

WELCOME

POTOMAC RIVER TUNNEL ENVIRONMENTAL IMPACT STATEMENT

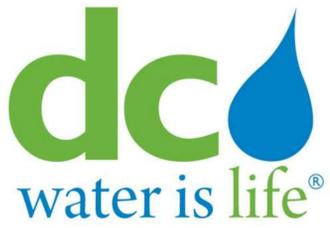


PUBLIC SCOPING MEETING

July 31, 2014

6:00 P.M. – 8:00 P.M.





Purpose of Tonight's Public Scoping Meeting



Purpose of the Meeting

- Present an overview of the Potomac River Tunnel project
- Gather public input on the proposed Potomac River Tunnel
- Gain public feedback to assist with the development of project alternatives
- Identify important environmental and cultural issues
- Identify any other areas of public concern regarding the proposed project

***WE THANK YOU FOR YOUR PARTICIPATION
IN THIS PROCESS***

**LEARN MORE:
DC CLEAN RIVERS PROJECT**

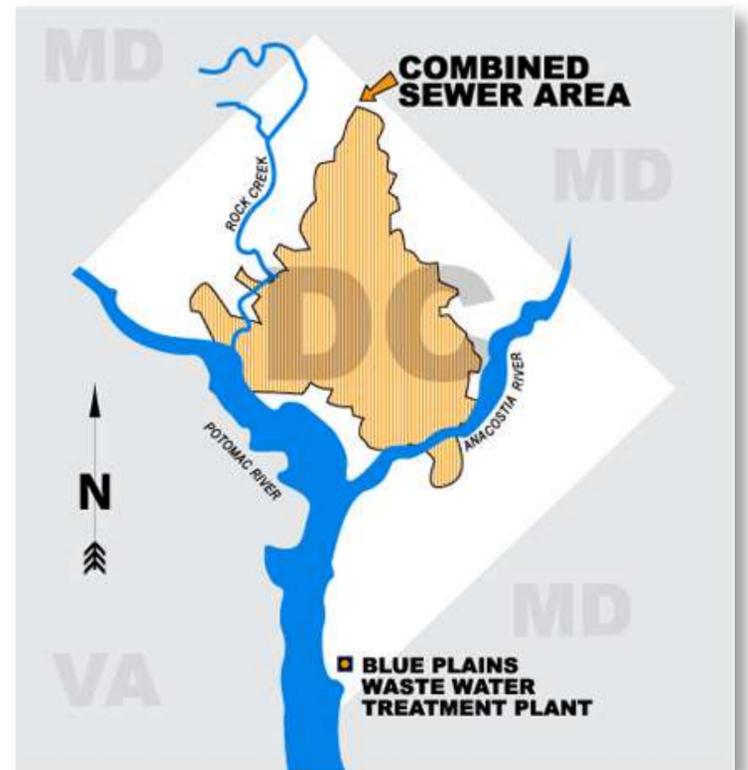
www.dewater.com/cleanrivers

**GIVE US YOUR FEEDBACK:
POTOMAC RIVER TUNNEL**

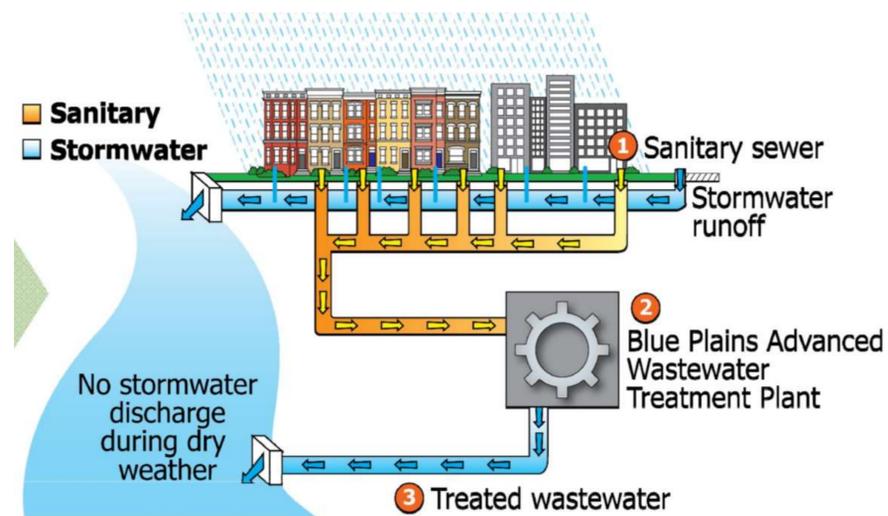
<http://parkplanning.nps.gov/PotomacRiverTunnel>



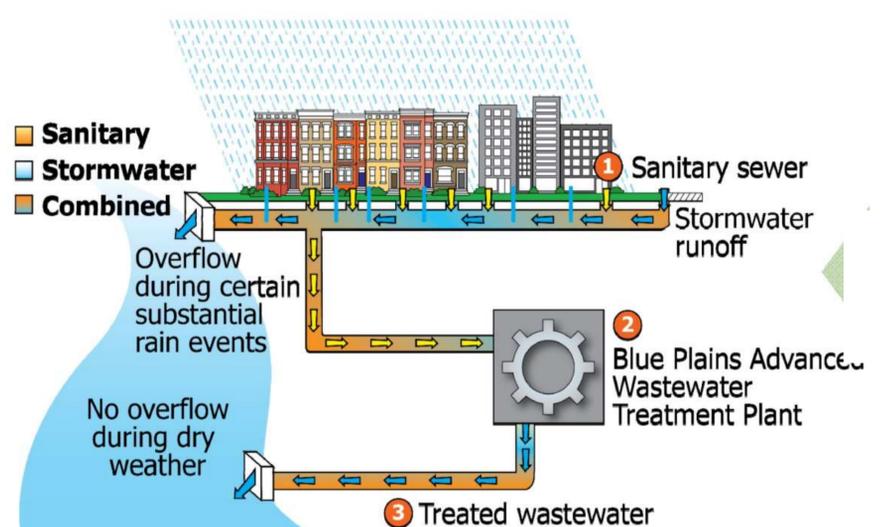
- DC Water’s wastewater collection system is comprised of 67% “separate” and 33% “combined” sewers.
- **Separate** sewers are made up of two independent piping systems: one for “sanitary” sewage (i.e., wastewater from homes and businesses) and one for stormwater.
- **Combined** sewer systems carry both sanitary sewage and stormwater in one piping system.
- During dry weather, sanitary sewage is collected in the combined sewer system, diverted by regulators, and carried to the Blue Plains Advanced Wastewater Treatment Plant.
- During storm events, the combined system overflows and a mixture of sanitary sewage and stormwater is discharged directly into the District’s receiving water bodies (Anacostia River, Potomac River, and Rock Creek). These discharges are referred to as **Combined Sewer Overflows (CSOs)**.
- **Surcharging** occurs when the capacity of the sewer system is exceeded, which can result in flooding of streets and basements.



Combined Sewer Area within the District of Columbia



Separate Sanitary & Stormwater Sewer Systems



Combined Sewer Systems



As required by the U.S. Environmental Protection Agency (EPA), through a Federal Consent Decree in 2005, DC Water developed a Long Term Control Plan (LTCP), known as the DC Clean Rivers Project, to reduce CSOs into the Anacostia and Potomac Rivers and Rock Creek.

Long Term Control Plan (LTCP)

- Control CSOs (96% Reduction in CSOs)
- Reduce flooding
- Meet nutrient discharge limits of Chesapeake Bay Program through upgrades at Blue Plains (Total Nitrogen Removal / Wet Weather Plan)

Schedule

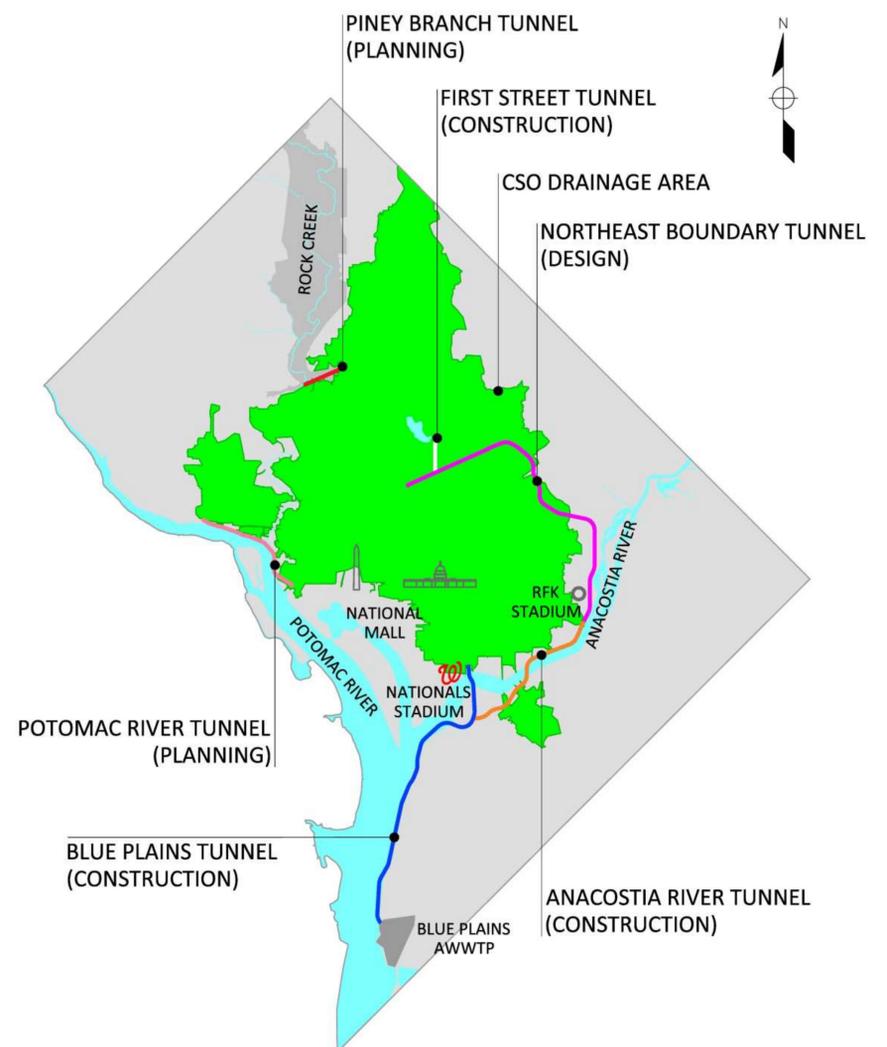
- LTCP = 20 years (2005-2025)
- Nitrogen = 2007-2015

Cost

- LTCP = \$2.6 billion
- Nitrogen = \$950 M
- Total > \$3.6 billion

Drivers

- Projects required to meet regulatory requirements (NPDES Permit and Consent Decree)



POTOMAC and ROCK CREEK PROJECTS

- System of deep tunnels
- Green infrastructure is being evaluated
- 93% CSO Reduction
- In-service by March 2025

ANACOSTIA RIVER PROJECTS

- System of deep tunnels
- Green infrastructure at DC Water Facilities
- 98% CSO Reduction
- Tunnels reach into Northeast DC to provide flood relief
- System south of RFK Stadium in service by March 2018, north of RFK Stadium by 2022



Project Purpose:

- The purpose of the project is to control combined sewer overflows (CSOs) to District receiving waterways that occur when the combined sewer system capacity is exceeded during storm events.

Project Need:

- Capture of CSOs will reduce risks to human health, greatly reduce the discharge of untreated wastewater into the District's receiving water bodies, and reduce water bacteria levels, impacts to aquatic life, and trash in waterways.
- The project is needed to comply with the 2005 Federal Consent Decree entered into by DC Water, the District, the U.S. Department of Justice, and the U.S. Environmental Protection Agency (EPA).

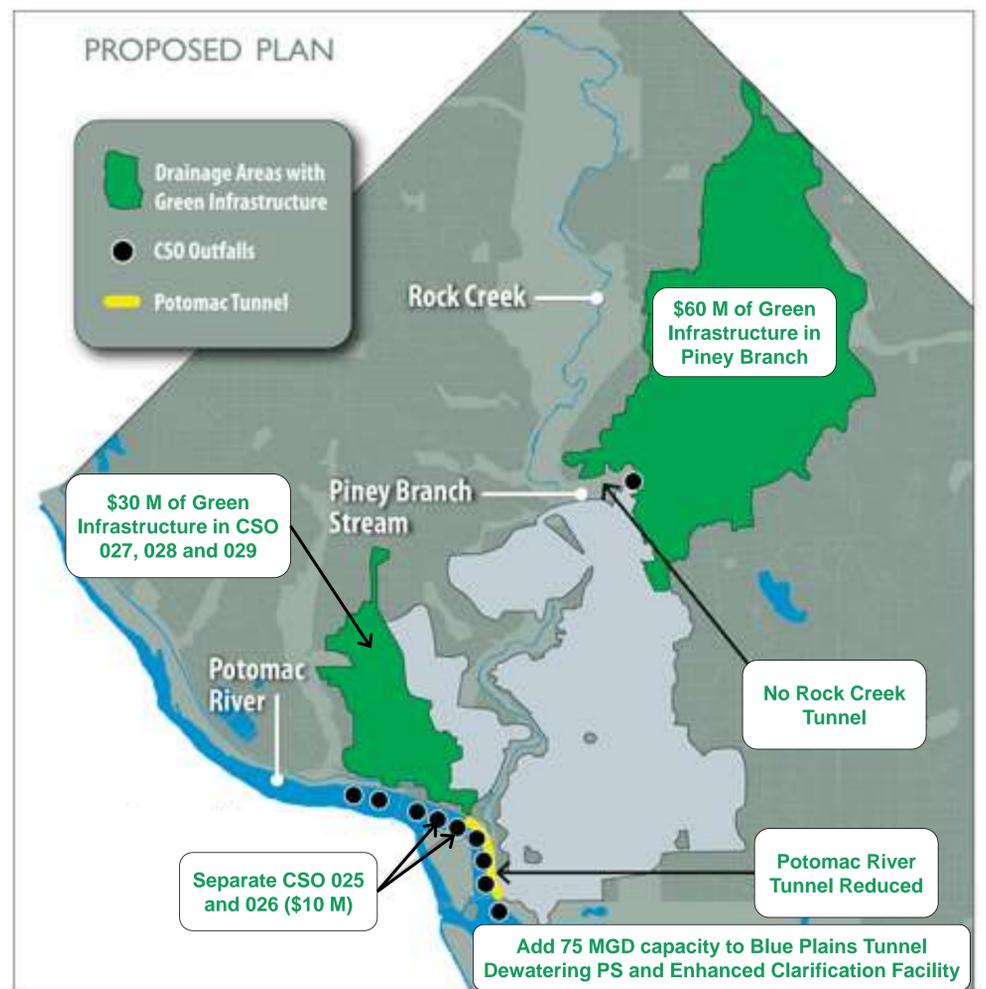
Project Approach:

- Construct a deep tunnel to temporarily store excess flow to the sewer system.
- Divert water from the sewer system to the tunnel using diversion chambers and drop shafts.
- Convey water from the tunnel to the Blue Plains Advanced Wastewater Treatment Plant for treatment prior to discharge to the Potomac River.



Proposed Consent Decree Modification for Green Infrastructure (Hybrid Plan)

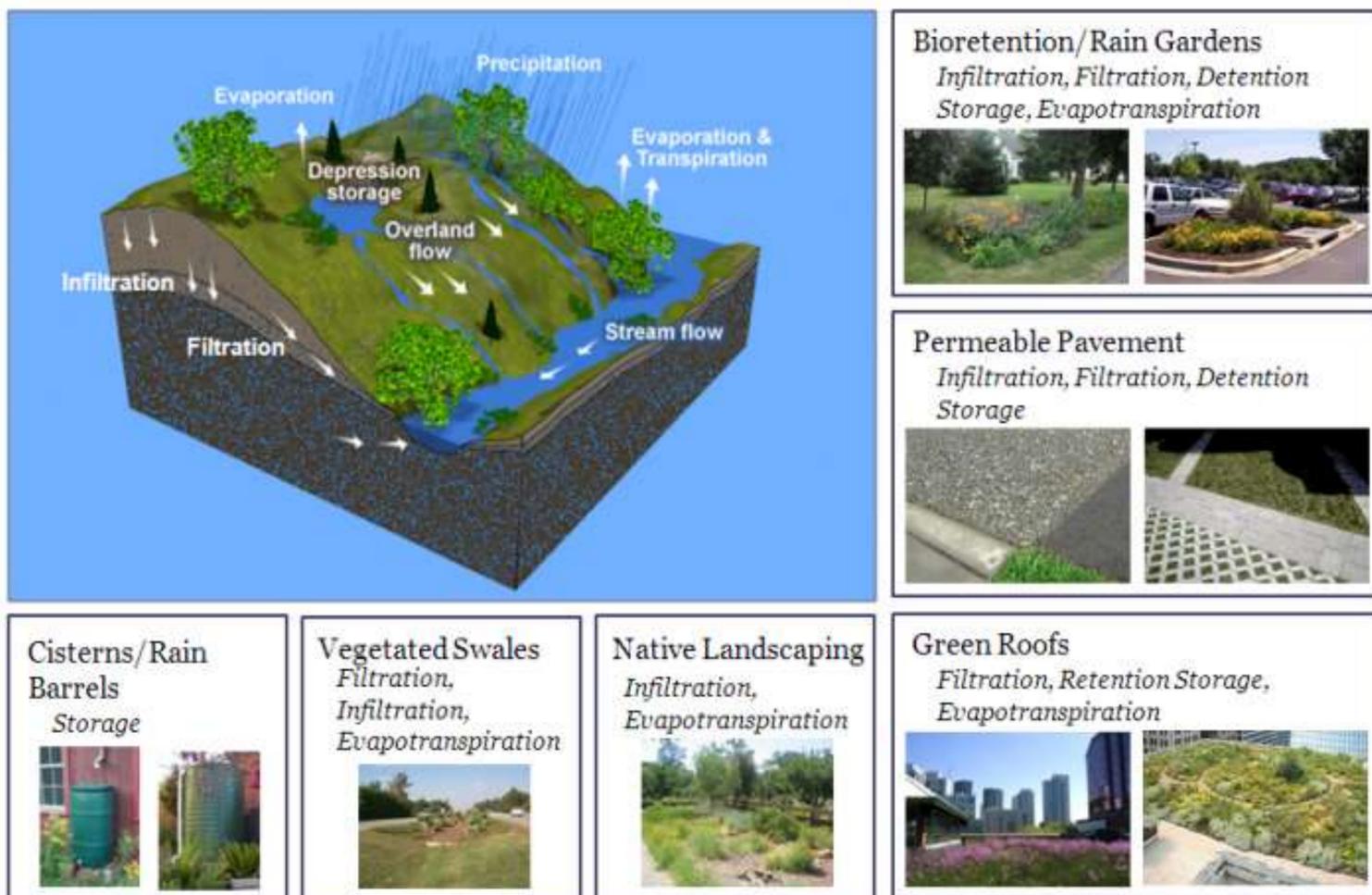
- DC Water has proposed to modify its Consent Decree to incorporate Green Infrastructure into a hybrid green/gray CSO abatement plan.
- Green Infrastructure would reduce the need for tunnel storage by capturing stormwater before it gets to the combined sewer system.
- The Potomac River Tunnel would be shortened.
- The overall schedule would be extended to accommodate the hybrid plan.



Activity	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Rock Creek CSO Controls																					
Current Plan - Piney Branch Tunnel			Planning & Eng.						Construction				2025								
Proposed GI Plan	Plan	Design, Construct, Monitor																			2032
Potomac CSO Controls																					
Current Plan - Potomac River Tunnel		Planning & Eng.							Construction				2025								
Proposed GI Hybrid Plan																					
GI at CSO 027, 028, 029	Planning & Eng.	Design, Construct, Monitor													2028						
Potomac River Tunnel	E.I.S.		Planning & Eng.							Construction										2030	
Separate CSO 025,026																					2032



Green Infrastructure practices mimic natural environmental processes by providing storage for stormwater runoff at the surface and by allowing water to infiltrate into the ground, both of which reduce combined sewer overflows.



Bioretention

- Planted filter bed of engineered soil, sand and gravel
- Formal or informal aesthetic. Ex: Street side tree box vs. naturalized garden

Green Roofs

- Can vary in depth and type of vegetation (sedums, grasses, perennials, shrubs)
- Insulates the roof resulting in lower energy costs
- Extends the life of the underlying roof membrane

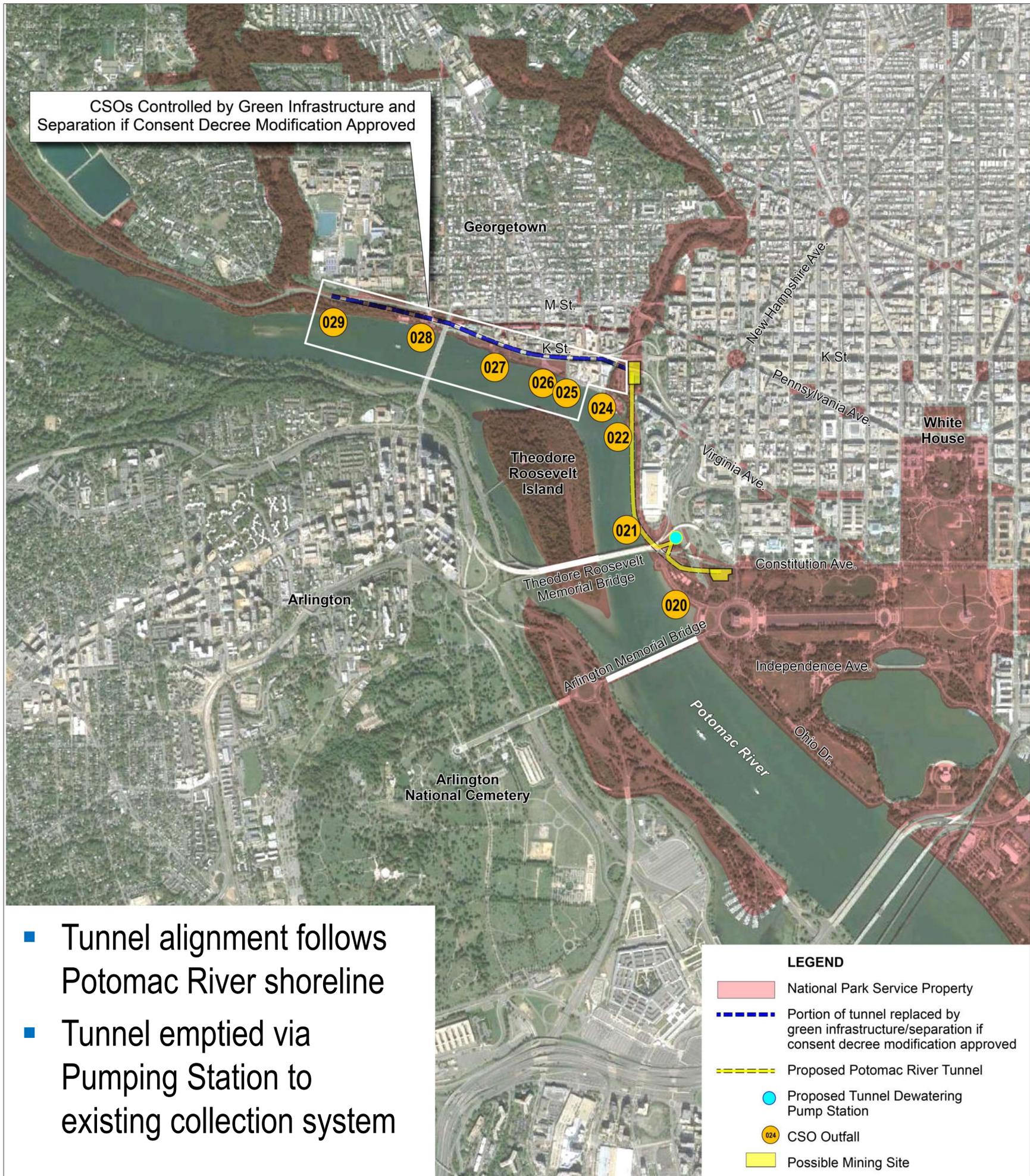
Permeable Pavement

- Used on sidewalks, parking areas, low-traffic roadways

Rainwater Harvesting

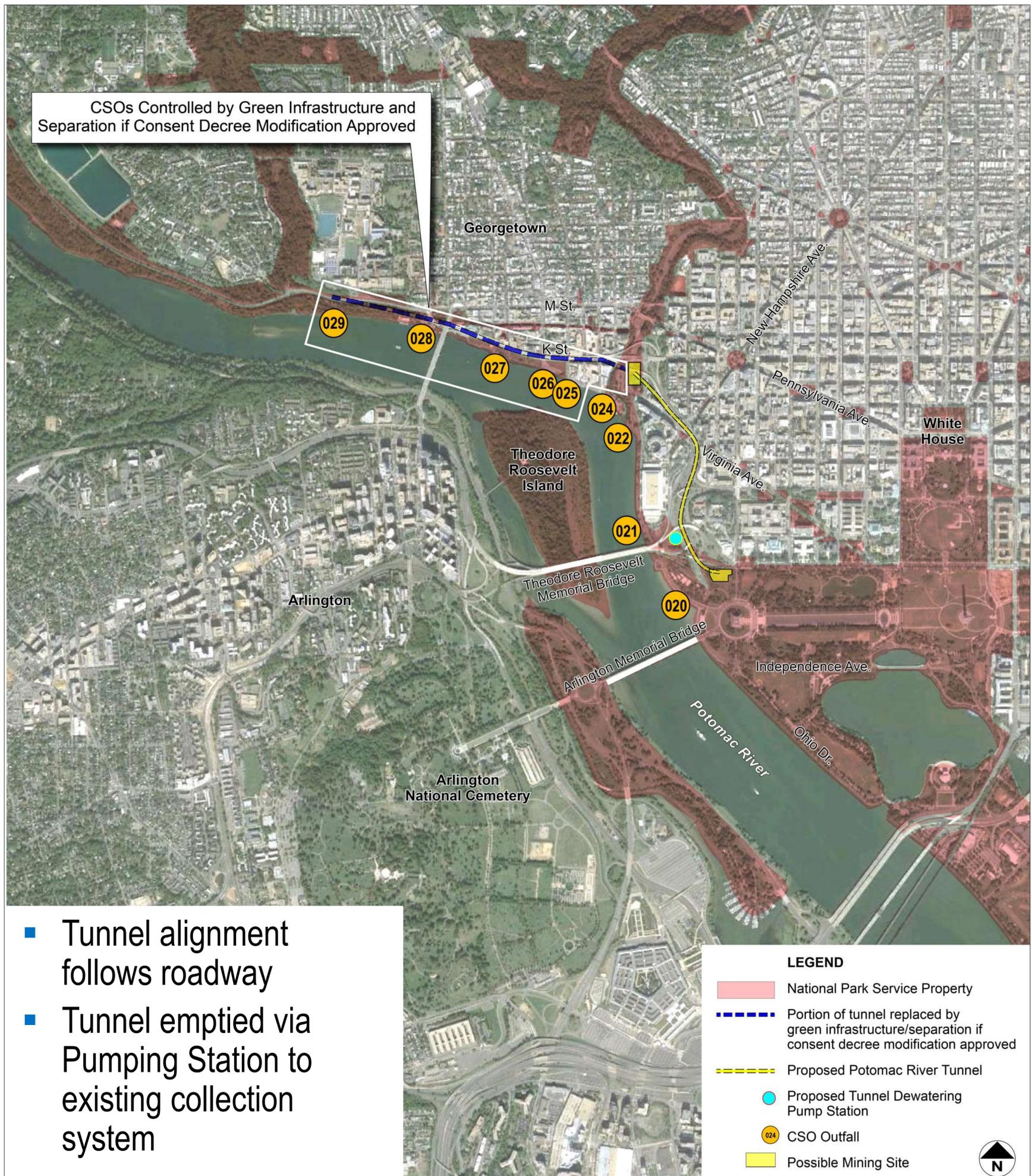
- Used for irrigation or other non-potable purposes





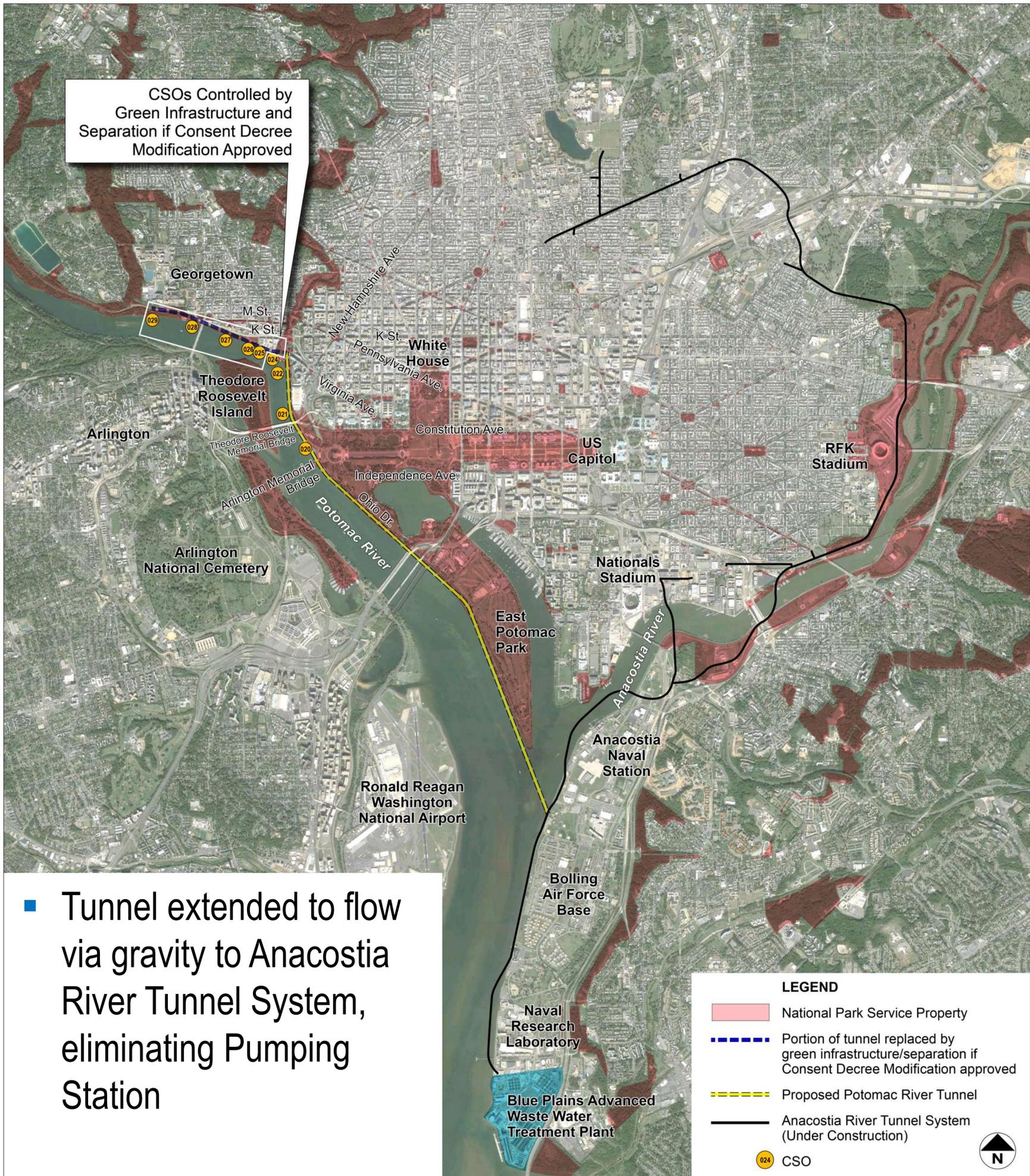
- Tunnel alignment follows Potomac River shoreline
- Tunnel emptied via Pumping Station to existing collection system





- Tunnel alignment follows roadway
- Tunnel emptied via Pumping Station to existing collection system





- Tunnel extended to flow via gravity to Anacostia River Tunnel System, eliminating Pumping Station



- An Environmental Impact Statement (EIS) is a document prepared in accordance with the National Environmental Policy Act (NEPA) to describe the impacts of a proposed activity on the environment.
- The “environment” considered in an EIS includes land, water, air, structures, living organisms, environmental conditions at the site, as well as social, cultural, and economic aspects.
- An "impact" is a change in consequence that results from an activity. Impacts can be positive or negative or both.
- An EIS describes impacts, as well as ways to "mitigate" impacts. To "mitigate" means to lessen or remove negative impacts.



What is Section 106 of the

National Historic Preservation Act (NHPA)?

- Section 106 is the portion of the NHPA concerned with review of Federal undertakings and their effects on historic properties.
- Section 106 requires Federal agencies to take into account the effects of their undertakings on historic properties and to provide the Advisory Council on Historic Preservation (ACHP) with a reasonable opportunity to comment.
- The Section 106 process is conducted concurrently with NEPA and includes:
 - formally initiating the Section 106 process with the State Historic Preservation Office;
 - identifying historic properties;
 - assessing adverse effects to historic properties;
 - resolving adverse effects to historic properties (if applicable); and
 - implementation of a memorandum of agreement (MOA), which outlines agreed-upon measures that the agency will take to avoid, minimize, or mitigate the adverse effects (if applicable).



What project issues and impact topics will be analyzed in the EIS?

- Water Quality
- Wetlands
- Floodplains
- Wildlife including Rare, Threatened, and Endangered Species
- Air Quality
- Noise
- Historic Structures and Districts
- Cultural Landscapes
- Visitor Use and Experience
- Human Health and Safety
- Park Operations and Management
- Transportation



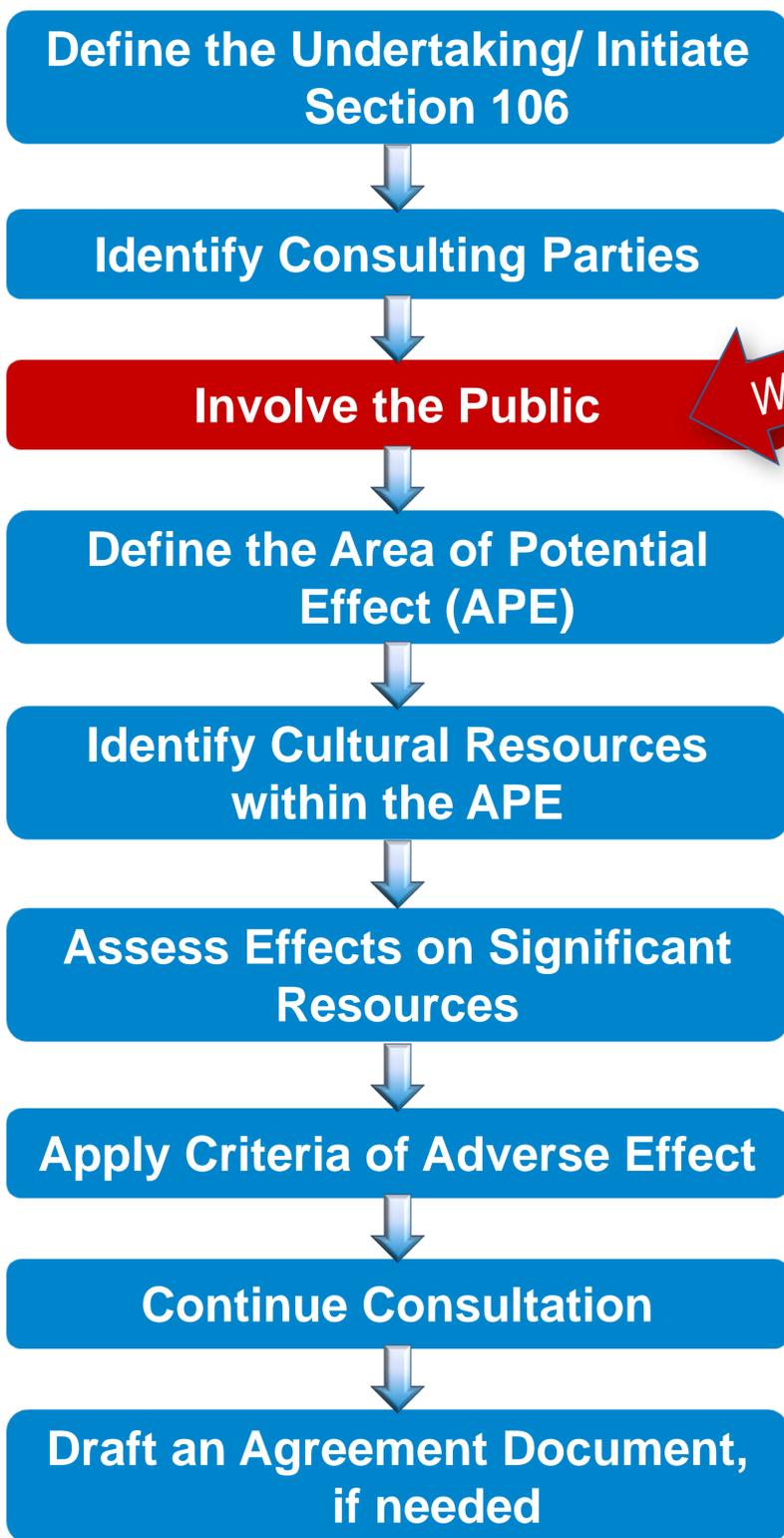
Potomac River Tunnel Study Area



National Environmental Policy Act (NEPA) and National Historic Preservation Act (NHPA) Processes



We are here



We are here



Next Steps	
Public and Agency Scoping	July 2 through August 31, 2014
Analysis of Public Scoping Comments	September 2014
Alternatives Development	Fall 2014
Public Meeting to Introduce Alternatives	Winter 2014-15
Draft EIS Released to Public/Agencies	Spring 2015
Public Hearing on Draft EIS	Spring 2015
Final EIS Released to Public/Agencies	Winter 2015-16
Issuance of Record of Decision	Spring 2016

How to Comment

DC Water values and welcomes your input on this project.

You can submit your comments several ways. Choose the one that is easiest for you.

- 1) Online at <http://parkplanning.nps.gov/PotomacRiverTunnel> (preferred)
- 2) Mail to:

DC Clean Rivers Project
c/o Potomac River Tunnel EIS
DC Water and Sewer Authority
5000 Overlook Ave., SW
Washington, DC 20032

If you wish to comment, you may submit comments electronically or directly by mail. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. While you may request in your comment that your personal identifying information be withheld from public review, we cannot guarantee that we will be able to do so.



**Please be sure to submit your comments
no later than August 31, 2014.**