

IMPLEMENTING THE PLAN

King County is expected to begin implementing the *Executive's Preferred Plan* in the year 1999. As a precursor to constructing proposed capital projects, implementation will involve a mixture of activities including planning, public involvement, evaluating possible environmental impacts, siting and acquiring property for a new treatment plant, undertaking additional studies, and permitting, as shown in Figure 7.

In the first few years of implementation, King County plans to conduct a public process to find possible sites for the new North Treatment Plant, select and purchase a site, and conduct studies to determine where to locate the outfall pipe for discharge into Puget Sound. These activities are necessary preliminaries to designing, permitting, and constructing the plant by 2010. The first few years will also include construction of minor conveyance improvements not specifically discussed in this plan.

This plan identifies a number of major capital facilities that are needed to meet regulations and accommodate future population growth, including

new and upgraded treatment plants, outfalls, conveyance pipes, storage tanks, pump stations, and combined sewer overflow control projects. The schedule for completing the specific capital projects is shown in Figure 8.

In February 1998, the National Marine Fisheries Service proposed listing the Puget Sound Chinook salmon as a threatened species under the Endangered Species Act (ESA). King County is working in cooperation with Pierce and Snohomish Counties and local governments to develop a response to the listing that will allow the area to thrive economically while enhancing and improving salmon habitat. The *Executive's Preferred Plan* provides the flexibility to modify our facilities and programs to address changing conditions. As the ESA response is developed, King County will coordinate with federal, state, and local agencies including the National Marine Fisheries Service, tribal governments, and citizens to ensure our wastewater facilities will benefit salmon restoration programs in Puget Sound.

An Adaptable Plan

Because implementing this plan is a long-term process, the County expects conditions to change during implementation. To allow for these changes, we will monitor conditions that could affect the plan and "check in" at key points to ensure that decisions still make sense. For example, we expect to do the following:

- Revisit growth estimates during the design stage of each capital project to ensure that the facilities are sized correctly and built at the right time to accommodate new growth

The County will monitor conditions (e.g., population growth, etc.) that could affect the plan and will make any necessary changes to facilities to reflect any new conditions.

- Track federal, state, and local regulations and change the plan if warranted
- Modify projects if environmental conditions change
 - Participate in developing and implementing plans in response to the proposed listing of Chinook Salmon under the federal Endangered Species Act
 - Consider new wastewater technologies and information from studies that might provide more efficient and cost-effective service to ratepayers

- Solicit and incorporate public opinion throughout the implementation of this plan

Siting New Facilities

This plan calls for expanding existing facilities and siting many new ones, including a new treatment plant and outfall located in the vicinity of the North Service area, but the exact location of the new plant and outfall has not been decided. King County must identify a site quickly: at least 10 years are needed to design, permit, and construct the North Plant, so a suitable site for the plant and its outfall must be found by the year 2001.

For the new treatment and associated facilities King County envisions two key components of a workable siting process: (1) perform an assessment of available or underdeveloped large parcels of land, and (2) develop and implement a decision-making process.

King County would begin by examining large parcels of land in the vicinity of the North Service Area. A site of 30-60 acres will likely be needed. Issues would include size, environment, geography, social/economic issues, availability, zoning, ability to get required permits, access, community and political concerns, and potential local and regional benefits of a treatment plant. Local communities would be encouraged to offer specific parcels for consideration.

Once an inventory of sites is developed, King County would design a decision-making process that involves local communities in developing criteria and narrowing the field of candidate sites. We commit to a meaningful public involvement effort from the earliest stages of the siting process.

King County will shorten the list of sites using technical criteria as well as local community attitudes and priorities—values that will be reflected in the siting process and in subsequent mitigation. King County has developed amenities reflecting community interests with its wastewater projects in the past. Two examples include Waterworks Garden at the East Treatment Plant in Renton and the Interurban Pump Station in Tukwila.

The County’s goal is to construct a regional facility that enhances quality of life, not just in the region, but in the local area where the facility is sited.

YEARS: 1995 2000 2005

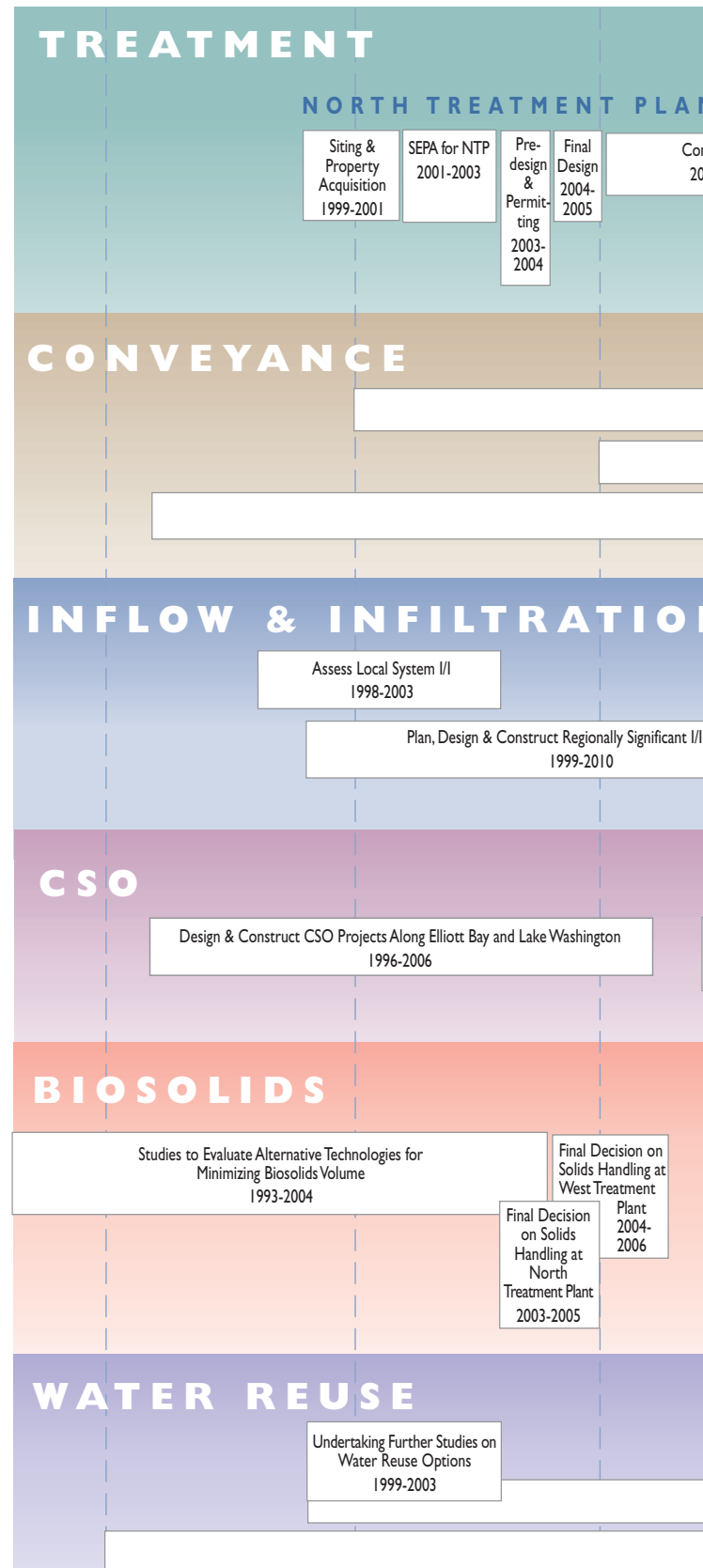


FIGURE 7 – Executive’s Preferred Plan Implementation

2010

2015

2020

2025

2030

2040

NT (NTP)

EAST TREATMENT PLANT (ETP)

NORTH TREATMENT PLANT (NTP)

Construction
2005-2010

SEPA
Process
for ETP
Expansion
2013-
2014

Pre-
design &
Permit-
ting
2014-
2015

Final
Design
2015-
2016

ETP Expansion/Construction
2016-2020

SEPA
Process
for NTP
Expansion
2023-
2024

Pre-
design &
Permit-
ting
2024-
2025

Final
Design
2025-
2026

NTP Expansion/Construction
2026-30

Expand
NTP
2040

East Treatment Plant Conveyance 2000-2020

North Treatment Plant Conveyance 2005-2040

Minor Conveyance Improvements Throughout the System 1996-2040

N (I/I)

Projects

Amend Local Agency Contracts & Implement Excessive I/I Surcharge
2010 onward

Design & Construct
CSO Projects Along Beaches
2007-2011

Design & Construct
CSO Project at
University/Montlake
Location
2012-2015

Design & Construct CSO Projects Along Duwamish River
2017-2027

Design & Construct CSO
Projects Along
Lake Union Ship Canal
2026-2030

Water Reuse Direct Non-Potable Pilot Projects 1999 onward

Water Reuse at Treatment Plants 1995 onward

80129BHGDa.FH7

Activities

TREATMENT PLANT PROJECTS

- 1 Construct 18 mgd North Treatment Plant (2010)
- 2 Increase East Treatment Plant capacity to 135 mgd (2020)
- 3 Increase North Treatment Plant capacity to 36 mgd (2030)
- 4 Increase North Treatment Plant capacity to 54 mgd (2040)

OUTFALL

- 1 North Treatment Plant Outfall (2010)

CONVEYANCE PROJECTS*

- 1 Increase York Pump Station to 68 mgd (2000)
- 2 Parallel Eastside Interceptor Section 1 (2000)
- 3 Parallel Auburn Interceptor Sections 1, 2, and 3 (2004)
- 4 Off-Line Storage at North Creek Pump Station (2005)
- 5 Tunnel from North Treatment Plant to Outfall (2010)
- 6 105-mgd Kenmore Pump Station to Pump Flow to North Treatment Plant Tunnel (2010)
- 7 Forcemain from Kenmore Pump Station to North Treatment Plant Tunnel (2010)
- 8 Auburn Interceptor Storage (2020)
- 9 Modify York Pump Station to Pump 35 mgd to North Treatment Plant (2030)
- 10 Increase new Kenmore Pump Station capacity to 160 mgd (2030)
- 11 Forcemain to Convey North Creek Flows to Kenmore Pump Station (2030)
- 12 Increase North Creek Pump Station to 50 mgd (2030)
- 13 McAleer-Lyon Pump Station flows to Kenmore Pump Station (2038)
- 14 Forcemain to Transfer McAleer-Lyon Pump Station Flows to Kenmore Pump Station (2038)

*Minor trunk improvements (e.g., increasing conveyance line and pump station capacities or extending service) are implemented throughout the system from 1996-2040.

CSO PROJECTS**

- 1 Norfolk 0.8-mg CSO Storage Tank (2009)
- 2 South Magnolia 1.3-mg CSO Storage Tank (2010)
- 3 SW Alaska 0.7-mg CSO Storage Tank (2010)
- 4 Murray 0.8-mg CSO Storage Tank (2010)
- 5 Barton Pump Station Expansion & Upgrade (2011)
- 6 North Beach CSO Storage Tank & Pump Station Expansion (2011)
- 7 University/Montlake 7.5-mg CSO Storage Tank (2015)
- 8 Hanford #2 3.3-mg CSO Storage/Treatment Tank (2017)
- 9 West Treatment Plant Primary/Secondary Enhancements due to CSO Projects (2018)
- 10 Lander 1.5-mg-CSO Storage/Treatment Tank at Hanford (2019)
- 11 Michigan 2.2-mg CSO Storage/Treatment Tank (2022)
- 12 Brandon 0.8-mg CSO Storage/Treatment Tank (2022)
- 13 Chelan 4.0-mg CSO Storage Tank (2024)
- 14 Connecticut 2.1-mg CSO Storage/Treatment Tank (2026)
- 15 King Street CSO conveyance to Connecticut for treatment (2026)
- 16 Hanford at Rainier 0.6-mg CSO Storage Tank (2026)
- 17 8th Ave S 1.0-mg CSO Storage Tank (2027)
- 18 W Michigan CSO Conveyance Expansion (2027)
- 19 Terminal 115 0.5-mg CSO Storage Tank (2027)
- 20 Ballard 1.0-mg CSO Storage Tank (2029)
- 21 3rd Ave W 5-mg CSO Storage Tank (2029)
- 22 11th Ave NW 2.0-mg CSO Storage Tank (2030)

**CSO Control projects at Denny Way, Martin Luther King Jr. Way, and Henderson Street CSOs are part of current plans and scheduled for construction.

80129BHGDa.FH7

FIGURE 8 – Phasing of Capital Facilities by Date of Completion

Siting Principles

The details of the siting process, including the public involvement elements, will be developed further after the initial assessment is complete. The process will reflect the issues identified in the assessment. The following principles will guide the siting process:

- A treatment plant site will be selected by 2001
- The siting process will be flexible to adjust to change
- Partnerships with other jurisdictions adjacent to King County's service area will be sought to maximize the use of facilities
- Criteria for a site will comprehensively evaluate environment, technical, financial, and community needs
- Costs will be kept within guidelines
- All parties with a significant interest in the siting process will be involved in the decision process. Parties with an interest in the issues will vary over time, and the process will be open so that new parties can enter and leave the process accordingly
- Communities will help develop the criteria by which a site is selected and may help identify what is needed to mitigate impacts and enhance the community when a plant is built
- King County will meet agreements made with local communities
- Citizens in the region and in local communities will have access to relevant information
- King County will support local community efforts to effectively participate in the process to site new facilities
- King County will listen and respond to input from citizens and communities



The parklike Waterworks Garden at the East Treatment Plant treats stormwater while providing open space for wildlife and people.

Although the above process and siting principals focus on the new treatment plant and associated facilities, King County will use this approach for other new facilities and for expanding existing facilities.

Wastewater Policies

This plan is based on technical and scientific research, public and stakeholder input, and policy. The policies that guide this plan are included in Appendix B. Some of these policies were developed in the past and used as guides in developing this plan and some of these policies are new—such as building a new treatment plant, water reuse, and reducing inflow and infiltration into King County's wastewater conveyance system. These policies will be reviewed from time to time and modified to reflect any changes in direction based on continued research and public opinion.