RiverRenew is a program owned and implemented by Alexandria Renew Enterprises, with support from the City of Alexandria.

1800 Limerick Street | Alexandria, VA 22314

RiverRenew Stakeholder Advisory Group Meeting No. 4

June 20, 2019
Presentation Outline

- Welcome and SAG Member Updates
- Technical Update
  - Climate Change Handout
  - Review of Environmental Data near Outfall 001
  - Environmental Assessment – Preferred Alternative
  - Walk-through of Listening Session Boards
- Next Steps
- Public Comment Period

Tonight’s Speakers

Caitlin Feehan
Program Manager

Justin Carl
Program Advisor

Doug Chapin
Third Party Manager

Amber Ahles
Environmental Specialist
Welcome and Updates
RiverRenew SAG Member Roles and Responsibilities

**REVIEW AND MONITOR PROGRAM PROGRESS**
Gain awareness and understanding for RiverRenew.

**COMMUNICATE PROGRESS AND SERVE AS SPOKESPEOPLE FOR PROGRAM**
Be a RiverRenew advocate. Disseminate information to networks on progress and increase community awareness of RiverRenew and the benefits it will have for Alexandria.

**RECEIVE INPUT FROM THE PUBLIC**
Solicit feedback on RiverRenew as we advance toward construction.

**ASSIST IN IDENTIFYING COMMUNITY IMPACTS**
Provide feedback on approaches to minimize community impacts.
Environmental Assessment Released on June 19, 2019

Environmental Assessment Released
• June 19, 2019

View here: riverrenew.com/community

30-Day Public Comment Period
• June 19 – July 19, 2019

Community Listening Sessions
• June 24, 26, and 27

June 24: Basilica School of Saint Mary; 6 – 9 p.m.
June 26: Charles Houston Rec. Center; 6 – 9 p.m.
June 27: AlexRenew; 6 – 9 p.m.

Decision Document*
• August 2019

*Note: Dependent on NPS schedule
RiverRenew Development Special Use Permit Applications

**Tunnel System**  
(DSUP No. 2018-0020)
- Existing and proposed civil-site plans
- Landscaping plans
- Stormwater plans
- Renderings

Planning Commission Hearing: 6/25/2019  
City Council Public Hearing: 7/9/2019

**Tunnel Dewatering Pumping Station**  
(DSUP No. 2019-0013)
- Existing and proposed civil-site plans
- Landscaping plans
- Stormwater plans
- Renderings
- Architectural Finishes
- Building Floor Area

Planning Commission Hearing: 9/3/2019  
City Council Public Hearing: 9/14/2019

Planning Commission Docket  
Technical Update
Climate Change Handout
RiverRenew and Climate Change: Is RiverRenew Adaptable and Resilient?

Planning for Increased Rainfall

Rising temperatures will intensify Earth’s water cycle, resulting in increased frequency and greater intensity of rainfall in our area.

To determine the impacts of increased rainfall due to climate change, RiverRenew:
- Estimated future rainfall in 2050 based on current climate models.
- Simulated RiverRenew facilities under these future climate conditions.
- Determined that RiverRenew facilities would meet or exceed the Environmental Protection Agency’s (EPA) current targets under future climate conditions.

Comparison of Overflows Events from the Outlets in Alexandria

With RiverRenew facilities in place, it is estimated that the outfalls will discharge less than four times per year in 2050, compared to 70 times per year under current conditions.

RiverRenew facilities will be designed to include:
- Safety features
- Cost-effective design
- Components to hold back the tide
- Increased capacity of Alexandria to handle rainfall from future storms
- Tidal outfall vents to protect the existing sewer system

Staying Above Rising Seas

Rising temperatures will melt ice sheets and cause seawater to expand. This will result in sea level rise, especially in coastal areas.

To determine the impacts of sea level rise due to climate change, RiverRenew estimated the future 100-year flood event.
- The map below shows current (2019) and future (2050) 100-year flood events. Currently the Potomac River rises to 11 feet above sea level during a 100-year flood event. In 2050, that elevation is anticipated to increase to 14 feet above sea level.

Elevations of the 100-Year Flood Event in the City of Alexandria

Proposed RiverRenew facilities will be built at an elevation higher than the future 100-year flood event.
Review of Environmental Data at Outfall 001
Historic Operations in the Vicinity of Outfall 001

- Standard Oil Company
  - Manufactured Gas Plant
- RH Bogle Facility
  - Chemical Manufacturing and Fertilizer
- Alexandria Fertilizer
  - Chemical Manufacturing & Fertilizer
- Alexandria Town Gas
  - Manufactured Gas Plant
- W.A. Smoot
  - Coal, Wood, Sand and Gravel Yard

Potential Location for Outfall 001 Diversion Facility

Arsenic attributed to primarily naturally occurring levels

Pesticides, Dioxin, Metals, VOCs, Petroleum

Petroleum
Soil Impacts in the Vicinity of Outfall 001 based on Available Data

Soils within the proposed Outfall 001 Diversion Facility excavation area are anticipated to be impacted by Diesel and Gasoline Range Organics at levels that can be handled by landfills.

It is anticipated that excavated soils within this area will be disposed of at a landfill.
Soil Impacts in the Vicinity of Outfall 001 based on Available Data
Benzene and/or Gasoline Range Organics (GRO)

Based on available data, benzene has not been detected in soils within the proposed Outfall 001 Diversion Facility excavation area. Detected GRO concentrations in soils within the proposed Outfall 001 Diversion Facility excavation area are below residential human health risk-based screening levels based on direct contact with soil via ingestion, inhalation, and dermal absorption.
Groundwater Impacted by Benzene in the Vicinity of Outfall 001 based on Available Data

Based on available data, benzene was detected in one well within the proposed Outfall 001 Diversion Facility excavation area.

At the concentrations of benzene detected, the groundwater can be treated using typical construction methods like granular activated carbon treatment and tested prior to discharge to the existing sewer system.
Environmental Assessment - Preferred Alternative
The Preferred Alternative in the Environmental Assessment Includes:

**Outfall 001 Diversion Facility:**
- Robinson Terminal North
- Outfall 001 Extension
- Waterfront Tunnel
- Drop Shaft

**Outfall 002 Diversion Facility:**
- S Royal Street North
- Approach Channel
- Ventilation Control Facility
- Construction Staging Area
- Drop Shaft

**Legend:**
- Existing Outfall
- Diversion Chamber
- Mining Shaft/Pumping Station
- Diversion Facility
- Historic District
- Waterfront Tunnel
- Hooffs Run Interceptor
The Preferred Alternative in the Environmental Assessment Includes:

- Hooffs Run
- Diversion Chamber
- Commonwealth Interceptor
- Holmes Run Trunk Sewer
- Tunnel Dewatering
- Pumping Station
- Wet Weather Pumping Station
- HGL Control Structure
- Trenchless
- AlexRenew North Bridge
- African American Heritage Park
- Alexandria National Cemetery
- Hooffs Run Tunnel: Open-cut Sewer Interceptor Replacement
Walk-through of Listening Session Boards
# Community Listening Sessions Board Groupings

## Welcome Board and Legend

### Group 1
- Intro to AlexRenew
- Alexandria Water System
- The Issue
- 2017 Law
- Intro to RiverRenew
- Purpose of EA
- Items Covered in EA
- Section 106

### Group 2
- Outfall Locations
- Diversion Facility Overview
- Tunnel Boring Machine
- Waterfront Tunnel Preferred Alternative
- Outfall 001 Preferred Alternative
- Outfall 002 Preferred Alternative
- Hooffs Run Tunnel Preferred Alternative
- What's happening at AlexRenew?

### Group 3
- Proposed Haul Routes
- Construction Process
- Impact Mitigation Toolbox
- RiverRenew Benefits
- Schedule
- Next Steps
- RiverRenew Progress

## Rates Corner
Next Steps
Takeaways and Next Steps from Tonight’s Meeting

### Information Sharing

- **Environmental Assessment** comment period from June 19 – July 19
- **Tunnel System DSUP** City Planning Commission Meeting June 25
- **Tunnel System DSUP** City Council Public Hearing July 9

### SAG Member Assistance

**Week of June 24: Listening Sessions**
- Distribute Save-The-Date postcards at community meetings and events
- Email Listening Session Announcement to your network
- Attend the Community Listening Sessions (as available)

### Upcoming RiverRenew SAG Meeting

- **Week of July 29 (to be scheduled):** Environmental Assessment Recap
Public Comment Period