

## Albemarle County Service Authority Board of Directors

1 The Board of Directors of the Albemarle County Service Authority (ACSA) met in  
2 a regular session on July 15, 2010, at 9:00 a.m. at the Administration and  
3 Operations Center at 168 Spotnap Road in Charlottesville, Virginia.

4 **Members Present:** Mr. Roberts, Chairman, Mr. Martin, Vice-Chairman; Messrs.  
5 Carter, Colbaugh, Thomas; Dr. Palmer

6 **Members Absent:** None

7 **Staff Present:** Messrs. Gorham, J. Lynn, M. Lynn, O'Connell, Bowling, Ms.  
8 Breeden, Mrs. Thraves and Mrs. Herr

9 **Public Present:** Mrs. Marvin Hilton and Family; Robbie Savage, Rivanna  
10 Conservation Society; Chip Votava and Randy Cyr, Michael Baker, Inc.; Sean  
11 Tubbs, Charlottesville Tomorrow.

12

13 1. Call to Order

14 The Chairman called the meeting to order and a quorum was established.

15

16 2. Recognition of Service, Marvin Hilton (Recording Time: 08:59:12 a.m.)

17 The Chairman welcomed Mr. Hilton's family to the meeting and extended  
18 the Board's condolences upon his recent passing. He stated that he personally  
19 had the occasion of getting to know Mr. Hilton during numerous lunches together.  
20 The Chairman stated that Mr. Hilton was a great asset and contributed a great  
21 deal to the Albemarle County Service Authority (ACSA) Board.

22 Dr. Palmer added that, after learning Mr. Hilton had been appointed to the  
23 ACSA Board as her replacement, she felt concerned. She stated she arranged a  
24 meeting with Mr. Hilton, and it was during that meeting she found him to be a  
25 very thoughtful, intelligent, and experienced man. Dr. Palmer stated that it was  
26 through that meeting and subsequent meetings, that all her concerns were  
27 allayed. She felt that Mr. Hilton was a real asset to the ACSA Board, and wished  
28 Mr. Hilton could have continued so the Service Authority could have benefited  
29 from his experience and wisdom.

30 The Chairman stated that he had spoken with Mr. Duane Snow, Albemarle  
31 County Supervisor, who wished to express his condolences and apologize for not

**Albemarle County Service Authority Board of Directors**

1 being able to attend today's meeting. The Chairman stated that Mr. Snow  
2 expressed to him how deeply he was hurt upon hearing of Mr. Hilton's passing.  
3 Mr. Snow had stated that he knew Mr. Hilton through Senior Statesman of  
4 Virginia, as well as other ways, and that Mr. Hilton served because he really  
5 cared. Mr. Snow had stated that Mr. Hilton served without an agenda, and that  
6 he had trusted Mr. Hilton to make the right decisions, which were in the best  
7 interest of both the Service Authority and the citizens. Mr. Snow had added that  
8 Mr. Hilton had stated to him numerous times how he enjoyed serving on the  
9 ACSA Board and working with ACSA staff.

10 The Chairman read and presented a resolution recognizing Mr. Hilton for  
11 his service on the ACSA Board to Mr. Hilton's family. He stated that the Service  
12 Authority would truly miss Mr. Hilton. The family expressed their thanks to the  
13 Board and staff.

14

15 3. Approval of Minutes for June 10, 2010 and June 17, 2010 (Recording  
16 Time: 09:04:50 a.m.)

17 a. The Chairman asked if there were any corrections or additions to  
18 the minutes of June 10, 2010.

19 ***Dr. Palmer moved to approve the minutes of June 10, 2010,***  
20 ***seconded by Mr. Colbaugh. All members voted aye.***

21 b. The Chairman asked if there were any corrections or additions to  
22 the minutes of June 17, 2010.

23 ***Mr. Carter moved to approve the minutes of June 17, 2010, seconded***  
24 ***by Dr. Palmer. All members voted aye.***

25 Dr. Palmer noted that she felt the minutes were great.

26

27 4. Executive Director Report (Recording Time: 09:06:14 a.m.)

28 Mr. O'Connell stated that his report was brief and mainly related to items  
29 on the Agenda. He noted one of those items was the continuing quest to obtain  
30 easements for the North Fork Regional Pump Station Project. Mr. O'Connell  
31 noted that the Camelot Wastewater Treatment Plant was scheduled to close by

## **Albemarle County Service Authority Board of Directors**

1 April 15, 2013, as part of an agreement with the Rivanna Water and Sewer  
2 Authority (RWSA), and that staff was focusing more and more on that date to  
3 make certain the project was on schedule. He stated that on this Agenda, were  
4 two items related to the project. Mr. O'Connell noted that staff was in detailed  
5 negotiations on four or five easements, with one or two easements being difficult  
6 to negotiate.

7 Mr. O'Connell stated that Mr. Tom Frederick, Executive Director of the  
8 RWSA, was present to provide an update on RWSA water and wastewater  
9 projects.

10 Mr. O'Connell stated that later on the Agenda, staff would present the  
11 Glenmore Tank Study.

12 Mr. O'Connell stated that with respect to the recent storm, the Service  
13 Authority was very fortunate to have only experienced minimal damage to one  
14 pump station. He added that due to long hours and hard work by the  
15 Maintenance Department, no customers experienced an outage. Mr. O'Connell  
16 noted that other utilities within the region were not so fortunate.

17 Mr. O'Connell stated that as part of this agenda and future agendas, staff  
18 would be providing the Board with more information on the day-to-day operations  
19 of the Service Authority. He stated that at this meeting staff would provide a  
20 demonstration on the Geographical Information System (GIS).

21 The Chairman asked if the Board had any questions or comments  
22 regarding the Executive Director Report.

23 Mr. Martin asked if a target date had been determined for when the North  
24 Fork Regional Pump Station Project would be advertised? Mr. O'Connell replied,  
25 as soon as all easements were obtained. He added that the target date was  
26 August 22, 2010, with the bidding process to be in two phases.

27 Mr. Martin asked if staff was still prepared to advertise the project if all  
28 easements were not obtained? Mr. O'Connell replied that staff would request  
29 that the Board authorize the filing of a Certificate of Condemnation to obtain any  
30 easements still unresolved by the time bids were received.

**Albemarle County Service Authority Board of Directors**

1 Mr. Bowling explained that the condemnation process entailed the filing of  
2 a certificate initially, which “takes” the property, in essence. He stated that what  
3 typically occurred was that the Service Authority continued to negotiate a  
4 settlement, satisfactory to both parties, prior to actually filing a petition in court,  
5 typically six months after the project was complete.

6 The Chairman asked if mediation was part of the process? Mr. Bowling  
7 replied yes, if the Service Authority was agreeable. He stated that his experience  
8 had been that all acquisitions settled before going to court.

9

10 **5. Matters from the Public Concerning Items Not on the Agenda (Recording**  
11 **Time: 09:10:47 a.m.)**

12 There were no matters from the public.

13

14 **6. Response to Public Comment (Recording Time: 09:11:02 a.m.)**

15 There was no public comment.

16

17 **7. GIS Demonstration by Engineering (Recording Time: 09:11:11 a.m.)**

18 Mr. O’Connell introduced Mr. Jeremy Lynn, Senior Civil Engineer, who  
19 would provide an overview of the information available through the Geographical  
20 Information System (GIS). He stated that the GIS was a sophisticated system,  
21 still in the midst of being built, and had been a multi-year project. Mr. O’Connell  
22 stated that Mr. Lynn’s overview of the system was from an engineer’s  
23 perspective, and that staff would discuss how the system could be used in other  
24 areas of the ACSA at a future Board meeting.

25 Mr. Lynn stated that he has been employed full-time for six years at the  
26 Service Authority. He stated that prior to that time he had worked as an intern,  
27 working with the GIS from the ground up. Mr. Lynn stated that the Engineering  
28 Department used an ESRI product to manage its GIS system, which was industry  
29 standard for water and wastewater utilities. He noted that both the City of  
30 Charlottesville and the RWSA used ESRI.

**Albemarle County Service Authority Board of Directors**

1 Mr. Lynn presented the software which showed what an engineer would  
2 see when opening the GIS. He indicated, on screen, a list of layers for different  
3 objects and features that could be located on a map. Mr. Lynn also showed a  
4 map of Albemarle County which displayed tax map parcels.

5 Mr. Lynn stated that the layers were broken down into groups which  
6 allowed certain features to be turned on and off. He provided the following  
7 description of each feature:

- 8 • *Fittings* – Mr. Lynn stated that fittings were bends in a pipe, crosses,  
9 and tapping sleeves, etc. He explained that prior to purchasing a  
10 Global Positioning System (GPS) for each Construction Inspector, staff  
11 would have to guess where fittings were located along a pipe. He  
12 stated that each Construction Inspector was now able to GPS locate  
13 the fittings along a pipe as they were installed and inspected. Mr. Lynn  
14 stated that this technology was very helpful in creating maps.
- 15 • *Water Meters* – Mr. Lynn stated that water meters displayed  
16 information from the billing system, such as service address, owner,  
17 mailing address, water consumption and whether the account was a  
18 water and sewer account or water only. Mr. Lynn stated that billing  
19 information was helpful in assisting a customer with regard to billing  
20 history or consumption. He stated that another benefit of having water  
21 meters GPS-located was scheduled water disruptions. He explained  
22 that the Engineering Department could select water meters within a  
23 particular area to compile a mailing list used in notifying customers of a  
24 scheduled water disruption.

25 Mr. Lynn stated that other highlights within the water feature were  
26 fire hydrants, which were useful for inquiries from insurance companies  
27 regarding the location of the nearest fire hydrant to a particular  
28 property. He stated that the feature allowed an engineer to enter an  
29 address and measure the distance to the nearest fire hydrant, which  
30 could provide a property owner with a discount on their homeowner's  
31 insurance. Mr. Lynn stated that on a monthly basis, the Engineering

**Albemarle County Service Authority Board of Directors**

1 Department exported all fire hydrant information to be sent to the  
2 County of Albemarle (County), which was also shared with the  
3 Emergency Communications Center. He noted that data regarding the  
4 installation of new fire hydrants within the system was provided to the  
5 Fire Department.

- 6 • *System Valves* – Mr. Lynn explained that system valves opened and  
7 closed to prevent the flow of water; ancillary valves were air release  
8 valves or blow-offs.
- 9 • *Water Mains* – Mr. Lynn stated the attribute table for water mains  
10 provided information such as the year installed, pipe material,  
11 diameter, length and street name.
- 12 • *Abandoned Water Lines* – Mr. Lynn noted that this feature was  
13 recently added due to capital improvement projects. He stated the  
14 abandoned water line feature was helpful, especially to an ACSA Utility  
15 Location Technician marking for Miss Utility, in determining where  
16 abandoned water lines were located, as well as new water lines. Mr.  
17 Lynn added that the information was also helpful to contractors in the  
18 field.
- 19 • *Repair* - Mr. Lynn stated the repair feature was added due to a request  
20 from the Maintenance Department. He explained that when a water  
21 repair was performed by the Maintenance Department, the  
22 Engineering Department documented that repair within the GIS. Mr.  
23 Lynn referred to an area along Route 240 in Crozet near the ConAgra  
24 facility, which showed a 6-inch pipe, 1 ½ - 2 miles long. He stated that  
25 within that stretch of pipe there had been three repairs on the west end  
26 of this section and two more repairs on the eastern end. Mr. Lynn  
27 stated that by being able to see where repairs had taken place, and the  
28 frequency of those repairs, the Engineering Department could focus  
29 their CIP efforts. He stated that coincidentally, there was a 12-inch  
30 RWSA water line that ran parallel with the ACSA's 6-inch water line.  
31 Mr. Lynn stated that staff had begun discussions with RWSA to

**Albemarle County Service Authority Board of Directors**

1 relocate connections from the 6-inch to the 12-inch, in order to take the  
2 6-inch water line out of service. Mr. Lynn referred to another area in  
3 the Key West subdivision, where six water repairs had been made  
4 since 2007, with two of those repairs in 2010. He stated this was a  
5 prime reason the Key West subdivision was a focus within the Capital  
6 Improvement Program for FY 2011.

- 7 • *Sewer* - Mr. Lynn stated that the sewer feature showed fittings,  
8 primarily related to force mains. He stated that the two most important  
9 highlights within the sewer feature were manholes and sewer lines.  
10 Mr. Lynn stated that all point features were GPS located, with line  
11 features drawn in by an engineer.
- 12 • *Sewer Line Repairs* - Mr. Lynn stated the sewer line repair feature was  
13 recently added due to a fair amount of sewer repairs. He stated that  
14 just recently, sewer line repairs had been added to the layer in the  
15 Meadowcreek Drainage Basin Rehabilitation Project.

16 Mr. Carter asked if the number of manholes, and location, were  
17 determined by topography? Mr. Lynn stated that any change in direction for a  
18 gravity system, for example a change in elevation or grade, would require a  
19 manhole. He noted that the furthest distance allowed between manholes was  
20 400 feet; this distance allowed a complete inspection between manholes in  
21 rodding efforts and CCTVing.

22 Mr. Lynn stated that the Service Authority was working with the RWSA,  
23 the City and the University of Virginia (UVA) on modeling efforts. He stated that  
24 on a monthly basis, data such as water lines and attributes, was shared between  
25 agencies. Mr. Lynn stated that the water lines for RWSA, the City and UVA were  
26 symbolized differently to show each agency's lines. He stated that this  
27 information was helpful in the creation of connectivity maps, showing where all  
28 agencies' assets were connected; this was a very crucial part of the modeling  
29 process. Mr. Lynn stated that in addition to sharing data, monthly updates were  
30 received from the County which were also included in the GIS. He explained the  
31 information included new parcels and buildings [GPS-located at corners identified

## **Albemarle County Service Authority Board of Directors**

1 by footing inspections]. Mr. Lynn added that another interesting piece of data  
2 received was flood plain information.

3 Mr. Martin asked if the information was received in a data file? Mr. Lynn  
4 explained that the County posted their data on an FTP site, which agencies then  
5 accessed.

6 Mr. Lynn stated that in addition, the County also provided contour data, to  
7 view topography, and Jurisdictional Area data, used in determining whether or  
8 not a customer could be served with public water or sewer. He explained that  
9 the GIS system displayed the areas by different symbology to indicate if a parcel  
10 could be provided water and sewer, or water only, service.

11 Mr. Lynn stated that when a project was completed, the ACSA received an  
12 as-built plan showing where utilities were installed. He explained that the  
13 Engineering Department drew those features into the GIS, including information  
14 such as the inverts, lengths and depths. Mr. Lynn stated that once as-built plans  
15 were approved, the Engineering Department scanned those plans so they can be  
16 viewed within the GIS. He stated this was helpful to both the Engineers in the  
17 office and the employees in the field. Mr. Lynn showed an example of a sewer  
18 line drawn into the GIS; he stated that all the information as far as inverts, length  
19 and slope, could be seen. He noted that the sewer pipe was steep enough  
20 where it required concrete anchors, which was important information for the  
21 Maintenance Department to know.

22 Mr. Lynn stated that the GIS also provided orthophotos, which was used  
23 to determine an exact location.

24 Mr. Lynn stated that a “spatial query” allowed the selection of features by  
25 location, by creating a polygon in a particular location. He stated this query was  
26 helpful for planned water disruptions, which allowed one to export the information  
27 to Excel and create a mail merge to send out a notification letter to those  
28 residents.

29 Mr. Lynn stated that in addition to the spatial query, one could select all  
30 gravity sewer mains or clay sewer pipes in the system. He noted that, within the  
31 system, there were over 20 miles of unlined clay sewer pipe. Mr. Lynn stated

**Albemarle County Service Authority Board of Directors**

1 that to date, five miles of clay sewer pipe had been lined. He stated that as a  
2 result of the Meadow Creek Drainage Basin Sewer Rehabilitation Project,  
3 another three miles would be lined, leaving 17 miles of unlined clay sewer pipe in  
4 the system. Mr. Lynn stated that as a result of the Strategic Plan, the Service  
5 Authority would be lining clay sewer pipe, area by area, to reduce the amount of  
6 infiltration and inflow. He noted that the Canterbury Hills Water Main  
7 Replacement Project would involve some lining of clay sewer pipe.

8 Mr. Lynn stated that another selection one could view was the galvanized  
9 water mains in the system. In viewing this feature, he noted that all pipes  
10 scheduled to be replaced within the Canterbury Hills Water Main Replacement  
11 Project were highlighted in red; with the completion of the project, there would  
12 only be 1.5 miles of galvanized water main remaining.

13 Mr. Lynn stated that as the Engineering Department continued to work  
14 and train with the GIS, additional uses would be discovered. He stated his  
15 confidence was that the Service Authority had only scratched the surface on  
16 what the GIS could do. He stressed the importance of data integrity, since all  
17 GIS data fed into the hydraulic model.

18 Mr. Martin asked, could the GIS provide the age of a pipe? Mr. Lynn  
19 replied yes, and provided an example where one could select all water pipes that  
20 were older than 1990. He explained that any of the multiple attributes could be  
21 searched upon to provide information, such as the diameter, age and material of  
22 a pipe. Mr. Martin asked if easements were included within the GIS? Mr. Lynn  
23 replied no. Mr. Martin asked if easements could be easily included? Mr. Lynn  
24 replied that it was probably feasible, and explained that it was just a matter of  
25 scanning all easement documents and creating links to that information. He  
26 stated that this was not a priority right now, but could be done in the future. Mr.  
27 Martin asked if it would be feasible to create, at a low cost, a read-only version of  
28 the GIS so the Board could have access. Mr. Lynn replied perhaps, by way of  
29 the Service Authority's intranet. Mr. Martin suggested that the read-only version  
30 could exclude customer data. Mr. Lynn agreed, noting that the Finance  
31 Department had a strict policy regarding the sharing of customer data, and it was

## **Albemarle County Service Authority Board of Directors**

1 not accessible to anyone outside of the Service Authority when viewing the GIS.  
2 He stated that perhaps staff could discuss the possibility of creating a read-only  
3 version.

4 Mr. O'Connell suggested that staff could provide a read-only version of the  
5 maps, and exclude all the layers of the GIS.

6 The Chairman recalled that the Department of Homeland Security had  
7 strict regulations with the providing of security-critical information.

8 Mr. Lynn stated that the only information shared with the County was pipe  
9 information. He stated that the County has been asked to direct the public to the  
10 Service Authority if interested in obtaining any specific information.

11 Dr. Palmer recalled that the Board had discussed, several years ago, the  
12 sharing of information on-line and voted against doing so. Mr. Lynn noted that  
13 the County was requesting a lot more information than what the Service Authority  
14 was comfortable in providing.

15 Mr. Martin asked, with regard to a new project that a Board member may  
16 not be familiar with, could a map of the project area be provided? Mr. Lynn  
17 replied, yes. He explained that capital improvement project maps were  
18 generated from the ESRI product at the beginning of a project which showed  
19 existing infrastructure. Mr. Lynn noted that, for example if the project was a  
20 sewer project, there may be a general layout, but not any specific detail until  
21 surveying was complete.

22 Mr. Martin asked if providing a map of a particular area was time  
23 consuming or expensive? Mr. Lynn replied no, that it was just a matter of  
24 formatting the data that was pleasing to the eye.

25 Mr. Gorham asked Mr. Martin if he was referring to private developer  
26 projects? Mr. Martin replied possibly, but that he was thinking more in terms of  
27 subdivisions where the Service Authority was installing new infrastructure. Mr.  
28 Lynn explained that new infrastructure being installed in a subdivision was not  
29 shown on a map until after the infrastructure was completely installed and GPS-  
30 located.

**Albemarle County Service Authority Board of Directors**

1 Mr. Martin asked who he would call to request a map of a particular area?

2 Mr. O’Connell asked that the Board notify him.

3 Dr. Palmer asked how long clay-lined pipe would last? Mr. Gorham  
4 explained that there was clay pipe and then extra-strength clay pipe, which lasted  
5 longer, but that the amount of time had not been determined. He stated that clay  
6 pipe was not a great material to use, and was discontinued in 1979. Mr. Gorham  
7 stated that clay pipe, by nature, had short joints which allowed root intrusion, and  
8 that any kind of shift in the backfill could shear the pipe.

9 Mr. Colbaugh asked if the decaying of a clay pipe could be weather  
10 related? Mr. Gorham replied not too much, but more the fact that what ran  
11 through a sewer line could latch on and degrade the clay pipe over a period of  
12 time.

13 Dr. Palmer asked if the Key West subdivision had been a “rescue”  
14 project? Mr. Gorham replied, yes. Dr. Palmer asked why there had been so  
15 many recent repairs to the system? Mr. Gorham explained that the repairs were  
16 due to an old well system, which grew [in feed lines] haphazardly, and that there  
17 was every type of pipe imaginable within Key West. Mr. Gorham replied that the  
18 Service Authority took over an existing community system and ran a water line to  
19 it due to contamination problems in the original well.

20 The Chairman thanked Mr. Lynn for his presentation.

21

22 **8. Consent Agenda (Recording Time: 09:38:40 a.m.)**

23 The Chairman asked if there were any questions or comments regarding  
24 the Consent Agenda.

25

26 **a. *Monthly Financial Reports*** – Mr. Martin referred to Page 82, Check  
27 Register, and asked what was the payment in the amount of \$5,272  
28 made to Virginia Association of Counties Group was for? Mrs.  
29 Thraves replied, the renewal of the ACSA’s Equipment  
30 Maintenance Program. She stated that the program offered  
31 insurance for office equipment in lieu of service contracts, and

**Albemarle County Service Authority Board of Directors**

1 provided reimbursement for repairs. Mr. Martin asked if the  
2 program was new? Mrs. Thraves replied, no. Mr. O'Connell stated  
3 that both Virginia Association of Counties Group and Virginia  
4 Municipal Group Self Insurance were annual renewal payments.

5 Mr. Martin referred to a payment made to Van der Linde  
6 Recycling and asked who had been used previously for recycling  
7 services? Mr. O'Connell stated that Van der Linde Recycling was  
8 used to dispose of construction and demolition debris. Mr. Mike  
9 Lynn explained that the Maintenance Department typically disposed  
10 of construction spoils in the cheapest manner possible. He stated  
11 that for example, if a property owner in the county had a ravine or  
12 an area they wished to fill in, and the County did not have an issue  
13 with doing so, spoils were taken to that area and filled. Mr. Lynn  
14 stated this reduced turn-around time and tipping fees charged by  
15 the Ivy Landfill.

16 Mr. Martin asked, could the material taken to Van der Linde  
17 Recycling have been taken to the Ivy Landfill? Mr. Lynn replied  
18 yes, but that it would have taken more time to transport and  
19 resulted in tipping fees.

20 Mr. Martin referred to Page 92, Check Register, and asked  
21 what was the payment in the amount of \$55,948 made to VACorp?  
22 Mr. O'Connell replied annual premium for property & casualty  
23 insurance.

24 Dr. Palmer referred to Page 74, Check Register, and asked  
25 if the payment made to Daniel McLaughlin for an easement was the  
26 same Daniel McLaughlin who resided in Red Hill? Mr. Gorham  
27 replied, yes.

28 Mr. Martin asked if the Service Authority was in compliance  
29 with County regulations for materials disposed of other than at the  
30 Ivy Landfill and Van der Linde Recycling? Mr. Lynn replied that  
31 they required a property owner to have County approval prior to

**Albemarle County Service Authority Board of Directors**

1 dumping materials. He stated that the County did not require  
2 preapproval for property less than 1,000 square feet. Mr. Martin  
3 stated that his question was out of concern for the type of the  
4 debris. He recalled a situation where a contractor had dumped  
5 spoil which contained rebar, and was in violation of County  
6 dumping regulations, from the old hotel on the downtown mall,  
7 dumped on property along Garth Road. Mr. O’Connell stated that  
8 the Service Authority’s dumping quantities were on a much smaller  
9 scale.

10 **b. Monthly CIP Report** – Mr. Martin stated that the report showed  
11 eight projects that would be delayed on the schedule. He asked if  
12 the delays were a result of insufficient manpower? Mr. Gorham  
13 replied that the only projects that could potentially be considered  
14 were the Hardware Street Water Main Extension and Scottsville  
15 Phase 2 Sewer Projects. He explained that during the time the  
16 50% design plans were received and reviewed, staff was also trying  
17 to complete the Community Development Block Grant (CDBG)  
18 application, which was very time consuming. Mr. Gorham stated  
19 that all engineers worked on multiple projects and occasionally  
20 deadlines conflicted.

21 Mr. Colbaugh referred to Page 116, Capital Improvement  
22 Project Report for July 2010, Item (t), SCADA System and noted  
23 that the system was said to work by way of radio communication.  
24 He asked why the system would not be working by way of  
25 telephone communication? Mr. Gorham replied that staff was  
26 considering several different options.

27 **c. Monthly CIP Authorizations** – Dr. Palmer referred to Item A, West  
28 Leigh Water Williston and Emerson Drive Project, and asked what  
29 was the “stream bank erosion issue”? Mr. Gorham explained that  
30 the new water line would cross a couple of properties, in order to  
31 reach well below the dam; he recalled that the original water line,

**Albemarle County Service Authority Board of Directors**

1 located under the spillway of the dam, had been leaking and was  
2 abandoned. Mr. Gorham stated that the new line would cross  
3 under the stream, but potential erosion on the bank was a concern  
4 for the property owners. He further explained that erosion could  
5 result from excess water exiting culvert pipes under the road. Mr.  
6 Gorham stated that the Service Authority just wanted to make sure  
7 the line would not be compromised later due to erosion.

8 Dr. Palmer asked, would the Service Authority improve the  
9 area below the dam, where the new water line was to be installed?  
10 Mr. Gorham replied that stream flow at the dam was off to one side  
11 due to presence of debris, and that part of the project was to  
12 improve the area so that water would flow evenly. Dr. Palmer  
13 asked if the property owners would be comfortable with the Service  
14 Authority making that improvement? Mr. Gorham replied yes, that  
15 this had been a concern to the property owners.

16 Mr. Colbaugh referred to Page 129, Oak Hill Sanitary Sewer  
17 Phase 1 – Proposal for Design Revisions, and asked about the  
18 installation of service laterals. Would the consultant have  
19 interaction with the property owners of Oak Hill? Mr. Gorham  
20 replied that there would be some interaction to determine where the  
21 private line connected to the house. Mr. Colbaugh asked if  
22 property owners would receive notification that the project was  
23 proceeding? Mr. Gorham replied, yes. He noted that a meeting  
24 was scheduled on July 21, 2010 with representatives from the  
25 Virginia Department of Housing and Community Development.

26 *d. RWSA Minutes of May 25, 2010* – Mr. Martin stated that he felt Mr.  
27 O’Connell’s RWSA update was helpful and informative.

28 *e. Health Insurance Rate Update* – Referring to a memorandum from  
29 Mrs. Thraves, (Attached as Pages \_\_\_\_\_) Mr. Colbaugh asked if  
30 the employer’s benefit share would still increase from \$600 to  
31 \$650? Mrs. Thraves replied, no. She explained that based on

**Albemarle County Service Authority Board of Directors**

1 information from the County that health insurance premiums would  
2 increase, the Board approved an increase of \$50 to offset that  
3 increase.

4 Mr. Colbaugh stated that his understanding was that the  
5 Board increased the total “benefit dollar” amount by \$50 and did not  
6 understand why that amount was now being reduced.

7 Mr. O’Connell stated that when staff presented the  
8 recommendation of increasing the “benefit dollar” amount, it was to  
9 cover the increase in health insurance premiums anticipated by the  
10 County. He stated that since the County would be utilizing funds  
11 from the Health Care Reserve to absorb that increase, there would  
12 not be an increase to the employer or employee, and that staff was  
13 recommending leaving the employer’s benefit contribution at \$600.  
14 Mr. O’Connell stated that the employees understood the reason for  
15 staff’s recommendation, which would create a surplus of \$40,800 in  
16 the FY 2011 Budget.

17 *f. ACSA Board Policy Issues 2010 Update -*

18  
19 The Chairman asked if there were further questions or comments  
20 regarding the Consent Agenda.

21 ***Mr. Carter moved to approve the Consent Agenda, seconded by Dr.***  
22 ***Palmer. All members voted aye. (Mr. Thomas had to leave the meeting***  
23 ***prior to the vote.)***

24  
25 **9. Rivanna Water and Sewer Authority (RWSA) Presentation and Discussion**  
26 **with Tom Frederick, Executive Director (Recording Time: 09:59:22 a.m.)**

27 Mr. O’Connell stated that Mr. Frederick was in attendance today to provide  
28 an update on RWSA wastewater projects and water supply issues.

29 Mr. Frederick referred to his memorandum to the Board (Attached as  
30 Pages \_\_\_\_\_) and stated that he would review the items listed and answer any  
31 questions along the way. He stated that RWSA was doing an extensive amount

**Albemarle County Service Authority Board of Directors**

1 of work on its wastewater system, as was the Service Authority, to ensure the  
2 most reliable infrastructure. Mr. Frederick stated that the community, up until a  
3 few years ago, had not done enough to maintain and improve the wastewater  
4 system; he noted this was a trend across the country, in trying to keep  
5 wastewater rates low. He stated that both the RWSA and the ACSA were  
6 moving, in many ways, at “light speed” to construct a better system.

7 Mr. Frederick stated that upgrades to the Moore’s Creek Wastewater  
8 Treatment Plant (WWTP) were well into construction, and were moving ahead of  
9 schedule. He stated that completion of construction was estimated at 50%; with  
10 actual completion of work completed and paid for between 35-40%. Mr.  
11 Frederick noted that in addition to the work completed and paid for, there were  
12 stored materials also paid for. He stated that one of the objectives of the project  
13 was to handle peak wet-weather flows. Mr. Frederick stated that the Moore’s  
14 Creek WWTP handled an average daily flow of 15 million gallons. He noted that  
15 most wastewater treatment facilities that produced a high quantity of effluent  
16 were designed to handle only 15M gallons per day (gpd), but that the Moore’s  
17 Creek WWTP was originally designed to handle more for short periods of peak  
18 flows. Mr. Frederick stated that when upgraded in 1981, the Moore’s Creek  
19 WWTP was expanded to handle 18M gpd, which was still unusually low for a  
20 wastewater treatment facility, compared to industry standards across the country.  
21 He stated that the new upgrades would expand the temporary peak capacity to  
22 37.5M gpd, which was an extensive improvement in the ability to handle and  
23 contain wastewater during wet-weather periods.

24 Mr. Colbaugh asked how close to completion were the improvements?  
25 Mr. Frederick replied that there were several structures that still needed to be  
26 upgraded, with one critical addition of a secondary clarifier. He stated that the  
27 clarifier would be used until ultraviolet disinfection facilities were completed,  
28 which was the area where the secondary clarifier would be installed for chlorine  
29 mixing. Mr. Frederick stated that it would be another year before RWSA saw a  
30 significant increase in temporary peak capacity.

**Albemarle County Service Authority Board of Directors**

1 Mr. Frederick explained that another objective of the project was an  
2 upgrade to the process of biological nutrient removal, which would significantly  
3 reduce the amount of nitrogen and phosphorus nutrients in the effluent. He  
4 stated that odor control measures were included, with some already on-line; with  
5 the bio-solids gravity thickener now under odor control, as is the influent pump  
6 station at Moore's Creek, with the scrubber on and operating to help with odor  
7 control. He added that the project would also include a septage receiving station,  
8 which had been approved to go on-line. Mr. Frederick stated that all the tests  
9 and startup activities that occur during construction had been completed, which  
10 was a significant issue with respect to odor control.

11 Mr. Frederick stated that a new generator, which was on-site but not yet  
12 installed, would use digester gas from anaerobic digestion to produce electricity.  
13 Mr. Frederick stated that the Moore's Creek WWTP was innovative in feeding  
14 digester gas through gas engines to provide air to aeration tanks; this would work  
15 well for a long period of time. He stated that given the new age of nutrient  
16 removal the air requirements would have to be fine-tuned carefully, so having a  
17 direct coupling had fewer advantages versus producing the electricity by  
18 generator; Operators could use that electricity anywhere in the plant at anytime.

19 Mr. Frederick stated that the RWSA has just completed the  
20 Comprehensive Sanitary Sewer Interceptor Study, which was referred to as the  
21 "Master Plan" for the wastewater interceptor system that served the ACSA and  
22 the City of Charlottesville (City). He stated that Greeley and Hansen would  
23 present the study at the RWSA Board Meeting on July 27, 2010. Mr. Frederick  
24 stated that the report was significant and covered activities that had taken place  
25 over the last four and half years. He explained that in 2005, RWSA initiated and  
26 conducted an extensive amount of flow metering of the sewer system at various  
27 locations, to establish how flows were moving through the system during both dry  
28 and wet periods. Mr. Frederick stated that the extensive data was used to  
29 develop a calibrated computer model that could simulate how the sewer system  
30 behaved under various scenarios, including present and future. He stated that  
31 RWSA obtained growth information from both the County and the City Planning

## **Albemarle County Service Authority Board of Directors**

1 Departments in terms of expected future flows. Mr. Frederick stated that RWSA  
2 had extensive discussions with both the ACSA and the City, and that both  
3 organizations had developed Infiltration/Inflow (I/I) removal goals for the future,  
4 with a target of 25% reduction by 2020. He stated that by having those goals in  
5 place, RWSA could establish where to build larger wastewater interceptor  
6 systems or rehabilitate existing wastewater interceptor systems, in order to  
7 handle remaining wet weather flows that cannot be cost effectively removed  
8 through I/I reduction. Mr. Frederick noted that several projects would be  
9 completed as a result of the study, with some already under construction and  
10 others nearing completion. He mentioned the following projects:

- 11 • Improvements and Upgrades to the Moore's Creek Wastewater  
12 Treatment Plant; a \$49M project with \$41M in construction cost;
- 13 • A new project, with regard to Inflow/Infiltration reduction goals, from a  
14 peak wet-weather flow of 37.5M gpd up to 45M gpd, which would cost  
15 \$7 million.
- 16 • The Meadow Creek Interceptor Replacement Project; a \$20 million  
17 project.
- 18 • Various projects to replace lower sections of the Schenks Branch  
19 Interceptor; an \$8 million project.
- 20 • Upgrades to increase pumping capacity between the RWSA  
21 Interceptor and the Moores Creek WWTP; a \$25 million project that  
22 could result in a new pump station or upgrades to existing pump  
23 stations. Mr. Frederick stated that there were a number of alternatives  
24 being considered, with a public meeting to be held with the Woolen  
25 Mills community. He stated that the goal was to build a cost effective  
26 project which reflected the environment of the community and the  
27 neighborhood.
- 28 • The expansion of the Moores Creek Pump Station that extends south  
29 into the Urban Collection System and into the Moores Creek WWTP, to  
30 provide greater wet-weather capacity.

**Albemarle County Service Authority Board of Directors**

- 1 • Several areas of rehabilitation of existing systems including the Crozet  
2 Interceptor, the lower RWSA Interceptor and the Albemarle-Berkley  
3 Interceptor.
- 4 • Installation of flow meters at critical areas of the RWSA Interceptor  
5 System to continuously collect data. He stated that this would allow  
6 RWSA to measure post rehabilitation results as SSES rehabilitations  
7 projects were completed.

8 Dr. Palmer asked if the installation of flow meters would be permanent?  
9 Mr. Frederick stated that as part of the “Master Plan” several temporary flow  
10 meters had been installed for several months to measure flow, and then  
11 removed. He added that RWSA would install permanent flow meters in many  
12 locations, but not all, to collect data from that point forward.

13 Mr. Colbaugh asked how much interceptor flow was pumped to the  
14 Moores Creek WWTP? Mr. Frederick replied that all flows were pumped to the  
15 Moores Creek WWTP by way of the Rivanna Pump Station and the Moores  
16 Creek Pump Station, with flows from the Crozet Interceptor and the Moores  
17 Creek Interceptor entering the Moores Creek Pump Station. He stated that  
18 RWSA operated five pump stations within the system, one near Albemarle High  
19 School and the other four located between Crozet and Ivy.

20 Dr. Palmer referred to Mr. Frederick’s narrative in the RWSA Budget that  
21 stated operation cost for the new WWTP would be expensive. She asked if Mr.  
22 Frederick could comment on those costs and how they were relative to current  
23 operating cost? Mr. Frederick stated that the operation of an advanced nutrient  
24 removal facility would cost more than the current facility. He stated that the  
25 nutrient removal facility would produce cleaner effluent, but at a cost, which was  
26 typical in the industry. Mr. Frederick stated that the facility upgrade would  
27 remove nitrogen nutrients and phosphorus by 0.3 parts per million. He stated  
28 that removal of nitrogen nutrients required the use of chemicals, as well as tanks  
29 that have different phases of air requirements. He explained that in order to  
30 remove phosphorus, an anaerobic bacteria prevailing condition was required.  
31 Mr. Frederick stated that in order to remove ammonia, aerobic conditions were

## **Albemarle County Service Authority Board of Directors**

1 required, with aerobic bacteria thriving. He stated that by the mixing of air,  
2 opportunity was given to different tanks for different types of bacteria to perform  
3 different functions to allow the environment to prevail. Mr. Frederick stated that  
4 the situation was complex in that different parts of the system had different  
5 amounts of air. He stated that the “key” chemical used in the removal of nitrogen  
6 was methanol, which was derived from fuel and as fuel prices increased,  
7 operating prices would increase. Mr. Frederick stated that during design in 2007-  
8 08, a study was conducted to research alternative fuels to methanol, which did  
9 not prove cost effective. He added that now, with fuel prices lower, the results of  
10 the study were even less cost effective.

11 Mr. O’Connell stated that RWSA’s annual chemical budget would be \$1.2  
12 million, with next year’s budget estimated at a fourth of that amount because the  
13 plant would not yet be operational. Dr. Palmer asked if Mr. O’Connell knew what  
14 percentage the chemical budget had increased? Mr. O’Connell replied that the  
15 chemical budget was a new line item this year in RWSA’s budget.

16 Mr. Frederick stated that once the entire plant was on-line and removing  
17 nitrogen by way of biological process, that chemical cost would decrease.

18 Mr. Frederick stated that various studies had been conducted recently as  
19 the community, through elected officials of both the County and the City,  
20 questioned whether the Community Water Supply Plan approved in 2006 was  
21 the right plan. He stated that the Ragged Mountain Dam Preliminary Design,  
22 completed by Schnabel Engineering, recommended an earthen dam instead of a  
23 concrete dam, which was a big change from the initial concept previously  
24 proposed. He stated that the recommendation also provided an economical  
25 design to complete the dam, showing a range of costs between \$28.5 and  
26 \$36.5M to include all construction, final design, construction management,  
27 environmental mitigation and an allowance for the I-64 embankment.

28 Mr. Frederick stated that the conceptual design study for reviewing the  
29 South Fork Ragged Mountain Pipeline had been completed. He stated that at  
30 this point in time, RWSA was not recommending moving the project into  
31 construction, but that RWSA was open to ideas from the community as to how

**Albemarle County Service Authority Board of Directors**

1 they wished to phase the installation of different components of a comprehensive  
2 water supply upgrade to provide for future needs.

3 Mr. Frederick stated that the Dredging Feasibility Study had just recently  
4 been completed, with most of the study funded by the City of Charlottesville. He  
5 stated that HDR Engineering's (HDR) final report suggested that 1.1M cubic  
6 yards (CY) could be dredged at a cost ranging from \$34.0 to \$40.2M. Mr.  
7 Frederick stated that the 1.1M CY represented 13% of water storage that the  
8 new Ragged Mountain Dam would provide. He added that HDR also suggested  
9 that revenue, ranging from \$4.5 to \$11.6M, could be generated, particularly from  
10 beneficial reuse, but stated the high end of that range may be difficult to achieve  
11 due to current economic conditions. He stated that RWSA had recommended a  
12 smaller dredging project, at the upper end of the reservoir where most of the  
13 sand was located, that would not amount to the cost associated with the \$34.0 to  
14 \$40.2M project. Mr. Frederick stated that all indications were that costs for the  
15 Ragged Mountain Dam would not be as inexpensive, on a per gallon basis, but  
16 that it was closer to the "ballpark" and might merit further consideration. He  
17 stated that if sand were dredged from the upper end of the reservoir, a "bowl"  
18 would be created under the water, where new sand would deposit, but which  
19 could preserve the reservoir further downstream for a longer period of time.

20 Dr. Palmer stated that the "bowl" would not act as the fore bay envisioned  
21 to slow the sedimentation down. Mr. Frederick stated that the "bowl" would be an  
22 advocate of a fore bay, but perhaps would not remove every piece of sediment.  
23 He stated that some people, idealistically, may have that thought in mind, but that  
24 removing clay particles required an extremely large surface area.

25 Mr. Carter asked, was his understanding correct that Mr. Frederick was  
26 suggesting combining an expansion of the dam and dredging? Mr. Frederick  
27 replied no, because dredging of the upper end of the reservoir would only provide  
28 three percent of the storage that the Ragged Mountain Dam would provide. He  
29 stated that RWSA had suggested building the Ragged Mountain Dam, as the  
30 preliminary design indicated, and looking at dredging as a separate project.

**Albemarle County Service Authority Board of Directors**

1 Mr. Carter asked how long dredging would be effective? Mr. Frederick  
2 replied that the reservoir, in operation for over 40 years, had just reached a point  
3 where there was 1.7M CY of sediment. He noted that one interesting fact from  
4 the study was that part of the 1.7M CY of sediment had been established as  
5 wetlands. He stated that the wetlands were discovered during an exhaustive  
6 search, over a two-mile radius, for alternate sites available for the processing of  
7 sediment. Mr. Frederick noted that at a recent public meeting the question was  
8 asked as to whether or not the wetlands could be removed in order to dredge the  
9 entire 1.7M CY of sediment, and whether regulators would approve the removal,  
10 which possibly would require mitigation. He stated that HDR suggested not  
11 doing so, due to the limitation by the land sites to process the material.

12 Dr. Palmer noted that it was at that meeting, a statement was made that  
13 the sites identified would be a one-time use only. She asked if the sites were  
14 originally considered for a one-time use only, or if there were other reasons they  
15 were being limited in use? Mr. Frederick replied that there was one small site  
16 that was not identified as a one-time use, that would accommodate mechanical  
17 dewatering for the removal of sand. He stated that HDR had identified sites for  
18 the building of confined dykes, at the lower end of the reservoir, that would  
19 contain and allow the remainder of sediment (the silts and clays) to dry over a  
20 period of time. Mr. Frederick added that this would allow the material to be taken  
21 off-site by dump truck for processing and reuse. He stated that the property  
22 owners of these sites would not allow the material to be taken off-site, which was  
23 why the sites were a one-time use only.

24 Dr. Palmer stated that there would still be net costs associated with  
25 dredging, even with potential revenue from the beneficial reuse. She stated that  
26 she would like to see the Ragged Mountain Pipeline built before other projects  
27 that were not as crucial. Mr. Frederick stated that HDR had suggested that there  
28 would be cost associated with dredging. He stated that if you were to consider  
29 the high end of HDR's range for potential revenue and the low end of HDR's  
30 range for costs, it seemed that revenue could be generated by dredging.

## Albemarle County Service Authority Board of Directors

1 Mr. O'Connell noted that the RWSA Board had not yet had this discussion  
2 and that the proposal was just a possibility, but which did not seem to meet the  
3 water supply demand analysis. He stated that a critical question was who would  
4 pay the costs.

5 Mr. Martin stated that his assumption was that the Albemarle County  
6 Board of Supervisors had not considered the question of whether or not to allow  
7 a mining operation at the end of the reservoir. Mr. Frederick stated that  
8 Albemarle County required a special use permit for any dredging operations.

9 Mr. Frederick stated that in April, the RWSA Board retained a consultant,  
10 at a price not to exceed \$25,000, to review the 2004 Water Demand Study and  
11 update the data from that study to include historical data not available in 2004.  
12 He stated that the RWSA Board had also requested that the consultant review  
13 water conservation and development trends and issues. Mr. Frederick stated  
14 that the consultant would review information and conduct interviews, as well as  
15 talk with citizens of the City, County and University of Virginia. He stated that a  
16 report, to be presented to the RWSA Board, was expected sometime in August.

17 Mr. Frederick stated that the City was also conducting a study to evaluate  
18 the feasibility and cost of raising the existing Ragged Mountain Dam by 13-feet.  
19 He stated that City Council may wish to see the completed study before  
20 engaging in a discussion about whether to build the plan approved four years  
21 ago, or modify that plan.

22 Mr. Frederick stated that the three possible phasing scenarios RWSA  
23 asked Schnabel Engineering (Schnabel) to review for the earthen dam were:

- 24 • Build a new earthen dam with a spillway to increase the reservoir pool  
25 by 13 feet with a foundation designed only for the "13 feet";
- 26 • Build a new earthen dam with a foundation that could support  
27 increasing the reservoir pool by 45 feet, but only build the first phase of  
28 the dam to "13 feet";
- 29 • Build a new earthen dam and spillway as required, eventually raising  
30 the reservoir pool by 45 feet, but design the spillway tower to control  
31 the initial water level at "13 feet".

**Albemarle County Service Authority Board of Directors**

1 Mr. Frederick stated that a report outlining the three scenarios would be  
2 available to the Board [RWSA] on July 27, 2010.

3 Dr. Palmer asked if the studies regarding safe-yield and stream flows,  
4 which required modeling the earthen dam, would be part of Schnabel's report  
5 outlining the three scenarios? Mr. Frederick stated that he was not certain the  
6 safe-yield and stream flow studies would be completed by the time Schnabel's  
7 report was available, but would possibly be available next month (August).

8 Mr. Frederick stated that Mr. O'Connell had asked him if there were other  
9 studies, beyond the geotechnical evaluation, that could be conducted in order to  
10 move the dam project forward. He stated that Schnabel had identified the need  
11 to modify the environmental permits based on an earthen dam, instead of a  
12 concrete dam. Mr. Frederick stated the revisions would not be significant and  
13 would require Department of Environmental Quality (DEQ) review. He stated the  
14 information could be prepared and taken through the review process for an  
15 additional \$35,000. Mr. Frederick stated that authorization of \$35,000 could  
16 occur early or as part of final design. He stated that Schnabel also identified that  
17 a County Special Use Permit would be required to build the dam and the effort  
18 required to go through the special use permitting process was estimated to cost  
19 \$10,000. Mr. Frederick stated that RWSA understood that after the application  
20 was filed for a Special Use Permit, it would take about six months to go through  
21 the County's Development and Review process. He stated that if the community  
22 decided to authorize final design, these issues could become critical very quickly.

23 Mr. Martin asked if the estimated cost of \$10,000 for the special use  
24 permitting process would be paid to Schnabel? Mr. Frederick replied, yes.

25 Mr. Frederick stated that Mr. O'Connell had asked that RWSA provide  
26 data on whether or not there were any activities associated with final design that  
27 could be moved ahead between now and October 1, 2010. He stated that  
28 Schnabel did identify that that they could begin design work on the scope that  
29 would provide for the 500 year spillway. Mr. Frederick stated that design work  
30 could be performed between now and October at a cost of \$85,000. He stated  
31 that he would be more than happy to provide this information to the ACSA Board

## **Albemarle County Service Authority Board of Directors**

1 at their request, through Mr. O'Connell. Mr. Frederick noted that he had not yet  
2 shared this information with the RWSA Board; approval from the RWSA Board  
3 would be required for any design work.

4 Dr. Palmer asked what would happen if final design was not approved by  
5 October 1, 2010? Mr. Frederick explained that had Schnabel been given  
6 authorization for final design back on July 1, 2010, final design would have taken  
7 nine months to complete. He added that the bidding process, award of contract  
8 and contract execution would take an additional three months, with notice to  
9 proceed around July, 2011. Mr. Frederick noted that starting construction by  
10 July, 2011, RWSA would be well into the favorable construction season, which  
11 ran from May through October. He stated that Schnabel had also stated that if  
12 final design were to be authorized by October 1, 2010, an additional seven  
13 months would be needed; therefore, putting the project start date to August 1,  
14 2011. Mr. Frederick stated that each additional month after October 1, 2010  
15 would delay final design and increase the amount of time the project would be  
16 delayed.

17 Mr. Colbaugh asked if Schnabel had been able to keep their "team"  
18 together? Mr. Frederick explained that Schnabel's core team was still part of the  
19 project, with specialists used for different tasks.

20 Mr. Martin asked, if the ACSA were to agree to fund the three additional  
21 studies and the RWSA Board approved doing so, would funding result in a time  
22 savings? Mr. Frederick stated that he had not received a clear answer from  
23 Schnabel on that suggestion. He stated that to him it would make sense that if  
24 the work on the tower was advanced, it could help save a few weeks. Mr.  
25 Frederick stated that the real issue would be whether or not the community was  
26 still debating the issue in October, November or December and whether the  
27 additional studies had been completed.

28 Mr. O'Connell asked Mr. Frederick what studies would be completed by  
29 mid-August? Mr. Frederick replied, the Water Demand Study, and the I-64  
30 Embankment Report. Mr. Frederick noted that RWSA was in negotiations with  
31 the Virginia Department of Transportation (VDOT) Highway Administration over

## Albemarle County Service Authority Board of Directors

1 technical work to be performed on the I-64 embankment. He stated that RWSA  
2 would prefer to conclude those negotiations since it was impacting the technical  
3 report.

4 Mr. O'Connell asked when the alternative study would be completed? Mr.  
5 Frederick replied by the end of July. Mr. O'Connell asked if the first phase of the  
6 City's Dam +13 Feet Study would be finished by mid-August? Mr. Frederick  
7 replied yes, and then if authorized by the City, a second phase would be  
8 completed. Mr. O'Connell asked if the Hydrologic Safe-Yield Study would be  
9 received by mid August. Mr. Frederick replied, yes.

10 Dr. Palmer stated that the Dam +13 Feet Study would be brought before  
11 City Council, hopefully in September, and asked if the study would be brought  
12 before the RWSA Board? Mr. O'Connell replied, or all four Boards. Dr. Palmer  
13 stated that the process could easily be extended into October. She felt that the  
14 ACSA Board was willing to do whatever they possibly could to move forward and  
15 shorten the time.

16 Mr. O'Connell stated that the City Mayor had outlined the timeline as late  
17 September, early October for when discussions regarding the reports on the  
18 various studies would be held by the community. He stated that there was  
19 pressure from a variety of people to have those discussions before summer was  
20 over, so the issue could be in front of decision makers. Mr. O'Connell stated that  
21 the dredging study was to be presented by HDR Engineering at City Council's  
22 meeting on Monday, July 26, 2010.

23 Mr. Colbaugh felt that the ACSA Board did not need to take action on the  
24 issue today, but perhaps next month authorize action to advance the schedule if  
25 needed; Mr. O'Connell agreed.

26 After general discussion by the Board, Dr. Palmer asked that Mr.  
27 Frederick keep the ACSA Board informed. Mr. Frederick stated that he would  
28 ask Schnabel to notify RWSA if an issue did arise that would create a dilemma  
29 and if so, that Schnabel would provide RWSA with as much notice as possible.

**Albemarle County Service Authority Board of Directors**

1 Mr. Colbaugh asked if there would be any discussion today with regard to  
2 the City's bill? Ms. Breeden noted that she was aware the invoice had been  
3 paid.

4 Mr. O'Connell advised that the Board, ACSA staff, including the ACSA  
5 attorney, would be talking about the Four Party Agreement. He stated that  
6 discussions would involve a review of the debt formula and how it worked, as  
7 well as the sewer cost allocation. Mr. O'Connell stated that he did not know  
8 whether staff would have information available to present to the Board in August.  
9 He stated that Mr. Frederick would be scheduling a meeting, within the next two  
10 weeks, to advance plans for eventual discussion by the Four Boards.

11 Mr. Colbaugh asked if the percentage formulas for the cost allocation for  
12 water and sewer sewer would be part of the "whole" package. Mr. O'Connell  
13 replied ideally, yes.

14 Dr. Palmer asked how much a study would cost to consider the different  
15 phasing scenarios for the Ragged Mountain Dam? Mr. Frederick replied not a  
16 significant amount, but that he was not sure. He asked that Dr. Palmer send him  
17 an email with that question so he could provide that amount to her.

18 Mr. Martin stated that one of the guiding principles of the ACSA's Strategic  
19 Plan was to collaborate with community partners. He stated RSWA was one of  
20 those community partners and wondered if there could be some collaboration, at  
21 the staff level, regarding the relationship between the ACSA and the RSWA in  
22 terms of disposal of ACSA debris. Mr. Frederick stated that RSWA would be  
23 more than happy to do so. Mr. Martin stated that, if at all possible, he would like  
24 to continue to support the RSWA with ACSA business.

25

26 **10. Current State of a Drought (Recording Time: 10:52:39 a.m.)**

27 Mr. O'Connell stated that the Drought Management Plan, adopted several  
28 years ago, was developed with the understanding that Rivanna Water & Sewer  
29 Authority (RWSA) would run its' Model (OASIS) to determine if a Drought Watch  
30 should be declared. He stated the ultimate agreement was that the RWSA Board  
31 would declare a Drought Watch in coordination with the Albemarle County

## **Albemarle County Service Authority Board of Directors**

1 Service Authority (ACSA) Board. Mr. O'Connell stated that Model results from  
2 last week indicated that conditions had improved due to recent rains, with one  
3 reservoir reported to be full. He stated that if the area did not receive rain in the  
4 near future, conditions would deteriorate to a point where a Drought Watch would  
5 need to be declared.

6 Mr. O'Connell stated that a calculation used by the Model was that if  
7 useable storage dropped below 80%, within 12 weeks, there was a 20%  
8 probability of a Drought Watch. He stated that Model results from last week  
9 indicated a 17% probability.

10 Mr. O'Connell noted that a Drought Watch had been declared by the  
11 Department of Environmental Quality (DEQ), with 80% of the State in drought  
12 conditions. He stated that if RWSA were to declare a Drought Watch, the  
13 Service Authority would ask customers to initiate voluntary water restrictions,  
14 limiting outside watering of shrubbery, trees, lawns, grass, plants, and vegetable  
15 gardens and other vegetation to between 9:00 p.m. to 10:00 am. Mr. O'Connell  
16 stated that in declaring a watch, it made sense to him to have one formal voice,  
17 coming from RWSA, and wanted to make sure the Board was aware of where  
18 the ACSA stood. He stated that for the August Board meeting staff would  
19 present a Water Conservation Report to include all actions taken by the Service  
20 Authority, as well as review the plan the Board had adopted.

21 Mr. O'Connell noted that an article on the RWSA Drought Management  
22 Plan and the OASIS Model had appeared in a recent issue of the American  
23 Water Works Association magazine. He stated that RWSA was a leader in the  
24 country in how drought conditions were evaluated and managed, and this was a  
25 compliment to Mr. Frederick and his staff, to receive such national publicity. Mr.  
26 O'Connell stated that he would provide Board members with a copy of the article,  
27 along with information on the different stages of a drought.

28 Mr. Colbaugh asked Mr. O'Connell about water usage in recent weeks.  
29 Mr. O'Connell replied that as of July 8, the community had used 12.5M gpd,  
30 which was close to the same amount used prior to the Drought of 2002. He  
31 stated that, with the recent rain, that amount had decreased to 10M gpd.

**Albemarle County Service Authority Board of Directors**

1 Mr. Colbaugh asked if the recent spike in use would be reviewed as part  
2 of the Water Demand Study? Mr. O’Connell replied that Swartz Engineering was  
3 aware of the recent spike; he noted this was an example of why there was a  
4 need to increase water supply to meet the demands of the community during a  
5 drought. Mr. O’Connell stated that the average daily use had decreased, but that  
6 use would increase during a drought.

7 In response to his suggestion that RWSA make public announcements in  
8 declaring drought warnings, Mr. Colbaugh asked why Mr. O’Connell felt that  
9 RWSA should lead when they only had two customers? He stated that he  
10 agreed with coordination, but that it would be the City and the ACSA who would  
11 have to notify customers. Mr. O’Connell felt that given past history, it was  
12 necessary to have “one” voice, clearly sending a message, especially during a  
13 Drought Warning. He stated that in the past, there had been three different  
14 Boards sending three different messages, which was confusing. The Chairman  
15 recalled that in the past the County had restrictions, but not the City.

16 Mr. Colbaugh stated, that would mean when a Watch was declared by  
17 RWSA, the Watch would also apply to both the City and the ACSA and asked if  
18 the Board agreed with that. Mr. O’Connell stated that currently, the ACSA’s  
19 Drought Management Plan was not written this way; the Board would need to  
20 discuss the issue.

21 Mr. Martin stated that it was his understanding that the City, ACSA and  
22 RWSA agreed that Mr. Frederick would have the discretion to declare a Drought  
23 Watch. Mr. O’Connell noted that the ACSA’s Drought Management Plan did not  
24 state that point. Mr. Martin asked if a Drought Watch required action by the  
25 ACSA Board? Mr. O’Connell replied yes, however he felt this needed to be  
26 discussed and changed. Mr. Colbaugh noted that the current plan stated “the  
27 ACSA Board shall declare a Drought Watch” within the service area.

28 Mr. Carter asked if a drought watch declared by DEQ would “trump” the  
29 ACSA? Mr. O’Connell replied that the drought watch declared by DEQ was to  
30 place the public on alert.

**Albemarle County Service Authority Board of Directors**

1 Mr. O'Connell stated that the Drought Management Plan included a list of  
2 actions to prepare for a Drought Watch. He stated that as part of water  
3 conservation efforts, the Service Authority and the City were planning to focus on  
4 outdoor watering, and the advertisement of water conservation tips.

5 Mr. Frederick stated that the OASIS model last week indicated a 17%  
6 probability of a drought, with 20% being the threshold, and that useable water  
7 storage levels were at 94.3%. He noted that if Model results stayed below the  
8 20% threshold over the next several weeks, a Drought Watch would not be  
9 necessary.

10  
11 **11. Glenmore Water Tank Study Report (Recording Time: 11:04:17 a.m.)**

12 Mr. O'Connell stated that as part of the ACSA's Capital Improvement  
13 Program a study (Attached as Pages \_\_\_\_\_) was conducted to determine  
14 whether or not a tank was needed in the Glenmore subdivision.

15 Mr. Gorham referred to a memorandum providing the Board with a  
16 summary of the study (Attached as Pages \_\_\_\_\_). He explained that in October  
17 2009, Michael Baker, Jr., Inc. (Baker) was given the task of conducting a Tank  
18 Siting Study for the Glenmore subdivision. He stated that the purpose of the  
19 study was to determine the storage volume necessary to provide emergency  
20 storage based upon historical and projected water demands. Mr. Gorham stated  
21 that the report was to identify potential tank sites given specific design criteria,  
22 perform hydraulic modeling and provide recommendations and cost estimates.

23 Mr. Gorham stated that the study area extended from the I-64/U.S. Rt. 250  
24 interchange east to the Glenmore subdivision. He stated that three areas were  
25 reviewed based on preliminary site screening: the I-64/U.S. Rt. 250 interchange,  
26 North Glenmore and South Glenmore. Mr. Gorham stated that the I-64/U.S. Rt.  
27 250 interchange was quickly eliminated due to not meeting the objective of the  
28 report.

29 Mr. Gorham stated that the next stage of the study focused on three sites  
30 within the Glenmore subdivision located in North Glenmore and South Glenmore.  
31 The three sites were: the wastewater treatment plant, the Leake property and

**Albemarle County Service Authority Board of Directors**

1 the Volunteer Fire Station. He stated that the advantages and disadvantages of  
2 each site were reviewed with distinct advantages being highlighted for each  
3 potential site. Mr. Gorham stated that after the analysis, it was determined that  
4 the recommended site would be the Volunteer Fire Station, to construct either a  
5 ground or elevated storage tank with a reduced hydraulic grade line (HGL).

6 Mr. Gorham stated that the next step was to conduct a hydraulic analysis  
7 to evaluate the affect of a reduced HGL on the level of service for both domestic  
8 use and fire protection. He stated the analysis was also used as a basis of  
9 comparison for the ground and elevated storage alternatives with regard to  
10 system operation, as well as compare the affect of the different tank alternatives  
11 on water age in the Glenmore subdivision, which has already been identified as  
12 elevated, due to system location at the end of a long dead-end water main  
13 extension. Mr. Gorham stated that the hydraulic analysis showed that the  
14 reduced HGL would not have a negative impact on domestic use, and that there  
15 were only two hydrants that “slipped” below 1,500 gallons per minute flow rate,  
16 which still met the Insurance Service Organization (ISO) recommendations for  
17 one and two family dwellings that do not exceed two stories in height. He stated  
18 that the analysis also showed that an elevated storage tank cycled slightly more  
19 volume than ground storage. Mr. Gorham stated that an elevated tank would  
20 increase the water age in the Glenmore system to a lesser degree than the  
21 ground storage tank.

22 Mr. Gorham stated that Baker finally conducted a cost analysis of the two  
23 tank alternatives. He stated that even though the ground storage tank was less  
24 expensive to install, it would require a pump station with the associated annual  
25 costs of such a facility. Mr. Gorham stated by taking into account the present  
26 worth value of a ground storage tank, the elevated storage tank would be the  
27 less expensive of the two alternatives by approximately \$160,000.

28 Mr. Gorham stated that based on the analysis of the study, Baker  
29 recommended constructing an elevated storage tank to limit costs, water age,  
30 and simplify system maintenance and operations; however, the study stated that  
31 both storage options were feasible. He stated that the next step would be to

**Albemarle County Service Authority Board of Directors**

1 launch a public outreach program to educate and inform the residents of the  
2 project needs and objectives.

3 Mr. Martin stated that he understood the cost to construct a tank would be  
4 a little less than \$2 million. Mr. Gorham replied, yes. Mr. Martin stated that in the  
5 event of a major water line break, for \$2 million the Service Authority could  
6 purchase one day of water storage. Mr. Gorham stated that in the case of a  
7 major water line break, the Service Authority would ask residents to immediately  
8 conserve water, which was protocol in any major water line break. Mr. Martin  
9 stated that he was referring to what the report stated, which was ... “Based on  
10 the relatively small average daily demand for the Glenmore area, Baker  
11 considered providing a storage volume equal to one day of “buildout average day  
12 demand.” Table 1 provides a summary of the demand projections and  
13 recommended storage volume. To provide one day of storage under the buildout  
14 average day demand scenario, a 425,000 gallon tank is required.” Mr. O’Connell  
15 stated that those calculations were based on an average day demand at full  
16 buildout.

17 Mr. Martin stated that originally the Glenmore subdivision was rezoned in  
18 1990, as a planned residential development, but now included the Rivanna  
19 Village, Livengood and Leake property. He stated that full buildout included  
20 Glenmore, Rivanna Village, Livengood and the Leake property. Mr. Gorham  
21 stated that due to information from the Comprehensive Plan, the upper Carroll  
22 Creek area was also being included. Mr. O’Connell stated that the  
23 Comprehensive Plan reflected what the County approved in the Rivanna Village  
24 Master Plan.

25 Mr. Martin stated that when Glenmore was proposed, either in the late  
26 1980s or early 1990, a 23,000 foot pipeline, from the urban area to Glenmore,  
27 was required. He stated that it was during that time, the developer, Mr. Frank  
28 Kessler, agreed to some proffers in order to get his project approved. He stated  
29 that one of the proffers stated that the developer would provide water and sewer  
30 facilities, a collection distribution system and treatment facilities, at his expense,  
31 for residential lots in Glenmore, as well as for the Country Club. The proffer also

**Albemarle County Service Authority Board of Directors**

1 stated that the developer would dedicate such facilities to the Service Authority  
2 and/or Rivanna Water & Sewer Authority. “These facilities are to be built at no  
3 cost to the tax payers of Albemarle County or to the customers of the Albemarle  
4 County Service Authority.” Mr. Martin stated that, to him, the reason to build this  
5 tank now, seemed to be exactly the same reason there would have been in 1990,  
6 which was to provide water for a few days, during a break in a 23,000 foot  
7 pipeline. He felt that a tank was an “accouchement;” part of the initial water  
8 system, that was never built. Mr. Martin agreed that a tank should be built, but  
9 that the Service Authority needed to explore who should pay for the tank, through  
10 discussions with Glenmore and the representatives of more recently rezoned  
11 areas, to see if an agreement could be reached. He stated that whether the  
12 expense of a tank could be paid for through a Special Rate District or by  
13 contributions would have to be explored.

14 Dr. Palmer asked if the tank would store enough water for 1-2 days of  
15 average daily buildout for the entire area? Mr. O’Connell replied yes, in an  
16 emergency. Dr. Palmer asked, if the area of concern was just the Glenmore  
17 subdivision, would a tank be needed? Mr. Gorham replied that he was not sure  
18 what exact number of units would require a tank, but the higher density of  
19 Rivanna Village added quite a bit to that number. He stated that reducing the  
20 number of units could reduce a tank size, but the primary idea is a catastrophic  
21 break could take some time to repair.

22 Mr. O’Connell referred to another tank site study, for the West Leigh  
23 subdivision, where major improvements were being planned for system reliability,  
24 or for an extreme emergency. He stated that was exactly what was being  
25 considered at Glenmore. Mr. O’Connell stated that the need for a tank in  
26 Glenmore was from both a system, as well as an emergency planning  
27 standpoint. He stated that determining who paid for a tank, especially in existing  
28 developments, was a common question anywhere the Service Authority made  
29 improvements.

30 He stated he felt the situation was different for new development, with new  
31 development bearing the costs because of the load placed on the system. Mr.

**Albemarle County Service Authority Board of Directors**

1 O'Connell stated that financing by existing customers was a question the Board  
2 needed to address, but from a staff standpoint, the sense was that Glenmore (or  
3 West Leigh) was an area where the ACSA was vulnerable. This was the  
4 purpose of the study, constructing a tank was the solution and one that did  
5 involve an expense. He stated that there would be other improvements, not  
6 necessarily a tank, but improvements to the system to ensure that the ACSA  
7 could continue to provide water to our customers, the ultimate goal.

8 Mr. Carter asked if the cost to construct a tank in Glenmore had been  
9 included in the budget? Mr. O'Connell replied that the project would be paid for  
10 by reserves or financing, if the Board chose to move forward.

11 Mr. Martin stated that the project was in the CIP for FY 2013. Mr. Gorham  
12 stated that design was included for FY 2012, with construction proposed for FY  
13 2013.

14 Mr. Martin stated the Board did not need to make a decision today, but he  
15 felt that Glenmore's proposed tank was different than West Leigh. He agreed  
16 that a tank was needed for both Glenmore and West Leigh, but felt that the  
17 history in Glenmore was different. Mr. Martin stated that the same reasons that  
18 exist now for building a tank also existed in 1990; he felt that the rate payers  
19 should not have to pay for it.

20 Mr. Colbaugh stated that with regard to system reliability, the only outage  
21 in Glenmore he was aware of was over a year and a half ago. He pointed out  
22 that while it was true the developer did not build a tank when the system was first  
23 built in 1990, with aging infrastructure being a problem now, perhaps if a tank  
24 had been built in 1990, the tank itself could perhaps have problems now. He  
25 stated that in 1990, there would not have been a need for a tank for the first 100  
26 or 200 homes, but as the community built out to 800 homes, the situation was  
27 now a little different. He added the situation would again be different as future  
28 growth occurred. He stated that he believed that the developer never considered  
29 capacity issues or a tank, when the 1990 agreement was made. He thought  
30 perhaps that was the reason why a 16-inch line was constructed instead of a 12-  
31 inch line; capacity was built into the system when it was originally built. Mr.

**Albemarle County Service Authority Board of Directors**

1 Colbaugh noted that the study did not address capacity, but reliability; adding  
2 that a quality water system provided reinforcement. Mr. Colbaugh felt that  
3 placing the construction expense on future developers would be difficult and did  
4 not believe the ACSA should do so. He stated that the process, which would  
5 take some time, needed to begin by the ACSA, committing to build a tank, and  
6 going to the community for input in that decision. Mr. Colbaugh felt that it was  
7 appropriate for the Board to take action on that process in order to move forward.

8 Mr. Martin stated that he did not know whether any Board action was  
9 necessary to continue discussions on the issue. He stated that the Board would  
10 need to take action when it came time to appropriate funds. Mr. Colbaugh stated  
11 that the ACSA would need to obtain the services of a consultant to assist with the  
12 project.

13 Mr. O'Connell felt that the Service Authority needed to have a "game" plan  
14 before meeting with the public. He stated that if there was consensus among the  
15 Board to debate the funding of the project, then he would like to receive and  
16 understand that consensus prior to meeting with the public.

17 Dr. Palmer asked what percentage of the "Rivanna Village" area was  
18 Glenmore? Mr. Colbaugh replied, a little more than 50% of total build out.

19 Mr. Martin stated that he was familiar with Glenmore's proffers, but was  
20 not familiar with any proffers made by Rivanna Village, Livengood and the Leake  
21 property. He stated that he did not know if the proffers made by Rivanna Village,  
22 Livengood and the Leake property contained any responsibility with respect to  
23 water and sewer infrastructure.

24 Mr. Colbaugh stated that the "Master" plan addressed adequate water and  
25 sewer capacity for Rivanna Village, Livengood and the Leake property. He  
26 stated that what Mr. Gorham was referring to, the upper end of Carroll Creek,  
27 was an additional future residential community adjacent to Rivanna Village that  
28 the County had approved and made part of Rivanna Village. Mr. Colbaugh  
29 explained that in order to build that residential community, the developer would  
30 be required to provide additional sewer capacity, which was agreed to and stated  
31 in the proffer. Mr. Martin stated his assumption was that the builder would be

## Albemarle County Service Authority Board of Directors

1 responsible for the infrastructure and that it was a question of whether or not the  
2 builder could be deemed responsible for a portion of the tank cost. He added  
3 that he was not suggesting that the Glenmore residents pay the entire cost of the  
4 tank since the tank would serve more than the Glenmore area. Mr. Colbaugh  
5 stated that there was no reference to any water system capacity, or, in the  
6 current "master" plan for Rivanna Village.

7 Dr. Palmer asked if there were other areas, not yet approved, where the  
8 same issue could apply, where consideration could be given to potential  
9 proffers? Mr. Gorham stated that a reasonable example was the Avon Park  
10 project, which was a bit higher in elevation, allowing the ACSA to provide a  
11 stable pressure band, as well as fire protection, within the Mill Creek subdivision.  
12 He stated that the Service Authority reviewed all site plans for any opportunity to  
13 oversize a line or install a tank where needed.

14 Mr. Colbaugh stated that located on Page 3 of the study, Figure 1 showed  
15 the tanks that exist within the ACSA system, with one tank located at each end of  
16 the system except at Glenmore and West Leigh. Mr. Martin stated that he was  
17 not sure those conclusions could be determined by looking at Figure 1. He  
18 stated that the sole reason for a tank in Glenmore was the fact there was one 16-  
19 inch pipe, 23,000 feet long, with no other way to provide water to Glenmore.

20 Mr. Colbaugh stated that the situation would be the same for West Leigh if  
21 additional system reliability was not provided, such as adding a tank.

22 Mr. O'Connell stated that he was not clear on how the Board wished to  
23 proceed. He stated that he was reluctant to talk with the residents of Glenmore  
24 with the question of financing unanswered.

25 Mr. Colbaugh suggested that staff appear before the Board with a  
26 preliminary proposal for design, including public information, and approve the  
27 conceptual construction of the tank based on approval of the community.

28 Mr. Martin felt there was an obligation to rate payers to explore the  
29 possibility of someone else paying for the tank.

30 The Chairman stated that he was under the impression that Mr. Bowling  
31 reviewed the proffer from 1990 to determine how legally binding the agreement

**Albemarle County Service Authority Board of Directors**

1 was. Mr. Bowling stated that the developer had built what was required in 1990,  
2 which was dedicated to the ACSA, as required.

3 Mr. Carter asked if the consensus of the Board was to build a tank in the  
4 Glenmore area, with the only question being who would pay? The Chairman  
5 replied, yes.

6 Mr. O'Connell stated that staff would bring back at a later Board meeting,  
7 design recommendations and any determined legal responsibilities as to  
8 financing.

9

10 **12. Rivanna Conservation Society Funding Request (Recording Time:  
11 **11:38:43 a.m.**)**

12 Mr. O'Connell stated that Ms. Robbi Savage, Executive Director of the  
13 Rivanna Conservation Society (RCS), was in attendance to address the Board.  
14 He stated that Ms. Savage submitted a proposal to the Albemarle County Service  
15 Authority (ACSA) in May requesting funding assistance in the amount of \$5,000  
16 to assist with the 40<sup>th</sup> anniversary of the Virginia Scenic Rivers Program. Mr.  
17 O'Connell stated that in May the Rivanna Water & Sewer Authority (RWSA)  
18 Board approved \$5,000 towards the support of the RCS efforts. He stated that at  
19 the RWSA Board meeting, a comment was made that the funding was on behalf  
20 of the City and the County. However, Mr. O'Connell stated, since a separate  
21 request was made to ACSA, he wished to bring the matter before the Board.

22 Ms. Savage stated that the RCS was the only non-profit organization  
23 whose mission was solely dedicated to the care and protection of the Rivanna  
24 River. She stated this year was the 20<sup>th</sup> anniversary of RCS and the 40<sup>th</sup>  
25 anniversary of the Virginia Scenic Rivers (VSR) Program. Ms. Savage stated  
26 that the VSR Program was important to the Rivanna River, since it was the first  
27 to be designated as scenic in Virginia. She stated that the Rivanna River was  
28 also designated as a historic river and was part of the National Trust. Ms.  
29 Savage stated that RCS was asked to facilitate the "Year of the Rivanna", a year-  
30 long series of events and programs to celebrate and impress a level of  
31 importance to the community.

**Albemarle County Service Authority Board of Directors**

1 Ms. Savage stated that RCS had a website, as well as publications,  
2 posters, documents and an anniversary poster which listed all of the different  
3 organizations supporting the project. She stated that there were a number of  
4 publications, such as 62 Ways to Conserve Water, The Rivanna, and The River  
5 of Life created and maintained by the RCS. Ms. Savage stated that RCS did not  
6 have the funds to print the publications and also conduct the celebratory events  
7 this year. She stated that RCS hopes to review the State of the Basin report,  
8 conducted in 1998, to evaluate the success of RCS, what had been  
9 accomplished and what still needed to be done. Ms. Savage stated that Mayor  
10 Norris had stated that there was federal interest in the Rivanna River to be used  
11 as a focal point, to bring more tourism and people to the Charlottesville  
12 community, to engage and be aware of what Central Virginia offered.

13 Ms. Savage stated that RCS was requesting funds of \$5,000 as a one-  
14 time donation to the RCS. She stated that the budget for the entire project was  
15 \$30,000. Ms. Savage stated that the RWSA Board did authorize the funding of  
16 \$5,000, which left a shortfall in the budget of \$25,000. She noted that the project  
17 was staffed with volunteers.

18 The Chairman asked Ms. Savage, did the RCS lose funding due to overall  
19 decreased funding at the State level? Ms. Savage replied, yes. She stated that  
20 the last several years had been tough, especially for smaller non-profit  
21 organizations such as the RCS. Ms. Savage stated that the RCS lost funding  
22 from a Federal grant due to budget cuts. She stated there were also  
23 organizations, who traditionally donated money each year, only providing half of  
24 the funding received in the past.

25 The Chairman asked if Ms. Savage had made the same funding request  
26 to the City of Charlottesville. Ms. Savage replied that she had not, at this point.  
27 She stated that when the RCS met with RWSA, Mayor Norris indicated that the  
28 Planning Commission was reviewing ways to increase tourism by focusing on the  
29 Rivanna River, and indicated a willingness to discuss different ways to do so, and  
30 that she would be meeting with him.

## Albemarle County Service Authority Board of Directors

1 Mr. Colbaugh asked, if the ACSA were to provide funding for the printing  
2 of brochures, how would the brochures be distributed to the public? Ms. Savage  
3 replied that the brochures would be distributed to public libraries, the County  
4 Office Building, City Hall and a number of restaurants located on the Downtown  
5 Mall. Ms. Savage stated that brochures would also be provided to the Nature  
6 Conservancy, Southern Environmental Law Clinic and all RCS partners.

7 Mr. Colbaugh asked if the brochure could be modified to include the ACSA  
8 and the City? Ms. Savagae replied, absolutely. She stated that the brochures  
9 would list all RCS partners.

10 Dr. Palmer asked when the brochures would be available for distribution?  
11 Ms. Savage replied that if funding was made available immediately, within a  
12 month. Dr. Palmer felt that the immediate distribution of any conservation  
13 brochures would be helpful since the area was experiencing a drought period.  
14 Ms. Savage stated that she could possibly have the brochures ready sooner.

15 Mr. Carter asked what the RCS would do if the additional funding was not  
16 received? Ms. Savage stated that the RCS would continue to solicit funding,  
17 particularly for the celebratory events. She stated that the RCS partners would  
18 help with the end-of-the-year conference, but would not fund the printing of  
19 brochures.

20 Dr. Palmer asked if the brochures could be distributed electronically? Ms.  
21 Savage stated that for events, such as "Fridays after 5" and the City Market, it  
22 would not be feasible. She stated that distribution of a smaller brochure was  
23 more feasible for the public. Ms. Savage stated that all brochures would be  
24 distributed electronically to all RCS partners.

25 Dr. Palmer stated that the funding approved by the RWSA Board included  
26 the City and County. She noted that RWSA had a Watershed Fund, which she  
27 felt was appropriate for this type of funding.

28 Mr. Carter stated that since RWSA received money from both the ACSA  
29 and the City, he also felt that the ACSA had already donated funding to the RCS.  
30 He stated that consideration for this type of funding was not a budgeted item.

**Albemarle County Service Authority Board of Directors**

1 Mr. Martin stated that he shared Mr. Carter's views and felt that the same  
2 point would apply to the City. He suggested that, if the City agreed to pay more  
3 than they already had, perhaps the ACSA could match any additional money the  
4 City agreed to pay.

5 Mr. Carter noted that the City had a much larger agenda, such as tourism;  
6 the ACSA's agenda was water conservation.

7 Mr. Colbaugh stated that was why he felt any funding from the ACSA  
8 should be specifically for water conservation brochures. He stated that there  
9 were other brochures that promoted the Rivanna River that the City could fund.  
10 Mr. Colbaugh stated that the only brochure uniquely representative of the ACSA  
11 was the water conservation brochure.

12 Dr. Palmer asked if the ACSA would be printing water conservation  
13 brochures? Mrs. Thraves replied that the Service Authority would probably  
14 purchase brochures through the AWWA. Dr. Palmer asked if the ACSA had  
15 donated money to other organizations? Mrs. Thraves replied, no. Dr. Palmer  
16 noted that she was a member of the RCS, which was a great organization, but  
17 she was torn by the fact that the Service Authority could possibly distribute their  
18 own brochures, and whether this was the best use of funds. Dr. Palmer stated  
19 that she liked Mr. Martin's suggestion of matching any funding from the City.

20 ***Mr. Colbaugh moved to approve the funding of \$2,000 for the printing***  
21 ***of conservation brochures, seconded by Dr. Palmer. Mr. Colbaugh, aye; all***  
22 ***other members, nay. Mr. Thomas was absent for the vote.***

23 Mr. Carter suggested that perhaps the Board revisit the matter after Ms.  
24 Savage met with the City. Mr. Martin agreed.

25 Dr. Palmer asked if Ms. Savage would be meeting with the County? Ms.  
26 Savage replied that the County did not have a surplus in their Budget. Dr.  
27 Palmer noted that the ACSA had a surplus for this year only.

28 Mr. Carter added that he felt it was a surplus that should be given back to  
29 ratepayers.

30 Ms. Savage stated her understanding that the Board was requesting that  
31 she meet with both the City and the County, and asked how she should

**Albemarle County Service Authority Board of Directors**

1 represent the ACSA during those meetings? Mr. Carter replied that she needed  
2 to say that the ACSA had not yet made a decision.

3 Dr. Palmer asked if what the ACSA would be funding was the printing of a  
4 conservation brochure? Mr. Colbaugh replied yes, which was what the Board  
5 voted against.

6 The Chairman asked that after Ms. Savage met with both the City and the  
7 County, she make an appeal to Mr. O’Connell for the Board to consider.

8

9 **13. Easements for North Fork Regional Pump Station Project - Condemnation**  
10 **(Recording Time: 11:57:07 a.m.)**

11 Mr. O’Connell stated that staff was requesting that the Board authorize the  
12 ACSA attorney to file a Certificate of Condemnation for the permanent and  
13 temporary easements on Tax Map 32, Parcel 22E, owned by Apex, LLC.

14 Mr. Carter asked who was Apex, LLC? Mr. Bowling replied, Larry Hall  
15 with Hall’s Body Shop. He stated that the Board had already approved the filing  
16 of a certificate by resolution, and that the Board was ratifying that action.

17 ***Mr. Carter moved to authorize the ACSA attorney to file a Certificate***  
18 ***of Condemnation for the permanent and temporary easements on Tax Map***  
19 ***32, Parcel 22E, owned by Apex, LLC, seconded by Mr. Colbaugh. All other***  
20 ***members voted aye, with the exception of Mr. Thomas who was absent.***

21

22 **14. Items not on the Agenda (Recording Time: 11:57:49 a.m.)**

23 **a. Future Tour of Rivanna Projects** - Mr. O’Connell asked for clarity on  
24 whether or not the Board wished to schedule a tour?

25 The Chairman stated that personally, he was not sure whether he  
26 would learn a great deal by touring the Moore’s Creek Wastewater  
27 Treatment Plant (WWTP) Facility (\$50 million upgrade). The Chairman  
28 stated that in addition, he had already seen drawings and sketches of  
29 the Ragged Mountain Dam. He stated that it was not a matter of  
30 taking the tour, but whether or not Mr. Frederick had time to conduct a  
31 tour.

**Albemarle County Service Authority Board of Directors**

1 Mr. O'Connell asked if there were any members that were  
2 interested in touring either of these facilities? Mr. Martin replied that he  
3 was interested in touring both facilities.

4 Dr. Palmer stated that she was trying to schedule a tour on  
5 Tuesday [July 20<sup>th</sup>], which Mr. Martin would try to attend. She stated  
6 that her reason for doing so was because she wanted her son to go  
7 along on the tour before he left for school.

8 Mr. O'Connell asked if a time had been determined for when the  
9 tour would start? Dr. Palmer replied that she requested the tour be  
10 sometime in the morning, but had not yet heard back on an exact time.

11 Mr. O'Connell stated that he would contact Jennifer Whitaker with  
12 RWSA as to what dates would be available and provide those dates to  
13 the Board.

14 Mr. Martin stated that several years ago, Bob Wischer gave Dr.  
15 Palmer and him a tour of the Moore's Creek WWTP. He stated that  
16 the tour was fascinating. Dr. Palmer added that the tour was several  
17 hours long.

18 ***b. Dredging Study Cost Allocation*** - Mr. Martin referred to Mr. O'Connell's  
19 memorandum (Attached as Pages \_\_\_\_). He stated that he  
20 disagreed with Mr. O'Connell's statement with respect to when the  
21 ACSA would share in the cost of the Dredging Feasibility Study. He  
22 stated that the Board had discussed the sharing of costs and provided  
23 Mr. Gary Fern with direction. Mr. Martin stated that Mr. Fern sent a  
24 letter, dated May 15, 2009, to the City stating what the ACSA's position  
25 was on the matter.

26 Mr. O'Connell stated that his statement was a reflection of the  
27 Board minutes. He stated that Mr. Fern's letter stated that the Board  
28 would consider cost sharing ... "should the study prove relevant, and  
29 useful for future water supply planning purposes."

30 Mr. O'Connell stated that he wanted the Board to be aware that the  
31 cost allocations agreed to previously by the ACSA, had been paid.

**Albemarle County Service Authority Board of Directors**

1 Dr. Palmer stated that cost allocations, detailed on the worksheet  
2 (Attached as Page \_\_\_\_\_) reflected what Mr. Fern’s letter said. She  
3 stated that the worksheet showed cost sharing between the RWSA  
4 and the Service Authority for the Wetlands Assessment and the  
5 Bathymetric Survey. Mr. O’Connell added, “Which the Board adopted.”

6 Mr. Martin stated that the worksheet did not reflect what would  
7 happen if a decision was made to use dredging of the reservoir for  
8 water supply capacity purposes. He stated that the current cost  
9 allocations outlined on the spreadsheet would change.

10 **c. Oak Hill Sewer Phase 1 Project** – Dr. Palmer thanked Mr. Martin for his  
11 part in getting the Community Development Block Grant (CDBG)  
12 underway. Mr. Martin stated that it was staff who spent an  
13 extraordinary amount time on the request for the CDBG, which  
14 resulted in a savings of \$712,500.

15 Mr. Gorham stated that a three-day workshop was scheduled for  
16 August on construction management of the CDBG. He stated that  
17 there would be a considerable amount of additional paperwork  
18 associated with the grant.

19 Mr. O’Connell stated that both the City and the County had full-time  
20 staff who handled regulatory paperwork. He noted that the paperwork  
21 would be a large burden on staff.

22 Dr. Palmer wondered how much time was spent by staff on the  
23 grant application. Mr. Gorham replied that the amount of time was not  
24 tracked. Dr. Palmer requested that staff’s time be tracked from this  
25 point forward.

26 **d. Robinson, Farmer, Cox Associates** – Mr. Colbaugh asked if the Board  
27 would be meeting with the auditors, prior to the audit? Ms. Breeden  
28 replied yes, but that the meeting had not yet been scheduled. Mr.  
29 Colbaugh stated that he was not sure whether a meeting was needed  
30 this year. Ms. Breeden explained that a meeting was required by the  
31 auditor, as part of new auditing standards.

**Albemarle County Service Authority Board of Directors**

1 e. State Revolving Loan Fund – Mr. Colbaugh stated that the possibility  
2 of acquiring funding from the Virginia Clean Water Revolving Loan  
3 Fund had been mentioned. He asked if staff had applied for a grant?  
4 Ms. Breeden replied no, that staff would possibly wait until next spring.  
5 She stated that Davenport Financial Services was reviewing all  
6 available funding options. Ms. Breeden noted that there had been  
7 discovered a stipulation from the Department of Environmental Quality  
8 (DEQ) that Mr. Gorham could expand on. Mr. Gorham explained that  
9 the consultant, researching what was needed for the contract  
10 documents, spoke with their contact at DEQ. The consultant explained  
11 that in those documents was a stipulation for an environmental impact  
12 study, to be conducted during design, before the project went out for  
13 bid. Mr. Gorham stated that the consultant advised the Service  
14 Authority that if an environmental impact study was to be conducted,  
15 the bid date for the project would have to be extended by four to five  
16 months, assuming everything went well. He added that the  
17 consultant’s contact at DEQ also noted that it would be highly unlikely  
18 that the Service Authority would receive funding, since most of the  
19 funding available from the State was reserved for areas that were  
20 under consent order.

21 Mr. Colbaugh noted that the RWSA had received funding the last  
22 two years.

23 f. Chamber of Commerce and Thomas Jefferson Partnership for  
24 Economic Development – Mr. Colbaugh asked if the ACSA would be  
25 joining both organizations.

26 Mr. O’Connell stated that both organizations were allowing the  
27 Service Authority to have access to their organization at no cost. He  
28 stated that he spoke with Mike Harvey, Chief Executive Officer with the  
29 Chamber of Commerce, about the Service Authority participating and  
30 receiving information from the Chamber, but not as a member. Mr.  
31 O’Connell stated that he would not be requesting funding for a

**Albemarle County Service Authority Board of Directors**

1 membership fee. He stated that his desire for joining both organizations  
2 was for informational purposes only.

3 The Chairman asked Mr. O'Connell, was he comfortable with that  
4 arrangement? Mr. O'Connell replied that he would wait to see how the  
5 arrangement worked.

6 **g. Work Session** – The Chairman asked if the Board needed to schedule  
7 a work session for August? Mr. Martin felt that, given the possibility of  
8 a drought, the Board needed to leave the possibility of a work session  
9 open. The Board agreed.

10  
11 **15. Executive Session – Land Acquisition for the North Fork Regional Pump**  
12 **Station Project (Recording Time: - Due to Executive Session, no**  
13 **recording was conducted during this time period.)**

14 Mrs. Herr read a resolution to enter into Executive Session  
15 pursuant to Virginia Code Section 2.2-3711 A (3), to discuss North Fork  
16 Regional Pump Station Project Land Acquisition (Attached as Page \_\_\_\_).

17 ***Dr. Palmer moved to enter into Executive Session, seconded***  
18 ***by Mr. Carter. The Chairman asked for a roll-call vote: Mr. Colbaugh,***  
19 ***aye; Mr. Roberts, aye; Mr. Carter, aye; Dr. Palmer, aye; Mr. Martin,***  
20 ***aye.***

21 The Board of Directors came back into regular session. Mrs. Herr  
22 read into record a resolution stating that only matters so previously stated  
23 and exempted from open discussion in regular session were discussed in  
24 Executive Session (Attached as Page \_\_\_\_).

25 ***Dr. Palmer moved to adopt the resolution, seconded by Mr.***  
26 ***Colbaugh. The Chairman asked for a roll-call vote: Mr. Colbaugh,***  
27 ***aye; Mr. Roberts, aye; Mr. Carter, aye; Dr. Palmer, aye; Mr. Martin,***  
28 ***aye.***

**Albemarle County Service Authority Board of Directors**

1 16. Adjourn (Recording Time: 12:36:34 p.m.)

2 *There being no further business, Mr. Carter moved that the meeting*  
3 *be adjourned, seconded by Dr. Palmer. All members voted aye.*

4

5

6

---

Gary B. O'Connell, Secretary-Treasurer