

**South Fork Rivanna Reservoir Stewardship Task Force
and
Rivanna Water & Sewer Authority**

**Minutes of Task Force Members Meeting
and
Authority Special Board of Directors Meeting**

August 12, 2008

**Note that visual presentations from this meeting are now posted at the RWSA website at
www.rivanna.org**

A meeting of the members of the South Fork Rivanna Reservoir (SFRR) Stewardship Task Force and a special meeting of the Rivanna Water & Sewer Authority (RWSA) Board of Directors was held on Tuesday, August 12, 2008, at 6:00 p.m. in Conference Room 241 at the Albemarle County Office Building, 401 McIntire Road, Charlottesville, VA. The purpose of the RWSA Special Board of Directors Meeting was to allow members of the Authority's Board of Directors to attend the meeting of the members of the Task Force.

SFRR Stewardship Task Force Members Present: Ms. Holly Edwards – Charlottesville City Council, Mr. Mark Fletcher – citizen from University of Virginia (UVA) representing recreational interests on the SFRR, Mr. Michael Gaffney – Rivanna Water & Sewer Authority Board of Directors, Mr. Robert Hodous – sitting in for Mr. Chris Lee who is representing the Charlottesville Regional Chamber of Commerce, Ms. Karen Joyner – representing the Ivy Creek Foundation, Mr. David Kudravetz – sitting in for Mr. Thomas Jones who is citizen representing property owners along SFRR, Mr. John Martin – Rivanna River Basin Commission, Ms. Wren Olivier – Sierra Club, Ms. Liz Palmer – Albemarle County Service Authority Board of Directors, Mr. Dennis Rooker – Albemarle County Board of Supervisors, Mr. Ridge Schuyler – The Nature Conservancy, Ms. Dede Smith – Citizens for Sustainable Water Supply, and Ms. Sally Thomas – Chair, member of the Albemarle County Board of Supervisors and representing the League of Women Voters.

RWSA Board Members Present: In addition to Mr. Gaffney-presiding, Mr. Gary Fern and Mr. Robert Tucker.

RWSA Staff Present: Mr. Bruce Edmonds – Recycling Operations Manager, Mr. Tom Frederick – Executive Director, Mr. David Golladay – Water Operations Manager, Mr. Chuck Kent – Capital Projects Engineer, Ms. Mary Knowles – Recording Secretary, Dr. Robert Wichser – Water & Wastewater Director, Mr. Stuart Wilson – Laboratory Director, and Ms. Jennifer Whitaker – Chief Engineer.

Also Present: Ms. Tamara Ambler – Albemarle County Department of Community Development, Mr. John Kauffman – Virginia Department of Game & Inland Fisheries, Mr. Pat Mullaney – Albemarle County Director of Parks & Recreation, members of the public, and media representatives.

1.0 Call To Order

The meeting of the members of the Task Force was called to order by Ms. Thomas and the special meeting of the RWSA Board of Directors was called to order by Mr. Gaffney on

Tuesday, August 12, 2008 at 6:02 p.m. and Ms. Thomas and Mr. Gaffney each noted that a quorum of the Task Force and the RWSA Board of Directors were present. Mr. Gaffney explained that due to the presence of three RWSA Board members, legal requirements specified that this public gathering become an official Board meeting. No RWSA Board actions would be taken at this meeting. Minutes would be prepared and submitted for RWSA Board approval.

Ms. Sally Thomas stated that the group was formed at the direction of the four board chairmen (the four boards being the Albemarle County Board of Supervisors, the Albemarle County Service Authority Board of Directors, Charlottesville City Council, and Rivanna Water & Sewer Authority Board of Directors). She then asked Mr. Michael Gaffney, who is one of the four board chairmen and also a member of the Task Force, to present the objectives for the Task Force members.

Mr. Gaffney then read a prepared summary of the "Outline of Work" as agreed upon by the four board chairmen at the June 30, 2008 meeting as follows: (Copies of the written statement were provided to the Task Force members as well as members of the public in attendance at the meeting.)

1. *Utilizing historical, scientific and survey data, and current expert testimony, establish a timeline spanning at least fifty years of the expected disposition of the South Fork Rivanna Reservoir if no maintenance is performed.*
2. *Using this anticipated life cycle identify the impact on the ecological, recreational, aesthetic, and water quality of the South Fork Rivanna Reservoir.*
3. *Receive public input on the community expectations for the future of the South Fork Rivanna Reservoir.*
4. *Given the approved fifty year water supply plan, and the fact that the South Fork Rivanna Reservoir is part of that plan, what will be the impact of the projected life cycle of the reservoir?*
5. *Given the collected data, define several expected outcomes relative to the community expectations, starting with doing nothing and including other potential maintenance initiatives.*
6. *Present results and make a majority recommendation, including an outline of needed future data/analysis if applicable, to a joint meeting of the Rivanna Water & Sewer Authority, Albemarle County Service Authority, City Council and Albemarle County Board of Supervisors before the end of the year.*

Ms. Thomas next reported that Mr. Gaffney would also provide some information about the SFRR.

Mr. Gaffney stated that the SFRR Dam was constructed by the City of Charlottesville in 1966, after purchasing the land in 1962, and is located behind the Doubletree Inn. The watershed area is 259.1 square miles and is situated almost entirely in Albemarle County, with only a small area

at the headwaters of the Mechums River located in Nelson County. The surface area of the reservoir pool equals 390 acres. The watershed to surface area ratio is very large by comparison to most reservoirs in the mid-Atlantic region. SFRR has often been described as a “run-of-the-river reservoir.” The current storage for the urban water supply is estimated at 740 million gallons, and sediment and nutrients are considered the most significant public issues. The engineers that designed the original dam predicted a loss of 19.6 million gallons of water per year to sedimentation – measurements to date average about 15 million gallons lost per year. The Hydro-Plant, which is located at the base of the dam, was installed in 1988 and produces one megawatt of capacity. The Hydro-Plant operates continuously when the natural water inflow to the reservoir is adequate.

Ms. Thomas then asked each of the Task Force members to introduce themselves and identify the organizations they represented. At the conclusion of the introductions, Ms. Thomas provided the following brief historical perspective on the community’s interest in the SFRR:

- In 1970 Ms. Thomas was a member of the League of Women Voters when the organization developed a booklet entitled “Mud,” which suggested that the reservoir was going to become a “stinking swamp” if it were not properly maintained. She felt the booklet was so influential that it “really changed politics in Albemarle County.” In 1980 there was a major “down zoning” of property in the rural areas of Albemarle County. Ms. Thomas believed that this was due in part to the views of the people being elected to the Board of Supervisors who shared the citizens’ concerns about the reservoir.
- In 1979 Ms. Thomas served on a Watershed Management Plan committee, along with Ms. Nancy O’Brien, Mr. Dan Roosevelt, Mr. Walter Perkins, Mr. Alan Kendrick, and Mr. Edgar Garnett. The Committee’s charge was to develop a plan for managing the reservoir and the watershed. She felt this was the beginning of thinking towards watershed management as opposed to “inside the reservoir water management.” There was a lot of discussion at that time about soil erosion and the causes for “eutrophication,” which was major problem in the 1970’s and 1980’s due to Morton’s Frozen Food flushing down all their waste into the reservoir. The 1979 plan was the last time there was anything actually called a “Watershed Management Plan.”
- In 1982 there was a “Watershed Management Study” for SFRR, which focused again mainly on Morton’s Frozen Food.
- In 1988 the Crozet Interceptor was built in order to pump all the waste from Crozet, including the waste from the Morton’s plant, to the Moores Creek Wastewater Treatment Plant.
- In 1993, there was a Phase II Report on the Rivanna Reservoir Restoration project.
- In 1998 there was a “State of the Basin” report written by a group that called themselves the “Rivanna River Basin Project, which included the UVA Architecture School and the Virginia Department of Mines, Minerals, and Energy.
- In 1999 the Lickinghole Detention Basin had been built in Crozet. The intent of that facility was to capture the surface runoff, and its effectiveness was being studied.
- In 2001 a report on “Sediment Sources and Mitigation Strategies for the South Fork Rivanna Reservoir” was published that generated great interest in “Integrated Resource Planning” and guided RWSA and citizen planning efforts for the next few years.

- In 2001 a consultant was hired to study the impact of the western bypass on the reservoir.
- In 2002 a report was written by Mr. Stephen Bowler called “South Fork Rivanna Reservoir Watershed: Reflecting on 36 Years, Anticipating 50 Years.” An Executive Summary of that report was included in the packet provided to each member.
- In 2003 a technical memorandum was prepared about dredging.
- In 2004 a meeting was held to discuss dredging. There was also an organization called “SORT,” which stood for “Save Our Reservoir Today,” that was investigating how different communities dredged their reservoirs. Ms. Thomas was also part of that group.

Ms. Thomas then stated that she felt a historical background would be helpful to the group since they would be focusing on this issue for the next four months; therefore, the main purpose of today’s meeting was to provide a “snapshot” of what is known at this time about the Rivanna Reservoir.

Ms. Thomas next introduced Mr. John Kauffman with the Virginia Department of Game and Inland Fisheries (DGIF), who is an expert on warm water streams and in-stream flows. Mr. Kauffman was in attendance to provide a summary on the status of the reservoir for fishing activities.

Mr. Kauffman reported that the SFRR consists of around 400 acres and is the largest public water body in the area and the surrounding counties, including those west of the Blue Ridge Mountains. The SFRR is extremely popular with anglers, as evidenced by the number of people who use the Ivy Creek launch area. There is also a public access point near the South Fork treatment plant, but since it is located some distance from the popular fishing spots, the public usually launch from the middle of the reservoir in order to save battery power.

Mr. Kauffman next commented that DGIF routinely conducts sampling of the reservoir and surrounding lakes about once every four or five years through “electric fishing,” which is focused on “sports fishery.” The reservoir supports self-sustaining populations of largemouth bass, bluegill, black crappie, and channel catfish. Other fish found in the reservoir include white suckers, bullheads, and golden shiners. DGIF sampling looks at two population aspects: abundance rates and size structure of the fish population. Of the eight county lakes that DGIF routinely samples, the Rivanna Reservoir usually ranks first or second for the rates of largemouth bass catches and the size structure of fish over 15 and 18 inches in length.

Mr. Kauffman then stated that some positive aspects of the reservoir include its proximity to population centers, the presence of shoreline habitat consisting of downed trees, existing docks and other “woody” structures, and the size of the bass population.

Mr. Kauffman next addressed some limitations associated with the reservoir. He stated that there is a lack of a developed public access located in the center or the upper end of the reservoir. The increased turbidity that is caused by sedimentation and siltation decreases productivity and affects the food chain. The reservoir has a short retention time as determined by the size of the reservoir versus how much water flows in, which also impacts algae growth and decreases productivity. The siltation located at the upper end of the reservoir can result in poor substrate

for fish spawning and nesting. However, due to the short retention time as well as other factors, aquatic plants are not a big issue for the reservoir.

At the conclusion of Mr. Kauffman's presentation, Mr. Mullaney commented on the significance of the reservoir having a self-sustaining catfish population since the stocking of catfish is required in most of the other area lakes. Mr. Kauffman next stated that due to the reproductive success of the channel catfish there has been no need to stock the Rivanna Reservoir.

Ms. Palmer next inquired about the areas of the reservoir that were best suited to support the fish population. Mr. Kauffman replied that towards the upper end of the "essential third" of the reservoir would facilitate the best reproductive conditions.

Ms. Palmer also commented that she was "a little bit confused" and asked for further explanation about the statement that there was no problem with aquatic plants because of the sedimentation and the short retention time of the reservoir. Mr. Kauffman stated that high sediment loads from runoff and the presence of plankton prevent sunlight from reaching the aquatic plants and inhibit their growth. The aquatic plants present were not abundant enough to interfere with the drinking water or recreational purpose of the reservoir. Mr. Rooker then asked about the impacts that an overabundance of aquatic plants would have on the reservoir. Mr. Kauffman replied that too many plants would provide too much cover and make it more difficult for anglers to reach the fish. The plants could also cause problems with water intake structures.

Ms. Smith then asked Mr. Kauffman to address the issue of sedimentation going over the dam and the impacts to the river downstream, especially during storm events. Mr. Kauffman stated that the "ripple areas" will clog up with silt. The reservoir itself does act as a "big sediment trap" for the more coarse material, but the finer sediment will decrease productivity downstream. Ms. Smith also inquired about whether the more coarse sediment would begin to have an impact as the reservoir became shallower. In his response Mr. Kauffman used as an example the Emery dam on the Rappahannock River that maintained a constant depth, which enabled any sediment runoff to be flushed through the system. Without a dam structure in place, the water level would be able to lower to a point where the sediment could potentially have a greater impact on downstream areas.

Mr. Rooker next questioned whether the impact would be greater without a reservoir at that location since the reservoir acts as a sedimentation trap. Mr. Kauffman stated that the ideal solution would be to reduce the sediment load entering the system.

Ms. Joyner then inquired about when DGIF began sampling the reservoir and if the results changed over time. Mr. Kauffman stated that DGIF began sampling in the mid 1970's, which was conducted every three to five years and the data analyzed for historical trends. He did not have the results at this time, but he could provide that information to the task force upon request. Ms. Joyner added that she felt the information would be useful for the group.

Mr. Kudravetz next inquired about the number of times per year that DGIF checked the reservoir for aquatic plant growth. Mr. Kauffman replied that aquatic plant growth is also checked on the same three-to-five year sampling time frame and occurs during the spring when the fish are most susceptible to their electric fishing. Ms. Thomas then commented that although Mr. Kudravetz was sitting in for Mr. Tom Jones, Mr. Jones had also commented by e-mail about the greater

amount of plant growth he has observed and inquired about its cause and what effect it might have on the reservoir. Mr. Kudravetz added that in the past two years the plant growth up from the boathouse has been “phenomenal and exponential” from prior years and echoed Mr. Jones question about the possible cause for this increase. Mr. Kauffman stated that the increase in aquatic plants could be caused by several factors, including shallower water and a reduction in turbidity due to lower stream flows. He referred to the Shenandoah River where the times of highest plant growth corresponded to the years of lowest flows.

Mr. Fletcher then asked Mr. Kauffman to address the effect of water temperature on plant growth. Mr. Kauffman stated that due to volume, water temperature would rise at a faster rate as the flows got lower, which increases plant growth. Mr. Fletcher next questioned if he were correct that the plant growth issue would not be a factor in December. Mr. Kauffman replied that usually in the fall most of the plants will die out.

Ms. Thomas next referred to a comment by Ms. Edwards concerning the “beautiful Heron” that she observed near the reservoir and inquired if DGIF dealt with birds that habitat the reservoir. Mr. Kauffman commented that although he has observed the variety of birds and wildlife in the reservoir, he was a Fish Biologist and his focus was in that area.

Mr. Hodous then asked if the increased plant growth occurring during a low flow season would tend to continue in future years unless really high flows occur. Mr. Kauffman replied that once aquatic life has been established, it will take several years of very turbid water to reduce the amount of the plants due to their widespread impacts.

Mr. John Martin next questioned about the number of fishing licenses that were issued in Albemarle County and the City of Charlottesville this year. Mr. Kauffman stated that he did not have those figures available at this time, but he offered to obtain that information for the Task Force.

Ms. Thomas then stated that Mr. Pat Mullaney, Albemarle County Parks and Recreation Director, and Mr. Mark Fletcher, Task Force member representing UVA “recreational interests” would now present information on the next agenda item concerning “Other Recreational Interests.”

Mr. Mullaney first reported that recreational use of all of this community’s water supply is regulated through the County Code. The County Code specifically authorizes uses of the SFRR as fishing, canoeing, boating with boats not operated with an internal combustion engine, hiking, bird watching, and picnicking. Because of the size and overall quality of the reservoir, fishing is the most recognized public use.

Mr. Mullaney further stated that the County has been attempting to get better access to the reservoir for about 30 years, but those efforts have been unsuccessful to date. As mentioned earlier by Mr. Kauffman, the most popular site and most ideal location for boat launches is in the Twin Bridges area. Other access sites used by the public include an area near the dam and also by the old iron bridge on Route 660. Other people are accessing the reservoir through private property or parking at the Ivy Creek Natural Area and walking to the reservoir. In 1983, a citizen offered to donate property to UVA for the UVA rowing crew’s use with 2 ½ of those acres stipulated for use as a formal public access. DGIF was actually going to build and

maintain the access, and Parks and Recreation would only be responsible for opening and closing the gate as well as handle litter control of the site. The neighbors persuaded the property owner to donate the land to UVA without the public access element. In 1990 when the old iron bridge was replaced, the County asked DGIF to look at that location for a possible public access site. DGIF determined that there was not sufficient land to accommodate all purposes for a formal public access. In 1995, the County had discussions with Mr. Kevin Sauer, coach of the UVA women's rowing programs, concerning mutually beneficial ideas of a public access and the rowing program working together. Further along in the discussions, the neighbors petitioned the Board of Supervisors against a formal public access at that location and the original donor again limited the property's use for UVA purposes.

Mr. Mullaney next commented that the County then decided to concentrate its efforts for better public access at the existing launch site near the dam, with the realization that it was not the ideal site to access all the reservoir. A 13-year intermittent conversation process with the adjacent property owners was begun concerning swapping five acres of land for some Greenway land that had been proffered during the Sam's Club rezoning process. During those 13 years the discussions had progressed to the point where money for this project was approved in the Capital Improvement Program (CIP) and the plan was approved by RWSA's Board of Directors. In 2006 the County learned that there was no possibility that this deal could be accomplished and the money in the CIP was used for other purposes. The County concluded this month that this property swap would take place, and money for the development of this public access site will be reprogrammed in the CIP for FY 2013-14.

Mr. Mullaney then stated that in 1995 when the UVA rowing program property was being considered for a public access site, the County conducted a vehicle sticker count at the various access locations to determine jurisdictional usage. At that time, the reservoir was utilized by 41% of County residents, 23% from the City of Charlottesville, and 36% were from other jurisdictions, which despite the lack of good formal access reflects the quality of the fishery.

Mr. Mullaney next addressed the shoreline access issue. He stated that in the past there was a situation concerning an individual who insisted on his right to access the reservoir and fished on private property. This led to an investigation as to whether the actual property line of the reservoir was at the water line or if there was a uniform buffer around the reservoir. He concluded his presentation by stating that this issue he felt has never been clearly answered.

Mr. Mark Fletcher then presented his comments, which he stated would be briefly focused on the recreational aspects and the history as it related to the use of the reservoir from a rowing perspective. He was involved with the hiring of Mr. Kevin Sauer, coach of the UVA women's rowing program, who became employed when the women's and men's rowing teams were simply clubs. Since that time, rowing has developed in many ways within this community. The men's program still operates as a club, while the women's team has been "varsity" for many years. All ages and skill levels are represented from the various recreational usages of the reservoir, which include rowing, canoeing, and kayaking.

Mr. Fletcher next stated that he has already suggested to Ms. Thomas that the entire Task Force have the opportunity to go out on the reservoir in order to observe the vegetation growth and to hear an historical perspective from Mr. Sauer on the effects of sedimentation from a rowing

standpoint as well as what is being “lost” from the reservoir every day. He concluded by stating that he hoped that an early morning trip on the reservoir could be scheduled in the near future.

Ms. Thomas then commented that she had heard that the reservoir was a “wonderful” location for a rowing crew, and she asked if Mr. Fletcher had any comparative information or would it be better to wait until the reservoir tour occurred to address her question. Mr. Fletcher stated that he could respond in part by stating that the distance availability for the rowing crew is continually getting shorter due to conditions in the reservoir. Mr. Sauer estimates that 1 ½ miles has been lost from the original distance undertaken by his rowing crew due to the increase in sedimentation.

Mr. Martin next asked if the UVA rowing programs have been on the “upsweep” over the years with increasing numbers of people interested in this sport. Mr. Fletcher stated that the women’s teams have won the Atlantic Coast Conference (ACC) championship almost every year since it became a “varsity” program. He then used Ms. Lindsay Shoop, former UVA rower, as an example of the increased popularity of the sport. Ms. Shoop had not done any rowing in high school but was an athlete with the potential of winning a gold medal at the Summer Olympics. The men’s rowing club will have many students interested in “trying out” for the team when school begins this fall, and the Rivanna program has also become very popular. Mr. Martin further inquired if Mr. Fletcher felt the sport was becoming more popular by the increasing numbers of people participating in those programs. Mr. Fletcher commented that he felt Mr. Sauer would be the best person to address that question from UVA’s perspective and also as someone who is more closely associated with the Rivanna rowing program. Mr. Martin also questioned if there was any possibility that the men’s rowing crew would be made into a “varsity” sport, and if so, would that increase the numbers of men participating in that activity. Mr. Fletcher stated that the men’s rowing club would probably not become a “varsity” sport because at this time most colleges and universities were not undertaking additional intercollegiate sports. If it were to occur, he believed that the interest would continue to build due to its club base.

Ms. Olivier then questioned if distance was the main issue that the rowing program had with the sediment in the reservoir. Mr. Fletcher stated that Mr. Sauer has demonstrated to him how the difficulty of the oars penetrating the water through the increased vegetation has affected the rowing teams’ ability to maintain a high rate of speed. Even though it could be a seasonal issue as discussed previously by Mr. Kauffman, the increased vegetation is not an insignificant matter for the rowing programs.

Mr. Martin next requested that Mr. Fletcher illustrate the portion of the reservoir that is used by the rowing programs on one of the maps provided in the meeting packets. Ms. Whitaker suggested that he use the map displayed on the board that notes the location of the boathouse used by the rowing programs. Mr. Fletcher then pointed out the boathouse and the route taken by the rowing teams on that map. Ms. Smith next asked about the minimum amount of miles that the rowing programs would need to meet their purposes. Mr. Fletcher replied that the training needs would be different from actual race conditions and that longer distances would be preferred from a training standpoint. Ms. Smith then inquired about options for the rowing program should the distance become too short for their training needs. Mr. Fletcher commented that the difficulty with finding another location if the reservoir became unsuitable for rowing

programs' needs due to sediment and/or vegetation was an issue that he felt Mr. Sauer should address with the Task Force. Lake Monticello, a site used once for a race, would not be available on a routine basis; Lake Anna would be the next best choice. Ms. Thomas then asked about the suitability of Beaver Creek, and Mr. Fletcher stated that it was appropriate for high school use but not on a collegiate level. Ms. Olivier next questioned if all the high schools had rowing programs. Ms. Thomas commented that she thought only Western Albemarle had a rowing program, which began two years ago. Mr. Fletcher added that their program was basically a club situation.

Ms. Thomas thanked the speakers and then proceeded to the next agenda item concerning the reservoir's water quality, which would be presented by Dr. Robert Wichser, RWSA Director of Water and Wastewater Operations.

Dr. Wichser first thanked the Task Force for the opportunity to provide information to the group. He then referred to the first slide in his PowerPoint® presentation that pictured a man with a large catch of fish, which he felt also illustrated what Mr. Kauffman discussed previously about the reservoir's popularity with fishermen. Some of the general topics that he would be addressing about the SFRR included biology, water chemistry, and sediment chemistry.

Dr. Wichser next commented that the SFRR is a long narrow body of water with a very large watershed, which gives it the characteristics of both a river and a lake. The SFRR provides the community with recreational benefits, a "unique aquatic environment," as well as a consistent supply of water. The SFRR has land uses similar to other Piedmont reservoirs. Although it has "aesthetic positives," it is not "environmentally pristine."

Dr. Wichser then addressed water quality issues associated with the SFRR. He stated that the water quality is adequate to maintain 100% compliance with drinking water regulations after treatment, but there are times when additional treatment efforts are needed due to its less than "pristine" condition. The reservoir has elevated nutrient levels that can lead to algae blooms, poor transmission of light, and "low dissolved oxygen" during the warm months. The SFRR is on DEQ's "Naturally Impaired List for Dissolved Oxygen" but is presently proposed to be "delisted." He further explained that the term "Naturally Impaired" related to certain flow characteristics and meteorological conditions that occurred during warmer weather that affected certain areas and depths of the reservoir. Aggressive water treatment is required during the warmer months to remove taste and odor compounds, which are caused by different forms of algae mass, dissolved manganese, dissolved iron, and "low dissolved oxygen."

Dr. Wichser next stated that for the past few years RWSA has not only monitored and measured the amount of algae in the reservoir on a weekly basis but has also formed a panel that tastes the water, makes comparisons, and discusses any taste issues. RWSA has optimized treatment by the use of certain advanced chemistries. The water quality of the SFRR is very typical of other reservoirs with similar watersheds and landings.

Dr. Wichser further commented that over the past few years, RWSA has actually conducted an algae count on a per milliliter basis. He felt it was interesting to compare the May and August figures for the blue-green algae versus the non blue-green algae, which reflect that the blue-green species increases with the warmer water temperatures. The blue-green algae are taste and

odor organisms, and their increased presence could also indicate that the reservoir is more laden with phosphorus and nitrogen.

Dr. Wichser then provided some information on the algae community. The blue-green algae may dominate and increase excessively when nutrient levels, particularly phosphorus and nitrogen, are sufficient to support its growth, the water is still or turbulence is minimal, the weather pattern is stable for a long time, and the weather is warm. However, blooms have occurred in drought conditions during cooler weather.

Dr. Wichser next presented some additional water quality information. He stated that the aging process or the "oxidation" status of the sediment deposited on the bottom of the reservoir can impact the "water column chemistry" above the sediment layers. The raw water quality to treatment plant is directly impacted by wet-weather events as reflected by a 2 to 5 turbidity range during dry weather versus a 10 to 89 turbidity range for wet-weather events. Ms. Thomas then asked Dr. Wichser to explain turbidity units in "layman's" terms. Dr. Wichser explained that if you shined a flashlight beam through a glass of distilled water there would probably be "0" turbidity units. If you mixed clay particles into the distilled water and then tried to shine the light through the glass, the light would be inhibited from going through the glass. An instrument would detect the impendence of light through the water media in direct proportion to the amount of particulate matter in the water.

Concerning the biology of the SFRR, Dr. Wichser commented that there is little known about the benthic invertebrate population located at the bottom of the reservoir. Warm water fish are the "norm," and turtles (sliders) and aquatic mammals (beaver/muskrats) are widely found in the reservoir. Aquatic plant species, such as Elodea, are present in the upper reaches of the SFRR, and the freshwater jellyfish has also been reported. He noted that Elodea favors waters that are rich in silty sediments and nutrients. Fringe wetlands are widely developed along the edge of the water body.

Dr. Wichser next reviewed the chemistry of the sediment found at the bottom of the reservoir. He stated that limited information is available about either the presence or absence of heavy metals, pesticides, herbicides, or PCBs in the material. The water samples collected and tested by DEQ have been "non-detect" for pesticide. Little is also known about the presence or absence of trace organics. He emphasized that all the samples of RWSA's finished drinking water tested for the compounds he just mentioned are in 100% compliance with United States Environmental Protection Agency (USEPA) and Virginia Health Department requirements

Dr. Wichser then reported that five sediment samples have been collected, two core samples by DEQ in September 1996 and three core samples by Froehling & Robertson for RWSA in November 2002. Froehling & Robertson, Inc. (F&R) is a consulting firm located in Richmond, Virginia.

Referring to the slide that listed the DEQ sediment sample data, Dr. Wichser noted that the results from both collections are listed by each element. One sampling was collected from a location right above the dam, and the second one was taken in the Earlysville Road area. The results are typical for what would be expected from a reservoir.

Dr. Wichser next reviewed the sediment sample data collected by F&R. He stated that the sampling was taken near Panorama Farms on November 13, 2002, and the results from each of the three samplings were listed on the slide. He noted the wide variance in the three core samples for "Sand" and "Silt / Clay." The results for the metals were again typically what would be found in a reservoir. Dr. Wichser could state from his discussions with Dr. Robert Brent with DEQ that the data indicates what would be expected generally from soils. He conducted a study in the mid 1990's in Richmond on the soils from playgrounds, and the concentrations of metals were not too "dissimilar." The concentrations of those metals in the soils from surrounding states would also be similar to these sediment sample results.

Dr. Wichser then reviewed the last slide in his presentation that addressed "Sediment Make-up." He stated that there is limited knowledge on the gravel, sand, clay, and silt sediment types, amounts, and specific locations. There is also a lack of knowledge on sediment organic make-up and inorganic grain sizes. Sediment high in organic material can be a potential odor source. Analytical knowledge on sediment constituents (organic / inorganic) and their potential leachability is also lacking.

Mr. Martin next asked if arsenic that came in with the sediment would be heavy enough to remain with the material and be built upon by future sediment. Dr. Wichser replied that generally the arsenic adhered to the sediment material and would need to be in a fairly hostile pH environment for it to leach out. He added that although mercury has not been detected in the samples, sediment chemistry can cause mercury to go into a mentholated state, which is much more toxic to biological forms. When sediment goes anoxic, hydrogen sulfide, manganese, and iron can be liberated and directly impact the river column chemistry. Mr. Martin then commented that Crozet had a large orchard industry almost a century ago, and he understood that arsenic was used as a pesticide at that time. His question related to whether there might be pockets of pesticide or other material buried in the reservoir sediment due to runoff into the rivers over time. Dr. Wichser referred to the DEQ sediment data, which detected no arsenic in the two samples they collected. Of the three samples taken by F&R, arsenic was not detected in samples 1 and 3. He felt the 23 parts per million figure for Sample 2 might be an anomaly.

Mr. Rooker then commented that it would be helpful for the Task Force to have a copy of the PowerPoint® presentation, and Ms. Thomas stated that RWSA would be placing it on their website in the near future.

Ms. Smith next asked Dr. Wichser to further clarify the sediment data as it related what is considered a "normal" presence of those metals. Dr. Wichser stated that the determination was made through his discussions with DEQ and his professional experience in looking at normal concentration elements in central Appalachian soils. Ms. Smith then questioned whether any of the sediment data should be of concern at these concentrations. Dr. Wichser replied that based on DEQ's input and his own analysis, he felt comfortable with the data presented.

Mr. Rooker next inquired about the chemicals being used currently for water treatment and if there have been changes over time. Dr. Wichser replied that he felt the industry has gotten "a little smarter" and regulations have become "much tighter," which have resulted in changes in the types of chemicals used for treatment. RWSA was currently using aluminum sulfate, polymer, potassium permanganate, and hypochlorite for disinfectant. The recent big change was a result of findings of a study conducted in late 2004 and 2005 on optimization of what activated

carbon to use on constituents directly related to taste and odor. RWSA found that the carbon it was using was essentially ineffective and when a more effective carbon was used, customer complaints virtually stopped related to taste and odor. Ms. Thomas then commented that she had asked a similar question to essentially the same RWSA staff, and her interpretation of the answer she received was that the current RWSA administration is much more careful about taste, so it was difficult to compare current expenditures for water treatment versus seven or eight years ago due to the demand for higher water quality. Mr. Rooker next questioned if there were limits on the amount of chlorine that can remain in finished water. Dr. Wisner stated that there are federal and state regulations that govern the amount of chlorine use, which is 4 parts per million. Mr. Rooker further asked if RWSA was close to the limit, and Dr. Wisner replied that generally 1 to 2 parts per million would be found in the distribution system.

Ms. Olivier then noted that the sediment data was from sampling conducted in 1996 and in 2002 and asked how often the sediment sampling was performed. Dr. Wisner stated that it depended upon the availability of DEQ funding for that purpose. The sampling done by RWSA in 2002 was in preparation for some actions that RWSA might undertake due to drought conditions being experienced by this community.

Ms. Palmer next inquired if RWSA had information on the depth at which the sampling was done. Dr. Wisner stated that he did not have that information at this time but would be able to obtain that data for her.

Ms. Thomas then asked Ms. Jennifer Whitaker, RWSA Chief Engineer, to present information on the historical bathymetric surveys and sediment sampling of the SFRR.

Ms. Whitaker first referred to the map of the SFRR that was prepared specifically for this meeting and included in the meeting packets, which illustrated where sediment sampling occurred. Key geographical points have been labeled to facilitate identification of sample sites. She also noted the maps displayed on the wall that showed the topography and aerial views of the SFRR. Other graphs displayed included cross sections of the reservoir that were known paths for the bathymetric surveys. These maps can be provided to the Task Force whenever needed as reference points.

Ms. Whitaker next provided the definition of a bathymetric survey, which is the mapping of the physical conditions for the characteristics of a body of water, specifically a bed of a lake or a river. As previously discussed, the SFRR and the dam were constructed in 1966 and six bathymetric surveys have been completed over that period of time as follows: 1976, 1980, 1988, 1994, 2001, and 2002. Each of those surveys consisted of a varying degree of detail. Highly specialized companies conduct these surveys by sounding the bottom of the lake or river using the most advanced global positioning system (GPS) equipment and do cross sections, which they call "transects." The area in-between the "transects" is averaged to arrive at the volume of water, which has been the focus of surveys conducted to date in the reservoir. The interval at which measurements are taken gives you a higher accuracy as the sequence gets closer. This process is utilized due to the expense of surveying the entire reservoir.

Ms. Whitaker then stated that the original volume of the SFRR shortly after it was built was approximately 1,700 million gallons. The volume has decreased linearly since that time. Included in the meeting packets and also available on the sign-in table is a graph that plots the

bathymetric volumes and illustrates the linear decrease over time. She noted that the reservoir was designed with the knowledge that it would lose about 19.6 million gallons of water per year. When the dam was sited at this location, it was understood that there was sedimentation coming into the reservoir and volume would be lost over time. Current data actually indicates that over that same period of time the reservoir has actually lost about 15.1 million gallons of water per year, so the sedimentation rate has been slower than what had been anticipated at the time of construction. Dams and reservoirs are typically built with several zones. The usable storage zone for this particular dam is located at the top 15 feet of the reservoir. The “dead storage” area is typically where sediment is supposed to accumulate. In a “nice round bowl” where there is a constant flow coming and going out, the sediment would accumulate in the bottom of that configuration. Since the shape of the SFRR is long and narrow, the reservoir has features of both a lake and a river, which has resulted in the sediment settling in different areas over time. There is not a good definition of how much sediment is located in the usable volume and how much is in the “dead storage” area where sediment was intended to accumulate.

Ms. Whitaker next commented that the reservoir is approximately 40,000 linear feet or 7 ½ miles in length up to Buck Mountain Creek, which is where the City property line currently stops. She noted that the City owns the land where the SFRR is situated. The 1988 bathymetric survey was conducted with 27 “transects,” and the measurements were averaged over the 7 ½ miles of the reservoir. In 1994 the number of “transects” was increased to 47 in order to obtain a more accurate survey, 3 of which included Ivy Creek. The same number of “transects” were used during the 2001 and 2002 surveys. She then referred to the maps displayed on the board that plotted the results of the 1994, 2001, and 2002 surveys. She pointed out the areas of the reservoir where the lines were almost identical and also sections of the reservoir where the stream channel had shifted dramatically from 1994 to 2001. Ms. Whitaker next stated that it was very challenging from a technical standpoint to refer back to the 1966 data due to advances in survey techniques that have occurred over that period of time. If the Task Force were interested in receiving a greater level of accuracy concerning conditions at the bottom of the reservoir, a bathymetric survey providing that amount of detail within 2 to 3 percent accuracy would require 310 additional “transects,” for a total of 370 “transects.” She described for the Task Force’s consideration available technology that utilizes 3-D topography to better define the physical features of the bottom of the reservoir, such as location of sandbars, rocks, and natural formations.

Ms. Whitaker further stated that also shown on the SFRR map was a listing of sediment samples collected. Dr. Wichser focused his discussion on the samples listed in the tables located in the top right-hand corner and the middle bottom of the map. In 1994, an additional 12 samples were taken at 4 different locations in association with a bathymetric survey. At each location, three samples were collected and laboratory core samples were taken across the reservoir. An analysis they hoped to conduct did not occur because the pre-1994 data was not available. A box located in the left-hand side of the map contains a narrative about what was found in those 12 samples, which she felt was the broadest available information on the reservoir sampling. Comparative data on the 12 samples could not be done since each sampling was conducted for different reasons. However, there are pictures and floor logs of the 12 samples if the Task Force would be interested in viewing this technical information. The data from the three samples taken from Panorama Farm reflected the high variability in the amount of sand and silt/clay found at that site. A comparison of the laboratory core samples taken in 1994 throughout the reservoir reflected the same variability numbers. A few samples contained a “fair amount” of coarse

material overlaying with what they call “aquatic mud,” but generally the samples consisted of a more organic, silk-clay combination. The sampling data also indicated a mixing of layers embedded within the same deposit. The supposition made by the consultant who conducted the sampling was that the layering accumulated over time based on the flows and that there did not appear to be a common site for a uniform type of material.

At the conclusion of Ms. Whitaker’s presentation, Mr. Kudravetz asked if the bathymetric studies detected how much of the reservoir’s capacity was lost due to plant life. Ms. Whitaker stated that in order to obtain that information, a bathymetric study would need to be conducted during the winter months so that the plant growth would not inhibit the operation. Mr. Kudravetz next inquired if the study done in the winter would get a “false reading” since the capacity is lessened during the summer months due to the aquatic plant growth. Ms. Whitaker replied that she did not know how much capacity plant life consumes and whether their presence had much of an impact from a volume standpoint. She added that bathymetric data was based on conditions present during the entire year and not during a specific season.

Ms. Thomas then stated that Ms. Tamara Ambler, Natural Resources Manager for Albemarle County, will now present a “Summary of Albemarle County Land Use Strategies to Reduce Sedimentation.”

Ms. Ambler stated that she would be discussing how Albemarle County land use policies impact water quality in the SFRR. As discussed previously, the SFRR watershed is large and consists of approximately 258 square miles. Land uses include suburban / urban development, agricultural activities, and forestry uses. Nonpoint source pollution in the form of sediment and nutrients can come from any of those land uses. The County has numerous regulations to reduce nonpoint source pollution, as well as non-regulatory programs initiated with the goal of being better stewards of our water and the environment.

Ms. Ambler next commented that the County has always been very aware that land use can affect water quality, and as a result, has been very proactive in terms of considering water quality issues in its land use policy decisions. One example is the County’s designated areas for rural and development purposes. About 95% of the County’s land area is designated as rural and only 5% as development.

Ms. Ambler then the discussed the existing tools that the County uses when land use changes occur. One type of land use change is new construction. Any land-disturbing activity that is over 10,000 square feet is required to have an erosion and sediment control plan and that plan needs to show how erosion is being prevented and how the resulting sediment transport is minimized. Before the program was mandated, Albemarle County initiated water quality criteria that focused on removing phosphorus from new development. Areas that drain to a drinking water supply have a higher phosphorus removal requirement than non-drinking water watersheds. Infiltration devices / stormwater management facilities can help remove the pollutants prior to being discharged. The use of infiltration techniques may actually help reduce the volume and velocity of stream flows downstream and also assist with the reduction of streambank erosion, which is another potential source of sediment in the reservoir.

Ms. Ambler next commented that all localities east of I-95 in the Tidewater region are required to have stream buffers to protect vegetation on either side of streams. Other localities in Virginia can voluntarily adopt this provision, which Albemarle County did in 1991. The County recently made the regulation more stringent by requiring 100 foot buffers on either side of streams, including intermittent and perennial, in the rural areas. In the designated development areas, only perennial streams require the 100-foot buffer. In the Chesapeake Bay Preservation Area Designation and Management Regulations, a 100-foot buffer is said to achieve a 75% reduction in sediments and 40% reduction in nutrients, specifically phosphorus and nitrogen. The buffer requirement for drinking water reservoirs is 200 feet from the edge of the floodplain. In 2006, the County proactively mailed out information on the buffer regulations to the affected property owners.

Referring back to a previous discussion, Ms. Ambler stated there were many people who were not aware that the City owns the reservoir bottom itself. Residents who request boat docks on the SFRR require a special use permit since the structure would be located in the floodplain. Since the dock would also be sitting on City property, the private applicant and the City apply jointly for the boat dock permit.

Ms. Ambler then stated that two years ago the County received a grant from the Department of Conservation and Recreation (DCR) to cost-share the planting of new buffer vegetation on non-agricultural lands. Over \$80,000 was allocated for planting projects that would be undertaken this fall.

Ms. Ambler next discussed other locally implemented tools that the County undertakes cooperatively with other agencies. The Soil and Water Conservation District (SWCD) programs offer financial assistance for agricultural lands, which include fencing livestock from streams and water bodies, installing alternative water systems, and providing technical assistance on horse pasture management. Logging operations are overseen by the Virginia Department of Forestry that imposes best management practices to control erosion and sediment.

At the conclusion of Ms. Ambler's presentation, roundtable discussion among the Task Force members was held on the next steps in the process. Ms. Thomas asked some questions in order to get the discussion underway as follows:

“At what point do we want to have public input? Do we want to have public input as a the usual type of public hearing in which everyone stands up and speaks for three minutes? Do we want to have a facilitated visioning process in which people get to talk about what they value in this reservoir and what they would like to see it do in the future? Do we want to have another meeting with more information input before we have a public input session? Do you want to have a public input session right away?”

Ms. Palmer stated that she would like to have more information before holding a public input session. Specifically, she wanted more information on what was available that has not been done for keeping sediment out of the reservoir, such as forebays, and whether it was even possible to undertake in this reservoir. She also wanted to better understand the physical and aesthetic impacts to the river if nothing is done about the sedimentation.

Ms. Smith then commented that she felt it would be helpful to know what would be the components of a dredging study. Although she was not present when Gahagan & Bryant were here on May 5 and 6, she encouraged the members to listen to the podcast that provided a lot of information on dredging.

Mr. Hodous next stated that he would like more information on the cost of a bathymetric survey and what type of useful information would be provided.

Ms. Thomas then commented that when the dredging consultants were here she asked the question about the steps that would need to be undertaken if dredging was done in the SFRR. The consultants responded that you would first need to answer this question: "Why dredge?" which she felt was the purpose of forming this Task Force.

Ms. Smith next commented that she would recommend that everyone listen to the podcast on dredging. She felt it would very helpful not only to the Task Force members but also to the public to have one source of information on this issue. She then volunteered to develop a web page that would provide information on dredging, including this podcast.

Ms. Palmer next stated that she felt it was important to address the question of "why we dredge" first because it would help with the next issues of "how much to dredge" and "where do you dredge."

Mr. Martin then commented that he liked the idea of the Task Force members getting out on the reservoir. He next used the example of the build up of siltation and the formation of wetlands in Ivy Creek area, which he believed that the Ivy Creek Foundation felt was a positive development. In other areas of the reservoir, some sandbars and vegetations might be building up that cause different problems and need different solutions. What he has been able to observe has been during his travels over the reservoir every day.

Mr. Kudravetz next stated that what can be observed by traveling over the reservoir will be different than what can be seen by actually going out in the water because if you go far enough up the river you can visualize what the reservoir will look like in 30 years by viewing the mud flats that have already formed. He would therefore "triple the motion" that the Task Force "take a boat ride."

Mr. Gaffney next stated that when RWSA was looking at raising the reservoir four feet by adding a four-foot bladder to the top of the dam, one of the big concerns was flooding existing wetlands. One of the ideas in terms of not doing anything to the reservoir for the next 50 years is that it turns into "one giant wetland." He felt it would be good to go out on the reservoir to view current conditions and project how it might appear if the wetland areas continue to grow in order to get a better understanding of what needs to be done with the existing reservoir for public uses.

Mr. Rooker then commented that it would be helpful to get an understanding of how future actions could be limited by existing federal and state regulations before making any recommendations. The question of whether or not existing wetlands can be dredged would need to be addressed. He has also heard two different answers as to whether EPA or DEQ would allow some kind of forebay system. He would like the question addressed concerning who could provide the regulatory information.

Mr. Schuyler next stated that he would like to “second” or “third” the idea of going on the field trip and also for looking at the sources of sediment and the strategies for not only capturing the sediment that enters the reservoir but also how to stop the sediment from entering the reservoir. The same sediment that is filling up the reservoir is also “suffocating the life out of the streams” upstream of the SFRR. Concerning the stewardship of the SFRR, he was very “intrigued” by and wanted to follow up on the “human uses” that have been identified in order to get a better “handle” on those “human uses.” He used as an example the idea of a sticker count to get a “sense of where the anglers are coming from” and the numbers utilizing the SFRR in order to get a clear idea of what the Task Force was “stewarding the reservoir to achieve.”

Mr. Hodous then mentioned that the Task Force should evaluate potential sites to place the dredged material. Ms. Thomas next commented that someone would need to make that recommendation, but she was not sure whether it was a subject to be undertaken by this group. Mr. Rooker then stated that it might be the responsibility of the potential dredger to obtain the sites as part of the RFP. The question is whether the Task Force locates the sites or the “burden” is placed on the potential dredger. Mr. Hodous further commented that if the Task Force felt there were not many potential sites for the dredged materials, he questioned why money should be spent on “how we are going to dredge” and “where we are going to put it.” Mr. Rooker then stated that he talked to four or five dredgers, and some of them have a way of handling the materials on-site in preparation for commercial use. Other dredgers have identified sites around the reservoir that they might use. He was not sure if it was the Task Force’s role to identify in detail how dredged material would be handled.

Ms. Joyner next stated that there were a lot of issues to think about even before considering dredging. Two uses have been discussed so far other than the water use, which included fishing and rowing. She felt more historical fish sampling data was needed to obtain a better idea of any problems that might be associated with the fish population. She also wanted more information on the rowing aspect. She commented that this data was needed in order for the Task Force to be able to determine what the condition of the reservoir would be in 50 years or more if nothing was done. Ms. Thomas next asked about the educational uses of the reservoir, including the Ivy Creek natural area. Ms. Joyner suggested the use of a blog to capture input from the members of the public who might not attend a public meeting.

Ms. Palmer then commented that she felt that a Hydrologist perspective on how the changes over the next several years will impact the reservoir would be very helpful. She further explained that she would like to understand how large flows that change the channel and cut through to the more narrow areas would be affected over time.

Mr. Rooker next stated that he felt it was part of the “charge” of the Task Force to examine how the appearance of the reservoir would change over time if nothing is done and how that would impact the potential uses of the SFRR.

Mr. Schuyler then mentioned some uses of the reservoir not included in the list provided to the group, which included the adjacent landowners’ aesthetic uses as well as the citizens who drive over the reservoir every day and expect a certain “viewshed experience.” He felt the group would have a better understanding about a “viewshed protection effort” by incorporating those uses into their scope of work.

Ms. Smith next stated that she wanted to “ditto” the environmental education because the reservoir is used very heavily by the local schools. The Ivy Creek Foundation receives thousands of students every year, and Panorama Farms hosts nature camps.

Ms. Edwards then used the analogy of viewing the reservoir as a patient under her care and the information being obtained from the patient’s chart. After viewing all the data so that she could make a decision about the current “diagnosis,” she was not certain about the “current diagnosis” based on the information provided to the Task Force. She would be interested in the “greater level of advocacy” about the appearance of the bottom of the reservoir before making any decisions about dredging. Some of the chemicals used to treat the water are “disconcerting,” and what is used to treat the water is now different. She also expressed an interest in learning more about best practices that can be utilized now to prevent sediment from entering the reservoir. Speaking also on behalf of the “Blue Heron” she observed yesterday, she wanted more information on the private / City boundaries in relation to trespassers and what is being done to regulate that situation. She was “struck” by the volume of trash that is around the dam and the reservoir and also the amount of graffiti on the walls. She felt as this group went through the process that it consider practical ways to address this situation.

Mr. Rooker next seconded Ms. Edwards’ comments about the group’s consideration about the other things that needed to be undertaken by RWSA in order to properly maintain that facility that might be different than just removing the sediment.

Ms. Edwards then further stated that she felt the “road trip” would be appropriate because after viewing her “chart” she need to go “see her patient” in order to determine the next best step.

Ms. Olivier next stated that she was in agreement that the first step the group should take would be “to go see what we are talking about,” as she felt she had a lot to learn about this issue. Another concern is what can be done within current regulations to prevent the sediment build-up. She was also uncertain as to this group’s role related to logging operations, which is regulated by the Forestry Department. She felt that best management practices were not being followed by that industry on a regular basis and that the presence of cattle in streams was a major factor in sedimentation build-up. She did not know if it was in the Task Force’s scope of work, but any encouragement or ways to discourage those practices she believed would make a big difference.

Ms. Smith then requested that the group be provided a copy of the resolution passed by both the Charlottesville City Council and the Albemarle County Board of Supervisors that called for the maintenance study. Mr. Schuyler stated that he had copies of that resolution, which he distributed to the Task Force members.

Ms. Joyner next requested more data on any stream restoration work currently underway. She also inquired how the Water Supply Plan would impact the stream flows on the Moormans River. Mr. Rooker stated that the plan would improve the constant flow on the Moormans River.

Ms. Thomas then commented that during her research she read where a staff person at DEQ indicated that when this community’s water supply plan came into effect the Rivanna Reservoir’s water level could be lowered so that dry dredging could be implemented. She suggested that the concept of dry dredging be included in the Task Force’s discussions on different forms of reservoir maintenance.

Mr. Kudravetz next inquired about the cost in 2008 dollars to duplicate the SFRR if it were built today in order to get a better idea of the asset to the community. Mr. Rooker commented that information is available about the current cost of land acquisitions, but that it is DEQ's current position that they will not approve a new reservoir except in a last-resort situation.

After the discussion concerning the next Task Force meeting, Ms. Thomas summarized for the members that it was agreed that the "field trip" would be scheduled first and that Mr. Fletcher would handle the arrangements with Mr. Sauer. She further concluded that the public hearing would be scheduled after the "road trip." The members were also in agreement that the public hearing will not be held until there has been at least one more educational meeting for the Task Force.

Mr. Schuyler then asked about the method to be utilized for obtaining the answers to the questions raised by the members at this meeting. Mr. Rooker suggested that the members e-mail their ideas to the Chairman. Ms. Thomas further stated that the RWSA website will be a source of information as this process moves forward. She also noted that this work is in addition to the regular work responsibilities of RWSA staff and expressed her appreciation for all their assistance.

Ms. Edwards next asked if the entire two hours will be needed at the next educational meeting for information sharing and if anytime during that time frame could be open for public input. Mr. Rooker felt it would helpful in this process to have a particular meeting designated for public comment in order to take full opportunity of the educational sessions. Ms. Edwards further commented that she would "frame" the public input segments by providing a sign-up sheet for members of the public who wanted to speak during those designated times. She wanted to make this process as open to the public as possible. Mr. Kudravetz next commented that he felt that holding two more informational-sharing meetings would be more helpful to the group at this stage of the process before scheduling a public-input session. Ms. Palmer next stated that the additional information would enable the members to better interpret public comments.

Ms. Thomas then asked the members if they preferred a public input segment during the last 15 minutes of a meeting if all questions have been addressed or designating 45 minutes of each meeting for that purpose. Mr. Rooker stated that he felt that the time for public input would significantly impact the work of the committee and expressed doubts about how productive it would be for the public and whether it would provide a broad base of community participation. Mr. Gaffney then suggested that the web site be used as a source for submitting comments by the public. Ms. Thomas further commented that another option to consider would be for the public to be able to e-mail their comments directly to Task Force members, but the Task Force did not need to make a decision at this time. She did suggest for the members' consideration an interactive public input period. Mr. Rooker also commented that he felt smaller breakout groups would better facilitate public input. Mr. Martin next commented that he felt the format used by RWSA over the years for their public input sessions worked very well, and he would suggest considering that type of model. Mr. Schuyler further suggested that public input could be further defined by providing separate tables for different uses of the reservoir.

2.0 Adjournment

The SFRR Stewardship Task Force meeting was adjourned by Ms. Thomas and the special meeting of the RWSA Board of Directors was adjourned by Mr. Gaffney at 8:10 p.m.

Respectfully submitted,

Ms. Sally H. Thomas
Chairperson
SFRR STEWARDSHIP TASK FORCE

Mr. Robert W. Tucker, Jr.
Secretary-Treasurer
RWSA BOARD OF DIRECTORS