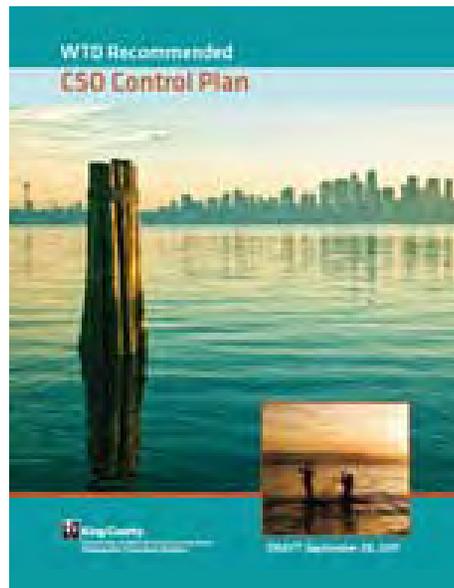


Wastewater Treatment Division Recommended Combined Sewer Overflow Control Plan



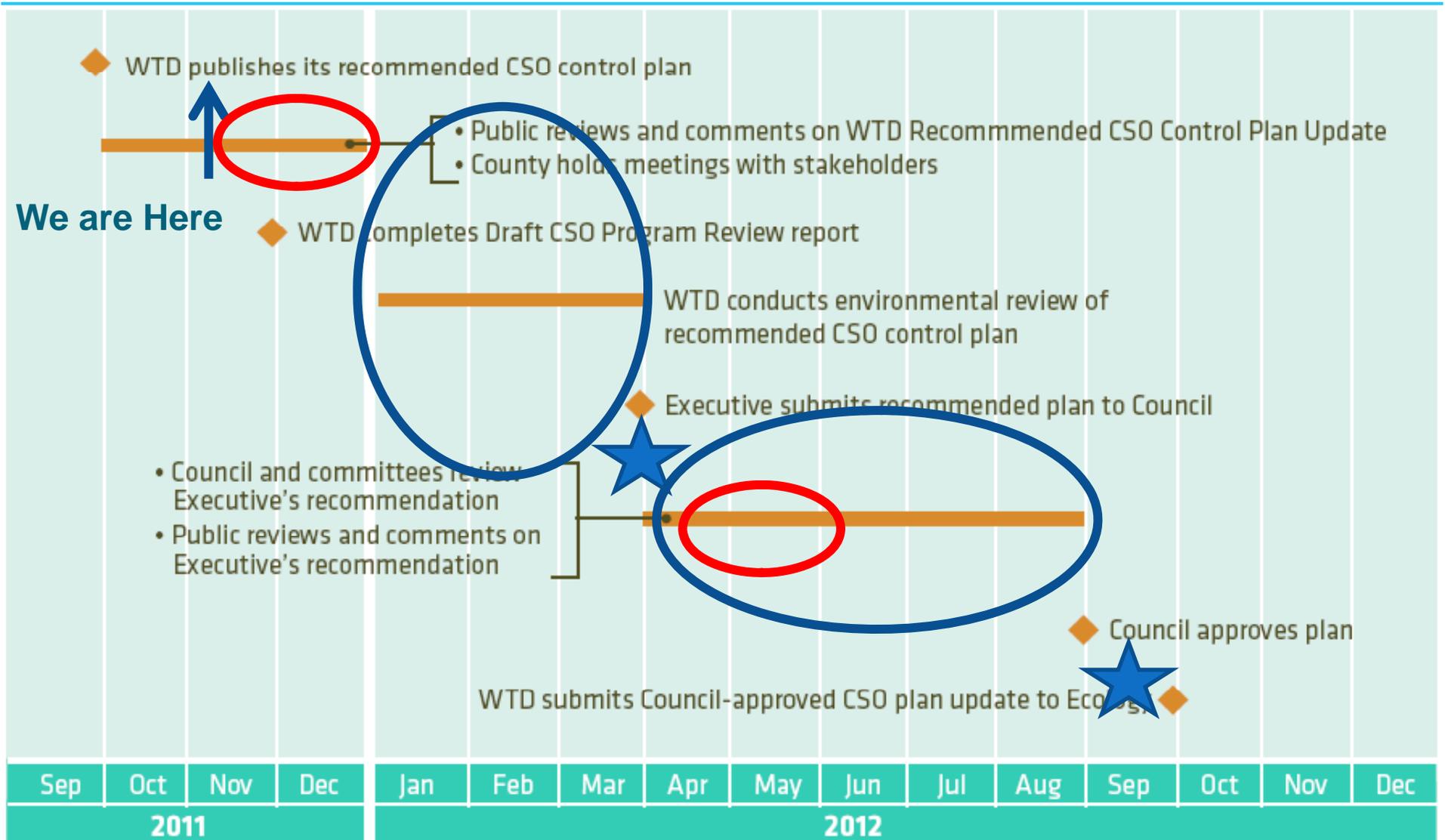
Open House
November 9, 2011



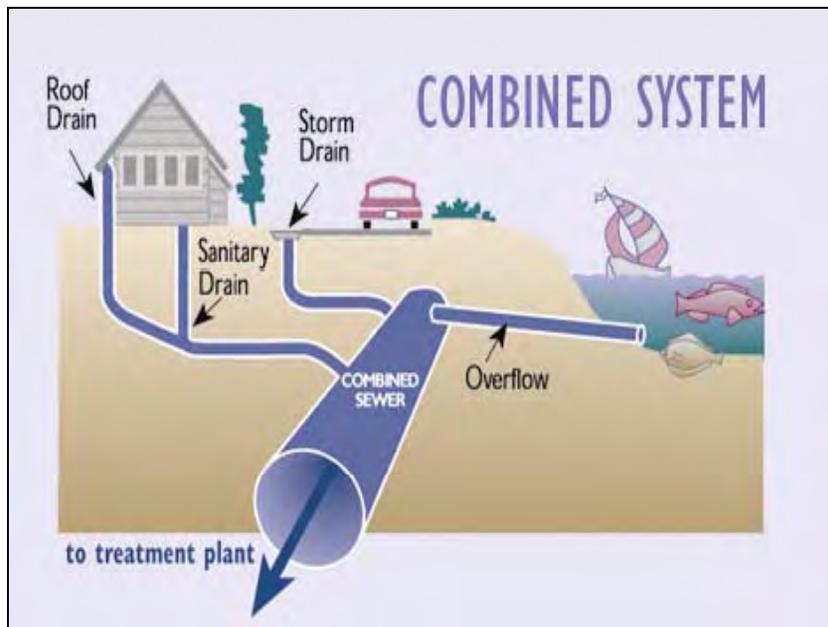
King County

Department of Natural Resources and Parks
Wastewater Treatment Division

Schedule for Review of CSO Control Recommended Plans



What are Combined Sewer Overflows (CSOs)?



- Sewage and stormwater are managed together
- CSOs are designated relief points designed into the combined system
- CSO events occur infrequently during heavy rains



Why Do CSOs Need To Be Controlled?

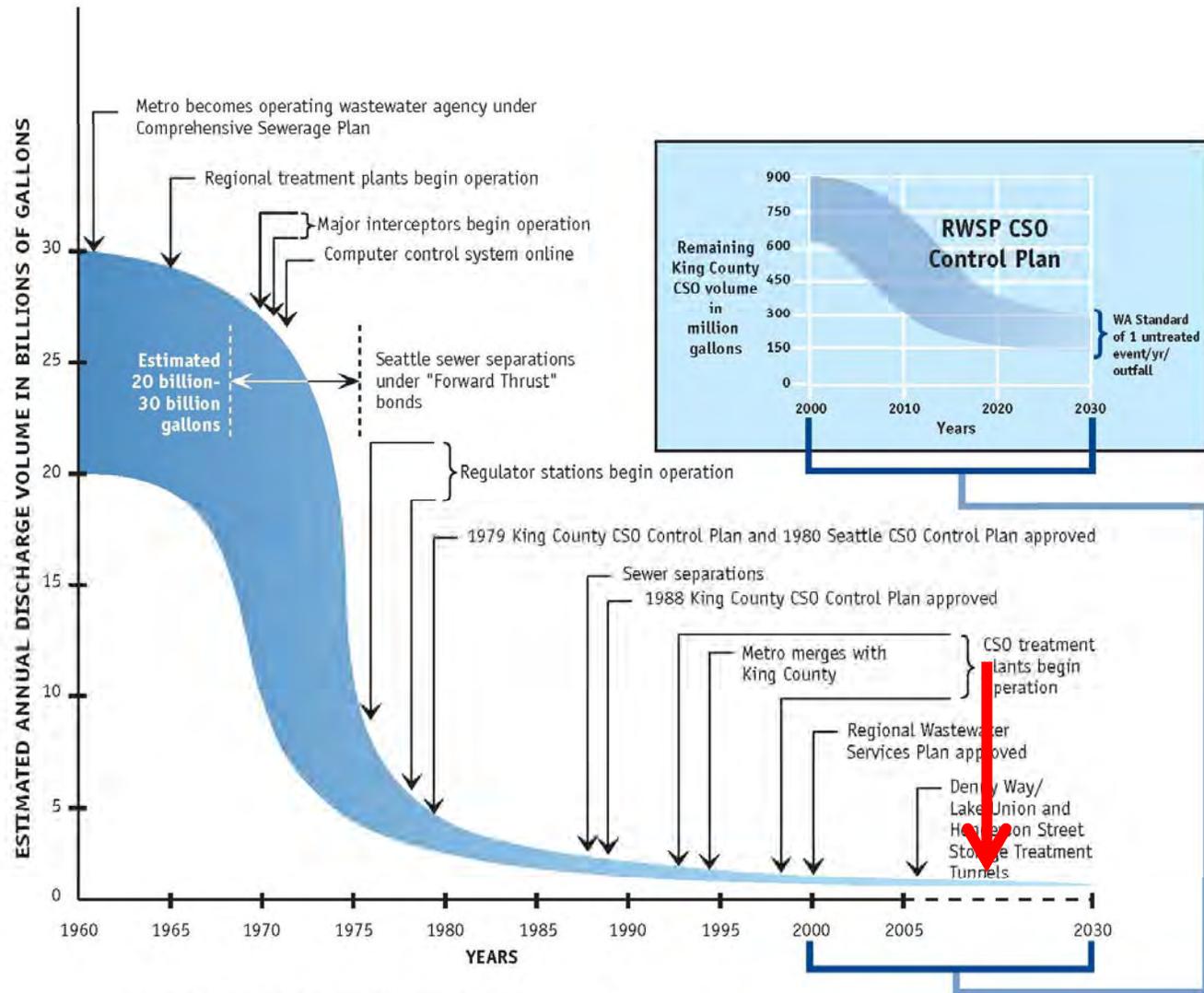
- Reduce threat to people from contact with pathogens or consumption of contaminated fish
- Reduce threat to salmon from exposure to chemicals at vulnerable life stages
- Contribute to the protection of Puget Sound and the clean up of the Duwamish Waterway



Background

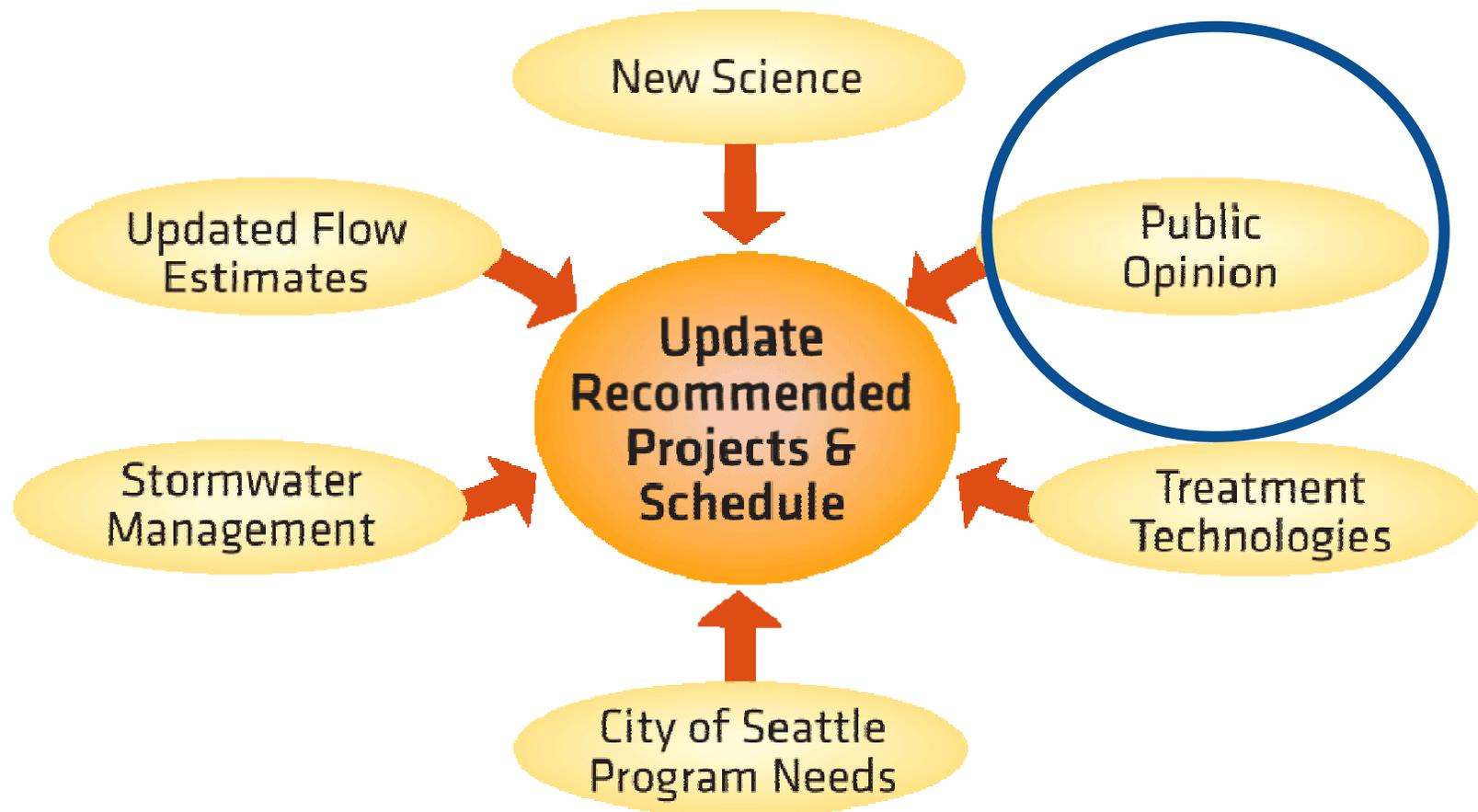
- CSO control standard is established by Ecology and is 1 untreated event/year per CSO location
- King County & Seattle have been making progress since the late 1970s
- We review the control plan about every 5 years
 - King County's last major update was in 1999
 - Minor updates done in 2000 & 2008
- The reviews & updates look at changes in factors that shape our Plan
- A lot has changed in 12 years

We've Made a Lot of Progress



Produced by: DNR/PIT Services, Web Development/Visual Communications Group
File name: 1104Cydolne_1980-2030_withINSE Tai skrau

Current Planning Process





What's Been Heard to Date

- CSO control is important
- CSO and stormwater should be managed more holistically
- Use Green Stormwater Infrastructure (GSI or "Green") for CSO control
- King County/Seattle coordination is important
- Control Duwamish River CSOs sooner
- Concern about costs and rate impacts
- Engage community in siting decisions
- Questions?

Working With The City of Seattle

- Multi-year assessment of potential joint projects
- We are proposing 3 joint projects
- Coordinating on “Green”
- The City’s Plan is on a different schedule



Joint Real-Time Status Website

<http://www.kingcounty.gov/CSOstatus>

Overview map -- combined sewer overflow (CSO) status in the Seattle area - Windows Internet Explorer

<http://www.kingcounty.gov/environment/wastewater/CSOstatus/Overview.aspx>

File Edit View Favorites Tools Help

Google Search More >> Sign In

Favorites Suggested Sites Web Slice Gallery

<http://your.kingcounty.gov> Overview map -- comb... x

CSO status in the Seattle area

Overview map

NW Seattle

NE Seattle

SE Seattle

SW Seattle

Site map

This site is a joint effort by King County and the City of Seattle.

For questions about the [King County CSO Control Program](#), please contact [Karen Huber](#).

For questions about the [City of Seattle CSO Control Plan](#), please contact spucso@seattle.gov.

What's happening in your waterway?
Current information to inform your choices.

King County RESTORE OUR WATERS SEATTLE PUBLIC UTILITIES

Overview map -- click on region to view detail map

10/28/2011 6:00:01 PM

Corkeek CSO Treatment Facility

West Point Treatment Plant

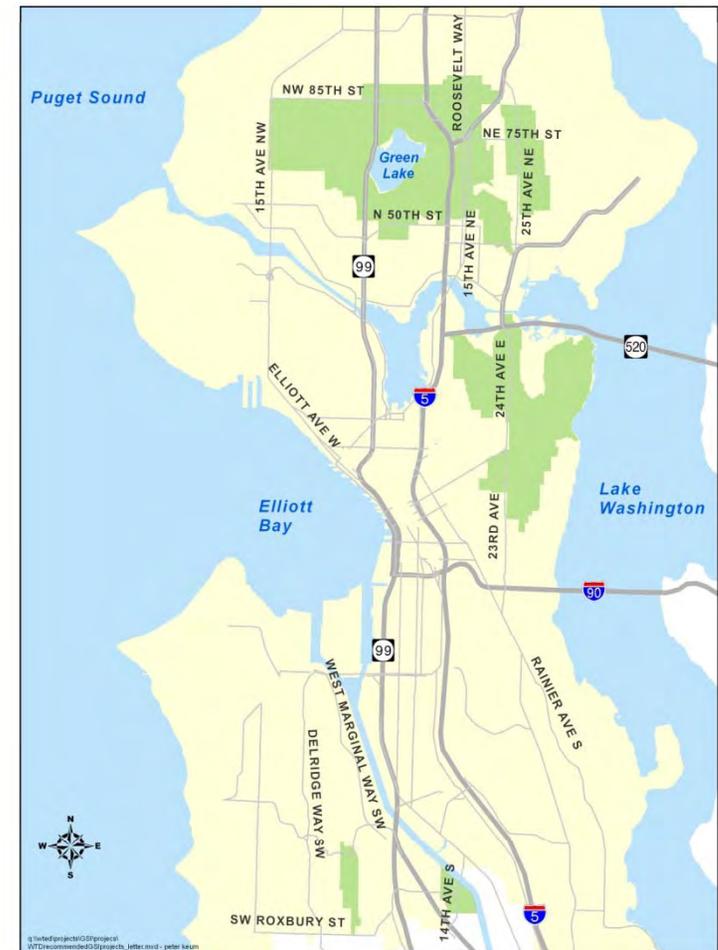
King County and the City of Seattle are piloting this website to inform the public when and where CSOs are occurring or have recently occurred. The purpose is to give the public information so that the public may make informed decisions about where and how to use our local waters. CSOs usually discharge in the winter between October and May, but may discharge during very intense rainfall in the summer and early fall. During the discharge and for at least 48 hours following the discharge the public should avoid fishing, wading, swimming, boating, or other contact with the water near the CSO location to avoid potential public health risks.

Internet | Protected Mode: On 125%

6:03 PM

The Role of “Green” in this Plan

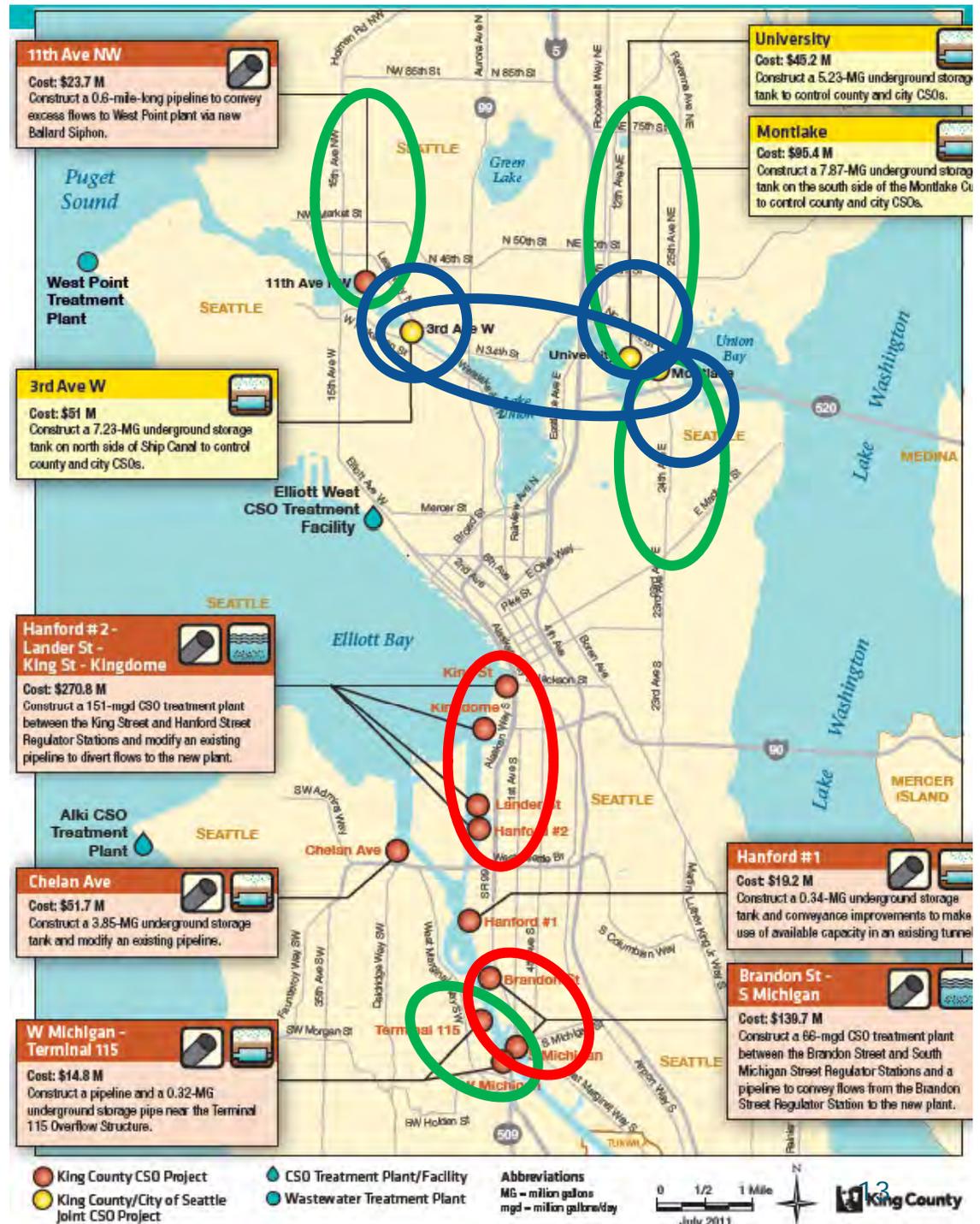
- Diverts stormwater
 - Mimics natural systems
 - Raingardens, pervious pavement, cisterns, etc.
- Goal: reduce size & costs of “gray” CSO facilities
- Provides some early CSO reduction
- This Plan identifies “feasible” areas in a basin
 - Further assessment will be needed
- 4 Projects may have GSI



Wastewater Treatment Division Recommended Plan

9 projects to control remaining 14 CSOs

- 2 Large Duwamish CSO treatment plants
- 7 storage & conveyance options
 - 4 with significant “Green” potential
 - 3 joint projects with Seattle
 - A joint tunnel under the Ship Canal is still being evaluated
- Cost is \$711 M in 2010 \$ (planning level)





Where Will Facilities Be Sited?

- This is not determined yet
- Plan identifies possible “areas” based on engineering that reduces costs
- King County will meet with neighborhoods early in design
 - We try to be a good neighbor
 - We are interested in ideas
- Questions?

Collaborative Montlake/Madison Park Storage Tank

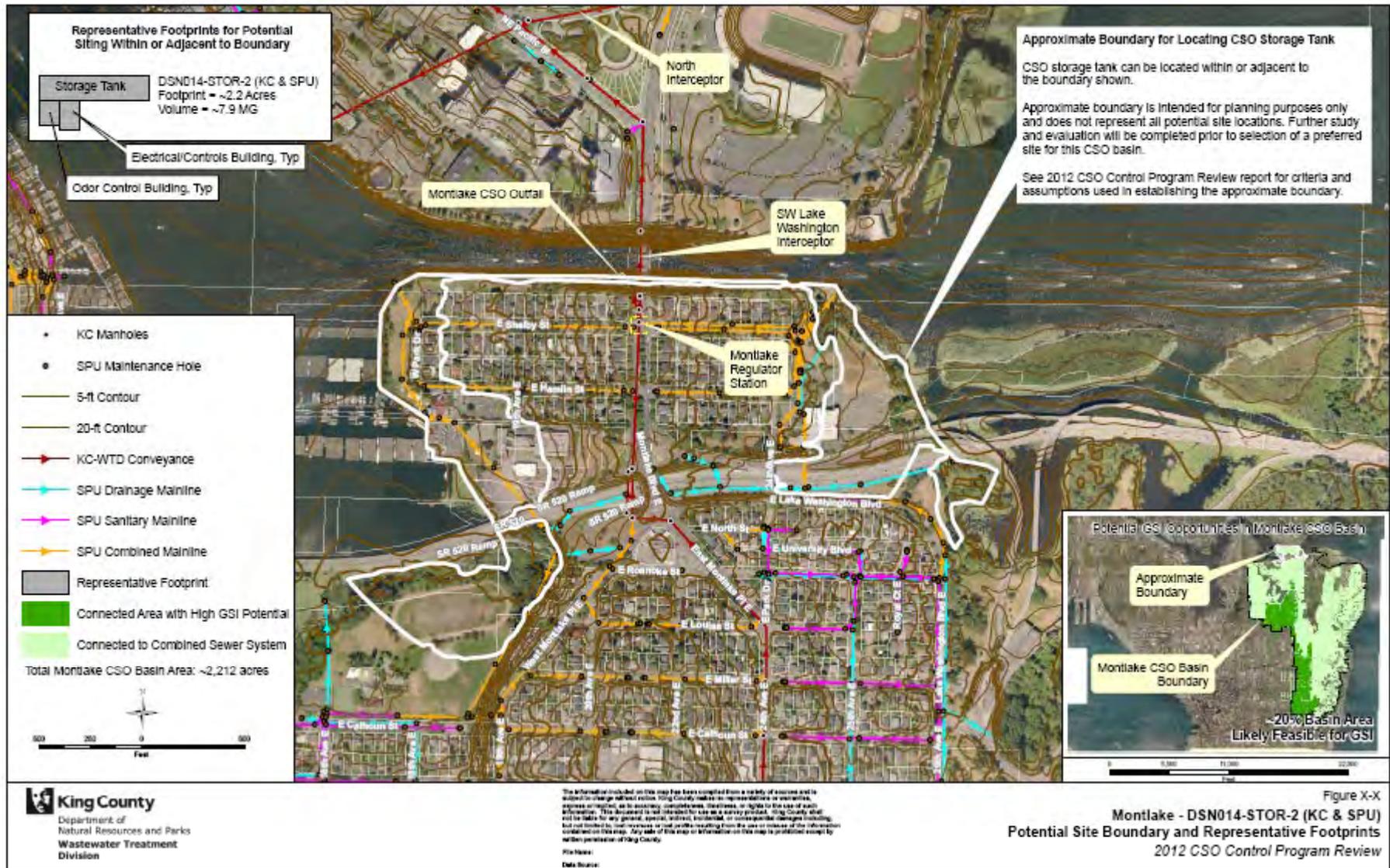
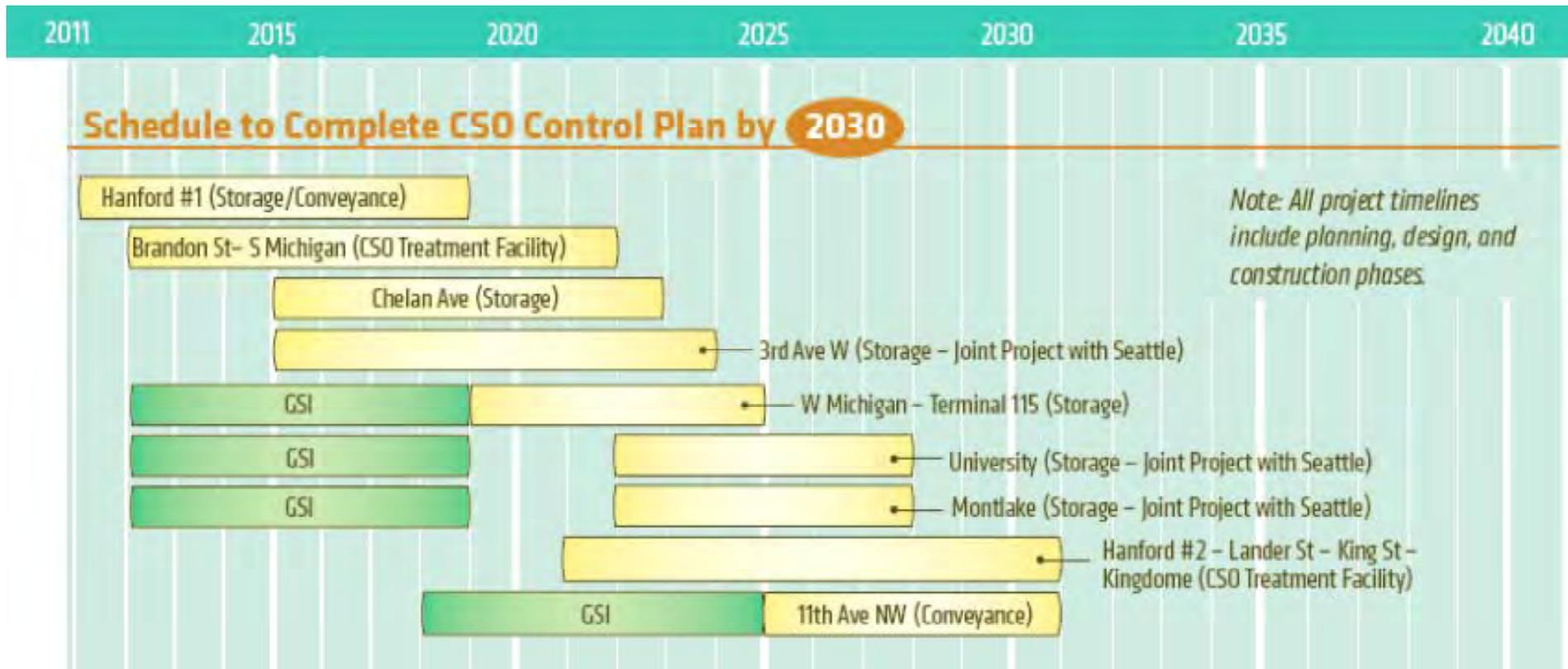


Figure X-X
Montlake - DSN014-STOR-2 (KC & SPU)
Potential Site Boundary and Representative Footprints
2012 CSO Control Program Review

Ship Canal

Recommended Project Implementation Sequence to Complete Program by 2030 Duwamish & Green First



Summary of Investments and Planned Expenditures in the Regional CSO Control Program

	2012 Program Review (2010\$)
Costs shown are in millions of dollars.	
CSO control investments since the 1980's	\$389
Beach Projects in Design	\$103
CSO control component of the Ballard Siphon Project in construction	\$14
Planned projects	\$711
<i>Total</i>	<i>\$1,217</i>

- Sewer rates will begin to rise in 2016
- Propose plan will add \$7.61 to monthly rate by 2030 (with inflation)

Plan and Technical Documents

Libraries and at <http://www.kingcounty.gov/csoreview>

The screenshot shows a Windows Internet Explorer browser window displaying the King County website. The address bar shows the URL <http://www.kingcounty.gov/environment/wastewater/CSO/ProgramReview.aspx>. The page title is "Combined Sewer Overflow Control". The main content area is titled "CSO Control Program 2012 Plan Review" and includes a sub-header "Wastewater Treatment Division Recommended Combined Sewer Overflow Control Plan". The text describes the plan's goal of reducing CSO overflows and lists recommended projects. A sidebar on the left contains navigation links such as "CSO control program", "FAQs", "CSO map", and "Program components". A sidebar on the right provides "Related information" in multiple languages, including English, Spanish, Korean, Chinese, and Vietnamese. The bottom of the browser window shows the Windows taskbar with the system clock at 4:55 PM.

CSO control program review, 2010 - 2012 - Windows Internet Explorer

<http://www.kingcounty.gov/environment/wastewater/CSO/ProgramReview.aspx>

File Edit View Favorites Tools Help

Google Search More >> Sign In

http://your.kingcounty.gov... CSO control program r...

HOME | NEWS | SERVICES | DIRECTORY | CONTACT | Search

Combined Sewer Overflow Control

By reducing combined sewer overflows into local water bodies, King County is protecting public health and the environment.

You're in: CSO control program » Program review, 2010 - 2012

SHARE PRINT SUMMARY

CSO control program
FAQs
CSO map
Program components
Program review, 2010 - 2012
WTD Recommended Plan
Why do a review?
How can public be involved?
Meeting schedule
Evaluating treatment technologies
Sign up to receive updates
Submitting comments
Controlling CSOs
Projects
Control requirements
Glossary
Library
Site map
For questions about the King County CSO Control Program, please contact Karen Huber.
Wastewater Treatment Division
King Street Center
211 S. Jackson St., Suite 505
Seattle, WA 98104-3035
Get Directions to our office

CSO Control Program 2012 Plan Review

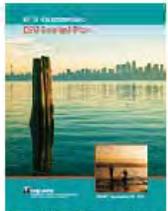
From 2010 – 2012 the CSO Control Program is completing a [review](#) of its Combined Sewer Overflow (CSO) Control Plan.

- The program has issued the [Wastewater Treatment Division Recommended Combined Sewer Overflow Control Plan](#) in October 2011.
- A draft of the 2012 Plan Review will be published December 2011.

Wastewater Treatment Division Recommended Combined Sewer Overflow Control Plan

Our recommended plan calls for controlling all King County CSO locations to an average of no more than one overflow per year at each location. To meet this goal, we propose constructing nine projects in the Lake Washington Ship Canal area and in industrial areas near the Duwamish River. We're recommending that the projects in the Duwamish River area be finished first to support ongoing regional efforts to clean up the river. In addition, we're recommending that the projects incorporate [green stormwater infrastructure](#) where possible and that we meet the schedule recommended in previous plan updates to complete all projects by 2030.

[Read entire letter from the Wastewater Treatment Division Director and October 17 news release.](#)



[Read the Plan and learn about:](#)

- Scope and scale of the recommended CSO control projects
- How the recommended projects could affect your Seattle neighborhood
- How CSO Control could affect wastewater rates



[A map of recommended CSO control projects as presented in the plan.](#)

[How can you become more involved?](#)

- [Learn more and comment on the](#)

Related information

Information about this project is available in Spanish, Korean, Chinese and Vietnamese. Please contact Dana West at 206-884-1097 or TTY Relay: 711.

Information about this project is available in English, Spanish, Korean, Chinese, and Vietnamese. Please contact Dana West at 206-884-1097 or TTY Relay: 711.

Se encuentra disponible información sobre este proyecto en español. Favor de comunicarse con Dana West al 206-884-1097 o TTY (para personas con problemas de audición): 711.

Tin tức về dự án này có sẵn bằng tiếng Việt. Xin liên lạc Dana West tại số Đ.T. 206-884-1097 hoặc 711 dành cho người điếc.

이 프로젝트에 관한 자료는 한국어로도 제공 가능합니다. Dana West에게 전화(206-884-1097) 또는 TTY 711를 이용해 연락하실 수 있습니다.

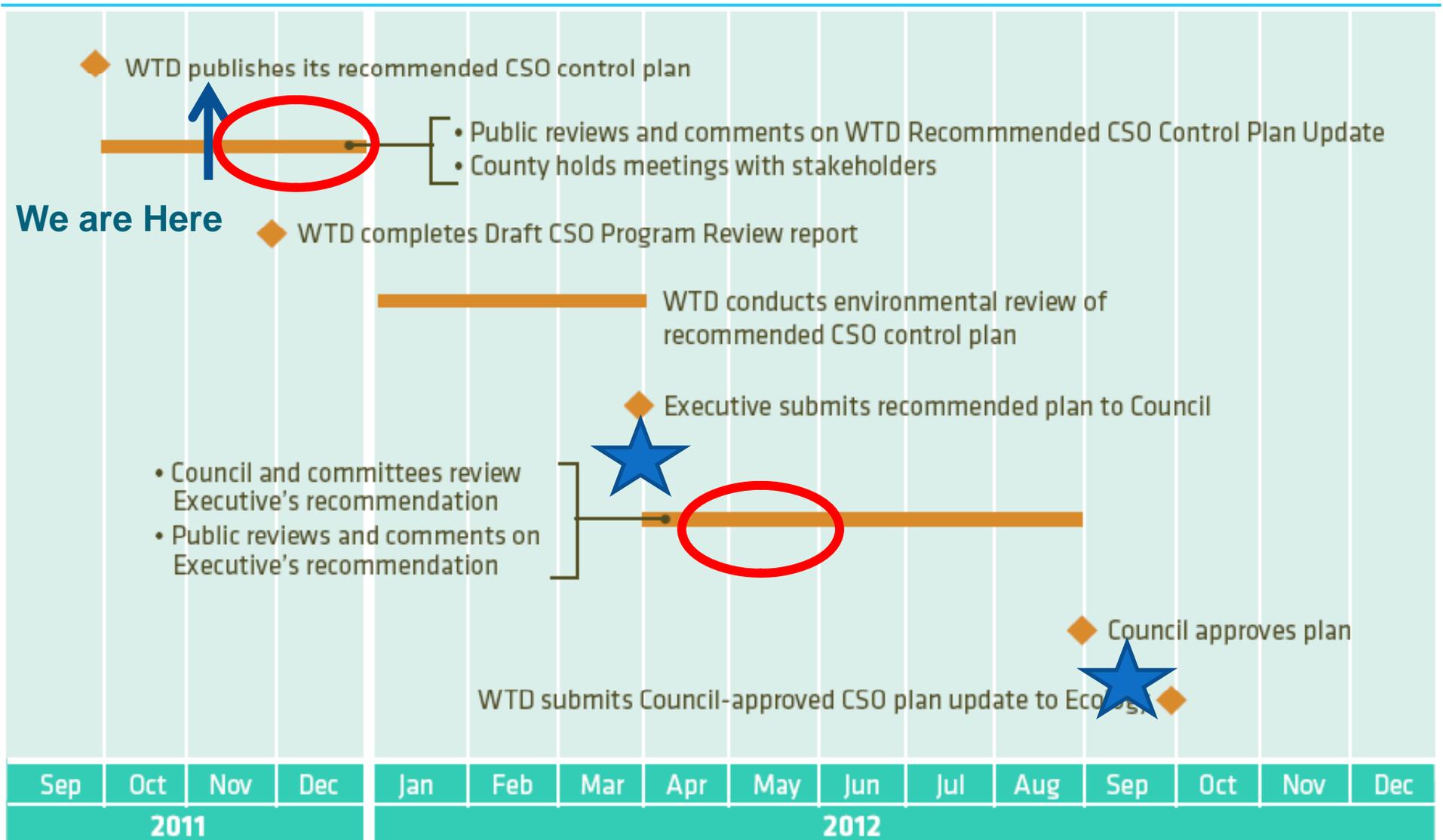
此項目的資訊有中文版本，請

<http://www.kingcounty.gov/environment/wastewater/CSO/ProgramReview/Plan/9Projects.aspx>

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4:55 PM

We Appreciate Your Taking the Time to Learn About This Plan – Please Comment





How to Comment

- Talk to us now
- Mail comment card at back of Plan
- On-line comment form:
www.kingcounty.gov/csocontrol
- Email: review.cso@kingcounty.gov
- Call Dana West, Communication Specialist at (206) 684-1097 or TTY Relay: 711
- Invite us to speak at your meetings
- Attend our public meeting in the spring



Please Browse the Boards & Ask Staff Questions

- A variety of boards that tell the CSO story
- Boards on each proposed project alternative with maps
 - Maps identify project areas only
- Boards from the City of Seattle's CSO planning process
- Enjoy snacks



Questions?

Thank You!