

Wastewater Treatment Division Systemwide Comprehensive Plan

April 12, 2018

MWPAAC Engineering and Planning Subcommittee

“The main question for policy-makers and utility managers is whether the increased rate of infrastructure spending that utilities must face over the next 20 years can be financed by utilities themselves at rates that customers can afford.” -- American Water Works Association, 2001.

“Extensive and efficient infrastructure is critical for ensuring the effective functions of the economy.” -- World Economic Forum, The Global Competitiveness Report 2013



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Presentation Topics

- Purpose of Systemwide Comprehensive Plan
- Utility Planning, Economic, and Financial Technical Services
- Systemwide Comprehensive Plan Strategic Communication
- Next Steps



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Systemwide Comprehensive Plan

Purpose- Update the WTD Comprehensive Plan to guide the utility in the near-term (0-10 years) and long-term (10-40 years) using an approach that addresses:

- Protecting and improving water quality
- Planning for population growth
- Ensuring resiliency for an aging system
- Climate change
- Establishing a financing and rate structure that is reasonably affordable



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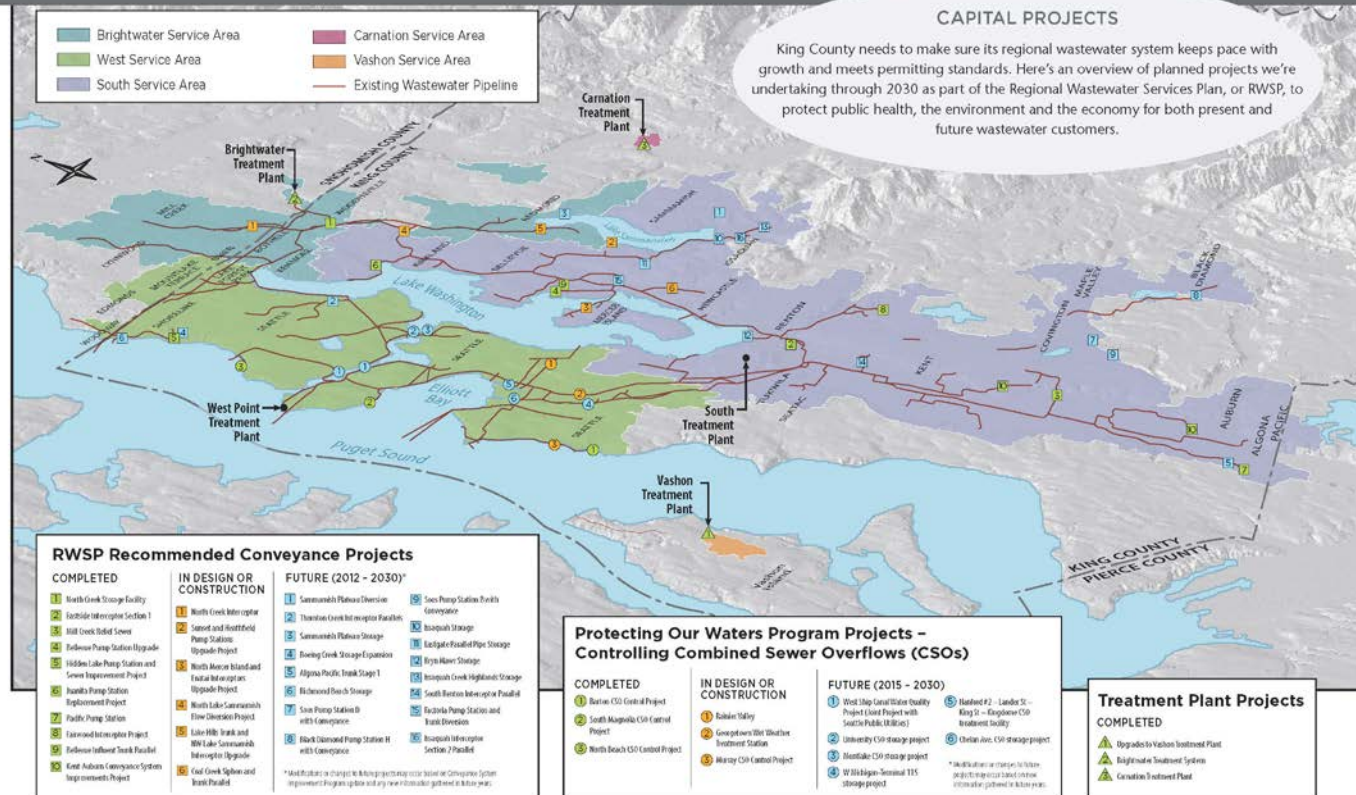
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Existing WTD Plan – 1999 Regional Wastewater Services Plan (RWSP)

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System Investments



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Overview of Scope of Work

- Project Management
- Phase I
 - Data Collection and Development
 - Scenario Planning
- Phase II
 - Strategic Utility Planning
 - Financial Plan



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Data Collection and Development Task

- Purpose:
 - Build foundation for scenario and strategy development
- Tasks:
 - Review existing system, studies, and background information
 - Develop information outside of current WTD practices
 - Regional infrastructure and program inventory
 - Future trends and projections
- Desired Outcome:
 - Update approach to scenario planning process and strategic utility planning

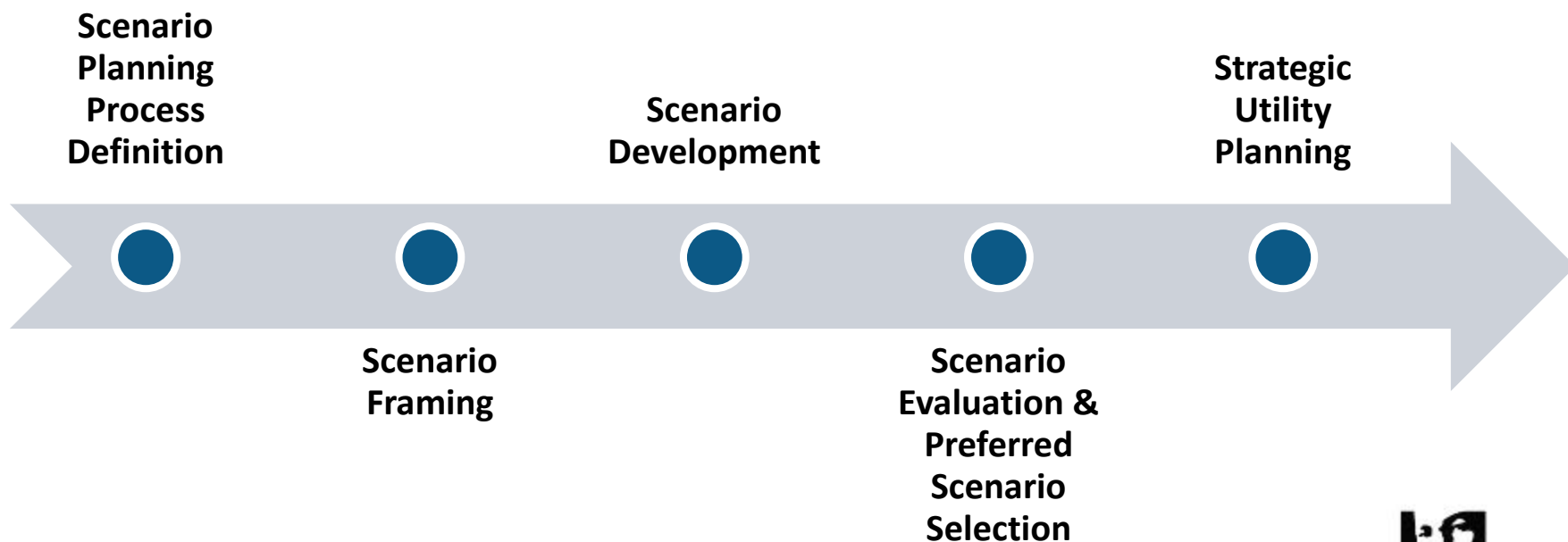


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Scenario Planning Overview



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Scenario Planning Overview

- Purpose:
 - Explore plausible futures for WTD in protecting public health and the environment
- Example evaluation techniques:
 - Multi-criteria analysis
 - Pairwise comparison
 - Feasibility analyses
 - Decision science tools
- Implications for study include:
 - Water quality benefits
 - Rate affordability
- Desired Outcome:
 - A preferred scenario for more focused strategic utility planning

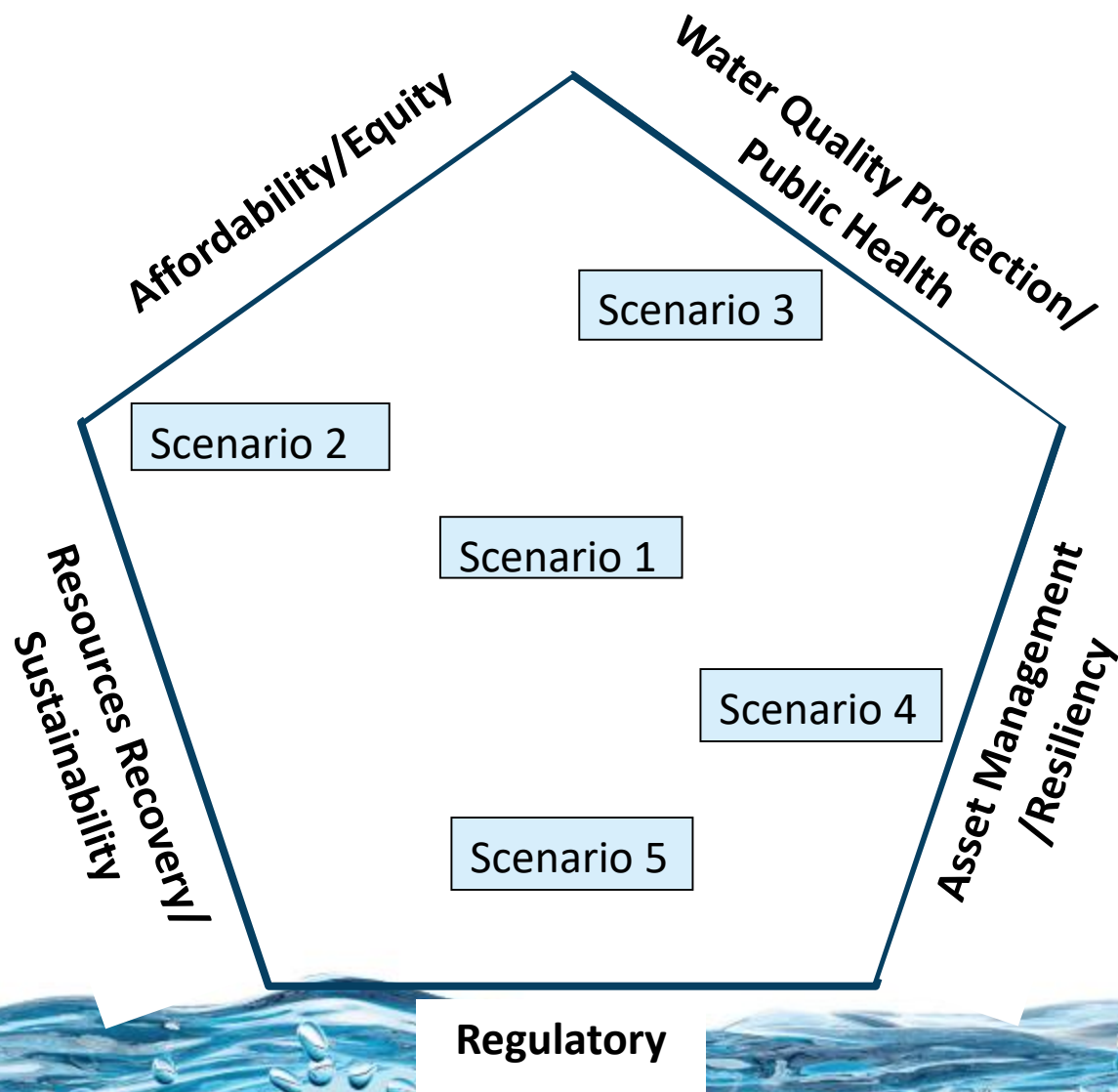


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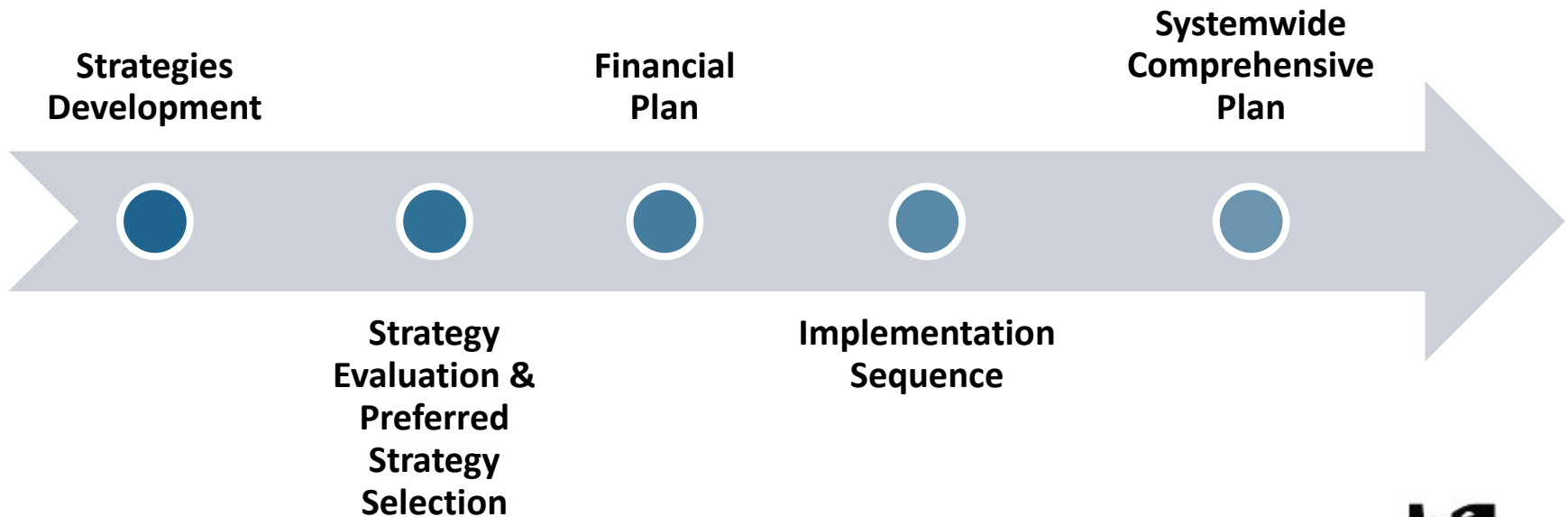
Framing Plausible Scenarios



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Strategic Utility Planning Overview



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Strategic Utility Planning Overview

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- Purpose: Develop strategies (up to 3) for analysis based on preferred scenario
- Potential Elements of Strategies:
 - Programmatic changes (e.g., new WTD programs)
 - Changes to financial practices
 - Legislative or policy changes
 - Regulatory strategy changes
 - Water quality improvements programs
 - Enhancement to current operating procedures and capital plans
 - Capital Projects



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Strategic Utility Planning Overview

- Analysis:
 - Cost/Benefit
 - Environmental
 - Engineering
 - Financial
- Desired Outcomes
 - Recommended strategy to guide near term (0-10 years) and long term (10-40 years) investments in the regional wastewater system
 - Financial plan with summarized annual operation and capital costs to implement the recommended strategy.



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Overview of Strategic Communication and Regional Leaders Forum

- Objective is to start a regional conversation about priorities to shape planning
- Values-based *and* technical
- Engages people and ideas, recognizing that a lot has changed since development of the Regional Wastewater Services Plan



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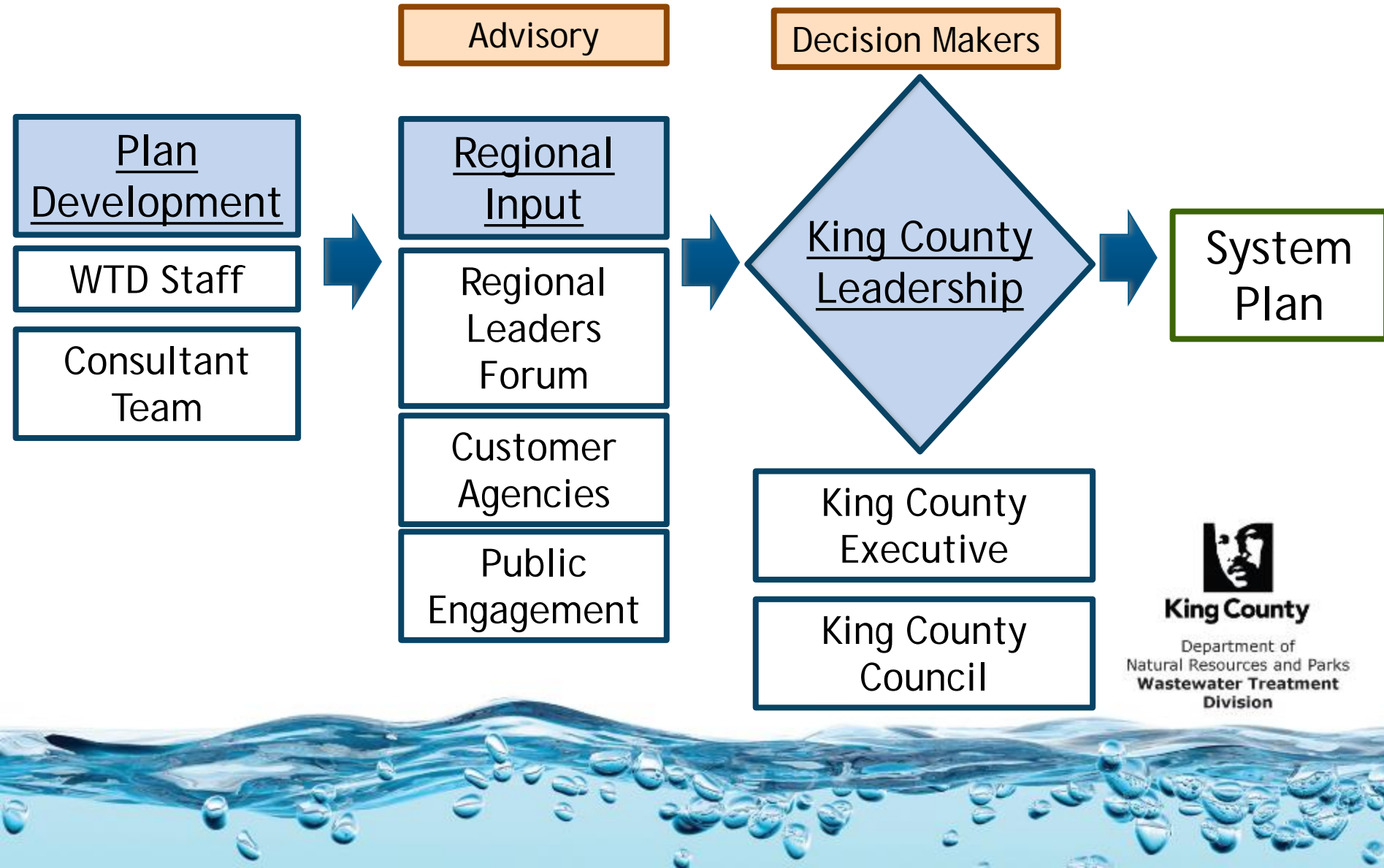
Public Affairs and Public Engagement

- Establish a Regional Leaders Forum
 - Forum will guide a parallel community engagement effort
- Involve stakeholders to shape planning, advise the King County Executive



Public and King County Leadership Involvement

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Next Steps

- Consultant procurement Q2 2018
 - Strategic Communications and Regional Leaders Forum
 - *Contract advertised; closes 4/24*
 - Planning, Economic, and Financial Technical Services
- Initiation of planning work Q3 2018



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Discussion and Questions

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“...modern water systems are being pushed to the edge by costs associated with personnel, pipes, energy, and pollution, and it seems almost certain that all or most of these pressures will continue. David Sedlak, Water 4.0, 2014.

“How do we generate the most long-term community value from investments to maintain, operate, and modernize wastewater infrastructure?” The Evergreen State College Center for Sustainable Infrastructure, A Northwest Vision for 2040 Water Infrastructure, 2017.

