

CSI PROJECT

Conveyance System Improvements

Fall 1999

KING COUNTY • WASTEWATER TREATMENT DIVISION

In this issue...

- ➔ How will the CSI Project benefit local sewer agencies? 2
- ➔ What steps comprise the CSI Project? 2
- ➔ How are we doing this work? 2
- ➔ Progress to date 3
- ➔ How can you be involved? 4
- ➔ More information 4
- ➔ Contacts for other WTD programs 4



King County is responsible for conveying and treating wastewater collected by 32 local sewer agencies in the King County region. The County's current treatment system consists of two secondary treatment plants, three stormweather treatment plants, 42 pump stations and over 250 miles of pipelines.



In recent years, you may have heard a lot about the Regional Wastewater Services Plan (RWSP), the County's plan for managing the wastewater flows that our region's growing population will generate in the next 35 years. What you may not know is that the County also has an effort called the Conveyance System Improvements (CSI) project that is focusing on upgrading and improving the existing regional conveyance system level of service - as well as planning for future conveyance extensions.

What is the Conveyance System Improvements (CSI) Project?

The CSI project is a multi-year, multidisciplinary effort to prioritize and coordinate regional conveyance system planning. The County's regional conveyance system consists of interceptor sewers, pump stations, forcemains, regulators, and tunnels that transport wastewater from local sewer systems to the County's two existing regional secondary treatment plants.

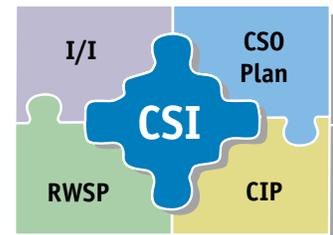
Clearly, planning for future growth is one important consideration, and the CSI project is addressing regional conveyance and pump station improvements that are common to all RWSP strategies.

System improvements that are not directly related to growth are also being evaluated at a planning level as part of this project. These types of improvements are required to: improve or optimize system operation; address

public health and safety concerns; meet policy or permit requirements; respond to local agency infrastructure construction or development; or leverage other federal, county or local resources.

The CSI project is also addressing very short term critical capacity issues and potential storm-induced overflows in the existing regional system, as well as operational and maintenance needs.

The CSI project is coordinating with other related projects conducted by King County and the local agencies.



The CSI Project integrates with other related project efforts.

How Will the CSI Project Benefit Local Sewer Agencies?

The CSI project focuses on County-owned regional conveyance facilities. However, it provides a framework for ongoing discussions between the County and local sewer agencies regarding local and regional facility upgrades to improve the overall system’s level of service. The CSI planning process will benefit local sewer agencies by:

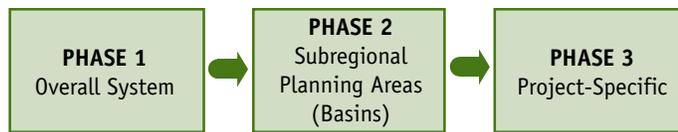
- Providing a consistent approach to conveyance planning throughout the service area.
- Defining planning priorities based on future population growth as well as current operational and environmental considerations.
- Providing an opportunity for the County and local sewer agencies to address common conveyance issues, leverage available resources, and minimize customer disruption.

What Steps Comprise the CSI Project?

Phase 1, which has been completed, established the criteria and process to determine overall

system planning priorities. Phase 1 defined and prioritized ten wastewater subregional planning areas within the County’s service area. The map shows the CSI subregional planning areas with their final priority rankings.

Phase 2, which is currently underway, involves the preparation of plans to identify and coordinate projects within each planning area. Each planning area consists of one or more individual King County sewer basins. The Phase 2 planning process begins with the compilation of a regional and local wastewater planning record, and descriptions of the current regional and local facilities, demographics, infrastructure, environment, and governance within each basin. This work is the basis for broad conceptual alternatives about the ways to manage wastewater flows in the regional system. Conceptual wastewater flow management



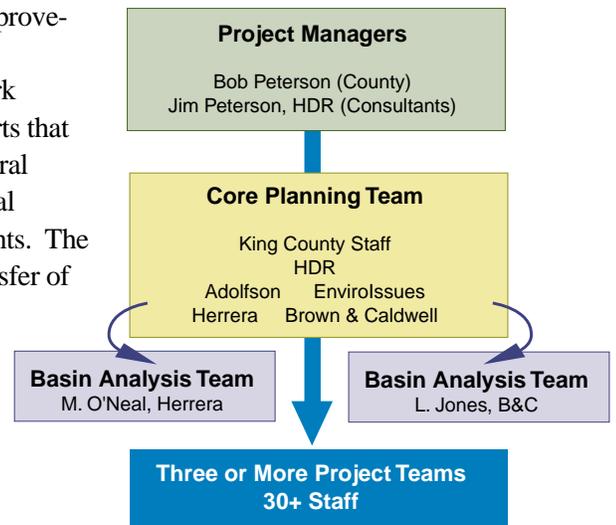
alternatives could include storage, improvements to pumping and conveyance, or diversion of flows to another basin. Local sewer agency involvement is critical during the development and analysis of Phase 2 alternatives.

Phase 3, which has begun, involves project-specific planning. Phase 3 work is driven by facility condition and operational issues. It also is driven by the need for specific facility improvements identified during Phase 2 planning activities. Phase 3 work produces project planning reports that describe the type, size and general location of the proposed regional wastewater facility improvements. The reports are the basis for the transfer of the improvement effort to the Division’s Capital Improvement Program for predesign, design and construction.

How Are We Doing This Work?

King County has hired a team of consultants led by HDR, Inc. HDR has assembled a team of consultants that includes Brown and Caldwell, Herrera Environmental Consultants, Adolfson Associates, HWA Geosciences, Garry Struthers Associates, EnviroIssues, and other specialized consultants. Consultant project teams, managed by engineers from HDR, Brown and Caldwell, and Herrera are conducting the work.

These consultant teams are working with local sewer agencies to collect information and obtain ideas on the County’s regional system, and to discuss opportunities for collaborative efforts to improve local and regional sewer service. Other specialized consultants are also available to work on the project.



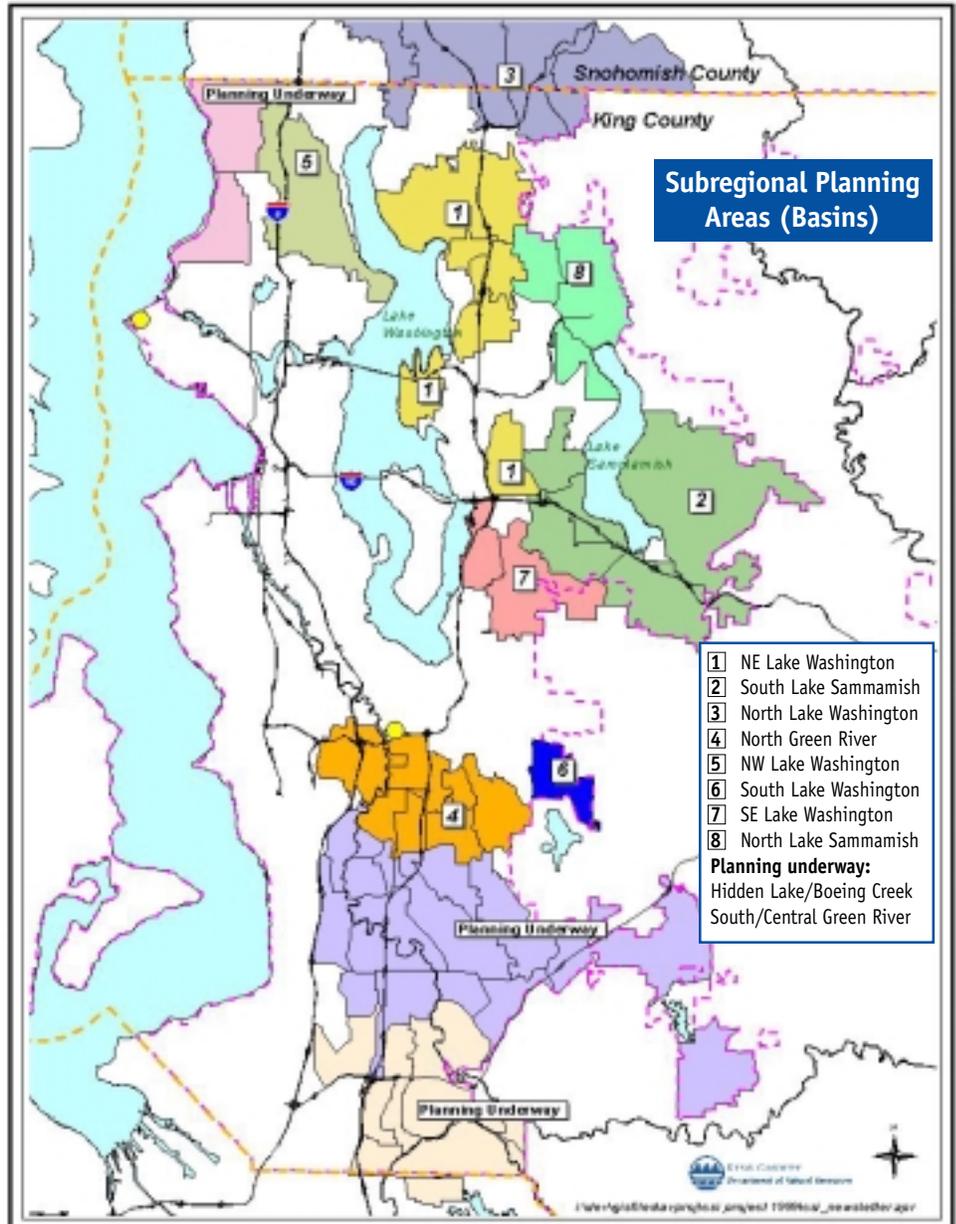
Progress to Date

Wastewater basin planning is underway in two areas: Hidden Lake/Boeing Creek in northwest King County, and South/Central Green River in south King County.

In the Hidden Lake area, current wet weather flow capacity problems are being addressed. In the South/Central Green River area, short-term capacity issues, and potential facility upgrades and acquisitions are being evaluated. Existing conditions have been defined, and by end of this summer, the County teams expect to have completed an initial look at the issues and range of alternatives for conveyance and pump station improvements in the two areas.

The County is also working closely with the City of Bellevue to examine flow transfers and other alternatives to reduce wastewater flows to the County's Sweylocken Pump Station, which has limited capacity.

Project planning has been completed for the County's Kirkland and Juanita Bay pump stations and their associated conveyance systems. Both facilities currently experience operational problems and require mechanical or capacity upgrades. The CSI technical team has presented a range of service and design alternatives to the County's operations staff for consideration. Project planning is also underway for the Pacific Pump Station.



How Can Local Sewer Agencies Be Involved?

Local sewer agencies can be involved in the CSI project in a variety of ways:

- **Identify a contact person** to receive periodic updates, newsletters, invitations to briefings, and other project information.
- **Provide information and ideas** to the County/consultant team working in your area.
- **Participate in meetings** designed to gather your ideas and suggestions.

- **Ask conveyance-related questions and concerns** by contacting the County's CSI project manager.

Remember...planning will be done throughout the regional wastewater service area-but not all at the same time. Your support will help us better serve our customers in the years to come! We appreciate your interest and support of the CSI project.



If you would like to receive more copies of the map insert, please contact Bob Peterson.

Contacts for the County's Other Wastewater Treatment Division Programs

Inflow and Infiltration (I/I)

Gunars Sreibers,
Program Manager
206/684-2113
gunars.sreibers@metrokc.gov

Regional Wastewater Services Plan (RWSP)

Christie True,
Program Manager
206/684-1236
christie.true@metrokc.gov

Combined Sewer Overflow (CSO)

Karen Huber,
Program Manager
206/684-1246
karen.huber@metrokc.gov

Capital Improvements Program (CIP)

John Vaughn,
Program Manager
206/684-2147
john.vaughn@metrokc.gov

VISIT OUR WEBSITE AT <http://waterquality.metrokc.gov>

This information is available in accessible formats on request at (206) 684-1241



80175BH/GD.PM16



King County
Department of Natural Resources
Wastewater Treatment Division
King Street Center
201 S. Jackson St., MS/KSC-NR-0503
Seattle, WA 98104-3855