FY 2019 – 2020 Budget Summary

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- \$36,167,000                      \$2.9 m increase, 8.7%
  - Operating                      \$1.7 m increase
  - Debt Service                      \$1.2 m increase
- City                      \$491,200 increase, 3.4%
- ACSA                      \$1,511,600 increase, 9.0%

Note: Using \$667,000k from Reserves for Operating Expenses

## FY 2019-20 Budgeted Expenses Total \$36,167,000



■ Personnel Costs   ■ General Services   ■ O & M   ■ Debt Service

# Operating Increase: \$1.7 m

---

## Urban Water

- Chemicals: \$1.1 m
  - GAC \$0.9 m

## Personnel

- Merit 3% \$164 k
- Additional Positions \$154 k
  - Construction Inspector
  - Laboratory Chemist
- Health Care Premiums \$29 k

## Urban Wastewater

- Biosolids Disposal \$128 k
- Rivanna SPS Utilities \$68 k

& Maintenance

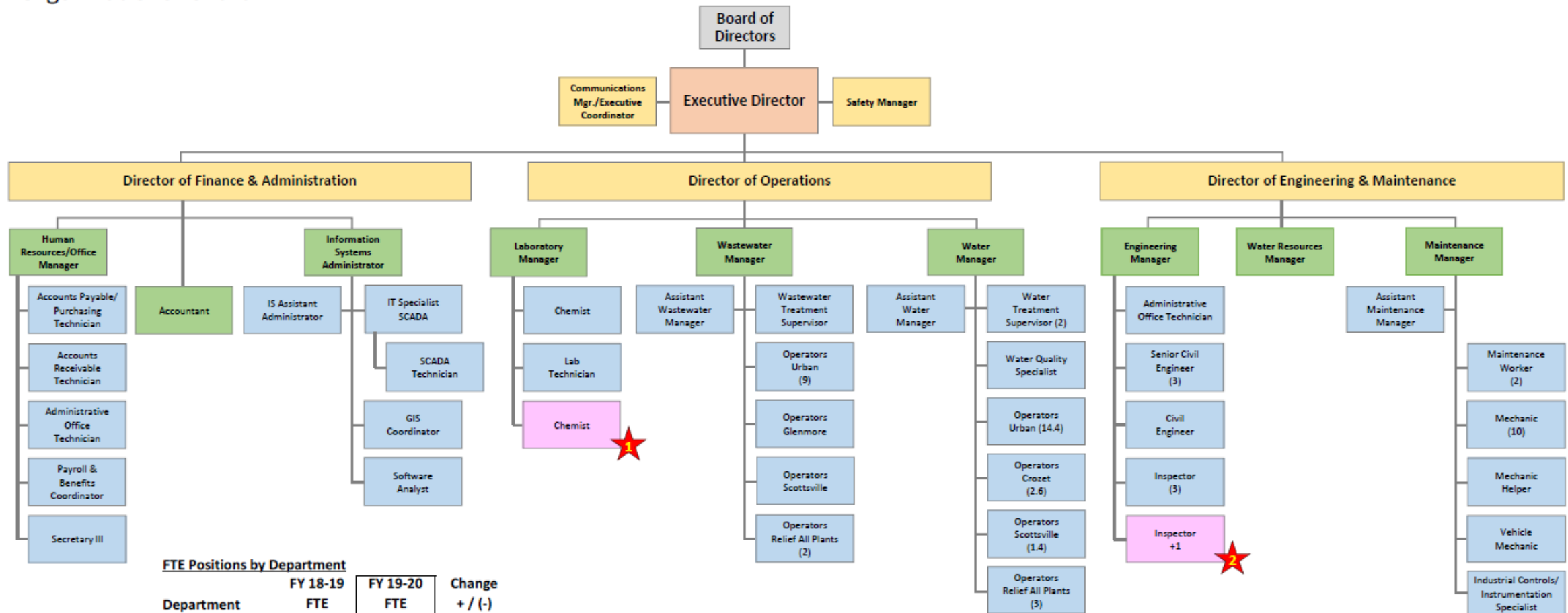
Instrumentation \$144 k

# Rivanna Water & Sewer Authority

## Organizational Chart

FY 2019-2020 Proposed Budget

Revision No. 1



### FTE Positions by Department

Department	FY 18-19 FTE	FY 19-20 FTE	Change + / (-)
Administration	11	11	No Change
IT/SCADA	6	6	No Change
Engineering	11	12	1
Maintenance	17	17	No Change
Operations	1	1	No Change
Laboratory	3	4	1
Wastewater	16	16	No Change
Water	26.4	26.4	No Change
<b>Total</b>	<b>91.4</b>	<b>93.4</b>	

### ★ FY 2019-2020 Proposed FTE Changes

1. Increase number of Chemists from 1 to 2 FTE.
2. Increase number of Inspectors from 3 to 4 FTE.



# Debt Service Increase: \$1.2 M

---

- Urban Water

- Birdwood WL
- Observatory WTP Upgrade
- South Rivanna WTP Renovation
- RMR – OWTP Pipe and Pump Station Replacements

- Crozet Water

- Water Treatment Plant Upgrade
- Beaver Creek Dam & Pump Station Modifications

- Urban Wastewater

- Crozet Flow Equalization Tank



# Proposed FY 20 – 24 CIP

---

- \$97.2 M
- 37 Projects to be completed
- 5 Projects to be extended into FY 25-29
  1. Avon to Pantops Water Main
  2. Beaver Creek Dam Modifications
  3. Beaver Creek Raw Water Pump Station
    - a. Deleted Beaver Creek Oxygenation System
  4. Interceptor SS Repairs
  5. Security Enhancements
- \$56.6 M Less than FY 19-23 CIP of \$153.9 M



# Questions?

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# Public Hearing

## Adoption of Rate Resolution

## Approval of FY 20 Budget and FY 20 – 24 CIP

### RESOLUTION

#### ADOPTION OF THE RIVANNA WATER AND SEWER AUTHORITY WATER AND WASTEWATER RATE SCHEDULE AND RELATED BUDGET FOR FISCAL YEAR 2020

**WHEREAS**, the Authority has advertised and held a public hearing on May 28, 2019, on the proposed Fiscal Year 2020 rates in accordance with Section 15.2-5136(G) of the Code of Virginia, as amended;

**THEREFORE, BE IT RESOLVED** that the Rivanna Water and Sewer Authority Board of Directors hereby adopt the accompanying rate schedule effective July 1, 2019, and approves the related Fiscal Year 2020 Budget as submitted as an attachment with this resolution.

Water Rates & Charges				Wastewater Rates & Charges			
Urban Area				Urban Area			
City & ACSA	Operating	\$2.095	Per 1,000 gallons	City & ACSA	Operating	\$2.369	Per 1,000 gallons
City	Debt Service	\$193,580	Per month	City	Debt Service	\$407,588	Per month
ACSA	Debt Service	\$321,303	Per month	ACSA	Debt Service	\$278,174	Per month
Crozet Water				Glenmore Wastewater			
ACSA	Operating & Debt Service	\$195,010	Per month	ACSA	Operating & Debt Service	\$31,192	Per Month
Scottsville Water				Scottsville Wastewater			
ACSA	Operating & Debt Service	\$54,130	Per month	ACSA	Operating & Debt Service	\$26,536	Per month

## R E S O L U T I O N

### ADOPTION OF THE RIVANNA WATER AND SEWER AUTHORITY WATER AND WASTEWATER RATE SCHEDULE AND RELATED BUDGET FOR FISCAL YEAR 2020

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ACSA	Operating & Debt Service	\$195,010	Per month	ACSA	Operating & Debt Service	\$31,192	Per Month
Scottsville Water				Scottsville Wastewater			
ACSA	Operating & Debt Service	\$54,130	Per month	ACSA	Operating & Debt Service	\$26,536	Per month

# Fiscal Year 2019-2020

## Budget Proposal



## Board of Directors

## May 28, 2019

# RIVANNA WATER & SEWER AUTHORITY

## FY 2020 Proposed Budget

Prepared: March 19, 2019

Adopted: DRAFT 8

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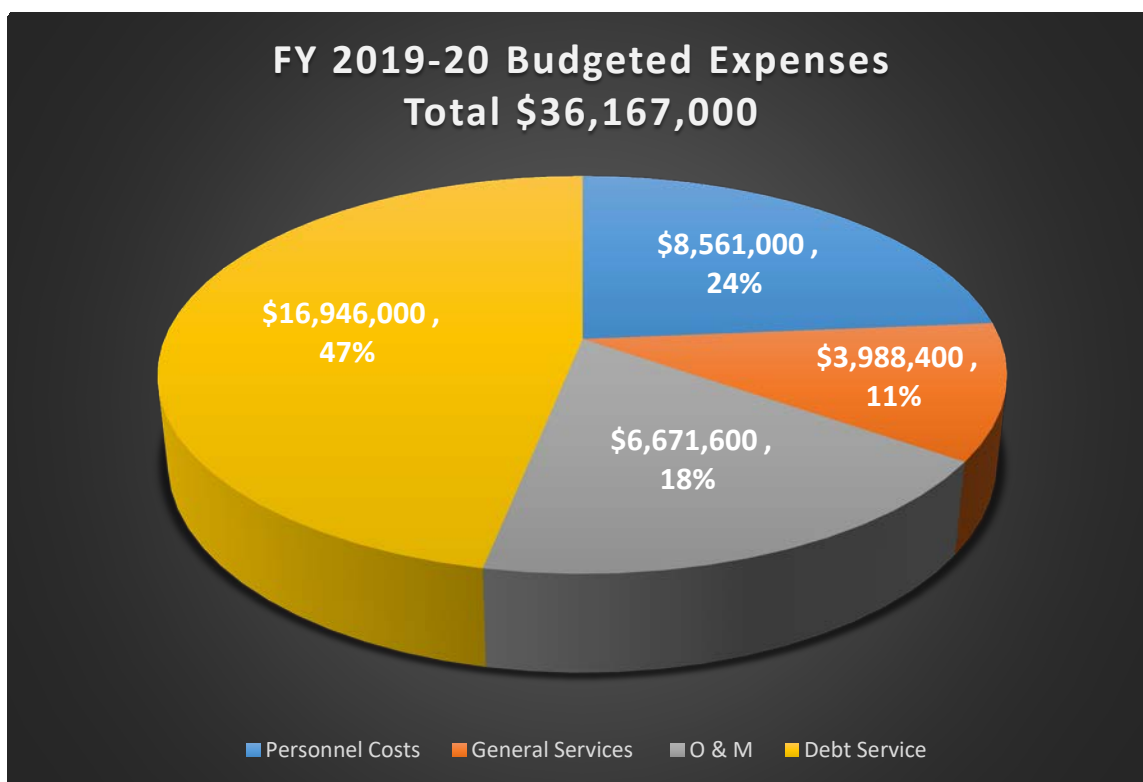
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**Rivanna Water and Sewer Authority**  
**Proposed**  
**FY 2019-2020 Budget**

**Budget Overview**

The Rivanna Water and Sewer Authority provides wholesale drinking water and wastewater treatment services for the City of Charlottesville and the Albemarle County Service Authority (ACSA). An FY 2019-2020 budget of \$36,167,000 is proposed to strategically provide these water and wastewater services in a financially responsible manner for our customers and the community. The FY 2019-2020 budget proposes an increase of \$1.72 million in Operating expenses and an increase of \$1.17 million in Debt Service charges for a total budget increase of \$2.89 million, or 8.68% above the FY 2018-2019 budget. Annual charges for the City are proposed to increase 3.4% (\$491,200), and 9% (\$1,511,600) for the ACSA.

The proposed budget includes \$19,221,000 for Operating expenses and \$16,946,000 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, and technology). 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 facilities.



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

- \$0.025 per 1000 gallons (1.2%) for water
- \$0.223 per 1000 gallons (10.39%) for wastewater

Debt Service charges for the City are proposed to:

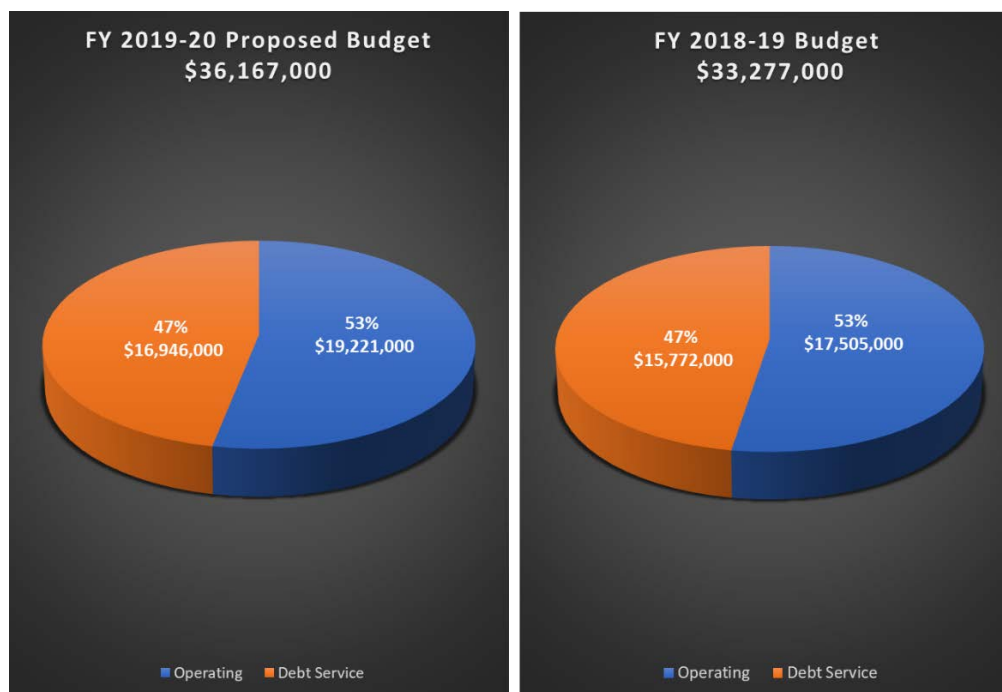
- Increase 6.95 % for water
- Decrease 0.16 % for wastewater

**Rivanna Water and Sewer Authority  
Proposed  
FY 2019-2020 Budget**

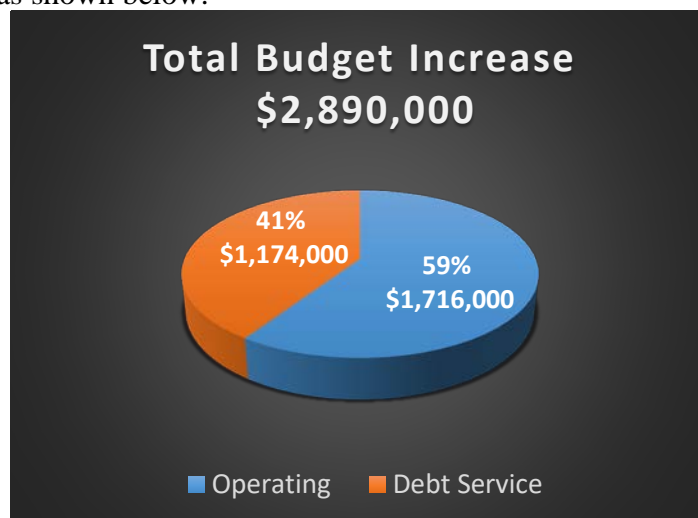
Debt Service charges for the ACSA are proposed to increase:

- 4.46 % for water
- 12.94 % for wastewater
- 14.73% as a composite Operating and Debt Service increase for water and wastewater services in the Non-Urban Rate Centers.

Overall, annual charges for the City are proposed to increase 3.4% (\$491,200), and 9 % (\$1,511,600) for the ACSA. A comparison of the FY 2019-2020 budget with the FY 2018-2019 budget is shown below:



The FY 2019-2020 budget proposes an increase of \$1.72 million in Operating expenses and an increase of \$1.17 million in Debt Service charges for a total budget increase of \$2.89 million, or 8.68% above the FY 2018-2019 budget, as shown below:





**Rivanna Water and Sewer Authority**  
**Proposed**  
**FY 2019-2020 Budget**

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

**1. Strategic Plan Implementation**

This budget supports the implementation of our six Strategic Goals. It continues our efforts to attract, retain and reward exceptional employees, while providing essential enhancements to our safety program. Operational optimization and dependable infrastructure are also fundamental aspects of this budget.

**2. Granular Activated Carbon (GAC) Filter Operations**

Our recently completed GAC systems have been doing a great job removing organic material from the water to prevent formation of undesirable disinfection byproducts at five of our drinking water treatment plants. We will continue to monitor the service life of the GAC material under differing raw water conditions and operating procedures to optimize the treatment process.

In addition, recent EPA investigations of emerging manmade contaminants called per- and polyfluoroalkyl substances (PFAS), indicate GAC filters remove these contaminants. We recently tested raw water from our reservoirs and did not find any PFAS. However, we will continue to consider PFAS reduction in our service life optimization assessment for the GAC media.

**3. Urban Drinking Water Management**

Water supply, reliability and resiliency will be improved by:

- Renovating and increasing drinking water treatment capacity at the Observatory plant
- Renovating our largest drinking water treatment plant at South Rivanna
- Acquiring easements for a pipeline to connect the South Rivanna and Ragged Mountain Reservoirs, and completing a one-mile long section of this pipeline on the Birdwood property
- Updating our Risk and Resilience Assessment, and our Emergency Response Plan, as required by the federal America's Water Infrastructure Act of 2018

**4. Non-Urban Drinking Water Management**

Water supply, reliability and resiliency will be improved by:

- Renovating and increasing drinking water treatment capacity at the Crozet plant
- Modifying the Beaver Creek Dam to comply with new regulatory requirements, and replacing the raw water pumping station
- Updating our Risk and Resilience Assessment, and our Emergency Response Plan, as required by the federal America's Water Infrastructure Act of 2018

**Rivanna Water and Sewer Authority**  
**Proposed**  
**FY 2019-2020 Budget**

**5. Urban Wastewater Management**

Our recently completed Odor Control systems have been doing an effective job reducing odors at the Moores Creek wastewater treatment facility, as well as in the wastewater piping and pumping stations serving the Crozet area. The new Rivanna Sewer Pumping Station and tunnel have helped to essentially eliminate sanitary sewer overflows from our system, despite the record amount of rainfall in 2018.

**6. Instrumentation Systems**

Use of complex instrumentation systems continues to grow as we leverage technology to achieve operational efficiencies. Additional support is programmed to calibrate and maintain new wholesale meters and their data transmission system, calibrate water treatment plant meters, and replace existing wastewater meters.

**7. Personnel**

a. Merit Pool

A 3% merit pool for our employees has been included in the budget to remain competitive in the utility workforce marketplace.

b. Health Insurance

Based on recommendations from our insurance consultant, a 2% increase in health insurance premiums has been included.

c. Additional Positions, in Priority Order:

1. Construction Inspector – Major construction projects are scheduled to begin in late 2019 to renovate the Observatory and South Rivanna Water Treatment Plants. An additional Inspector is needed to support those projects, as well as other projects in our CIP, and in a more cost-effective manner than through the use of inspection services provided by engineering consultants.
2. Laboratory Chemist – An additional chemist is needed in our laboratory to complete the increasing number of analyses required annually. Testing for total organic carbon levels in our new GAC filters (over 550 samples/month), as well as for urban water quality, and reservoir raw water sampling programs have significantly increased the workload for our laboratory staff. This additional position will support the increasing analytical loads that the Laboratory is experiencing as a result of increased regulatory and process operation requirements.

**Rivanna Water and Sewer Authority**  
**Proposed**  
**FY 2019-2020 Budget**

**Actual Water and Wastewater Flows**

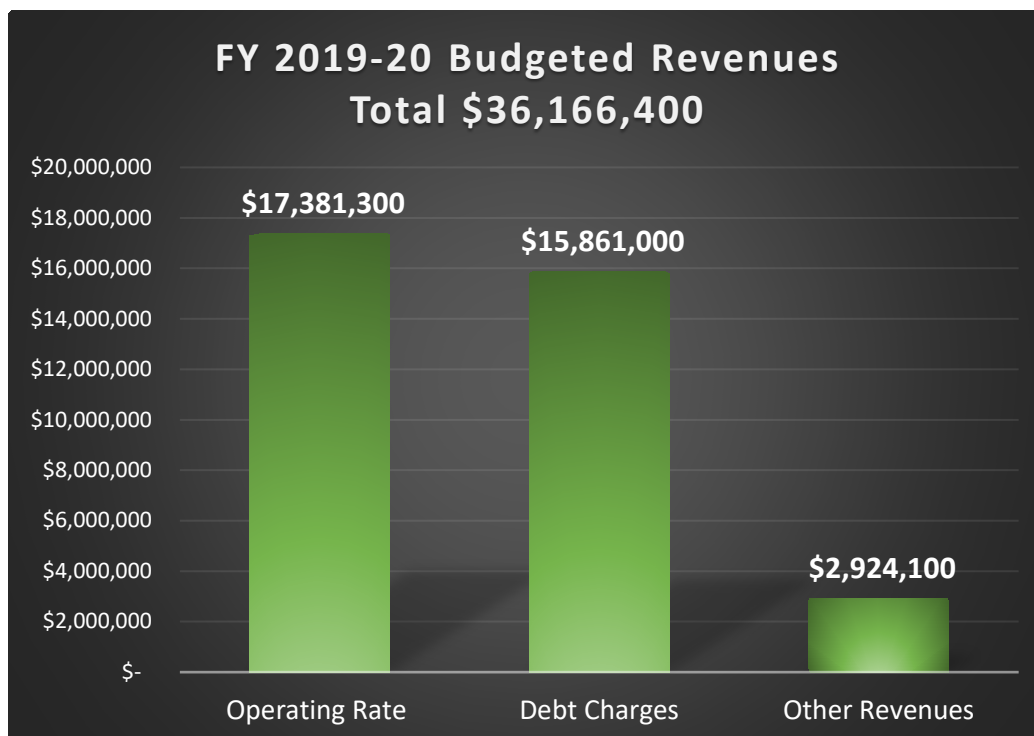
Actual water and wastewater retail flows reported by the City and ACSA are used to allocate the Urban Area operating rates and charges. Based on FY 2018 actual retail flow data, the allocation for Urban Wastewater flow shifted one percent (\$101,000 = \$73,000 Operations + \$28,000 Debt Service) between the two customers, while the allocation for Urban Water was unchanged.

Allocation of flows (based on retail flows):

	<b><u>FY 2020</u></b>	<b><u>FY 2019</u></b>
City Wastewater	50%	51%
ACSA Wastewater	50%	49%
City Water	51%	51%
ACSA Water	49%	49%

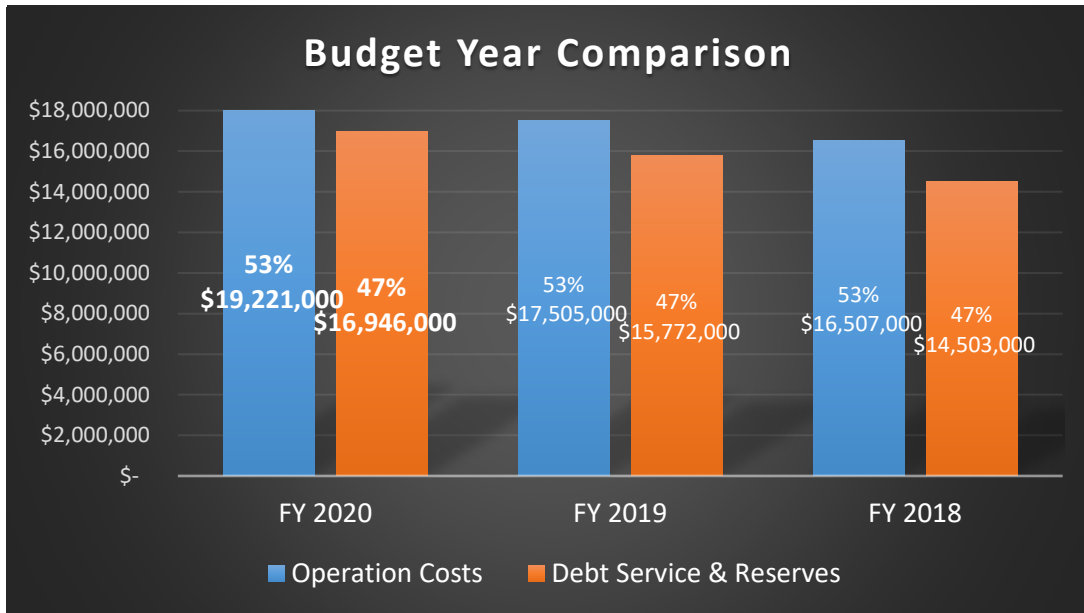
**Revenues & Expenses**

Revenues for FY 2020 are driven by Operating Rate revenues of \$17,381,300, Debt Service charges of \$15,861,000, and other non-customer revenues of \$2,924,100, as shown below:



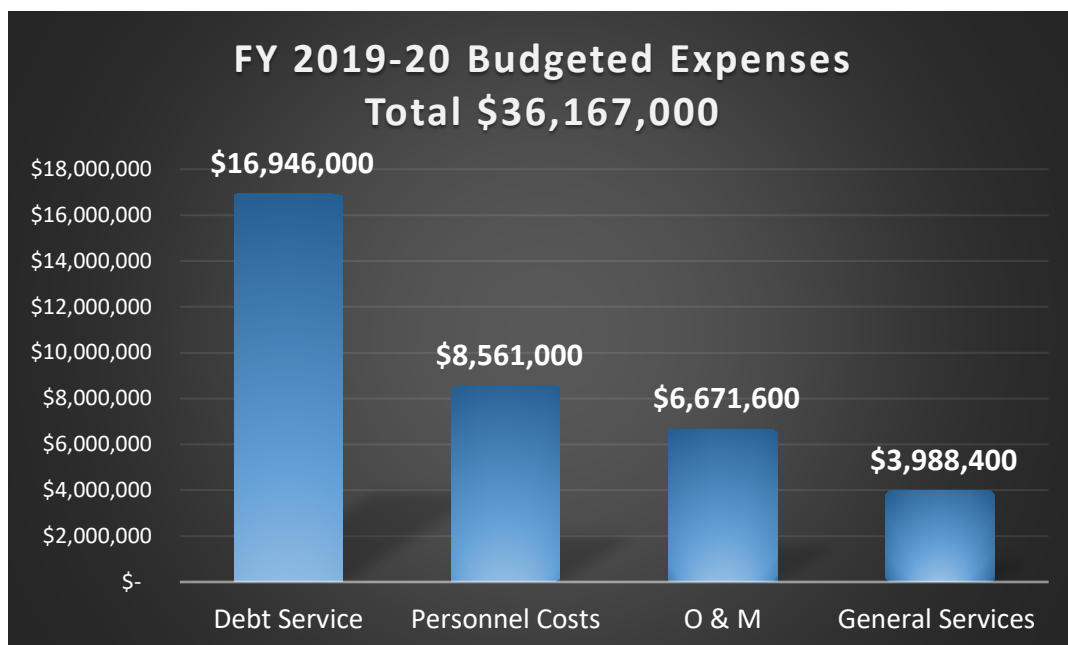
The Authority's overall ratio of Operating expenses and Debt Service costs are similar to the last several years, with Operating expenses representing roughly 53% of the total budget and Debt Service costs being 47% of the total, as shown below:

**Rivanna Water and Sewer Authority  
Proposed  
FY 2019-2020 Budget**



Expenses are largely driven by four major categories. Debt Service costs related to capital expenses are \$16,946,000. These expenses are estimated to increase \$1,174,000 over the current year to support recent and future major projects including the Birdwood Water Line, Water Treatment Plant Upgrades, Beaver Creek Dam and Pump Station Modifications, and Crozet Wastewater Equalization Tank.

Personnel and Benefit costs are the second largest expense with \$8,561,000 in estimated costs. Costs for Operations and Maintenance, which includes chemicals, building repairs, equipment maintenance, IT/SCADA, supplies and materials will total approximately \$6,671,600. General Service costs, which includes professional fees, utilities, insurance, permits, and data and voice communications, are anticipated to cost \$3,988,400, as shown below:



**Rivanna Water and Sewer Authority**  
**Proposed**  
**FY 2019-2020 Budget**

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.

	<u>Line Item</u>	<u>Notable Items</u>	<u>Budget Change over Prior year</u>
<b><u>Personnel cost in general</u></b>			
• Merit of 3.0%	11000	\$ 163,900	
• Personnel/Position changes:			
2 new positions (Lab Chemist, Engineering Tech/Inspector)	11000	110,000	
Benefit costs related to personnel changes	11XXX	44,340	
• Overtime & Holiday pay increase	11010	38,000	
• Health Care Benefit premium renewal 2% increase	12020	28,800	
• All other Personnel related changes		<u>(63,740)</u>	
<b>Total change in personnel and benefit costs</b>			<b>\$ 321,300</b>
<b><u>General overall changes</u></b>			
• Professional Services	21100		
Urban Water - Risk/Resiliency assessment		\$ 50,000	
Urban Water - Withdrawal permit		50,000	
Urban Water - Operating assistance		40,000	
Urban Water - Lickinghole Creek bathymetric		21,000	
Urban Water - Dam and tank inspections		22,200	
Urban Wastewater - Compost shed/digester eval. & repairs		40,000	
Urban Wastewater - Operational Assistance		35,000	
Urban Wastewater - WW Agreement 5 year metering event		100,000	
Administration - Engineer trustee report (every 3 years)		45,000	
Administration - professional service IT master plan implement		55,000	
All other changes - all rate centers & departments		<u>53,850</u>	
Total Request		512,050	
FY 2019 Budget		<u>(544,250)</u>	
		\$ (32,200)	\$ (32,200)
• General Other Services - Urban Wastewater	21420		
Biosolids cost increases			\$ 128,000
• Utilities - Urban Wastewater	21400		\$ 68,000
• Chemical Costs	41450		
Urban Water - GAC material replacement		\$ 795,000	
Urban Wastewater - General increases based on trends		168,050	
Non-Urban - GAC material replacement		113,280	
All other changes		<u>42,960</u>	
			\$ 1,119,290
• Instrumentation - all rate centers (contracts begin)	41600		\$ 143,980
(Wholesale metering, calibrations, WW flow meter replacements)			
• Safety Programs	21253		\$ 64,000
• All other changes			<u>\$ (97,370)</u>
<b>FY 2020 Total increases in estimated expenses</b>			<b>\$ 1,715,000</b>

**Rivanna Water and Sewer Authority**  
**Proposed**  
**FY 2019-2020 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 FY 20-24 CIP totals \$97.2 million, a decrease of \$56.6 million as compared to the FY 19-23 CIP. There were \$51 million in completed and removed projects, a \$13.8 million reduction in existing projects, and a \$8.2 million increase in new and expanded projects. A more detailed look at the new and adjusted costs can be found in the proposed FY 2020 – FY 2024 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>2019-2023 Adopted CIP</u>	<u>Projects Completed</u>	<u>New or Additional Project Costs</u>	<u>2020-2024 Proposed CIP</u>	<u>Change \$</u>	<u>Change %</u>
Urban Water Projects	\$88,382,485	\$(30,559,700)	\$3,679,155	\$61,501,940	\$(26,880,545)	-30%
Urban Wastewater Projects	30,924,151	(12,558,500)	(3,612,670)	14,752,981	(16,171,170)	-110%
Shared Projects	3,421,000	-	(825,000)	2,596,000	(825,000)	-32%
Non-Urban Projects	31,174,400	(7,933,400)	(4,888,000)	18,353,000	(12,821,400)	-70%
<b>Total Project Cost</b>						
<b>Estimates</b>	<b>\$153,902,036</b>	<b>\$(51,051,600)</b>	<b>\$(5,646,515)</b>	<b>\$97,203,921</b>	<b>\$(56,698,115)</b>	<b>-58%</b>

The Authority has programmed into the FY 2020 budget charges that fund the additional debt service anticipated by the proposed CIP. Cumulatively, the Authority has built 33% of future debt service costs into the rates for all rate centers for FY 2020. This is done by using the CIP as a guide for future debt needs to include an average charge increase over that five 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 31% of the needed future debt service revenues already built into the charges to cover the total needed for the next five years (\$2.14 million in annual debt service is estimated to be needed in the next 5 years, and \$742,300 will already be programmed into the charges). This would require the remaining \$1.6 million to be included in a debt service charge increase over the next four years to fund the Water projects within the CIP.

<b>Next Five Years</b>			
	<b>Annual Estimated NEW Debt Service related to 5- year CIP New Debt</b>	<b>New Debt Service Cost built into FY 2020 Rates</b>	<b>Percentage of Debt Service in proposed FY 2020 Rates</b>
Urban Water	\$2,391,700	\$742,300	31.0%
Urban Wastewater	\$386,300	\$230,300	59.6%
Rural Rate Centers	\$456,200	\$90,925	19.9%
	<b>\$3,234,200</b>	<b>\$1,063,525</b>	<b>32.9%</b>

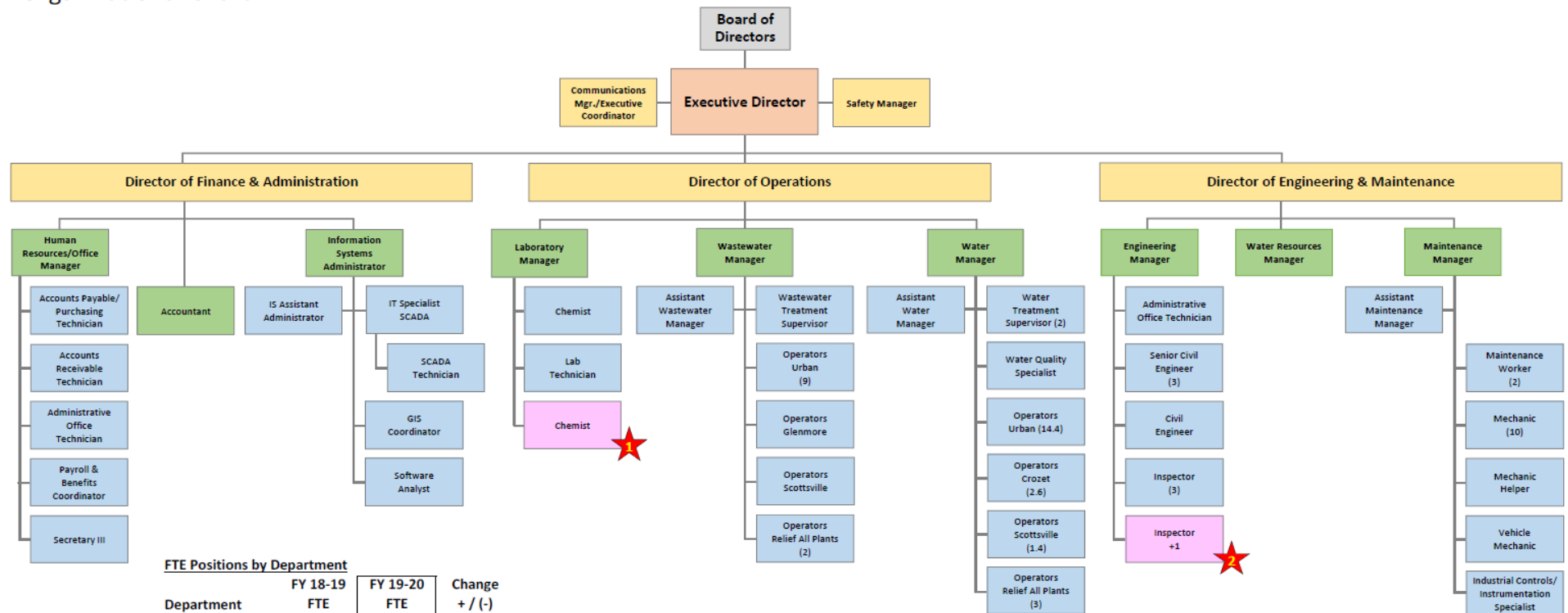
**Rivanna Water and Sewer Authority**  
**Proposed**  
**FY 2019-2020 Budget**

**Proposed FY 2019-2020 Organization Chart**

**Rivanna Water & Sewer Authority**  
Organizational Chart

**FY 2019-2020 Proposed Budget**

Revision No. 1



**FTE Positions by Department**

Department	FY 18-19 FTE	FY 19-20 FTE	Change + / (-)
Administration	11	11	No Change
IT/SCADA	6	6	No Change
Engineering	11	12	1
Maintenance	17	17	No Change
Operations	1	1	No Change
Laboratory	3	4	1
Wastewater	16	16	No Change
Water	26.4	26.4	No Change
<b>Total</b>	<b>91.4</b>	<b>93.4</b>	

- ★ **FY 2019-2020 Proposed FTE Changes**
1. Increase number of Chemists from 1 to 2 FTE.
  2. Increase number of Inspectors from 3 to 4 FTE.

One employee per position unless otherwise noted in parenthesis ( )

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# ***Budget Highlights***

***- Executive Summary Narrative  
Pages i - x***

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# ***Budget Details***

***Pages 1 - 64***

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## Departmental Summary of Revenues and Expenses

### Summary of Revenues

	FY 2019	FY 2020	\$ Change	% Change
<b>Operations Revenues</b>				
Urban Water	\$ 7,117,000	\$ 7,802,000	685,000	9.62%
Crozet Water	989,000	1,113,000	124,000	12.54%
Scottsville Water	444,000	537,000	93,000	20.95%
Urban Wastewater	7,818,000	8,610,000	792,000	10.13%
Glenmore Wastewater	373,000	371,000	(2,000)	-0.54%
Scottsville Wastewater	302,000	310,000	8,000	2.65%
Administration	462,000	468,000	6,000	1.30%
Maintenance	-	10,000	10,000	
Lab	-	-	-	
Engineering	-	-	-	
<b>Total</b>	<b>\$ 17,505,000</b>	<b>\$ 19,221,000</b>	<b>\$ 1,716,000</b>	<b>9.80%</b>
<b>Debt Service Revenues</b>				
Urban Water	\$ 6,185,000	\$ 6,747,000	562,000	9.09%
Crozet Water	1,004,000	1,338,000	334,000	33.27%
Scottsville Water	133,000	139,000	6,000	4.51%
Urban Wastewater	8,438,000	8,702,000	264,000	3.13%
Glenmore Wastewater	3,000	7,000	4,000	133.33%
Scottsville Wastewater	9,000	13,000	4,000	44.44%
<b>Total</b>	<b>\$ 15,772,000</b>	<b>\$ 16,946,000</b>	<b>\$ 1,174,000</b>	<b>7.44%</b>
<b>Total Revenues</b>	<b>\$ 33,277,000</b>	<b>\$ 36,167,000</b>	<b>\$ 2,890,000</b>	<b>8.68%</b>

### Summary of Expenses

	FY 2019	FY 2020	\$ Change	% Change
<b>Operations Expenses</b>				
Urban Water	\$ 4,927,000	\$ 5,498,000	571,000	11.59%
Crozet Water	782,000	895,000	113,000	14.45%
Scottsville Water	314,000	400,000	86,000	27.39%
Urban Wastewater	5,177,000	5,835,000	658,000	12.71%
Glenmore Wastewater	272,000	265,000	(7,000)	-2.57%
Scottsville Wastewater	209,000	211,000	2,000	0.96%
Administration	2,433,000	2,480,000	47,000	1.93%
Maintenance	1,518,000	1,611,000	93,000	6.13%
Lab	446,000	473,000	27,000	6.05%
Engineering	1,427,000	1,553,000	126,000	8.83%
<b>Total</b>	<b>\$ 17,505,000</b>	<b>\$ 19,221,000</b>	<b>\$ 1,716,000</b>	<b>9.80%</b>
<b>Debt Service Expenses</b>				
Urban Water	\$ 6,185,000	\$ 6,747,000	562,000	9.09%
Crozet Water	1,004,000	1,338,000	334,000	33.27%
Scottsville Water	133,000	139,000	6,000	4.51%
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Glenmore Wastewater	3,000	7,000	4,000	133.33%
Scottsville Wastewater	9,000	13,000	4,000	44.44%
<b>Total</b>	<b>\$ 15,772,000</b>	<b>\$ 16,946,000</b>	<b>\$ 1,174,000</b>	<b>7.44%</b>
<b>Total Expenses</b>	<b>\$ 33,277,000</b>	<b>\$ 36,167,000</b>	<b>\$ 2,890,000</b>	<b>8.68%</b>

<b>Total Budgetary Surplus/ (Deficit)</b>	<b>\$</b>	<b>-</b>	<b>\$</b>	<b>-</b>	<b>\$</b>	<b>-</b>
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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

<b>URBAN RATE CENTERS</b>		<b>FY 2019</b>	<b>FY 2020</b>	<b>\$ Change</b>	<b>% Change</b>
<u>Operating Rates</u> (\$ per 1,000 Gallons)					
Operations	<b>Water</b>	\$ 2.070	\$ 2.095	\$ 0.025	1.21%
Operations	<b>Wastewater</b>	2.146	2.369	0.223	10.39%
<u>Debt Service Charges</u> (\$ Monthly Charge)					
<u>Water</u>					
Debt Service	<b>CITY</b>	\$ 181,008	\$ 193,580	\$ 12,572	6.95%
Debt Service	<b>ACSA</b>	307,598	321,303	13,705	4.46%
<u>Wastewater</u>					
Debt Service	<b>CITY</b>	\$ 408,260	\$ 407,588	\$ (672)	-0.16%
Debt Service	<b>ACSA</b>	246,308	278,174	31,866	12.94%
<b>OTHER RATE CENTERS (Monthly)</b>		<b>FY 2019</b>	<b>FY 2020</b>	<b>\$ Change</b>	<b>% Change</b>
<u>Crozet Water</u>					
Operations		\$ 79,782	\$ 85,734	\$ 5,952	7.46%
Debt Service		82,964	109,276	26,312	31.71%
<u>Scottsville Water</u>					
Operations		\$ 36,944	\$ 43,401	\$ 6,457	17.48%
Debt Service		10,773	10,729	(44)	-0.41%
<b>Water Total</b>		<b>\$ 210,463</b>	<b>\$ 249,140</b>	<b>\$ 38,677</b>	<b>18.38%</b>
<u>Glenmore Wastewater</u>					
Operations		\$ 31,060	\$ 30,877	\$ (183)	-0.59%
Debt Service		132	315	183	138.64%
<u>Scottsville Wastewater</u>					
Operations		\$ 25,156	\$ 25,749	\$ 593	2.36%
Debt Service		667	787	120	17.99%
<b>Wastewater Total</b>		<b>\$ 57,015</b>	<b>\$ 57,728</b>	<b>\$ 713</b>	<b>1.25%</b>
<b>Total Monthly Other Rate Center Charges - ACSA</b>		<b>\$ 267,478</b>	<b>\$ 306,868</b>	<b>\$ 39,390</b>	<b>14.73%</b>

## Summary of Charges to Customers

Summary of Charges to Customers			FY 2019	FY 2020	Change \$	Change %
<b><u>City Charges From RWSA</u></b>						
Urban Water						
Operating Rate Charges	\$	3,587,700	\$	3,630,500	\$ 42,800	1.2%
Debt Service Charges		2,172,100		2,323,000	150,900	6.9%
	\$	5,759,800	\$	5,953,500	\$ 193,700	3.4%
Urban Wastewater						
Operating Rate Charges	\$	3,711,300	\$	4,016,800	\$ 305,500	8.2%
Debt Service Charges		4,899,100		4,891,100	(8,000)	-0.2%
	\$	8,610,400	\$	8,907,900	\$ 297,500	3.5%
<b>Total City Charges</b>	<b>\$</b>	<b>14,370,200</b>	<b>\$</b>	<b>14,861,400</b>	<b>\$ 491,200</b>	<b>3.4%</b>

<b><u>ACSA Charges From RWSA</u></b>						
Urban Water						
Operating Rate Charges	\$	3,447,000	\$	3,488,100	\$ 41,100	1.2%
Debt Service Charges		3,691,200		3,855,600	164,400	4.5%
	\$	7,138,200	\$	7,343,700	\$ 205,500	2.9%
Urban Wastewater						
Operating Rate Charges	\$	3,565,800	\$	4,016,800	\$ 451,000	12.6%
Debt Service Charges		2,955,700		3,338,100	382,400	12.9%
	\$	6,521,500	\$	7,354,900	\$ 833,400	12.8%
Other Rate Centers						
Operating Charges	\$	2,075,300	\$	2,229,100	\$ 153,800	7.4%
Debt Service Charges		1,134,400		1,453,300	318,900	28.1%
	\$	3,209,700	\$	3,682,400	\$ 472,700	14.7%
<b>Total ACSA Charges</b>	<b>\$</b>	<b>16,869,400</b>	<b>\$</b>	<b>18,381,000</b>	<b>\$ 1,511,600</b>	<b>9.0%</b>

<b><u>RWSA Customer Revenue Charges</u></b>						
Operating Rate Revenue						
Urban Water	\$	7,034,700	\$	7,118,600	\$ 83,900	1.2%
Urban Wastewater		7,277,100		8,033,600	756,500	10.4%
Other Rate Centers		2,075,300		2,229,100	153,800	7.4%
	\$	16,387,100	\$	17,381,300	\$ 994,200	6.1%
Debt Service Charge Revenues						
Urban Water	\$	5,863,300	\$	6,178,600	\$ 315,300	5.4%
Urban Wastewater		7,854,800		8,229,200	374,400	4.8%
Other Rate Centers		1,134,400		1,453,300	318,900	28.1%
	\$	14,852,500	\$	15,861,100	\$ 1,008,600	6.8%
<b>Total RWSA Customer Revenues</b>	<b>\$</b>	<b>31,239,600</b>	<b>\$</b>	<b>33,242,400</b>	<b>\$ 2,002,800</b>	<b>6.4%</b>

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# ***Water Rate Centers***

***Rivanna Water and Sewer Authority***

***Fiscal Year 2019-2020***

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## Urban Water Summary

FY 2019			FY 2020	Budget % Change
Budgeted FY 2019	Actual for 6 months	Projected 12 months	Proposed Budget	
Projected Flow (MGD)	9.309		9.309	0.00%

### Operations Budget

#### Projected Revenues

<b>Operations Rate</b>	\$ 2,070			\$ 2,095	1.21%
Revenue	\$ 7,034,788	\$ 3,552,985	\$ 7,105,970	\$ 7,118,541	1.19%
Lease Revenues	70,000	33,776	67,552	70,000	0.00%
Use of Reserves	-	-	-	600,000	
Miscellaneous	-	1,600	31,900	-	
Interest Allocation	12,000	8,985	17,970	13,200	10.00%
<b>Total Operations Revenues</b>	<b>\$ 7,116,788</b>	<b>\$ 3,597,346</b>	<b>\$ 7,223,392</b>	<b>\$ 7,801,741</b>	<b>9.62%</b>

#### Projected Expenses

Personnel Cost	\$ 1,903,778	\$ 885,359	\$ 1,759,223	\$ 1,861,134	-2.24%
Professional Services	329,250	256,808	513,616	207,200	-37.07%
Other Services and Charges	582,700	302,655	620,189	574,963	-1.33%
Communications	64,200	39,174	73,484	65,100	1.40%
Information Technology	65,300	18,961	52,922	77,000	17.92%
Supplies	5,000	3,413	6,826	6,100	22.00%
Operations and Maintenance	1,570,660	882,848	2,623,337	2,356,590	50.04%
Equipment Purchases	106,600	87,229	209,458	50,500	-52.63%
Depreciation & Reserves	300,000	150,000	300,000	300,000	0.00%
<b>Subtotal Before Allocations</b>	<b>\$ 4,927,488</b>	<b>\$ 2,626,447</b>	<b>\$ 6,159,055</b>	<b>\$ 5,498,587</b>	<b>11.59%</b>
Allocation of Support Departments	2,189,300	994,378	2,054,673	2,303,154	5.20%
<b>Total Operations Expenses</b>	<b>\$ 7,116,788</b>	<b>\$ 3,620,825</b>	<b>\$ 8,213,728</b>	<b>\$ 7,801,741</b>	<b>9.62%</b>

Operations Cost per 1,000 gallons	\$2.095		\$2.296	9.59%
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### Debt Service Budget

#### Projected Revenue

<b>Debt Service Rates</b>	CITY	<b>181,008</b>			<b>193,580</b>	6.95%			
	ACSA	<b>307,598</b>			<b>321,303</b>	4.46%			
Debt Service Rate Revenue - CITY	\$	2,172,094	\$	1,086,048	\$	2,172,096	\$	2,322,960	6.95%
Debt Service Rate Revenue - ACSA		3,691,177		1,845,588		3,691,176		3,855,638	4.46%
Trust Fund Interest		18,000		29,892		59,784		54,000	200.00%
Reserve Fund Interest		184,000		193,860		387,720		387,000	110.33%
Buck Mtn. Surcharge		118,600		65,600		131,200		125,900	6.16%
Lease Revenue		1,600		-		-		1,600	0.00%
<b>Total Debt Service Revenue</b>	<b>\$</b>	<b>6,185,471</b>	<b>\$</b>	<b>3,220,988</b>	<b>\$</b>	<b>6,441,976</b>	<b>\$</b>	<b>6,747,098</b>	<b>9.08%</b>

#### Principal, Interest & Reserves

Total Principal & Interest	\$ 4,190,796	2,095,398	\$ 4,190,796	\$ 5,223,498	24.64%
Reserve Additions - Interest	184,000	193,860	387,720	387,000	110.33%
Debt Service Ratio Charge	400,000	200,000	400,000	400,000	0.00%
Est. New Debt Service - CIP Growth	1,410,675	705,338	1,410,676	736,600	-47.78%
<b>Total Debt Principal and Interest</b>	<b>\$ 6,185,471</b>	<b>\$ 3,194,596</b>	<b>\$ 6,389,192</b>	<b>\$ 6,747,098</b>	<b>9.08%</b>

#### Rate Center Summary

<b>Total Revenues</b>	\$ 13,302,259	\$ 6,818,334	\$ 13,665,368	\$ 14,548,839	9.37%
<b>Total Expenses</b>	13,302,259	6,815,421	14,602,920	14,548,839	9.37%
<b>Surplus/(Deficit)</b>	<b>\$ -</b>	<b>\$ 2,913</b>	<b>\$ (937,552)</b>	<b>\$ -</b>	

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2019-2020 Proposed Budget**  
**Expense Detail**

**Rate Center: Urban Water**

Object Code	Line Item	Adopted Budget FY 2018-2019	Current Year Activity		Proposed Budget FY 2019-2020	2019	2019
			Six Month Actual 12/31/2018	Projected Year end 6/30/2019		vs. 2020 Variance \$	vs. 2020 Variance %
10000	<b>Salaries &amp; Benefits</b>						
11000	Salaries	\$ 1,200,800	\$ 554,878	\$ 1,109,756	\$ 1,155,180	\$ (45,620)	-3.80%
11010	Overtime & Holiday Pay	120,000	82,720	165,440	135,000	15,000	12.50%
12010	FICA	101,041	47,746	95,492	98,699	(2,342)	-2.32%
12020	Health Insurance	267,140	106,727	213,454	266,894	(246)	-0.09%
12026	Employee Assistance Program	300	190	380	300	-	0.00%
12030	Retirement	115,517	44,923	89,846	111,128	(4,389)	-3.80%
12040	Life Insurance	15,730	6,921	13,842	15,133	(597)	-3.80%
12050	Fitness Program	3,750	1,837	3,674	3,700	(50)	-1.33%
12060	Worker's Comp Insurance	29,000	17,243	22,991	24,600	(4,400)	-15.17%
	<b>Subtotal</b>	<b>\$ 1,853,278</b>	<b>\$ 863,185</b>	<b>\$ 1,714,875</b>	<b>\$ 1,810,634</b>	<b>\$ (42,644)</b>	<b>-2.30%</b>
13000	<b>Other Personnel Costs</b>						
13100	Employee Dues & Licenses	\$ 2,000	\$ 324	\$ 648	\$ 2,000	\$ -	0.00%
13150	Education & Training	21,700	7,698	15,396	21,700	-	0.00%
13200	Travel & Lodging	7,900	951	1,902	7,900	-	0.00%
13250	Uniforms	15,400	8,657	17,314	15,400	-	0.00%
13325	Recruiting & Medical Testing	2,000	628	1,256	2,000	-	0.00%
13350	Other	1,500	3,916	7,832	1,500	-	0.00%
	<b>Subtotal</b>	<b>\$ 50,500</b>	<b>\$ 22,174</b>	<b>\$ 44,348</b>	<b>\$ 50,500</b>	<b>\$ -</b>	<b>0.00%</b>
	<b>Professional Services</b>						
20100	Legal Fees	\$ 5,000	\$ 23,738	\$ 47,476	\$ 20,000	\$ 15,000	300.00%
20200	Financial & Admin. Services	-	-	-	-	-	-
20250	Bond Issue Costs	-	-	-	-	-	-
20300	Engineering & Technical Services	324,250	233,070	466,140	187,200	(137,050)	-42.27%
	<b>Subtotal</b>	<b>\$ 329,250</b>	<b>\$ 256,808</b>	<b>\$ 513,616</b>	<b>\$ 207,200</b>	<b>\$ (122,050)</b>	<b>-37.07%</b>
	<b>Other Services and Charges</b>						
21100	General Liability/Property Ins.	\$ 40,400	\$ 33,699	\$ 33,699	\$ 40,400	\$ -	0.00%
21150	Advertising & Communication	-	3,200	6,400	-	-	-
21250	Watershed Management	100,000	28,687	100,000	87,000	(13,000)	-13.00%
21252	EMS Programs/Supplies	500	161	322	500	-	0.00%
21253	Safety Programs/Supplies	15,800	8,870	17,740	43,313	27,513	174.13%
21300	Authority Dues/Permits/Fees	6,000	24	6,000	6,000	-	0.00%
21350	Laboratory Analysis	55,000	29,040	58,080	57,750	2,750	5.00%
21400	Utilities	325,000	158,870	317,740	260,000	(65,000)	-20.00%
21420	General Other Services	25,000	40,104	80,208	80,000	55,000	220.00%
21430	Governance & Strategic Support	15,000	-	-	-	(15,000)	-
21450	Bad Debt	-	-	-	-	-	-
	<b>Subtotal</b>	<b>\$ 582,700</b>	<b>\$ 302,655</b>	<b>\$ 620,189</b>	<b>\$ 574,963</b>	<b>\$ (7,737)</b>	<b>-1.33%</b>
22000	<b>Communication</b>						
22100	Radio	\$ 4,700	\$ 4,864	\$ 4,864	\$ 4,700	\$ -	0.00%
22150	Telephone & Data Service	50,000	29,260	58,520	50,000	-	0.00%
22200	Cell Phones & Pagers	9,500	5,050	10,100	10,400	900	9.47%
	<b>Subtotal</b>	<b>\$ 64,200</b>	<b>\$ 39,174</b>	<b>\$ 73,484</b>	<b>\$ 65,100</b>	<b>\$ 900</b>	<b>1.40%</b>
31000	<b>Information Technology</b>						
31100	Computer Hardware	\$ 7,800	\$ 2,351	\$ 4,702	\$ 12,000	\$ 4,200	53.85%
31150	SCADA Maint. & Support	55,000	16,610	48,220	62,000	7,000	12.73%
31200	Maintenance & Support Services	-	-	-	500	500	-
31250	Software Purchases	2,500	-	-	2,500	-	0.00%
	<b>Subtotal</b>	<b>\$ 65,300</b>	<b>\$ 18,961</b>	<b>\$ 52,922</b>	<b>\$ 77,000</b>	<b>\$ 11,700</b>	<b>17.92%</b>
33000	<b>Supplies</b>						
33100	Office Supplies	\$ 3,000	\$ 1,948	\$ 3,896	\$ 3,500	\$ 500	16.67%
33150	Subscriptions/Reference Material	500	-	-	100	(400)	-80.00%
33350	Postage & Delivery	1,500	1,465	2,930	2,500	1,000	66.67%
	<b>Subtotal</b>	<b>\$ 5,000</b>	<b>\$ 3,413</b>	<b>\$ 6,826</b>	<b>\$ 6,100</b>	<b>\$ 1,100</b>	<b>22.00%</b>
41000	<b>Operation &amp; Maintenance</b>						
41100	Building & Grounds	\$ 116,800	\$ 56,499	\$ 112,998	\$ 116,800	\$ -	0.00%
41150	Building & Land Lease	32,500	32,313	32,313	32,500	-	0.00%
41200	Pump Station Maintenance	5,000	1,135	2,270	5,000	-	0.00%
41300	Dam Maintenance	93,000	48,376	96,752	140,490	47,490	51.06%
41350	Pipeline/Appurtenances	146,560	234,912	594,824	104,000	(42,560)	-29.04%
41400	Materials & Supplies	50,000	24,729	49,458	50,000	-	0.00%
41450	Chemicals	725,000	345,958	1,408,916	1,520,600	795,600	109.74%
41500	Vehicle Maintenance	5,000	10,445	20,890	5,000	-	0.00%
41550	Equipment Maint. & Repair	200,000	88,045	176,090	200,000	-	0.00%
41600	Instrumentation & Metering	91,800	16,023	80,000	147,200	55,400	60.35%
41650	Fuel & Lubricants	15,000	6,437	12,874	15,000	-	0.00%

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2019-2020 Proposed Budget**  
**Expense Detail**

**Rate Center: Urban Water**

Object Code	Line Item	Adopted Budget FY 2018-2019	Current Year Activity		Proposed Budget FY 2019-2020	2019	2019
			Six Month Actual 12/31/2018	Projected Year end 6/30/2019		vs. 2020 Variance \$	vs. 2020 Variance %
41700	General Other Maintenance	90,000	17,976	35,952	20,000	(70,000)	-77.78%
	<i>Subtotal</i>	\$ 1,570,660	\$ 882,848	\$ 2,623,337	\$ 2,356,590	\$ 785,930	50.04%
81000	<b>Equipment Purchases</b>						
81100	Small Equipment & Tools	\$ 19,000	\$ 33,619	\$ 67,238	\$ 19,000	\$ -	0.00%
81200	Rental & Leases	2,500	1,465	37,930	2,500	-	0.00%
81250	Equipment (over \$5000)	70,000	44,595	89,190	10,000	(60,000)	-85.71%
81300	Vehicle Replacement Fund	15,100	7,550	15,100	19,000	3,900	25.83%
	<i>Subtotal</i>	\$ 106,600	\$ 87,229	\$ 209,458	\$ 50,500	\$ (56,100)	-52.63%
95000	<b>Allocations from Departments</b>						
95100	Administrative Allocation	\$ 867,157	\$ 375,504	\$ 834,082	\$ 885,060	\$ 17,903	2.06%
95300	Engineering Allocation	670,478	323,072	639,690	729,759	59,281	8.84%
95150	Maintenance Allocation	455,257	209,404	412,318	480,235	24,978	5.49%
95200	Laboratory Allocation	196,408	86,398	168,583	208,100	11,692	5.95%
	<i>Subtotal</i>	\$ 2,189,300	\$ 994,378	\$ 2,054,673	\$ 2,303,154	\$ 113,854	5.20%
	Depreciation	300,000	150,000	300,000	300,000	-	0.00%
	<i>Subtotal</i>	\$ 300,000	\$ 150,000	\$ 300,000	\$ 300,000	\$ -	0.00%
	<b>Total</b>	<b>\$ 7,116,788</b>	<b>\$ 3,620,825</b>	<b>\$ 8,213,728</b>	<b>\$ 7,801,741</b>	<b>\$ 684,953</b>	<b>9.62%</b>

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## Crozet Water Summary

Projected Flow (MGD)

FY 2019			FY 2020	Budget % Change
Budgeted FY 2019	Actual for 6 months	Projected 12 months	Proposed Budget	
0.521			0.545	4.61%

### Operations Budget

#### Projected Revenues

##### Operations Rate (monthly)

Revenue	\$ 79,782			\$ 85,734	7.46%
Leases	\$ 957,384	\$ 478,692	\$ 957,384	\$ 1,028,808	7.46%
Use of Reserves	30,000	13,861	27,722	30,000	0.00%
Interest Allocation	-	-	-	52,000	
	1,700	1,272	2,544	1,800	5.88%
<b>Total Operations Revenues</b>	<b>\$ 989,084</b>	<b>\$ 493,825</b>	<b>\$ 987,650</b>	<b>\$ 1,112,608</b>	<b>12.49%</b>

#### Projected Expenses

Personnel Cost	\$ 288,389	\$ 133,622	\$ 265,553	\$ 300,589	4.23%
Professional Services	30,000	1,925	23,850	12,850	-57.17%
Other Services and Charges	126,960	53,473	119,875	137,816	8.55%
Communications	4,450	2,910	5,820	4,950	11.24%
Information Technology	14,200	240	12,000	2,600	-81.69%
Supplies	620	879	1,758	1,395	125.00%
Operations and Maintenance	261,150	201,012	400,174	398,400	52.56%
Equipment Purchases	26,450	3,870	7,740	6,500	-75.43%
Depreciation	30,000	15,000	30,000	30,000	0.00%
<b>Subtotal Before Allocations</b>	<b>\$ 782,219</b>	<b>\$ 412,931</b>	<b>\$ 866,770</b>	<b>\$ 895,100</b>	<b>14.43%</b>
Allocations of Support Departments	206,862	93,916	193,698	217,512	5.15%
<b>Total Operations Expenses</b>	<b>\$ 989,081</b>	<b>\$ 506,847</b>	<b>\$ 1,060,468</b>	<b>\$ 1,112,612</b>	<b>12.49%</b>

Operations Cost per 1,000 gallons \$5.018 \$5.593 11.46%

### Debt Service Budget

#### Projected Revenue

##### Debt Service Rates (monthly)

Debt Service Rate Revenue - ACSA	\$ 82,964			\$ 109,276	31.71%
Trust Fund Interest	\$ 995,568	\$ 497,784	\$ 995,568	\$ 1,311,312	31.71%
Reserve Fund Interest	1,800	3,050	6,100	5,500	205.56%
	6,700	7,189	14,378	21,500	220.90%
<b>Total Debt Service Revenue</b>	<b>\$ 1,004,068</b>	<b>\$ 508,023</b>	<b>\$ 1,016,046</b>	<b>\$ 1,338,312</b>	<b>33.29%</b>

#### Principal, Interest & Reserves

Total Principal & Interest - Existing	\$ 426,071	\$ 213,036	\$ 426,072	\$ 1,230,815	188.88%
Estimated New Principal & Interest	571,300	285,650	571,300	86,000	-84.95%
Reserve Additions - Interest	6,700	7,189	14,378	21,500	220.90%
<b>Total Debt Principal and Interest</b>	<b>\$ 1,004,071</b>	<b>\$ 505,875</b>	<b>\$ 1,011,750</b>	<b>\$ 1,338,315</b>	<b>33.29%</b>

#### Rate Center Summary

Total Revenues	\$ 1,993,152	\$ 1,001,848	\$ 2,003,696	\$ 2,450,920	22.97%
Total Expenses	1,993,152	1,012,722	2,072,218	2,450,927	22.97%
<b>Surplus/(Deficit)</b>	<b>\$ -</b>	<b>\$ (10,874)</b>	<b>\$ (68,522)</b>	<b>\$ (7)</b>	
<b>Rates - (Monthly)</b>					
ACSA	\$ 162,746			\$ 195,010	19.82%

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2019-2020 Proposed Budget**  
**Expense Detail**

**Rate Center: Crozet Water**

Object Code	Line Item	Current Year Activity			Proposed Budget FY 2019-2020	2019 vs. 2020 Variance \$	2019 vs. 2020 Variance %
		Adopted Budget FY 2018-2019	Six Month Actual 12/31/2018	Projected Year end 6/30/2019			
10000	<b>Salaries &amp; Benefits</b>						
11000	Salaries	\$ 181,100	\$ 83,705	\$ 167,410	\$ 184,970	\$ 3,870	2.14%
11010	Overtime & Holiday Pay	20,000	12,781	25,562	25,000	5,000	25.00%
12010	FICA	15,384	7,227	14,454	16,063	679	4.41%
12020	Health Insurance	40,891	16,132	32,264	43,369	2,478	6.06%
12026	Employee Assistance Program	50	29	58	50	-	0.00%
12030	Retirement	17,422	6,782	13,564	17,794	372	2.14%
12040	Life Insurance	2,372	1,044	2,088	2,423	51	2.15%
12050	Fitness Program	600	275	550	600	-	0.00%
12060	Worker's Comp Insurance	4,250	2,536	3,381	4,000	(250)	-5.88%
	<b>Subtotal</b>	<b>\$ 282,069</b>	<b>\$ 130,511</b>	<b>\$ 259,331</b>	<b>\$ 294,269</b>	<b>\$ 12,200</b>	<b>4.33%</b>
13000	<b>Other Personnel Costs</b>						
13100	Employee Dues & Licenses	\$ 250	\$ 50	\$ 100	\$ 250	\$ -	0.00%
13150	Education & Training	2,900	913	1,826	2,900	-	0.00%
13200	Travel & Lodging	670	120	240	670	-	0.00%
13250	Uniforms	2,000	1,334	2,668	2,000	-	0.00%
13325	Recruiting & Medical Testing	350	97	194	350	-	0.00%
13350	Other	150	597	1,194	150	-	0.00%
	<b>Subtotal</b>	<b>\$ 6,320</b>	<b>\$ 3,111</b>	<b>\$ 6,222</b>	<b>\$ 6,320</b>	<b>\$ -</b>	<b>0.00%</b>
	<b>Professional Services</b>						
20100	Legal Fees	\$ -	\$ -	\$ -	\$ -	\$ -	
20200	Financial & Admin. Services	-	-	-	-	-	
20250	Bond Issue Costs	-	-	-	-	-	
20300	Engineering & Technical Services	30,000	1,925	23,850	12,850	(17,150)	-57.17%
	<b>Subtotal</b>	<b>\$ 30,000</b>	<b>\$ 1,925</b>	<b>\$ 23,850</b>	<b>\$ 12,850</b>	<b>\$ (17,150)</b>	
	<b>Other Services and Charges</b>						
21100	General Liability/Property Ins.	\$ 2,960	\$ 2,469	\$ 2,469	\$ 3,000	\$ 40	1.35%
21150	Advertising & Communication	-	1,600	3,200	-	-	
21250	Watershed Management	25,000	-	15,000	25,000	-	0.00%
21252	EMS Programs/Supplies	-	-	-	-	-	
21253	Safety Programs/Supplies	1,500	366	732	3,616	2,116	141.07%
21300	Authority Dues/Permits/Fees	1,000	301	1,000	1,000	-	0.00%
21350	Laboratory Analysis	30,000	15,748	31,496	38,000	8,000	26.67%
21400	Utilities	61,000	32,955	65,910	67,000	6,000	9.84%
21420	General Other Services	500	34	68	200	(300)	-60.00%
21430	Governance & Strategic Support	5,000	-	-	-	(5,000)	
21450	Bad Debt	-	-	-	-	-	
	<b>Subtotal</b>	<b>\$ 126,960</b>	<b>\$ 53,473</b>	<b>\$ 119,875</b>	<b>\$ 137,816</b>	<b>\$ 10,856</b>	<b>8.55%</b>
22000	<b>Communication</b>						
22100	Radio	\$ 450	\$ 639	\$ 1,278	\$ 450	\$ -	0.00%
22150	Telephone & Data Service	3,000	1,599	3,198	3,300	300	10.00%
22200	Cell Phones & Pagers	1,000	672	1,344	1,200	200	20.00%
	<b>Subtotal</b>	<b>\$ 4,450</b>	<b>\$ 2,910</b>	<b>\$ 5,820</b>	<b>\$ 4,950</b>	<b>\$ 500</b>	<b>11.24%</b>
31000	<b>Information Technology</b>						
31100	Computer Hardware	\$ 1,000	\$ -	\$ -	\$ 1,250	\$ 250	25.00%
31150	SCADA Maint. & Support	12,400	240	12,000	1,000	(11,400)	-91.94%
31200	Maintenance & Support Services	-	-	-	-	-	
31250	Software Purchases	800	-	-	350	(450)	-56.25%
	<b>Subtotal</b>	<b>\$ 14,200</b>	<b>\$ 240</b>	<b>\$ 12,000</b>	<b>\$ 2,600</b>	<b>\$ (11,600)</b>	<b>-81.69%</b>
33000	<b>Supplies</b>						
33100	Office Supplies	\$ 100	\$ -	\$ -	\$ 25	\$ (75)	-75.00%
33150	Subscriptions/Reference Material	20	-	-	20	-	0.00%
33350	Postage & Delivery	500	879	1,758	1,350	850	170.00%
	<b>Subtotal</b>	<b>\$ 620</b>	<b>\$ 879</b>	<b>\$ 1,758</b>	<b>\$ 1,395</b>	<b>\$ 775</b>	<b>125.00%</b>
41000	<b>Operation &amp; Maintenance</b>						
41100	Building & Grounds	\$ 35,000	\$ 11,087	\$ 22,174	\$ 40,000	\$ 5,000	14.29%
41150	Building & Land Lease	-	-	-	-	-	
41200	Pump Station Maintenance	-	-	-	-	-	
41300	Dam Maintenance	5,000	2,500	5,000	5,000	-	
41350	Pipeline/Appurtenances	5,000	707	1,414	5,000	-	0.00%



**Rivanna Water and Sewer Authority**  
**Fiscal Year 2019-2020 Proposed Budget**  
**Expense Detail**

**Rate Center: Crozet Water**

Object Code	Line Item	Adopted Budget FY 2018-2019	Current Year Activity		Proposed Budget FY 2019-2020	2019	2019
			Six Month Actual 12/31/2018	Projected Year end 6/30/2019		vs. 2020 Variance \$	vs. 2020 Variance %
41400	Materials & Supplies	5,000	886	1,772	5,000	-	0.00%
41450	Chemicals	134,000	132,723	265,446	256,900	122,900	91.72%
41500	Vehicle Maintenance	1,000	1,365	2,730	1,000	-	0.00%
41550	Equipment Maint. & Repair	40,000	13,175	36,350	40,000	-	0.00%
41600	Instrumentation & Metering	8,150	-	8,150	8,500	350	4.29%
41650	Fuel & Lubricants	7,000	5,694	11,388	7,000	-	0.00%
41700	General Other Maintenance	21,000	32,875	45,750	30,000	9,000	42.86%
<b>Subtotal</b>		<b>\$ 261,150</b>	<b>\$ 201,012</b>	<b>\$ 400,174</b>	<b>\$ 398,400</b>	<b>\$ 137,250</b>	<b>52.56%</b>
81000	<b>Equipment Purchases</b>						
81100	Small Equipment & Tools	\$ 4,000	\$ 58	\$ 116	\$ 4,000	\$ -	0.00%
81200	Rental & Leases	-	2,587	5,174	-	-	
81250	Equipment (over \$5000)	20,000	-	-	-	(20,000)	-100.00%
81300	Vehicle Replacement Fund	2,450	1,225	2,450	2,500	50	2.04%
<b>Subtotal</b>		<b>\$ 26,450</b>	<b>\$ 3,870</b>	<b>\$ 7,740</b>	<b>\$ 6,500</b>	<b>\$ (19,950)</b>	<b>-75.43%</b>
95000	<b>Allocations from Departments</b>						
95100	Administrative Allocation	\$ 78,832	\$ 34,137	\$ 75,826	\$ 80,460	\$ 1,628	2.07%
95300	Engineering Allocation	57,062	27,495	54,442	62,107	5,045	8.84%
95150	Maintenance Allocation	53,113	24,430	48,104	56,027	2,914	5.49%
95200	Laboratory Allocation	17,855	7,854	15,326	18,918	1,063	5.95%
<b>Subtotal</b>		<b>\$ 206,862</b>	<b>\$ 93,916</b>	<b>\$ 193,698</b>	<b>\$ 217,512</b>	<b>\$ 10,650</b>	<b>5.15%</b>
Depreciation		30,000	15,000	30,000	\$ 30,000	-	0.00%
<b>Subtotal</b>		<b>\$ 30,000</b>	<b>\$ 15,000</b>	<b>\$ 30,000</b>	<b>\$ 30,000</b>	<b>\$ -</b>	<b>0.00%</b>
<b>Total</b>		<b>\$ 989,081</b>	<b>\$ 506,847</b>	<b>\$ 1,060,468</b>	<b>\$ 1,112,612</b>	<b>\$ 123,531</b>	<b>12.49%</b>

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## Scottsville Water Summary

Projected Flow (MGD)

FY 2019			FY 2020	Budget % Change
Budgeted FY 2019	Actual for 6 months	Projected 12 months	Proposed Budget	
0.051			0.05	-1.96%

### Operations Budget

#### Projected Revenues

##### Operations Rate (monthly)

Revenue	\$ 36,944			\$ 43,401	17.48%
Red Hill Community Water System Revenue	\$ 443,328	\$ 221,664	\$ 443,328	\$ 520,812	17.48%
Use of reserves	-	16,303	25,000	-	
Interest Allocation	-	-	-	15,000	
	750	570	1,140	800	6.67%
<b>Total Operations Revenues</b>	<b>\$ 444,078</b>	<b>\$ 238,537</b>	<b>\$ 469,468</b>	<b>\$ 536,612</b>	<b>20.84%</b>

#### Projected Expenses

Personnel Cost	\$ 153,885	\$ 70,510	\$ 140,087	\$ 197,349	28.24%
Professional Services	20,000	16,456	32,912	20,000	0.00%
Other Services and Charges	28,680	14,384	28,534	33,318	16.17%
Communications	3,210	1,875	3,750	3,430	6.85%
Information Technology	7,000	6,348	7,340	800	-88.57%
Supplies	750	-	360	410	-45.33%
Operations and Maintenance	66,570	41,013	83,626	121,340	82.27%
Equipment Purchases	14,000	51,279	52,558	3,200	-77.14%
Depreciation	20,000	10,000	20,000	20,000	0.00%
<b>Subtotal Before Allocations</b>	<b>\$ 314,095</b>	<b>\$ 211,865</b>	<b>\$ 369,167</b>	<b>\$ 399,847</b>	<b>27.30%</b>
Allocations of Support Departments	129,988	59,173	120,901	136,770	5.22%
<b>Total Operations Expenses</b>	<b>\$ 444,083</b>	<b>\$ 271,038</b>	<b>\$ 490,068</b>	<b>\$ 536,617</b>	<b>20.84%</b>

Operations Cost per 1,000 gallons \$23.856 \$29.404 23.26%

### Debt Service Budget

#### Projected Revenue

##### Debt Service Rates - Monthly

Debt Service Rate Revenue - ACSA	\$ 10,773			\$ 10,729	-0.41%
Trust Fund Interest	\$ 129,280	\$ 64,638	\$ 129,276	\$ 128,749	-0.41%
Reserve Fund Interest	400	871	1,742	1,700	325.00%
	3,300	3,600	7,200	8,400	154.55%
<b>Total Debt Service Revenue</b>	<b>\$ 132,980</b>	<b>\$ 69,109</b>	<b>\$ 138,218</b>	<b>\$ 138,849</b>	<b>4.41%</b>

#### Principal, Interest & Reserves

Total Principal & Interest	\$ 129,680	\$ 64,840	\$ 129,680	\$ 129,524	-0.12%
Estimated New Principal & Interest	-	-	-	925	
Reserve Additions-Interest	3,300	3,600	7,200	8,400	154.55%
<b>Total Debt Principal and Interest</b>	<b>\$ 132,980</b>	<b>\$ 68,440</b>	<b>\$ 136,880</b>	<b>\$ 138,849</b>	<b>4.41%</b>

#### Rate Center Summary

Total Revenues	\$ 577,058	\$ 307,646	\$ 607,686	\$ 675,461	17.05%
Total Expenses	577,063	339,478	626,948	675,466	17.05%
<b>Surplus/ (Deficit)</b>	<b>\$ (5)</b>	<b>\$ (31,832)</b>	<b>\$ (19,262)</b>	<b>\$ (5)</b>	
<b>Rates - Monthly</b>					
ACSA	\$ 47,717			\$ 54,130	13.44%

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2019-2020 Proposed Budget**  
**Expense Detail**

**Rate Center: Scottsville Water**

Object Code	Line Item	Adopted Budget FY 2018-2019	Current Year Activity		Proposed Budget FY 2019-2020	2019	2019
			Six Month Actual 12/31/2018	Projected Year end 6/30/2019		vs. 2020 Variance \$	vs. 2020 Variance %
10000	<b>Salaries &amp; Benefits</b>						
11000	Salaries	\$ 95,900	\$ 44,126	\$ 88,252	\$ 124,221	\$ 28,321	29.53%
11010	Overtime & Holiday Pay	11,000	6,748	13,496	13,000	2,000	18.18%
12010	FICA	8,178	3,811	7,622	10,497	2,319	28.36%
12020	Health Insurance	21,670	8,506	17,012	29,249	7,579	34.97%
12026	Employee Assistance Program	25	15	30	25	-	0.00%
12030	Retirement	9,226	3,575	7,150	11,950	2,724	29.53%
12040	Life Insurance	1,256	550	1,100	1,627	371	29.54%
12050	Fitness Program	300	145	290	300	-	0.00%
12060	Worker's Comp Insurance	2,350	1,399	1,865	2,600	250	10.64%
	<b>Subtotal</b>	<b>\$ 149,905</b>	<b>\$ 68,875</b>	<b>\$ 136,817</b>	<b>\$ 193,469</b>	<b>\$ 43,564</b>	<b>29.06%</b>
13000	<b>Other Personnel Costs</b>						
13100	Employee Dues & Licenses	\$ 180	\$ 26	\$ 52	\$ 180	\$ -	0.00%
13150	Education & Training	1,950	477	954	1,950	-	0.00%
13200	Travel & Lodging	500	62	124	400	(100)	-20.00%
13250	Uniforms	1,200	704	1,408	1,200	-	0.00%
13325	Recruiting & Medical Testing	100	51	102	100	-	0.00%
13350	Other	50	315	630	50	-	0.00%
	<b>Subtotal</b>	<b>\$ 3,980</b>	<b>\$ 1,635</b>	<b>\$ 3,270</b>	<b>\$ 3,880</b>	<b>\$ (100)</b>	<b>-2.51%</b>
	<b>Professional Services</b>						
20100	Legal Fees	\$ -	\$ -	\$ -	\$ -	\$ -	
20200	Financial & Admin. Services	-	-	-	-	-	
20250	Bond Issue Costs	-	-	-	-	-	
20300	Engineering & Technical Services	20,000	16,456	32,912	20,000	-	0.00%
	<b>Subtotal</b>	<b>\$ 20,000</b>	<b>\$ 16,456</b>	<b>\$ 32,912</b>	<b>\$ 20,000</b>	<b>\$ -</b>	
	<b>Other Services and Charges</b>						
21100	General Liability/Property Ins.	\$ 760	\$ 634	\$ 634	\$ 760	\$ -	0.00%
21150	Advertising & Communication	-	28	56	-	-	
21250	Watershed Management	-	-	-	-	-	
21252	EMS Programs/Supplies	-	-	-	-	-	
21253	Safety Programs/Supplies	1,990	475	950	1,858	(132)	-6.63%
21300	Authority Dues/Permits/Fees	1,000	300	1,000	1,000	-	0.00%
21350	Laboratory Analysis	8,730	6,237	12,474	18,500	9,770	111.91%
21400	Utilities	11,000	6,637	13,274	11,000	-	0.00%
21420	General Other Services	200	73	146	200	-	0.00%
21430	Governance & Strategic Support	5,000	-	-	-	(5,000)	
21450	Bad Debt	-	-	-	-	-	
	<b>Subtotal</b>	<b>\$ 28,680</b>	<b>\$ 14,384</b>	<b>\$ 28,534</b>	<b>\$ 33,318</b>	<b>\$ 4,638</b>	<b>16.17%</b>
22000	<b>Communication</b>						
22100	Radio	\$ 430	\$ 438	\$ 876	\$ 430	\$ -	0.00%
22150	Telephone & Data Service	2,000	996	1,992	2,000	-	0.00%
22200	Cell Phones & Pagers	780	441	882	1,000	220	28.21%
	<b>Subtotal</b>	<b>\$ 3,210</b>	<b>\$ 1,875</b>	<b>\$ 3,750</b>	<b>\$ 3,430</b>	<b>\$ 220</b>	<b>6.85%</b>
31000	<b>Information Technology</b>						
31100	Computer Hardware	\$ 600	\$ 170	\$ 340	\$ 150	\$ (450)	-75.00%
31150	SCADA Maint. & Support	6,200	6,178	7,000	500	(5,700)	-91.94%
31200	Maintenance & Support Services	-	-	-	-	-	
31250	Software Purchases	200	-	-	150	(50)	0.00%
	<b>Subtotal</b>	<b>\$ 7,000</b>	<b>\$ 6,348</b>	<b>\$ 7,340</b>	<b>\$ 800</b>	<b>\$ (6,200)</b>	<b>-88.57%</b>
33000	<b>Supplies</b>						
33100	Office Supplies	\$ 300	\$ -	\$ 50	\$ 50	\$ (250)	-83.33%
33150	Subscriptions/Reference Material	100	-	10	10	(90)	-90.00%
33350	Postage & Delivery	350	-	300	350	-	0.00%
	<b>Subtotal</b>	<b>\$ 750</b>	<b>\$ -</b>	<b>\$ 360</b>	<b>\$ 410</b>	<b>\$ (340)</b>	<b>-45.33%</b>
41000	<b>Operation &amp; Maintenance</b>						
41100	Building & Grounds	\$ 12,000	\$ 1,766	\$ 3,532	\$ 13,000	\$ 1,000	8.33%
41150	Building & Land Lease	-	-	-	-	-	
41200	Pump Station Maintenance	-	-	-	-	-	
41300	Dam Maintenance	1,500	-	1,500	1,500	-	0.00%
41350	Pipeline/Appurtenances	100	-	100	100	-	0.00%
41400	Materials & Supplies	3,000	3,386	6,772	3,000	-	0.00%

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2019-2020 Proposed Budget**  
**Expense Detail**

**Rate Center: Scottsville Water**

Object Code	Line Item	Adopted Budget FY 2018-2019	Current Year Activity		Proposed Budget FY 2019-2020	2019	2019
			Six Month Actual 12/31/2018	Projected Year end 6/30/2019		vs. 2020 Variance \$	vs. 2020 Variance %
41450	Chemicals	13,700	8,266	16,532	46,440	32,740	238.98%
41500	Vehicle Maintenance	700	717	1,434	700	-	0.00%
41550	Equipment Maint. & Repair	15,000	10,126	20,252	23,000	8,000	53.33%
41600	Instrumentation & Metering	7,170	10,749	21,498	20,200	13,030	181.73%
41650	Fuel & Lubricants	1,400	434	868	1,400	-	0.00%
41700	General Other Maintenance	12,000	5,569	11,138	12,000	-	0.00%
<b>Subtotal</b>		<b>\$ 66,570</b>	<b>\$ 41,013</b>	<b>\$ 83,626</b>	<b>\$ 121,340</b>	<b>\$ 54,770</b>	<b>82.27%</b>
81000	<b>Equipment Purchases</b>						
81100	Small Equipment & Tools	\$ 200	\$ 629	\$ 1,258	\$ 200	\$ -	0.00%
81200	Rental & Leases	500	-	-	500	-	0.00%
81250	Equipment (over \$5000)	12,000	50,000	50,000	-	(12,000)	-100.00%
81300	Vehicle Replacement Fund	1,300	650	1,300	2,500	1,200	92.31%
<b>Subtotal</b>		<b>\$ 14,000</b>	<b>\$ 51,279</b>	<b>\$ 52,558</b>	<b>\$ 3,200</b>	<b>\$ (10,800)</b>	<b>-77.14%</b>
95000	<b>Allocations from Departments</b>						
95100	Administrative Allocation	\$ 39,416	\$ 17,068	\$ 37,913	\$ 40,230	\$ 814	2.07%
95300	Engineering Allocation	28,531	13,748	27,221	31,054	2,523	8.84%
95150	Maintenance Allocation	53,113	24,430	48,104	56,027	2,914	5.49%
95200	Laboratory Allocation	8,928	3,927	7,663	9,459	531	5.95%
<b>Subtotal</b>		<b>\$ 129,988</b>	<b>\$ 59,173</b>	<b>\$ 120,901</b>	<b>\$ 136,770</b>	<b>\$ 6,782</b>	<b>5.22%</b>
Depreciation		20,000	10,000	20,000	\$ 20,000	-	0.00%
<b>Subtotal</b>		<b>\$ 20,000</b>	<b>\$ 10,000</b>	<b>\$ 20,000</b>	<b>\$ 20,000</b>	<b>\$ -</b>	<b>0.00%</b>
<b>Total</b>		<b>\$ 444,083</b>	<b>\$ 271,038</b>	<b>\$ 490,068</b>	<b>\$ 536,617</b>	<b>\$ 92,534</b>	<b>20.84%</b>

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# ***Wastewater Rate Centers***

***Rivanna Water and Sewer Authority***

***Fiscal Year 2019-2020***

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## Urban Wastewater Summary

Projected Flow (MGD)

FY 2019			FY 2020	Budget % Change
Budgeted FY 2019	Actual for 6 months	Projected 12 months	Proposed Budget	
9.289			9.289	0.00%

### Operations Budget

#### Projected Revenues

<b>Operations Rate</b>	\$	<b>2.146</b>			\$	<b>2.369</b>	10.39%
Revenue	\$	7,277,082	\$ 5,151,977	\$ 10,303,954	\$	8,033,620	10.40%
Stone Robinson WWTP		28,084	11,088	22,176		22,478	-19.96%
Septage Acceptance		410,000	226,228	452,456		450,000	9.76%
Nutrient Credits		90,000	104,060	104,060		90,000	0.00%
Miscellaneous Revenue		-	891	1,782		-	
Interest Allocation		12,500	9,482	18,964		14,400	15.20%
<b>Total Operations Revenues</b>	<b>\$</b>	<b>7,817,666</b>	<b>\$ 5,503,726</b>	<b>\$ 10,903,392</b>	<b>\$</b>	<b>8,610,498</b>	<b>10.14%</b>

#### Projected Expenses

Personnel Cost	\$	1,282,792	\$ 604,367	\$ 1,204,449	\$	1,281,463	-0.10%
Professional Services		54,000	36,719	73,438		175,000	224.07%
Other Services and Charges		1,816,225	1,216,629	2,369,737		2,030,825	11.82%
Communications		10,430	7,371	10,798		10,430	0.00%
Information Technology		57,250	1,068	48,062		62,500	9.17%
Supplies		2,700	687	1,374		2,700	0.00%
Operations and Maintenance		1,408,900	818,618	1,937,236		1,724,650	22.41%
Equipment Purchases		74,500	30,184	60,368		77,500	4.03%
Depreciation & Reserves		470,000	235,000	470,000		470,000	0.00%
<b>Subtotal before allocations</b>	<b>\$</b>	<b>5,176,797</b>	<b>\$ 2,950,643</b>	<b>\$ 6,175,462</b>	<b>\$</b>	<b>5,835,068</b>	<b>12.72%</b>
Allocations of Support Departments		2,640,869	1,198,757	2,465,375		2,775,430	5.10%
<b>Total Operations Expenses</b>	<b>\$</b>	<b>7,817,666</b>	<b>\$ 4,149,400</b>	<b>\$ 8,640,837</b>	<b>\$</b>	<b>8,610,498</b>	<b>10.14%</b>

Operations Cost per 1,000 gallons \$2.107 \$2.540 20.55%

### Debt Service Budget

#### Projected Revenue

<b>Debt Service Rate</b>	CITY	<b>408,260</b>				<b>407,588</b>	<b>-0.16%</b>
	ACSA	<b>246,308</b>				<b>278,174</b>	<b>12.94%</b>
Debt Service Rate Revenue - CITY	\$	4,899,122	\$ 2,449,560	\$ 4,899,120	\$	4,891,055	-0.16%
Debt Service Rate Revenue - ACSA		2,955,698	1,477,848	2,955,696		3,338,088	12.94%
Use of Reserves for 2016 Bond DS		300,000	150,000	300,000		-	-100.00%
County MOU - Septage		109,440	109,441	109,441		109,440	0.00%
Trust Fund Interest		26,200	53,247	106,494		96,900	269.85%
Reserve Fund Interest		148,000	155,544	311,088		266,900	80.34%
<b>Total Debt Service Revenue</b>	<b>\$</b>	<b>8,438,460</b>	<b>\$ 4,395,640</b>	<b>\$ 8,681,839</b>	<b>\$</b>	<b>8,702,383</b>	<b>3.13%</b>

#### Principal, Interest & Reserves

Total Principal & Interest	\$	7,539,261	\$ 3,769,631	\$ 7,539,262	\$	7,880,079	4.52%
Reserve Additions - Interest		148,000	155,544	311,088		266,900	80.34%
Debt Service Ratio Charge		325,000	162,500	325,000		325,000	0.00%
Est. New Debt Service - CIP Growth		426,200	213,100	426,200		230,400	-45.94%
<b>Total Debt Principal and Interest</b>	<b>\$</b>	<b>8,438,461</b>	<b>\$ 4,300,775</b>	<b>\$ 8,601,550</b>	<b>\$</b>	<b>8,702,379</b>	<b>3.13%</b>

#### Rate Center Summary

<b>Total Revenues</b>	\$	16,256,126	\$ 9,899,366	\$ 19,585,231	\$	17,312,881	6.50%
<b>Total Expenses</b>		16,256,127	8,450,175	17,242,387		17,312,877	6.50%
<b>Surplus/(Deficit)</b>	<b>\$</b>	<b>(1)</b>	<b>\$ 1,449,191</b>	<b>\$ 2,342,844</b>	<b>\$</b>	<b>4</b>	

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2019-2020 Proposed Budget**  
**Expense Detail**

**Rate Center: Urban Wastewater**

Object Code	Line Item	Adopted Budget FY 2018-2019	Current Year Activity		Proposed Budget FY 2019-2020	2019 vs. 2020 Variance \$	2019 vs. 2020 Variance %
			Six Month Actual 12/31/2018	Projected Year end 6/30/2019			
10000	<b>Salaries &amp; Benefits</b>						
11000	Salaries	\$ 837,300	\$ 391,393	\$ 782,786	\$ 821,784	\$ (15,516)	-1.85%
11010	Overtime & Holiday Pay	65,000	32,137	64,274	80,000	15,000	23.08%
12010	FICA	69,026	31,222	62,444	68,986	(40)	-0.06%
12020	Health Insurance	180,849	93,657	187,314	180,472	(377)	-0.21%
12026	Employee Assistance Program	200	129	258	200	-	0.00%
12030	Retirement	80,548	30,687	61,374	79,056	(1,492)	-1.85%
12040	Life Insurance	10,969	4,812	9,624	10,765	(204)	-1.86%
12050	Fitness Program	700	564	1,128	700	-	0.00%
12060	Worker's Comp Insurance	10,800	6,428	8,571	11,200	400	3.70%
	<b>Subtotal</b>	<b>\$ 1,255,392</b>	<b>\$ 591,029</b>	<b>\$ 1,177,773</b>	<b>\$ 1,253,163</b>	<b>\$ (2,229)</b>	<b>-0.18%</b>
13000	<b>Other Personnel Costs</b>						
13100	Employee Dues & Licenses	\$ 2,800	\$ 650	\$ 1,300	\$ 2,800	\$ -	0.00%
13150	Education & Training	10,900	5,407	10,814	10,900	-	0.00%
13200	Travel & Lodging	5,300	1,231	2,462	5,300	-	0.00%
13250	Uniforms	6,900	4,891	9,782	7,800	900	13.04%
13325	Recruiting & Medical Testing	1,000	513	1,026	1,000	-	0.00%
13350	Other	500	646	1,292	500	-	0.00%
	<b>Subtotal</b>	<b>\$ 27,400</b>	<b>\$ 13,338</b>	<b>\$ 26,676</b>	<b>\$ 28,300</b>	<b>\$ 900</b>	<b>3.28%</b>
20100	<b>Professional Services</b>						
20100	Legal Fees	\$ 4,000	\$ -	\$ -	\$ -	\$ (4,000)	-100.00%
20200	Financial & Admin. Services	-	-	-	-	-	-
20250	Bond Issue Costs	-	-	-	-	-	-
20300	Engineering & Technical Services	50,000	36,719	73,438	175,000	125,000	250.00%
	<b>Subtotal</b>	<b>\$ 54,000</b>	<b>\$ 36,719</b>	<b>\$ 73,438</b>	<b>\$ 175,000</b>	<b>\$ 121,000</b>	
21100	<b>Other Services and Charges</b>						
21100	General Liability/Property Ins.	\$ 74,800	\$ 62,393	\$ 62,393	\$ 74,800	\$ -	0.00%
21150	Advertising & Communication	225	-	-	225	-	-
21250	Watershed Management	-	-	-	-	-	-
21252	EMS Programs/Supplies	-	651	1,302	-	-	-
21253	Safety Programs/Supplies	8,100	12,763	25,526	38,700	30,600	377.78%
21300	Authority Dues/Permits/Fees	35,200	20,487	35,200	35,200	-	0.00%
21350	Laboratory Analysis	6,500	927	6,500	6,500	-	0.00%
21400	Utilities	870,000	593,756	1,187,512	938,000	68,000	7.82%
21420	General Other Services	804,400	525,652	1,051,304	932,400	128,000	15.91%
21430	Governance & Strategic Support	17,000	-	-	5,000	(12,000)	-70.59%
21450	Bad Debt	-	-	-	-	-	-
	<b>Subtotal</b>	<b>\$ 1,816,225</b>	<b>\$ 1,216,629</b>	<b>\$ 2,369,737</b>	<b>\$ 2,030,825</b>	<b>\$ 214,600</b>	<b>11.82%</b>
22000	<b>Communication</b>						
22100	Radio	\$ 3,830	\$ 3,947	\$ 3,950	\$ 3,830	\$ -	0.00%
22150	Telephone & Data Service	1,800	979	1,958	1,800	-	0.00%
22200	Cell Phones & Pagers	4,800	2,445	4,890	4,800	-	0.00%
	<b>Subtotal</b>	<b>\$ 10,430</b>	<b>\$ 7,371</b>	<b>\$ 10,798</b>	<b>\$ 10,430</b>	<b>\$ -</b>	<b>0.00%</b>
31000	<b>Information Technology</b>						
31100	Computer Hardware	\$ 6,500	\$ 287	\$ 6,500	\$ 9,000	\$ 2,500	38.46%
31150	SCADA Maint. & Support	50,000	781	41,562	50,500	500	1.00%
31200	Maintenance & Support Services	-	-	-	-	-	-
31250	Software Purchases	750	-	-	3,000	2,250	300.00%
	<b>Subtotal</b>	<b>\$ 57,250</b>	<b>\$ 1,068</b>	<b>\$ 48,062</b>	<b>\$ 62,500</b>	<b>\$ 5,250</b>	<b>9.17%</b>
33000	<b>Supplies</b>						
33100	Office Supplies	\$ 2,500	\$ 95	\$ 190	\$ 2,500	\$ -	0.00%
33150	Subscriptions/Reference Material	-	-	-	-	-	-
33350	Postage & Delivery	200	592	1,184	200	-	0.00%
	<b>Subtotal</b>	<b>\$ 2,700</b>	<b>\$ 687</b>	<b>\$ 1,374</b>	<b>\$ 2,700</b>	<b>\$ -</b>	<b>0.00%</b>
41000	<b>Operation &amp; Maintenance</b>						
41100	Building & Grounds	\$ 70,000	\$ 32,670	\$ 65,340	\$ 85,000	\$ 15,000	21.43%
41150	Building & Land Lease	-	-	-	-	-	-
41200	Pump Station Maintenance	78,000	38,245	76,490	90,000	12,000	15.38%
41300	Dam Maintenance	-	-	-	-	-	-
41350	Pipeline/Appurtenances	195,000	32,174	364,348	195,000	-	0.00%
41400	Materials & Supplies	28,000	28,159	56,318	28,000	-	0.00%
41450	Chemicals	669,200	446,190	892,380	837,250	168,050	25.11%
41500	Vehicle Maintenance	10,000	8,921	17,842	13,500	3,500	35.00%
41550	Equipment Maint. & Repair	300,000	208,528	417,056	350,000	50,000	16.67%
41600	Instrumentation & Metering	58,700	20,862	41,724	125,900	67,200	114.48%

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2019-2020 Proposed Budget**  
**Expense Detail**

**Rate Center: Urban Wastewater**

Object Code	Line Item	Adopted Budget FY 2018-2019	Current Year Activity		Proposed Budget FY 2019-2020	2019	2019
			Six Month Actual 12/31/2018	Projected Year end 6/30/2019		vs. 2020 Variance \$	vs. 2020 Variance %
41650	Fuel & Lubricants	38,000	20,043	40,086	38,000	-	0.00%
41700	General Other Maintenance	(38,000)	(17,174)	(34,348)	(38,000)	-	0.00%
<b>Subtotal</b>		<b>\$ 1,408,900</b>	<b>\$ 818,618</b>	<b>\$ 1,937,236</b>	<b>\$ 1,724,650</b>	<b>\$ 315,750</b>	<b>22.41%</b>
81000	<b>Equipment Purchases</b>						
81100	Small Equipment & Tools	\$ 7,500	\$ 93	\$ 186	\$ 7,500	\$ -	0.00%
81200	Rental & Leases	10,000	1,591	3,182	10,000	-	0.00%
81250	Equipment (over \$5000)	-	-	-	-	-	-
81300	Vehicle Replacement Fund	57,000	28,500	57,000	60,000	3,000	5.26%
<b>Subtotal</b>		<b>\$ 74,500</b>	<b>\$ 30,184</b>	<b>\$ 60,368</b>	<b>\$ 77,500</b>	<b>\$ 3,000</b>	<b>4.03%</b>
95000	<b>Allocations from Departments</b>						
95100	Administrative Allocation	\$ 945,989	\$ 409,641	\$ 909,907	\$ 965,520	\$ 19,531	2.06%
95300	Engineering Allocation	627,681	302,450	598,858	683,179	55,498	8.84%
95150	Maintenance Allocation	857,400	394,377	776,532	904,442	47,042	5.49%
95200	Laboratory Allocation	209,799	92,289	180,078	222,289	12,490	5.95%
<b>Subtotal</b>		<b>\$ 2,640,869</b>	<b>\$ 1,198,757</b>	<b>\$ 2,465,375</b>	<b>\$ 2,775,430</b>	<b>\$ 134,561</b>	<b>5.10%</b>
Depreciation		470,000	235,000	470,000	\$ 470,000	-	0.00%
<b>Subtotal</b>		<b>\$ 470,000</b>	<b>\$ 235,000</b>	<b>\$ 470,000</b>	<b>\$ 470,000</b>	<b>\$ -</b>	<b>0.00%</b>
<b>Total</b>		<b>\$ 7,817,666</b>	<b>\$ 4,149,400</b>	<b>\$ 8,640,837</b>	<b>\$ 8,610,498</b>	<b>\$ 792,832</b>	<b>10.14%</b>

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## Glenmore Wastewater Summary

Projected Flow (MGD)

FY 2019			FY 2020	Budget % Change
Budgeted FY 2019	Actual for 6 months	Projected 12 months	Proposed Budget	
0.119			0.109	

### Operations Budget

#### Projected Revenues

##### Operations Rate (monthly)

Revenue	\$ 31,060			\$ 30,877	-0.59%
Interest Allocation	\$ 372,720	\$ 186,360	\$ 372,720	\$ 370,524	-0.59%
	600	464	928	700	16.67%
<b>Total Operations Revenues</b>	<b>\$ 373,320</b>	<b>\$ 186,824</b>	<b>\$ 373,648</b>	<b>\$ 371,224</b>	<b>-0.56%</b>

#### Projected Expenses

Personnel Cost	\$ 94,490	\$ 44,653	\$ 88,989	\$ 95,340	0.90%
Professional Services	3,000	-	-	-	-100.00%
Other Services and Charges	39,510	19,792	39,334	35,210	-10.88%
Communications	2,600	1,833	3,230	3,000	15.38%
Information Technology	3,350	-	3,350	3,700	10.45%
Supplies	100	-	-	100	0.00%
Operations and Maintenance	121,450	50,373	102,746	119,450	-1.65%
Equipment Purchases	2,900	1,200	2,400	2,900	0.00%
Depreciation	5,000	5,000	5,000	5,000	0.00%
<b>Subtotal before allocations</b>	<b>\$ 272,400</b>	<b>\$ 122,851</b>	<b>\$ 245,049</b>	<b>\$ 264,700</b>	<b>-2.83%</b>
Allocations of Support Departments	100,915	46,220	93,223	106,526	5.56%
<b>Total Operations Expenses</b>	<b>\$ 373,315</b>	<b>\$ 169,071</b>	<b>\$ 338,272</b>	<b>\$ 371,226</b>	<b>-0.56%</b>

Operations Cost per 1,000 gallons

\$8.595

\$9.331

### Debt Service Budget

#### Projected Revenue

##### Debt Service Rate (monthly)

Debt Service Rate Revenue - ACSA	\$ 132			\$ 315	138.64%
Trust Fund Interest	\$ 1,586	\$ 792	\$ 1,584	\$ 3,778	138.21%
Reserve Fund Interest	-	-	-	-	
	1,000	1,087	2,174	3,100	210.00%
<b>Total Debt Service Revenue</b>	<b>\$ 2,586</b>	<b>\$ 1,879</b>	<b>\$ 3,758</b>	<b>\$ 6,878</b>	<b>165.97%</b>

#### Principal, Interest & Reserves

Total Principal & Interest	\$ 1,586	\$ 793	\$ 1,586	\$ 1,578	-0.50%
Estimated New Principal & Interest				\$ 2,200	
Reserve Additions - Interest	1,000	1,087	2,174	3,100	210.00%
<b>Total Debt Principal and Interest</b>	<b>\$ 2,586</b>	<b>\$ 1,880</b>	<b>\$ 3,760</b>	<b>\$ 6,878</b>	<b>165.97%</b>

#### Rate Center Summary

Total Revenues	\$ 375,906	\$ 188,703	\$ 377,406	\$ 378,102	0.58%
Total Expenses	375,901	170,951	342,032	378,104	0.59%
<b>Surplus/(Deficit)</b>	<b>\$ 5</b>	<b>\$ 17,752</b>	<b>\$ 35,374</b>	<b>\$ (2)</b>	
<b>Rates (Monthly)</b>					
ACSA	\$ 31,192			\$ 31,192	0.00%

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2019-2020 Proposed Budget**  
**Expense Detail**

**Rate Center: Glenmore Wastewater**

Object Code	Line Item	Adopted Budget FY 2018-2019	Current Year Activity		Proposed Budget FY 2019-2020	2019 vs. 2020	
			Six Month Actual 12/31/2018	Projected Year end 6/30/2019		Variance \$	Variance %
10000	<b>Salaries &amp; Benefits</b>						
11000	Salaries	\$ 61,600	\$ 28,853	\$ 57,706	\$ 60,532	\$ (1,068)	-1.73%
11010	Overtime & Holiday Pay	4,500	2,465	4,930	6,500	2,000	44.44%
12010	FICA	5,057	2,308	4,616	5,128	71	1.40%
12020	Health Insurance	13,620	6,978	13,956	13,584	(36)	-0.26%
12026	Employee Assistance Program	15	10	20	15	-	0.00%
12030	Retirement	5,926	2,262	4,524	5,823	(103)	-1.74%
12040	Life Insurance	807	355	710	793	(14)	-1.73%
12050	Fitness Program	50	38	76	50	-	0.00%
12060	Worker's Comp Insurance	800	476	635	800	-	0.00%
	<i>Subtotal</i>	\$ 92,375	\$ 43,745	\$ 87,173	\$ 93,225	\$ 850	0.92%
13000	<b>Other Personnel Costs</b>						
13100	Employee Dues & Licenses	\$ 230	\$ 50	\$ 100	\$ 230	\$ -	0.00%
13150	Education & Training	775	329	658	775	-	0.00%
13200	Travel & Lodging	375	69	138	375	-	0.00%
13250	Uniforms	600	373	746	600	-	0.00%
13325	Recruiting & Medical Testing	100	39	78	100	-	0.00%
13350	Other	35	48	96	35	-	0.00%
	<i>Subtotal</i>	\$ 2,115	\$ 908	\$ 1,816	\$ 2,115	\$ -	0.00%
	<b>Professional Services</b>						
20100	Legal Fees	\$ -	\$ -	\$ -	\$ -	\$ -	-
20200	Financial & Admin. Services	-	-	-	-	-	-
20250	Bond Issue Costs	-	-	-	-	-	-
20300	Engineering & Technical Services	3,000	-	-	-	(3,000)	-100.00%
	<i>Subtotal</i>	\$ 3,000	\$ -	\$ -	\$ -	\$ (3,000)	-
	<b>Other Services and Charges</b>						
21100	General Liability/Property Ins.	\$ 300	\$ 250	\$ 250	\$ 300	\$ -	0.00%
21150	Advertising & Communication	-	-	-	-	-	-
21250	Watershed Management	-	-	-	-	-	-
21252	EMS Programs/Supplies	-	-	-	-	-	-
21253	Safety Programs/Supplies	800	673	1,346	2,000	1,200	150.00%
21300	Authority Dues/Permits/Fees	3,300	2,768	5,536	3,300	-	0.00%
21350	Laboratory Analysis	1,500	516	1,032	1,500	-	-
21400	Utilities	28,500	15,585	31,170	28,000	(500)	-1.75%
21420	General Other Services	110	-	-	110	-	-
21430	Governance & Strategic Support	5,000	-	-	-	(5,000)	-
21450	Bad Debt	-	-	-	-	-	-
	<i>Subtotal</i>	\$ 39,510	\$ 19,792	\$ 39,334	\$ 35,210	\$ (4,300)	-10.88%
22000	<b>Communication</b>						
22100	Radio	\$ 400	\$ 438	\$ 440	\$ 400	\$ -	0.00%
22150	Telephone & Data Service	1,700	1,073	2,146	2,000	300	17.65%
22200	Cell Phones & Pagers	500	322	644	600	100	20.00%
	<i>Subtotal</i>	\$ 2,600	\$ 1,833	\$ 3,230	\$ 3,000	\$ 400	15.38%
31000	<b>Information Technology</b>						
31100	Computer Hardware	\$ 650	\$ -	\$ 650	\$ 1,000	\$ 350	53.85%
31150	SCADA Maint. & Support	2,500	-	2,500	2,500	-	0.00%
31200	Maintenance & Support Services	-	-	-	-	-	-
31250	Software Purchases	200	-	200	200	-	0.00%
	<i>Subtotal</i>	\$ 3,350	\$ -	\$ 3,350	\$ 3,700	\$ 350	10.45%
33000	<b>Supplies</b>						
33100	Office Supplies	\$ 100	\$ -	\$ -	\$ 100	\$ -	0.00%
33150	Subscriptions/Reference Material	-	-	-	-	-	-
33350	Postage & Delivery	-	-	-	-	-	-
	<i>Subtotal</i>	\$ 100	\$ -	\$ -	\$ 100	\$ -	0.00%
41000	<b>Operation &amp; Maintenance</b>						
41100	Building & Grounds	\$ 8,500	\$ 713	\$ 1,426	\$ 8,500	\$ -	0.00%
41150	Building & Land Lease	-	-	-	-	-	-
41200	Pump Station Maintenance	9,000	11,898	23,796	9,000	-	0.00%
41300	Dam Maintenance	-	-	-	-	-	-
41350	Pipeline/Appurtenances	500	-	-	500	-	0.00%

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2019-2020 Proposed Budget**  
**Expense Detail**

**Rate Center: Glenmore Wastewater**

Object Code	Line Item	Adopted Budget FY 2018-2019	Current Year Activity		Proposed Budget FY 2019-2020	2019	2019
			Six Month Actual 12/31/2018	Projected Year end 6/30/2019		vs. 2020 Variance \$	vs. 2020 Variance %
41400	Materials & Supplies	2,000	107	214	2,000	-	0.00%
41450	Chemicals	4,000	-	2,000	2,000	(2,000)	
41500	Vehicle Maintenance	750	612	1,224	750	-	0.00%
41550	Equipment Maint. & Repair	18,000	3,096	6,192	18,000	-	0.00%
41600	Instrumentation & Metering	5,100	239	478	5,100	-	0.00%
41650	Fuel & Lubricants	3,600	1,048	2,096	3,600	-	0.00%
41700	General Other Maintenance	70,000	32,660	65,320	70,000	-	0.00%
<b>Subtotal</b>		<b>\$ 121,450</b>	<b>\$ 50,373</b>	<b>\$ 102,746</b>	<b>\$ 119,450</b>	<b>\$ (2,000)</b>	<b>-1.65%</b>
81000	<b>Equipment Purchases</b>						
81100	Small Equipment & Tools	\$ 500	\$ -	\$ -	\$ 500	\$ -	0.00%
81200	Rental & Leases	-	-	-	-	-	
81250	Equipment (over \$5000)	-	-	-	-	-	
81300	Vehicle Replacement Fund	2,400	1,200	2,400	2,400	-	0.00%
<b>Subtotal</b>		<b>\$ 2,900</b>	<b>\$ 1,200</b>	<b>\$ 2,400</b>	<b>\$ 2,900</b>	<b>\$ -</b>	<b>0.00%</b>
95000	<b>Allocations from Departments</b>						
95100	Administrative Allocation	\$ 19,708	\$ 8,534	\$ 18,956	\$ 20,115	\$ 407	2.07%
95300	Engineering Allocation	21,398	10,311	20,416	23,290	1,892	8.84%
95150	Maintenance Allocation	53,113	24,430	48,104	56,027	2,914	5.49%
95200	Laboratory Allocation	6,696	2,945	5,747	7,094	398	5.94%
<b>Subtotal</b>		<b>\$ 100,915</b>	<b>\$ 46,220</b>	<b>\$ 93,223</b>	<b>\$ 106,526</b>	<b>\$ 5,611</b>	<b>5.56%</b>
Depreciation		5,000	2,500	5,000	\$ 5,000	-	0.00%
<b>Subtotal</b>		<b>\$ 5,000</b>	<b>\$ 5,000</b>	<b>\$ 5,000</b>	<b>\$ 5,000</b>	<b>\$ 5,000</b>	<b>100.00%</b>
<b>Total</b>		<b>\$ 373,315</b>	<b>\$ 169,071</b>	<b>\$ 338,272</b>	<b>\$ 371,226</b>	<b>\$ 2,911</b>	<b>0.78%</b>

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## Scottsville Wastewater Summary

Projected Flow (MGD)

FY 2019			FY 2020	Budget % Change
Budgeted FY 2019	Actual for 6 months	Projected 12 months	Proposed Budget	
0.058			0.059	

### Operations Budget

#### Projected Revenues

##### Operations Rate (monthly)

Revenue	\$ 301,872	\$ 150,936	\$ 301,872	\$ 308,988	2.36%
Interest Allocation	500	380	760	600	20.00%
<b>Total Operations Revenues</b>	<b>\$ 302,372</b>	<b>\$ 151,316</b>	<b>\$ 302,632</b>	<b>\$ 309,588</b>	<b>2.39%</b>

#### Projected Expenses

Personnel Cost	\$ 94,515	\$ 44,653	\$ 88,989	\$ 95,366	0.90%
Professional Services	2,000	-	-	2,000	
Other Services and Charges	28,400	11,410	22,236	28,000	-1.41%
Communications	2,630	2,194	3,736	3,930	49.43%
Information Technology	2,350	-	2,350	1,700	-27.66%
Supplies	100	446	892	25	-75.00%
Operations and Maintenance	57,850	22,760	54,916	58,850	1.73%
Equipment Purchases	3,200	1,200	2,400	3,200	0.00%
Depreciation	18,000	9,000	18,000	18,000	0.00%
<b>Subtotal before allocations</b>	<b>\$ 209,045</b>	<b>\$ 91,663</b>	<b>\$ 193,519</b>	<b>\$ 211,071</b>	<b>0.97%</b>
Allocations of Support Departments	93,328	42,730	86,351	98,522	5.57%
<b>Total Operations Expenses</b>	<b>\$ 302,373</b>	<b>\$ 134,393</b>	<b>\$ 279,870</b>	<b>\$ 309,593</b>	<b>2.39%</b>

Operations Cost per 1,000 gallons \$15.062 \$14.376 95.45%

### Debt Service Budget

#### Projected Revenue

##### Debt Service Rate (monthly)

Debt Service Rate Revenue - ACSA	\$ 8,006	\$ 4,002	\$ 8,004	\$ 9,442	17.94%
Trust Fund Interest	-	87	174	100	
Reserve Fund Interest	1,000	1,075	2,150	3,100	210.00%
<b>Total Debt Service Revenue</b>	<b>\$ 9,006</b>	<b>\$ 5,164</b>	<b>\$ 10,328</b>	<b>\$ 12,642</b>	<b>40.37%</b>

#### Principal, Interest & Reserves

Total Principal & Interest	\$ 8,006	\$ 4,003	\$ 8,006	\$ 7,742	-3.30%
Estimated New Principal & Interest	-	500	1,000	1,800	
Reserve Additions - Interest	1,000	1,075	2,150	3,100	210.00%
<b>Total Debt Principal and Interest</b>	<b>\$ 9,006</b>	<b>\$ 5,578</b>	<b>\$ 11,156</b>	<b>\$ 12,642</b>	<b>40.37%</b>

#### Rate Center Summary

Total Revenues	\$ 311,378	\$ 156,480	\$ 312,960	\$ 322,230	3.49%
Total Expenses	311,379	139,971	291,026	322,235	3.49%
<b>Surplus/(Deficit)</b>	<b>\$ (1)</b>	<b>\$ 16,509</b>	<b>\$ 21,934</b>	<b>\$ (5)</b>	
<b>Rates (Monthly)</b>					
ACSA	\$ 25,823			\$ 26,536	2.76%

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2019-2020 Proposed Budget**  
**Expense Detail**

**Rate Center: Scottsville Wastewater**

Object Code	Line Item	Adopted Budget FY 2018-2019	Current Year Activity		Proposed Budget FY 2019-2020	2019 vs. 2020 Variance \$		2019 vs. 2020 Variance %	
			Six Month Actual 12/31/2018	Projected Year end 6/30/2019					
10000	<b>Salaries &amp; Benefits</b>								
11000	Salaries	\$ 61,600	\$ 28,853	\$ 57,706	\$ 60,532	\$ (1,068)		-1.73%	
11010	Overtime & Holiday Pay	4,500	2,465	4,930	6,500	2,000		44.44%	
12010	FICA	5,057	2,308	4,616	5,128	71		1.40%	
12020	Health Insurance	13,620	6,978	13,956	13,584	(36)		-0.26%	
12026	Employee Assistance Program	15	10	20	16	1		6.67%	
12030	Retirement	5,926	2,262	4,524	5,823	(103)		-1.74%	
12040	Life Insurance	807	355	710	793	(14)		-1.73%	
12050	Fitness Program	50	38	76	50	-		0.00%	
12060	Worker's Comp Insurance	800	476	635	800	-		0.00%	
	<b>Subtotal</b>	<b>\$ 92,375</b>	<b>\$ 43,745</b>	<b>\$ 87,173</b>	<b>\$ 93,226</b>	<b>\$ 851</b>		<b>0.92%</b>	
13000	<b>Other Personnel Costs</b>								
13100	Employee Dues & Licenses	\$ 230	\$ 50	\$ 100	\$ 230	\$ -		0.00%	
13150	Education & Training	775	329	658	775	-		0.00%	
13200	Travel & Lodging	375	69	138	375	-		0.00%	
13250	Uniforms	600	373	746	600	-		0.00%	
13325	Recruiting & Medical Testing	100	39	78	100	-			
13350	Other	60	48	96	60	-		0.00%	
	<b>Subtotal</b>	<b>\$ 2,140</b>	<b>\$ 908</b>	<b>\$ 1,816</b>	<b>\$ 2,140</b>	<b>\$ -</b>		<b>0.00%</b>	
	<b>Professional Services</b>								
20100	Legal Fees	\$ -	\$ -	\$ -	\$ -	\$ -			
20200	Financial & Admin. Services	-	-	-	-	-			
20250	Bond Issue Costs	-	-	-	-	-			
20300	Engineering & Technical Services	2,000	-	-	2,000	-			
	<b>Subtotal</b>	<b>\$ 2,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,000</b>	<b>\$ -</b>			
	<b>Other Services and Charges</b>								
21100	General Liability/Property Ins.	\$ 700	\$ 584	\$ 584	\$ 700	\$ -		0.00%	
21150	Advertising & Communication	-	-	-	-	-			
21250	Watershed Management	-	-	-	-	-			
21252	EMS Programs/Supplies	-	-	-	-	-			
21253	Safety Programs/Supplies	400	305	610	2,000	1,600		400.00%	
21300	Authority Dues/Permits/Fees	3,300	2,768	5,536	3,300	-		0.00%	
21350	Laboratory Analysis	4,000	-	-	4,000	-		0.00%	
21400	Utilities	15,000	7,753	15,506	18,000	3,000		20.00%	
21420	General Other Services	-	-	-	-	-			
21430	Governance & Strategic Support	5,000	-	-	-	(5,000)			
21450	Bad Debt	-	-	-	-	-			
	<b>Subtotal</b>	<b>\$ 28,400</b>	<b>\$ 11,410</b>	<b>\$ 22,236</b>	<b>\$ 28,000</b>	<b>\$ (400)</b>		<b>-1.41%</b>	
22000	<b>Communication</b>								
22100	Radio	\$ 430	\$ 651	\$ 650	\$ 430	\$ -		0.00%	
22150	Telephone & Data Service	1,700	1,404	2,808	3,000	1,300		76.47%	
22200	Cell Phones & Pagers	500	139	278	500	-		0.00%	
	<b>Subtotal</b>	<b>\$ 2,630</b>	<b>\$ 2,194</b>	<b>\$ 3,736</b>	<b>\$ 3,930</b>	<b>\$ 1,300</b>		<b>49.43%</b>	
31000	<b>Information Technology</b>								
31100	Computer Hardware	\$ 650	\$ -	\$ 650	\$ 1,000	\$ 350		53.85%	
31150	SCADA Maint. & Support	1,500	-	1,500	500	(1,000)		-66.67%	
31200	Maintenance & Support Services	-	-	-	-	-			
31250	Software Purchases	200	-	200	200	-		0.00%	
	<b>Subtotal</b>	<b>\$ 2,350</b>	<b>\$ -</b>	<b>\$ 2,350</b>	<b>\$ 1,700</b>	<b>\$ (650)</b>		<b>-27.66%</b>	
33000	<b>Supplies</b>								
33100	Office Supplies	\$ 100	\$ -	\$ -	\$ 25	\$ (75)		-75.00%	
33150	Subscriptions/Reference Material	-	-	-	-	-			
33350	Postage & Delivery	-	446	892	-	-			
	<b>Subtotal</b>	<b>\$ 100</b>	<b>\$ 446</b>	<b>\$ 892</b>	<b>\$ 25</b>	<b>\$ (75)</b>		<b>-75.00%</b>	
41000	<b>Operation &amp; Maintenance</b>								
41100	Building & Grounds	\$ 4,800	\$ 2,821	\$ 5,642	\$ 4,800	\$ -		0.00%	
41150	Building & Land Lease	-	-	-	-	-			
41200	Pump Station Maintenance	10,500	-	5,000	10,500	-		0.00%	
41300	Dam Maintenance	-	-	-	-	-			
41350	Pipeline/Appurtenances	500	-	-	500	-		0.00%	
41400	Materials & Supplies	1,500	654	1,308	1,500	-		0.00%	

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2019-2020 Proposed Budget**  
**Expense Detail**

**Rate Center: Scottsville Wastewater**

Object Code	Line Item	Adopted Budget FY 2018-2019	Current Year Activity		Proposed Budget FY 2019-2020	2019	2019
			Six Month Actual 12/31/2018	Projected Year end 6/30/2019		vs. 2020 Variance \$	vs. 2020 Variance %
41450	Chemicals	4,000	988	1,976	4,000	-	0.00%
41500	Vehicle Maintenance	750	686	1,372	750	-	0.00%
41550	Equipment Maint. & Repair	16,000	9,035	18,070	16,000	-	0.00%
41600	Instrumentation & Metering	10,000	302	5,000	10,000	-	0.00%
41650	Fuel & Lubricants	800	407	814	800	-	0.00%
41700	General Other Maintenance	9,000	7,867	15,734	10,000	1,000	11.11%
<b>Subtotal</b>		<b>\$ 57,850</b>	<b>\$ 22,760</b>	<b>\$ 54,916</b>	<b>\$ 58,850</b>	<b>\$ 1,000</b>	<b>1.73%</b>
81000	<b>Equipment Purchases</b>						
81100	Small Equipment & Tools	\$ 500	\$ -	\$ -	\$ 500	\$ -	0.00%
81200	Rental & Leases	300	-	-	300	-	
81250	Equipment (over \$5000)	-	-	-	-	-	
81300	Vehicle Replacement Fund	2,400	1,200	2,400	2,400	-	0.00%
<b>Subtotal</b>		<b>\$ 3,200</b>	<b>\$ 1,200</b>	<b>\$ 2,400</b>	<b>\$ 3,200</b>	<b>\$ -</b>	<b>0.00%</b>
95000	<b>Allocations from Departments</b>						
95100	Administrative Allocation	\$ 19,708	\$ 8,534	\$ 18,956	\$ 20,115	\$ 407	2.07%
95300	Engineering Allocation	21,398	10,311	20,416	23,290	1,892	8.84%
95150	Maintenance Allocation	45,526	20,940	41,232	48,023	2,497	5.48%
95200	Laboratory Allocation	6,696	2,945	5,747	7,094	398	5.94%
<b>Subtotal</b>		<b>\$ 93,328</b>	<b>\$ 42,730</b>	<b>\$ 86,351</b>	<b>\$ 98,522</b>	<b>\$ 5,194</b>	<b>5.57%</b>
Depreciation		18,000	9,000	18,000	\$ 18,000	-	0.00%
<b>Subtotal</b>		<b>\$ 18,000</b>	<b>\$ 9,000</b>	<b>\$ 18,000</b>	<b>\$ 18,000</b>	<b>\$ -</b>	<b>0.00%</b>
<b>Total</b>		<b>\$ 302,373</b>	<b>\$ 134,393</b>	<b>\$ 279,870</b>	<b>\$ 309,593</b>	<b>\$ 7,220</b>	<b>2.39%</b>

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# ***Support Departments***

***Fiscal Year 2019-2020***

***Rivanna Water and Sewer Authority***

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## Administration

FY 2019			FY 2020	Budget % Change
<i>Budgeted FY 2019</i>	Actual for 6 months	Projected 12 months	<i>Proposed Budget</i>	

### Operations Budget

#### Projected Revenues & Sources

Payment for Services SWA	\$ 460,000	\$ 230,000	\$ 460,000	\$ 466,000	1.30%
Miscellaneous Revenue	2,000	6,478	12,956	2,000	0.00%
<b>Total Operations Revenues</b>	<b>\$ 462,000</b>	<b>\$ 236,478</b>	<b>\$ 472,956</b>	<b>\$ 468,000</b>	<b>1.30%</b>

#### Projected Expenses

Personnel Cost	\$ 1,796,151	\$ 865,553	\$ 1,738,874	\$ 1,841,351	2.52%
Professional Services	228,000	75,385	228,636	229,000	0.44%
Other Services and Charges	140,980	60,570	135,852	106,400	-24.53%
Communications	20,280	11,550	21,784	18,500	-8.78%
Information Technology	138,500	40,517	133,202	174,250	25.81%
Supplies	21,000	11,447	22,894	21,500	2.38%
Operations and Maintenance	60,400	18,625	59,854	64,500	6.79%
Equipment Purchases	27,500	6,250	27,500	24,000	-12.73%
Depreciation	-	-	-	-	
<b>Total Operations Expenses</b>	<b>\$ 2,432,811</b>	<b>\$ 1,089,897</b>	<b>\$ 2,368,596</b>	<b>\$ 2,479,501</b>	<b>1.92%</b>

#### Department Summary

<b>Total Revenues</b>		\$ 462,000	\$ 236,478	\$ 472,956	\$ 468,000	1.30%
<b>Total Expenses</b>		2,432,811	1,089,897	2,368,596	2,479,501	1.92%
<b>Net Costs Allocable to Rate Centers</b>		<b>\$ (1,970,811)</b>	<b>\$ (853,419)</b>	<b>\$ (1,895,640)</b>	<b>\$ (2,011,501)</b>	<b>2.06%</b>
<b>Allocations to the Rate Centers</b>						
Urban Water	44.00%	\$ 867,157	\$ 375,504	\$ 834,082	\$ 885,060	
Crozet Water	4.00%	78,832	34,137	75,826	80,460	
Scottsville Water	2.00%	39,416	17,068	37,913	40,230	
Urban Wastewater	48.00%	945,989	409,641	909,907	965,520	
Glenmore Wastewater	1.00%	19,708	8,534	18,956	20,115	
Scottsville Wastewater	1.00%	19,708	8,534	18,956	20,115	
	100.00%	\$ 1,970,810	\$ 853,418	\$ 1,895,640	\$ 2,011,500	

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2019-2020 Proposed Budget**  
**Expense Detail**

**Department: Administration**

Object Code	Line Item	Adopted Budget	Six Month Actual	Projected Year end	Proposed Budget	2020 Variance	2020 Variance
		FY 2018-2019	12/31/2018	6/30/2019	FY 2019-2020	\$	%
<b>Salaries &amp; Benefits</b>							
10000	Salaries	\$ 1,298,900	\$ 638,936	\$ 1,277,872	\$ 1,329,850	\$ 30,950	2.38%
11010	Overtime & Holiday Pay	1,500	835	1,670	1,500	-	0.00%
12010	FICA	99,481	41,146	82,292	101,848	2,367	2.38%
12020	Health Insurance	210,000	105,793	211,586	217,000	7,000	3.33%
12026	Employee Assistance Program	200	148	296	200	-	0.00%
12030	Retirement	124,954	50,660	101,320	127,932	2,978	2.38%
12040	Life Insurance	17,016	7,882	15,764	17,421	405	2.38%
12050	Fitness Program	2,700	1,384	2,768	3,000	300	11.11%
12060	Worker's Comp Insurance	4,700	2,826	3,768	4,700	-	0.00%
Subtotal		\$ 1,759,451	\$ 849,610	\$ 1,697,336	\$ 1,803,451	\$ 44,000	2.50%
<b>Other Personnel Costs</b>							
13000	Employee Dues & Licenses	\$ 2,000	\$ 315	\$ 2,000	\$ 2,000	\$ -	0.00%
13150	Education & Training	19,000	3,859	18,000	19,000	-	0.00%
13200	Travel & Lodging	5,000	2,366	4,732	4,500	(500)	-10.00%
13250	Uniforms	1,500	1,481	2,962	1,500	-	0.00%
13325	Recruiting & Medical Testing	1,200	1,645	3,290	1,000	(200)	-16.67%
13350	Other	8,000	6,277	10,554	9,900	1,900	23.75%
Subtotal		\$ 36,700	\$ 15,943	\$ 41,538	\$ 37,900	\$ 1,200	3.27%
<b>Professional Services</b>							
20100	Legal Fees	\$ 60,000	\$ 30,318	\$ 60,636	\$ 60,000	\$ -	0.00%
20200	Financial & Admin. Services	68,000	15,067	68,000	69,000	1,000	1.47%
20250	Bond Issue Costs	-	-	-	-	-	0.00%
20300	Engineering & Technical Services	100,000	30,000	100,000	100,000	-	0.00%
Subtotal		\$ 228,000	\$ 75,385	\$ 228,636	\$ 229,000	\$ 1,000	0.44%
<b>Other Services and Charges</b>							
21100	General Liability/Property Ins.	\$ 11,900	\$ 9,926	\$ 9,926	\$ 11,200	\$ (700)	-5.88%
21150	Advertising & Communication	15,000	7,361	14,722	15,000	-	0.00%
21250	Watershed Management	-	-	-	-	-	-
21252	EMS Programs/Supplies	500	-	-	-	(500)	-
21253	Safety Programs/Supplies	5,000	2,549	35,098	5,000	-	0.00%
21300	Authority Dues/Permits/Fees	35,000	22,681	35,000	37,100	2,100	6.00%
21350	Laboratory Analysis	-	-	-	-	-	-
21400	Utilities	900	499	998	1,100	200	22.22%
21420	General Other Services	3,000	1,023	2,046	2,000	(1,000)	-33.33%
21430	Governance & Strategic Support	64,680	16,531	33,062	30,000	(34,680)	-53.62%
21450	Bad Debt	5,000	-	5,000	5,000	-	-
Subtotal		\$ 140,980	\$ 60,570	\$ 135,852	\$ 106,400	\$ (34,580)	-24.53%
<b>Communication</b>							
22000	Radio	\$ 1,280	\$ 1,316	\$ 1,316	\$ 1,200	\$ (80)	-6.25%
22150	Telephone & Data Service	12,000	5,106	10,212	10,000	(2,000)	-16.67%
22200	Cell Phones & Pagers	7,000	5,128	10,256	7,300	300	4.29%
Subtotal		\$ 20,280	\$ 11,550	\$ 21,784	\$ 18,500	\$ (1,780)	-8.78%
<b>Information Technology</b>							
31000	Computer Hardware	\$ 20,000	\$ 10,092	\$ 20,184	\$ 27,000	\$ 7,000	35.00%
31150	SCADA Maint. & Support	42,500	1,622	40,000	21,500	(21,000)	-
31200	Maintenance & Support Services	63,000	22,294	60,000	91,750	28,750	45.63%
31250	Software Purchases	13,000	6,509	13,018	34,000	21,000	161.54%
Subtotal		\$ 138,500	\$ 40,517	\$ 133,202	\$ 174,250	\$ 35,750	25.81%
<b>Supplies</b>							
33000	Office Supplies	\$ 15,000	\$ 7,364	\$ 14,728	\$ 15,000	\$ -	0.00%
33150	Subscriptions/Reference Material	1,000	465	930	800	(200)	-20.00%
33350	Postage & Delivery	5,000	3,618	7,236	5,700	700	14.00%
Subtotal		\$ 21,000	\$ 11,447	\$ 22,894	\$ 21,500	\$ 500	2.38%
<b>Operation &amp; Maintenance</b>							
41000	Building & Grounds	\$ 53,000	\$ 14,343	\$ 50,000	\$ 53,000	\$ -	0.00%
41150	Building & Land Lease	-	1,416	2,832	4,100	4,100	-
41200	Pump Station Maintenance	-	-	-	-	-	-
41300	Dam Maintenance	-	-	-	-	-	-
41350	Pipeline/Appurtenances	-	-	-	-	-	-
41400	Materials & Supplies	400	-	400	400	-	0.00%
41450	Chemicals	-	-	-	-	-	-



**Rivanna Water and Sewer Authority**  
**Fiscal Year 2019-2020 Proposed Budget**  
**Expense Detail**

**Department: Administration**

Object Code	Line Item	Adopted Budget FY 2018-2019	Current Year Activity		Proposed Budget FY 2019-2020	2019	2019
			Six Month Actual 12/31/2018	Projected Year end 6/30/2019		vs. 2020 Variance \$	vs. 2020 Variance %
41500	Vehicle Maintenance	3,000	805	2,500	3,000	-	0.00%
41550	Equipment Maint. & Repair		-	-	-	-	
41600	Instrumentation & Metering		-	-	-	-	
41650	Fuel & Lubricants	4,000	2,061	4,122	4,000	-	0.00%
41700	General Other Maintenance		-	-	-	-	
<b>Subtotal</b>		<b>\$ 60,400</b>	<b>\$ 18,625</b>	<b>\$ 59,854</b>	<b>\$ 64,500</b>	<b>\$ 4,100</b>	<b>6.79%</b>
81000	<b>Equipment Purchases</b>						
81100	Small Equipment & Tools	\$ -	\$ -	\$ -	\$ -	\$ -	
81200	Rental & Leases		-	-	-	-	
81250	Equipment (over \$5000)	15,000	-	15,000	10,000	(5,000)	
81300	Vehicle Replacement Fund	12,500	6,250	12,500	14,000	1,500	12.00%
<b>Subtotal</b>		<b>\$ 27,500</b>	<b>\$ 6,250</b>	<b>\$ 27,500</b>	<b>\$ 24,000</b>	<b>\$ (3,500)</b>	<b>-12.73%</b>
95000	<b>Allocations from Departments</b>						
95100	Administrative Allocation	\$ -	\$ -	\$ -	\$ -	\$ -	
95300	Engineering Allocation	-	-	-	-	-	
95150	Maintenance Allocation	-	-	-	-	-	
95200	Laboratory Allocation	-	-	-	-	-	
<b>Subtotal</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
Depreciation		-	-	-	-	-	
<b>Subtotal</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
<b>Total</b>		<b>\$ 2,432,811</b>	<b>\$ 1,089,897</b>	<b>\$ 2,368,596</b>	<b>\$ 2,479,501</b>	<b>\$ 46,690</b>	<b>1.92%</b>

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Rivanna Water & Sewer Authority  
FY 2020 Proposed Budget

**Maintenance**

FY 2019			FY 2020	Budget % Change
Budgeted FY 2019	Actual for 6 months	Projected 12 months	Proposed Budget	

**Operations Budget**

**Projected Revenues**

Miscellaneous Revenue	\$	-	\$	1,534	\$	3,068	\$	-	
Payment for Services SWA								10,000	

**Total Operations Revenues**

<b>\$</b>	<b>-</b>	<b>\$</b>	<b>1,534</b>	<b>\$</b>	<b>3,068</b>	<b>\$</b>	<b>10,000</b>		
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**Projected Expenses**

Personnel Cost	\$	1,304,247	\$	585,115	\$	1,163,449	\$	1,345,633	3.17%
Professional Services		-		-		-		-	
Other Services and Charges		17,500		10,729		16,644		14,500	-17.14%
Communications		17,325		12,071		2,306		17,600	1.59%
Information Technology		6,500		3,025		8,050		6,500	0.00%
Supplies		2,000		361		722		2,000	0.00%
Operations and Maintenance		64,300		42,192		84,384		77,400	20.37%
Equipment Purchases		105,650		46,053		101,906		147,150	39.28%
Depreciation		-		-		-		-	

**Total Operations Expenses**

<b>\$</b>	<b>1,517,522</b>	<b>\$</b>	<b>699,546</b>	<b>\$</b>	<b>1,377,461</b>	<b>\$</b>	<b>1,610,783</b>	<b>6.15%</b>	
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**Department Summary**

<b>Total Revenues</b>		\$	-	\$	1,534	\$	3,068	\$	10,000
<b>Total Expenses</b>			1,517,522		699,546		1,377,461		1,610,783
<b>Net Costs Allocable to Rate Centers</b>		<b>\$</b>	<b>(1,517,522)</b>	<b>\$</b>	<b>(698,012)</b>	<b>\$</b>	<b>(1,374,393)</b>	<b>\$</b>	<b>(1,600,783)</b>
<b><u>Allocations to the Rate Centers</u></b>									
Urban Water	30.00%	\$	455,257	\$	209,404	\$	412,318	\$	480,235
Crozet Water	3.50%		53,113		24,430		48,104		56,027
Scottsville Water	3.50%		53,113		24,430		48,104		56,027
			-		-		-		-
Urban Wastewater	56.50%		857,400		394,377		776,532		904,442
Glenmore Wastewater	3.50%		53,113		24,430		48,104		56,027
Scottsville Wastewater	3.00%		45,526		20,940		41,232		48,023
	100.00%	<b>\$</b>	<b>1,517,522</b>	<b>\$</b>	<b>698,011</b>	<b>\$</b>	<b>1,374,394</b>	<b>\$</b>	<b>1,600,781</b>

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2019-2020 Proposed Budget**  
**Expense Detail**

**Department: Maintenance**

Object Code	Line Item	Adopted Budget FY 2018-2019	Current Year Activity		Proposed Budget FY 2019-2020	2019 vs. 2020 Variance \$	2019 vs. 2020 Variance %
			Six Month Actual 12/31/2018	Projected Year end 6/30/2019			
10000	<b>Salaries &amp; Benefits</b>						
11000	Salaries	\$ 880,100	\$ 402,947	\$ 805,894	\$ 908,500	\$ 28,400	3.23%
11010	Overtime & Holiday Pay	6,000	1,572	3,144	6,000	-	0.00%
12010	FICA	67,787	29,533	59,066	69,959	2,172	3.20%
12020	Health Insurance	210,000	93,221	186,442	217,000	7,000	3.33%
12026	Employee Assistance Program	250	140	280	250	-	0.00%
12030	Retirement	84,666	32,294	64,588	87,398	2,732	3.23%
12040	Life Insurance	11,529	5,044	10,088	11,901	372	3.23%
12050	Fitness Program	-	130	260	260	260	
12060	Worker's Comp Insurance	17,000	10,172	13,563	17,200	200	1.18%
	<b>Subtotal</b>	<b>\$ 1,277,332</b>	<b>\$ 575,053</b>	<b>\$ 1,143,325</b>	<b>\$ 1,318,468</b>	<b>\$ 41,136</b>	<b>3.22%</b>
13000	<b>Other Personnel Costs</b>						
13100	Employee Dues & Licenses	\$ 500	\$ 64	\$ 128	\$ 500	\$ -	
13150	Education & Training	11,000	2,295	4,590	11,000	-	0.00%
13200	Travel & Lodging	500	175	350	500	-	
13250	Uniforms	13,915	5,610	11,220	13,915	-	0.00%
13325	Recruiting & Medical Testing	500	383	766	500	-	
13350	Other	500	1,535	3,070	750	250	
	<b>Subtotal</b>	<b>\$ 26,915</b>	<b>\$ 10,062</b>	<b>\$ 20,124</b>	<b>\$ 27,165</b>	<b>\$ 250</b>	<b>0.93%</b>
20100	<b>Professional Services</b>						
20200	Legal Fees	\$ -	\$ -	\$ -	\$ -	\$ -	
20200	Financial & Admin. Services	-	-	-	-	-	
20250	Bond Issue Costs	-	-	-	-	-	
20300	Engineering & Technical Services	-	-	-	-	-	
	<b>Subtotal</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
21100	<b>Other Services and Charges</b>						
21100	General Liability/Property Ins.	\$ 7,500	\$ 6,256	\$ 6,256	\$ 7,500	\$ -	0.00%
21150	Advertising & Communication	-	-	-	-	-	
21250	Watershed Management	-	-	-	-	-	
21252	EMS Programs/Supplies	-	150	300	-	-	
21253	Safety Programs/Supplies	2,500	4,034	8,068	4,500	2,000	80.00%
21300	Authority Dues/Permits/Fees	-	10	20	-	-	
21350	Laboratory Analysis	-	-	-	-	-	
21400	Utilities	-	-	-	-	-	
21420	General Other Services	2,500	279	2,000	2,500	-	0.00%
21430	Governance & Strategic Support	5,000	-	-	-	(5,000)	
21450	Bad Debt	-	-	-	-	-	
	<b>Subtotal</b>	<b>\$ 17,500</b>	<b>\$ 10,729</b>	<b>\$ 16,644</b>	<b>\$ 14,500</b>	<b>\$ (3,000)</b>	<b>-17.14%</b>
22000	<b>Communication</b>						
22100	Radio	\$ 6,900	\$ 7,018	\$ 7,018	\$ 7,000	\$ 100	1.45%
22150	Telephone & Data Service	825	288	576	1,000	175	21.21%
22200	Cell Phones & Pagers	9,600	4,765	9,530	9,600	-	0.00%
	<b>Subtotal</b>	<b>\$ 17,325</b>	<b>\$ 12,071</b>	<b>\$ 17,124</b>	<b>\$ 17,600</b>	<b>\$ 275</b>	<b>1.59%</b>
31000	<b>Information Technology</b>						
31100	Computer Hardware	\$ 2,000	\$ -	\$ 2,000	\$ 2,000	\$ -	0.00%
31150	SCADA Maint. & Support	-	-	-	-	-	
31200	Maintenance & Support Services	2,500	775	1,550	2,500	-	0.00%
31250	Software Purchases	2,000	2,250	4,500	2,000	-	0.00%
	<b>Subtotal</b>	<b>\$ 6,500</b>	<b>\$ 3,025</b>	<b>\$ 8,050</b>	<b>\$ 6,500</b>	<b>\$ -</b>	<b>0.00%</b>
33000	<b>Supplies</b>						
33100	Office Supplies	\$ 2,000	\$ 361	\$ 722	\$ 2,000	\$ -	0.00%
33150	Subscriptions/Reference Material	-	-	-	-	-	
33350	Postage & Delivery	-	-	-	-	-	
	<b>Subtotal</b>	<b>\$ 2,000</b>	<b>\$ 361</b>	<b>\$ 722</b>	<b>\$ 2,000</b>	<b>\$ -</b>	<b>0.00%</b>
41000	<b>Operation &amp; Maintenance</b>						
41100	Building & Grounds	\$ 9,300	\$ 2,593	\$ 5,186	\$ 11,000	\$ 1,700	18.28%
41150	Building & Land Lease	-	-	-	-	-	
41200	Pump Station Maintenance	-	-	-	-	-	
41300	Dam Maintenance	-	-	-	-	-	
41350	Pipeline/Appurtenances	2,500	-	-	2,500	-	0.00%
41400	Materials & Supplies	8,000	6,419	12,838	12,000	4,000	50.00%
41450	Chemicals	-	556	1,112	-	-	
41500	Vehicle Maintenance	11,000	16,117	32,234	14,900	3,900	35.45%
41550	Equipment Maint. & Repair	13,500	7,519	15,038	15,500	2,000	14.81%
41600	Instrumentation & Metering	1,500	1,587	3,174	1,500	-	0.00%
41650	Fuel & Lubricants	18,500	7,401	14,802	20,000	1,500	8.11%
41700	General Other Maintenance	-	-	-	-	-	

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2019-2020 Proposed Budget**  
**Expense Detail**

**Department: Maintenance**

Object Code	Line Item	Adopted Budget FY 2018-2019	Current Year Activity		Proposed Budget FY 2019-2020	2019	2019
			Six Month Actual 12/31/2018	Projected Year end 6/30/2019		vs. 2020 Variance \$	vs. 2020 Variance %
	<i>Subtotal</i>	\$ 64,300	\$ 42,192	\$ 84,384	\$ 77,400	\$ 13,100	20.37%
81000	<b>Equipment Purchases</b>						
81100	Small Equipment & Tools	\$ 12,850	\$ 4,903	\$ 9,806	\$ 14,850	\$ 2,000	15.56%
81200	Rental & Leases	1,000	150	300	3,500	2,500	250.00%
81250	Equipment (over \$5000)	9,800	-	9,800	36,800	27,000	275.51%
81300	Vehicle Replacement Fund	82,000	41,000	82,000	92,000	10,000	12.20%
	<i>Subtotal</i>	\$ 105,650	\$ 46,053	\$ 101,906	\$ 147,150	\$ 41,500	39.28%
95000	<b>Allocations from Departments</b>						
95100	Administrative Allocation	\$ -	\$ -	\$ -	\$ -	\$ -	-
95300	Engineering Allocation	-	-	-	-	-	-
95150	Maintenance Allocation	-	-	-	-	-	-
95200	Laboratory Allocation	-	-	-	-	-	-
	<i>Subtotal</i>	\$ -	\$ -	\$ -	\$ -	\$ -	-
	Depreciation	-	-	-	-	-	-
	<i>Subtotal</i>	\$ -	\$ -	\$ -	\$ -	\$ -	-
	<b>Total</b>	<b>\$ 1,517,522</b>	<b>\$ 699,546</b>	<b>\$ 1,392,279</b>	<b>\$ 1,610,783</b>	<b>\$ 93,261</b>	<b>6.15%</b>

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## Laboratory Summary

FY 2019			FY 2020	Budget % Change
Budgeted FY 2019	Actual for 6 months	Projected 12 months	Proposed Budget	

### Operations Budget

#### Projected Revenues

N/A

#### Projected Expenses

Personnel Cost	\$ 301,101	\$ 148,094	\$ 294,398	\$ 394,222	30.93%
Professional Services	-	-	-	-	
Other Services and Charges	14,230	1,657	5,872	9,230	-35.14%
Communications	800	1,153	-	1,153	44.13%
Information Technology	2,500	-	-	2,500	0.00%
Supplies	2,150	386	772	2,150	0.00%
Operations and Maintenance	53,500	34,251	68,502	61,500	14.95%
Equipment Purchases	72,100	10,818	13,600	2,200	-96.95%
Depreciation	-	-	-	-	
<b>Total Operations Expenses</b>	<b>\$ 446,381</b>	<b>\$ 196,359</b>	<b>\$ 383,144</b>	<b>\$ 472,955</b>	<b>5.95%</b>

Department Summary						
Total Revenues	\$	-	\$	-	\$	-
Total Expenses		446,381		196,359		383,144
						472,955
						5.95%
Net Costs Allocable to Rate Centers	\$	(446,381)	\$	(196,359)	\$	(383,144)
						(472,955)
<b>Allocations to the Rate Centers</b>						
Urban Water	44.00%	\$ 196,408	\$ 86,398	\$ 168,583	\$	208,100
Crozet Water	4.00%	17,855	7,854	15,326		18,918
Scottsville Water	2.00%	8,928	3,927	7,663		9,459
		-	-	-		
Urban Wastewater	47.00%	209,799	92,289	180,078		222,289
Glenmore Wastewater	1.50%	6,696	2,945	5,747		7,094
Scottsville Wastewater	1.50%	6,696	2,945	5,747		7,094
	100.00%	\$ 446,382	\$ 196,358	\$ 383,144	\$	472,954

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2019-2020 Proposed Budget**  
**Expense Detail**

**Department: Laboratory**

Object Code	Line Item	Adopted Budget FY 2018-2019	Current Year Activity		Proposed Budget FY 2019-2020	2019	2019
			Six Month Actual 12/31/2018	Projected Year end 6/30/2019		vs. 2020 Variance \$	vs. 2020 Variance %
10000	<b>Salaries &amp; Benefits</b>						
11000	Salaries	\$ 204,800	\$ 103,026	\$ 206,052	\$ 273,465	\$ 68,665	33.53%
11010	Overtime & Holiday Pay	9,000	6,557	13,114	6,000	(3,000)	-33.33%
12010	FICA	16,356	7,996	15,992	21,379	5,023	30.71%
12020	Health Insurance	36,400	14,417	28,834	50,429	14,029	38.54%
12026	Employee Assistance Program	50	28	56	50	-	0.00%
12030	Retirement	19,702	8,151	16,302	26,307	6,605	33.52%
12040	Life Insurance	2,683	1,258	2,516	3,582	899	33.51%
12050	Fitness Program	500	260	520	500	-	0.00%
12060	Worker's Comp Insurance	4,500	2,685	3,580	5,400	900	20.00%
	<b>Subtotal</b>	<b>\$ 293,991</b>	<b>\$ 144,378</b>	<b>\$ 286,966</b>	<b>\$ 387,112</b>	<b>\$ 93,121</b>	<b>31.67%</b>
13000	<b>Other Personnel Costs</b>						
13100	Employee Dues & Licenses	\$ 500	\$ 211	\$ 422	\$ 500	\$ -	0.00%
13150	Education & Training	1,680	1,275	2,550	1,680	-	0.00%
13200	Travel & Lodging	1,930	1,820	3,640	1,930	-	0.00%
13250	Uniforms	2,000	75	150	2,000	-	0.00%
13325	Recruiting & Medical Testing	600	-	-	600	-	0.00%
13350	Other	400	335	670	400	-	0.00%
	<b>Subtotal</b>	<b>\$ 7,110</b>	<b>\$ 3,716</b>	<b>\$ 7,432</b>	<b>\$ 7,110</b>	<b>\$ -</b>	<b>0.00%</b>
20100	<b>Professional Services</b>						
20100	Legal Fees	\$ -	\$ -	\$ -	\$ -	\$ -	-
20200	Financial & Admin. Services	-	-	-	-	-	-
20250	Bond Issue Costs	-	-	-	-	-	-
20300	Engineering & Technical Services	-	-	-	-	-	-
	<b>Subtotal</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>
21100	<b>Other Services and Charges</b>						
21100	General Liability/Property Ins.	\$ 530	\$ 442	\$ 442	\$ 530	\$ -	0.00%
21150	Advertising & Communication	-	-	-	-	-	-
21250	Watershed Management	-	-	-	-	-	-
21252	EMS Programs/Supplies	-	600	1,200	-	-	-
21253	Safety Programs/Supplies	700	134	268	700	-	0.00%
21300	Authority Dues/Permits/Fees	3,000	-	3,000	3,000	-	0.00%
21350	Laboratory Analysis	4,500	481	962	4,500	-	0.00%
21400	Utilities	-	-	-	-	-	#DIV/0!
21420	General Other Services	500	-	-	500	-	0.00%
21430	Governance & Strategic Support	5,000	-	-	-	(5,000)	-
21450	Bad Debt	-	-	-	-	-	-
	<b>Subtotal</b>	<b>\$ 14,230</b>	<b>\$ 1,657</b>	<b>\$ 5,872</b>	<b>\$ 9,230</b>	<b>\$ (5,000)</b>	<b>-35.14%</b>
22000	<b>Communication</b>						
22100	Radio	\$ -	\$ -	\$ -	-	\$ -	-
22150	Telephone & Data Service	-	-	-	-	-	-
22200	Cell Phones & Pagers	800	1,153	2,306	1,153	353	44.13%
	<b>Subtotal</b>	<b>\$ 800</b>	<b>\$ 1,153</b>	<b>\$ 2,306</b>	<b>\$ 1,153</b>	<b>\$ 353</b>	<b>-</b>
31000	<b>Information Technology</b>						
31100	Computer Hardware	\$ 1,500	\$ -	\$ -	\$ 1,500	\$ -	0.00%
31150	SCADA Maint. & Support	-	-	-	-	-	-
31200	Maintenance & Support Services	800	-	-	800	-	0.00%
31250	Software Purchases	200	-	-	200	-	0.00%
	<b>Subtotal</b>	<b>\$ 2,500</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,500</b>	<b>\$ -</b>	<b>0.00%</b>
33000	<b>Supplies</b>						
33100	Office Supplies	\$ 1,500	\$ 329	\$ 658	\$ 1,500	\$ -	0.00%
33150	Subscriptions/Reference Material	300	-	-	300	-	-
33350	Postage & Delivery	350	57	114	350	-	0.00%
	<b>Subtotal</b>	<b>\$ 2,150</b>	<b>\$ 386</b>	<b>\$ 772</b>	<b>\$ 2,150</b>	<b>\$ -</b>	<b>0.00%</b>
41000	<b>Operation &amp; Maintenance</b>						
41100	Building & Grounds	\$ -	\$ -	\$ -	\$ -	\$ -	-
41150	Building & Land Lease	-	-	-	-	-	-
41200	Pump Station Maintenance	-	-	-	-	-	-
41300	Dam Maintenance	-	-	-	-	-	-
41350	Pipeline/Appurtenances	-	-	-	-	-	-



**Rivanna Water and Sewer Authority**  
**Fiscal Year 2019-2020 Proposed Budget**  
**Expense Detail**

**Department: Laboratory**

Object Code	Line Item	Adopted Budget FY 2018-2019	Current Year Activity		Proposed Budget FY 2019-2020	2019	2019
			Six Month Actual 12/31/2018	Projected Year end 6/30/2019		vs. 2020 Variance \$	vs. 2020 Variance %
41400	Materials & Supplies	30,000	17,150	34,300	30,000	-	0.00%
41450	Chemicals	15,000	6,249	12,498	15,000	-	0.00%
41500	Vehicle Maintenance	-	3,897	7,794	-	-	-
41550	Equipment Maint. & Repair	6,000	6,667	13,334	6,000	-	0.00%
41600	Instrumentation & Metering	2,000	-	-	10,000	8,000	-
41650	Fuel & Lubricants	500	288	576	500	-	-
41700	General Other Maintenance	-	-	-	-	-	-
<b>Subtotal</b>		<b>\$ 53,500</b>	<b>\$ 34,251</b>	<b>\$ 68,502</b>	<b>\$ 61,500</b>	<b>\$ 8,000</b>	<b>14.95%</b>
81000	<b>Equipment Purchases</b>						
81100	Small Equipment & Tools	\$ 500	\$ -	\$ -	\$ 500	\$ -	0.00%
81200	Rental & Leases	-	-	-	-	-	-
81250	Equipment (over \$5000)	70,000	10,018	12,000	-	(70,000)	-
81300	Vehicle Replacement Fund	1,600	800	1,600	1,700	100	6.25%
<b>Subtotal</b>		<b>\$ 72,100</b>	<b>\$ 10,818</b>	<b>\$ 13,600</b>	<b>\$ 2,200</b>	<b>\$ (69,900)</b>	<b>-96.95%</b>
95000	<b>Allocations from Departments</b>						
95100	Administrative Allocation	\$ -	\$ -	\$ -	\$ -	\$ -	-
95300	Engineering Allocation	-	-	-	-	-	-
95150	Maintenance Allocation	-	-	-	-	-	-
95200	Laboratory Allocation	-	-	-	-	-	-
<b>Subtotal</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>
Depreciation		-	-	-	\$ -	-	-
<b>Subtotal</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>
<b>Total</b>		<b>\$ 446,381</b>	<b>\$ 196,359</b>	<b>\$ 385,450</b>	<b>\$ 472,955</b>	<b>\$ 26,574</b>	<b>5.95%</b>

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## Engineering Summary

FY 2019			FY 2020	Budget % Change
Budgeted FY 2019	Actual for 6 months	Projected 12 months	Proposed Budget	

### Operations Budget

#### Projected Revenues

Payment for Services SWA

\$ - \$ 14,246 \$ 28,492 \$ -

#### Total Operations Revenues

\$ - \$ 14,246 \$ 28,492 \$ -

#### Projected Expenses

Personnel Cost	\$ 1,210,438	\$ 587,637	\$ 1,170,777	\$ 1,347,631	11.33%
Professional Services	44,000	8,252	16,504	20,000	-54.55%
Other Services and Charges	19,550	26,027	47,967	10,350	-47.06%
Communications	17,180	8,528	11,908	14,500	-15.60%
Information Technology	44,500	27,847	55,694	21,200	-52.36%
Supplies	9,500	2,026	4,052	9,800	3.16%
Operations and Maintenance	54,880	28,566	57,132	86,798	58.16%
Equipment Purchases	26,500	12,750	25,500	42,400	60.00%
Depreciation	-	-	-	-	

#### Total Operations Expenses

\$ 1,426,548 \$ 701,633 \$ 1,389,534 \$ 1,552,679 8.84%

#### Department Summary

Total Revenues	\$ -	\$ 14,246	\$ 28,492	\$ -
Total Expenses	1,426,548	701,633	1,389,534	1,552,679

8.84%

#### Net Costs Allocable to Rate Centers

\$ (1,426,548) \$ (687,387) \$ (1,361,042) \$ (1,552,679)

#### Allocations to the Rate Centers

Urban Water	47.00%	\$ 670,478	\$ 323,072	\$ 639,690	\$ 729,759
Crozet Water	4.00%	57,062	27,495	54,442	62,107
Scottsville Water	2.00%	28,531	13,748	27,221	31,054
Urban Wastewater	44.00%	627,681	302,450	598,858	683,179
Glenmore Wastewater	1.50%	21,398	10,311	20,416	23,290
Scottsville Wastewater	1.50%	21,398	10,311	20,416	23,290
	100.00%	\$ 1,426,548	\$ 687,387	\$ 1,361,043	\$ 1,552,679

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2019-2020 Proposed Budget**  
**Expense Detail**

**Department: Engineering**

Object Code	Line Item	Adopted Budget FY 2018-2019	Current Year Activity		Proposed Budget FY 2019-2020	2019	2019
			Six Month Actual 12/31/2018	Projected Year end 6/30/2019		vs. 2020 Variance \$	vs. 2020 Variance %
10000	<b>Salaries &amp; Benefits</b>						
11000	Salaries	\$ 861,350	\$ 433,776	\$ 867,552	\$ 957,874	\$ 96,524	11.21%
11010	Overtime & Holiday Pay	6,000	3,087	6,174	6,000	-	0.00%
12010	FICA	66,352	31,982	63,964	73,736	7,384	11.13%
12020	Health Insurance	134,700	57,728	115,456	151,286	16,586	12.31%
12026	Employee Assistance Program	140	98	196	150	10	7.14%
12030	Retirement	82,862	35,229	70,458	92,147	9,285	11.21%
12040	Life Insurance	11,284	5,513	11,026	12,548	1,264	11.20%
12050	Fitness Program	2,000	1,038	2,076	2,000	-	0.00%
12060	Worker's Comp Insurance	18,800	11,246	14,995	18,200	(600)	-3.19%
	<b>Subtotal</b>	<b>\$ 1,183,488</b>	<b>\$ 579,697</b>	<b>\$ 1,151,897</b>	<b>\$ 1,313,941</b>	<b>\$ 130,453</b>	<b>11.02%</b>
13000	<b>Other Personnel Costs</b>						
13100	Employee Dues & Licenses	\$ 2,200	\$ 1,295	\$ 2,590	\$ 2,500	\$ 300	13.64%
13150	Education & Training	8,450	2,544	8,088	12,840	4,390	51.95%
13200	Travel & Lodging	11,300	2,665	5,330	13,300	2,000	17.70%
13250	Uniforms	3,500	521	1,042	3,500	-	0.00%
13325	Recruiting & Medical Testing	500	55	110	550	50	10.00%
13350	Other	1,000	860	1,720	1,000	-	0.00%
	<b>Subtotal</b>	<b>\$ 26,950</b>	<b>\$ 7,940</b>	<b>\$ 18,880</b>	<b>\$ 33,690</b>	<b>\$ 6,740</b>	<b>25.01%</b>
20100	<b>Professional Services</b>						
20200	Legal Fees	\$ 25,000	\$ 143	\$ 286	\$ 5,000	\$ (20,000)	-80.00%
20200	Financial & Admin. Services	4,000	-	-	-	(4,000)	-100.00%
20250	Bond Issue Costs	-	-	-	-	-	-
20300	Engineering & Technical Services	15,000	8,109	16,218	15,000	-	0.00%
	<b>Subtotal</b>	<b>\$ 44,000</b>	<b>\$ 8,252</b>	<b>\$ 16,504</b>	<b>\$ 20,000</b>	<b>\$ (24,000)</b>	<b>-54.55%</b>
21100	<b>Other Services and Charges</b>						
21100	General Liability/Property Ins.	\$ 4,900	\$ 4,087	\$ 4,087	\$ 4,900	\$ -	0.00%
21150	Advertising & Communication	200	-	-	200	-	0.00%
21250	Watershed Management	-	-	-	-	-	-
21252	EMS Programs/Supplies	-	-	-	-	-	-
21253	Safety Programs/Supplies	4,000	644	1,288	3,000	(1,000)	-25.00%
21300	Authority Dues/Permits/Fees	1,500	1,090	2,180	1,500	-	0.00%
21350	Laboratory Analysis	250	-	-	250	-	0.00%
21400	Utilities	300	186	372	500	200	66.67%
21420	General Other Services	3,400	20,020	40,040	-	(3,400)	-100.00%
21430	Governance & Strategic Support	5,000	-	-	-	(5,000)	-
21450	Bad Debt	-	-	-	-	-	-
	<b>Subtotal</b>	<b>\$ 19,550</b>	<b>\$ 26,027</b>	<b>\$ 47,967</b>	<b>\$ 10,350</b>	<b>\$ (9,200)</b>	<b>-47.06%</b>
22000	<b>Communication</b>						
22100	Radio	\$ 8,000	\$ 4,824	\$ 4,500	\$ 4,500	\$ (3,500)	-43.75%
22150	Telephone & Data Service	1,500	697	1,394	1,500	-	0.00%
22200	Cell Phones & Pagers	7,680	3,007	6,014	8,500	820	10.68%
	<b>Subtotal</b>	<b>\$ 17,180</b>	<b>\$ 8,528</b>	<b>\$ 11,908</b>	<b>\$ 14,500</b>	<b>\$ (2,680)</b>	<b>-15.60%</b>
31000	<b>Information Technology</b>						
31100	Computer Hardware	\$ 7,000	\$ 331	\$ 662	\$ 9,000	\$ 2,000	28.57%
31150	SCADA Maint. & Support	-	-	-	-	-	-
31200	Maintenance & Support Services	34,500	27,516	55,032	9,200	(25,300)	-73.33%
31250	Software Purchases	3,000	-	-	3,000	-	0.00%
	<b>Subtotal</b>	<b>\$ 44,500</b>	<b>\$ 27,847</b>	<b>\$ 55,694</b>	<b>\$ 21,200</b>	<b>\$ (23,300)</b>	<b>-52.36%</b>
33000	<b>Supplies</b>						
33100	Office Supplies	\$ 5,000	\$ 1,854	\$ 3,708	\$ 5,000	\$ -	0.00%
33150	Subscriptions/Reference Material	4,000	33	66	4,200	200	5.00%
33350	Postage & Delivery	500	139	278	600	100	20.00%
	<b>Subtotal</b>	<b>\$ 9,500</b>	<b>\$ 2,026</b>	<b>\$ 4,052</b>	<b>\$ 9,800</b>	<b>\$ 300</b>	<b>3.16%</b>
41000	<b>Operation &amp; Maintenance</b>						
41100	Building & Grounds	\$ 18,940	\$ 7,120	\$ 14,240	\$ 29,500	\$ 10,560	55.76%
41150	Building & Land Lease	-	-	-	6,600	6,600	-
41200	Pump Station Maintenance	-	-	-	-	-	-
41300	Dam Maintenance	-	-	-	-	-	-
41350	Pipeline/Appurtenances	19,690	6,857	13,714	20,698	1,008	5.12%
41400	Materials & Supplies	4,250	1,422	2,844	4,000	(250)	-5.88%
41450	Chemicals	-	-	-	-	-	-

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2019-2020 Proposed Budget**  
**Expense Detail**

**Department: Engineering**

Object Code	Line Item	Adopted Budget FY 2018-2019	Current Year Activity		Proposed Budget FY 2019-2020	2019	2019
			Six Month Actual 12/31/2018	Projected Year end 6/30/2019		vs. 2020 Variance \$	vs. 2020 Variance %
41500	Vehicle Maintenance	6,000	9,980	19,960	20,000	14,000	233.33%
41550	Equipment Maint. & Repair	1,000	19	38	500	(500)	-50.00%
41600	Instrumentation & Metering	-	-	-	-	-	
41650	Fuel & Lubricants	5,000	3,168	6,336	5,500	500	10.00%
41700	General Other Maintenance	-	-	-	-	-	
<b>Subtotal</b>		<b>\$ 54,880</b>	<b>\$ 28,566</b>	<b>\$ 57,132</b>	<b>\$ 86,798</b>	<b>\$ 31,918</b>	<b>58.16%</b>
81000	<b>Equipment Purchases</b>						
81100	Small Equipment & Tools	\$ 8,000	\$ 3,500	\$ 7,000	\$ 23,800	\$ 15,800	197.50%
81200	Rental & Leases	-	-	-	-	-	
81250	Equipment (over \$5000)	-	-	-	-	-	
81300	Vehicle Replacement Fund	18,500	9,250	18,500	18,600	100	0.54%
<b>Subtotal</b>		<b>\$ 26,500</b>	<b>\$ 12,750</b>	<b>\$ 25,500</b>	<b>\$ 42,400</b>	<b>\$ 15,900</b>	<b>60.00%</b>
95000	<b>Allocations from Departments</b>						
95100	Administrative Allocation	\$ -	\$ -	\$ -	\$ -	\$ -	
95300	Engineering Allocation	-	-	-	-	-	
95150	Maintenance Allocation	-	-	-	-	-	
95200	Laboratory Allocation	-	-	-	-	-	
<b>Subtotal</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
Depreciation		-	-	-	-	-	
<b>Subtotal</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
<b>Total</b>		<b>\$ 1,426,548</b>	<b>\$ 701,633</b>	<b>\$ 1,389,534</b>	<b>\$ 1,552,679</b>	<b>\$ 126,131</b>	<b>8.84%</b>

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# ***APPENDICES***

***Rivanna Water and Sewer Authority***

***Fiscal Year 2019-2020***

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## Flow Projections

			(1,000 GALLONS)			(MILLION GALLONS PER DAY)		
			<u>FY 2019</u>	<u>FY 2020</u>	<u>% Change</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>% Change</u>
<b>Water</b>								
	Urban		3,397,700	3,397,700	0.00%	9.309	9.309	0.00%
	Crozet		196,946	199,053	1.07%	0.540	0.545	0.93%
	Scottsville		18,738	18,151	-3.13%	0.051	0.050	-1.96%
<b>Total</b>			<u>3,613,384</u>	<u>3,614,904</u>	<u>0.04%</u>	<u>9.900</u>	<u>9.904</u>	<u>0.04%</u>
<b>Wastewater</b>								
	Urban		3,390,400	3,390,400	0.00%	9.289	9.289	0.00%
	Glenmore		43,412	39,892	-8.11%	0.119	0.109	-8.40%
	Scottsville		19,966	21,677	8.57%	0.055	0.059	7.27%
<b>Total</b>			<u>3,453,778</u>	<u>3,451,969</u>	<u>-0.05%</u>	<u>9.463</u>	<u>9.457</u>	<u>-0.06%</u>

<b>Allocation (Urban Area Only)</b>	<u>FY 2019</u>	<u>FY 2020</u>	<u>% Change</u>
<b><u>Water</u></b>			
City	51%	51%	0.00%
ACSA	49%	49%	0.00%
<b><u>Wastewater</u></b>			
City	51%	50%	-1.96%
ACSA	49%	50%	2.04%

FY 2020 allocations are based on FY 2018 retail flows reported by the City and ACSA.

			(1,000 GALLONS)			(MILLION GALLONS PER DAY)		
			<u>FY 2019</u>	<u>FY 2020</u>	<u>% Change</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>% Change</u>
<b>Allocation (Urban Area Only)</b>								
<b><u>Water</u></b>								
	City		1,732,827	1,732,827	0.00%	4.747	4.747	0.00%
	ACSA		1,664,873	1,664,873	0.00%	4.561	4.561	0.00%
			<u>3,397,700</u>	<u>3,397,700</u>				
<b><u>Wastewater</u></b>								
	City		1,729,104	1,695,200	-1.96%	4.737	4.644	-1.96%
	ACSA		1,661,296	1,695,200	2.04%	4.551	4.644	2.04%
			<u>3,390,400</u>	<u>3,390,400</u>				

**URBAN WATER DEBT SERVICE COSTS**

**Summary of Debt Service Budget to be included in Monthly Charges**

<b>City Allocation of Debt Service Costs</b>		Estimated Debt Service Budget FY 2020	City %	City Amount	Annual Total
<b>ALLOCATION BASED ON FLOWS</b>					
<i>Regional Water System Projects:</i>					
47% of 2012A Refunding Bond		135,051	51.00%	68,876	
14.20% of 2015B Bond - New Projects		240,463	51.00%	122,636	191,512
<i>Revenues that offset Debt Service</i>					
Trust Fund Interest		(54,000)	51.00%	(27,540)	
Buck Mountain Surcharge		(125,900)	FIXED	(25,900)	
Lease Revenues		(1,600)	51.00%	(816)	(54,256)
<b>RATES BASED ON FIXED AGREEMENTS</b>					
<i>2003 &amp; 2012 Urban Water Agreement</i>					
<i>Water Supply Expansion (15%/85%)</i>					
100% of 2012B Revenue Bond		1,338,456	15.00%	200,768	
9.00% of 2015B Bond - Refunding		142,009	15.00%	21,301	
<i>Water Pipeline (20%/80%)</i>					
10.39% of 2018 Bond		234,274	20.00%	46,855	
<i>Non-Water Supply - Other Projects (48%/52%)</i>					
47.40% of 2015B Bond - Refunding		747,916	48.00%	359,000	
77.80% of 2015B Bond - New Projects		1,317,465	48.00%	632,383	
37.70% of 2018 Bond		850,062	48.00%	408,030	
<i>South Rivanna Expansion of 1999</i>					
10.30% of 2015B Bond - Refunding		162,522	0.00%	-	1,668,337
<i>Southern Loop Water Line, West Branch</i>					
3.9% of 2012A Refunding Bond		11,197	24.51%	2,744	2,744
<i>South Rivanna Connector Main</i>					
15.3% of 2012A Refunding Bond		44,083	52.00%	22,923	22,923
<b>DEBT SERVICE PROJECTED FROM 5-YEAR CIP</b>					
CIP Growth Rate from 2016-2020 CIP		736,600	FIXED	343,700	343,700
Debt Service Coverage Ratio / Policy Charge		400,000	37.00%	148,000	148,000
<b>Total Debt Service For Rate Computation</b>		<b>\$ 6,178,598</b>		<b>\$ 2,322,960</b>	<b>\$ 2,322,960</b>

<b>ACSA Allocation of Debt Service Costs</b>		Estimated Debt Service Budget FY 2020	ACSA %	ACSA Amount	Annual Total
<b>ALLOCATION BASED ON FLOWS</b>					
<i>Regional Water System Projects:</i>					
47% of 2012A Refunding Bond		135,051	49.00%	66,175	
14.20% of 2015B Bond - New Projects		240,463	49.00%	117,827	184,002
<i>Revenues that offset Debt Service</i>					
Trust Fund Interest		(54,000)	49.00%	(26,460)	
Buck Mountain Surcharge		(125,900)	FIXED	(100,000)	
Lease Revenues		(1,600)	49.00%	(784)	(127,244)
<b>RATES BASED ON FIXED AGREEMENTS</b>					
<i>2003 &amp; 2012 Urban Water Agreement</i>					
<i>Water Supply Expansion (15%/85%)</i>					
100% of 2012B Revenue Bond		1,338,456	85.00%	1,137,688	
9.00% of 2015B Bond - Refunding		142,009	85.00%	120,708	
<i>Water Pipeline (20%/80%)</i>					
10.39% of 2018 Bond		234,274	80.00%	187,419	
<i>Non-Water Supply - Other Projects (48%/52%)</i>					
47.40% of 2015B Bond - Refunding		747,916	52.00%	388,916	
77.80% of 2015B Bond - New Projects		1,317,465	52.00%	685,082	
37.70% of 2018 Bond		850,062	52.00%	442,032	
<i>South Rivanna Expansion of 1999</i>					
10.30% of 2015B Bond - Refunding		162,522	100.00%	162,522	3,124,367
<i>Southern Loop Water Line, West Branch</i>					
3.9% of 2012A Refunding Bond		11,197	75.49%	8,453	8,453
<i>South Rivanna Connector Main</i>					
15.3% of 2012A Refunding Bond		44,083	48.00%	21,160	21,160
<b>DEBT SERVICE PROJECTED FROM 5-YEAR CIP</b>					
CIP Growth Rate from 2016-2020 CIP		736,600	FIXED	392,900	392,900
Debt Service Coverage Ratio / Policy Charge		400,000	63.00%	252,000	252,000
<b>Total Debt Service For Rate Computation</b>		<b>\$ 6,178,598</b>		<b>\$ 3,855,638</b>	<b>\$ 3,855,638</b>

<b>SUMMARY OF DEBT SERVICE REVENUES:</b>			
CITY SHARE OF TOTAL DEBT SERVICE	\$	2,322,960	38%
ACSA SHARE OF TOTAL DEBT SERVICE		3,855,638	62%
	\$	6,178,598	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 2020	City %	City Amount	
<b>ALLOCATION BASED ON FLOWS</b>					
<i>System Projects Rate</i>					
	22.9% of 2015B Bond Refunding	361,335	50%	180,668	
	100% 2005A Bond VRA/VRLF	159,339	50%	79,670	
	88.5% of 2009A Bond VRA/VRLF	1,419,716	50%	709,858	
	37.9% of 2011 A,B Bond VRA/VRLF	192,130	50%	96,065	
	30.6% of 2012A Bond (new money)	370,610	50%	185,305	
	100% of 2016 Bond	627,265	50%	313,633	
	2.41% of 2018 Bond	54,341	50%	27,171	1,592,370
<i>Revenues/Reserves that offset Debt Service</i>					
	County MOU - Septage	(109,440)	50%	(54,720)	
	Use of reserves for 2016 Bond DS	-	50%	-	
	Trust Fund Interest	(96,900)	50%	(48,450)	(103,170)
<b>ALLOCATION BASED ON FIXED AGREEMENTS</b>					
<i>2014 Wastewater Agreement</i>					
Meadowcreek	97.9% of 2010A, and 13.6% of 2012A Bonds	1,107,418	Segments	908,803	
Wet Weather MCWWTP	11.5% of 2009A, and 62.1% of 2011 A/B Bonds	499,293	Segments	317,447	
Moore's Creek Pump Stn.	100% of 2011 D/E Bond	296,944	Segments	181,964	
Rivanna Pump Stn. & F.M.	7.2% of 2012A Bond & 100% of 2014A Bond	1,969,538	Segments	1,233,420	
Albemarle Berkley Pump Stn.	4.2% of 2012A Bond	50,868	0%	-	
Crozet Interceptor	2.9% of 2012A Bond & 13.78% of 2018	345,835	0%	-	
Schenks Branch Agreement	20.0% of 2012A, 2.1% of 2010A Bonds and 100% of 2015A	332,642	100%	332,642	2,974,276
<i>Four Party Rate</i>					
Regional System Projects	19.6% of 2012A Refunding Bond	56,341	N/A	18,780	
Crozet Interceptor	3.9% of 2012A Refunding Bond	11,226	N/A	3,742	
Facilities Purchase	7.2% of 2012A Refunding Bond	20,562	N/A	6,854	29,376
Moore's Creek Relief IS, Pt 1	1.6% of 2012A Refunding Bond	4,676	30%	1,403	1,403
<b>DEBT SERVICE PROJECTED FROM 5-YEAR CIP</b>					
	CIP Growth Charge from 2016-2020 CIP	230,400	Fixed	195,300	195,300
	Debt Service Coverage Ratio / Policy Charge	325,000	62%	201,500	201,500
<b>Total</b>		<b>\$ 8,229,139</b>		<b>\$ 4,891,055</b>	<b>\$ 4,891,055</b>

ACSA Allocation of Debt Service Costs		Estimated Debt Service Budget FY 2020	ACSA %	ACSA Amount	
<b>ALLOCATION BASED ON FLOWS</b>					
<i>System Projects Rate</i>					
	22.9% of 2015B Bond Refunding	361,335	50%	180,668	
	100% 2005A Bond VRA/VRLF	159,339	50%	79,670	
	88.5% of 2009A Bond VRA/VRLF	1,419,716	50%	709,858	
	37.9% of 2011 A,B Bond VRA/VRLF	192,130	50%	96,065	
	30.6% of 2012A Bond (new money)	370,610	50%	185,305	
	100% of 2016 Bond	627,265	50%	313,633	
	2.41% of 2018 Bond	54,341	50%	27,171	1,592,370
<i>Revenues that offset Debt Service</i>					
	County MOU - Septage	(109,440)	50%	(54,720)	
	Use of reserves for 2016 Bond DS	-	50%	-	
	Trust Fund Interest	(96,900)	50%	(48,450)	(103,170)
<b>ALLOCATION BASED ON FIXED AGREEMENTS</b>					
<i>2014 Wastewater Agreement</i>					
Meadowcreek	97.9% of 2010A, and 13.6% of 2012A Bonds	1,107,418	Segments	198,615	
Wet Weather MCWWTP	11.5% of 2009A, and 62.1% of 2011 A/B Bonds	499,293	Segments	181,845	
Moore's Creek Pump Stn.	100% of 2011 D/E Bond	296,944	Segments	114,981	
Rivanna Pump Stn. & F.M.	7.2% of 2012A Bond	1,969,538	Segments	736,118	
Albemarle Berkley Pump Stn.	4.2% of 2012A Bond	50,868	100%	50,868	
Crozet Interceptor	2.9% of 2012A Bond & 13.78% of 2018	345,835	100%	345,835	
Schenks Branch Agreement	20.0% of 2012A, 2.1% of 2010A Bonds and 100% of 2015A	332,642	0%	-	1,628,262
<i>Four Party Rate</i>					
Regional System Projects	19.6% of 2012A Refunding Bond	56,341	N/A	37,561	
Crozet Interceptor	3.9% of 2012A Refunding Bond	11,226	N/A	7,484	
Facilities Purchase	7.2% of 2012A Refunding Bond	20,562	N/A	13,708	58,753
Moore's Creek Relief IS, Pt 1	1.6% of 2012A Refunding Bond	4,676	70%	3,273	3,273
<b>DEBT SERVICE PROJECTED FROM 5-YEAR CIP</b>					
	CIP Growth Charge from 2016-2020 CIP	230,400	Fixed	35,100	35,100
	Debt Service Coverage Ratio / Policy Charge	325,000	38%	123,500	123,500
<b>Total</b>		<b>\$ 8,229,139</b>		<b>\$ 3,338,088</b>	<b>\$ 3,338,088</b>

<b>SUMMARY OF DEBT SERVICE REVENUES:</b>			
CITY SHARE OF TOTAL DEBT SERVICE	\$	4,891,055	59%
ACSA SHARE OF TOTAL DEBT SERVICE		3,338,088	41%
	\$	8,229,143	100%

## OTHER RATE CENTERS DEBT SERVICE RATES

### Summary of Debt Service Payments Due

	Existing Estimated Debt Service Budget FY 2020	Estimated New Debt Service	Total Annual Debt Service	ACSA Monthly Rate
<b>WATER</b>				
<u>Crozet Water</u>				
System Upgrades				
1.0% of 2012A Refunding Bond	\$ 2,830			
17.0% of 2012A Bond (new money)	205,894			
7.4% of 2015B Bond Refunding	116,763			
5.9% of 2015B Bond New Projects	99,911			
35.72% of 2018 Bond	805,417			
Estimated DS - CIP Growth in Rate		\$ 86,000		
Revenues that offset Debt Service				
Trust Fund Interest	(5,500)			
	\$ 1,225,315	\$ 86,000	\$ 1,311,315	\$ 109,276
<u>Scottsville Water</u>				
System Upgrades				
0.2% of 2012A Refunding Bond	\$ 492			
4.2% of 2012A Bond (new money)	50,868			
2.7% of 2015B Bond Refunding	42,603			
2.1% of 2015B Bond New Projects	35,561			
Estimated DS - CIP Growth in Rate		925		
Revenues that offset Debt Service				
Trust Fund Interest	(1,700)			
	\$ 127,824	\$ 925	\$ 128,749	\$ 10,729
<b>WASTEWATER</b>				
<u>Glenmore Wastewater</u>				
System Upgrades				
0.10% of 2015B Bond Refunding	\$ 1,578			
Revenues that offset Debt Service		2,200		
Trust Fund Interest	-			
	1,578	2,200	\$ 3,778	\$ 315
<u>Scottsville Wastewater</u>				
Facilities Purchase				
0.3% of 2012A Refunding Bond	\$ 953			
System Upgrades				
0.3% of 2012A Bond (new money)	3,633			
0.20% of 2015B Bond Refunding	3,156			
Estimated DS - CIP Growth in Rate		1,800		
Revenues that offset Debt Service				
Trust Fund Interest	(100)			
	\$ 7,642	\$ 1,800	\$ 9,442	\$ 787
<b>TOTAL</b>	<b>\$ 1,362,359</b>	<b>\$ 90,925</b>	<b>\$ 1,453,284</b>	<b>\$ 121,107</b>

**DEBT SUMMARY**

	Total Revenue Bond Debt	Total FY 2020 Debt Service	Total FY 2019 Debt Service
<b><u>CURRENT EXISTING DEBT</u></b>			
<b><u>DEBT BY BOND ISSUE</u></b>			
2005 A Bond VRA/VRLF	1,063,050	159,339	159,339
2009A Bond	15,812,877	1,604,199	1,604,199
2010A Bond	9,816,467	962,522	962,521
2011A Bond	4,869,766	443,608	443,608
2011B Bond	695,230	63,332	63,331
2011D,E Bond	3,373,638	296,944	296,944
2012A Bond (refunding & new money)	18,425,000	1,498,556	1,572,609
2012B Bond	22,715,000	1,338,456	1,337,656
2014A Bond	25,954,584	1,882,336	1,882,336
2015A Bond	1,052,840	70,593	70,593
2015B Bond (refunding & new money)	40,460,000	3,271,281	3,275,338
2016 Bond	9,198,000	627,265	626,924
2018 Bond	36,855,000	2,254,806	
	<b>\$ 190,291,452</b>	<b>\$ 14,473,237</b>	<b>\$ 12,295,398</b>

Ratio of Debt / Debt Service 7.6%

**PRINCIPAL AND INTEREST PAYMENTS BY CENTER - Annual**

Urban Water		5,223,498	4,190,796
Crozet Water		1,230,815	426,071
Scottsville Water		129,524	129,680
Urban Wastewater		7,880,079	7,539,261
Glenmore Wastewater		1,578	1,586
Scottsville Wastewater		7,742	8,006
	<b>\$ -</b>	<b>\$ 14,473,237</b>	<b>\$ 12,295,398</b>

## Stone Robinson School WWTP Estimated Charges

	<i>Total</i>	<i>Monthly</i>
<b>Expenses</b>		
<i>Fixed Costs</i>		
Wages	\$ 6,531	
Benefits	3,426	
Mileage	1,693	
Subtotal	\$ 11,650	
Overhead at 35%	4,078	
Total Fixed Charge	\$ 15,728	
<i>Variable Costs</i>		
Repairs, Maintenance, Other	\$ 5,000	
Overhead at 35%	1,750	
Total Variable Charge	\$ 6,750	
Total Annual Charge Estimate	\$ 22,478	\$ 1,873

## Red Hill Community Water System Estimated Charges

	<i>Total</i>	<i>Monthly</i>
<b>Expenses</b>		
<i>Fixed Costs</i>		
Wages	\$ 21,500	
Benefits	3,995	
Mileage	6,322	
Subtotal	\$ 31,817	
Overhead at 35%	11,136	
Total Fixed Charge	\$ 42,953	
<i>Variable Costs</i>		
Repairs, Maintenance, Other	\$ 39,000	
Overhead at 35%	13,650	
Total Variable Charge	\$ 52,650	
Total Annual Charge Estimate	\$ 95,603	\$ 7,967

All Rate Centers

**Detailed Summary of Revenues**

	<i>FY 2019</i>	<i>FY 2020</i>	<i>\$ Change</i>	<i>% Change</i>
<b><u>OPERATIONS</u></b>				
<b>Operations Rate Revenues</b>	\$ 16,387,174	\$ 17,381,293	\$ 994,119	6.07%
<b>Other Operations Revenues</b>				
Interest Allocation	\$ 28,050	\$ 31,500	\$ 3,450	12.30%
Red Hill Community Water System	-	-	-	
Stone Robinson WWTP	28,084	22,478	(5,606)	-19.96%
Septage/Sludge Acceptance	410,000	450,000	40,000	9.76%
Leases	100,000	100,000	-	0.00%
Administration	462,000	468,000	6,000	1.30%
Nutrient Credits	90,000	90,000	-	0.00%
Use of Reserves	-	667,000	667,000	0.00%
Miscellaneous	-	10,000	10,000	
	<u>\$ 1,118,134</u>	<u>\$ 1,838,978</u>	<u>\$ 720,844</u>	<u>64.47%</u>
<b>Total Operations Revenues</b>	<u>\$ 17,505,308</u>	<u>\$ 19,220,271</u>	<u>\$ 1,714,963</u>	<u>9.80%</u>
<b><u>DEBT SERVICE</u></b>				
<b>Debt Service Rate Revenues</b>				
City	\$ 7,071,216	\$ 7,214,015	\$ 142,799	2.02%
ACSA	7,781,315	8,647,007	865,692	11.13%
	<u>\$ 14,852,531</u>	<u>\$ 15,861,022</u>	<u>\$ 1,008,491</u>	<u>6.79%</u>
<b>Other Debt Service Revenues</b>				
Interest	390,400	848,200	457,800	117.26%
Urban WW Reserves Used	300,000	-	(300,000)	
County MOU - Septage	109,440	109,440	-	0.00%
Buck Mountain Surcharge	118,600	125,900	7,300	6.16%
Leases	1,600	1,600	-	0.00%
	<u>\$ 920,040</u>	<u>\$ 1,085,140</u>	<u>\$ 165,100</u>	<u>17.94%</u>
<b>Total Debt Service Revenues</b>	<u>\$ 15,772,571</u>	<u>\$ 16,946,162</u>	<u>\$ 1,173,591</u>	<u>7.44%</u>
<b>Total Revenues</b>	<u>\$ 33,277,879</u>	<u>\$ 36,166,433</u>	<u>\$ 2,888,554</u>	<u>8.68%</u>

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2019-2020 Proposed Budget**  
**Expense Detail**

**Authority as a Whole**

Object Code	Line Item	Adopted Budget FY 2018-2019	Current Year Activity		Proposed Budget FY 2019-2020	2019 vs. 2020 Variance \$	2019 vs. 2020 Variance %
			Six Month Actual 12/31/2018	Projected Year end 6/30/2019			
10000	<b>Salaries &amp; Benefits</b>						
11000	Salaries	\$ 5,683,450	\$ 2,710,493	\$ 5,420,986	\$ 5,876,908	\$ 193,458	3.40%
11010	Overtime Pay	247,500	151,367	302,734	285,500	38,000	15.35%
12010	FICA	453,719	205,279	410,558	471,423	17,704	3.90%
12020	Health Insurance	1,128,890	510,137	1,020,274	1,182,867	53,977	4.78%
12026	Employee Assistance Program	1,245	797	1,594	1,256	11	0.88%
12030	Retirement	546,749	216,825	433,650	565,358	18,609	3.40%
12040	Life Insurance	74,453	33,734	67,468	76,986	2,533	3.40%
12050	Fitness Program	10,650	5,709	11,418	11,160	510	4.79%
12060	Worker's Comp Insurance	93,000	55,487	73,984	89,500	(3,500)	-3.76%
	<b>Subtotal</b>	<b>\$ 8,239,656</b>	<b>\$ 3,889,828</b>	<b>\$ 7,742,666</b>	<b>\$ 8,560,958</b>	<b>\$ 321,302</b>	<b>3.90%</b>
13000	<b>Other Personnel Costs</b>						
13100	Employee Dues & Licenses	\$ 10,890	\$ 3,035	\$ 7,440	\$ 11,190	\$ 300	2.75%
13150	Education & Training	79,130	25,126	63,534	83,520	4,390	5.55%
13200	Travel & Lodging	33,850	9,528	19,056	35,250	1,400	4.14%
13250	Uniforms	47,615	24,019	48,038	48,515	900	1.89%
13325	Recruiting & Medical Testing	6,450	3,450	6,900	6,300	(150)	-2.33%
13350	Other	12,195	14,577	27,154	14,345	2,150	17.63%
	<b>Subtotal</b>	<b>\$ 190,130</b>	<b>\$ 79,735</b>	<b>\$ 172,122</b>	<b>\$ 199,120</b>	<b>\$ 8,990</b>	<b>4.73%</b>
20100	<b>Professional Services</b>						
20100	Legal Fees	\$ 94,000	\$ 54,199	\$ 108,398	\$ 85,000	\$ (9,000)	-9.57%
20200	Financial & Admin. Services	72,000	15,067	68,000	69,000	(3,000)	-4.17%
20250	Bond Issue Costs	-	-	-	-	-	0.00%
20300	Engineering & Technical Services	544,250	326,279	712,558	512,050	(32,200)	-5.92%
	<b>Subtotal</b>	<b>\$ 710,250</b>	<b>\$ 395,545</b>	<b>\$ 888,956</b>	<b>\$ 666,050</b>	<b>\$ (44,200)</b>	<b>-6.22%</b>
21100	<b>Other Services and Charges</b>						
21100	General Liability/Property Ins.	\$ 144,750	\$ 120,740	\$ 120,740	\$ 144,090	\$ (660)	-0.46%
21150	Advertising & Communication	15,425	12,189	24,378	15,425	-	0.00%
21250	Watershed Management	125,000	28,687	115,000	112,000	(13,000)	-10.40%
21252	EMS Programs/Supplies	1,000	1,562	3,124	500	(500)	-50.00%
21253	Safety Programs/Supplies	40,790	30,813	91,626	104,687	63,897	156.65%
21300	Authority Dues/Permits/Fees	89,300	50,429	94,472	91,400	2,100	2.35%
21350	Laboratory Analysis	110,480	52,949	110,544	131,000	20,520	18.57%
21400	Utilities	1,311,700	816,241	1,632,482	1,323,600	11,900	0.91%
21420	General Other Services	839,610	587,185	1,175,812	1,017,910	178,300	21.24%
21430	Governance & Strategic Support	131,680	16,531	33,062	35,000	(96,680)	-73.42%
21450	Bad Debt	5,000	-	5,000	5,000	-	-
	<b>Subtotal</b>	<b>\$ 2,814,735</b>	<b>\$ 1,717,326</b>	<b>\$ 3,406,240</b>	<b>\$ 2,980,612</b>	<b>\$ 165,877</b>	<b>5.89%</b>
22000	<b>Communication</b>						
22100	Radio	\$ 26,420	\$ 24,135	\$ 24,892	\$ 22,940	\$ (3,480)	-13.17%
22150	Telephone & Data Service	74,525	41,402	82,804	74,600	75	0.10%
22200	Cell Phones & Pagers	42,160	23,122	46,244	45,053	2,893	6.86%
	<b>Subtotal</b>	<b>\$ 143,105</b>	<b>\$ 88,659</b>	<b>\$ 153,940</b>	<b>\$ 142,593</b>	<b>\$ (512)</b>	<b>-0.36%</b>
31000	<b>Information Technology</b>						
31100	Computer Hardware	\$ 47,700	\$ 13,231	\$ 35,688	\$ 63,900	\$ 16,200	33.96%
31150	SCADA Maint. & Support	170,100	25,431	152,782	138,500	(31,600)	-18.58%
31200	Maintenance & Support Services	100,800	50,585	116,582	104,750	3,950	3.92%
31250	Software Purchases	22,850	8,759	17,918	45,600	22,750	99.56%
	<b>Subtotal</b>	<b>\$ 341,450</b>	<b>\$ 98,006</b>	<b>\$ 322,970</b>	<b>\$ 352,750</b>	<b>\$ 11,300</b>	<b>3.31%</b>
33000	<b>Supplies</b>						
33100	Office Supplies	\$ 29,600	\$ 11,951	\$ 23,952	\$ 29,700	\$ 100	0.34%
33150	Subscriptions/Reference Material	5,920	498	1,006	5,430	(490)	-8.28%
33350	Postage & Delivery	8,400	7,196	14,692	11,050	2,650	31.55%
	<b>Subtotal</b>	<b>\$ 43,920</b>	<b>\$ 19,645</b>	<b>\$ 39,650</b>	<b>\$ 46,180</b>	<b>\$ 2,260</b>	<b>5.15%</b>
41000	<b>Operation &amp; Maintenance</b>						
41100	Building & Grounds	\$ 328,340	\$ 129,612	\$ 280,538	\$ 361,600	\$ 33,260	10.13%
41150	Building & Land Lease	32,500	33,729	35,145	43,200	10,700	32.92%
41200	Pump Station Maintenance	102,500	51,278	107,556	114,500	12,000	11.71%
41300	Dam Maintenance	99,500	50,876	103,252	146,990	47,490	47.73%
41350	Pipeline/Appurtenances	369,850	274,650	974,400	328,298	(41,552)	-11.23%
41400	Materials & Supplies	132,150	82,912	166,224	135,900	3,750	2.84%
41450	Chemicals	1,564,900	940,930	2,600,860	2,682,190	1,117,290	71.40%
41500	Vehicle Maintenance	38,200	53,545	107,980	59,600	21,400	56.02%



**Rivanna Water and Sewer Authority**  
**Fiscal Year 2019-2020 Proposed Budget**  
**Expense Detail**

**Authority as a Whole**

Object Code	Line Item	Adopted Budget FY 2018-2019	Current Year Activity		Proposed Budget FY 2019-2020	2019 vs. 2020 Variance \$	2019 vs. 2020 Variance %
			Six Month Actual 12/31/2018	Projected Year end 6/30/2019			
41550	Equipment Maint. & Repair	609,500	346,210	702,420	669,000	59,500	9.76%
41600	Instrumentation	184,420	49,762	160,024	328,400	143,980	78.07%
41650	Fuel & Lubricants	93,800	46,981	93,962	95,800	2,000	2.13%
41700	General Other Maintenance	164,000	79,773	139,546	104,000	(60,000)	-36.59%
<b>Subtotal</b>		<b>\$ 3,719,660</b>	<b>\$ 2,140,258</b>	<b>\$ 5,471,907</b>	<b>\$ 5,069,478</b>	<b>\$ 1,349,818</b>	<b>36.29%</b>
81000	<b>Equipment Purchases</b>						
81100	Small Equipment & Tools	\$ 53,050	\$ 42,802	\$ 85,604	\$ 70,850	\$ 17,800	33.55%
81200	Rental & Leases	14,300	5,793	46,586	16,800	2,500	17.48%
81250	Equipment (over \$5000)	196,800	104,613	175,990	56,800	(140,000)	-71.14%
81300	Vehicle Replacement Fund	195,250	97,625	195,250	215,100	19,850	10.17%
<b>Subtotal</b>		<b>\$ 459,400</b>	<b>\$ 250,833</b>	<b>\$ 503,430</b>	<b>\$ 359,550</b>	<b>\$ (99,850)</b>	<b>-21.73%</b>
95000	<b>Allocations from Departments</b>						
95100	Administrative Allocation	\$ -	\$ -	\$ -	\$ -	\$ -	-
95300	Engineering Allocation	-	-	-	-	-	-
95150	Maintenance Allocation	-	-	-	-	-	-
95200	Laboratory Allocation	-	-	-	-	-	-
<b>Subtotal</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>-</b>
Depreciation		843,000	421,500	843,000	\$ 843,000	-	0.00%
<b>Subtotal</b>		<b>\$ 843,000</b>	<b>\$ 421,500</b>	<b>\$ 843,000</b>	<b>\$ 843,000</b>	<b>\$ -</b>	<b>0.00%</b>
<b>Total</b>		<b>\$ 17,505,306</b>	<b>\$ 9,101,335</b>	<b>\$ 19,544,881</b>	<b>\$ 19,220,291</b>	<b>\$ 1,714,985</b>	<b>9.80%</b>

Audit Check	
Less revenue allocation in Admin.	(468,000)
Less revenue allocation in Maint.	(10,000)
Less revenue allocation in Eng.	-
Detail Check on Expenses	\$ 18,742,291
Total Summary Sheet Rate Center Only	
	\$ 18,742,287

## RWSA Staffing by Department

	Approved Positions FY 2019	Changes	Positions FY 2020
<b>OPERATIONS</b>			
<b><u>Engineering &amp; Maintenance</u></b>			
Director of Engineering & Maintenance	1		1
<b>Engineering Department</b>			
Engineering Manager	1		1
Senior Civil, Civil Engineers	4		4
Water Resources Manager (moved from Water)	1		1
Engineering Technician/Inspector/GIS	3	1	4
GIS Coordinator (moved to Admin)	0		0
Administrative Office Technician	1		1
<b>(Director FTE included) Subtotal</b>	<b>11</b>	<b>1</b>	<b>12</b>
<b>Maintenance Department</b>			
Maintenance Manager	1		1
Maintenance Supervisor	1		1
Mechanics	10		10
Industrial Controls/Instrumentation Specialist	1		1
Vehicle Equipment Mechanic	1		1
Mechanic Helper	1		1
Maintenance Workers	2		2
<b>Subtotal</b>	<b>17</b>		<b>17</b>
<b><u>Operations</u></b>			
Director of Operations	1		1
<b>Laboratory</b>			
Laboratory Manager	1		1
Chemist	1	1	2
Lab Technician	1		1
<b>Subtotal</b>	<b>3</b>	<b>1</b>	<b>4</b>
<b>Wastewater Department</b>			
Wastewater Manager	1		1
Wastewater Assistant Manager	1		1
Treatment Supervisor	1		1
<b>Plant Operators (14 total)</b>			
Operators - Relief Shift Differential all plants	2		2
Operators - Urban	9		9
Operator - Glenmore	1		1
Operator - Scottsville	1		1
<b>Subtotal</b>	<b>16</b>		<b>16</b>
<b>Water Department</b>			
Water Manager	1		1
Water Assistant Manager	1		1
Water Quality Specialist	1		1

## RWSA Staffing by Department

	Approved Positions FY 2019	Changes	Positions FY 2020
<b>OPERATIONS</b>			
Water Treatment Plant Supervisor	2		2
<u>Plant Operators</u>			
Operators - Relief Shift Differential all plants	3		3
Operators - Urban	14.4	-0.5	13.9
Operators - Crozet	2.6		2.6
Operators - Scottsville	1.4	0.5	1.9
<b>Subtotal</b>	<b>26.4</b>	<b>-</b>	<b>26.4</b>
<b>Subtotal</b>	<b>74.4</b>	<b>2</b>	<b>76.4</b>

### Joint Administrative Staff

			FTE Split		
			RWSA	SWA	
Executive Director	1	1	0.85	0.15	1.00
Communications Manager/Executive Coordinator	1	1	0.60	0.40	1.00
Director of Finance & Administration	1	1	0.80	0.20	1.00
Office/HR Manager	1	1	0.80	0.20	1.00
Accountant	1	1	0.80	0.20	1.00
Payroll & Benefits Coordinator	1	1	0.75	0.25	1.00
Accounts Payable/Purchasing Technician	1	1	0.75	0.25	1.00
Accounts Receivable Technician	1	1	0.30	0.70	1.00
Reception/Secretary III	1	1	0.75	0.25	1.00
Administrative Office Technician	1	1	0.70	0.30	1.00
Environmental & Safety Manager	1	1	0.70	0.30	1.00
<u>IT/SCADA</u>					
Information Systems Administrator	1	1	0.60	0.40	1.00
Information Systems Asst. Administrator	1	1	0.60	0.40	1.00
GIS Coordinator (moved from Engineering)	1	1	1.00	0.00	1.00
Software Analyst	1	1	0.80	0.20	1.00
IT Specialist - SCADA	1	1	1.00	0.00	1.00
SCADA Technician	1	1	1.00	0.00	1.00
<b>Administration and allocation with RSWA</b>	<b>17</b>	<b>17</b>	<b>12.80</b>	<b>4.20</b>	

Total all positions	91.40	2.00	93.40
FTE Position Allocated to RSWA	<u>-3.95</u>		<u>-4.20</u>
Total Adjusted FTEs	87.45		89.20

**Data for ACSA**

	<u>FY 2019</u>	<u>FY 2020</u>	<u>Change</u>
<b>Total RWSA Expenses</b>			
Water	\$ 15,872,000	\$ 17,675,000	\$ 1,803,000
Wastewater	16,943,000	18,013,000	1,070,000
Add Administration revenue allocation	462,000	468,000	6,000
Add Maintenance revenue allocation	-	10,000	10,000
Add Engineering revenue allocation	-	-	-
			-
Total	<u>\$ 33,277,000</u>	<u>\$ 36,166,000</u>	<u>\$ 2,889,000</u>

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

Urban	\$ 7,138,223	<b>\$ 7,343,723</b>	\$ 205,500
Crozet	1,952,952	2,340,120	387,168
Scottsville	572,608	649,561	76,953
Total	<u>\$ 9,663,783</u>	<u>\$ 10,333,404</u>	<u>\$ 669,621</u>

**Wastewater**

Urban	\$ 6,521,468	<b>\$ 7,354,898</b>	\$ 833,430
Scottsville	309,878	318,430	8,552
Stone Robinson School	28,084	22,478	(5,606)
Glenmore	374,306	374,302	(4)
			-
Total	<u>\$ 7,233,736</u>	<u>\$ 8,070,108</u>	<u>\$ 836,372</u>

<b>Total for ACSA</b>	<u><b>\$ 16,897,519</b></u>	<u><b>\$ 18,403,512</b></u>	<u><b>\$ 1,505,993</b></u>
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# Capital Improvement Plan

Fiscal Years  
2020 - 2024

DRAFT  
March 2019



South Rivanna Water Treatment Plant



Birdwood Golf Course Waterline



Crozet Water Treatment Plant



Observatory Water Treatment Plant



Beaver Creek Dam



Rivanna Water & Sewer Authority

695 Moores Creek Lane, Charlottesville, Virginia 22902

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## Introduction

The Capital Improvement Plan (CIP) for Fiscal Years 2020-2024 has been prepared as a strategic and financially responsible plan for the Rivanna Water and Sewer Authority (RWSA) to complete major infrastructure construction projects. The projects included in the CIP are necessary to achieve the RWSA's core mission of providing safe, high-quality drinking water and environmentally responsible wastewater treatment services for the City of Charlottesville and the Albemarle County Service Authority (ACSA). The CIP is a 5-year planning document which provides an estimated budget and schedule for projects as they advance through the design and construction process.

The infrastructure requirements of the Capital Improvement Plan are developed through our Asset Management and Master Planning programs to address water and wastewater capacity demands, regulatory mandates and rehabilitation needs. Each year, these projects are reviewed and prioritized by the RWSA management team and brought forth for review by the Board of Directors.

During the past year, several capital projects were very near completion or are no longer needed, and as such are being removed from the 2020-2024 CIP. These projects account for approximately \$51.1 million or 33.2% of FY 19-23 CIP. These projects include:

- Interconnect Lower Sugar Hollow and Ragged Mountain Raw Water Mains
- Flow Meter and Auto Valve on Sugar Hollow to Ragged Mountain Transfer
- Route 29 Pump Station Site Acquisition
- Urban Water GAC and Water Treatment Plant Improvement
- Wholesale Water Master Metering – Urban
- Crozet Water GAC and Water Treatment Improvement
- Crozet Water Treatment Plant – Finished Water Pump Station
- Crozet Water System – Master Plan
- Scottsville Water GAC
- Crozet Interceptor Pump Stations – Bypass Fittings and Isolation Valves
- Moores Creek AWRRF Bridge Repairs
- Moores Creek AWRRF Odor Control – Phase 2
- Moores Creek AWRRF Roof Replacements
- Moores Creek AWRRF Second Centrifuge

The total 5-year 2020-2024 CIP is approximately \$97.2 million, with the previous expenditures on active projects totaling approximately \$2.8 million, leaving a net proposed 5-year projected expenditure of \$94.4 million.

There are several new projects added to the CIP this year, with a total estimated expenditures of \$4.18 million from 2020-2024, including:

- South Rivanna Dam – Gate Repair (\$0.9 million)
- North Rivanna Water Treatment Plant – Upgrades (\$2.325 million)

- Scottsville Water Treatment Plant LT2 Improvements (\$0.1 million)
- Albemarle Berkley Basin Demolition (\$0.2 million)
- IT Master Plan – Software (\$0.45 million)

There are a few projects where the proposed budgets have been modified based on the anticipated project requirements and necessitate funding adjustments. The projects with changes include:

- Ragged Mountain Reservoir to Observatory WTP Raw Waterline (\$4.12 million existing / \$3.217 million proposed)
- Ragged Mountain Reservoir to Observatory WTP Pump Station (\$2.41 million existing / \$0.66 million proposed)
- Observatory WTP Improvements (\$18.6 million existing / \$19.7 million proposed)
- Sugar Hollow Dam Rubber Crest Gate Replacement (\$0.94 million existing / \$1.14 million proposed)
- Avon to Pantops Water Main (\$13.2 million existing / \$2.10 million proposed)
- South Rivanna Hydropower Decommissioning (\$0.4 million existing / \$0.725 million proposed)
- Beaver Creek Dam Alteration (\$8.83 million existing / \$4.90 million proposed)
- New Raw Water Pump Station and Intake (\$6.1 million existing / \$4.14 million proposed)
- Upper Schenks Branch Interceptor (\$4.49 million existing / \$3.99 million proposed)
- Interceptor Sewer & Manhole Repair (\$1.941 million existing / \$1.088 million proposed)
- Crozet Flow Equalization Tank (\$3.3 million existing / \$4.86 million proposed)
- Maury Hill Branch Sewer Replacement (\$0.29 million existing / \$0 million proposed)
- Engineering and Administration Building (\$3.0 million existing / \$0 million proposed)
- Moores Creek AWRRF Master Plan (\$0.1 million existing / \$0.25 million proposed)
- Moores Creek AWRRF Mechanical Thickener (\$1.2 million existing / \$0 million proposed)
- Grinder and Air Control Improvements (\$0.10 million existing / \$0.21 million proposed)
- Radio Upgrades (\$0.52 million existing / \$0.65 million proposed)
- Security Enhancements (\$2.4 million existing / \$1.0 million proposed)



**FINANCIAL SUMMARY**  
**MAJOR SYSTEM CATEGORIES**

## FINANCIAL SUMMARY

### Major System Categories – Water

System Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress
	Current CIP	Proposed Changes	Current Capital Budget	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024		
<b>Urban Water (UW)</b>										
Community Water Supply Plan	\$8,831,000	\$1,351,000	\$3,240,249	\$2,470,000	\$594,751	\$575,000	\$1,307,000	\$1,995,000	\$10,182,000	\$123,782
Observatory WTP & Ragged Mountain/Sugar Hollow Reservoir System	\$19,570,000	\$1,270,000	\$2,703,198	\$415,000	\$6,371,802	\$7,850,000	\$3,500,000	\$0	\$20,840,000	\$1,154,558
Finished Water Storage/Distribution	\$22,090,000	(\$10,560,086)	\$2,782,000	\$583,914	\$2,667,000	\$4,205,000	\$567,000	\$725,000	\$11,529,914	\$178,046
South & North Fork Rivanna Water System	\$7,900,000	\$11,050,000	\$581,891	\$9,474,524	\$7,893,585	\$1,000,000	\$0	\$0	\$18,950,000	\$145,516
<b>Subtotal (UW)</b>	\$58,391,000	\$3,110,914	\$9,307,338	\$12,943,438	\$17,527,138	\$13,630,000	\$5,374,000	\$2,720,000	\$61,501,914	\$1,601,902
<b>Non-Urban Water (NUW)</b>										
Crozet Water System	\$23,030,000	(\$5,307,000)	\$4,221,690	\$5,016,310	\$1,317,000	\$943,000	\$835,000	\$5,390,000	\$17,723,000	\$702,248
Scottsville Water System	\$0	\$245,000	\$145,000	\$100,000	\$0	\$0	\$0	\$0	\$245,000	\$0
<b>Subtotal (NUW)</b>	\$23,030,000	(\$5,062,000)	\$4,366,690	\$5,116,310	\$1,317,000	\$943,000	\$835,000	\$5,390,000	\$17,968,000	\$702,248
<b>WATER TOTAL</b>	\$81,421,000	(\$1,951,086)	\$13,674,028	\$18,059,748	\$18,844,138	\$14,573,000	\$6,209,000	\$8,110,000	\$79,469,914	\$2,304,150

# FINANCIAL SUMMARY

## Major System Categories – Wastewater

	Five-Year Capital Program			Projected Future Expenses by Year						
System Description	Current CIP	Proposed Changes	Current Capital Budget	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Recommended CIP	Work-in-Progress
Urban Wastewater (UWW)										
Wastewater Interceptors and Pumping Stations	\$11,161,000	\$142,330	\$3,077,945	\$3,680,000	\$3,710,385	\$585,000	\$250,000	\$0	\$11,303,330	\$449,438
Moore's Creek AWWRF	\$7,251,632	(\$3,802,000)	\$2,951,632	\$50,000	\$448,000	\$0	\$0	\$0	\$3,449,632	\$65,743
Subtotal (UWW)	\$18,412,632	(\$3,659,670)	\$6,029,577	\$3,730,000	\$4,158,385	\$585,000	\$250,000	\$0	\$14,752,962	\$515,181
Non-Urban Wastewater (NUWW)										
Scottsville WRRF	\$100,000	\$110,000	\$0	\$65,000	\$145,000	\$0	\$0	\$0	\$210,000	\$0
Glenmore WRRF	\$111,000	\$64,000	\$25,000	\$85,000	\$65,000	\$0	\$0	\$0	\$175,000	\$0
Subtotal (NUWW)	\$211,000	\$174,000	\$25,000	\$150,000	\$210,000	\$0	\$0	\$0	\$385,000	\$0
WASTEWATER TOTAL	\$18,623,632	(\$3,485,670)	\$6,054,577	\$3,880,000	\$4,368,385	\$585,000	\$250,000	\$0	\$15,137,962	\$515,181
All Systems Security & Technology	\$3,421,000	(\$825,000)	\$991,000	\$980,000	\$475,000	\$150,000	\$0	\$0	\$2,596,000	\$28,337
TOTAL	\$103,465,632	(\$6,261,756)	\$20,719,605	\$22,919,748	\$23,687,523	\$15,308,000	\$6,459,000	\$8,110,000	\$97,203,876	\$2,847,668

## **PROJECT DETAILS**

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## Completed Projects

During fiscal year 2019, several capital improvement projects were completed, were advanced to the final phases of close-out, or were determined to be no longer necessary. As such they will be removed from consideration in future planning documents. Presented in the table below are the fourteen (14) completed projects, pertinent information on the adopted budgets, as well as the projected final costs and any anticipated savings. There was a total completed projects cost savings of \$2.1 million.

6. Interconnect Lower Sugar Hollow and Ragged Mountain Raw Water Mains: The two 18-inch water mains that supply water from Ragged Mountain Reservoir to Observatory Water Treatment Plant are 72 and 110 years old, respectively. 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 water to the Observatory Water Treatment Plant. This project was to interconnect the two raw water lines near the Rt. 29/Fontaine Avenue interchange. As design work proceeded, the cost of the project exceeded the potential benefit. With a new replacement water main anticipated by FY 2026, the interconnect project is being eliminated from the CIP.
7. Sugar Hollow to Ragged Mountain Reservoir Transfer Flow Meter: The Sugar Hollow Raw Waterline is an 18-inch diameter cast iron pipeline which conveys water from Sugar Hollow Reservoir to Ragged Mountain Reservoir. The waterline discharges directly into the Ragged Mountain Reservoir and is used to supplement inflow. Prior to this project, the control valve used to modulate flow between the two reservoirs was a manually-operated gate valve at the Sugar Hollow Gatekeeper's House near the Sugar Hollow Dam. This required RWSA staff to travel to the Sugar Hollow Gatekeeper's House to operate the valve, which given the limited cellular communication in that area, posed a potential safety hazard. In addition, prior to the project, there were limited means to monitor and record flow between the two reservoirs. In this project, one of RWSA's On-Call Maintenance Construction Contractors installed a new 18-inch flow meter, a modulating control valve, and new power and SCADA control wiring, to provide the means to effectively regulate the flow between the two reservoirs remotely from the Observatory Water Treatment Plant. Also, an existing, original 18-inch diameter gate valve upstream of the new 18-inch flow meter was replaced to provide redundancy in the system.

In addition to the improvements on the raw waterline, this project included the complete demolition of several previously abandoned structures including the Sugar Hollow Gatekeeper's House and four smaller utility buildings and sheds. As a result of the demolition process, the majority of RWSA-owned utilities and structures on the site are at or below grade, which enables the property to have more beneficial use in the future.

9. Rt. 29 Pump Station Site Acquisition: This project provided site acquisition for a new Rt. 29 Pump Station and Storage Tank to be built at a later time in the general area south of Airport Road and north of Hollymead Towncenter on TMP No. 32-41 as identified in the Albemarle County Comprehensive Plan. The future pump station and tank, along with a new transmission pipeline between the proposed pump station and the South Rivanna Water Treatment Plant, will provide an interconnection between the areas presently served by the South Rivanna Water Treatment Plant and the North Rivanna Water Treatment Plant. 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 29 area generally north of the Forest Lakes subdivision. Multiple meetings and negotiations took place with the property's land owner in an effort to acquire the needed property. The negotiations were not successful, and the property was acquired through condemnation proceedings authorized at the May 2017 RWSA Board Meeting. Final legal proceedings have been completed.

11. Urban Water Granular Activated Carbon and Water Treatment Improvements: In July 2012, the Board decided to pursue the installation of Granular Activated Carbon (GAC) contactors to achieve Stage 2 D/DBPR compliance with the EPA in the Urban System. The GAC adsorbs organic matter from the water, thereby reducing the precursors to THMs and HAAs. As decided by the Board in December 2013, the GAC systems have been sized at a lower capacity than the current rated plant capacities (the "Hybrid GAC" approach). The GAC contactors were not expected to be on-line in time for the EPA-mandated compliance date. In the interim, a Risk Reduction Plan was developed, outlining the use of Powder Activated Carbon (PAC) to reduce trace natural organic matter from the source water thereby reducing DBPs. The PAC feed systems were included in this project and were adequate treatment for the new regulations in the interim time period before GAC completion. The PAC systems were completed in 2015.

In addition to installation of PAC feed systems and GAC contactors, this project also included various improvements at the South Rivanna WTP including construction of additional clearwell storage, replacement of the lime feed system, upgrades to the filter underdrains and backwash system, replacement of the filter media, sound attenuation and ventilation improvements for the high service pump station, installation of a variable frequency drive for the raw water pump station, installation of a new raw water flow meter and several improvements to the residuals management facilities; at the North Rivanna WTP including new filter control valves, new pump control valves, new filter sludge removal equipment, new electrical system upgrades throughout the plant, and the installation of a surge relief mechanism; and at the Observatory WTP including various improvements such as a new chlorine contact tank, improved potable water service piping to the filter building and upgraded finished water discharge piping. Construction of the projects were completed in May 2018.

12. Wholesale Water Master Metering: The January 2012 Water Cost Allocation Agreement designated how the City of Charlottesville (City) and ACSA share in the financing of the New Ragged Mountain Dam project. Within the agreement is a general provision developed by the ACSA and the City to enhance measurement of the water usage by each of the distribution agencies. In an effort to meet this obligation, the RWSA Board of Directors authorized staff in August of 2012 to complete an engineering study on metering plan alternatives. The study identified several alternatives for a metering plan based on combinations of metering and estimating methodologies. A Jurisdictional Approach was recommended which included installation of water meters at locations at the City/county corporate boundary plus one meter at each of the three urban water treatment plants. At its September 2013 meeting the Board directed that staff proceed with the Jurisdictional Coverage Approach. The final design includes 25 remote meter locations plus the three finished water flow meters at the water treatment plants. Construction of the 25 remote meter locations began in early 2016 and was completed

in early 2019. The three finished water flow meters were installed in 2015 as part of the Urban Water Granular Activated Carbon Project.

23. Crozet Water Granular Activated Carbon and Water Treatment Improvements: For the Crozet water system, installation of granular activated carbon (GAC) contactor units was selected to achieve Stage 2 D/DBPR compliance with EPA due to the start/stop operation of the water treatment plant and the relatively higher water age in the distribution system. The GAC adsorbs organic matter from the water, thereby reducing the precursors to THMs and HAAs. Included in the Crozet WTP GAC project were various other improvements including upgrade of the chlorine feed system to a modern hypochlorite feed system, as well as replacing the existing fluoride and corrosion inhibitor chemical feed systems. The new chemical feed systems are housed in additional rooms in the GAC contactor building. This new location also allows for shorter chemical feed lines. Construction of the project was completed in September 2017.
25. Crozet Water Treatment Plant Finished Water Pump Station: The Crozet water treatment facilities required an expansion to secure future needs of the Crozet community. The Finished Water Pump Station is the final step in the treatment and conveyance process and was original to the plant. As a result it had numerous design and operational impediments or challenges that severely limited its operational reliability. A new pump station at the site was required for both current and future service needs. The project included evaluation, permitting, design, construction and construction management of a new Finished Water Pump Station and construction was completed in Spring 2019.
26. Drinking Water Infrastructure Plan: The Crozet drinking water service area continues to see expanded growth, and recent discussions with Albemarle County and Albemarle County Service Authority (ACSA) personnel have confirmed that recent growth trends indicate that water use demands in Crozet are on the rise. While some projects are currently underway to address the immediate needs in Crozet, RWSA staff concluded that it was pertinent to develop a comprehensive mid and long-range plan for the entire water system, including analysis of water supply, treatment, distribution, storage and raw water conveyance. The project evaluated and analyzed all of these parameters, and developed a Drinking Water Infrastructure Plan for the Crozet Service Area's water supply and distribution needs and recommended improvements for the next 50-year design period (Year 2070). The final plan will be complete in early 2019.
27. Scottsville Water Granular Activated Carbon: For the Scottsville water system, installation of granular activated carbon (GAC) contactor units was selected to achieve Stage 2 D/DBPR compliance with EPA due to the start/stop operation of the water treatment plant and the higher water age in the distribution system. The GAC adsorbs organic matter from the water, thereby reducing the precursors to THMs and HAAs. Construction of the project was completed in November 2017.
32. Crozet Interceptor Pump Station Bypass Isolation Valves: There are four pump stations located in the Crozet Interceptor system that help convey the 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 complicated maintenance-related activities as each

time a pump station component needed to be serviced or replaced, the volume of wastewater within the force main had to be addressed at the pump station as it drained 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, decreased the amount of time available to work on the equipment. In order to alleviate this condition, temporary valves called “line stops” were temporarily installed on the force mains downstream of the pump stations to allow enough time for a new isolation valve to be installed. This isolation valve location provides the maximum amount of down time available based on current system conditions for future pump station maintenance activities. While line stops were in place, bypass connections were also 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 that the isolation valves alone cannot account for. Construction of this project was completed in the Winter of 2018/2019.

35. Bridge Repairs: The bridge crossing Moores Creek located at the Advanced Water Resource Recovery Facility was constructed in the early 1980s. In late 2011, staff commissioned a detailed inspection of the bridge. The inspection results indicated that the bridge was in good condition but required maintenance repairs to assure continued safe operation. This work includes sealing the expansion joints, scupper installation to drain the bridge deck, repairs to the steel plate girders and their bearings, catwalk and steel corrosion repair and repainting, and minor concrete repair. This work will be completed by the spring of 2018 in conjunction with the Moores Creek Odor Control Improvements project.
36. Odor Control Phase 2: As part of the implementation of the next phase of the 2007 Odor Control Master Plan at the MCAWRRF, operations audits were performed, liquid and vapor phase sampling were conducted, and a computerized dispersion model was developed from 2013 to 2014. Recommendations for odor control improvements that would significantly control odors from traveling beyond the MCAWRRF fence line were presented to the RWSA Board of Directors in December 2014 and the CIP project was approved at the January 2015 Meeting, with subsequent increases due to project challenges. The final design for odor control improvements includes covering the head works and screening channels, installing grit facilities, constructing a bypass line through one equalization basin, covering the primary clarifiers, building additional odor scrubbing facilities to treat the foul air from the covered sources, removing the post-digestion clarifiers from service, modifying the handling, and hauling and storage of bio solids, all of which has been recently completed in Odor Control Improvements Project. The constructed facilities are shown as costs associated with these complete and will be capitalized in this CIP. The remaining odor control work included in the current CIP budget includes cleaning the equalization basins and holding ponds which is anticipated to be bid out this spring and coating the interior of the digesters which is ongoing.
37. Roof Replacements: 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, Sludge Pumping Building, Primary Pump Building, and the Effluent Pump Building. Design of these improvements began in March 2017 with completion of construction in late 2018.

38. Second Centrifuge: The Moores Creek AWWRF currently operates a high-speed centrifuge to process and dewater digested bio solids from the treatment process. The centrifuge was constructed during the 2009-2012 Nutrient Upgrade project and served to replace an older plate and frame filter press operation (which was removed during installation of the centrifuge), with a second plate and frame press serving as backup. An evaluation of the remaining filter press concluded that extensive repairs would be required to maintain this as a backup dewatering system and the repairs would not be cost-effective as purchasing a second centrifuge. Without the utility of the second press the facility does not have a redundant process, and thus during planned or emergency outages a portable back-up unit must be rented or leased. A second centrifuge will allow for continued bio solids dewatering during planned or emergency repairs to one of the two centrifuges, for higher-rate processing by operating both units simultaneously during other periods (thus saving on staff time), and for better maintenance of proper solids flow through the plant.

## Completed Projects

No.	Project Description	Five-Year Capital Program			
		Adopted Budget 6/2018	Previous Expenditures (6/30/2018)	Final Projected Costs/Close Out	Savings
6	Interconnect Lower SH and RM Raw Water Mains	\$331,000	\$8,076	\$8,076	\$322,924
7	Flow Meter and Auto Valve on SH to RM Transfer	\$383,241	\$15,311	\$383,241	
9	Route 29 Pump Station Site Acquisition	\$1,720,000	\$1,042,168	\$1,720,000	
11	Urban Water GAC and Water Treatment Plant Improvement	\$24,925,494	\$24,089,122	\$24,307,304	\$618,190
12	Wholesale Water Master Metering - Urban	\$3,200,000	\$2,679,816	\$3,221,659	(\$21,659)
23	Crozet Water GAC and Water Treatment Improvement	\$3,418,390	\$3,250,630	\$3,267,341	\$151,049
25	Crozet WTP - WTP Expansion Finished Water Pump Station	\$2,600,000	\$2,067,760	\$2,233,510	\$366,490
26	Crozet Water System - Master Plan	\$300,000	\$245,223	\$297,577	\$2,423
27	Scottsville Water Granular Activated Carbon	\$1,615,000	\$1,569,384	\$1,577,733	\$37,267
32	Crozet Interceptor Pump Stations - Bypass Fittings and Isolation Valves	\$720,000	\$18,334	\$462,000	\$258,000
35	Bridge Repairs	\$330,000	\$261,198	\$279,468	\$50,532
36	MCAWRRF Odor Control Phase 2	\$8,907,519	\$8,841,776	\$8,907,519	
37	MCAWRRF Roof Replacements	\$1,264,000	\$809,424	\$965,253	\$298,747
38	MCAWRRF Second Centrifuge	\$1,337,000	\$1,154,719	\$1,291,133	\$45,867
<b>TOTAL</b>		\$51,051,644	\$46,052,941	\$48,921,814	\$2,129,830

CIP 19-23 Total	CIP 20-24 Completed	CIP 20-24 Remaining	CIP 20-24 New Funding	CIP 20-24 New Total
\$153,902,035	\$51,051,644	\$103,465,632	(\$6,261,756)	\$97,203,876

## Community Water Supply Plan

The Community Water Supply Plan represents the program developed with substantial community input to fulfill RWSA's contractual obligation to the City of Charlottesville (City) and the Albemarle County Service Authority (ACSA) to provide adequate drinking water for their future needs. An initiative started in 2003 to find a long-term solution that could achieve both local support and meet federal and state requirements. After multiple community meetings, updates with local officials, and frequent consultations with federal and state agencies, local support was obtained to apply for federal and state permits to expand the Ragged Mountain Reservoir and build a future pipeline between the South Rivanna and Ragged Mountain Reservoirs, with stream and wetlands mitigation to be provided through property in the Buck Mountain Creek area and property adjacent to a lower reach of Moores Creek near its confluence with the Rivanna River. Federal and state permits were granted in 2008, and amended in 2011.

The first phase of this long-term program centered around the expansion of the Ragged Mountain Reservoir, a project that would simultaneously address a legal obligation to correct safety deficiencies on the existing site. Through a combination of technical investigations, engineering evaluations, and continued public discussion, a decision was reached in February 2011 through the City Council and Board of Supervisors to build the new dam as an earthen dam, with the initial phase raising the reservoir pool height by 30 feet. The decision also outlined an objective of the further pursuit of water conservation through the City and ACSA, and the pursuit of opportunities for dredging of the South Rivanna Reservoir, with the second phase of reservoir expansion in the future as necessary.

### Project Descriptions:

1. South Rivanna Reservoir to Ragged Mountain Reservoir Water Line Right-of-Way: The approved 50-year Community Water Supply Plan includes the future construction of a new raw water pipeline from the South Rivanna River to the Ragged Mountain Reservoir. This new pipeline will replace the Upper Sugar Hollow Pipeline along an alternative alignment to increase raw water transfer capacity in the Urban Water System. The project includes a detailed routing study to account for recent and proposed development and road projects in Albemarle County and the University of Virginia. Preliminary design, preparation of easement documents, and acquisition of water line easements along the approved route will also be completed as part of this project. Prior expenditures also covered a previous review of the 2009 conceptual design that was requested by the Board.
2. South Rivanna Reservoir Dredging: The South Rivanna Reservoir stores raw water for treatment at the South Rivanna Water Treatment Plant and in the future, is proposed to provide water for transfer to the enlarged Ragged Mountain Reservoir. River flow into the reservoir is from a drainage area, almost entirely within Albemarle County, of approximately 259 square miles. Soil erosion from natural events, from land use in the agricultural area, from land disturbances in the developed areas, and from re-suspension of flood plain deposits created during the 19th century (stream bank erosion), are likely the causes of sediment becoming trapped within the reservoir. The initial design of the reservoir anticipated the accumulation of these sediments, and a significant portion of the total storage volume was designated for this

purpose. Currently the sediment stored does not exceed the available sediment storage capacity.

The January 2012 Ragged Mountain Dam Project Agreement outlines that “the City and ACSA agree to direct, and RWSA agrees, to perform such dredging projects at the South Fork Rivanna Reservoir as may be specified jointly by the City and ACSA pursuant to the Water Cost Allocation Agreement.” The Cost Allocation Agreement stipulates that target maintenance dredging shall be performed, and that the dredging be market driven, cost effective, and opportunistic and shall not exceed \$3.5M. In 2012 and 2013, RWSA, via the Public-Private Education Facilities and Infrastructure Act (PPEA) process, solicited proposals to provide maintenance dredging. In July 2013, the one qualified PPEA proposer withdrew its proposal, citing difficulties in obtaining necessary land agreements.

Future Board decisions on the project contracting approach will dictate the next steps. This project remains in the CIP as the fulfillment of a contractual obligation from the January 2012 Ragged Mountain Dam Cost Allocation Agreement, and RWSA counsel has offered an opinion that consent to amend the Agreement from the City and ACSA is required before the RWSA Board can amend or cancel the project.

3. Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line: Raw water is transferred from the Ragged Mountain Reservoir (RMR) to the Observatory Water Treatment Plant by way of two 18-inch cast iron pipelines, which have been in service for more than 110 and 70 years respectively. The increased frequency of emergency repairs and expanded maintenance requirements are one impetus for replacing these pipelines. The proposed water line will be able to reliably transfer water to the expanded Observatory plant, which will have the capacity to treat 10-12 million gallons per day (mgd). The new pipeline is expected to be constructed of 36-inch ductile iron and will be on the order of 14,000 feet in length.
4. Ragged Mountain Reservoir to Observatory Raw Water Pump Station: The Ragged Mountain Reservoir (RMR) to Observatory WTP raw water pump station is planned to replace the existing Stadium Road and Royal pump stations, which in part have exceeded their design lives or will require significant upgrades with the Observatory WTP expansion. The pump station will pump up to 10 mgd to the Observatory WTP. Integration of the new pump station with the planned South Rivanna Reservoir (SRR) to RMR pipeline is being considered in the interest of improved operational and cost efficiencies. An integrated pump station would also include the capacity to transfer up to 16 million gallons per day (mgd) of raw water from RMR back to the SRR WTP. The location of this pump station will be recommended as part of the SRR to RMR raw water main preliminary engineering study, which is currently under way.
5. Birdwood Golf Course Waterline: RWSA and the UVA Foundation chose to expedite construction of the portion of the future South Rivanna to Ragged Mountain 36-inch raw water main through the Birdwood property. This enables pipeline work to proceed just ahead of the planned golf course reconstruction project to prevent subsequent disruption to the property and adjacent neighbors, as well as mitigate future increased water line construction costs. The golf course reconstruction project began in November 2018. This work includes installation of

approximately 6,100 linear feet of 36-inch raw water main along the eastern property boundary of the golf course.

## Community Water Supply Plan

Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year						
		Current CIP Adopted 6/2018	Proposed Changes	Current Capital Budget	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2018)
1	South Rivanna Reservoir to Ragged Mountain Reservoir Water Line Right-of-Way	\$2,295,000		\$840,249	\$870,000	\$584,751				\$2,295,000	\$123,782
2	South Rivanna Reservoir Dredging	\$10,000				\$10,000				\$10,000	
3	Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line	\$4,116,000	(\$899,000)				\$325,000	\$1,186,000	\$1,706,000	\$3,217,000	
4	Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Pump Station	\$2,410,000	(\$1,750,000)				\$250,000	\$121,000	\$289,000	\$660,000	
5	Birdwood Golf Course Waterline		\$4,000,000	\$2,400,000	\$1,600,000					\$4,000,000	
	TOTAL	\$8,831,000	\$1,351,000	\$3,240,249	\$2,470,000	\$594,751	\$575,000	\$1,307,000	\$1,995,000	\$10,182,000	\$123,782

## **Observatory WTP and Ragged Mountain/Sugar Hollow Reservoir System**

The Observatory Water Treatment Plant (WTP) and Ragged Mountain/Sugar Hollow Reservoir System is comprised of the water treatment facility on Observatory Mountain and the associated raw water infrastructure that stores and conveys source water to the plant. The raw water storage system includes the new Ragged Mountain Dam (constructed in 2014, with a useable raw water storage capacity of 1.5 billion gallons) and the Sugar Hollow Dam (originally constructed in 1947, upgraded in 1999 and downstream discharge improvements completed in September 2014, with a useable raw water storage capacity of 339 million gallons as updated by a 2015 bathymetric survey). The system also includes 17.6 miles of 18-inch raw water cast-iron mains, originally installed in 1908, 1922, and 1946. The Sugar Hollow Raw Water Main historically conveyed water from the Sugar Hollow Dam to the Observatory Water Treatment Plant, however, as a result of the New Ragged Mountain Dam project, the main now discharges directly into Ragged Mountain Reservoir. The remaining downstream section of the Sugar Hollow main now conveys raw water from the Ragged Mountain Reservoir to the treatment plant. The line crosses the Mechums River (where an abandoned pumping station is sited) on its way to Ragged Mountain Reservoir, and eventually passes through the Royal Pumping Station and terminates at the Observatory WTP. The Ragged Mountain Raw Water Main conveys water from the Ragged Mountain Reservoir through the Stadium Road Pumping Station and terminates at the Observatory Water Treatment Plant.

### **Project Descriptions:**

6. Observatory Water Treatment Plant Improvements: The Observatory Water Treatment Plant is the oldest of the three urban plants. Early planning for the Community Water Supply envisioned that the plant would undergo a wholesale upgrade. This upgrade will concentrate on specific improvements to critical elements, identified by a Needs Assessment Study as improvements to the flocculators, filters, sedimentation basins, and chemical feed facilities to enhance future reliability. In addition, the existing reinforced concrete flume, which conveys treated water from the sedimentation basins to the filters, is in need of replacement, old piping control valves will be replaced and modernized, and electrical and SCADA control systems will be upgraded.

The Observatory Water Treatment Plant was originally constructed in the mid-1950s. Since that time very little has been replaced or upgraded at the facility. The sixty-year-old facility has much of the original equipment that is inefficient, prone to unexpected failure, and does not have readily accessible replacement parts. A portion of the project was completed in the 2016-2017 fiscal year. The flocculator systems were completely upgraded with new mechanical and electrical equipment, including variable speed motor drives for optimum efficiency. The upgraded flocculators have been in service since May 2017.

In addition to providing needed equipment upgrades, the improvements will also increase the plant's capacity from 7.7 million gallons per day to 10 million gallons per day based on a feasibility analysis performed during the Preliminary Engineering phase of the project. It was determined that the capacity upgrades could be performed economically and would provide needed reliability and redundancy in the Urban System.

It should be noted that the Observatory Water Treatment Plant is sited on land leased to RWSA by the University of Virginia. The terms of the existing lease expire on April 17, 2021. Prior to construction of the remaining improvements, the terms of a new lease may be needed with RWSA and the University as participants. The new lease is currently under negotiation.

7. Sugar Hollow Dam – Rubber Crest Gate Replacement & Intake Tower Repairs: In 1998 the Sugar Hollow Dam underwent a significant upgrade to improve structural stability and spillway capacity. The original metal spillway gates were replaced with a manufactured five-foot-high inflatable rubber dam that is bolted to the existing concrete structure. This rubber dam allows for the normal storage of water in the reservoir with the ability to be lowered during extreme storm events. The rubber dam has an approximate service life of twenty years and is therefore now due for replacement. The aging intake tower structure will be evaluated as part of the project for necessary repairs and improvements. Recommended repairs may include issues relating to the intake gate valves and tower walls, including repair or replacement of intake trash racks, and sealing/grouting of minor concrete wall cracks.



## Observatory Water Treatment Plant and Ragged Mountain/Sugar Hollow Reservoir System

Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year						
		Current CIP Adopted 6/2018	Proposed Changes	Current Capital Budget	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2018)
6	Observatory Water Treatment Plant Improvements	\$18,630,000	\$1,070,000	\$2,648,198		\$5,701,802	\$7,850,000	\$3,500,000		\$19,700,000	\$1,154,558
7	Sugar Hollow Dam - Rubber Crest Gate Replacement & Intake	\$940,000	\$200,000	\$55,000	\$415,000	\$670,000				\$1,140,000	
	TOTAL	\$19,570,000	\$1,270,000	\$2,703,198	\$415,000	\$6,371,802	\$7,850,000	\$3,500,000	\$0	\$20,840,000	\$1,154,558

## **Finished Water Storage/Transmission – Urban System**

The urban finished water storage and transmission system serves to provide transmission of treated water from the three RWSA water plants (Observatory, South Rivanna, and North Rivanna Rivanna) to the distribution networks of the Albemarle County Service Authority, the City of Charlottesville, and the University of Virginia. The system includes approximately 40 miles of pipeline, six water storage tanks: Avon Street (2 MG), Pantops (5 MG), Piney Mountain. (0.7 MG), Stillhouse (0.7 MG), Observatory (3 MG), and Lewis Mountain (0.5 MG), and the Alderman Road and Stillhouse pumping stations.

### **Project Descriptions:**

8. Valve Repair - Replacement (Phase 2): Isolation valves are critical for normal operation of the water distribution system and timely emergency response to water main breaks. Staff continuously reviews results from an ongoing valve exercising and condition assessment program performed by the RWSA Maintenance Department. This project will repair any valves identified during the condition assessment as having a repairable deficiency and replace the highest priority valves that are inoperable and unrepairable. This phase of the Valve Repair-Replacement Project will include a repair of an existing valve on the Southern Loop Waterline and replacement of valves on the North Rivanna, South Rivanna, Pantops, and Crozet Waterlines.
9. Piney Mountain Tank Rehabilitation: The 700,000-gallon Piney Mountain Tank serves the North Rivanna pressure band. A routine inspection of the Piney Mountain Tank revealed several deformed roof rafters, indicating the potential for structural deficiency. An in-depth structural inspection was performed 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 to maintain the existing tank in service for at least the next 10 years.
10. Avon to Pantops Water Main: The southern half of the Urban Area water system is currently served by the Avon Street and Pantops 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 reducing system flexibility. In 1987, the City and ASCA developed the Southern Loop Agreement, outlining project phasing and cost allocations, as envisioned at the time. The first two phases of the project were constructed shortly thereafter. The third phase, known as the “Eastern Branch” is the subject of the current project. The initial funding for this project was used for route alignment determination, hydraulic modeling, and preliminary design. Due to the complicated nature of our finished water systems, it was decided at the August 2018 Board meeting that a more comprehensive approach is warranted and we should complete the Finished Water Master Plan prior to moving forward with final design and construction of the Avon to Pantops Water Main. Additionally, due to alternate funding priorities the construction of this main has been delayed 3-years.

11. Water Demand Projection and Safe Yield Study: In January 2012, the City of Charlottesville, Albemarle County Service Authority, and RWSA entered into the Ragged Mountain Dam Project Agreement. Within the agreement are provisions to monitor the bathymetric capacity of the Urban water reservoirs as well as a requirement to conduct reoccurring demand analysis, demand forecasting and safe yield evaluations. The bathymetric survey of the South Rivanna Reservoir and the Ragged Mountain Reservoir were funded in the FY2019 O&M Budget. Subsequent to collecting the reservoir survey data, this study will evaluate and calculate current and future demands and present safe yield. Per the project agreement, these analyses shall be completed by calendar year 2020.
12. South Rivanna River Crossing and North Rivanna Transmission Main: RWSA has previously identified through master planning that a 24-inch water main will be needed from the South Rivanna Water Treatment Plant (SRWTP) to Hollymead Town Center to meet future water demands. Two segments of this water main were constructed as part of the VDOT Rt. 29 Solutions projects, including approximately 10,000 LF of 24-inch water main along Rt. 29 and 600 LF of 24-inch water main along the new Berkmar Drive Extension, behind the Kohl's department store. To complete the connection between the SRWTP and the Airport Road Pump Station Site, there is a need to construct a new river crossing at the South Fork Rivanna River and two "gap" sections of 24-inch water main between the already completed sections. Much of the new water main route is within VDOT right-of-way; however, acquisition of right-of-way will be required at the river crossing and on the Kohl's Property at Hollymead Town Center. This project includes funding for construction as well as engineering design, easement acquisition, bid-phase services, and construction administration and inspection services.
13. Rt. 29 Pump Station: The Rt. 29 Pipeline and Pump Station master plan was developed in 2007 and originally envisioned a multi-faceted project that reliably connected the North and South Rivanna pressure bands, reduced excessive operating pressures, and developed a new Airport pressure zone to serve the highest elevations near the Airport and Hollymead Town Center. The master plan was updated in 2018 to reflect the changes in the system and demands since 2007. This project, along with project number 12 above will provide a reliable and redundant finished water supply to the North Rivanna area. The proposed pump station will be able to serve system demands at both the current high pressure and a future low pressure condition. These facilities will also lead to future phase implementation which will include a storage tank and the creation of the Airport pressure zone.
14. Finished Water System Master Plan: As identified in the 2017 Strategic Plan, the Authority has a goal to plan, deliver and maintain dependable infrastructure in a financially responsible manner. Staff has identified asset master planning as a priority strategy to improve overall system development. There are asset classes where comprehensive and ongoing plans exist or are in development (e.g. wastewater collection, raw water supply, Crozet water, etc.). In the case of the urban finished water system, many of the previously identified capital projects are in design or construction. As such, staff have identified a need to develop a current and ongoing finished water master plan. This work will utilize the demand forecasting from the Water Demand Project and Safe Yield Study.

## Finished Water Storage/Transmission – Urban System

Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year						
		Current CIP Adopted 6/2018	Proposed Changes	Current Capital Budget	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2018)
8	Valve Repair - Replacement (Phase 2)	\$500,000	\$382,914	\$500,000	\$382,914					\$882,914	
9	Piney Mountain Tank Rehabilitation	\$500,000		\$500,000						\$500,000	\$51,185
10	Avon to Pantops Water Main	\$13,200,000	(\$11,100,000)	\$1,375,000					\$725,000	\$2,100,000	\$126,861
11	Water Demand Projection and Safe Yield Study	\$100,000	\$54,000	\$154,000						\$154,000	
12	South Fork Rivanna River Crossing and North Rivanna Transmission	\$5,340,000				\$843,000	\$3,930,000	\$567,000		\$5,340,000	
13	Rt. 29 Pump Station	\$2,300,000			\$201,000	\$1,824,000	\$275,000			\$2,300,000	
14	Finished Water System Master Plan	\$150,000	\$103,000	\$253,000						\$253,000	
	TOTAL	\$22,090,000	(\$10,560,086)	\$2,782,000	\$583,914	\$2,667,000	\$4,205,000	\$567,000	\$725,000	\$11,529,914	\$178,046

## **South and North Rivanna Water Systems**

The South Rivanna Water System is comprised of the source water, storage, conveyance and treatment infrastructure currently serving the urban area from the South Fork Rivanna River. The system includes the South Fork Rivanna Reservoir and Dam (built in 1966). The Dam is co-located with the raw water intake and pump station, as well as a small hydroelectric generation facility. The source water from the South Rivanna Reservoir is treated at the South Rivanna treatment plant (12-mgd rated capacity).

The North Rivanna Water System is comprised of a river intake and raw water pumping station on the North Fork of the Rivanna River, as well as the North Fork Water Treatment Plant (2-mgd rated capacity). The North Rivanna System provides water to the ACSA service area located along US Route 29, between Forest Lakes subdivision and Piney Mountain Road.

### **Project Descriptions:**

15. South Rivanna Hydropower Plant Decommissioning: The South Fork Hydropower Plant is a small hydroelectric generating facility constructed in 1987. The plant has historically operated intermittently, as river flows allow. The generated power is used at the South Rivanna Water Treatment Plant, thereby reducing power purchased off the electric grid. During an effort to troubleshoot and repair the turbine, a large rain and lightning event caused unexpected flooding into the facility. Insurance paid damages to more recent improvements, but not the pre-existing needs to repair the turbine. Engineering investigations in 2013 associated with the failed mechanical equipment and flood event confirmed the need for further disassembly and inspection of the turbine shaft and blade linkages from a remote factory location.

Due to the complexity of possible rehabilitation, the associated Federal Energy Regulatory Commission (FERC) dam permitting, and the numerous variables in the economic analysis, proposals were solicited from national hydropower experts to initiate a feasibility study to determine the cost effectiveness of rehabilitating the hydropower plant while making sure to account for FERC-related costs and issues. The feasibility study was completed in May 2016 and determined that rehabilitation of the facility had a small likelihood for a positive return on investment. This conclusion was brought to the Board of Directors along with a recommendation to initiate the surrender of the exemption to licensure and decommission the facility. The Board approved this recommendation and staff has begun the exemption surrender process. The budget includes regulatory support as well as physical improvements such as removing defunct electrical components, abandoning components of the turbine and evaluating the re-establishment of the penstock as a reservoir drain.

16. South Rivanna Water Treatment Plant Improvements: The South Rivanna Water Treatment Plant recently completed significant upgrades as part of the Urban Granular Activated Carbon project. Over the course of that project, several other significant needs were identified and assembled into a single project within this Capital Plan. The project components include, but are not limited to, the following: a new coagulant storage facility; installation of two additional filters to meet firm capacity needs and new filter control panels; an enclosure around the lime storage facilities; the addition of a second variable frequency drive at the Raw Water Pump Station as well as other general pump station improvements; the relocation for the electrical

gear from a sub terrain location at the Sludge Pumping Station to a new aboveground enclosure; a new administration building on site for additional office, meeting, and storage space; an additional high service pump and the addition of variable frequency drives to three of the pumps; sedimentation basin improvements; replacement of filter inlet valves and actuators; remodeling of the existing filter building for better lab and control space and painting throughout; new clarifier drives; a new closed transition transfer switch for the facility; and a realignment of the plant entrance near the front gate. Currently this facility operates at 80-90% of capacity and the identified upgrades will improve reliability and resiliency, particularly at higher flow rates.

17. South Rivanna Dam – Gate Repair: The South Rivanna Dam, originally constructed in 1965, is equipped with two 36” diameter slide gates and conduits, one each on the north and south abutments of the dam, which can be utilized to dewater the facility or to meet minimum instream flow (MIF) requirements when the dam is not spilling. These gates are original to the dam and while they are operable and are exercised regularly, they can no longer provide a complete seal, therefore allowing some leakage through the dam. RWSA has protocols in place to temporarily stop leakage through the gates when necessary to conserve water; however, there is a desire to repair or replace the gates and components as needed to restore full functionality. The project includes other repairs to the facility, including improvements to the concrete wall adjacent to the Raw Water Pump Station as well as improvements to the north dam tower to provide safer access by staff while still discouraging access by the general public.
18. North Rivanna Water Treatment Plant – Upgrade: The North Rivanna Water Treatment Plant was recently retro-fitted with GAC treatment. While the electrical system was upgraded as part of the GAC project, the remaining equipment and process control are original to the plant. Additionally, recent flooding has identified an issue with the siting and viability of the current backwash lagoons. This project includes an evaluation as well as replacement of the backwash and sludge handling for the plant.

## South and North Rivanna Water Systems

Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2018)
		Current CIP Adopted 6/2018	Proposed Changes	Current Capital Budget	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024		
15	South Rivanna Hydropower Plant Decommissioning	\$400,000	\$325,000	\$400,000	\$325,000					\$725,000	\$98,625
16	South Rivanna Water Treatment Plant Improvements	\$7,500,000	\$7,500,000	\$181,891	\$7,864,524	\$6,953,585				\$15,000,000	\$46,891
17	South Rivanna Dam - Gate Repair		\$900,000		\$900,000					\$900,000	
18	North Rivanna Water Treatment Plant - Upgrade		\$2,325,000		\$385,000	\$940,000	\$1,000,000			\$2,325,000	
	TOTAL	\$7,900,000	\$11,050,000	\$581,891	\$9,474,524	\$7,893,585	\$1,000,000	\$0	\$0	\$18,950,000	\$145,516

## Crozet Water System

The Crozet Water System includes the source water, raw water conveyance, finished water treatment, transmission and storage infrastructure for the Crozet community in western Albemarle County. The source water for this system is the Beaver Creek Reservoir and Garnett Dam which was built in 1964 with a current useable storage capacity of 521 million gallons. Raw water is treated at the Crozet Water Treatment Plant (1.0 mgd rated capacity) and provides finished water to the Albemarle County Service Authority. The system includes the Crozet Elevated (Waterball) Tank (0.05 MG) for water treatment plant backwash; the Crozet Ground Storage Tank (0.5 MG) and pump station, and the Buck's Elbow Storage Tank (2.0 MG).

### Project Descriptions:

19. Beaver Creek Dam Alteration: From 2008-2014 the Virginia Department of Conservation and Recreation (DCR) adopted revised *Impounding Structures Regulation* which imposed new, more rigorous, evaluations of dams within the Commonwealth. As a result, the Beaver Creek Dam has been reclassified as a high hazard dam, thereby requiring the spillway to pass a larger design storm. The spillway capacity was not designed to pass the larger design storm, and thus will require modifications to adhere to current regulations. This project includes investigation, preliminary design, public outreach, permitting, easement and property acquisition, final design, and construction of the anticipated modifications. Also included in this project are a new relocated raw water pump station, intake and oxygenation system.

RWSA operates the Beaver Creek Dam and reservoir as the sole raw water supply for the Crozet Area. In 2011, an analysis of the Dam Breach inundation areas and changes to Virginia Department of Conservation and Recreation (DCR) *Impounding Structures Regulations* prompted a change in hazard classification of the dam from Significant to High Hazard. This change in hazard classification requires that the capacity of the spillway be increased. Following the completion of an updated alternatives analysis by Schnabel Engineering in 2018, staff decided to proceed with design of a labyrinth spillway and chute through the existing dam with a bridge to allow Browns Gap Turnpike to cross over the new spillway. This CIP project includes investigation, preliminary design, public outreach, permitting, easement acquisition, final design, and construction of the anticipated modifications. Work for this project will be coordinated with the new relocated raw water pump station and intake. Additionally, due to alternate funding priorities the construction of this project has been delayed 3-years.

20. Beaver Creek Raw Water Pump Station and Intake: The Drinking Water Infrastructure Plan for the Crozet water service area recommends installation of a new Raw Water Pump Station and Intake at the Beaver Creek Dam in order to meet new minimum instream flow requirements and provide adequate raw water pumping capacity to serve the growing Crozet community for the next 50 years. The pump station will be moved out of its existing location at the toe of the dam to a new location, to be determined during design. The new intake structure will include enhanced controls to allow for access to the best quality water at any given time.

Following a Reservoir Water Quality and Management Study by DiNatale Water Consultants, several recommendations were made to improve water quality in the Beaver Creek Reservoir,



including installation of a new outlet structure and installation of a hypolimnetic oxygenation system. The oxygenation system would reduce reliance on algaecide treatments by increasing dissolved oxygen in the reservoir. Due to alternate funding priorities, the entire pump station and intake project have been delayed 3-years. Additionally, hypolimnetic oxygenation system has been eliminated from the project. The site, however, will be designed to accommodate it's possible future inclusion.

21. Buck's Elbow & Crozet Waterball Tank Painting: The 2,000,000-gallon Buck's Elbow Ground Storage Tank provides finished water storage for the Crozet Area while the 50,000- gallon Crozet Waterball Tank serves as filter backwash storage at the Crozet Water Treatment Plant (CZWTP). Routine inspections of these tanks in 2012 indicated that the tanks would require recoating by 2020. The project includes recoating the interior and top-coating the exterior of both tanks to prevent corrosion. Also included is the installation of an active mixing system and construction of a chlorine feed station at the Buck's Elbow Tank to decrease stratification, maintain consistent chlorine residuals, and improve overall water quality in the Crozet area. Minor repairs and improvements to both tanks will also be included in this work, such as foundation repairs and safety enhancements. This project includes consultant services for design of project specifications, as well as construction, construction administration, and inspection services. Installation of the active mixing system and construction of the chlorine feed station at Buck's Elbow Tank is expected to begin in Spring 2019, while the painting of both tanks has been postponed until 2025.
22. Crozet Water Treatment Plant Expansion: The Crozet water treatment system is currently permitted and rated to supply up to 1.0 million gallons per day (mgd) of water to the ACSA distribution system. Over the past several years, average day usage of water has increased steadily, with maximum day demand approaching plant capacity. In addition, much of the existing plant systems are the same as when the plant was constructed in the 1960's.

Expanding the plant capacity at Crozet WTP would require a new Virginia Department of Environmental Quality Water Withdrawal Permit and could include possible stream release requirements. In order to fully analyze all aspects of the design required for this project a Preliminary Engineering Report (PER), plant field testing, preliminary permitting work and coordination with pertinent regulators were completed. The results of the PER stated that the current treatment plant can be upgraded, and the capacity increased, through installation of newer, and more technologically advanced equipment into the existing footprint of the filter plant. Work associated with this project includes general building rehabilitation, filter improvements, sedimentation expansion and improvements, chemical feed improvements, flocculator expansion, alum storage/containment improvements and waste sludge handling and removal improvements.

## Crozet Water System

Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2018)
		Current CIP Adopted 6/2018	Proposed Changes	Current Capital Budget	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024		
19	Beaver Creek Dam Alteration	\$8,830,000	(\$3,932,000)	\$192,871	\$516,129	\$561,000	\$668,000	\$660,000	\$2,300,000	\$4,898,000	\$191,871
20	New Raw Water PS & Intake	\$6,100,000	(\$1,962,000)	\$160,000	\$138,000	\$300,000	\$275,000	\$175,000	\$3,090,000	\$4,138,000	
21	Buck's Elbow & Crozet Waterball Tank Painting	\$1,200,000	(\$1,013,000)	\$60,000	\$127,000					\$187,000	
22	Crozet Water Treatment Plant Expansion	\$6,900,000	\$1,600,000	\$3,808,819	\$4,235,181	\$456,000				\$8,500,000	\$510,377
	TOTAL	\$23,030,000	(\$5,307,000)	\$4,221,690	\$5,016,310	\$1,317,000	\$943,000	\$835,000	\$5,390,000	\$17,723,000	\$702,248

## Scottsville Water System

The Scottsville Water System is comprised of the raw water conveyance, finished water treatment, transmission and storage infrastructure for the Town of Scottsville in southern Albemarle County. The source water for this system is the Totier Creek Intake, and the backup supply is the Totier Creek Reservoir, which was built in 1971 with a current useable capacity of 182 million gallons. Raw water is treated at the Scottsville Water Treatment Plant (0.25 mgd rated capacity) and provides finished water to the Albemarle County Service Authority. The system includes the Scottsville Storage Tank (0.25 MG).

### Project Description:

23. Scottsville WTP Finished Water Flow Meter: The Scottsville Water Treatment Plant provides potable drinking water to Albemarle County Service Authority customers in the Scottsville service area. After water has been treated at the plant, it is collected in an existing clearwell which was constructed with the original facility. From the clearwell, the water is pumped into the distribution system by one of two high service pumps. The flow from these pumps is not metered. In order to keep a record of the total flow entering the Scottsville distribution system, plant operators must periodically conduct draw-down tests to verify the pumping rate of each of the two pumps. The total flow is then calculated based on the run time of each pump. Based on these procedures, this method of measuring flow may not be representative of the flow entering the system as the pumping rate will vary based on the clearwell level and the hydraulic grade line of the distribution system. In addition, the Virginia Department of Health has indicated that the flow should be metered during recent conversations related to the disinfection profile calculation throughout the plant. To resolve this issue, this project will modify the high service pump discharge piping to allow for the installation of a finished water meter.
24. Scottsville Water LT2 Improvements: RWSA conducts routine regulatory sampling of the raw water from Totier Creek and Totier Creek Reservoir for compliance with the EPA Long Term 2 Enhanced Surface Water Treatment Rule (LT2). The rule provides risk based guidance on the needed level of treatment for the deactivation of microbial pathogens. This project anticipates the addition of ultraviolet disinfection to the treatment process in Scottsville.

## Scottsville Water System

Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2018)
		Current CIP Adopted 6/2018	Proposed Changes	Current Capital Budget	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024		
23	Scottsville Water Finished Water Flow Meter		\$145,000	\$145,000						\$145,000	
24	Scottsville Water LT2 Improvements		\$100,000		\$100,000					\$100,000	
	TOTAL	\$0	\$245,000	\$145,000	\$100,000	\$0	\$0	\$0	\$0	\$245,000	\$0

## **Wastewater Interceptors/Pumping Stations**

The RWSA wastewater interceptors and pumping stations serve to convey wastewater from the collection systems of the City of Charlottesville and Albemarle County Service Authority to the Moores Creek Advanced Water Resource Recovery Facility (MCAWRRF). This grouping includes: the Crozet Interceptor and four associated pumping stations; the Moores Creek Interceptor and Relief Sewer; the Morey Creek, Maury Hills, Powell Creek, Meadow Creek, Schenks Branch, Woodbrook and Rivanna Interceptors; as well as the Albemarle-Berkley Interceptor and associated Albemarle Pumping Station. Also included in this system are the two primary pump stations into the MCAWRRF, the Rivanna and Moores Creek Pump Stations.

### **Project Descriptions:**

25. Upper Schenks Branch Interceptor: The Schenks Branch Interceptor is located in the eastern part of the City of Charlottesville and ties into the Meadowcreek Interceptor. The interceptor was constructed in the mid-1950s of 21-inch clay and concrete pipe. The existing interceptor is undersized to serve present and future wet weather flows as determined by the City, and is to be upgraded to 30-inch pipe. The Upper Schenks Branch Interceptor consists of two sections along McIntire Road. Both of these sections have been designed with the first phase of this project located in the City's Schenks Branch Greenway, completed in early 2016. The second phase of the Upper Schenks Interceptor will be replaced by RWSA in coordination with the City of Charlottesville's sewer upgrades once easement negotiations with Albemarle County are complete (or the City authorizes the second phase project be constructed under McIntire Road). Project costs include design, permitting, easement acquisition, construction, construction observation/administration by the engineering consultant; and project contingencies
26. Interceptor Sewer and Manhole Repair: This project is used to conduct assessment of various interceptors as well as rehabilitation of interceptors that do not have a separate CIP project. Planned projects include condition assessments and assumed rehabilitation of the Morey Creek Interceptor, Powell Creek Interceptor and Upper Rivanna Interceptor as well as rehabilitation efforts identified for the Moores Creek Interceptor and the Moores Creek Relief Interceptor that have been identified from previous condition assessment efforts. A sewer rehabilitation contract has been developed under this project as well which procured a dedicated contractor for all rehabilitation work. This project will also provide an allowance in budgeted funds to carry out future repairs. The intent of this project is to complete a condition assessment of all RWSA interceptors (except those replaced during the period with new pipe) and perform as-needed rehabilitation work by the end of 2020. Such periodic assessments of all sewer pipe reflects industry best practices and the maintenance expectations of federal and state regulators as a part of avoiding sanitary sewer overflows
27. Crozet Interceptor: The Crozet Interceptor is located in western Albemarle County and serves the Crozet area. Flow metering indicated that the interceptor experienced substantial inflow and infiltration and requires rehabilitation. In order to minimize future infrastructure improvements, ACSA and RWSA have agreed to rehabilitate this interceptor and the sewers that flow to the interceptor. The initial phase of rehabilitation to repair defects in manholes and pipelines contributing to the inflow and infiltration in the interceptor upstream of Crozet

Pump Station No. 4 has been completed. The current budget accounts for condition assessment work and assumed rehabilitation needs for the lower portions of the interceptor. While wet weather flows have moderately improved based on the initial phase of work, the ACSA and RWSA continue to investigate and remediate deficiencies along the entire interceptor.

28. Crozet Flow Equalization Tank: Rehabilitation work in the RWSA and ACSA sewer systems is on-going to meet the I&I reduction goals in the Crozet Interceptor. This is based on the flow metering and modeling results of the Comprehensive Sanitary Sewer Model & Study conducted in 2006 and as part of the Crozet Interceptor CIP project. The results of the 2006 study were updated in 2016 to evaluate I/I reduction goals and future capital project needs. The need to proceed with construction of a flow equalization tank in the Crozet area was confirmed as a result of this study update, which took into account recent flow monitoring data that had been collected following previous I/I reduction efforts. Based on those results, a preliminary engineering evaluation and siting analysis of a flow equalization tank upstream of Crozet Pump Station No. 4 was completed to ensure that the facility could be designed, permitted, constructed and ready for operation by 2020 in order to meet the two-year storm flow targets. The budget for this project includes estimates for the preliminary engineering, final design, property acquisition, legal assistance, construction costs and construction management services.
29. Crozet Pump Station 1, 2, 3 Rehabilitation: The Crozet Interceptor Pump Stations were constructed in the 1980's and many of the components are still original. This project includes the replacement of pumps and valves at Pump Station 2 in order to improve pumping capabilities at this location and provide spare parts for the pumps at Pump Station 1. It also includes roof replacements at all four pump stations, siding replacement for the wet well enclosure at Pump Station 3, and installation of new water wells at Pump Stations 3 and 4.
30. Maury Hill Branch Sewer Upgrade: Based on the sewer study performed in 2016, the Maury Hill Branch Sewer was targeted for capacity upgrades around 2020. This project would include an upgrade from 8-inch diameter to 12-inch diameter sewer along with all new manholes. The work was anticipated to be coincident with rehabilitation needs and capacity increases to accommodate the growth at the UVA Fontaine Research Park. Due to alternate funding priorities, this project has been delayed 2-years outside of the current 5-year CIP.
31. Albemarle Berkley PS – Basin Demolition: Historically the Albemarle Berkley Pump Station was co-located within an open air basing that occasionally collected sewage during power outages. With the addition of a back-up power generator, the basin no longer serves a technical purpose. Given the proximity of the deteriorating structure to school property, this project serves to demolish and fill the area of the existing basin.

## Urban Wastewater Interceptors/Pumping Stations

Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2018)
		Current CIP Adopted 6/2018	Proposed Changes	Current Capital Budget	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024		
25	Upper Schenks Branch Interceptor	\$4,485,000	(\$500,000)	\$20,000	\$100,000	\$3,315,000	\$550,000			\$3,985,000	\$11,187
26	Interceptor Sewer and Manhole Repair	\$1,941,000	(\$852,670)	\$1,088,330						\$1,088,330	\$176,434
27	Crozet Interceptor	\$625,000		\$394,615		\$230,385				\$625,000	\$181,725
28	Crozet Flow Equalization Tank	\$3,300,000	\$1,560,000	\$1,300,000	\$3,560,000					\$4,860,000	\$80,092
29	Crozet Pump Station 1, 2, 3 Rehabilitation	\$525,000	\$20,000	\$275,000	\$20,000			\$250,000		\$545,000	
30	Maury Hill Branch Sewer Replacement	\$285,000	(\$285,000)							\$0	
31	Alb. Berkley PS - Basin Demolition		\$200,000			\$165,000	\$35,000			\$200,000	
	TOTAL	\$11,161,000	\$142,330	\$3,077,945	\$3,680,000	\$3,710,385	\$585,000	\$250,000	\$0	\$11,303,330	\$449,438

## **Moores Creek Advanced Water Resource Recovery Facility**

The Moores Creek Advanced Water Resource Recovery Facility (MCAWRRF) is the largest wastewater treatment facility within the RWSA system. The plant was originally constructed in 1958 and upgraded and expanded in 1981 and 1982, and currently has a rated capacity of 15 mgd. From 2009 thru 2012 the facility was upgraded to provide enhanced nutrient removal, and increased wet weather pumping and treatment capacity. This site includes the infrastructure for the wastewater treatment process as well as the RWSA administration facilities.

### **Project Descriptions:**

32. Odor Control Phase 2: As part of the implementation of the next phase of the 2007 Odor Control Master Plan at the MCAWRRF, operations audits were performed, liquid and vapor phase sampling was conducted, and a computerized dispersion model was developed from 2013 to 2014. Recommendations for odor control improvements that would significantly control odors from traveling beyond the MCAWRRF fence line were presented to the RWSA Board of Directors in December 2014 and the CIP project was approved at the January 2015 Meeting, with subsequent increases due to project challenges. The final design for odor control improvements includes covering the head works and screening channels, installing grit facilities, constructing a bypass line through one equalization basin, covering the primary clarifiers, building additional odor scrubbing facilities to treat the foul air from the covered sources, removing the post-digestion clarifiers from service, modifying the handling, and hauling and storage of bio solids, all of which has been recently completed in Odor Control Improvements Project. The remaining odor control work included in the current CIP budget includes cleaning the equalization basins and holding ponds which is anticipated to be bid out this spring and coating the interior of the digesters which is ongoing.
33. Engineering and Administration Building: RWSA currently has its administrative headquarters in two buildings on the grounds of the Moores Creek Advanced Water Resource Recovery Facility. The two-story Administration Building was constructed in the early 1980's and houses offices, IT server space, meeting space and a full service laboratory. The second building is a series of four trailers installed in between 2003-2010 that house the engineering department. The Administration building is located at the head of the wastewater treatment plant and is surrounded by underground piping and process functions that may conflict with existing parking and/or the building in a future plant expansion. There is currently a need to house additional staff; increase office and meeting space; plan for the replacement of the trailers; bring the IT server workrooms to modern standards; provide classroom space for education outreach. Due to the alternate funding priorities and the desire to complete the MCAWRRF master plan, this project has been delayed 4-years beyond the current 5-year CIP.
34. Digester Sludge Storage Improvements: The sole sludge storage tank at the MCAWRRF was constructed in 1959 of reinforced concrete and is in need of repairs. The scope of work would include piping modifications, hydraulic improvements, tank safety improvements such as handrail and lights, and structural improvements to the existing sludge storage tank roof.



35. Aluminum Slide Gate Replacement: Several large aluminum slide gates are located at the influent side of the Moores Creek Pump Station. These gates allow staff to stop or divert flow to perform maintenance activities. After repeated attempts to access and repair the gates, it is now necessary to replace and modify the gate arrangement. The replacement includes new gates for greater flexibility and resiliency as well as significant flow bypass pumping. Likewise there are several gates at the Ultraviolet disinfection facility that leak water, causing a reduced capacity of the facility. Replacement of these gates will restore the process to full capacity. In addition, motor operated valves at the headworks will improve wet weather operations related to the new grit facility.
36. Moores Creek AWWRF Master Plan: The majority of the Moores Creek Water Resource Recovery Facility was constructed in the early 1980's. At the time, the plant layout was developed with space held open for future process expansion. With the Enhanced Nutrient Removal (ENR) project in 2009, the operation and layout of the plant was fundamentally altered, as needed to meet the new regulation. The project did anticipate the need for future expansion and some of the processes have readily available space. However, a full expansion plan was not developed at the time. As identified in the 2107 Strategic Plan, the Authority has a goal to plan, deliver and maintain dependable infrastructure in a financially responsible manner. Staff has identified asset master planning as a priority strategy to improve overall system development. As such, this project will serve to evaluate and plan for future space and process needs to accommodate capacity expansion and/or anticipated regulatory changes.
37. Mechanical Thickener: During the design of the Moores Creek AWWRF Phase 2 Odor Control project, the consultants conducted a detailed evaluation of all facility odor sources. One of the key sources identified, was the post-digestion clarifiers. These clarifiers are two round open-topped tanks of digested wastewater sludge, located on the north side of the plant. During the ENR upgrade, the characteristics of the post-aeration sludge changed. This change has led to less predictable sludge handling through the existing gravity thickeners. This change in the post-aeration sludge characteristics has made obtaining a clear thickener overflow more difficult without chemical addition. Removing the post-digestion clarifiers from service combined with solids carryover from the existing gravity thickeners create a number of downstream consequences in primary clarification, sludge digestion and solids dewatering. Removing these facilities from service reduces the sludge thickness and therefore the plant's ability to adequately process it. This project includes the design and installation of a mechanical thickener prior to digestion that will increase plant solids processing reliability and capacity. Due to the alternate funding priorities and the desire to complete the MCAWWRF Master Plan, this project has been delayed 4-years beyond the current 5-year CIP.
38. Compost Shed Roof Rehabilitation: In the early 1980's a large metal-framed shed roof was constructed to house the biosolids composting operations. Subsequent to stopping composting at Moores Creek AWWRF, the shed roof serves as an equipment maintenance yard, solids handling facility and material storage lock-up. The shed roof is exhibiting signs of rafter deterioration and ongoing drainage issues. This project will serve to evaluate and perform remediation needs at this facility.

## Moores Creek Advanced Water Resource Recovery Facility

Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2018)
		Current CIP Adopted 6/2018	Proposed Changes	Current Capital Budget	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024		
32	Odor Control Phase 2	\$2,216,632		\$2,216,632						\$2,216,632	\$65,743
33	Engineering and Administration Building	\$3,000,000	(\$3,000,000)							\$0	
34	Digester Sludge Storage Improvements	\$265,000	\$48,000	\$265,000		\$48,000				\$313,000	
35	Aluminum Slide Gate Replacements	\$470,000		\$470,000						\$470,000	
36	Moores Creek AWRRF Master Plan	\$100,000	\$150,000		\$50,000	\$200,000				\$250,000	
37	Mechanical Thickener	\$1,200,000	(\$1,200,000)							\$0	
38	Compost Shed Roof Rehabilitation		\$200,000			\$200,000				\$200,000	
	TOTAL	\$7,251,632	(\$3,802,000)	\$2,951,632	\$50,000	\$448,000	\$0	\$0	\$0	\$3,449,632	\$65,743

## **Scottsville Wastewater System**

The Scottsville Wastewater System includes the influent pumping station, the water resource recovery facility constructed in 1983, and the historical treatment lagoon (now incorporated into the plant operation). The water resource recovery facility has a rated capacity of 0.2 mgd.

### **Project Descriptions:**

39. Grinder and Air Control Improvements: Currently the influent raw water pump station does not have a means to prevent large material from impacting the pumps, resulting in frequent clogging and maintenance. The space within the pump station is very limited and therefore does not allow for screening. This project will design and install an inline grinder within the influent pump channel. In addition, this project will evaluate methods to automate air control for the biological treatment process. The current method of air control produces inconsistent results, adversely impacting treatment and operations.

# Scottsville Water Resource Recovery Facility

Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2018)
		Current CIP Adopted 6/2018	Proposed Changes	Current Capital Budget	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024		
39	Grinder and Air Control Improvements	\$100,000	\$110,000		\$65,000	\$145,000				\$210,000	
	TOTAL	\$100,000	\$110,000	\$0	\$65,000	\$145,000	\$0	\$0	\$0	\$210,000	\$0

## **Glenmore Wastewater System**

The 0.381-mgd water resource recovery facility, located within the Glenmore subdivision, is operated by RWSA. The facility includes an influent pumping station located immediately adjacent to the treatment facility.

### **Project Descriptions:**

40. Influent Pump & VFD Addition: The Glenmore WRRF is predicted to see additional dry and wet weather flows as construction within the service area continues. Future wet weather flows will require higher influent pumping capacity and an additional pump and electrical variable frequency drive will be required to maintain firm capacity.
41. Secondary Clarifier Coating: The secondary clarifiers at the Glenmore facility were painted over 10-years ago. The clarifier environment is a particularly harsh environment subject to corrosive gasses, grit abrasion and mechanical wear. Based on observations by operations staff, the coating system is in need of replacement to prevent deterioration and failure of the underlying metal superstructure. This project includes the cleaning and full coating of the metal portions of the clarifier.

## Glenmore Water Resource Recovery Facility

Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2018)
		Current CIP Adopted 6/2018	Proposed Changes	Current Capital Budget	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024		
40	Influent Pump & VFD Addition	\$61,000	\$4,000			\$65,000				\$65,000	
41	Secondary Clarifier Coating	\$50,000	\$60,000	\$25,000	\$85,000					\$110,000	
	TOTAL	\$111,000	\$64,000	\$25,000	\$85,000	\$65,000	\$0	\$0	\$0	\$175,000	\$0

## All Systems

### Project Descriptions:

42. Radio Upgrades: The regional 800 MHz Public Safety Communication System, in which the Rivanna Water and Sewer Authority participates to provide internal and emergency radio communication, is expected to reach the end of its service life in 2018. Because of technology changes (software and hardware) the Charlottesville-UVA-Albemarle County Emergency Communications Center (ECC) will need to upgrade or replace the system to keep it useable. This project plans for the upgrade or replacement of major technology components and equipment of the existing system include: electronic components at all tower sites and the prime site at the ECC facility; new console equipment at the regional ECC; equipment such as tower site generators and UPS systems; an additional tower site (to improve service in southern Albemarle County); microwave backbone; and replacement of the system recording facilities. The project will take 24 months to complete and will be completed in Fiscal Year 2018. RWSA is being apportioned a part of the \$18.8M project cost proportionately based on the number of radios (2.4% of the total project cost). In addition to this assessment from the ECC, the Authority will also be required to undertake upgrades to its fleet of stationary, mobile, and portable radios.
43. Asset Management: Asset management is the practice of managing our infrastructure to minimize the total cost of owning and operating these assets while providing desired service levels. In doing so, it is used to make sure planned maintenance activities take place and that capital assets are replaced, repaired or upgraded at the right time, while ensuring that the money necessary to perform those activities is available. The Rivanna Water and Sewer Authority (RWSA) has some components of an asset management program in place (i.e. GIS, work order system), but has identified the need to further develop the program as part of our Strategic Planning process. In order to continue to build the program, a consultant was procured to assist with a three-phase process that will include facilitation and development of an asset management strategic plan, development and management of a pilot study where the results of the strategic plan will be applied to a specific class of assets, and assistance through a full implementation process. As part of this three-phase process, the consultant will also assist RWSA with the procurement of a software package to facilitate the overall program.
44. Security Enhancements: As required by the federal Bioterrorism Act of 2002, water utilities must conduct vulnerability assessments (VA) and have emergency response plans. RWSA recently completed a VA of its water system in collaboration with other regional partners and identified a number of security improvements that could be applied to both its water and wastewater systems. The purpose of this project will be to install security improvements at RWSA facilities including an enhanced access control program, industrial strength door and window components, security gate and fencing modifications, an improved lock and key program, facility signage, closed circuit television (CCTV) enhancements, intrusion detection systems (IDS), additional security lighting, and ladder guards.
45. IT Master Plan – Software: Staff is currently conducting an IT Master Plan to assess and benchmark current software and business practices. As the planning effort nears completion

there will be a need for several wholesale software upgrades. This project will address those Authority wide needs.



## All Systems

Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2018)
		Current CIP Adopted 6/2018	Proposed Changes	Current Capital Budget	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024		
42	Radio Upgrades	\$521,000	\$125,000	\$521,000		\$125,000				\$646,000	\$28,337
43	Asset Management	\$500,000		\$300,000		\$200,000				\$500,000	
44	Security Enhancements	\$2,400,000	(\$1,400,000)	\$170,000	\$830,000					\$1,000,000	
45	IT Master Plan - Software		\$450,000		\$150,000	\$150,000	\$150,000			\$450,000	
	TOTAL	\$3,421,000	(\$825,000)	\$991,000	\$980,000	\$475,000	\$150,000	\$0	\$0	\$2,596,000	\$28,337

## **APPENDICES**

**CIP Financial Summary**

**Water System Summary**

**Wastewater System Summary**

**All Systems Summary**

## CIP Financial Summary

Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2018)
		Current CIP Adopted 6/2018	Proposed Changes	Current Capital Budget	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024		
1	South Rivanna Reservoir to Ragged Mountain Reservoir Water Line Right-of-Way	\$2,295,000		\$840,249	\$870,000	\$584,751				\$2,295,000	\$123,782
2	South Rivanna Reservoir Dredging	\$10,000				\$10,000				\$10,000	
3	Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line	\$4,116,000	(\$899,000)	\$0			\$325,000	\$1,186,000	\$1,706,000	\$3,217,000	
4	Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Pump Station	\$2,410,000	(\$1,750,000)	\$0			\$250,000	\$121,000	\$289,000	\$660,000	
5	Birdwood Golf Course Waterline		\$4,000,000	\$2,400,000	\$1,600,000					\$4,000,000	
6	Observatory Water Treatment Plant Improvements	\$18,630,000	\$1,070,000	\$2,648,198		\$5,701,802	\$7,850,000	\$3,500,000		\$19,700,000	\$1,154,558
7	Sugar Hollow Dam - Rubber Crest Gate Replacement & Intake	\$940,000	\$200,000	\$55,000	\$415,000	\$670,000				\$1,140,000	
8	Valve Repair - Replacement (Phase 2)	\$500,000	\$382,914	\$500,000	\$382,914					\$882,914	
9	Piney Mountain Tank Rehabilitation	\$500,000		\$500,000						\$500,000	\$51,185
10	Avon to Pantops Water Main	\$13,200,000	(\$11,100,000)	\$1,375,000					\$725,000	\$2,100,000	\$126,861
11	Water Demand Projection and Safe Yield Study	\$100,000	\$54,000	\$154,000						\$154,000	
12	South Fork Rivanna River Crossing and North Rivanna Transmission Main	\$5,340,000				\$843,000	\$3,930,000	\$567,000		\$5,340,000	
13	Rt. 29 Pump Station	\$2,300,000			\$201,000	\$1,824,000	\$275,000			\$2,300,000	

## CIP Financial Summary (Continued)

Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2018)
		Current CIP Adopted 6/2018	Proposed Changes	Current Capital Budget	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024		
14	Finished Water System Master Plan	\$150,000	\$103,000	\$253,000						\$253,000	
15	South Rivanna Hydropower Plant Decommissioning	\$400,000	\$325,000	\$400,000	\$325,000					\$725,000	\$98,625
16	South Rivanna Water Treatment Plant Improvements	\$7,500,000	\$7,500,000	\$181,891	\$7,864,524	\$6,953,585				\$15,000,000	\$46,891
17	South Rivanna Dam - Gate Repair		\$900,000		\$900,000					\$900,000	
18	North Rivanna Water Treatment Plant - Upgrade		\$2,325,000		\$385,000	\$940,000	\$1,000,000			\$2,325,000	
19	Beaver Creek Dam Alteration	\$8,830,000	(\$3,932,000)	\$192,871	\$516,129	\$561,000	\$668,000	\$660,000	\$2,300,000	\$4,898,000	\$191,871
20	New Raw Water PS & Intake, Oxygenation (BCR)	\$6,100,000	(\$1,962,000)	\$160,000	\$138,000	\$300,000	\$275,000	\$175,000	\$3,090,000	\$4,138,000	
21	Buck's Elbow & Crozet Waterball Tank Painting	\$1,200,000	(\$1,013,000)	\$60,000	\$127,000					\$187,000	
22	Crozet Water Treatment Plant Expansion	\$6,900,000	\$1,600,000	\$3,808,819	\$4,235,181	\$456,000				\$8,500,000	\$510,377
23	Scottsville Water Finished Water Flow Meter		\$145,000	\$145,000						\$145,000	
24	Scottsville Water LT2 Improvements		\$100,000		\$100,000					\$100,000	
25	Upper Schenks Branch Interceptor	\$4,485,000	(\$500,000)	\$20,000	\$100,000	\$3,315,000	\$550,000			\$3,985,000	\$11,187
26	Interceptor Sewer and Manhole Repair	\$1,941,000	(\$852,670)	\$1,088,330						\$1,088,330	\$176,434

## CIP Financial Summary (Continued)

Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2018)
		Current CIP Adopted 6/2018	Proposed Changes	Current Capital Budget	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024		
27	Crozet Interceptor	\$625,000		\$394,615		\$230,385				\$625,000	\$181,725
28	Crozet Flow Equalization Tank	\$3,300,000	\$1,560,000	\$1,300,000	\$3,560,000					\$4,860,000	\$80,092
29	Crozet Pump Station 1, 2, 3 Rehabilitation	\$525,000	\$20,000	\$275,000	\$20,000			\$250,000		\$545,000	
30	Maury Hill Branch Sewer Replacement	\$285,000	(\$285,000)								
31	Alb. Berley PS - Basin Demolition		\$200,000			\$165,000	\$35,000			\$200,000	
32	Odor Control Phase 2	\$2,216,632		\$2,216,632						\$2,216,632	\$65,743
33	Engineering and Administration Building	\$3,000,000	(\$3,000,000)								
34	Digester Sludge Storage Improvements	\$265,000	\$48,000	\$265,000		\$48,000				\$313,000	
35	Aluminum Slide Gate Replacements	\$470,000		\$470,000						\$470,000	
36	Moore's Creek AWWRF Master Plan	\$100,000	\$150,000		\$50,000	\$200,000				\$250,000	
37	Mechanical Thickener	\$1,200,000	(\$1,200,000)								
38	Compost Shed Roof Rehabilitation		\$200,000			\$200,000				\$200,000	
39	Grinder and Air Control Improvements	\$100,000	\$110,000		\$65,000	\$145,000				\$210,000	

## CIP Financial Summary (Continued)

Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2018)
		Current CIP Adopted 6/2018	Proposed Changes	Current Capital Budget	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024		
40	Influent Pump & VFD Addition	\$61,000	\$4,000			\$65,000				\$65,000	
41	Secondary Clarifier Coating	\$50,000	\$60,000	\$25,000	\$85,000					\$110,000	
42	Radio Upgrades	\$521,000	\$125,000	\$521,000		\$125,000				\$646,000	\$28,337
43	Asset Management	\$500,000		\$300,000		\$200,000				\$500,000	
44	Security Enhancements	\$2,400,000	(\$1,400,000)	\$170,000	\$830,000					\$1,000,000	
45	IT Master Plan - Software		\$450,000		\$150,000	\$150,000	\$150,000			\$450,000	
<b>Total</b>		\$103,465,632	(\$6,261,756)	\$20,719,605	\$22,919,748	\$23,687,523	\$15,308,000	\$6,459,000	\$8,110,000	\$97,203,876	\$2,847,668

# Water System Summary

Urban Water System	Summary		Current Capital Budget	Projected Future Expenses by Year					Recommended CIP	Work-in -Progress
	Current CIP	Proposed Changes		FY20	FY21	FY22	FY23	FY24		
<b>PROJECT COSTS</b>										
Community Water Supply Plan	\$ 8,831,000	\$ 1,351,000	\$ 3,240,249	\$ 2,470,000	\$ 594,751	\$ 575,000	\$ 1,307,000	\$ 1,995,000	\$ 10,182,000	\$ 123,782
Observatory WTP/Ragged Mtn/Sugar Hollow Systems	19,570,000	1,270,000	2,703,198	415,000	6,371,802	7,850,000	3,500,000	-	20,840,000	1,154,558
Finished Water Storage/Distribution - Urban System	22,090,000	(10,560,086)	2,782,001	583,914	2,667,000	4,205,000	567,000	725,000	11,529,915	178,047
South & North Fork Rivanna WTP and Reservoir System	7,900,000	11,050,000	581,891	9,474,524	7,893,585	1,000,000	-	-	18,950,000	145,516
<b>Total Projects Urban Water Systems</b>	<b>\$ 58,391,000</b>	<b>\$ 3,110,914</b>	<b>\$ 9,307,337</b>	<b>\$ 12,943,438</b>	<b>\$ 17,527,138</b>	<b>\$ 13,630,000</b>	<b>\$ 5,374,000</b>	<b>\$ 2,720,000</b>	<b>\$ 61,501,913</b>	<b>\$ 1,601,901</b>
<b>FUNDING SOURCES URBAN SYSTEM - TO DATE</b>										
Work-in-Progress			\$ 1,601,900	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,601,900	
Debt Proceeds Available 2015B			5,294,967	8,000,000	5,225,033	-	-	-	18,520,000	
Capital Funds Available			2,410,470	-	-	-	-	-	2,410,470	
SUBTOTAL			9,307,337	8,000,000	5,225,033	-	-	-	22,532,370	
<b>FUNDING SOURCES URBAN SYSTEM - NEEDS</b>										
Future Cash reserve transfer to Capital Fund				\$ 1,000,000	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ 500,000	\$ 6,000,000	
New Debt Needed			-	3,943,438	10,802,105	12,130,000	3,874,000	2,220,000	32,969,543	
SUBTOTAL			-	4,943,438	12,302,105	13,630,000	5,374,000	2,720,000	38,969,543	
<b>TOTAL URBAN WATER FUNDING</b>			<b>\$ 9,307,337</b>	<b>\$ 12,943,438</b>	<b>\$ 17,527,138</b>	<b>\$ 13,630,000</b>	<b>\$ 5,374,000</b>	<b>\$ 2,720,000</b>	<b>\$ 61,501,913</b>	
									\$61,501,913	
<b>Estimated Bond Issues</b>					<b>\$14,745,500</b>		<b>\$18,224,000</b>			

Non-Urban Water System	Summary		Current Capital Budget	Projected Future Expenses by Year					Recommended CIP	Work-in -Progress
	Current CIP	Proposed Changes		FY20	FY21	FY22	FY23	FY24		
<b>PROJECT COSTS</b>										
Crozet Water System	\$ 23,030,000	\$ (5,307,000)	\$ 4,221,690	\$ 5,016,310	\$ 1,317,000	\$ 943,000	\$ 835,000	\$ 5,390,000	\$ 17,723,000	\$ 702,248
Scottsville Water System	-	245,000	145,000	100,000	-	-	-	-	245,000	-
<b>Total Rural Water Systems</b>	<b>\$ 23,030,000</b>	<b>\$ (5,062,000)</b>	<b>\$ 4,366,690</b>	<b>\$ 5,116,310</b>	<b>\$ 1,317,000</b>	<b>\$ 943,000</b>	<b>\$ 835,000</b>	<b>\$ 5,390,000</b>	<b>\$ 17,968,000</b>	<b>\$ 702,248</b>
<b>Non-URBAN FUNDING SOURCES</b>										
Work in Progress			\$ 702,248	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 702,248	
Capital Funds Available			\$ 145,000	\$ 100,000					245,000	
Debt Proceeds 2018 Bond			3,519,442	5,016,310	1,317,000	943,000	734,248	-	11,530,000	
Future Cash reserve transfer to Capital Fund					-	-	-	-	-	
New Debt Needed			-	-	-	-	100,752	5,390,000	5,490,752	
<b>TOTAL NON-URBAN WATER FUNDING</b>			<b>\$ 4,366,690</b>	<b>\$ 5,116,310</b>	<b>\$ 1,317,000</b>	<b>\$ 943,000</b>	<b>\$ 835,000</b>	<b>\$ 5,390,000</b>	<b>\$ 17,968,000</b>	
<b>Estimated Bond Issues</b>				<b>\$ -</b>			<b>5,490,800</b>			

## Wastewater System Summary

Urban Wastewater System	Summary		Current Capital Budget	Projected Future Expenses by Year					Recommended CIP	Work-in -Progress
	Current CIP	Proposed Changes		FY20	FY21	FY22	FY23	FY24		
<b>PROJECT COSTS</b>										
Wastewater Interceptor/Pumping Stations	\$ 11,161,000	\$ 142,330	\$ 3,077,945	\$ 3,680,000	\$ 3,710,385	\$ 585,000	\$ 250,000	\$ -	\$ 11,303,330	\$ 449,438
Moore's Creek WWTP	7,251,632	(3,802,000)	2,951,632	50,000	448,000	-	-	-	3,449,632	65,743
Security & Asset Management										
<b>Total Urban Wastewater Systems</b>	<b>\$ 18,412,632</b>	<b>\$ (3,659,670)</b>	<b>\$ 6,029,577</b>	<b>\$ 3,730,000</b>	<b>\$ 4,158,385</b>	<b>\$ 585,000</b>	<b>\$ 250,000</b>	<b>\$ 0</b>	<b>\$ 14,752,962</b>	<b>\$ 515,181</b>
<b>FUNDING SOURCES URBAN SYSTEM - IN PLACE</b>										
Work-in-Progress			\$ 515,181	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 515,181	
Debt Proceeds - 2018			1,472,396	2,980,000	851,604	-	-	-	5,304,000	
Capital Funds Available			4,042,000	-	-	-	-	-	4,042,000	
<b>SUBTOTAL</b>			<b>6,029,577</b>	<b>2,980,000</b>	<b>851,604</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9,861,181</b>	
<b>FUNDING SOURCES URBAN SYSTEM - NEEDS</b>										
Future Cash Reserves			\$ -	\$ 750,000	\$ 500,000	\$ -	\$ -	\$ -	\$ 1,250,000	
New Debt Needed			(0)	\$ 0	2,806,781	585,000	250,000	-	3,641,781	
<b>SUBTOTAL</b>			<b>(0)</b>	<b>\$ 750,000</b>	<b>3,306,781</b>	<b>585,000</b>	<b>250,000</b>	<b>-</b>	<b>4,891,781</b>	
<b>TOTAL URBAN WASTEWATER FUNDING</b>			<b>\$ 6,029,577</b>	<b>\$ 3,730,000</b>	<b>\$ 4,158,385</b>	<b>\$ 585,000</b>	<b>\$ 250,000</b>	<b>\$ -</b>	<b>\$ 14,752,962</b>	
<b>Estimated Bond Issues</b>					<b>\$ 2,806,800</b>		<b>\$ 835,000</b>		<b>\$ 3,641,800</b>	

Non-Urban Wastewater System	Summary		Current Capital Budget	Projected Future Expenses by Year					Recommended CIP	Work-in -Progress
	Current CIP	Proposed Changes		FY20	FY21	FY22	FY23	FY24		
<b>PROJECT COSTS</b>										
Glenmore WWTP	\$ 111,000	\$ 64,000	\$ 25,000	\$ 85,000	\$ 65,000	\$ -	\$ -	\$ -	\$ 175,000	\$ -
Scottsville WWTP	100,000	110,000	-	65,000	145,000	-	-	-	210,000	-
<b>Total Rural Wastewater Systems</b>	<b>\$ 211,000</b>	<b>\$ 174,000</b>	<b>\$ 25,000</b>	<b>\$ 150,000</b>	<b>\$ 210,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 385,000</b>	<b>\$ -</b>
<b>FUNDING SOURCES RURAL SYSTEM - NEEDS</b>										
Capital Funds Available			\$ 25,000	\$ 45,000	-	-	-	-	70,000	
Future Cash Reserve			-	80,000	-	-	-	-	80,000	
New Debt Needed				25,000	210,000	-	-	-	235,000	
<b>TOTAL RURAL WASTEWATER FUNDING</b>			<b>\$ 25,000</b>	<b>\$ 150,000</b>	<b>\$ 210,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 385,000</b>	
<b>Estimated Bond Issues</b>			<b>\$ 235,000</b>		<b>\$ 235,000</b>					



## All Systems Summary

Shared Projects - All Rate Centers	Summary		Current Capital Budget	Projected Future Expenses by Year					Recommended CIP	Work-in - Progress
	Current CIP	Proposed Changes		FY20	FY21	FY22	FY23	FY24		
<b>PROJECT COSTS</b>										
Asset management/Security/IT Master Plan	\$ 3,421,000	\$ (825,000)	\$ 991,000	\$ 980,000	\$ 475,000	\$ 150,000	\$ -	\$ -	\$ 2,596,000	\$ 123,782
<b>Total Projects Urban Water Systems</b>	<b>\$ 3,421,000</b>	<b>\$ (825,000)</b>	<b>\$ 991,000</b>	<b>\$ 980,000</b>	<b>\$ 475,000</b>	<b>\$ 150,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,596,000</b>	<b>\$ 123,782</b>
Completed or Closed Projects	-	-								
<b>FUNDING SOURCES</b>										
Work in Progress			\$123,782						\$ 123,782	
Possible Future Reserves			\$100,000	\$100,000					\$200,000	
New Debt Needed			\$ 767,219	\$ 880,000	\$ 475,000	\$ 150,000	\$ -	\$ -	\$ 2,272,219	
									-	
<b>TOTAL URBAN WATER FUNDING</b>			<b>\$ 991,000</b>	<b>\$ 980,000</b>	<b>\$ 475,000</b>	<b>\$ 150,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,596,000</b>	
<b>Estimated Bond Issues</b>					<b>\$2,272,219</b>					

	<b>2020 - 2024 Proposed <u>CIP</u></b>	<b>2019-2023 Adopted <u>CIP</u></b>	<b><u>Change \$</u></b>
<b><u>Project Cost</u></b>			
Urban Water Projects	\$ 61,501,900	\$ 89,832,485	\$ (28,330,585)
Urban Wastewater Projects	14,753,000	32,895,150	(18,142,150)
Non-Urban Projects & Shared	20,949,000	31,174,400	(10,225,400)
<b>Total Project Cost Estimates</b>	<b><u>\$ 97,203,900</u></b>	<b><u>\$ 153,902,035</u></b>	<b><u>\$ (56,698,135)</u></b>
<b><u>Funding in place</u></b>			
Work-in-Progress (paid for)	\$ 2,943,110	\$ 33,967,484	(31,024,374)
Debt Proceeds Used	35,354,000	11,230,305	24,123,695
Cash-Capital Available	6,767,470	7,702,584	(935,114)
	<u>\$ 45,064,580</u>	<u>\$ 52,900,373</u>	<u>\$ (7,835,793)</u>
<b><u>Financing Needs</u></b>			
Possible Future Reserves	\$ 7,530,000	4,111,000	3,419,000
New Debt	44,609,320	96,890,662	(52,281,342)
	<u>\$ 52,139,320</u>	<u>\$ 101,001,662</u>	<u>\$ (48,862,342)</u>
<b>Total Funding</b>	<b><u>\$ 97,203,900</u></b>	<b><u>\$ 153,902,035</u></b>	<b><u>\$ (56,698,135)</u></b>
Percentage of funding in place	46.4%	34.4%	
Ratio of debt to expense	85.3%	92.3%	
Ratio of cash to expense	14.7%	7.7%	

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Detail by Major Systems	Total Proposed CIP	Urban Water Projects	Urban Wastewater Projects	Shared Projects	Water Non-Urban Projects	Wastewater Non-Urban Projects
<b><u>Project Cost</u></b>						
Urban Water Projects	\$ 61,501,900	\$ 61,501,900	\$ -		\$ -	\$ -
Urban Wastewater Projects	14,753,000	-	14,753,000		-	-
Non-Urban Projects & Shared	20,949,000	-	-	2,596,000	17,968,000	385,000
<b>Total Project Cost Estimates</b>	<b>\$ 97,203,900</b>	<b>\$ 61,501,900</b>	<b>\$ 14,753,000</b>	<b>\$ 2,596,000</b>	<b>\$ 17,968,000</b>	<b>\$ 385,000</b>
<b><u>Funding in place</u></b>						
Work-in-Progress (paid for)	\$ 2,943,110	\$ 1,601,900	\$ 515,180	\$ 123,780	\$ 702,250	\$ -
Debt Proceeds available	35,354,000	18,520,000	5,304,000	-	11,530,000	-
Cash-Capital Available	6,767,470	2,410,470	4,042,000	-	245,000	70,000
Subtotal	\$ 45,064,580	\$ 22,532,370	\$ 9,861,180	\$ 123,780	\$ 12,477,250	\$ 70,000
<b><u>Financing Needs</u></b>						
Possible Future Reserves	\$ 7,530,000	6,000,000	1,250,000	200,000	-	80,000
New Debt	44,609,320	32,969,530	3,641,820	2,272,220	5,490,750	235,000
Subtotal	\$ 52,139,320	\$ 38,969,530	\$ 4,891,820	\$ 2,472,220	\$ 5,490,750	\$ 315,000
<b>Total Funding</b>	<b>\$ 97,203,900</b>	<b>\$ 61,501,900</b>	<b>\$ 14,753,000</b>	<b>\$ 2,596,000</b>	<b>\$ 17,968,000</b>	<b>\$ 385,000</b>
Percentage of funding in place	46.4%	36.6%	66.8%	4.8%	69.4%	18.2%
Ratio of debt to expense	85.3%	83.7%	60.6%	87.5%	94.7%	61.0%
Ratio of cash to expense	14.7%	13.7%	35.9%	7.7%	1.4%	39.0%

	<u>Urban Water</u>	<u>Urban Wastewater</u>	<u>Non-Urban</u>	<u>Shared</u>	<u>Total</u>
Current Adopted CIP 2019 - 2023	\$ 88,382,485	\$ 30,924,151	\$ 31,174,390	\$ 3,421,000	\$ 153,902,026
<u>Changes:</u>					
Completed or Closed Projects	(30,559,735)	(12,558,519)	(7,933,390)	-	(51,051,644)
Adjustments on existing Projects	(3,545,845)	(4,012,670)	(4,988,000)	(1,275,000)	(13,821,515)
New Projects	<u>7,225,000</u>	<u>400,000</u>	<u>100,000</u>	<u>450,000</u>	<u>8,175,000</u>
Total Changes	(26,880,580)	(16,171,189)	(12,821,390)	(825,000)	(56,698,159)
Total Proposed CIP 2020 - 2024	\$ 61,501,905	\$ 14,752,962	\$ 18,353,000	\$ 2,596,000	\$ 97,203,867

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		FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
<b><u>City of Charlottesville</u></b>								
<b><u>Urban Water</u></b>								
Operating Rate	Per 1000 gal.	1.969	2.070	2.095	2.284	2.466	2.614	2.771
	% Change		5.1%	1.2%	9.0%	8.0%	6.0%	6.0%
Debt Service Charge	Per month	\$ 160,039	\$ 181,008	193,580	210,345	226,150	242,069	257,946
			13.1%	6.9%	8.7%	7.5%	7.0%	6.6%
Revenue Requirements:								
Operating Rate Revenue	Annual	\$ 3,514,200	\$ 3,587,700	\$ 3,630,500	\$ 3,957,245	\$ 4,273,825	\$ 4,530,254	\$ 4,802,069
Debt Service Revenues	Annual	1,920,500	2,172,100	2,323,000	2,524,139	2,713,796	2,904,834	3,095,354
Total		<b>\$ 5,434,700</b>	<b>\$ 5,759,800</b>	<b>\$ 5,953,500</b>	<b>\$ 6,481,384</b>	<b>\$ 6,987,620</b>	<b>\$ 7,435,088</b>	<b>\$ 7,897,423</b>
	\$ Change		\$ 325,100	\$ 193,700	\$ 527,884	\$ 506,237	\$ 447,467	\$ 462,335
	% Change		6.0%	3.4%	8.9%	7.8%	6.4%	6.2%
<b><u>Urban Wastewater</u></b>								
Operating Rate	Per 1000 gal.	1.951	2.146	2.369	2.511	2.662	2.822	2.991
	% Change		10.0%	10.4%	6.0%	6.0%	6.0%	6.0%
Debt Service Charge	Per month	\$ 392,841	\$ 408,260	407,588	411,140	411,960	411,060	410,190
			3.9%	-0.2%	0.9%	0.2%	-0.2%	-0.2%
Revenue Requirements:								
Operating Rate Revenue	Annual	\$ 3,540,600	\$ 3,711,300	\$ 4,016,800	\$ 4,257,808	\$ 4,513,276	\$ 4,784,073	\$ 5,071,117
Debt Service Revenues	Annual	4,714,100	4,899,100	4,891,100	4,933,680	4,943,520	4,932,720	4,922,280
Total		<b>\$ 8,254,700</b>	<b>\$ 8,610,400</b>	<b>\$ 8,907,900</b>	<b>\$ 9,191,488</b>	<b>\$ 9,456,796</b>	<b>\$ 9,716,793</b>	<b>\$ 9,993,397</b>
	\$ Change		\$ 355,700	\$ 297,500	\$ 283,588	\$ 265,308	\$ 259,997	\$ 276,604
	% Change		4.3%	3.5%	3.2%	2.9%	2.7%	2.8%
<b><u>Total all Rate Centers</u></b>								
Operating Rate Revenue		<b>\$ 7,054,800</b>	<b>\$ 7,299,000</b>	<b>\$ 7,647,300</b>	<b>\$ 8,215,053</b>	<b>\$ 8,787,101</b>	<b>\$ 9,314,327</b>	<b>\$ 9,873,187</b>
Debt Service Revenues		<b>6,634,600</b>	<b>7,071,200</b>	<b>7,214,100</b>	<b>7,457,819</b>	<b>7,657,316</b>	<b>7,837,554</b>	<b>8,017,634</b>
Total City All Revenues		<b>\$ 13,689,400</b>	<b>\$ 14,370,200</b>	<b>\$ 14,861,400</b>	<b>\$ 15,672,872</b>	<b>\$ 16,444,417</b>	<b>\$ 17,151,881</b>	<b>\$ 17,890,820</b>
	\$ Change		\$ 680,800	\$ 491,200	\$ 811,472	\$ 771,545	\$ 707,464	\$ 738,940
	% Change		5.0%	3.4%	5.5%	4.9%	4.3%	4.3%
<b>Additional for 10-Year CIP</b>					79,300	292,300	623,200	981,600
		<b>\$ 13,689,400</b>	<b>\$ 14,370,200</b>	<b>\$ 14,861,400</b>	<b>\$ 15,752,172</b>	<b>\$ 16,736,717</b>	<b>\$ 17,775,081</b>	<b>\$ 18,872,420</b>
			5.0%	3.4%	6.0%	6.3%	6.2%	6.2%

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		FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
<b><u>ACSA Charges From RWSA</u></b>								
<b><u>Urban Water</u></b>								
Operating Rate	Per 1000 gal.	1.969	2.07	2.095	2.284	2.466	2.614	2.771
	% Change		5.1%	1.2%	9.0%	8.0%	6.0%	6.0%
Debt Service Charge	Per month	\$ 285,439	\$ 307,598	321,303	342,838	362,235	382,693	404,655
			7.8%	4.5%	6.7%	5.7%	5.6%	5.7%
Revenue Requirements:								
Operating Rate Revenue	Annual	\$ 3,243,900	\$ 3,447,000	\$ 3,488,100	\$ 3,802,029	\$ 4,106,191	\$ 4,352,563	\$ 4,613,717
Debt Service Revenues	Annual	3,425,300	3,691,200	3,855,600	4,114,052	4,346,818	4,592,315	4,855,858
Total		<b>\$ 6,669,200</b>	<b>\$ 7,138,200</b>	<b>\$ 7,343,700</b>	<b>\$ 7,916,081</b>	<b>\$ 8,453,010</b>	<b>\$ 8,944,878</b>	<b>\$ 9,469,575</b>
	\$ Change		\$ 469,000	\$ 205,500	\$ 572,381	\$ 536,928	\$ 491,868	\$ 524,697
	% Change		7.0%	2.9%	7.8%	6.8%	5.8%	5.9%
<b><u>Urban Wastewater</u></b>								
Operating Rate	Per 1000 gal.	1.951	2.146	2.369	2.511	2.662	2.822	2.991
	% Change		10.0%	10.4%	6.0%	6.0%	6.0%	6.0%
Debt Service Charge	Per month	\$ 222,550	\$ 246,308	278,174	286,107	289,337	294,757	300,207
			10.7%	12.9%	2.9%	1.1%	1.9%	1.8%
Revenue Requirements:								
Operating Rate Revenue	Annual	\$ 3,139,800	\$ 3,565,800	\$ 4,016,800	\$ 4,257,808	\$ 4,513,276	\$ 4,784,073	\$ 5,071,117
Debt Service Revenues	Annual	2,670,600	2,955,700	3,338,100	3,433,289	3,472,049	3,537,089	3,602,489
Total		<b>\$ 5,810,400</b>	<b>\$ 6,521,500</b>	<b>\$ 7,354,900</b>	<b>\$ 7,691,097</b>	<b>\$ 7,985,325</b>	<b>\$ 8,321,162</b>	<b>\$ 8,673,606</b>
	\$ Change		\$ 711,100	\$ 833,400	\$ 336,197	\$ 294,228	\$ 335,837	\$ 352,444
	% Change		12.2%	12.8%	4.6%	3.8%	4.2%	4.2%
<b><u>Non-Urban Rate Centers</u></b>								
Operating Rate Revenue	Annual	\$ 1,964,600	\$ 2,075,300	2,229,100	2,407,428	2,551,874	2,704,986	2,867,285
Debt Service Revenues	Annual	830,700	1,134,400	1,453,300	1,553,300	1,645,800	1,738,300	1,830,800
Total		<b>\$ 2,795,300</b>	<b>\$ 3,209,700</b>	<b>\$ 3,682,400</b>	<b>\$ 3,960,728</b>	<b>\$ 4,197,674</b>	<b>\$ 4,443,286</b>	<b>\$ 4,698,085</b>
				\$ 472,700	\$ 278,328	\$ 236,946	\$ 245,612	\$ 254,799
				14.7%	7.6%	6.0%	5.9%	5.7%
<b><u>Total all Rate Centers</u></b>								
Operating Rate Revenue		<b>\$ 8,348,300</b>	<b>\$ 9,088,100</b>	<b>\$ 9,734,000</b>	<b>\$ 10,467,265</b>	<b>\$ 11,171,341</b>	<b>\$ 11,841,622</b>	<b>\$ 12,552,119</b>
Debt Service Revenues		<b>6,926,600</b>	<b>7,781,300</b>	<b>8,647,000</b>	<b>9,100,641</b>	<b>9,464,667</b>	<b>9,867,704</b>	<b>10,289,147</b>
Total ACSA All Revenues		<b>\$ 15,274,900</b>	<b>\$ 16,869,400</b>	<b>\$ 18,381,000</b>	<b>\$ 19,567,906</b>	<b>\$ 20,636,009</b>	<b>\$ 21,709,326</b>	<b>\$ 22,841,267</b>
	\$ Change		\$ 1,594,500	\$ 1,511,600	\$ 1,186,906	\$ 1,068,102	\$ 1,073,317	\$ 1,131,940
	% Change		10.4%	9.0%	6.5%	5.5%	5.2%	5.2%
<b><u>Additional for 10-Year CIP</u></b>				209,900	652,600	1,256,700	1,901,200	
		<b>\$ 15,274,900</b>	<b>\$ 16,869,400</b>	<b>\$ 18,381,000</b>	<b>\$ 19,777,806</b>	<b>\$ 21,288,609</b>	<b>\$ 22,966,026</b>	<b>\$ 24,742,467</b>
			10.4%	9.0%	7.6%	7.6%	7.9%	7.7%

Rivanna Water and Sewer Authority  
CIP 2020-2024  
Summary Information - DRAFT

3/21/2019

	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
<b>RWSA</b>							
Operations Revenues							
Urban Water	\$ 6,758,100	\$ 7,034,700	\$ 7,118,600	\$ 7,759,274	\$ 8,380,016	\$ 8,882,817	\$ 9,415,786
Urban Wastewater	6,680,400	7,277,100	8,033,600	8,515,616	9,026,553	9,568,146	10,142,235
Other Rate Centers	1,964,600	2,075,300	2,229,100	2,407,428	2,551,874	2,704,986	2,867,285
Total	\$ 15,403,100	\$ 16,387,100	\$ 17,381,300	\$ 18,682,318	\$ 19,958,443	\$ 21,155,949	\$ 22,425,306
Change \$		984,000	994,200	1,301,018	1,276,125	1,197,507	1,269,357
Change %		6.4%	6.1%	7.5%	6.8%	6.0%	6.0%
Debt Service Charge Revenues							
Urban Water	5,345,800	5,863,300	6,178,600	6,638,191	7,060,614	7,497,149	7,951,212
Urban Wastewater	7,384,700	7,854,800	8,229,200	8,366,969	8,415,569	8,469,809	8,524,769
Other Rate Centers	830,700	1,134,400	1,453,300	1,553,300	1,645,800	1,738,300	1,830,800
Total	\$ 13,561,200	\$ 14,852,500	\$ 15,861,100	\$ 16,558,460	\$ 17,121,983	\$ 17,705,258	\$ 18,306,781
Change \$		1,291,300	1,008,600	697,360	563,523	583,275	601,523
Change %		9.5%	6.8%	4.4%	3.4%	3.4%	3.4%
<b>Total RWSA Customer Revenues</b>	<b>\$ 28,964,300</b>	<b>\$ 31,239,600</b>	<b>\$ 33,242,400</b>	<b>\$ 35,240,778</b>	<b>\$ 37,080,426</b>	<b>\$ 38,861,207</b>	<b>\$ 40,732,087</b>
Change \$		\$ 2,275,300	\$ 2,002,800	\$ 1,998,378	\$ 1,839,648	\$ 1,780,782	\$ 1,870,880
Change %		7.9%	6.4%	6.0%	5.2%	4.8%	4.8%
<b>Additional for 10-Year CIP</b>				289,200	944,900	1,879,900	2,882,800
	<b>\$ 28,964,300</b>	<b>\$ 31,239,600</b>	<b>\$ 33,242,400</b>	<b>\$ 35,529,978</b>	<b>\$ 38,314,526</b>	<b>\$ 41,975,207</b>	<b>\$ 46,728,887</b>
		0.0%	6.4%	6.9%	7.8%	9.6%	11.3%