

**WSA BOARD / BOARD OF SUPERVISORS  
LIAISON COMMITTEE MEETING  
January 30, 2019  
MEETING MINUTES**

The meeting was called to order at 3:00 p.m. at the Fauquier County Water and Sanitation Authority Conference Room, 7172 Kennedy Road, Warrenton, Virginia.

**Board of Supervisors (BOS):**

|                     |            |
|---------------------|------------|
| Rick Gerhardt       | Absent     |
| Mary Leigh McDaniel | Vice Chair |

**Authority Board:**

|                    |            |
|--------------------|------------|
| Michael J. Focazio | Chair      |
| William Downey     | Vice Chair |

**County Staff:**

|              |                                 |
|--------------|---------------------------------|
| Paul McCulla | County Administrator            |
| Holly Meade  | Director, Community Development |

**WSA Staff:**

|                       |  |
|-----------------------|--|
| Benjamin R. Shoemaker | Executive Director                       |
| Cheryl St. Amant      | Assistant Executive Director             |
| Ck Chan               | Executive Assistant & Clerk to the Board |

**Guests:**

|                 |  |
|-----------------|--|
| James Emery     | Emery & Garrett Groundwater Investigations       |
| Hank Day        | Authority's Local Counsel                        |
| Julie Bolthouse | Piedmont Environmental Council<br>Representative |

**1. Mr. McCulla called the meeting to order.**

**2. Approval of Agenda:**

This special meeting of the Liaison Committee was called to order for the sole purpose of Mr. Emery presenting a Water Resource Assessment and Protection Program to the Committee.

**3. Approval of the Minutes:**

**Mr. McCulla** indicated for the minutes of the September 18, 2018 meeting be removed from the agenda and to be reviewed at the next scheduled meeting.

4. **Emery & Garrett Groundwater Investigations Presentation - Water Resource Assessment and Protection Program:**

Mr. McCulla introduced Mr. Emery from Emery & Garrett to the Committee. Mr. Emery presented the Fauquier County Water Resource Assessment and Protection Program with a PowerPoint presentation. He indicated that the objective of the day's presentation is to review and to resolve some directions/decisions on how the County will move forward to monitor and protect groundwater. Mr. Emery indicated that his presentation is basically divided into three parts, the first being a brief historical/geological background of the County's service areas, the second is to review investigations/assessments of population growth potentials, available recharge to groundwater resources and potential for past and present land uses to adversely impact groundwater quality. The last being a discussion on groundwater monitoring, protection efforts and the implementation of protection activities.

Mr. Emery highlighted that there are significant numbers of withdrawals of groundwater in the Service Districts and sustainability and quality of such withdrawals depend on the availability of groundwater recharge and the presence of contaminant threats. He added that the major watersheds within Fauquier County are important as they directly influence the potential recharge to groundwater systems. In a previous study by Emery & Garrett for Fauquier County, the estimated annual recharge is about 200M – 300M GPD. He added that based on the watershed levels and the amount of withdrawal, these numbers are not bad at all. However, he reminded that the Service Districts are not neatly overlaid by the best portion of the watersheds.

Mr. Emery proceeded to discuss population growth in the Service Districts and calculations of groundwater user/per acre. He added that values for the percentage of available groundwater recharge used in each Service District were calculated in the 2010 study. Using projected full build-out population projections, within the boundaries of the Service Districts, it was estimated that 45 to 114% of the available groundwater recharge could be potentially used to meet the groundwater demand. He stressed that it is technically impossible to capture and to utilize 100% of available groundwater recharge in any given area from a sustainability standpoint. Mr. Emery indicated that the maximum accessible would probably be around 15% to 20 % of recharge.

Mr. Emery proceeded to discuss the various potential threats to groundwater quality. The sources of contamination can be natural and/or anthropogenic. He added that taking into consideration the recharge rates, contamination and potential full build-up, it is critical for Fauquier County to focus on the concerns and think about developing and deriving groundwater resources outside the immediate Service District boundaries. He indicated that it may be necessary to develop future groundwater resources within a 1-mile buffer

around each Service District to locate sources of water. Members of the Committee indicated their concerns with such recommendation highlighting among others, Service District boundaries encroaching into another, land designated as conservation, resistance from existing residents, and difficulties in obtaining easements.

Mr. Emery acknowledged the concerns, as such were experienced by other jurisdictions that he had work with. However, he stressed that the County must accept the reality that it is necessary in the geological, political and hydrogeological prospective, to meet the full build-out needs of the service districts, that the development of groundwater resources outside Service District boundaries will be necessary. Mr. Emery provided the names of some jurisdictions which have developed wells outside the boundaries of their Service Districts. He added that this may be the time to start thinking about expanding water supplies outside the Service District boundaries.

Mr. Emery proceeded to indicate the top six (6) “sensitive” areas based on recharge rates and contamination.

- (1) Marshall
- (2) Bealeton
- (3) New Baltimore
- (4) Opal
- (5) Warrenton
- (6) Remington

The next and final area of discussion is groundwater protection and methods to initiate and implement of the next steps. Mr. Emery reminded that groundwater availability is dependent upon geological conditions, and as such Fauquier County has to be concerned with past and future land uses that can interfere the sustainability of resources. He understands that ordinance directed initiatives would be obvious. However, he stressed that the Committee must not to be hampered by the prospect of enactment of ordinances and that ordinances are absolutely essential to any progress in groundwater protection. Mr. Emery indicated that there are levels of protection support that every individual can advocate such as educating the community on the steps that can help to protect recharge.

Mr. Emery proceeded with a short discussion on how to determine groundwater protection areas and determination of zones of contribution to wells. He added that Fauquier County should take advantage of a groundwater monitoring plan. The first course of action would be identifying the areas of recharge and second, developing a groundwater monitoring plan at the top three (3) Service Districts that are most threatened – Marshall, Bealeton, and New Baltimore.

Mr. Emery reiterated the goal of his presentation which is to highlight how to identify zones of contribution, the benefits of a groundwater monitoring plan, and how the County can advocate long-term protection for its very important asset.

Mr. McCulla indicated that this will be a multi-year project and if the Committee is agreeable, to then present same to the full FCWSA Board and the Board of Supervisors. The decision will then be, if to advocate through the ordinance or non-ordinance standpoint. In the financial standpoint, Fauquier County has a budgeted allocation of Two Hundred Thousand Dollars (\$200,000) each year for water issues. In the current year, approximately One Hundred Thousand (\$100,000) is still available. He indicated that the County may be able to have the full \$200,000 allocation in about two years later once an existing project is completed. Mr. McCulla added that he will also check on the availability of Two Million Dollars (\$2M) allocated for Marshall in CIP on water issues. Should that amount be available, such can certainly jumpstart the matter in Marshall. Mr. McCulla would like FCWSA to determine the amount of financial contribution that they can put towards this endeavor.

Mr. Focazio indicated that the FCWSA Board has always wanted to embark on water protection plans. He added that there has always been the dilemma of treatment versus exploration.

Mr. Downey inquired if Mr. Emery can provide an estimate on the order of approximately 8 to 10 observation wells. Mr. Emery indicated that in his project in Loudoun County, the project started off at around \$300,000 which included the setting up of the monitoring program and utilizing unused exploratory wells as much as possible. He estimated the amount could be around \$250,000 to \$300,00 for the necessary drilling of additional wells and setting up of the monitoring systems in the top three threatened Service Districts in Fauquier County. Mr. Emery advised that the on-going cost for monitoring in Loudoun County is around \$45,000 annually. He added that for the larger areas in Fauquier County, the cost can come up to \$50,000 annually. He stressed that the start-off cost does not include identifying the aquifers and/or treatment. Also, the water quality piece will be determined separately depending on the amount of monitoring required and this can come up to another \$50,000 annually.

Mr. Downey would like to know if the Board of Supervisors has taken any steps to the creation of ordinances in support of this endeavor. Mr. McCulla indicated that the Board of Supervisors has not. He added that should this initiative move forward and the Board agreeing to the creation of the overlaid district ordinance, similar to the one adopted in Augusta County, with Mr. Emery's deliverables, the County's Community Development would proceed with coming up with the details and identifying the special exceptions. He stressed that there is unlikely any prohibitions to current land use, it will be the addition of protection, such as when bringing in contaminants, to have containment or other measures undertaken.

Mr. Downey indicated that he had discussed same with Mr. Focazio and are on the same page and do want to be engaged in the details of this phase of operation. Conceptually, he totally understands the importance of this endeavor and believes the same with the other

WSA Board members. However, he reminded that since the Authority is funded fully by ratepayers, the Authority's operations are totally financed by them.

**5. Adjourn:**

**Without objection,** the meeting was adjourned at 4:00 p.m.