



## Clean Water Plan Advisory Group

### Meeting #7 Summary

#### Background

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The King County Department of Natural Resources and Parks (DNRP) has convened the Clean Water Plan Advisory Group to:

- Advise King County on the planning process to identify the most effective water quality investments the region can make.
- Advise King County on the ways to best engage and hear from key interests and constituencies throughout the region, including historically underrepresented groups.
- Provide insights and information related to the pressures, issues, and trends impacting constituencies and businesses throughout the region.
- Assist King County in understanding high-level implications, trade-offs, and opportunities associated with the planning process.

The seventh meeting of the Clean Water Plan Advisory Group took place on September 9, 2020 virtually, through a web-based conference call. Meeting #7 objectives were to:

- Learn about the comments provided during the State Environmental Policy Act (SEPA) scoping period and share thoughts on working with the comments towards a water quality investment strategy
- Review a sample of preliminary findings from action development and analysis, including notable systemwide impacts and analytical challenges, and provide feedback on how the findings inform the region on investment outcomes and, ultimately, water quality investment decision making
- Discuss key questions or information needed to frame strategies to inform community interests during the next phase of the planning process

In advance of the meeting, Advisory Group members were provided a briefing document that contained the following:

- An overview of SEPA scoping comments
- A sample of preliminary findings from Action Analysis
- An introduction to the approach to formulate a programmatic strategy

The briefing document also included a set of appendices that provided additional context on these items. This meeting summary provides non-attributed highlights from the presentations and discussions from the September 9, 2020 meeting.

## Land Acknowledgement & Opening Remarks

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Department of Natural Resources and Parks (DNRP) leadership opened the meeting with a welcome and an acknowledgement that, though we met virtually, many participants were calling in while located on the traditional land of Duwamish People and expressed gratitude for all Coast Salish People, past and present, stewards of this land since time immemorial.

Next, DNRP leadership thanked Advisory Group members for dedicating time to attend the September 9th meeting amidst the public health, social crises, and already felt impacts of climate change. DNRP leadership noted that the context within which the group was being convened clearly demonstrated the need for meaningful action to protect our environment and communities, one avenue of which is through the Clean Water Plan.

## Overview of SEPA Scoping Comments

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During this first session of the meeting, the County provided an overview of the number of scoping comments received, the nature of those comments, and the type of individuals and organizations that submitted comments. The County also provided an overview of the engagement strategy and approach for Fall 2020. At the conclusion of this presentation, Advisory Group membership noted their continued desire to see public engagement include not only a discussion of the negative impacts, cost, and constraints associated with the actions that may be included in the Clean Water Plan, but also a desire to see opportunities and positive impacts discussed in public engagement.

## Preliminary Findings from Action Analysis

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During this session, the County provided a reminder of the seven decision areas and approximately thirty-five actions that are being developed and evaluated- to inform a regional discussion about investments in the regional wastewater system and water quality. Next, the County provided initial findings from ten of the actions across four decision areas: Asset Management, Resiliency, and Redundancy; Wastewater Conveyance; Wastewater Treatment; and Wet Weather Management.

In response to this overview, individual Advisory Group members made the following observations.

### **Asset Management, Resiliency, and Redundancy**

- There was interest in seeing more detail on the initial cost findings for the asset management, resiliency, and redundancy actions, as well as the cost estimates for actions under the other decision areas.
- Some of the capital improvement actions may benefit from being paired with integrative planning and decentralized methods. These actions, in tandem, may diffuse the cost burden across more actions and potentially lower funding requirements.
- When analyzing and communicating cost, it may be helpful to include the amount saved by investments and improvements that are done correctly the first time (seek to capture the avoided costs of failures as benefits of making the investments).
- It would be helpful for the County to provide the Advisory Group with a consistent set of evaluation findings or details, including key assumptions, behind the analysis. In the absence of

such detail, the Advisory Group members, and likely the broader regional community, struggle to provide meaningful feedback on the appropriateness and desirability of potential actions.

### Wastewater Conveyance

- An Advisory Group member commented that the County modeling assumptions related to capacity needs are -conservative (i.e., they are designed to accommodate occasional, very high flows and include safety factors to reflect uncertainty in modeling). While this is viewed by Advisory Group members as a prudent risk management approach, and there is support for that approach, there may be an opportunity to alter capacity requirements as a means to lower future capital costs. At the 20-year level of service, the County almost never experiences capacity induced sanitary sewer overflows (SSOs). There may be an opportunity to move to the 5-year level of service, which would lead to lower capital costs, with potentially minimal increase in the risk of SSOs.
  - In response to this observation, the County noted that the existing system is sized for high flows, which occur on limited days a year. The remaining days of the year, it is unused capacity.
- An Advisory Group member commented that, it is important to note that the findings presented in this category examine sanitary sewer overflows SSOs not combined sewer overflows (CSOs). An Advisory Group member also commented that conveyance is not entirely owned and operated by the County and asked if the actions included these local conveyance systems.
  - In response to these observations and question, the County confirmed that the actions profiled in the examples did pertain only to the separated sewer system and do not extend to the city and sewer district collection systems. The County does not intend to construct something that would create a restriction for city and sewer districts. The County also noted that WTD has higher capacity design standard than cities and sewer districts.

### Wastewater Treatment

- An Advisory Group member commented that there may be some public health endpoints that will be helpful in the metrics of this analysis. For example, the County may consider using a disparity mapping tool to track (disaggregated by location): the number of beach closures; the acres of shellfish harvesting bed approved/prohibited; the number of fishing areas with data to inform fish advisories and safety; the number of sewage spills or surfacing sewage cases (an indicator of the risk of direct public exposure to sewage); and other environmental justice considerations including risk and protective factor distribution.
- There is concern that the County is discounting the need to meet water quality standards in Puget Sound. NWIFC has sent a letter to Governor Inslee stating that they expect to see the transition to nutrient removal technology at wastewater treatment plants to meet treaty right obligations.
- When examining contaminants of emerging concern (CECs), the County should take into account that the list of CECs has not been updated at a federal level for quite some time. There are CECs that are not on the County's list, such as pharmaceuticals, that should still be examined and discussed.
- The vocabulary used in the initial findings are complex and may make it difficult to effectively communicate with the general public.
- In examining nitrogen alternatives, the County should consider factors, such as the varying potency of nitrogen species and seasonality of nitrogen.

- The County noted that while the initial findings presented at the meeting did not provide that level of detail, the evaluation has considered nitrogen type and seasonality considerations.
- An Advisory Group member suggested that the County should consider changing the names of the actions to avoid confusion and could consider "Each King County regional facility individually reduces nitrogen" for the action currently listed as "individual permit" and "King County manages nutrient reduction as a whole across regional facilities " instead of "bubble permit." An adjustment now may help in long-term communications.
- The County may want to consider options for achieving a similar level of nitrogen removal for less cost through a focus on investments with a high-level return on investment rather than a limit to wastewater treatment plant nutrients. The County may find helpful the Washington State Department of Ecology [Nitrogen in Puget Sound story map](#).
- In regard to the individually permitted action, the West Point expansion and potential 4th regional treatment could have some CSO control synergies that should be included in the capital and lifecycle cost estimates.

### **Wet Weather Management (Stormwater)**

- In examining wet weather management, the County could use the Environmental Justice Task Force Health Disparities Map to inform equity work overlay.
- There is an interaction between the stormwater actions and the nitrogen reduction actions examined under the Wastewater Treatment decision area. If additional stormwater is added to the system, this would make nutrient load more dilute. It would be helpful to have more information on seasonal removal and removal efficiencies with more dilute inflows.
  - In response to this observation, the County noted that at this stage in the analysis they are treating each action independently though they recognize that there are interactions as noted by membership. The Clean Water Plan team will examine and account for interactions and interdependencies between actions when assembling and evaluating programmatic strategies.
- Today we have received initial findings for two actions under this decision area, but eventually the full range of actions will be evaluated. It would be helpful to see impacts of actions in other areas beyond their decision area. The County could consider building out the findings into a matrix.
  - In response to this observation, the County noted that they intend to explore interactions, and how actions positively and negatively impact each other to better understand how those interrelationships might work and play out over time at the strategy part of the process.
- It is surprising to see that capital costs may be 2 to 5 times more for new infrastructure actions compared to use of existing wastewater infrastructure.
  - In response to this observation, the County noted that the existing system is sized for high flows which occur on limited days a year, the rest of the time it is unused capacity. Infrastructure investments are only needed to convey stormwater to the existing system to make use of this available capacity.

## Programmatic Strategy Formulation

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In this session, the County introduced their approach to formulating alternative programmatic strategies. The County provided an overview of the conceptual approach, which will move individual actions into groupings of actions, which will form three to five distinct, comprehensive strategies.

In response to this overview, Advisory Group members made the following observations.

- While there is appreciation for where the County is in terms of analysis, a more complete view would be very helpful. At this phase there are a number of gaps that need to be filled to understand benefits, tradeoffs, cost-benefit analysis, and gaps.
- The conceptual flow diagram showing the steps involved in moving from individual actions to consolidated program strategies demonstrated that there is the ability to pull more than one action from each decision area into a strategy alternative. There was support for this approach.
- The County should be clear about what data is leading to decisions, and there is a need for the Advisory Group to better understand the full analysis, including how the regulatory and legal drivers are influencing the process and their relationship to individual actions.
- The County should look to present information on the synergies among actions within a particular strategy and how those synergies impact cost and local communities.
- In this context, the County should be looking simultaneously at nitrogen removal along with upgrades/replacements that will improve the reliability of, in particular, the West Point treatment plant.
- The County should examine cost impacts over a number of different timeframes and avoid only examining low cost in the short term. Often, low cost in the short term can be seen as a valid driver while long term cost may be a more important consideration.
- The information provided to the Advisory Group led membership to even more questions and the group needs more time to process the information.
- The Advisory Group would like more detailed information on the methodologies (e.g., flow rates), cost estimates, and assumptions, such as population growth.
- The County should proceed with a mindset that, while wastewater currently may be thought of as “waste,” in the future it may be seen as a valuable resource.
- The County should communicate with the community about the Clean Water Plan with transparency and honesty. Given that this is going to cost quite a bit of money, people should have a clear picture of the cost, but also of the benefits that will be achieved through these investments.
- There is a need to have a values system not just based on the monetary value, but rather an approach that considered the value of resources in and out (e.g., energy, water, land, air) and the use of those resources.
- The County should look for a cross-jurisdictional approach and seek to meet with cities, counties, and the state with at least the same frequency as the County is meeting with the Advisory Group. The County is often in a visible, leadership position in the region, and this can place pressure on the County to perform exceptionally and be innovative. It should be noted, however, that other jurisdictions in the region are innovative, and this sets up the opportunity for learning from each other.

- The County should look to solutions that can work in tandem with more conventional approaches, such as biological processes, distribution of potable water, and water reuse for industrial processes, to reduce reliance on current potable water supplies.

## Closing Comments

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At the end of the meeting, DNRP leadership noted their appreciation for the work the Clean Water Plan team has done throughout the process and the preparation of advanced materials for the Advisory Group. The County noted that at this phase, outcomes and information is beginning to emerge leading to a robust discussion. Advisory Group members are experiencing first-hand the challenges the region faces related to the constraints and limitations as the region pursues improved water quality, and this conversation is happening in the midst of a pandemic, a racial reckoning, and an extraordinary economic time. Additionally, we are facing the impacts of climate change and the fires in California, Oregon, and Washington. We are at an extraordinary time that warrants that we look under every rock and pursue every option to identify a program of investments that will make this region a better place for everyone that lives, works, and recreates here.

## Post Meeting Follow-up

King County sent a follow-up email immediately after the meeting regarding a recent nitrogen removal study that was completed and posted online. The draft Nitrogen Removal Study report is an evaluation of nitrogen removal options and cost estimates for different levels of nitrogen removal for our existing treatment plants at their current capacities. This report was prepared so that King County could begin to understand what implementing nitrogen removal at the regional treatment plants would look like as the state prepares to implement new regulations. Here is a link to the report, "[King County Nitrogen Removal Study - Final Draft](#)."<sup>1</sup> The Clean Water Plan wastewater treatment actions incorporate and build on the information from the Nitrogen Removal Study.

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<sup>1</sup> Report viewing is best supported in Google Chrome web browser. If you have issues accessing, try saving the file to your desktop, or go to the King County Website support page for troubleshooting.

## Attendees

### Advisory Group

NAME	Title	Organization	Attendance 9/10
Monty Anderson	Building Trades Board Member	King County Labor Council/Building Trades	Present
Josh Brown	Executive Director	Puget Sound Regional Council	Present
Caia Caldwell	External Relations Manager	Master Builders Association of King and Snohomish Counties	Present
Adrian Dominguez	Scientific Director	Urban Indian Health Institute	Absent
Jessie Israel	Puget Sound Director	The Nature Conservancy	Present
Jay Manning	Board Chair; Vice Board Chair	Puget Sound Partnership	Absent
Ben Marre	Drainage & Wastewater Planning and Program Management Division Director	Seattle Public Utilities	Present
John McClellan	Engineering and Development Director	Alderwood Water and Wastewater	Present
Rachel McCrea	NW Section Manager	Department of Ecology	Present
Bud Nicola	Affiliate Professor	University of Washington	Present
Bridget Ray	Director of Strategic Partnerships	Na'ah Illahee Fund	Present
Mindy Roberts	Puget Sound Program Director	Washington Environmental Council	Present
Heather Sheffer	Environmental Strategy	Boeing	Present
Randy Shuman	Affiliate Associate Professor	Oceanography, University of Washington	Present
Anne Udalo	Board Member	League of Women Voters	Present
Ken Workman	Former Council Member	Duwamish Tribe	Present

### King County and Clean Water Plan Staff

NAME	TITLE
Christie True	DNRP Director
Josh Baldi	Water and Land Resources Division Director
Sonia-Lynn Abenojar	Clean Water Plan Regional Engagement Project Manager
Steve Tolzman	Clean Water Plan Program Manager and Planning Project Manager
Tiffany Knapp	Clean Water Plan Planning Project Manager and Alternate Program Manager
Susan Kaufman-Una	WTD Project Resources Unit Manager
Abby Hook	Environmental Affairs Officer
Joe Hovenkotter	Tribal Government Relations Officer
Ian McKelvey	Brown and Caldwell – Clean Water Plan Consultant

<b>Natalie Graves</b>	<b>Stepherson &amp; Associates – Clean Water Plan Consultant</b>
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## **Facilitators – Ross Strategic**

<b>NAME</b>	<b>TITLE</b>
<b>Rob Greenwood</b>	<b>Principal</b>
<b>Sarah Shadid</b>	<b>Senior Associate</b>