

Meeting Attendees:

<u>RiverRenew Stakeholder Advisory Group</u>	<u>Alexandria Renew Enterprises</u>	<u>City of Alexandria</u>
Andy Duncan	Karen Pallansch	Erin Bevis-Carver
Bill Hillner	John Hill	Abigail Harwell
Dan Bradfield	Bill Dickinson	
Geoff Goode	Bruce Johnson	<u>Consultants</u>
Ivy Whitlatch	Liliana Maldonado	Justin Carl
Joe Canny, for Kate Mackenzie	Lisa Van Riper	Susan Mitchell
Karen Halbrecht	Caitlin Feehan	Doug Chapin
Kathy Dismukes	Monica Billger	Kelvin Coles
Liz Birnbaum	Sheeva Noshirvan	Kasey Kraft
Mary Ann Burstein	Jimena Larson	
Ron LaFond		
Yvonne Callahan		

The meeting convened at 7:00 p.m. Caitlin Feehan, RiverRenew Program Manager, welcomed the RiverRenew Stakeholder Advisory Group (SAG), public attendees, and managed introductions of the SAG members.

Ms. Feehan provided a presentation to update the SAG on the current status of RiverRenew. Highlights of the presentation included:

- An introduction to the SAG members' roles as RiverRenew ambassadors, rules for SAG meetings, and proposed discussion topics for SAG meetings through 2019.
- An overview of Alexandria's combined sewer system and the RiverRenew program.
- An explanation of the Environmental Assessment (EA) process with the National Park Service (NPS), community engagement efforts, and an overview of the tunnel routes and facility locations for the proposed RiverRenew tunnel system.

Justin Carl, RiverRenew Program Advisor, provided an overview of the proposed RiverRenew tunnel system. Highlights of the presentation included:

- An overview of the proposed tunnel system components.
- An in-depth look at soil layers in Alexandria and soil samples collected as part of the RiverRenew boring program.
- Animations illustrating the tunnel and drop shaft construction processes.
- A phase-by-phase construction sequence example for the Outfall 001 Diversion Facility, a conceptual restoration plan for the Outfall 002 Diversion Facility, and an overview of the proposed alternatives for Outfalls 003/4 with a conceptual restoration plan for Hooffs Run.

Kelvin Coles, RiverRenew Civil/Hydraulics Lead, provided an overview of the system performance. Highlights of the presentation included:

- A summary of the 2017 Virginia CSO law and performance requirements.

- A side-by-side comparison of the existing combined sewer system's performance and system performance following implementation of the RiverRenew facilities.
- A look at how the RiverRenew system would have performed in 2018, the wettest year on record.

Ms. Feehan continued her presentation with an overview of the program schedule and costs. Highlights included:

- An overview of the tunnel system permit and procurement schedule with anticipated dates for issuance of the EA document and City of Alexandria Tunnel System Development Special Use Permit (DSUP).
- An explanation of estimated costs for implementing RiverRenew and the various components of the tunnel system.
- A brief introduction to the AlexRenew rate adjustment implementation timeline and reasoning. The rate adjustment will be discussed at the next SAG meeting.

Sheeva Noshirvan, RiverRenew Community Outreach Specialist, finished the presentation with an introduction to the "SAG Toolkit," which included:

- The resources available to SAG members to help them in serving as ambassadors to the community.
- Methods for both SAG members and the community to learn more about RiverRenew.

The following is a summary of the questions asked by the SAG members and the answers provided by the RiverRenew team.

- ***Kathy Dismukes asked how many combined sewer overflow events currently occur each year.***

Ms. Feehan responded that, on average, there are 60 events resulting in 140 million gallons of overflow per year.

- ***Karen Halbrecht asked about the EA document, and whether it analyzes the entire tunnel system or just the portions impacting NPS property.***

Mr. Carl explained that the EA process requires analysis of all potentially feasible alternatives for the proposed tunnel system.

- ***Ivy Whitlatch asked if the tunnel system will impact historic properties near Outfalls 003/4.***

Mr. Carl noted that the open-cut alternative is adjacent to Jamieson Avenue Bridge.

- ***Dan Bradfield asked about the feasibility of achieving the current EA schedule.***

Mr. Carl noted that the NPS had experience with completing EAs for similar combined sewer tunneling projects in Washington, DC and based on that experience, the schedule was feasible.

- ***Liz Birnbaum asked about the depth of the alternatives for Outfalls 003/4.***

Mr. Carl indicated that the depth of the Hooffs Run Tunnel alternative would vary based on the three alternatives under consideration: a deep tunnel (approximately 100-feet deep), a microtunnel (approximately 40-feet deep), and an open-cut pipeline (approximately 10 to 20-feet deep).

- **Bill Hillner asked to clarify where the soil bored from the tunnel would be removed and where the tunnel boring machine (TBM) would be entering the ground.**
Mr. Carl explained that tunneling operations would be conducted from AlexRenew.
- **Ms. Dismukes asked how many diversion facilities would be needed at each outfall.**
Mr. Carl noted that there will be one diversion facility associated with each outfall.
- **Geoff Goode asked if there was a buffer to meet the performance requirements for each outfall and determine the size of these facilities.**
Mr. Carl noted that the system performance in the Long Term Control Plan Update was based on a the recent climate period of 2000-2016. Additionally, a safety factor is typically included for the simulated diversion rates to the tunnel system.
- **Ms. Whitlatch asked if boring activities account for the changes the City has made to the shoreline and any potential artifacts within the soil layer.**
Mr. Carl noted that historic shoreline locations are considered as part of planning and preliminary engineering.
- **Mr. Hillner asked if RiverRenew was aware of potential contaminants at Robinson Terminal North.**
Mr. Carl confirmed that RiverRenew is aware of the potential contamination at Robinson Terminal North and the recent Corrective Action Plan submitted to VDEQ.
- **Andy Duncan asked if tunnel construction operations are slower as the tunnel length increases.**
Mr. Carl noted that the daily production rates are not anticipated to be affected by tunnel length on this project.
- **Ms. Whitlatch asked if having enough depth of Potomac Clay is important to determine the tunnel route.**
Mr. Carl noted that the depth and thickness of the Potomac Clay are important factors in determining the tunnel route and depth.
- **Mr. Hillner asked what would happen if the TBM were to break down underground while constructing the tunnel.**
Mr. Carl indicated there is a very low probability of the TBM breaking down. Repairs would first be attempted from inside the machine. If this proves unsuccessful, an access shaft would need to be constructed from the surface to access the TBM.
- **Mr. Hillner asked about the potential for ground movement associated with diversion facility construction.**
Mr. Carl noted that proposed excavation support methods would be designed to minimize the potential for ground movement. The sheeting discussed for the Outfall 001 extension could be vibrated, hammered, or hydraulically pressed into the ground (based on soil layers/ground conditions).
- **Ms. Whitlatch asked about the location of the proposed odor control units.**

Mr. Carl noted that odor control units would be located at each drop shaft and at the Tunnel Dewatering Pumping Station.

- **Ms. Birnbaum asked whether or not Outfall 004 would be removed as part of the construction and restoration plans for Outfalls 003/4.**

Mr. Carl noted that Outfall 004 would be consolidated and relocated to AlexRenew. Outfall 003 would remain in place.

- **Mr. Duncan asked about the cost difference between an open-cut sewer and a tunnel to control discharges from Outfalls 003/4.**

Mr. Carl noted that the open-cut alternative is approximately 20 percent less than the deep tunnel alternative.

- **Joe Canny asked why overflows cannot be reduced to zero.**

Mr. Carl explained that a cost-benefit approach is used to evaluate proposed controls for combined sewer systems. This is referred to as a “knee-of-the-curve” approach established by the EPA. This approach balances total project cost against potential water quality benefits.

- **Mr. Canny asked if the EA process is as comprehensive as an Environmental Impact Statement (EIS).**

Mr. Carl noted that the EA is a shorter process and a shorter document than a typical EIS.

- **Ron LaFond asked if rates will be increasing for all AlexRenew customers.**

Ms. Feehan confirmed that AlexRenew rates will increase as a result of RiverRenew and indicated that further rate discussions will take place at the upcoming SAG meeting.

- **Ms. Whitlatch asked about the \$25 million received from the Commonwealth to support the program.**

Ms. Feehan indicated that AlexRenew and the City of Alexandria are working together to obtain state grant funding similar to that received by other Virginia combined sewer communities. The General Assembly adopted a \$25 million grant allocation for RiverRenew as part of the state budget amendments for Fiscal Year 2020.

- **Ms. Birnbaum asked about the availability of variable rates for lower income rate payers, and whether RiverRenew has looked into grants to support these ratepayers.**

Karen Pallansch, AlexRenew General Manager, noted that sewer rates are part of a large conversation about affordability and the living wage in Alexandria.

- **Mr. Goode asked if there was an estimate on the rate increase for customers.**

Ms. Feehan indicated there will be a comprehensive discussion about the rate increase at the next SAG meeting.

Other discussion points:

The next SAG meeting date and time is to be determined.

The meeting adjourned at 9:00 p.m.