Work Session: Briefing Document

Introduction

This briefing document provides Regional Water Quality Committee (RWQC) members with the background information needed to engage in discussions at the November 6 Clean Water Plan Work Session. The purpose for the meeting is to:

- Provide status report on process to develop the Clean Water Plan.
- Report out on regional engagement activities.
- Introduce and discuss preliminary Clean Water Plan Decision Areas.

Agenda Item I. Update on the Planning Process

As a reminder, King County is convening this discussion because it is facing critical decisions that will shape the scope and focus of regional water quality investments for decades to come. The Clean Water Plan represents a community investment that is a major opportunity to contribute to the economic, social, and ecological health of the region.

After reflecting on progress one year into Clean Water Plan development, King County has decided to accelerate the planning process with a goal of presenting the plan to the King County Council at the end of 2021, rather than the previous schedule of 2022.

The County has made this decision to be responsive to the growing need to make tough decisions on water quality, aging infrastructure, and increasing pressures of current and proposed regulatory requirements. King County is confident the shift in the planning process will not impact the quality of the process or the plan. The objective and desired outcomes of the planning process remain the same and the fundamental question the planning process will address is:

What is the most appropriate path to ensure we direct the right public investments to the right actions at the right time for the best water quality outcomes?

An overview of the planning process is on the following page. The overview shows the intended process and timeline to develop the plan so that critical decisions can be made.

Planning Process Overview



Agenda Item II. Report Out on 2019 Regional Engagment Activities

In Spring 2019, the County began a regional, multi-stakeholder, community-based, intensive public outreach and engagement effort. This effort aimed to break down barriers to involvement and collect input from all kinds of people — including long-time participants in water quality discussions and new interested and impacted parties. Through all the outreach activities, people told the County their priorities for planning our region's clean water future. A summary list of the community and King County priorities we heard, separated into values (what people care about), frequently-cited problems, and suggested solutions is below.

Protect and restore our rivers, lakes, and Puget Sound

Values:

- Water serves a key role for cultural, spiritual, recreational, ecological, and commercial needs
- Protect water for future generations and make it accessible to all

Frequently-cited problems:

- Stormwater is a major pathway for contaminants to enter waterways
- Point-source pollution (pollution coming from a discrete source such as a pipe) needs to be reduced
- Address legacy contamination, like in the Duwamish River

Suggested Solutions:

- It is important for the Clean Water Plan to address both stormwater and wastewater
- Increase stormwater management, in place of or in addition to reducing other sources of pollution
- Prevent pollution from being produced in the first place
- Consider advanced treatment for potential water quality improvement opportunities, such as reverse osmosis or other processes that take more pollution out of the water
- Explore the role of agricultural runoff management to help reduce the amount of pollution that travels from farms to waterways

Prepare for and prevent climate change

Values:

- The County needs to invest in actions to prepare for and prevent climate change **Frequently-cited problems**:
 - Climate change will add pressure to ecosystems as habitats change, and there will be uncertainty in predicting outcomes due to future changes
 - Sea-level rise could impact existing pipes and treatment facilities
 - Wetter winters mean more water enters the sewer system
 - Drier summers mean more water will be needed for irrigation
 - Infrastructure needs to be updated to be able to adapt to climate change

Suggested solutions:

- The Clean Water Plan should be adaptable to the changing context of climate change
- Recover resources from wastewater, like biosolids, energy, and recycled water
- Encourage water conservation

Avoid sewer system failures

Values:

- Sewer system failures impact people's ability to enjoy local bodies of water, which are important for our quality of life
- King County is responsible for managing the regional sewer system to protect public health and the environment

Frequently-cited problems:

- System failures and sewage spills from treatment plants and pipes have happened
- Aging infrastructure creates a risk of more frequent failures

Suggested solutions:

- Prioritize repair and upgrades for the aging sewer system to prevent sewage spills from treatment plants and pipes
- Prioritize resilience to system failures as a key component in supporting the needs of the growing region

Protect public health

Values:

- Community members want to be able to swim and fish without the risk of getting sick
- Due to the spiritual nature of water, the region's waters should continue to be a source of healing and should contribute to positive health outcomes
- Being near water in people's daily lives contributes to their mental health and overall wellbeing

Frequently-cited problems:

- Polluted water can make people sick and contaminate fish and shellfish that people eat
- Stormwater is a major pathway for many contaminants to enter waterways

Suggested solutions:

- Prevent fish and shellfish contamination, and reduce peoples' exposure to bacteria and contaminants
- Keep beaches open and accessible for recreation and other purposes
- Pursue new technologies and pollution control upgrades

Support healthy habitats for fish and wildlife

Values:

• A healthy ecosystem should include special consideration for protecting and enhancing critical habitat

- The health of threatened species like orcas and salmon are strong indicators of the health of other species in our water bodies
- Addressing water quality is part of a larger picture of the interconnected land, trees, and humans in the region

- Orca and salmon face an even greater threat of extinction due to food and habitat challenges
- These species are also exposed to bacteria and contaminants of emerging concern
- Climate change will add further pressure and uncertainty to ecosystems

Suggested solutions:

- Protection for habitat and species will involve moving beyond a simple focus on water quality improvements
- Protect and enhance critical areas around Puget Sound and waterways, such as the Cedar River

Keep rates affordable in the context of the growing region

Values:

- The Clean Water Plan should consider how much people living in this region and the community overall will be able to afford to pay, in the context of other regional investment needs
- Focus on affordability of wastewater services across populations

Frequently-cited problems:

- The cost of living in King County continues to rise
- Residents who are unable to afford utility bills, in combination with other expenses, continue to be displaced outside of their homes and neighborhoods
- Investments will be funded in the context of a region with growing income disparity and an increasing cost of living
- There is growth in low- and high-income populations and a shrinking middle-income population

Suggested solutions:

- Sewer rates should be set with consideration for how much individuals and families can afford, and options should address the needs of lower-income populations
- Costs might be shared across departments and agencies
- The private sector could be a potential source for financial partnership

Ensure benefits and impacts are experienced equitably

Values:

- We must address historical inequities related to water quality programs, policies, and projects
- The voices of people of color and other underrepresented communities should be valued in water quality decisions

- Due to historical and systemic inequities, people of color, native people, low income people, people with disabilities, refugees, and immigrant communities do not experience the same quality of life as other residents, including exposure to pollution
- Without specific attention and focused efforts, communities will continue to suffer disproportionately from the impacts of environmental pollution and climate change

Suggested solutions:

- Honor and incorporate the relationship between native people and Puget Sound, rivers, and lakes
- Respect Tribal treaty rights, safeguard access to traditional and cultural food sources, and ensure American Indian and Alaskan Native community's ability to subsistence hunt and fish
- Incorporate equity and social justice goals and address historical discrepancies in costs and benefits associated with pollution
- Focus plan improvements in areas where damages have been the greatest

Communicate with the public about the plan

Values:

- It's important to invest in community engagement. The goal of this engagement should be to help people understand the Clean Water Plan so they can provide feedback and create a stronger Clean Water Plan
- Be transparent and help people participate in the Clean Water Plan process

Frequently-cited problems:

Past efforts have led to underrepresentation in public processes that did not reach certain populations

Suggested solutions:

- Do early outreach to historically underrepresented communities
- Do meaningful outreach to youth and consider the impacts of water quality decisions on younger generations
- Target communications to the full range of multicultural communities (such as immigrant populations) and generations in the region, and understand how priorities may differ across those communities
- Engage with young leaders who may have a different perspective on sustainability and the right investments for water quality
- Review and replicate effective youth engagement efforts
- Provide the community with tools for conserving water and preventing pollution, such as rain gardens

Maintain an effective wastewater treatment workforce

Values:

• Community members, especially WTD staff, are invested in successful future conditions of the wastewater treatment workforce in the region

- The agency faces increasing challenges in employee retention, increasing staff retirement, and succession planning
- Housing affordability in the region impacts wastewater treatment staff, as they may be unable to afford to live in the areas where they work

Suggested solutions:

- Pursue workplace equity and diversification
- Transfer knowledge via apprentice programs

Increase collaboration between agencies and departments

Values:

- The Clean Water Plan should be a coordinated and collaborative effort
- A full range of partnerships and interagency/interjurisdictional collaboration is available and should be leveraged to address the region's complex water quality and ecosystem challenges

Frequently-cited problems:

- There is a risk that the Clean Water Plan would duplicate or be out of sync with existing efforts
- A mix of pollution sources and individual and institutional behaviors impact regional water quality and ecosystem health
- Incidents cannot be fully addressed without an integrated approach

Suggested solutions:

- Coordinate efforts across King County departments such as transportation, land use, and housing
- Consider the private sector as a potential partner for financing projects and implementing sustainable business practices related to water quality
- Integrate water quality considerations into the regulatory and permitting processes for land use development to address impacts of future growth
- Use an interagency approach to manage legacy contamination and improve efficiency
- Look for opportunities to collaborate on green infrastructure, affordable housing, and improving natural and built environments; and explore the use of ecosystem services, certifications (e.g., Salmon Safe Certification), and incentives

Prioritize the best water quality outcomes for our investments

Values:

- Obtain the best overall water quality and ecosystem health for our Clean Water Plan investments
- Provide good stewardship of public dollars

• Water quality investments can be costly and can vary substantially in their contribution to water quality improvements

Suggested solutions:

- Set priorities based on the most effective solutions for water quality
- Emphasize policies, programs, and projects that provide multiple benefits to the Puget Sound region
- Consider sharing costs across departments and agencies
- Invest in resource recovery (biosolids, energy, and recycled water) and water conservation
- Prevent pollution at the source instead of treating water (both stormwater and wastewater) after it is polluted
- Study the cost and impact of different pollution removal efforts to determine the most effective investment of the public's money – for example, a study could explore the comparative cost and impact of meeting combined sewer overflow (CSO) control regulations and stormwater runoff pollution reduction
- Collect robust, meaningful data to better understand how to move forward and accurately measure water quality success

Agenda Item III. Discussion of Preliminary Decision Areas

Over the summer, the planning team identified regional trends, specifically trends that impact regional water quality, water resource or ecosystem management efforts, or King County Wastewater Treatment Division (WTD) operations. The trends were presented to the RWQC at the work session on June 6, 2019. These trends inform the types of decisions that will need to be made through the Clean Water Plan process. At this phase of the process, the planning team has identified eight preliminary decision areas. The decision areas and questions that the Clean Water Plan intends to address are below.

- Treatment Plants: What treatment plant investments should be made?
- **Pollution Source Control/Product Stewardship:** Are there more efficient or effective methods than wastewater treatment to address pollutants of concern?
- Stormwater and Combined Sewer Overflows (CSOs): What approach should be taken to address stormwater and combined sewer overflows in King County's system?
- Wastewater Conveyance System: What are the best investments in collection systems to ensure sufficient capacity?
- Asset Management, Resiliency, and Redundancy: What investments should be made to care for an aging regional wastewater system and protect investments that have been made?
- Legacy Pollution: What are the opportunities to address legacy pollution?
- **Resource Recovery:** What level of investment should King County make in recovering resources from wastewater?
- Finance: How will regional water quality investments be financed?

The project team will be developing a range of water quality investments for evaluation in all the above decision areas over the next several months. To gather input from RWQC, a decision area question and some example investments that could be made related to three example decision areas are provided below. These are examples of the types of decisions that will shape King County's future investment strategies. These decisions and the evaluation of them are complex.

Please consider the following questions as more detail on three of the preliminary decision areas and example water quality investments are presented and discussed.

- What input do you have these decision areas?
- What other water quality investments should be considered within these decision areas?
- What type of information or results from evaluation of the water quality investments would be most helpful to you as a decision maker? In addition to this overall question, more detailed questions on evaluation include:
 - Evaluations of these potential investments are complex. Complexities includes things such as the cost of wastewater treatment (Appendix A) and consideration of the many pollution pathways (Appendix B). What do RWQC members see as the critical information or key variables to include the in evaluation?
 - Existing or new methods will be used to evaluate potential water quality investments. Examples are the Water Quality Benefits Evaluation (Appendix C) and Equity Impact Review (Appendix D). Evaluation of water quality investments will span a variety of topics including water quality, other environmental impacts (e.g., climate), equity, and financial. What other evaluation topics are of interest to RWQC?

• The project team plans to qualitatively assess water quality investments using community priorities. This qualitative assessment will be based on technical evaluations. How should community priorities be reflected in the evaluation of water quality investments?

Decision: Treatment Plants - What treatment plant investments should be made?

Some examples of treatment plant investments that could be developed and evaluated are:

- Example 1: Individual treatment plant nitrogen reduction target. Upgrade of all WTD secondary treatment plants or construction of new treatment plant(s) to include nitrogen removal through a phased approach from 2030-2060.
- Example 2: Upgrade one or more WTD secondary treatment plants or construct new treatment plant(s) to advanced treatment (e.g., reverse osmosis) in the 2040s-2050s to address specific toxics or contaminants of emerging concern.
- Example 3: Expand WTD treatment plant capacity to accommodate population growth while maintaining the existing levels of treatment.

Decision: Pollution Source Control/Product Stewardship - Are there more efficient or effective methods than wastewater treatment to address pollutants of concern?

Some examples of pollution source control/product stewardship investments that could be developed and evaluated are:

- Example 1: Expand/augment exiting activities to provide or influence incentives for product stewardship. For example, ensure proper disposal of products that contain toxic chemicals, like PFAS-containing products.
- Example 2: Expand/augment existing source control programs or activities beyond current regulation to influence the development of new regulations and regulatory actions for product stewardship. Potential new regulations could include bans on phthalates, PFAS chemicals, and the hazardous class of flame retardants. Implementation could be immediate (e.g., Hawaii ban of sunscreen containing the coral-harming chemicals oxybenzone and octinoxate) or phased (e.g., copper free break pad initiative is a MOU between EPA and Automotive Industry).

Decision: Asset Management, Resiliency, and Redundancy - What investments should be made to care for an aging regional wastewater system and protect the investments that have been made?

Some examples of asset management, resiliency, and redundancy investments that could be developed and evaluated are:

- Example 1: Accept lowest level of system failure risk and improve asset management program to the highest industry standard. For example, "excellent" International Organization for Standards (ISO) 55000 maturity level.
- Example 2: Accept a level of system failure risk and maintain asset management program at a moderate industry standard. For example, "competent" ISO 55000 maturity level.
- Example 3: Implement an aggressive earthquake resiliency program funding project to reinforce the regional wastewater system and mitigate the potential for earthquake damage.
- Example 4: Facilities in the regional wastewater system are brought up to current earthquake building codes as they are replaced at the end of useful life. Prepare a regional wastewater system post-earthquake reconstruction plan to proactively prepare and enable a speedy recovery.

Agenda Item IV: Existing Conditions Report

King County is developing an existing conditions report to support the Clean Water Plan. The report will present the need for the Clean Water Plan and describe relevant conditions in the region. A draft outline for the report is included as Appendix E. Please share any recommendations on other items to add to the outline or any specific existing condition areas you would like more information on to engage in discussions at RWQC Work Sessions in the future.

Appendices Included in This Brief

The following appendices include relevant additional information to support this RWQC Work Session:

- Appendix A: Cost of Wastewater Treatment in Comparison to Pollutant Removal
- Appendix B: Stormwater Runoff Estimates in King County
- Appendix C: King County's Water Quality Benefits Evaluation
- Appendix D: King County's Equity Impact Review Process
- Appendix E: Existing Conditions Report Outline

Appendix A: Cost of Wastewater Treatment in Comparision to Polluatant Removal

Using wastewater treatment to remove nutrients or trace chemicals will require more complex technologies. National research by the Water Environment Research Foundation and preliminary evaluations by King County indicate constructing and operating these more complex technologies typically has higher costs, consumes more energy, and requires more space. The general consensus among industry professionals is that the unit cost of treatment increases exponentially as the last bit of pollutants are removed. Greater energy consumption is also associated with more complex wastewater treatment technologies and contributes to greenhouse gas emissions.



Figure 1 Demonstrates the law of diminishing marginal return: the cost of removing each additional unit of pollutant rises exponentially

Appendix B: Stormwater Runoff in King County

Figure 2 Flow chart illustrating the simplified universe of rainfall and runoff in King County. Note that runoff from natural land cover and rainfall that directly infiltrates to groundwater is not quantified at this time.



* existing conditions, estimates are annual volumes, on average

Appendix C: King County's Water Quality Benefits Evaluation

King County's Water Quality Benefits Evaluation

Identifying how we can make the biggest impact on our region's water quality



King County is developing tools to help determine the most effective ways to leverage our efforts

King County is committed to investing billions of dollars in water quality improvements in the next decade,

but how do we strategically prioritize our actions? Specifically, how can we determine the relative benefit of actions that reduce one pollutant over another? And what combination of actions could we expect to be most effective?

To help answer these questions, we need to start by identifying why we want to improve water quality.

We improve water quality TO PROTECT:



The health of humans interacting with the water, through swimming or eating fish and shellfish.



The health of aquatic animals, especially endangered or threatened species such as Chinook salmon and Southern Resident orcas.

Identifying benefits and tradeoffs

The tools developed under this project will provide decision-makers with information about which water quality projects and programs could be most effective in reducing threats to people and aquatic animals.

For example, the table below illustrates how actions can affect water quality differently. Actions could be more effective at reducing one pollutant over another and have different impacts on human and animal health. For example: Option B is most effective at reducing pollutant B and threats to safe fish consumption.

POTENTIAL PROJECTS AND PROGRAMS	LOAD REDUCTIONS			THREAT REDUCTIONS				
	Pollutant A	Pollutant B	Pollutant C	Edible fish	Swimming	Shellfish harvesting	Chinook salmon	Orca
Option A		0	0	0	•	•	0	0
Option B	0	•	0	•	0	0	•	Θ
Option C	Θ	0	•	•	0	•	•	-
SYMBOLS: High reduction Medium reduction Low reduction 								
Continued)						11		

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King County's Water Quality Benefits Evaluation

Steps for developing and using the tools:

 Using the latest science and expert input, determine the biggest threats to what we are working to protect.



2 Identify the sources and pathways of these threats and estimate pollutant loads across the landscape.



Oetermine what preventative and corrective actions can be taken to reduce these threats and estimate their effectiveness and cost per unit.



Use the tools to determine the most cost-effective combination of actions across the watershed that provide the greatest reductions in the pollutants causing the biggest threat to what we're working to protect.



King County Department of Natural Resources and Parks Wastewater Treatment Division Water and Land Resources Division



Project Timeline



Method Development Q3 2019 - Q4 2019

Refine project plan and methods to develop effective tools.

Tool Development

Q4 2019 - Q3 2020

Build the tools and get feedback from experts.

Evaluation/Reporting

Q4 2020 - Q2 2021

Use the tools to determine which types of projects and programs are most effective at protecting the health of humans and animals interacting with water.

King County will use the outputs from these tools to identify projects and programs with the greatest water quality benefits.

For more information, please contact: Carly Greyell Project Manager 206-477-4703 carly.greyell@kingcounty.gov

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Appendix D: King County Equity Impact Review

2015 Equity Impact Review Process Overview

Updated March 2016

The Equity Impact Review (EIR) process merges empirical (quantitative) data and community engagement findings (qualitative) to inform planning, decision-making and implementation of actions which affect equity in King County.

When conducting this review process, please a) consider organizational and cultural diversity, b) include members who regularly engage with communities or connect with key affected parties/stakeholders, c) involve managers and leadership, and d) engage subject-matter and feasibility experts.

Purpose: Ensure that equity impacts are rigorously and holistically considered and advanced in the design and implementation of the proposed action (plan/policy/program development, operations modification, capital programs/projects, etc.)

How and When to Use the EIR Process: It is expected that the Equity Impact Review is embedded within the development and implementation processes of the proposed action.

As a team, use the <u>equity tools</u> – Equity Impact Review process, Community Engagement and Language Access guides, and available data resources – to complete the EIR worksheets and understand how - and to what extent - your proposal impacts equity. The checklist on Page 2 will indicate successful completion of the EIR process.

REMEMBER: For each stage of the EIR process, consider how these frameworks of equity are being impacted.

Distributional equity—Fair and just distribution of benefits and burdens to all affected parties and communities across the community and organizational landscape.

Process equity—Inclusive, open and fair access by all stakeholders to decision processes that impact community and operational outcomes. Process equity relies on all affected parties having access to and meaningful experience with civic and employee engagement, public participation, and jurisdictional listening.

Cross-generational equity—Effects of current actions on the fair and just distribution of benefits and burdens to future generations of communities and employees. Examples include income and wealth, health outcomes, white privilege, resource depletion, climate change and pollution, real estate redlining practices, and species extinction.



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Updated March 2016

Phase 1: Scope. Identify who will be affected.

- □ Identify how your action will affect/serve <u>people and places</u> using <u>demographic information</u>. Consider in particular low income populations, communities of color, and limited-English speaking residents.
 - Reach: which people and places will be affected by your action?
 - Intensity: what effects, impacts and/or outcomes will your action have on people and places?
 - Duration: how long will the action have an effect-short-, medium-, and/or long-term?
- □ Identify the group of stakeholders and affected parties including those who have historically *not* been/felt included or engaged and their roles in decision-making.

Phase 2: Assess equity and community context.

- □ Learn about affected communities', employees', and/or stakeholders' priorities and concerns. (Use the <u>Community Engagement Guide</u> to help with this.)
- Know which determinants of equity will be affected by your intended outcomes both directly and indirectly. (Reference the <u>Determinants of Equity report</u>.)
- □ Know how your proposed course of action will affect known disparities within relevant determinants. (Use quantitative data and/or gather new information.)
- □ Identify potential unintended equity-related outcomes of this action.

Phase 3: Analysis and decision process.

- □ Project or map out how key alternatives will affect community and employee priorities and concerns.
- Evaluate each alternative for who will be disproportionately burdened or benefit now and in the future. How will alternative actions differ in improving or worsening current equity conditions?
- Include upstream alternatives (and related costs) that target root causes to eliminate disproportionate impact.
- Prioritize alternatives by equitable outcomes and reconcile with functional and fiscal policy drivers.

Phase 4: Implement. Are you staying connected with communities and employees?

- Based on earlier use of Community Engagement Guide, communicate with communities, stakeholders and employees about how you will implement your action.
- Engage with affected communities and employees to guide successful implementation.
- Advance "pro-equity" opportunities when possible, i.e. <u>contracting</u>, hiring and promotion, materials sourcing, etc.
- Measure and evaluate your intended outcomes in collaboration with affected communities. Are there sufficient monitoring and accountability systems to identify unintended consequences? How will course corrections be handled if unintended consequences are identified?

Phase 5: Ongoing Learning. Listen, adjust, and co-learn with communities and employees.

- Evaluate whether your action appropriately responds to community priorities and concerns.
- Learn with the community to adjust your action as their priorities and concerns shift.
- Communicate progress to all stakeholders. Plan to include community feedback into future planning.

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Appendix E: Clean Water Plan Existing Conditions – Draft Report Outline

Background and Need for the Clean Water Plan

- 1) Issues facing the region
 - a) Population growth
 - b) Aging infrastructure
 - c) Regulatory landscape
 - d) Climate change

Planning Area

- 1) King County wastewater treatment service area and receiving waters
- 2) Environmental setting
 - a) Geography, geology, and climate
 - b) Habitat and ecosystem
 - c) Recreational, commercial, and industrial uses
 - d) Community Values

King County Existing Conditions

- Historical context
- Regulatory history
- Treatment plant history
- Conveyance system history
- Wastewater collection
- Sewersheds
- Collection system
- Combined sewer system
- Sanitary sewer system
- Pump stations
- I/I management
- Already planned improvements
- 3) Wastewater treatment
 - a) Wastewater treatment plants
 - b) Wastewater flows and loads
 - c) Wastewater technology
 - d) Already planned improvements
- 4) Wet weather management
- 5) Water quality
 - Existing water quality
 - Urban Streams
 - Lake Washington
 - Duwamish Estuary

- e) Ecosystem health
- f) Social and environmental justice
- 2) Purpose of the Clean Water Plan
- Purpose of the Existing Conditions Report
- 3) Population and demographics
- 4) Land use
- 5) Economic conditions
 - a) Historical growth
 - b) Major industries/employers
 - c) Income disparity
- 6) Governance
 - Elliott Bay
 - Lake Union/Ship Canal
 - Central Basin Puget Sound
 - Legacy pollution (map of impacted areas)
 - Source control
 - Industrial wastewater source control
 - Hazardous waste program (e.g., pharmaceuticals)
 - Stormwater source control
 - Education programs
 - Product stewardship (e.g., flushable wipes)
 - Discharge requirements
 - Already planned improvements
 - Related planning questions (sidebar to section)
 - Asset Management, resiliency, and redundancy
 - a) Aging infrastructure
 - b) Asset management program
 - c) Data management
 - d) Risk management

- 7) Asset Management, resiliency, and redundancy
- 8) Operations and staffing
- 9) Resource recovery
 - a) Biosolids
 - b) Energy
 - c) Recycled Water
 - d) Already planned improvements
 - e) Related planning questions
- 10) Financial planning
- 11) Financial Management Overview
 - a) Current Capital Improvement Plan and Operational (O&M) Costs
 - b) Existing rate structure
 - c) Historical revenues and investment distribution
 - d) Current revenues and capital spending
 - e) Utility rate affordability