



**King County**

Department of  
Natural Resources and Parks

**Wastewater Treatment Division**

# West Point Treatment Plant Half-century Evaluation

Presentation to MWPAAC  
June 28, 2017




# Drivers for Project

- ▶ Feb. 9 West Point event generated interest in:
  - Half-century evaluation of changes in West Point operating context and relationship to facility operations
  - How West Point is positioned for coming decades
- ▶ Council approved Motion 14882 on June 12, 2017

# Overview of Motion

- ▶ Identify recommendations for system improvements or upgrades for future
- ▶ Report to Council 180 days after Independent Assessment delivered to Council

	<b>KING COUNTY</b> <b>Signature Report</b> June 13, 2017 Motion 14882	1200 King County Courthouse 516 Third Avenue Seattle, WA 98104
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Proposed No. 2017-0141.2      Sponsors Kohl-Welles and Lambert

1      A MOTION providing for a half-century evaluation and  
2      report on the West Point Treatment Plant.

3      WHEREAS, the West Point Wastewater Treatment Plant, which is the flagship of  
4      the region's wastewater system, serves as the key wastewater treatment facility for a  
5      significant portion of the system's service area, and

6      WHEREAS, the plant experienced a major system failure in the early morning of  
7      February 9, 2017, with the result that the plant was inundated by major internal flooding  
8      and that the emergency bypass discharge was activated, resulting in the release of high  
9      volumes of untreated, combined flows of wastewater and stormwater directly into Puget  
10     Sound ("the event"), and

11     WHEREAS, the plant was constructed over fifty years ago, and began operations  
12     in 1966, and

13     WHEREAS, the operating context of the plant, including the dramatic population  
14     growth in the plant's service area, the substantial regional increase in impermeable cover  
15     over the region's land surface, existing and projected weather-related impacts of climate  
16     change, the county's adoption of a comprehensive plan that concentrates growth and  
17     housing patterns, the development of heightened environmental standards and regulatory  
18     requirements, the increase in the region's industrial base as a contributor to wastewater  
19     flows and similar developments, present a more complex and challenging operating


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# Scope of Work

## Review and evaluate:

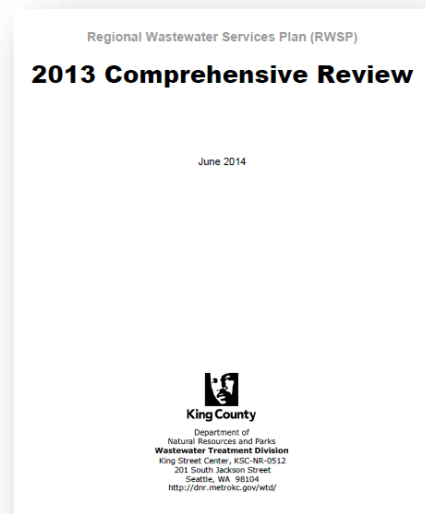
- Changes in operating context:
  - Population, growth patterns
  - Impermeable surface
  - Climate change impacts to weather patterns and flow
  - Regulatory requirements
  - Concern about water quality
  - Industrial wastewater flow
  - Toxic levels from outdoor urban surfaces
- How well positioned West Point is to meet these changes

# Scope of Work Continued

- Current and projected capacity
  - Changes in wastewater treatment technology
  - Treatment plant capital development constraints
    - Functional
    - Design
    - Engineering
    - Land-based limitations
  - System vulnerabilities and other operations and management concerns
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# Elements to be Included in Project

- RWSP Comprehensive Review
  - Capacity assessments
  - Study from UW Climate Impacts Group
  - Independent Review of West Point
- ▶ Project will be performed in conjunction with *Treatment Plant Flows and Loadings Study*



# Anticipated Deliverable

- ▶ Report:
  - Summarize review and evaluation
  - Identify and recommend improvements to position West Point Treatment Plant for future

# Anticipated Schedule

June	July	August	September	October	November	December
Contract/scope negotiations	Conduct evaluation and identify recommendations		Draft Report to WTD 	Develop final report and review process		Final Report to KC Council 



# Questions?

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Comprehensive Planning

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