



RiverRenew

Council-Board Workgroup Meeting No. 5

January 31, 2019





Presentation Outline

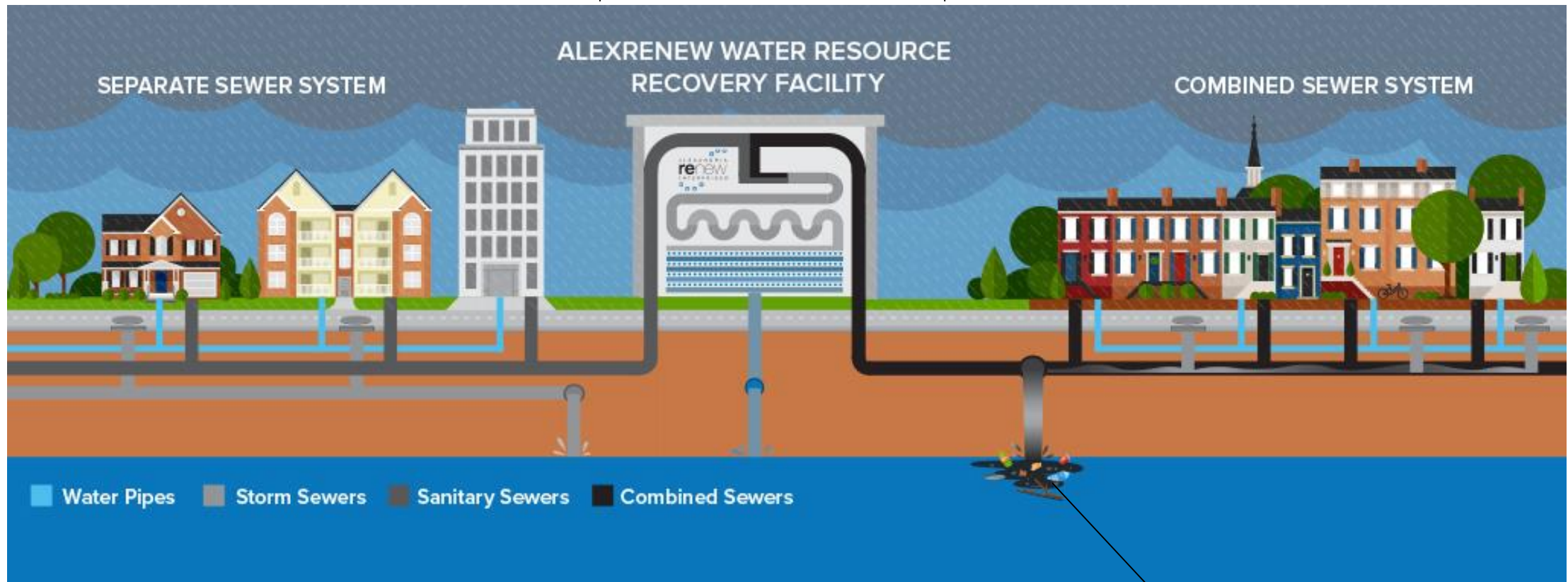
- Brief Program Background
- Environmental Assessment Update
- Community Engagement Update
- Outfalls 003/4 Alternatives Update
- Risk Mitigation
- Rate Adjustment Guidance Review
- Tunnel Naming
- Next Steps



Brief Program Background

Alexandria's One Water System

AlexRenew
(Wastewater Treatment and Base Charges)



Virginia American Water
(Drinking Water Fee)

City of Alexandria
(Stormwater Utility Fee)

City of Alexandria
(Capital Investment &
Maintenance Fee)

AlexRenew
(Outfall Only)



Alexandria's Combined Sewer System and 2017 Virginia Law

544

total acres of combined sewer system owned by City of Alexandria

390

acres of impervious area

4

outfalls owned by AlexRenew as of July 2018



Outfall	Requirement
001	4-6 overflows per year
002	80% bacteria reduction
003	99% bacteria reduction
004	99% bacteria reduction

New controls in place by July 1, 2025

Joint Plan Prepared by AlexRenew and City to Address Outfalls

- Storage/conveyance tunnel to control overflows from Outfalls 001 and 002
- Conveyance tunnel/sewer to control overflows from Outfalls 003 and 004
- Wet weather treatment facility at AlexRenew's Wastewater Treatment Plant
- Upgrades to the primary treatment capacity of AlexRenew's Wastewater Treatment Plant

Approved by Virginia
Department of Environmental
Quality on June 29, 2018



The project requires many levels of agency coordination.

Federal Agency Approvals



- NEPA
- Special Use Permit
- Construction and Right of Way Permit
- ARPA Permit



US Army Corps of Engineers®

- Clean Water Act Permit

Consulting Federal Agencies



United States Environmental Protection Agency



U.S. Department of Transportation Federal Highway Administration



State Agency Approvals



- Clean Water Act Permit
- Construction General Permit
- VPDES Permit(s)



- Submerged Lands Permit



- Land Use Permit



- Consent for Encroachment

Consulting State Agencies



VIRGINIA DEPARTMENT OF HISTORIC RESOURCES



Department of Game & Inland Fisheries



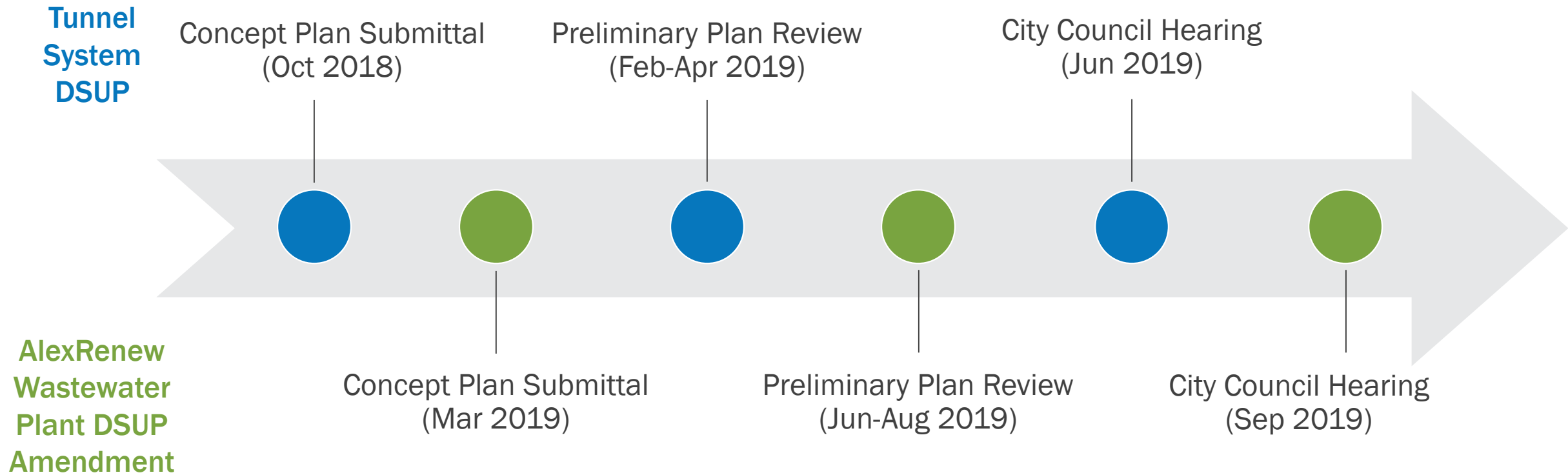
Virginia Department of Conservation & Recreation

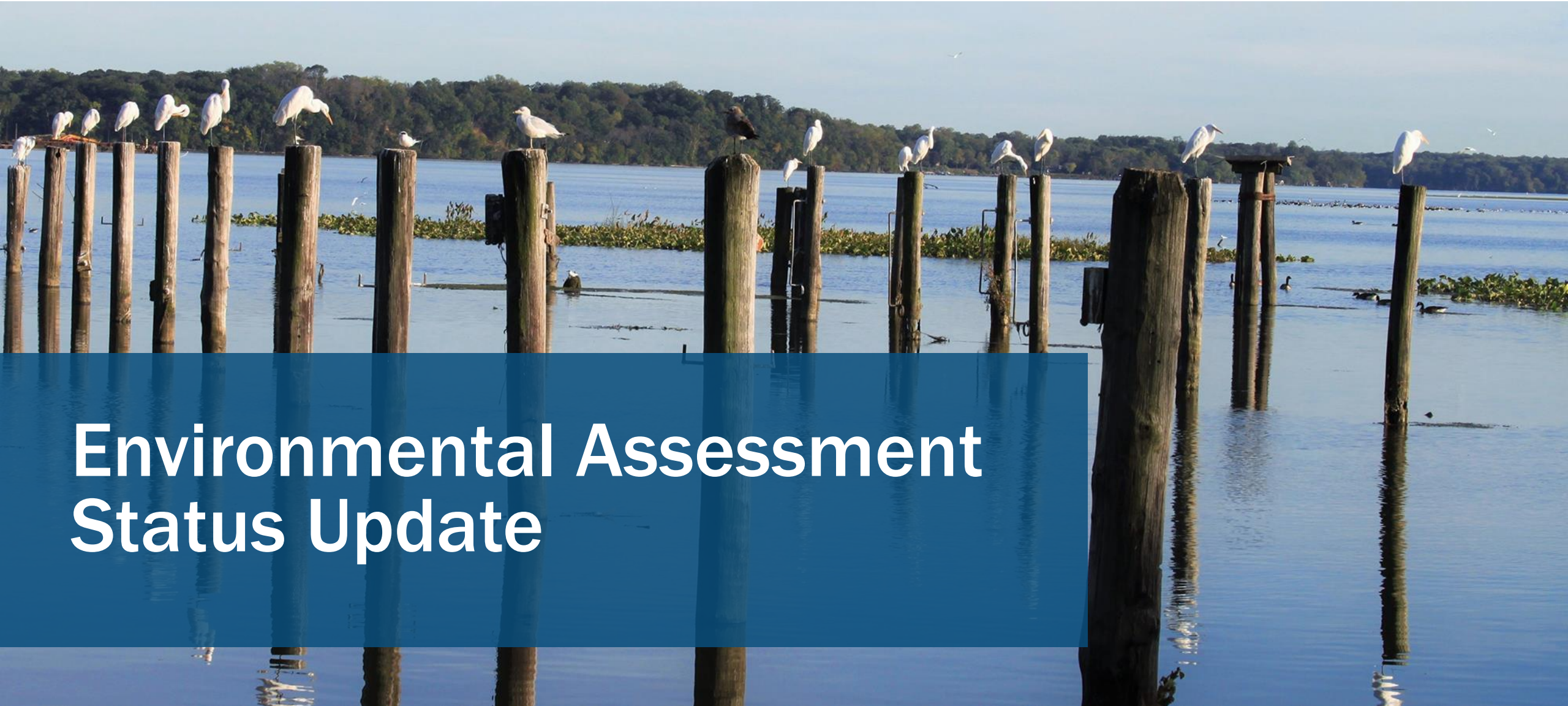
City Approvals



- DSUP
- Excavation Permit
- Grading Permit
- Building Permit
- Right-of-Way Permit
- Archaeology
- Landowner Easements
- Hauling Permit
- Demolition Permit
- Mechanical Permit

Anticipated DSUP Timelines for Tunnel and AlexRenew Work





Environmental Assessment Status Update

Proposed Tunnel Alignments and Facility Locations

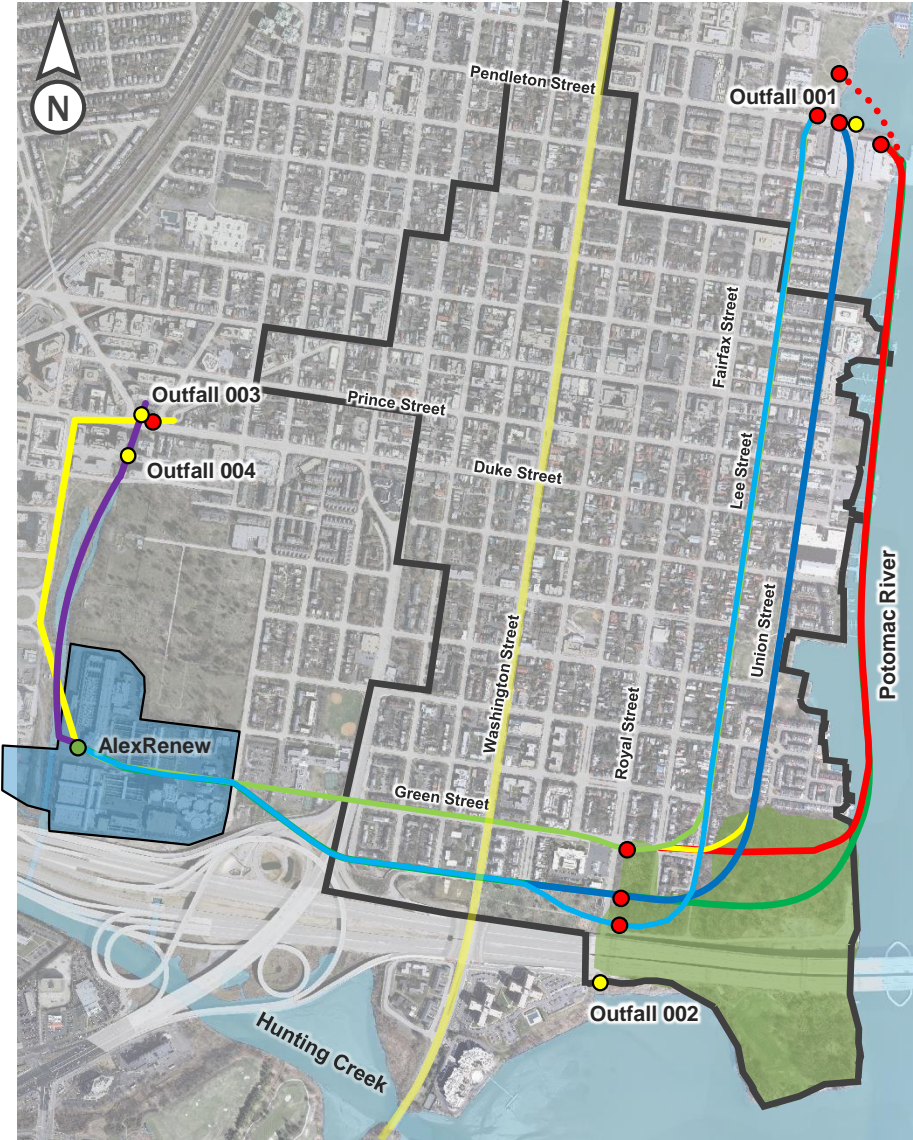
001/2 Tunnel Alignments*

East-West	North-South
Green Street	Lee Street
Church Street	Union Street
	Potomac River

*approximately 100 feet deep

003/4 Tunnel Alignments

Option	Approx. Depth
Deep	100 feet
Trenchless	20 to 40 feet
Hooffs Run	10 to 20 feet

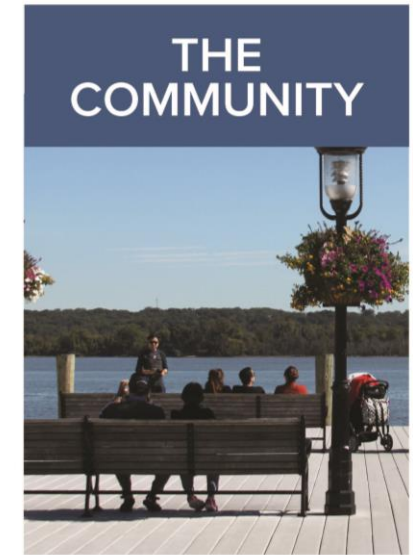
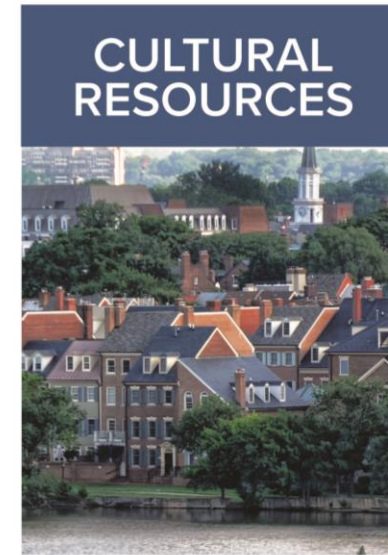
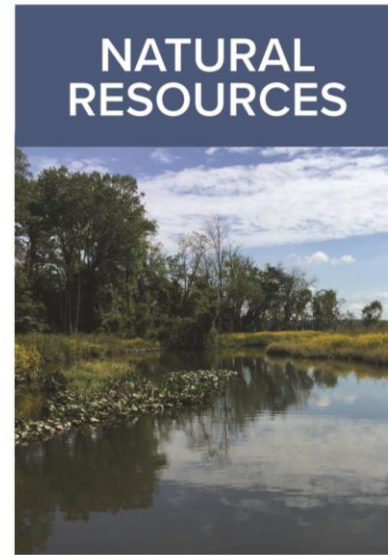


LEGEND

- AlexRenew
- National Park Service (Federal Property)
- Existing Outfall
- Potential Diversion Facility Location
- Tunnel Dewatering Pumping Station/Mining Shaft
- Potential Alignment Alternatives
- Historic District (Old Town)

Tunnel alignments and facility locations are being evaluated through the development of an Environmental Assessment to comply with the National Environmental Policy Act.

- National Park Service (NPS) requires permits from RiverRenew due to alignments and locations running through NPS land, which triggers the National Environmental Policy Act
- NPS determined an Environmental Assessment is required
- Consideration of historic resources (Section 106) will be completed in conjunction with the Environmental Assessment and Clean Water Act permitting



We heard common themes within the comments from the community.

001/2 Tunnel System

- Minimize community impacts
- Community preference toward Potomac-Church alignment

Outfall 001 Diversion Facility

- Minimize community/park impacts
- Strong community preference toward RTN and/or Oronoco Bay Park East

Outfall 002 Diversion Facility

- Minimize residential/garden impacts
- Strong community preference for southernmost alternatives (Royal Street or Royal Street South)

Outfall 003/4

- Community support for shallow options with preference toward open-cut along Hooffs Run
- Business owners along Duke Street strongly oppose deep tunnel alternative

General Comments

- Concerns regarding truck haul routes and contaminated soil/groundwater
- Minimize impacts to historic structures and resources

Coordination with the National Park Service (NPS)

Scoping Comments

- Compiling, reviewing, and responding to comments in Environmental Assessment

Oct 2018 – Dec 2018

Environmental Assessment Document

- Received feedback from NPS on outline and draft sections
- Drafting sections for submission in March 2019
- Conducting research and field investigations

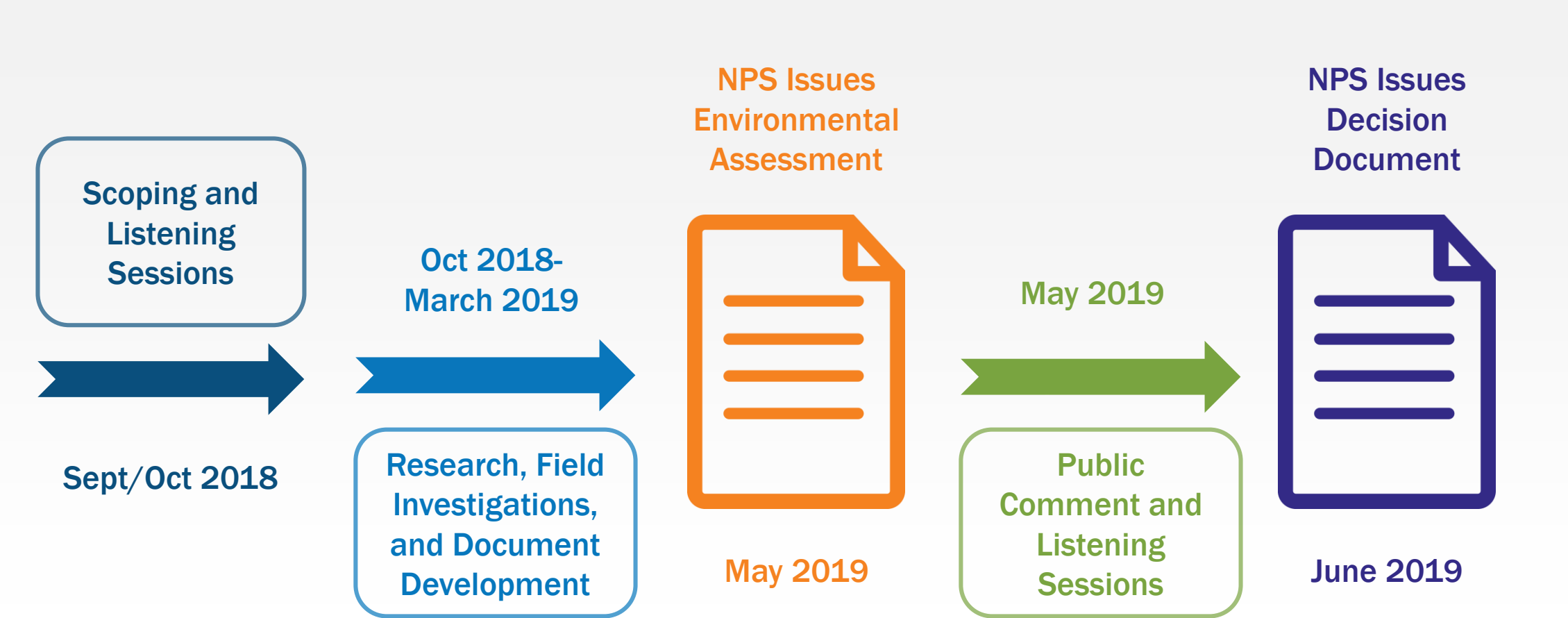
Submit Mar 2019

Consideration of Historic Resources (Section 106)

- NPS is actively coordinating with Virginia Department of Historic Resources (VDHR)
- AlexRenew/NPS/City met to confirm scope of historic resource surveys
- NPS preparing Assessment of Effects documentation for submittal to VDHR in early 2019

Ongoing

Projected Environmental Assessment Timeline



Note: Dependent on NPS schedule for Environmental Assessment finalization



Community Engagement Update

Community Engagement Look-Ahead for All Program Phases

	PLANNING	DESIGN	PROCUREMENT	CONSTRUCTION	ONGOING
	Nov 2018-May 2019	May 2019-Feb 2020	Feb 2020-Nov 2020	Nov 2020-May 2025	
ACTIONS	Gain acceptance of preferred alternative	Ensure design plans mitigate impacts	Prepare public for construction	Mitigate impacts	Program updates to RiverRenew website
	Engage residents at community meetings and online	Expand efforts to connect with residents citywide	Build community partnerships	Host milestone events	Updates to outreach collateral materials
	Introduce rate increase	Create learning opportunities	Launch social platform for daily engagement	Leave a legacy	Civic association outreach
EXAMPLE	Launch e-newsletter; hold Listening Sessions	Host hands-on booths at schools and weekend events	Partner with Archaeological Commission to create multi-media display featuring sewer artifacts	Tour construction sites with VIPs, student groups, and adults interested in engineering feats	Ensuring program information is up to date on both internal and external materials and channels

eNewsletter Launching Next Week

366 subscribers and growing

- Program Updates
- Upcoming Events
- Getting to Know
 - Featured role
- Did you know?
 - Interesting fact
 - Video link



Program Updates

New Year, New Newsletter

Welcome to **The River Renewer**, the new e-newsletter for RiverRenew! RiverRenew is a major infrastructure initiative in response to a 2017 Virginia law to achieve cleaner, healthier waterways in Alexandria. In this inaugural issue, we're reflecting on what's ahead for RiverRenew and the Alexandria community in 2019. We look forward to sharing updates, events and behind-the-scenes stories. As always, [your feedback](#) is welcome.

2019: Looking Ahead

Alexandrians will continue to hear more about RiverRenew as 2019 progresses. Earlier this month, AlexRenew and the City of Alexandria announced the establishment of the **RiverRenew Stakeholder Advisory Group** to advise and monitor implementation of the program. Comprised of 13 members, this diverse group of citizens will serve as ambassadors for the program, reaching out to neighbors and constituents to receive and share input. Stakeholder Advisory Group meetings will be open to the public, and we encourage you to attend and participate. Learn more about the Stakeholder Advisory Group and find out who your neighborhood representative is here: riverrenew.com/sag/.

RiverRenew Stakeholder Advisory Group



Overview of RiverRenew Stakeholder Advisory Group

Size

13-member group representing both ratepayers and construction neighbors, including residents and businesses who commit to being active and engaged in the stakeholder process

Timeframe

Term: Early 2019 – Mid 2020

Meetings: Monthly or as needed

Next Term: Update/Validate group members and charge of group in Mid-2020

Charge

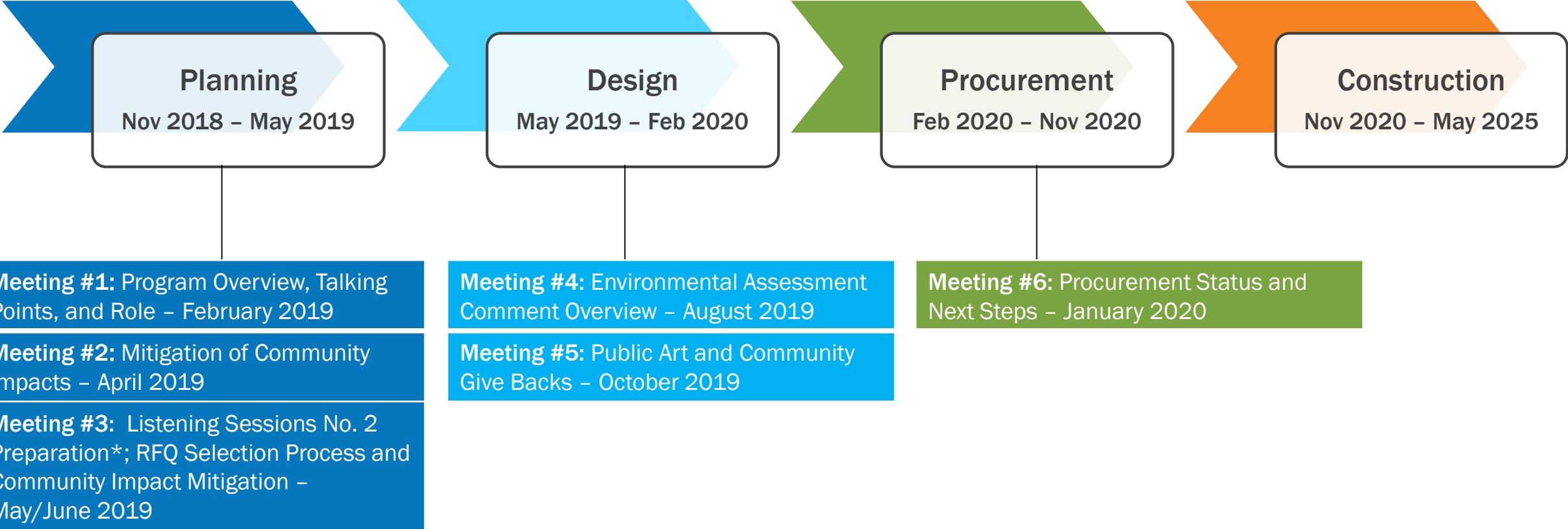
- Review and monitor program progress
- Communicate progress to community by leveraging network to serve as spokespeople for program
- Receive input from the public
- Provide recommendations regarding mitigation of community impacts

RiverRenew Stakeholder Advisory Group

Area	Description	SAG Member
Outfall 001	North Old Town Independent Citizens' Association	Erik Olson
	Representative from Tobacco Quay, Waterfront Residences or Rivergate	William Hillner
Outfall 002	Old Town Civic Association	Yvonne Callahan
	Representative from South Old Town	Catherine Mackenzie
Outfalls 003/4	Eisenhower Partnership	Andrew Duncan
	Representative from Carlyle community or Duke Street corridor	Kathy Dismukes
AlexRenew Customer	At-large representatives with interest in RiverRenew	Daniel Bradfield
		Ivy Whitlatch
City-wide Organizations	Environmental Policy Commission	Geoffrey Goode
	Alexandria business group	Mary Ann Burstein
	Park and Recreation Commission	Liz Birnbaum
At-large	Representatives with engineering, environmental, financial or related experience	Ron LaFond
		Karen Halbrecht

*Note: Letters notifying selected applicants sent January 16, 2019

Draft SAG Meeting Topics through 2019 for Discussion



*Note: Dependent on NPS schedule for Environmental Assessment finalization



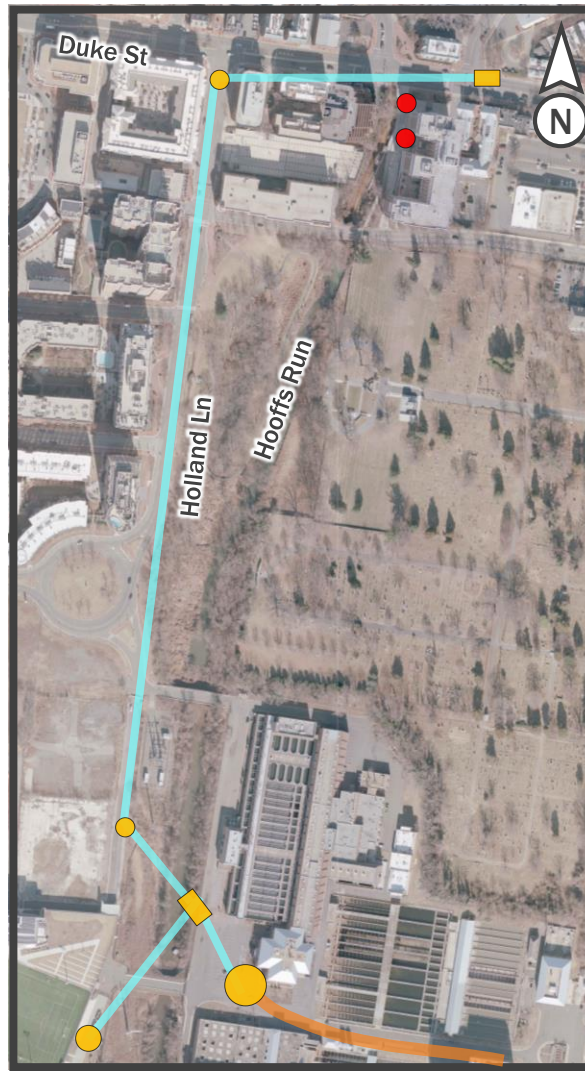
Outfalls 003/4 Alternatives Update

Three alternatives are being evaluated to control discharges from Outfalls 003/4.

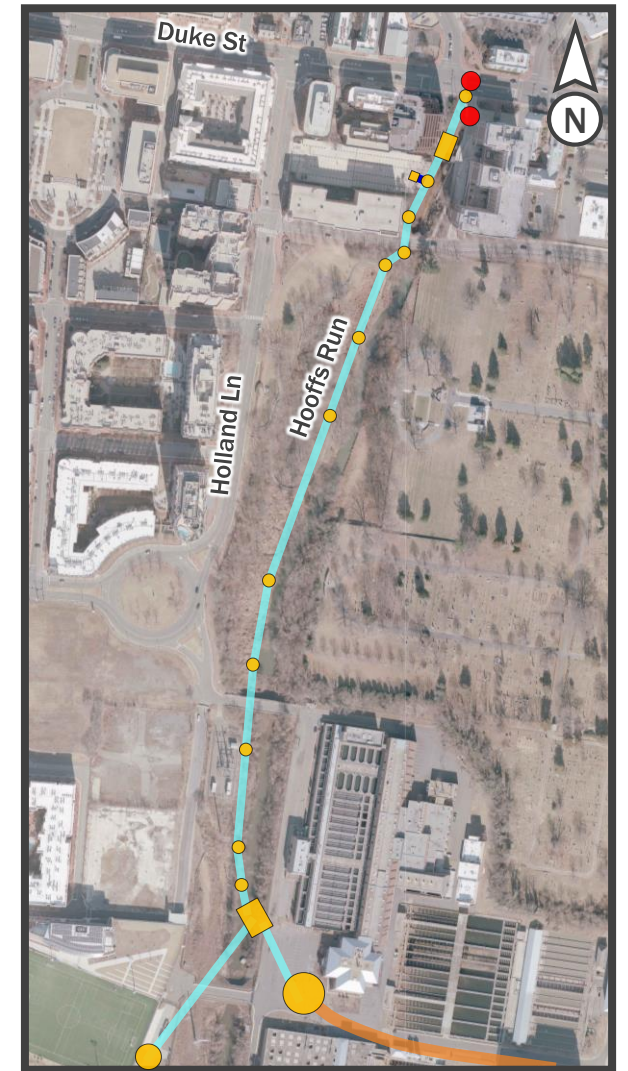
Deep Tunnel (100-ft deep)



Trenchless (40-ft deep)



Open-cut (10 to 20-ft deep)

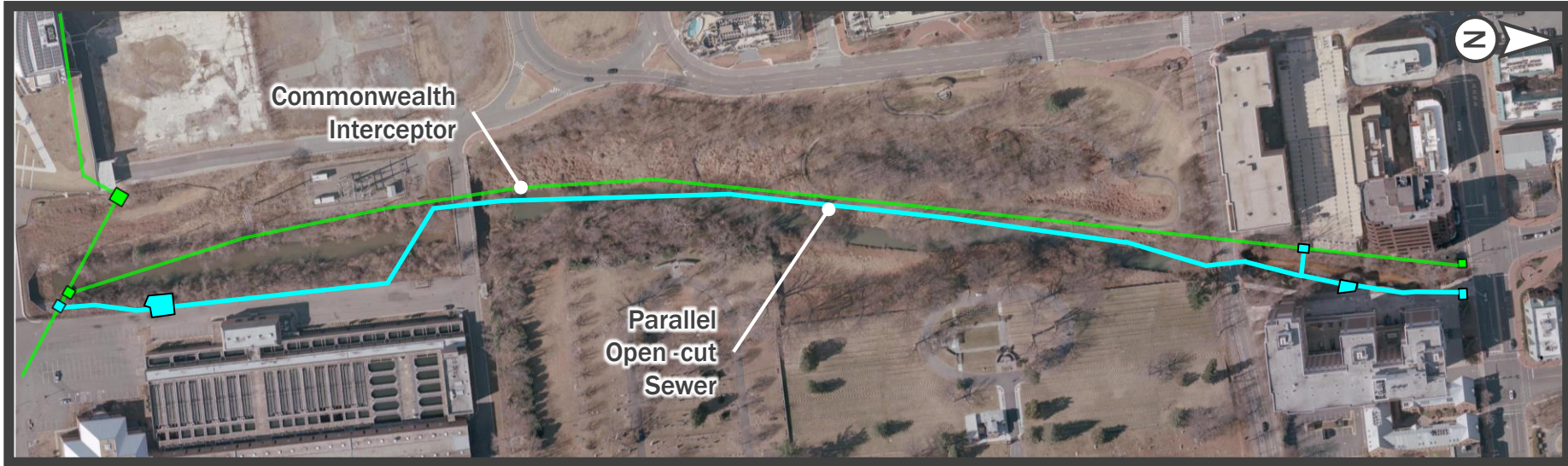


LEGEND

- Manhole
- Existing Outfall
- Potential Alignment Alternatives
- Shaft

Commonwealth Interceptor replacement minimizes risk and area disturbed during construction.

Parallel



Replacement



Advantages of Replacement Alternative

- Expedited permitting times
- Minimization of easements/agreements needed
- Minimize disturbance to stream limits
- Less risk to impact cultural resources
- Pipe installed in previously disturbed area



Risk Mitigation

We're working throughout the planning, design, and construction phases to significantly mitigate Program risks.

Risk Management

- Planning
- Design
- Construction



We've identified approximately 170 identified risks in six major categories for mitigation.

Category	Third Party Coordination	Community	Procurement	Design	Construction	Operation
Example Risk	Inability to secure easements from property owners	Community opposition to preferred alternative	Reduced competition for tunnel system project	Work areas are too small	Unidentified obstruction impacts construction	Hydraulic transients cause instability in system operation
Example Risk Mitigation	Negotiate with property owners early	Ensure community is engaged throughout process (Listening Sessions)	Adjust procurement terms to increase appeal	Incorporate constructability reviews and lessons learned	Perform extensive research of record documents and field investigations	Conduct transient and physical modeling during design to mitigate transients

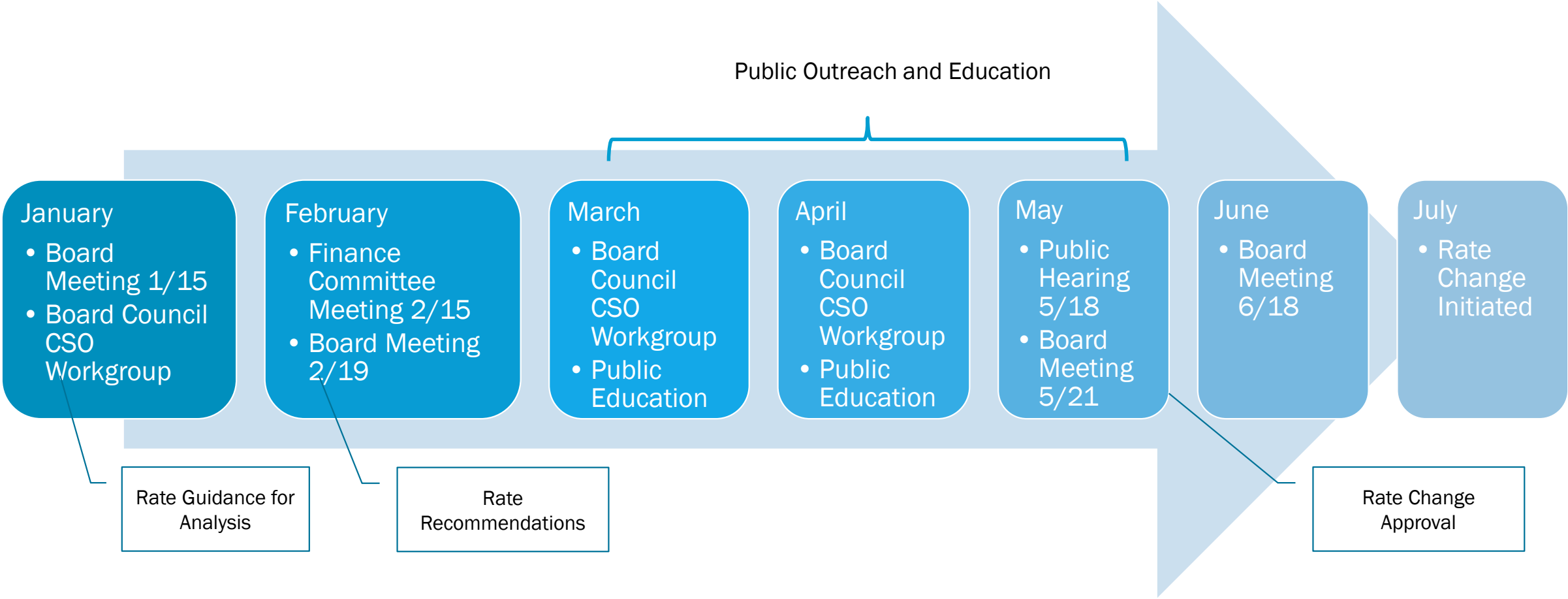


Rate Adjustment Guidance Review

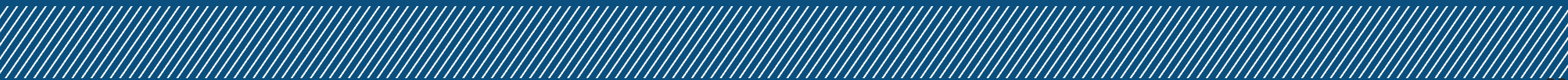
Topics for Discussion

- Rate Change Timeline
- Revenue Requirements
- One Water Costs in Our City
- Rate Implementation Guidance

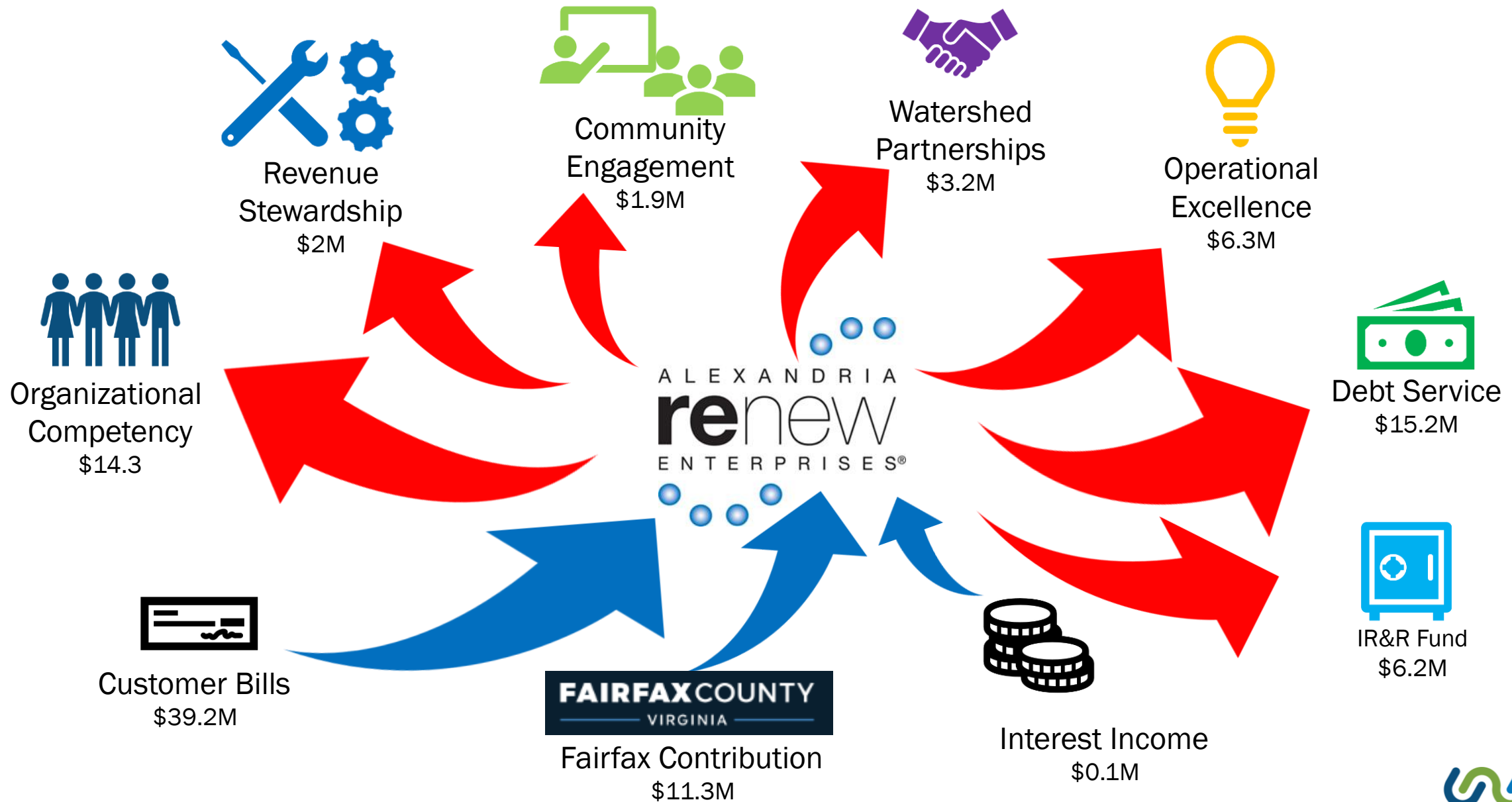
Rate Analysis and Approval Timeline



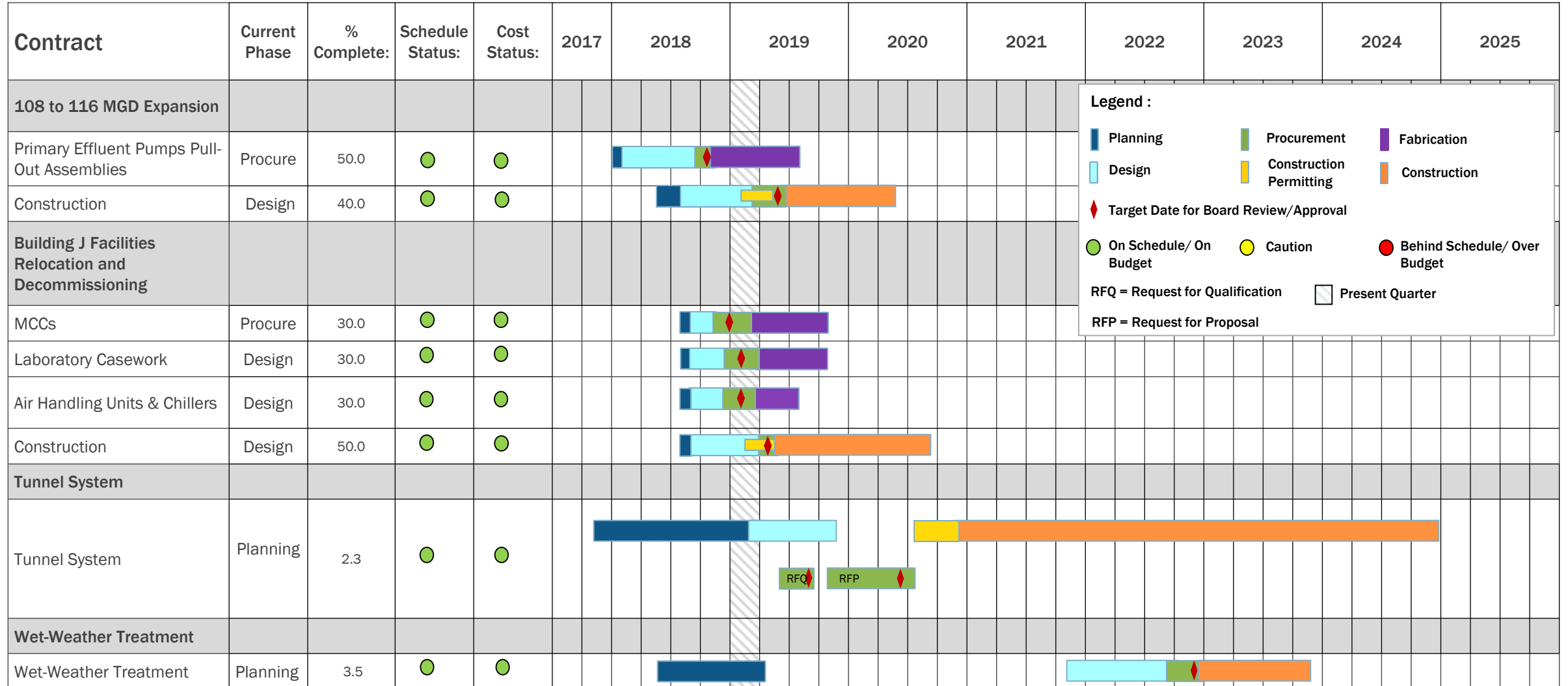
Revenue Requirements



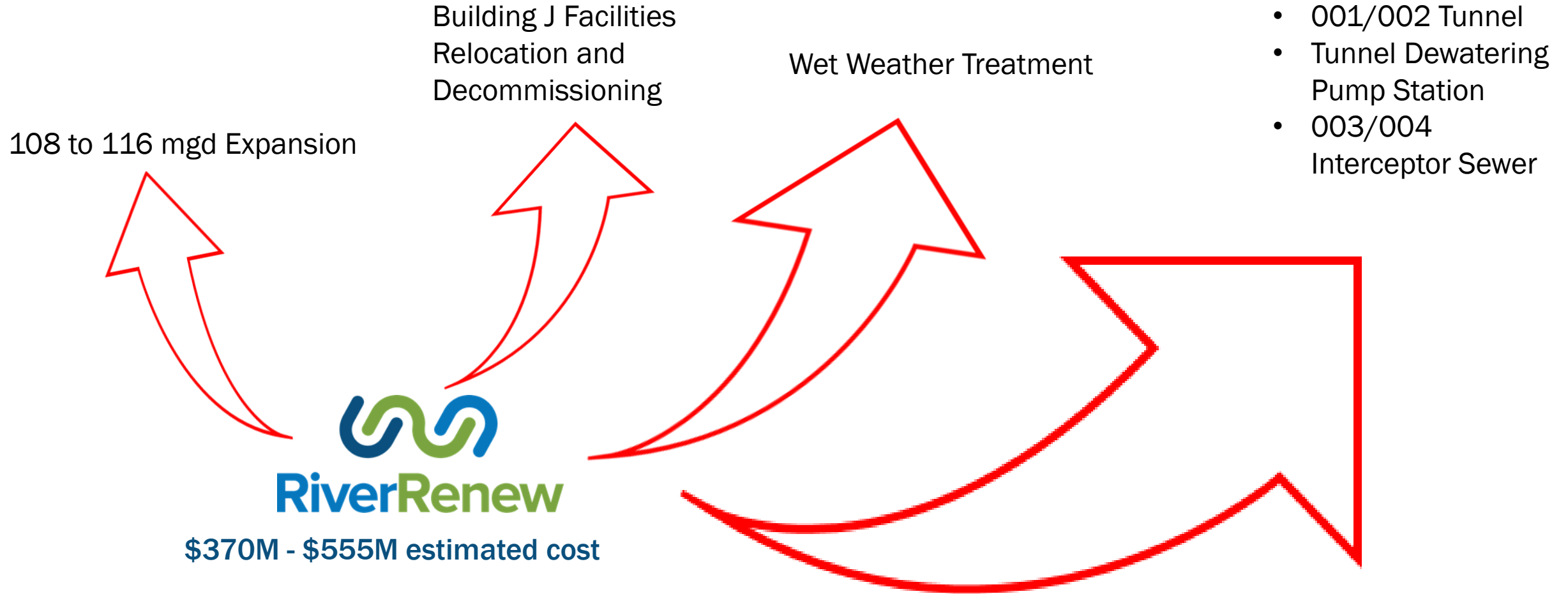
The Costs of Operating AlexRenew (FY19)



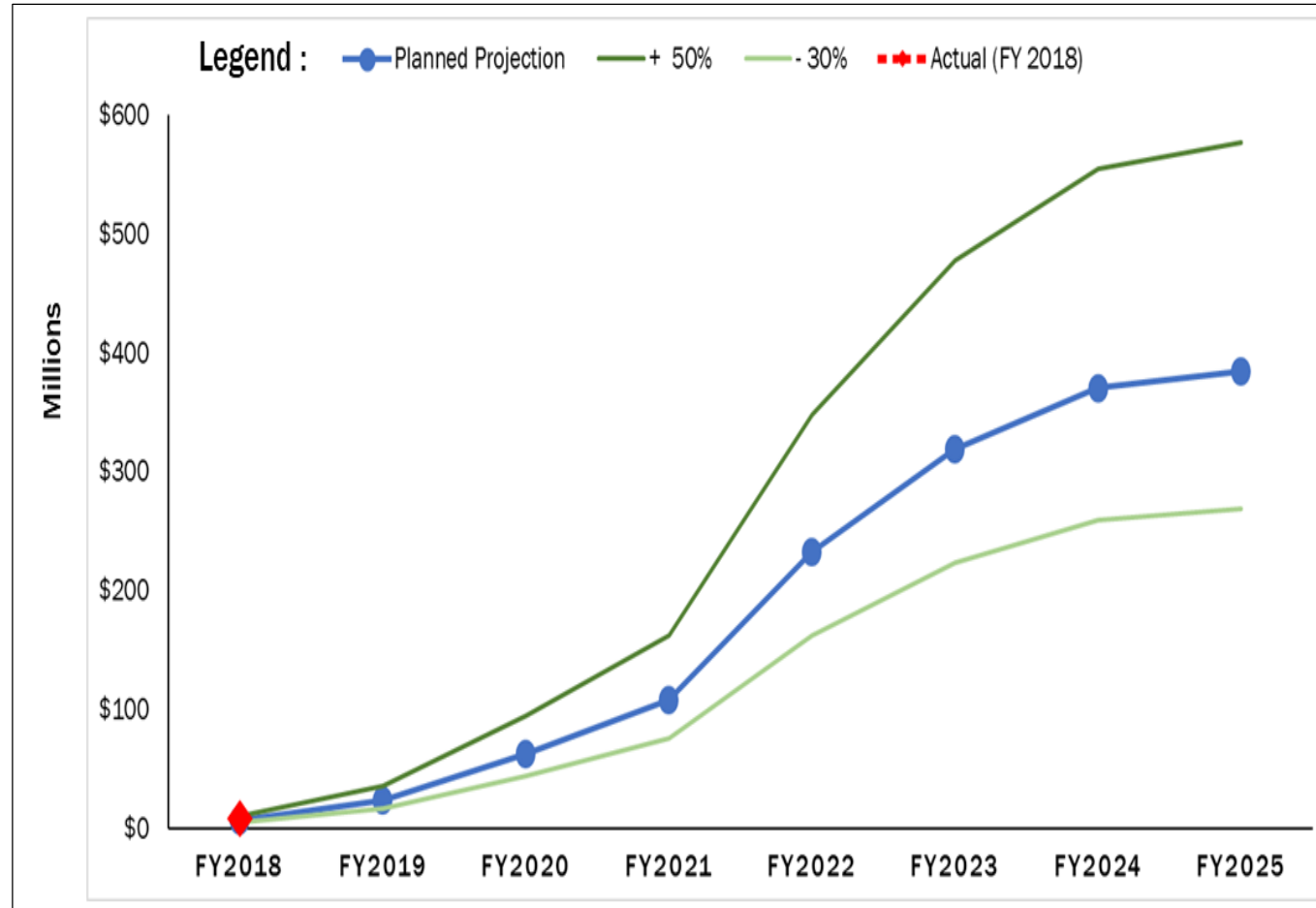
What Is Being Built for RiverRenew



What It Costs to Build the RiverRenew Program



When Program Dollars Will Be Spent



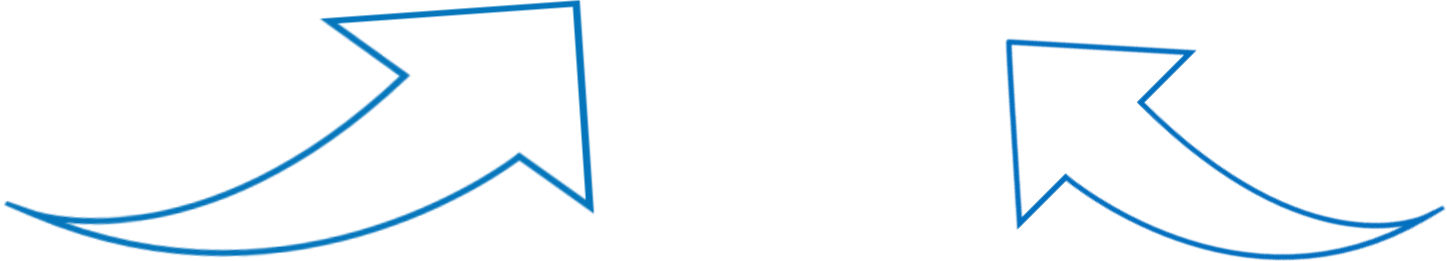
Even without RiverRenew, AlexRenew must continually invest in its existing assets.



AlexRenew Asset Renewal
About \$25M per year

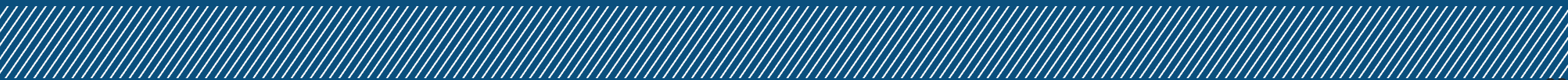


Customer Bills



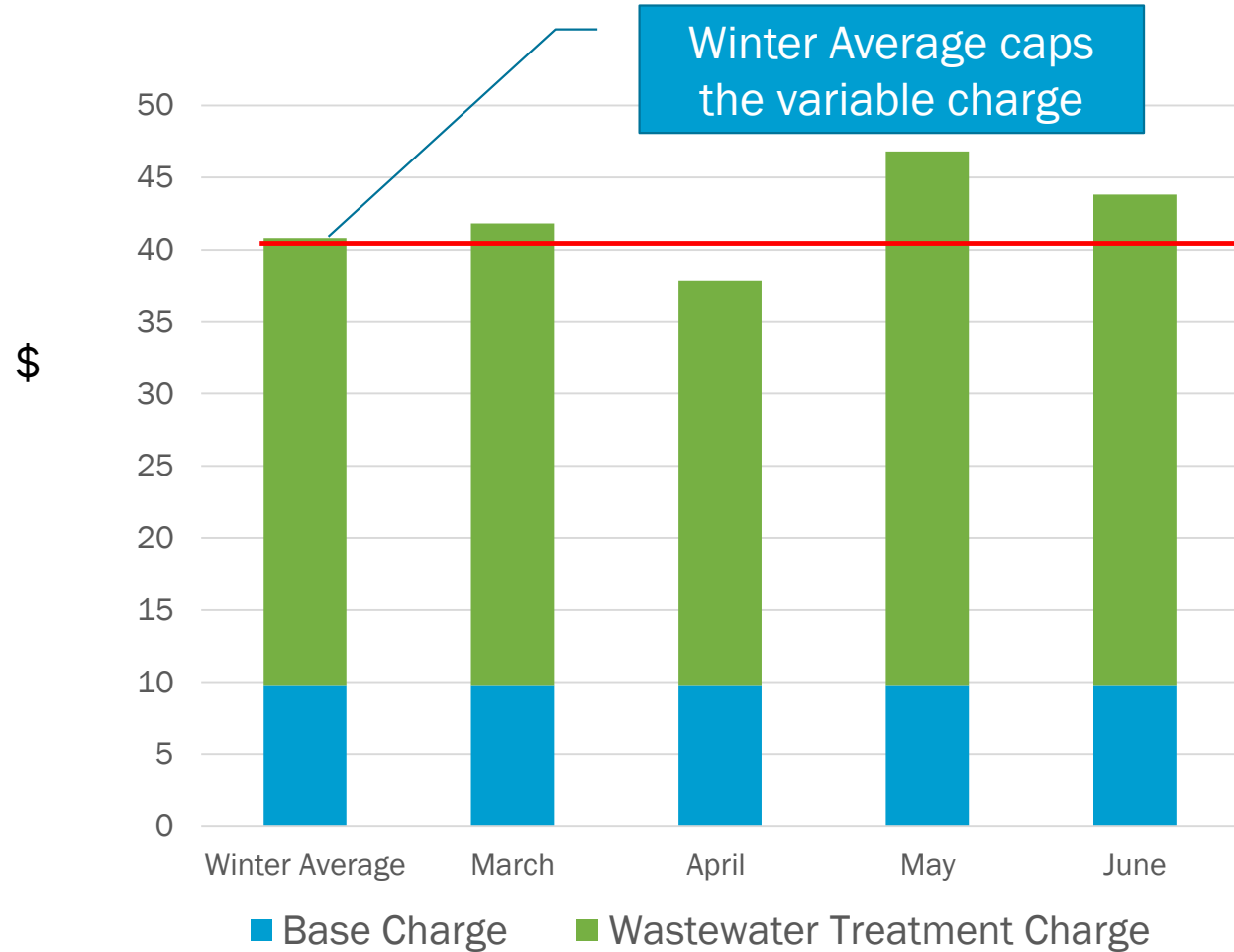
Fairfax Contribution

One Water Costs in Our City



Current Rate Structure Components

- **Wastewater Treatment Charge – Variable Monthly Rate**
 - Recovers the costs of processing the wastewater
 - Based on metered water sales for each customer
 - Winter average consumption is used as the most representative for residential service
- **Base Charge – Fixed Monthly Rate**
 - Recovers the costs associated with having the infrastructure available and ready for immediate use by each customer
 - Based on meter size
 - This is a fixed charge that helps provides revenue stability



AlexRenew and Alexandria Bill Example

Current Charges

Wastewater treatment charge
(\$6.77 x 4,000 thousands of gallons) 27.08

Base Charge 9.61

Total wastewater treatment 36.69

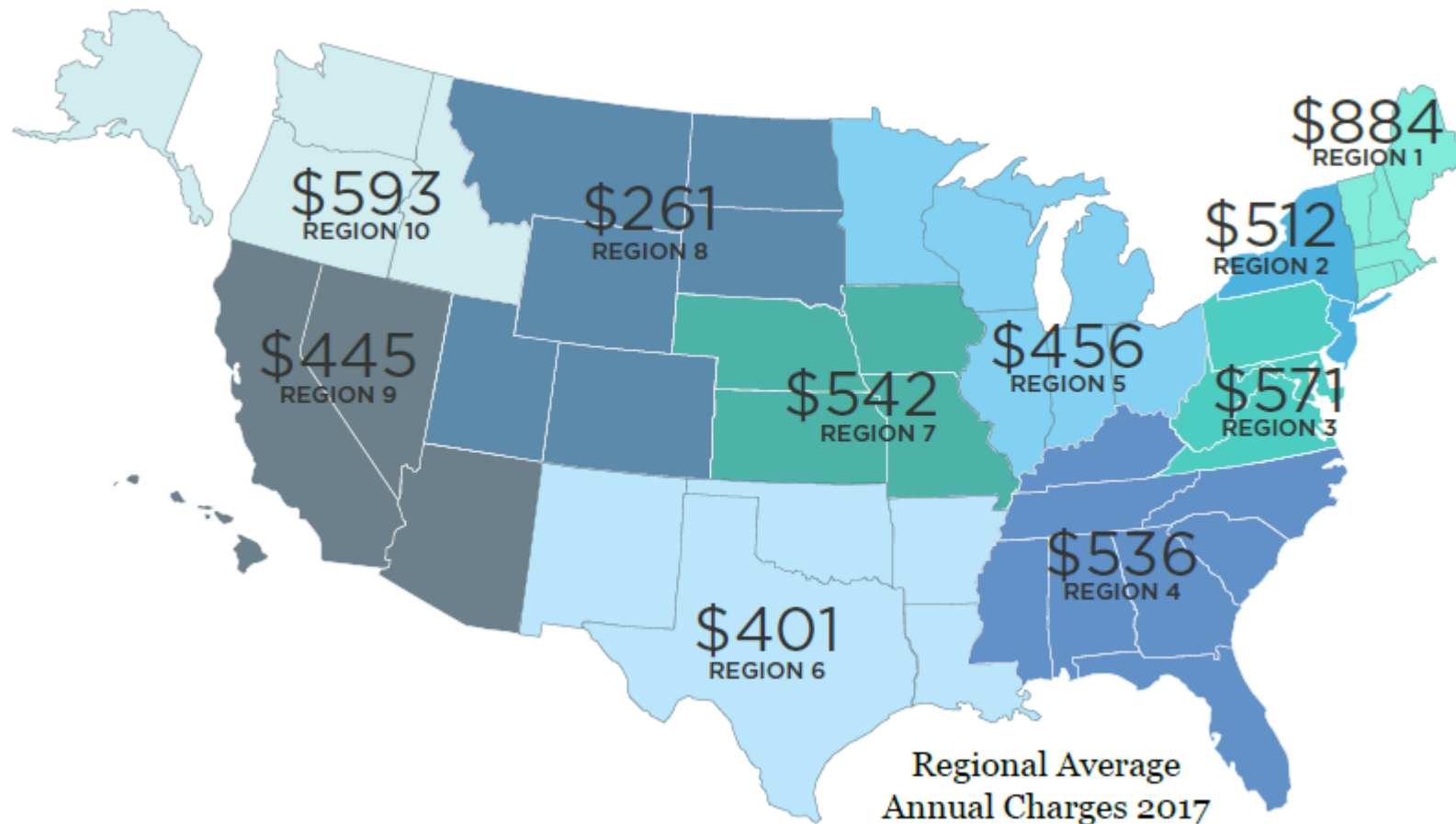
City Sanitary Sewer System
Capital Investment and Maintenance Fee
(\$2.28 x 5,000 thousands of gallons) 11.40

Total current charges 48.09

- Volume Charge based on metered water consumption
- Base Charge based on meter size
- City Sanitary Sewer Charge

Combined Alexandria wastewater service costs are below the regional survey average.

Based on 174 wastewater utility responses: Including Alexandria Renew Enterprises, Fairfax County WWMP, Hampton Roads San. Dist., Upper Occoquan SA, Hopewell RWTF, Prince William County SA, and Chesterfield County Utilities



Alexandria 2018 annual wastewater services (AlexRenew plus the City of Alexandria)
\$550 per year

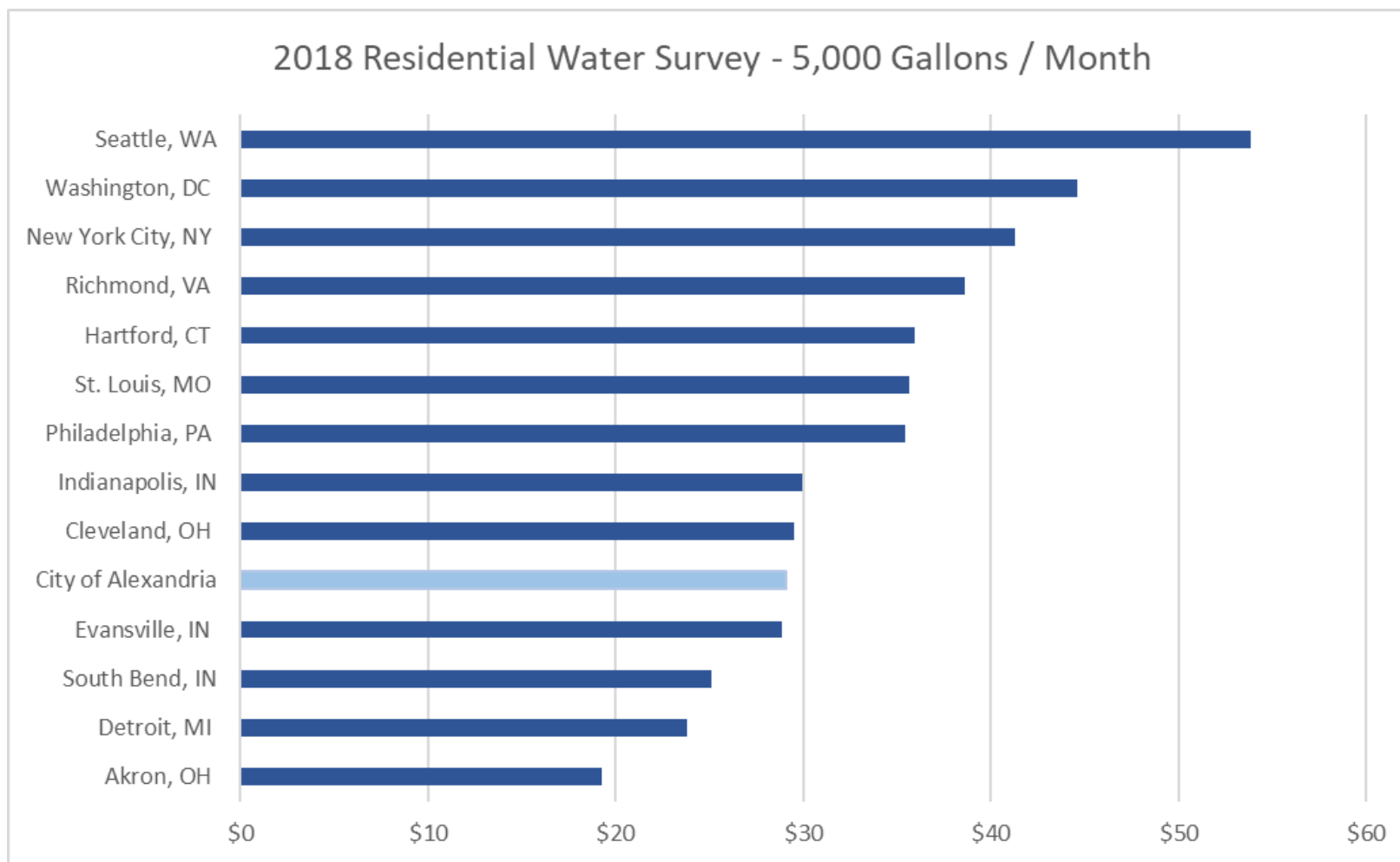
Virginia American Water Bill Example

Balance Forward		0.00
Current Water Service		
• Water Service Charge		15.00
• Water Usage Charge	(\$0.00000000 x 20.00)	0.00
	(\$0.19644000 x 30.00)	5.89
• Total Water Service Related Charges		20.89
Other Charges		
• WWISC- Infrastructure Svc. Chg.	(\$0.01800000 x 50.00)	0.90
• Purchased Water Surcharge	(\$0.14540000 x 50.00)	7.27
• Total Other Charges		8.17
Taxes		
• Utility User Tax		4.36
• Total Taxes		4.36
TOTAL CURRENT CHARGES		33.42

TOTAL AMOUNT DUE  **\$33.42**

- Base Charge for first 2000 gal based on meter size
- Usage charge for volume over 2000 gal
- WWISC infrastructure charge
- Fairfax purchased water surcharge
- Water utility taxes (15%)

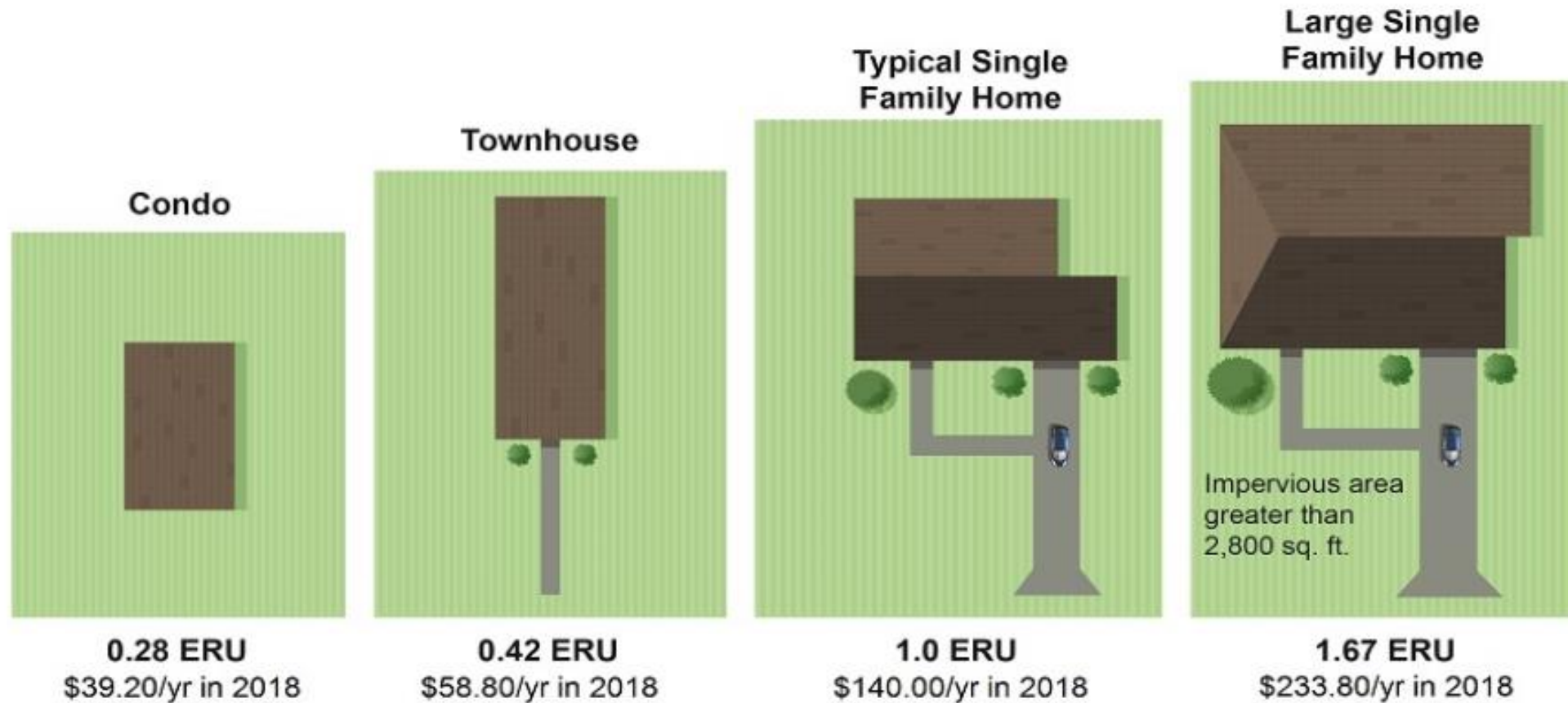
Alexandria Water service costs are below the PRMG survey average.



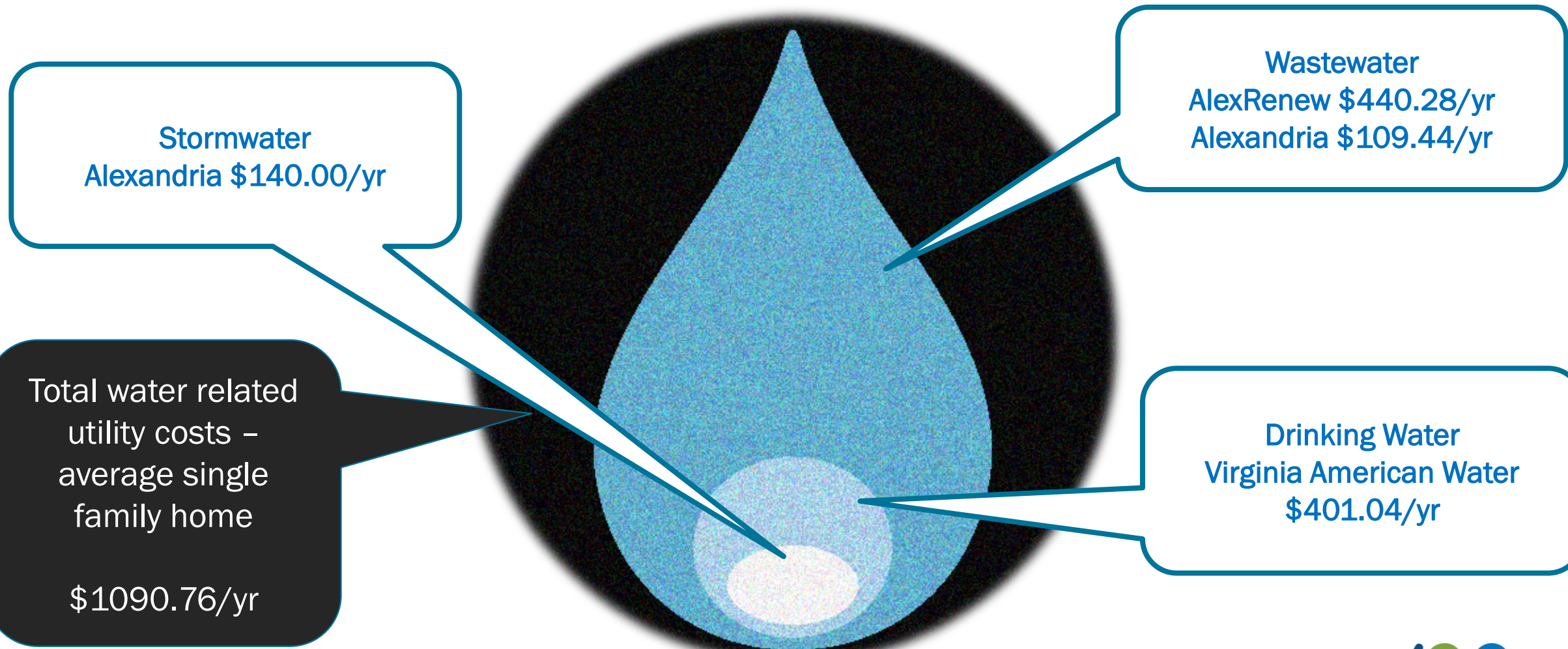
Alexandria 2018
annual water service
costs – Virginia
American Water

\$401 per year
(including surcharges & taxes)

Alexandria Stormwater Charges



Alexandria's Average Annual Residential "One Water" Costs



For most, sewer bills are hidden in housing costs.

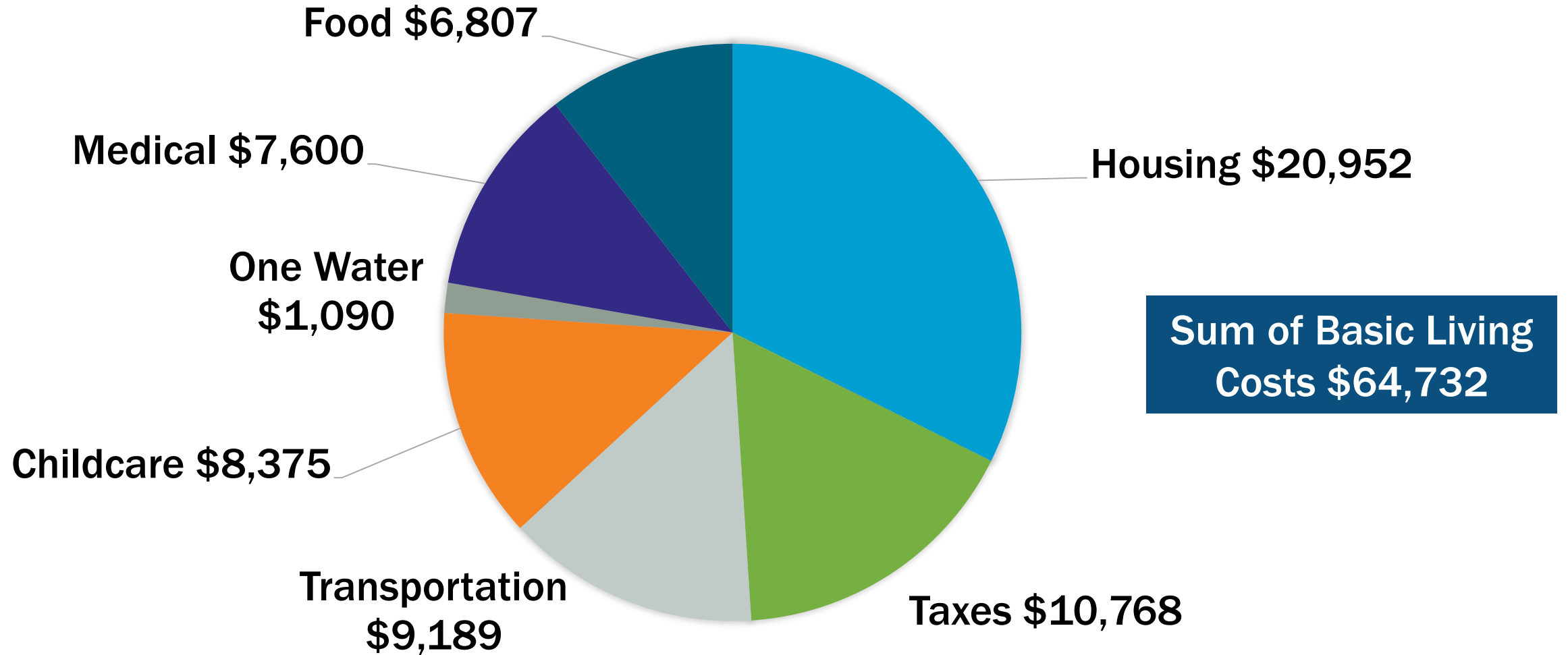


Of the 70,236 housing units in Alexandria, only 23,016 (33%) receive sewer bills directly.

Most customers pay for their service as part of the rent or condo fees

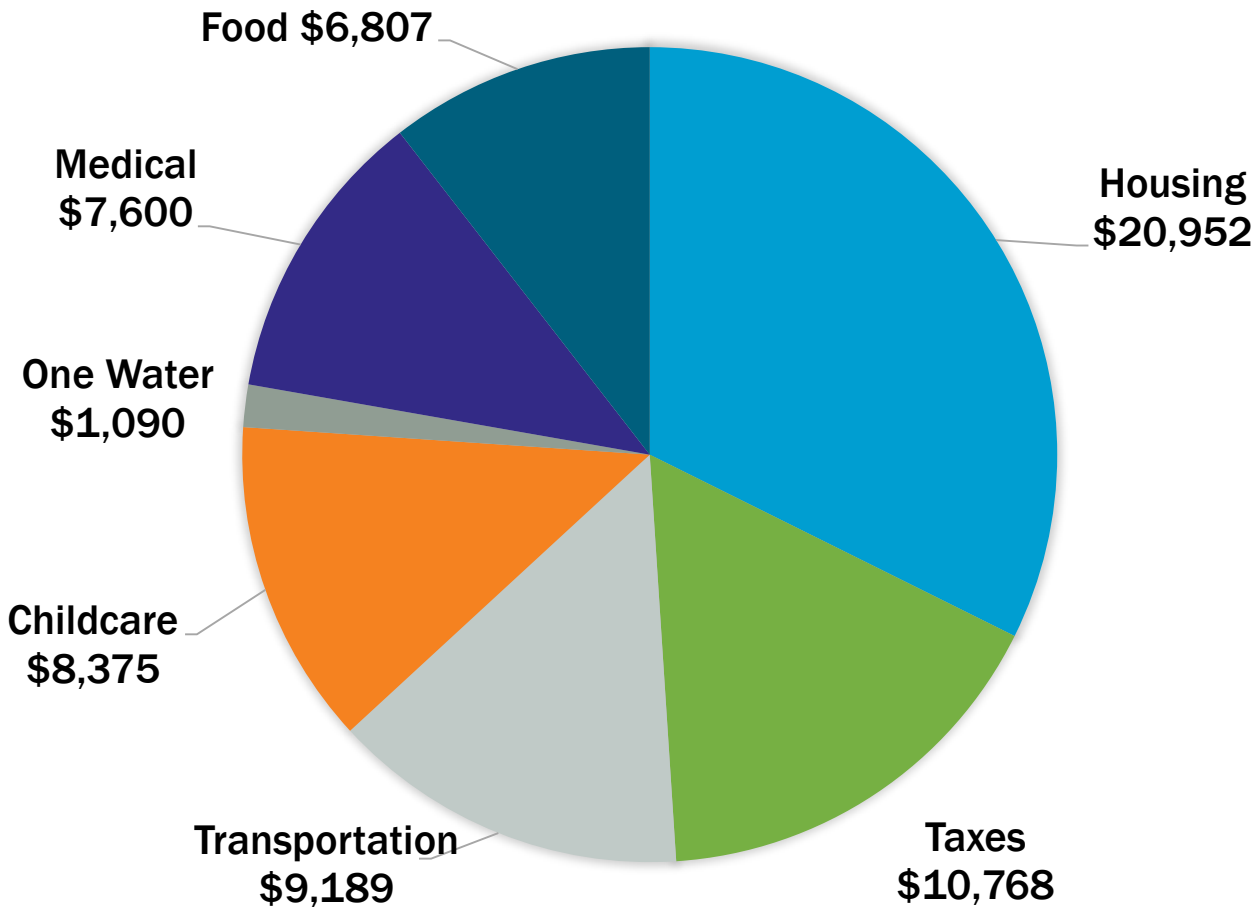
What Alexandrians Pay to Live in Our City

(Based on annual costs for a family of 2 adults and 1 child)



Cost Impact to Various Household Incomes in Alexandria

(Based on annual costs for a family of 2 adults and 1 child)



- Sum of Basic Living Costs \$64,732
- Household Income
 - 20th Percentile \$41,100
 - 40th Percentile \$72,400
 - Living Wage \$68,428
- Median Household Income \$89,200

Rate Considerations

Considerations During Rate Analysis

Sustainability of Operations

Cost of Service
Recovery

Revenue Stability and
Predictability

Fair and
Equitable
Rates

Payment
Flexibility

Easy to
Understand

Adequate
Notice

Minimize
Rate Shock

Draft Resolution on Rate Adjustment Principles for Board Consideration

Serves as a tool for board to guide staff in rate recommendations

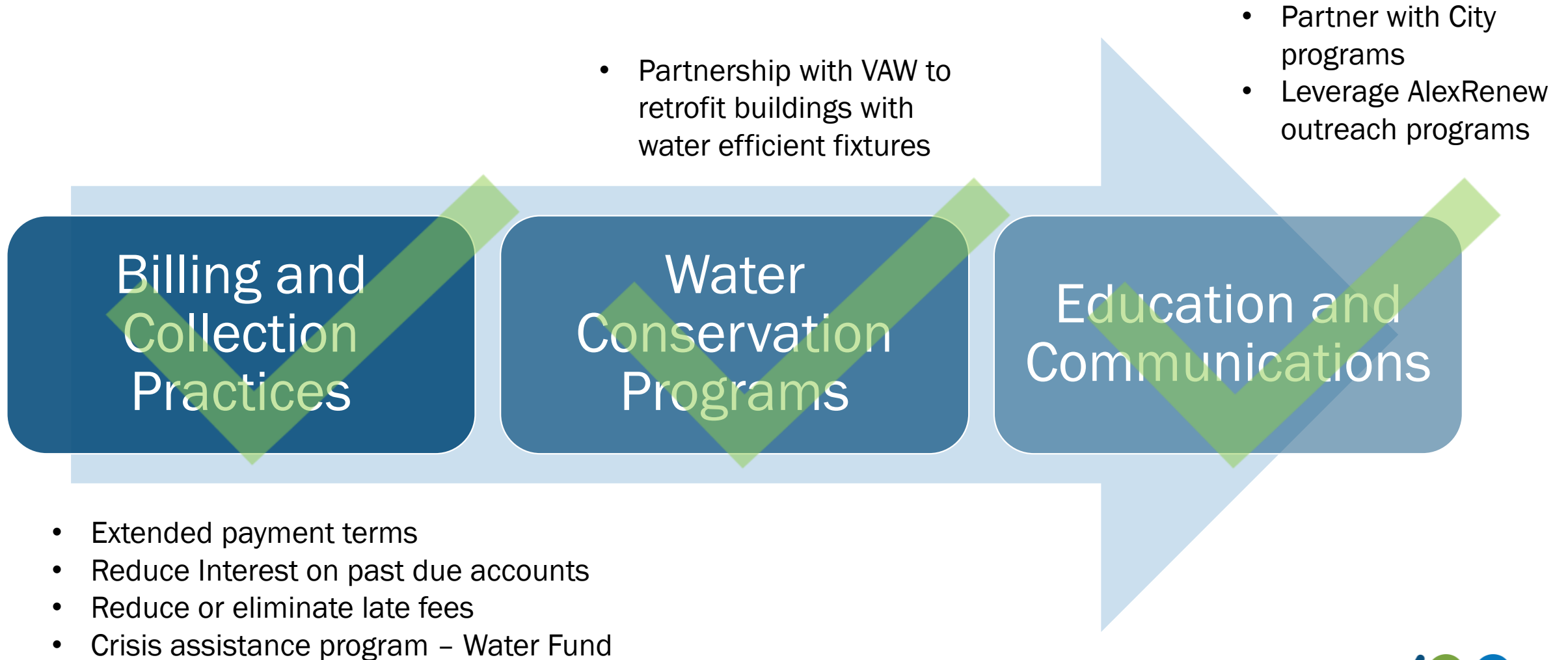
It communicates board priorities for rate setting to the public

The rate adjustment resolution that will be approved for public notice will not show the principles used to guide rate development

Tools to Assist Alexandrians with Costs

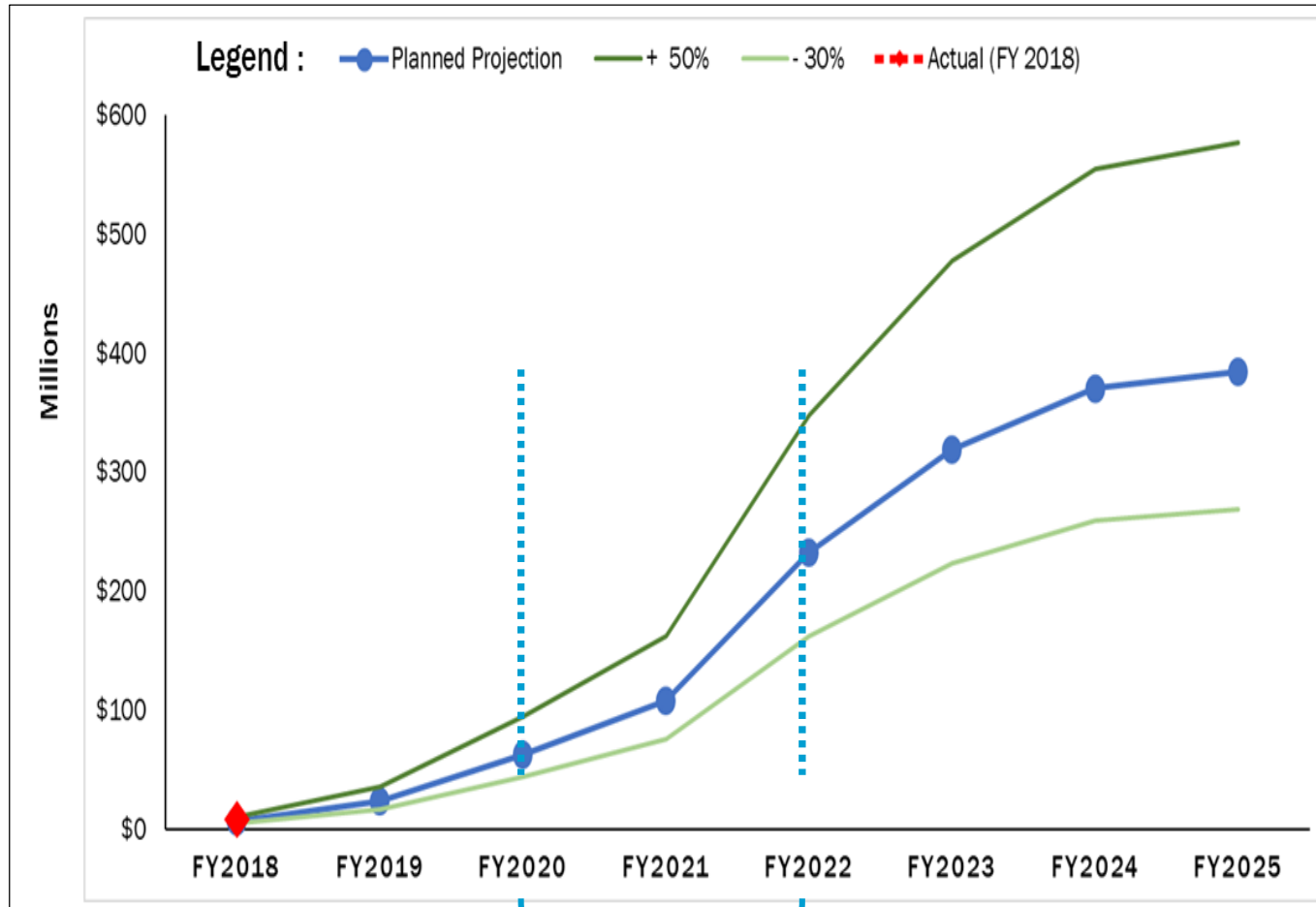


Tools AlexRenew Uses to Assist Our Customers



Rate Implementation Guidance

Timeframe for This Rate Approval

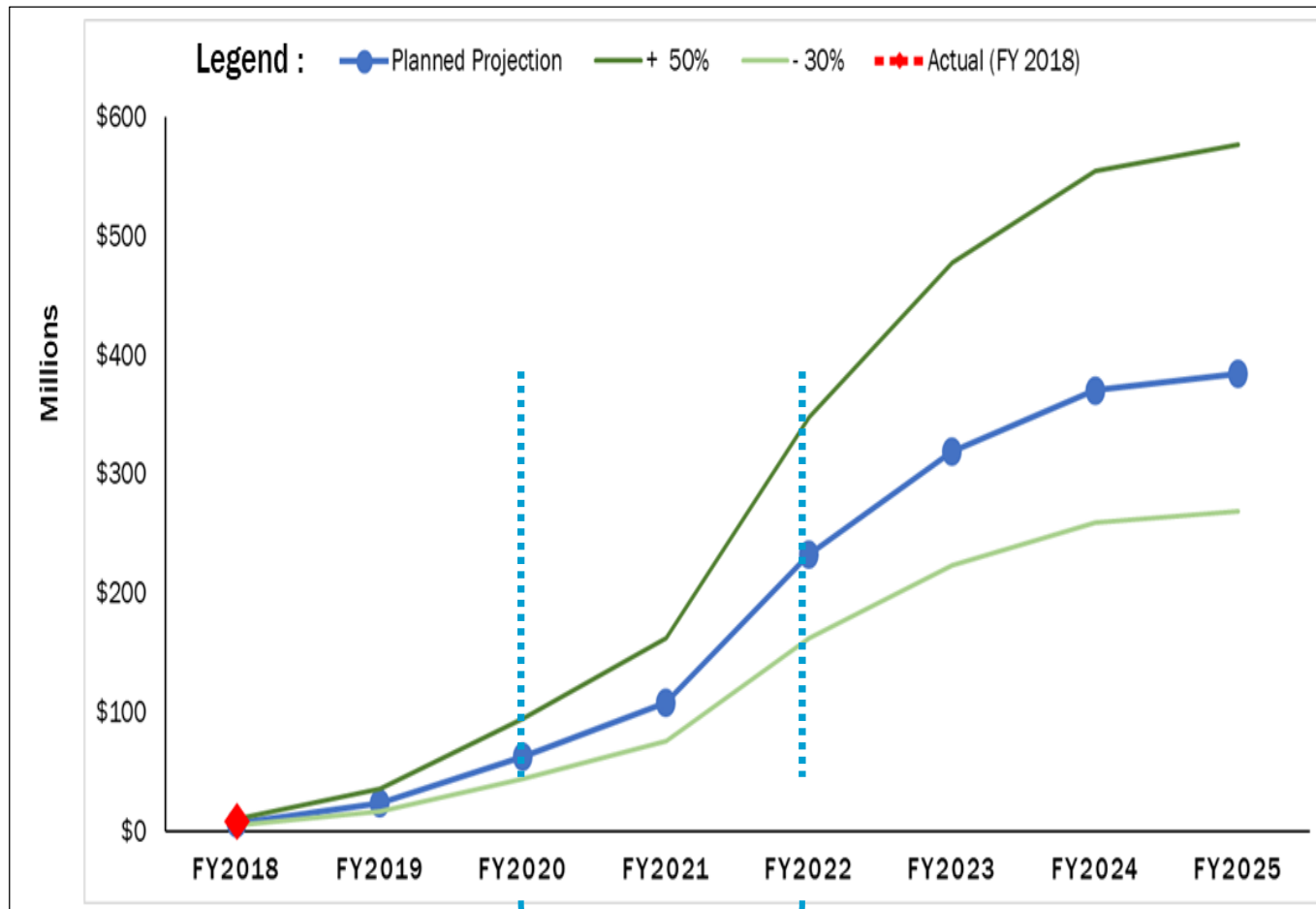


July 2019 through July 2021

Recommend two years of rate increases

- Provides funding through procurement for most of the program
- Program costs will be much clearer in July 2021
- Other sources of funding may be identified
- Debt issuance approach and amounts will be clear

AlexRenew Board of Directors Guidance to Staff



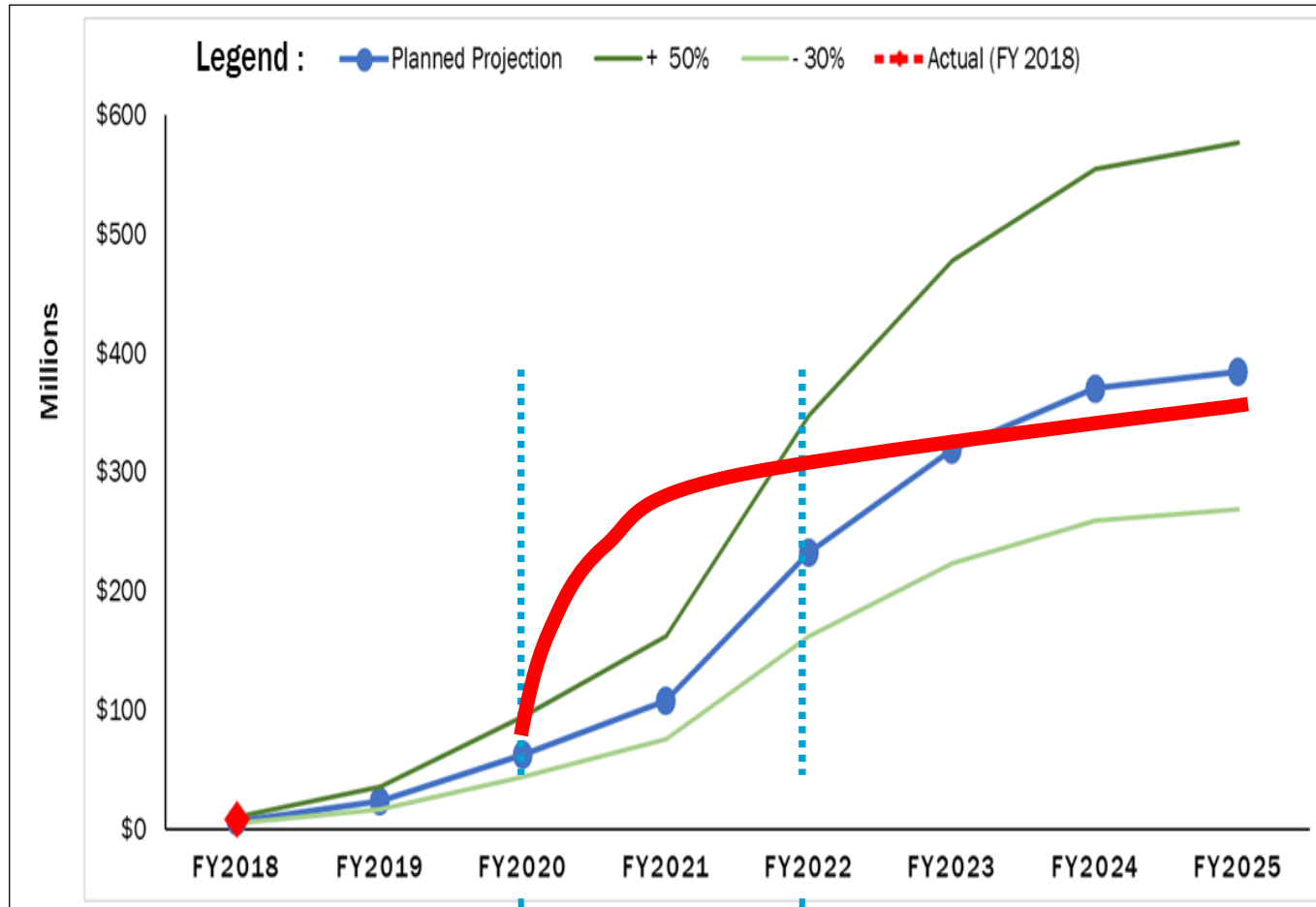
July 2019 through July 2021

Develop a proposed initial rate change schedule that would increase rates effective on July 1, 2019 and 2020.

Rationale:

- More will be known about program costs and financing.
- One year is less feasible due to outreach and education
- Balance of program financing will be determined in the future.

How Rate Increases Could Be Implemented Through 2025



July 2019 through July 2021

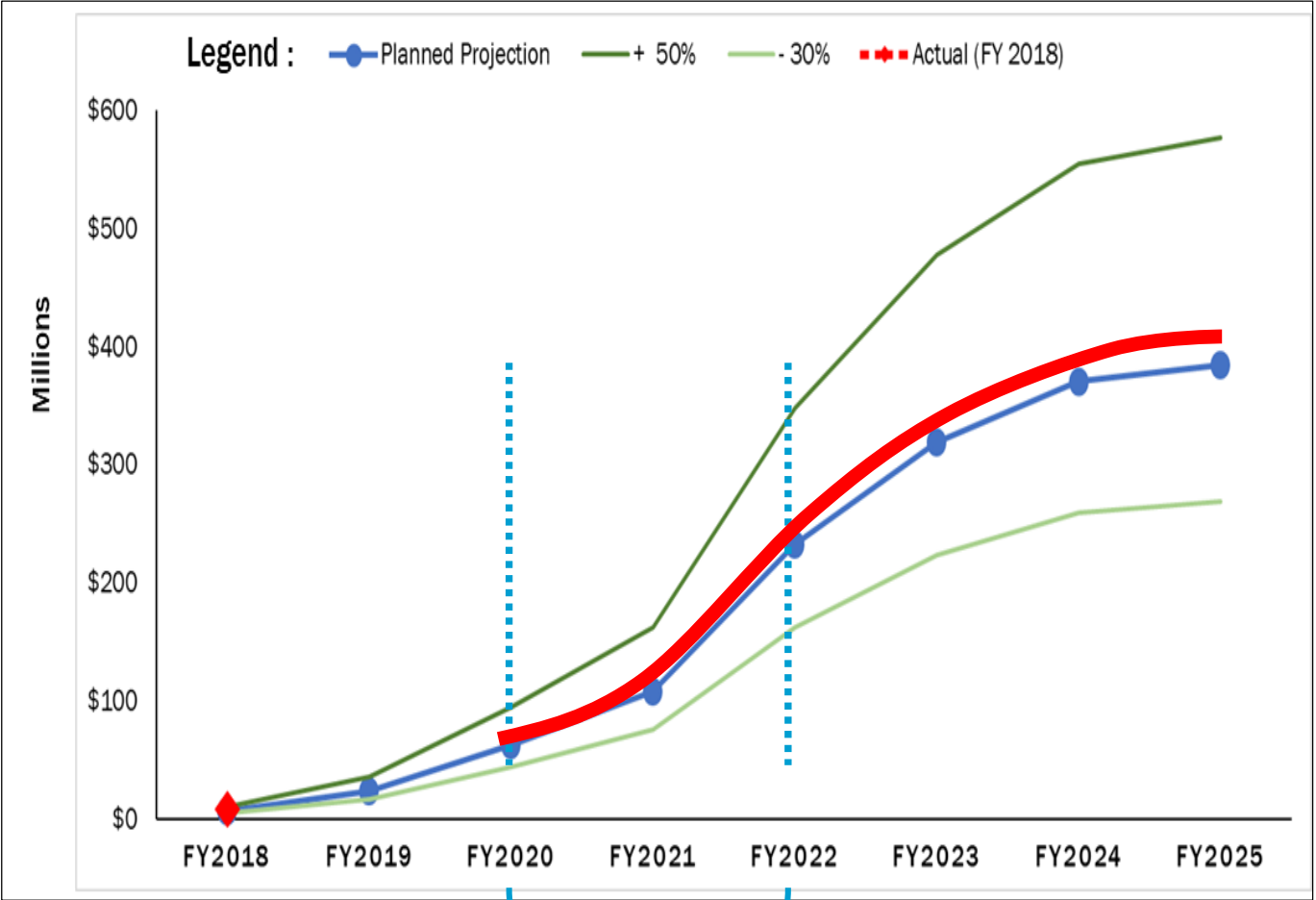
Pros

- Early revenue collection lowers revenue risks
- Early revenue allows 2025 rate to be slightly lower

Cons

- Steep increases up front
- Might over collect revenue if costs drop

How Rate Increases Could Be Implemented Through 2025



July 2019 through July 2021

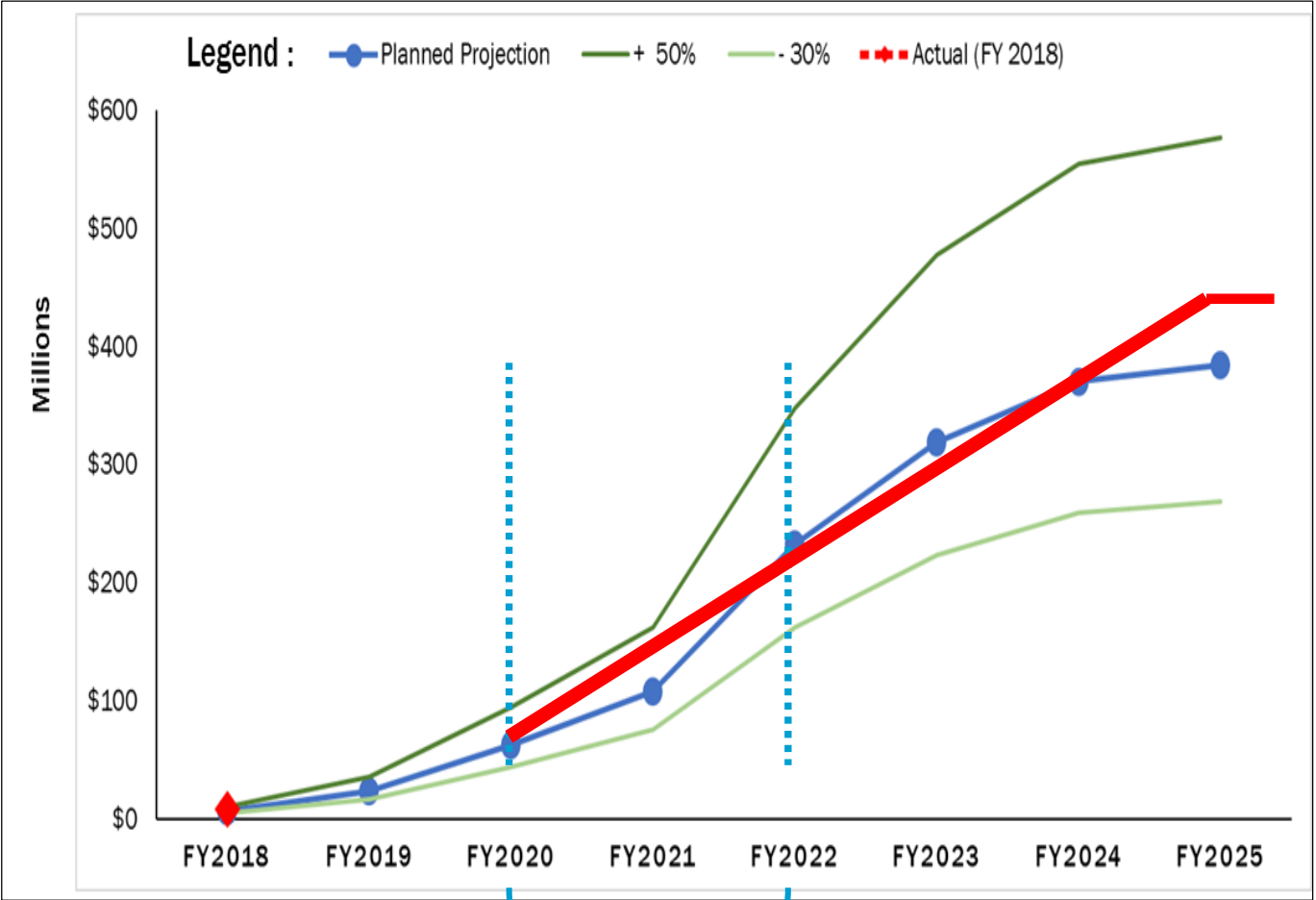
Pros

- Less initial impacts on customers
- More closely matches the program cashflow

Cons

- Increases are steeper in later years.
- Increased revenue risk if costs rise

How Rate Increases Could Be Implemented Through 2025



July 2019 through July 2021

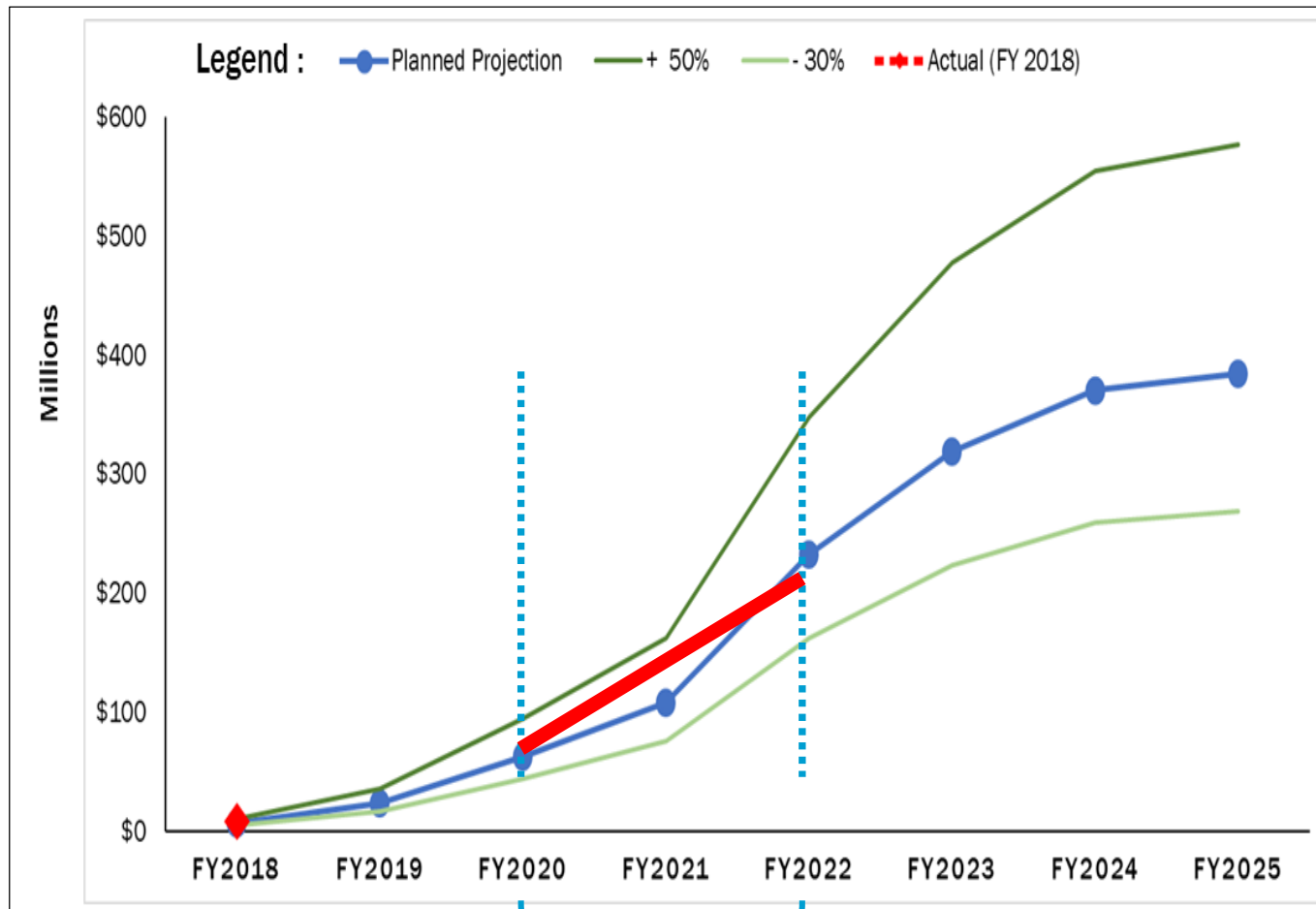
Pros

- Predictable annual increases
- Allows customers to plan for increases
- Less revenue risk if costs rise

Cons

- Doesn't match the cashflow of the program – may collect some funds early

AlexRenew Board of Directors Guidance to Staff



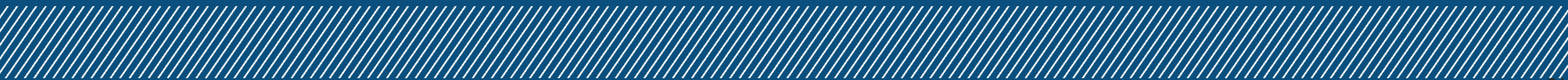
July 2019 through July 2021

Develop a proposed rate change schedule that would include a uniform rate of increase in rates effective on July 1, 2019 and 2020.

Rationale:

- Predicable increases over 2 years.
- Provides financial stability
- Revisited in the rate development next cycle

Discussion and Input





Tunnel Naming

Tunnel Naming Contest Shortlist

- Contest ended December 1, 2018
- 100 submissions received via Listening Sessions and riverrenew.com

No.	Outfall 001/2 Tunnel	Outfall 003/4 Tunnel
1	Coastal Tunnel	Inland Tunnel
2	Northhook Tunnel	Underhooff Tunnel
3	Potomac Passage	Hooffs Runnel
4	Clean River Tunnel	Renew Run Tunnel
5	Waterfront Tunnel	Hooffs Run Tunnel
6	River Tunnel	Creek Tunnel
7	Mallard Tunnel	Canvasback Canal



Next Series of Meetings

Board Council Workgroup Input Requested

- ▶ Ideas for meeting topics
- ▶ Next meeting time/date (late February)
 - Monday, February 20, 2019
 - 5pm – 7pm;
 - AlexRenew Offices, Conference Room EC 600 Semonian Board Room – 1800 Limerick Street, Alexandria, VA 22314

Questions?

