



King County

Department of Natural Resources and Parks
Wastewater Treatment Division

WTD Capital Improvement Program Overview

Presented to

Engineering and Planning and Rates and Finance Subcommittees
of the Metropolitan Water Pollution Abatement Advisory Committee

May 5, 2016

Today's Presentation

- Capital Program summary
- Capital Project Prioritization Process
- Example projects – capacity driven and asset management
- Historical and Projected Annual Capital Expenditures
- Sources of Capital Revenue and Financing
- Budget Planning vs. Rate Analysis
- Schedule for budget development and transmittal
- Questions

WTD Capital Program Summary

- What is capital budget comprised of?
 - Approximately 100 stand-alone major capital projects
 - 6 Minor Asset Management Programs
 - Approximately 130 capital projects or equipment replacement requests in the Minor Asset Management Programs

Scoring/Ranking Process of Capital Projects

- All on-going and new stand-alone capital project requests are ranked using established criteria
- Separate Ranking Process for Asset Management and Major Capital Projects
 - Major Capital refers to projects that provide new capacity
 - Asset Management refers to a range projects of varying sizes that replace, rehabilitate or improve existing facilities; upgrade technologies; or improve processes or system

General Prioritization Guidelines

- Maximum scores provided to:
 - Projects in construction to ensure continuity
 - Projects in design required by legal mandate
 - Minor Asset Management projects to ensure capacity to address urgent plant needs
- High scores provided to:
 - Stand-alone projects in design that replace or upgrade critical assets at end of serviceable life
 - Projects that expand capacity in the mid-to-long term receive high scores
- Range of scores – from low to high – provided to:
 - Projects that serve other business opportunities and strategic objectives

Example Criteria

- Criteria used includes:
 - Public health, public and employee safety, risk of property damage
 - Regulatory or contractual requirements
 - Environmental Impacts
 - Service disruption and impacts from asset failure
 - Regional capacity and distribution needs
 - Cost savings

How Projects are Scored

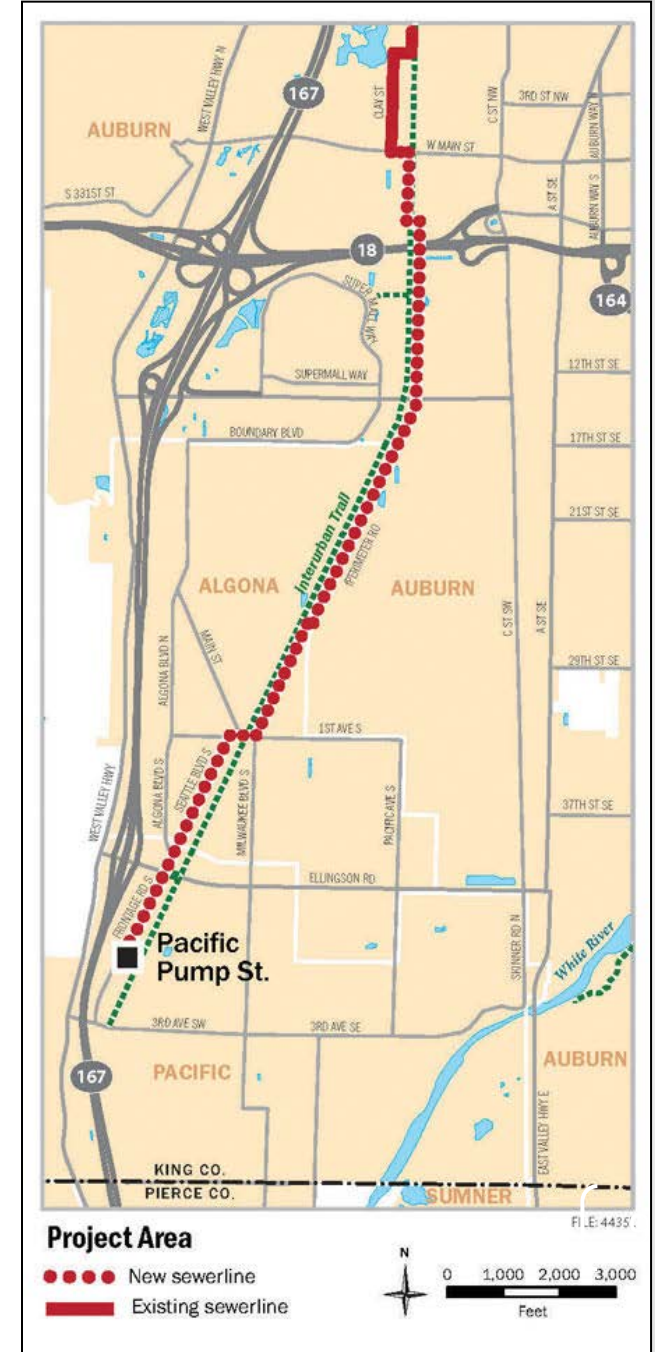
- Projects scored by project manager or supervisors for new projects
- Scores reviewed and discussed by multi-disciplinary teams of senior staff
- Review teams develop consensus score
- Scores and rankings are further reviewed/discussed/prioritized by WTD Capital Systems Team

Sampling of Projects Approved as Part of 2015/2016 biennial budget

- Rainier Valley Wet Weather Storage Combined Sewer Overflow Project (Major Capital Capacity-Driven Project)
- Kent-Auburn Conveyance Systems Improvement Phase B (Major Capital Capacity-Driven Project)
- Eastside Interceptor Rehabilitation Phase III (Asset Management Project)
- Fremont Siphon Replacement Project (Asset Management Project)



Rainier Valley Wet Weather Storage CSO Control Project



Kent Auburn Phase B CSI project

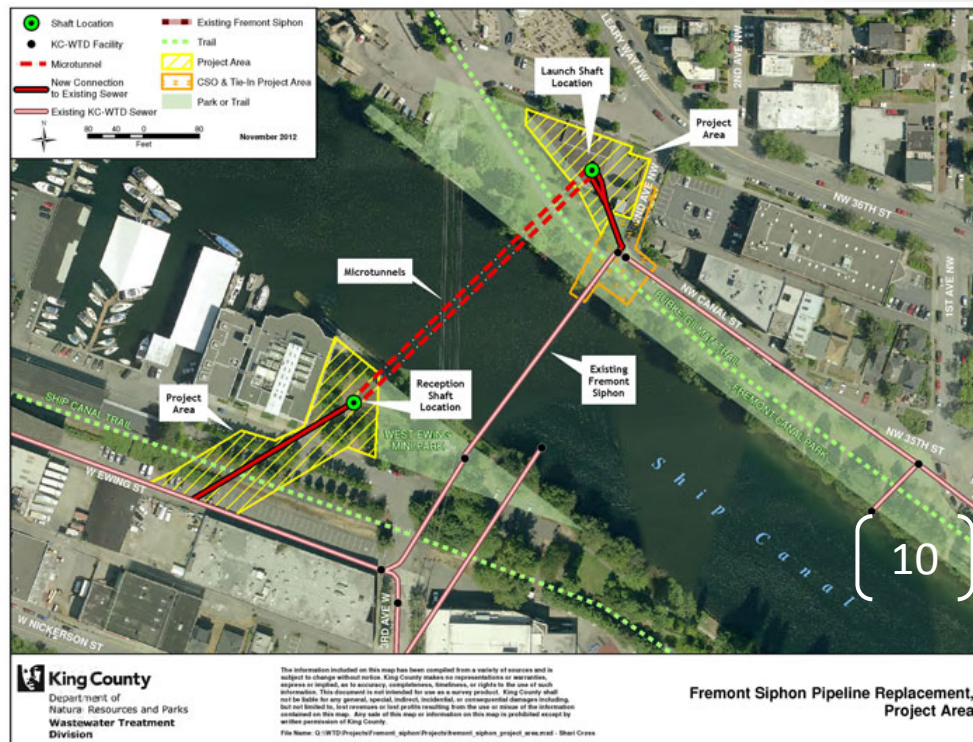


Pipe-Lining Technology to be used in Eastgate Interceptor Rehabilitation Phase III project

Photo: Sewer pipe liner being inserted at a manhole on a lining project in West Seattle



Building the Fremont Siphon Tunnel, 1913.
Photo provided by Seattle Municipal Archives.



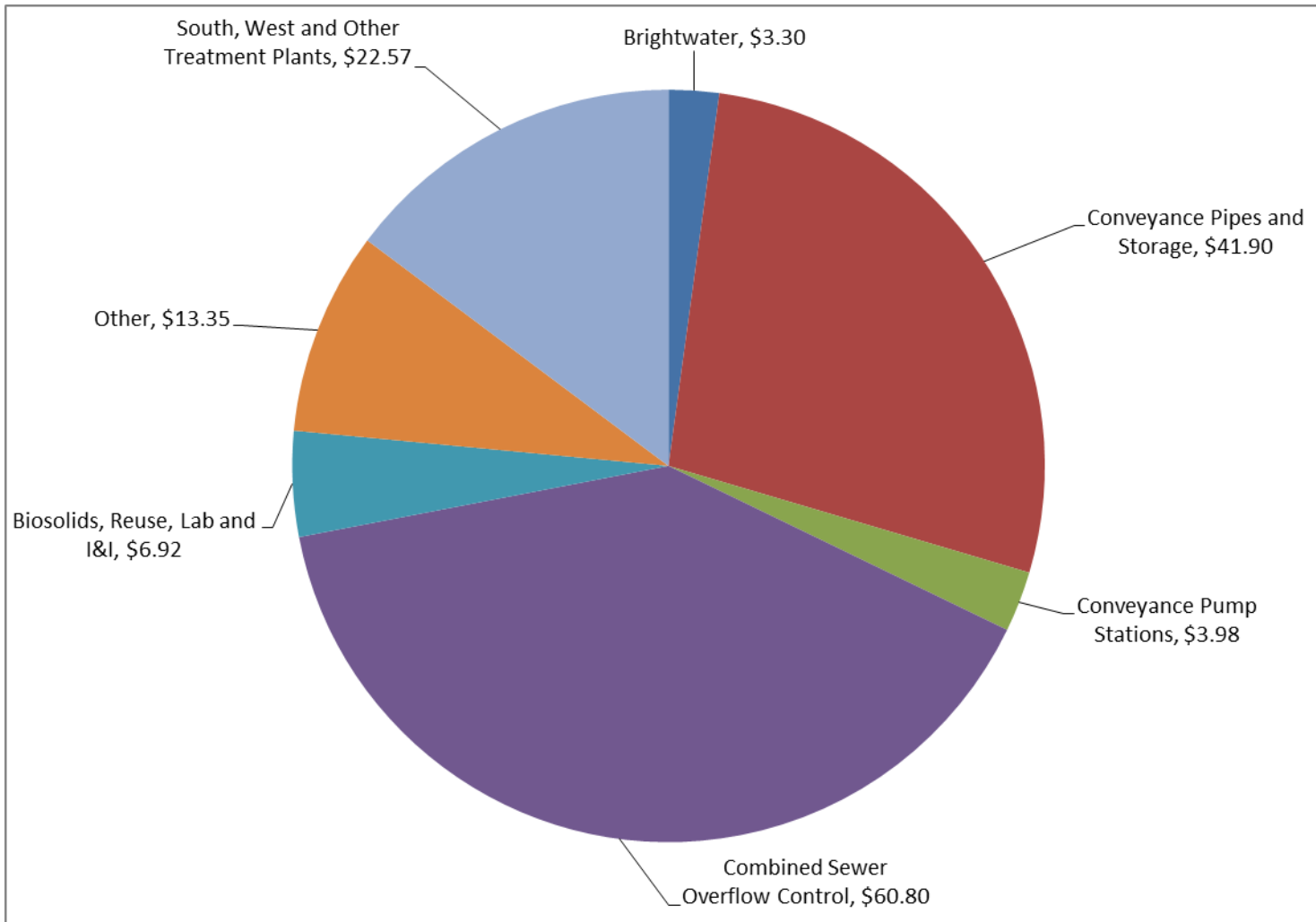
Sample Projects 2016 Budget Plan, Expenditures, and Estimated Costs to Date

Project	Phase	2016 Plan and % Spent as of Mar 2016 (Million \$)	LTD Expenditures as of Mar 2016 (Million \$)	Estimated Cost at Completion (Million \$)
Rainier Valley Wet Weather Storage CSO Control Project	Final Design	\$10.25 2%	\$9.1	\$34.2
Kent-Auburn CSI Project – Phase B	Final Design	\$2.7 12%	\$2.5	\$40.8
Fremont Siphon Tunnel	Constru ction	\$11 7%	\$24.4	\$47.3
Eastgate Interceptor Rehabilitation Phase III (Sewer Lining Project)	Final Design	\$0.5 23%	\$0.71	\$0.73

Historical and Projected Annual Capital Expenditures (Million \$)

Category	2015 Actual	2016 Forecast	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast	2022 Forecast
Treatment Facilities/Asset Mgmt	\$39.2	\$59.0	\$48.8	\$61.9	\$60.0	\$47.9	\$43.7	\$35.7
Conveyance Pipeline & Pump Stations	\$45.9	\$54.2	\$53.0	\$64.7	\$73.7	\$60.4	\$69.9	\$73.5
CSO Control & Remediation	\$60.8	\$56.6	\$49.1	\$51.1	\$82.0	\$114.9	\$101.5	\$125.3
Biosolids, Reuse, Lab, I&I	\$6.9	\$6.0	\$11.9	\$6.6	\$4.2	\$3.6	\$3.9	\$4.2
Total	\$152.8	\$175.9	\$162.8	\$184.2	\$219.9	\$226.8	\$219.1	\$238.7

2015 Actual Capital Spending



Sources of Capital Revenue & Financing

	2016		2017		2018	
	Amount	% of Total	Amount	% of Total	Amount	% of Total
Parity bonds	\$35,615	23%	-	-	\$60,976	33%
Variable debt bonds (short-term)	-	-	-	-	47,297	26%
Grants and low-interest loans	\$58,917	38%	\$19,443	20%	\$1,648	1%
Miscellaneous capital revenue	\$500	0%	\$500	1%	\$500	0%
Cash transfers from operations & capacity charg	\$60,335	39%	\$76,328	79%	\$71,750	39%
TOTAL REVENUES	\$155,367	100%	\$96,271	100%	\$182,170	100%

Budget Planning vs. Rate Analysis

- Sewer rate process is focused on the revenue requirements of the Utility
 - Capital program is represented by aggregate spending
 - Determine financing strategies
- The budget is focused on the authority to spend that revenue in specific ways
 - Individual projects are scrutinized for appropriate project-level budget and schedule
 - Balance spending requests and schedules to ensure the program is in synch with resources
 - Develop information/justification for requested new projects
 - Evaluate staffing adequacy and other resources required; current staffing not adequate to implement CIP beyond 2018

2017/2018 Budget Schedule

Action	2016
WTD Balancing to Capital Expenditures total in Adopted Rate	June 30
WTD submits 2017-18 biennial budget request to Executive	July 1
Executive Office Review	July/August
Executive Finalizes Recommendation	early Sept.
Executive Transmits Biennial Budget Recommendation to King County Council	Sept. 26
King County Council Reviews Executive Budget Recommendation	Oct. & Nov.
King County Council Approves Final Budget	Nov. 21

Questions?