Regional Wastewater Services Plan (RWSP) Update Policy Framework - *draft*

Presented to the Regional Water Quality Committee

Dec. 3, 2025

RWSP 2026 Budget Proviso:

"WTD shall transmit a plan describing the proposed analysis to be completed for the policy questions identified in the Regional Wastewater Services Plan Update scope document as adopted by regional water quality committee resolution 2025-01"

The plan shall be developed with input from RWQC and will include:

- A **framework** for the analysis of the policy questions which identifies the **topics** that shall be addressed
- A **problem statement** corresponding to each policy question
- **How the policy analysis will inform** the RWSP Update
- **Timelines** for the analysis for each policy question
- Proposed **format** for reporting the analysis
- Plan Due Date: March 1, 2026

Today's Goal:

Gather RWQC's comments on Wastewater Treatment Division's approach to address and integrate the 29 Major Policy Questions from the RWSP Scope Document into RWSP Update planning process.

Questions for RWQC:

1. What seems to work in the draft framework?

2. Is there anything missing?

3. Given the volume of questions, is PPT format sufficient for the analyses as shown in the example in this presentation?

4. The draft framework proposes two-touches with RWQC for each policy question and analysis. Is this sufficient?

Outline of RWSP Policy Approach - *draft*

1. **Framework & Topics for the Analyses:** Major Policy Questions will be analyzed by providing the following information:

Step 1

   a. Problem Statement
   b. Contextual and baseline information:
      i. What we know about the topic and current conditions
      ii. Current policies in code, contract or in-practice
      iii. The system "must-dos"
      iv. Current and budgeted expenditures
      v. Summary of science/data if applicable
   c. Example practices from other jurisdictions/industry
   d. Policy issues, challenges and opportunities related to the policy question
   e. Range of policy options with associated actions and considerations
   f. Interested and affected parties WTD will engage to gather input

Outline of RWSP Policy Approach - *draft*

1. **Framework & Topics for the Analyses** [continued]

Step 2

g. Planning level cost estimates of the options and actions
h. Evaluation of outcomes – alongside cost estimates identify impacts and outcomes of each option
i. Other?

Outline of RWSP Policy Approach - *draft*

2. **How Analyses will Inform the RWSP Update:** The Draft RWSP Update will include a full range of alternatives for a SEPA process in 2027. Analyses of the policy questions will inform development of the Draft RWSP Update in the following specific ways:

   I. WTD will ensure all policy issues associated with the major policy questions are included and addressed in the Draft RWSP Update;

   II. Analyses will intentionally guide and specifically inform development of RWSP policy options (see slides 14 and 15).

   III. RWQC can use analyses to identify any additional policy options for further analysis inclusion in the Draft RWSP Update; **options not meeting legal requirements will be identified and reviewed by legal counsel before including in the Draft Plan.**

      - *A parallel effort outside the formal RWSP process will explore alternate regulatory strategies that may be less costly to achieve water quality outcomes. If a change results from this effort, options and actions will be revised as appropriate.*

   IV. Analyses will be used in the decision-making, following the SEPA process, for the Executive's Preferred Plan and can be used for decision-making with Council's adopted Plan.

Outline of RWSP Policy Approach - *draft*

2. **How Analyses will Inform RWSP Update** [Continued]:

v. **Three-step process** for RWQC to evaluate and consider the analyses and provide feedback to influence WTD's development of the Draft RWSP Update in the planning and development stages of the work:

Step 1: **RWQC can share its initial and general direction** with WTD during Committee discussion on **parts a-f** of the analysis for a given policy question *(note: this initial discussion would occur before cost estimates of the options are available)*;

Step 2: Upon **completion of cost estimates for the options**, WTD will provide a **follow-up analyses** to **include costs and evaluation of impacts and outcomes** for all options, inclusive of those RWQC expressed desire to see evaluated. Equipped with this additional information **RWQC will have a 2nd opportunity to identify its policy preferences** to WTD;

Step 3: WTD will integrate RWQC's direction into development of a full range of policy options to include in the Draft RWSP Update.

Outline of RWSP Policy Approach - *draft*

Following the SEPA process for the Draft RWSP Update, WTD will begin to evaluate and consider tradeoffs for a full range of options to develop the “Executive’s Preferred Alternative” RWSP Update in 2028.

This will be followed by transmittal to Council and anticipated referral to RWQC in 2029 for consideration and Council approval.

Outline of RWSP Policy Approach - *draft*

3. **Timeline of analyses:** WTD will cluster each of the policy questions by topic and sequence completion of the analyses and subsequent RWQC briefings in time to ensure a Draft RWSP is produced in 2027.

    - Example schedule for the analyses is shown in Table on next slide

    - For policy questions that cover multiple topics WTD will make connections across topics in Step 1 of the analyses and create opportunities for RWQC in Step 2 to holistically evaluate questions and options that cover multiple topics.

Policy Analysis Schedule – *draft example*

Number (of 29)	Major Policy Questions from Scoping Document	Topic	Timeline (RWQC Discussions)
1	Given the uncertainties in future growth rates reported by Washington State and the Puget Sound Regional Council, how aggressively beyond legal requirements should WTD expand capacity to account for future population growth?	Separated System Conveyance (including infiltration/inflow) & Treatment	**Step #1: February 2026** **Step #2: TBD**
2	How should I/I be managed and how can costs be fairly apportioned? Should system capacity be expanded to account for increases in I/I? Should I/I policies change to support reducing the capacity needed for I/I?	Separated System Conveyance (including infiltration/inflow)	
3	How should the conversion of on-site septic systems to sewers in the service area be managed and should WTD implement programs to encourage conversion within the service area?	Separated System Conveyance (including infiltration/inflow)	
4	What upstream or source control actions should the region undertake to prevent contaminants and reduce costs?	Pollution (Source Control and Legacy)	**Step #1: March 2026** **Step #2: TBD**
5	How proactive vs. reactive should WTD be when deciding to refurbish or replace aging infrastructure?	Asset Renewal and Replacement	**Step #1: April 2026** **Step #2: TBD**
6	What level of redundancy of critical systems should WTD have?	Asset Renewal and Replacement & Climate Impact Preparedness and Natural Disaster Resiliency	

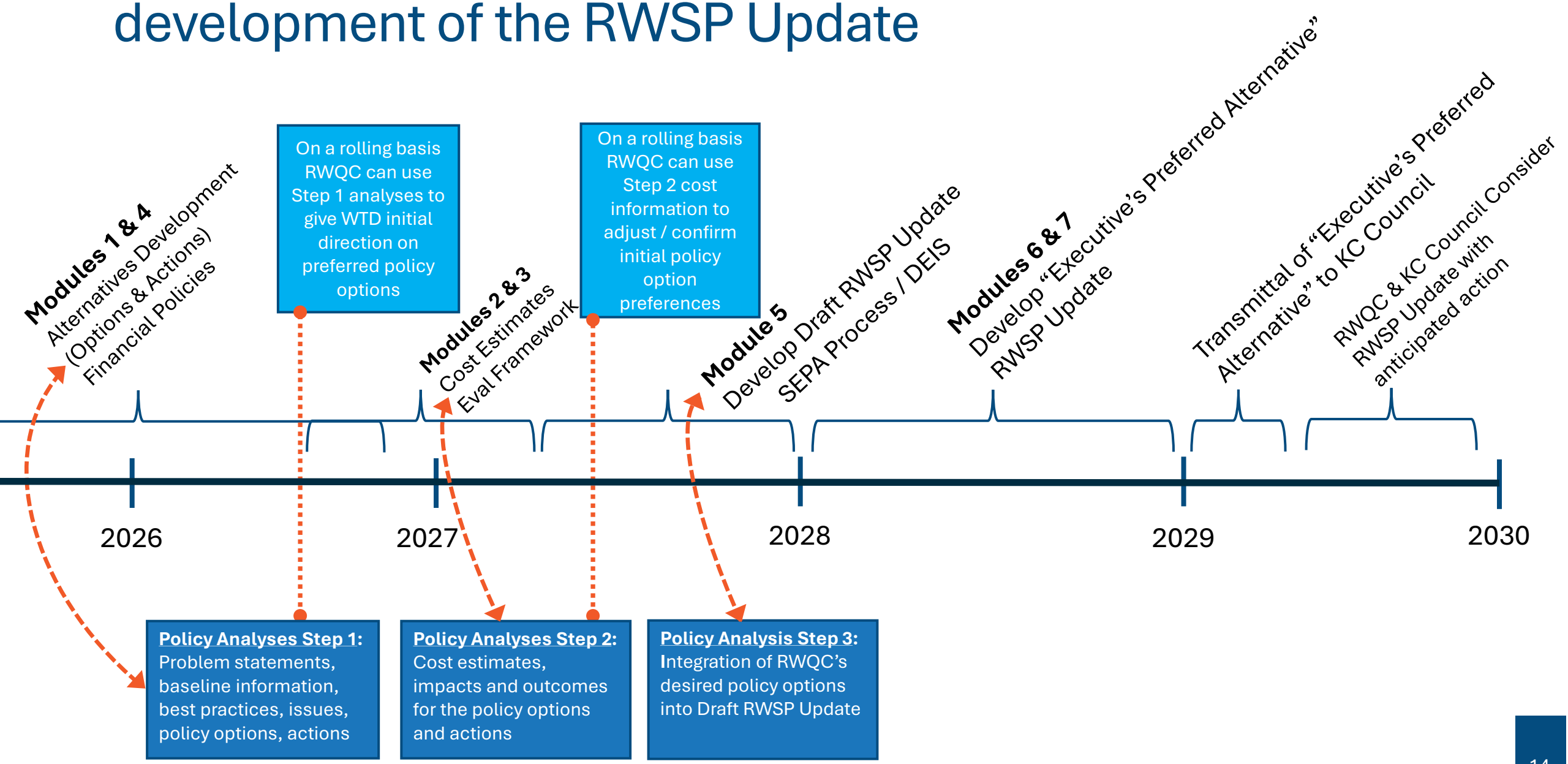
Outline of RWSP Policy Approach - *draft*

4. **Format of Analyses:** given the volume of questions, we intend for the format for reporting-out the analyses on all major policy questions to be PPT slides for ease and efficiency of conveying the information (see example starting on slide 15).

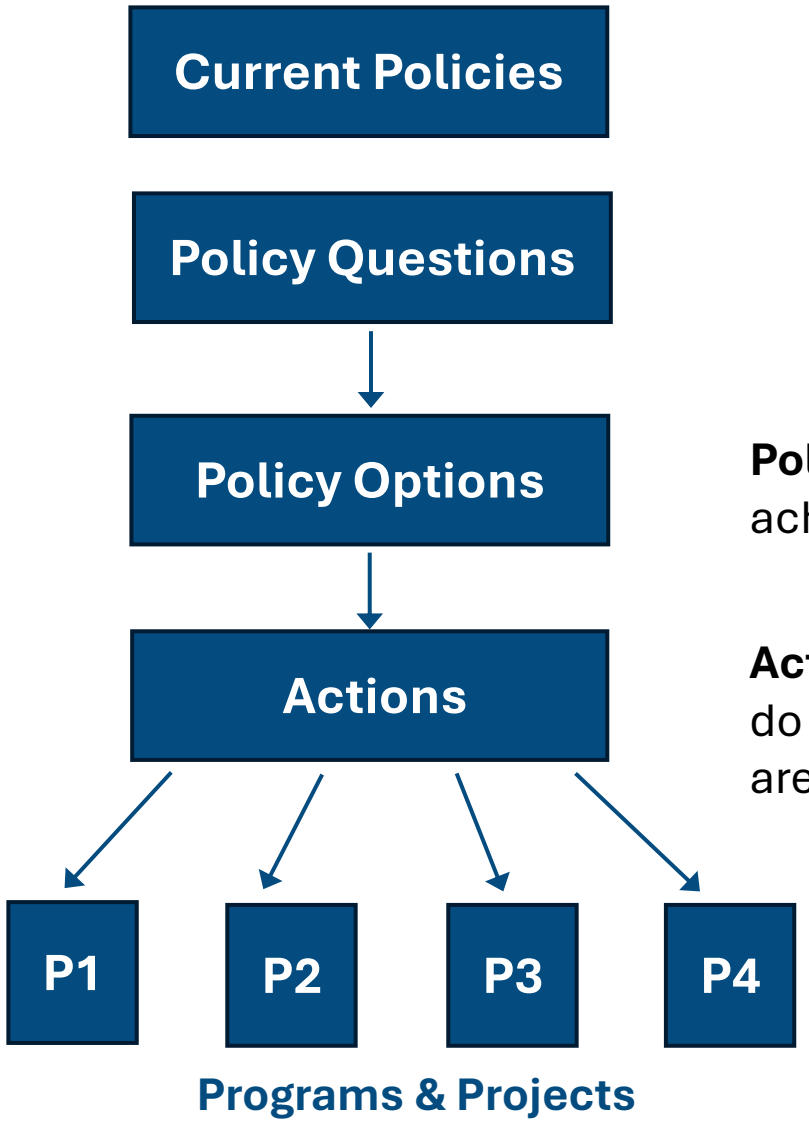
RWSP Road Map - *Tentative*

• **Module #1: Alternatives Development -** "Actions" for 8 categories of capital investments for 3 Conceptual Approaches	Q2 2025 – Q1 2026
• **Module #2:** Evaluation Framework and Affordability Metrics to compare Approaches and evaluate tradeoffs to inform selection of Final Proposal	Q2 2026 – Q3 2026
• **Module #3:** Planning level cost estimation for the 24 sets of detailed Actions	Q2 2026 – Q1 2027
• **Module #4:** Phase 1 Financial Policies	Q1 2026 – Q4 2026
• **Module #5:** *Draft* RWSP with 3 Conceptual Approaches with associated cost estimates (and DEIS, if needed)	2027
• **Module #6:** Apply Evaluation Framework from Module #2 to determine *which* sets of Actions	2027/28
• **Module #7:** Final Proposed Plan (may be a hybrid set of actions from the 3 Approaches) with RWSP Policies and Phase 2 Financial Policies (and FEIS, if needed)	2028/29

How and When the Policy Analyses will inform development of the RWSP Update



Policy Options and Actions



Policy Option = Goal we want to achieve

Actions = activities WTD will do to achieve the goal; actions are what WTD will cost

Example

King County | Wastewater Treatment

Policy Questions on Infiltration/Inflow (I/I)

1. How should I/I be managed and how can costs be fairly apportioned?

2. Should system capacity be expanded to account for increases in I/I?

3. Should I/I policies change to support reducing the capacity needed for I/I?

1a. Problem Statement(s) for the I/I policy questions

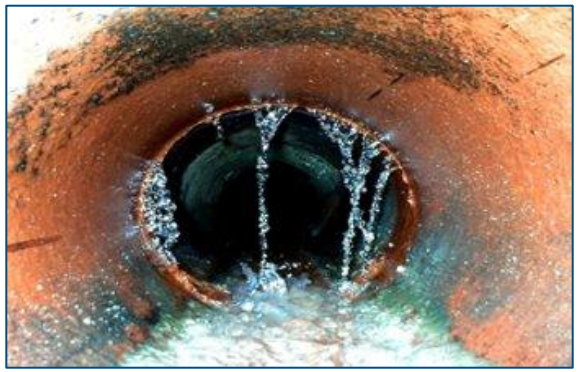
- I/I contributes large and increasing amounts of flow to the separated conveyance system during wet weather.
- This results in the need to expand system capacity, including larger conveyance pipes, sending more flow to the treatment plants.
- The region is paying to convey and treat extraneous water.
- I/I contribution is uneven across the regional system.

1b. What is infiltration and inflow (I/I)?

I/I is excess water that flows into sanitary sewer pipes from groundwater and stormwater.

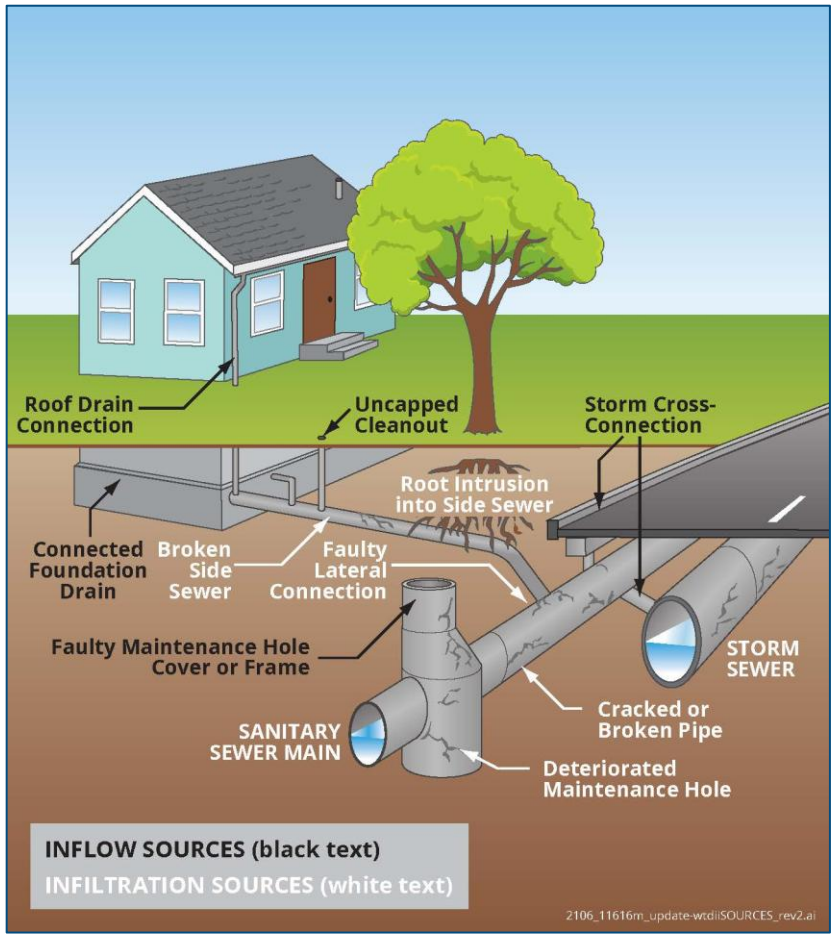
Infiltration refers to groundwater that infiltrates or leaks into pipes.

Inflow refers to storm or surface water that enters pipes from sources other than infiltration.



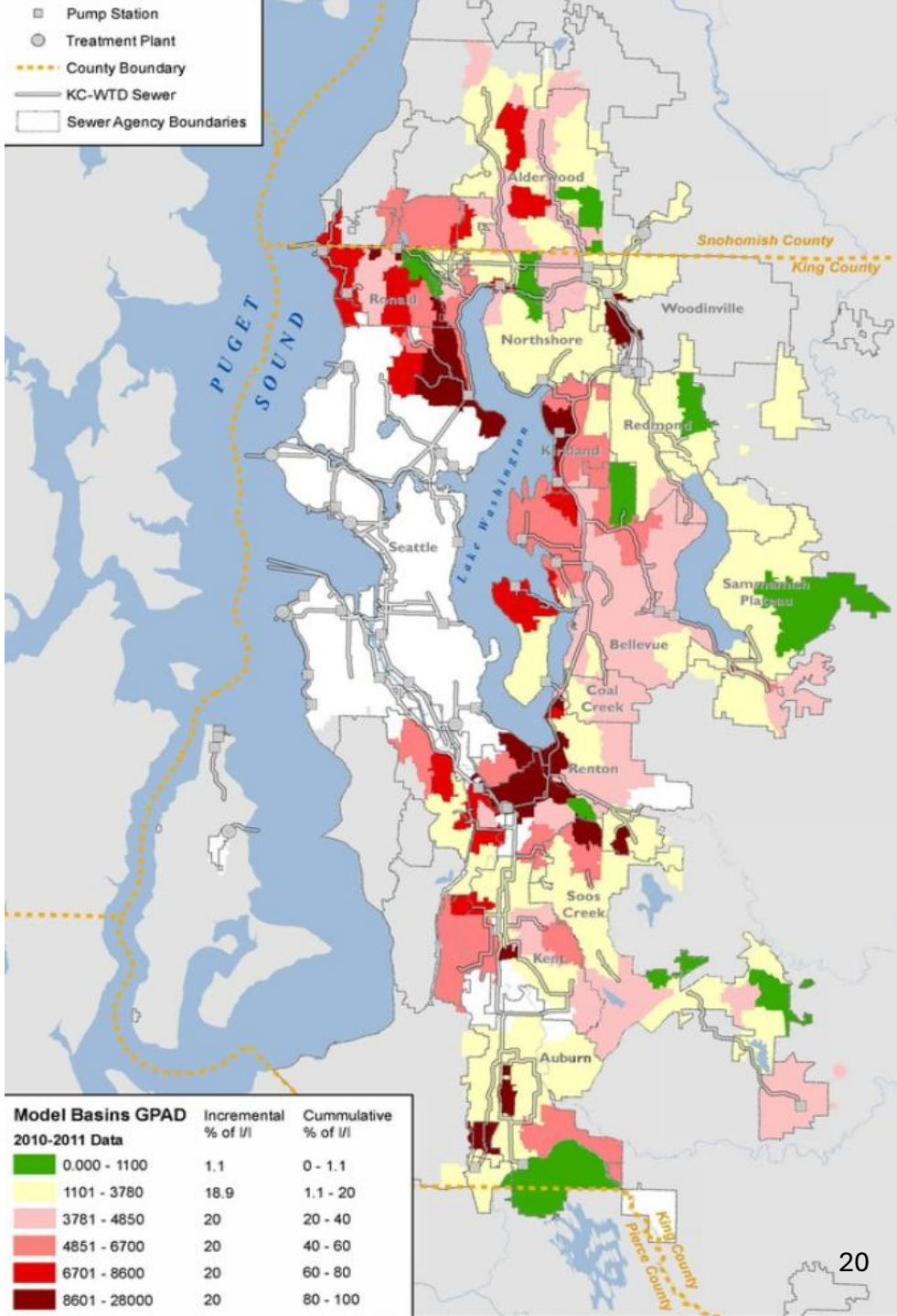
Infiltration

Inflow



1b. Infiltration and Inflow (I/I) in the Regional Separated System

- On average during wet weather, as much as three-quarters of peak flow is I/I
- About one-quarter of the annual separated wastewater system flow is I/I
- WTD estimates a majority of I/I originates from side sewer pipes on private property
- I/I contributes heavily to Sanitary Sewer Overflow (SSO) risk during wet weather

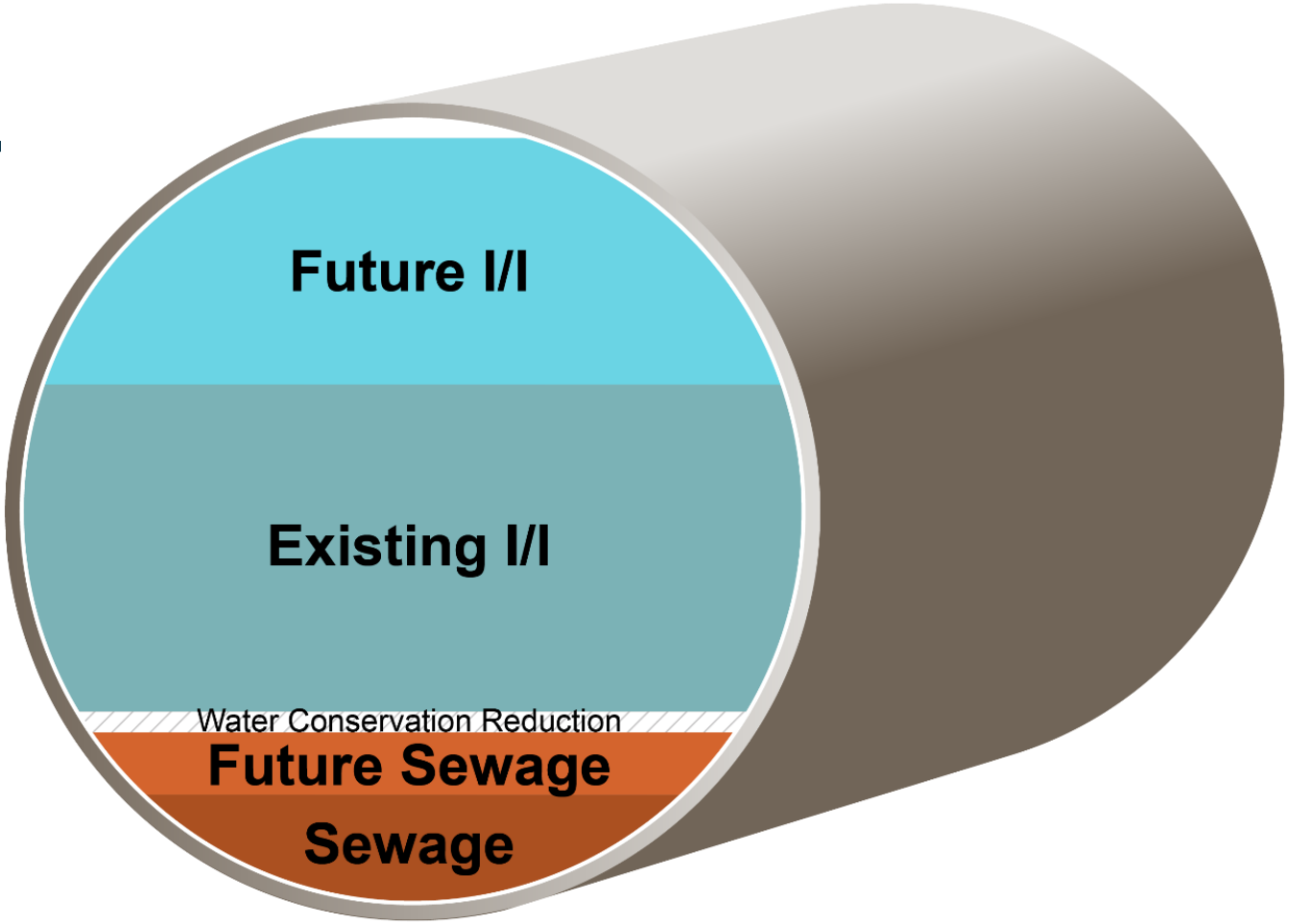


1b. I/I in the Regional Separated System

I/I drives conveyance capacity needs in the regional system

I/I results in approximately $1.7 billion (2016$) in Conveyance System Improvement (CSI) Projects through 2060

I/I results in approximately $16M-$40M per year in conveyance and treatment costs



1b. Current I/I related policies and their interpretation

Relevant Policies in K.C.C.	Description
I/IP – 1	King County shall reduce I/I when cost effective
I/IP – 2	King County shall work cooperatively with component agencies to reduce I/I in local conveyance systems
I/IP – 3	King County shall consider an I/I surcharge, no later than June 30, 2006
CP – 3 (2)	Decennial Flow Monitoring (DFM) to correspond with the Federal Census conducted every 10 years.

Current Implementation:

- WTD evaluates every conveyance project to determine if I/I reduction is cost effective. Based on current methodology, no I/I reduction projects have been found to be cost effective.
- I/I reduction pilot projects were completed in early 2000's.
- Surcharge was not implemented due to cost of administering.
- DFM completed alongside 2020 Federal Census to update flow projections, including I/I.

1b. Current I/I language in Some Sewage Disposal Contracts

- "… the City will undertake continual rehabilitation and replacement of its local sewage facilities for **purposes of preventing, reducing and eliminating the entry of extraneous water** into such facilities and will **expend annually**, averaged over five (5) years, an amount equal to **two (2) cents per inch of diameter per foot of its local sewage facilities**, excluding combined sewers and force mains, for said rehabilitation and replacement." – City of Bellevue contract

- "An additional charge may be made for quantities of storm or ground waters entering those Local Sewerage Facilities which are constructed after January 1, 1961 in excess of the minimum standard established by the general rules and regulations of Metro." – City of Black Diamond contract

- The County has not enforced these provisions since the language is not consistent across all contracts.

1b. System “must-dos”

WAC 173-240-050

The General sewer plan shall include the following information…

- (g) A discussion of any infiltration and inflow problems and a discussion of actions that will alleviate these problems in the future.

1c. Example practices from other jurisdictions/industry

I/I Reduction Option/Action	Examples of agencies using the option/action
Targeted or Comprehensive Rehabilitation or Replacement of Sewer System Components	• Clackamas County (OR) • Northeast Ohio Regional Sewer District (OH) • Hampton Roads Sanitation District (VA) • Miami Dade County (FL)
Private Side Sewer Inspection and/or Certification Programs	• East Bay Municipal Utility District (CA) • Pinellas County (FL)
Peak Flow Limitation Program	• Northeast Ohio Regional Sewer District (OH) • Miami Dade County (FL) • Metropolitan Council Environmental Services (MN-WI)

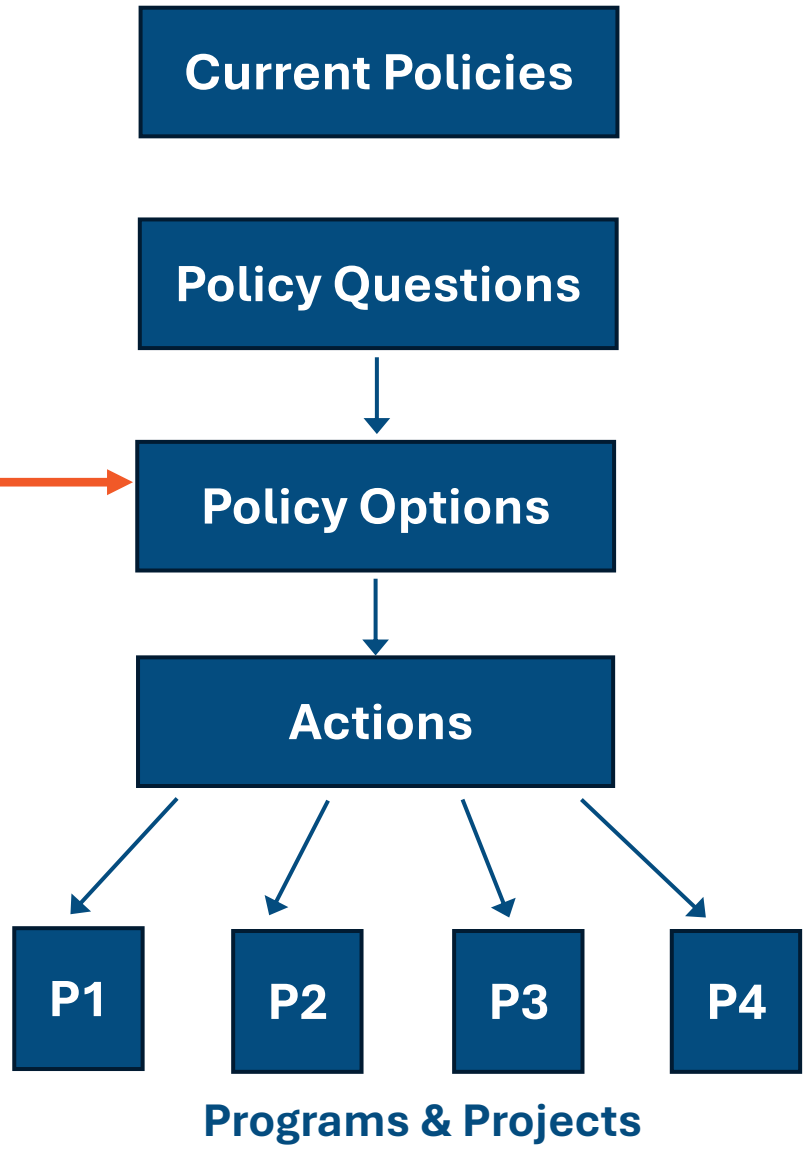
1d. Policy issues, challenges and opportunities

- WTD's authority as a wholesaler is limited (e.g., WTD lacks authority to mandate actions for private property owners)
- There is not a quick fix to removing I/I from the system because sources of I/I are diffuse and spread across the WTD service area. I/I reduction requires multiple approaches that affect private side sewers and public sewer systems.
- The benefits of I/I rehabilitation work are most apparent close to where the work is performed in the local system. Benefits are sometimes more difficult to see downstream in the regional system.
- As a regional provider at the downstream end of the sewer system, WTD accepts and ratepayers pay the costs of all I/I from local agencies and their customers.

1e. Range of **Options**

- Keep current policies
  1. **Reduce I/I only when cost effective**

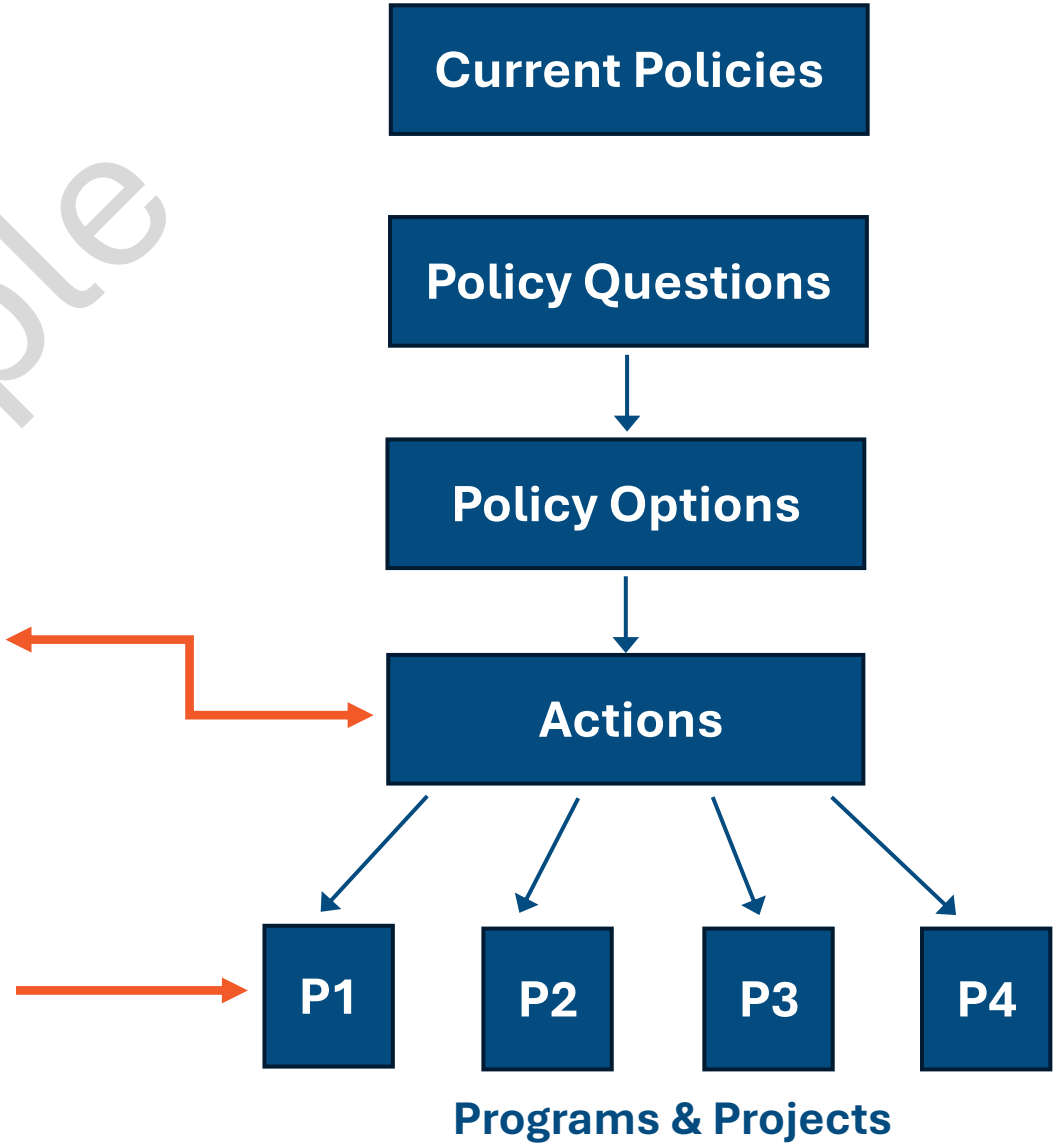
- Amend I/IP-1, I/IP-2, I/IP-3 and/or add new policies
  2. **Reduce I/I system wide**
  3. **Reduce I/I where it is the greatest problem**
  4. **Don't worry about I/I and just build bigger pipes and more treatment plant capacity**
  5. **Other ?**



1e. "**Actions**" for Policy Option #2

Policy Option #2: Reduce I/I system wide

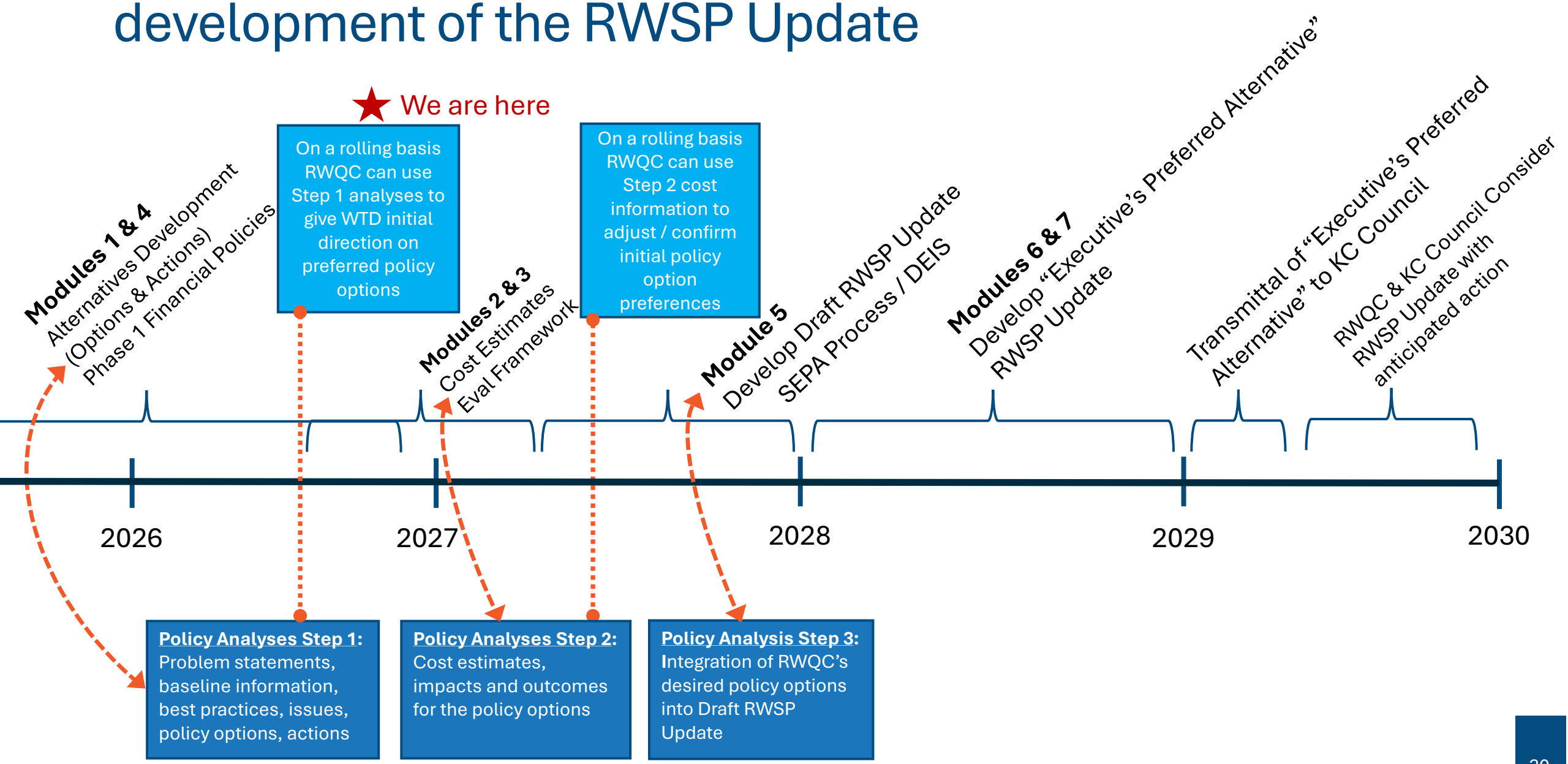
- **Example Actions:**
  - *i.* ***Required*** **service area wide I/I reduction** to eliminate need for capacity upgrades and reduce peak flows conveyed and treated
  - *ii.* *E*xpanded ***permanent regional and temporary local flow monitoring*** to identify sources and quantify levels of I/I
- **Example Programs & Projects**
  - i. Peak Flow Limitation Program



1f. Interested and affected parties WTD will engage to gather input

- Engagement may include the following:
  - RWQC, MWPAAC, RWSP Working Group
  - Tribes
  - Regulators
  - Academia
  - Community Based Organizations (CBOs)
  - Environmental Non-Governmental Organizations (NGOs)
  - General Public
  - WTD Employees

How and When the Policy Analyses will inform development of the RWSP Update



Step 2 Analysis

- Costs of actions for policy options 1 - 4
- Impacts of options 1-4
- Outcomes of options 1-4

Questions for RWQC:

1. What seems to work in the draft framework?

2. Is there anything missing?

3. Given the volume of questions, is PPT format sufficient for the analyses as shown in the example in this presentation?

4. The draft framework proposes two-touches with RWQC for each policy question and analysis. Is this sufficient?

Q & A

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Policy Analysis and the Draft RWSP Update