

Improving the Environment through Optimization

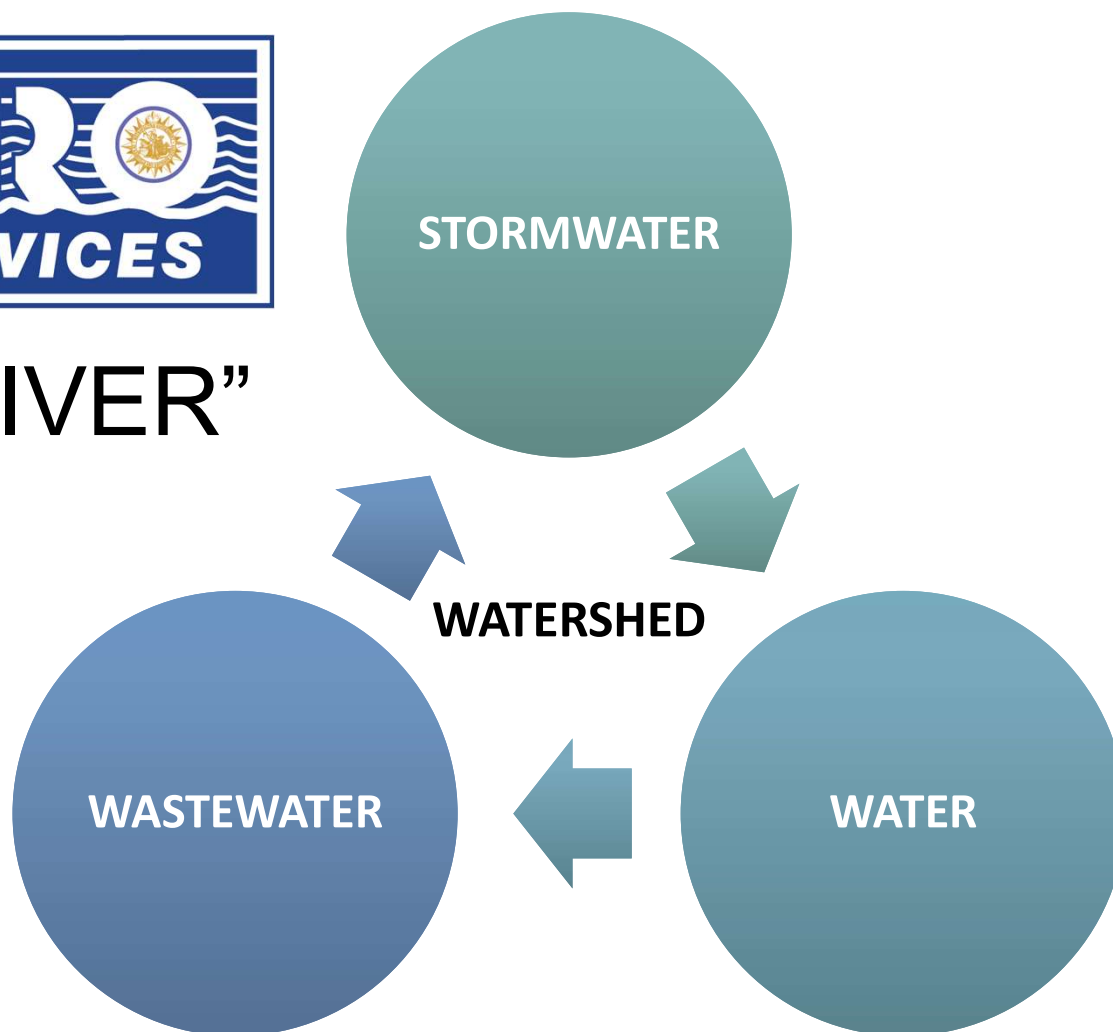
Scott Potter, P.E.

Metro Water Services Director





“RIVER to RIVER”



Nashville's Sewer System



Construction of Nashville's sewage collection system began in the late 1800s within former Nashville "city limits."

This system carried both stormwater and sewage directly to the Cumberland River without treatment.



Four Reclamation Facilities



Central WWTP – 1958
125/330 MGD



Dry Creek WWTP – 1961
25/63 MGD



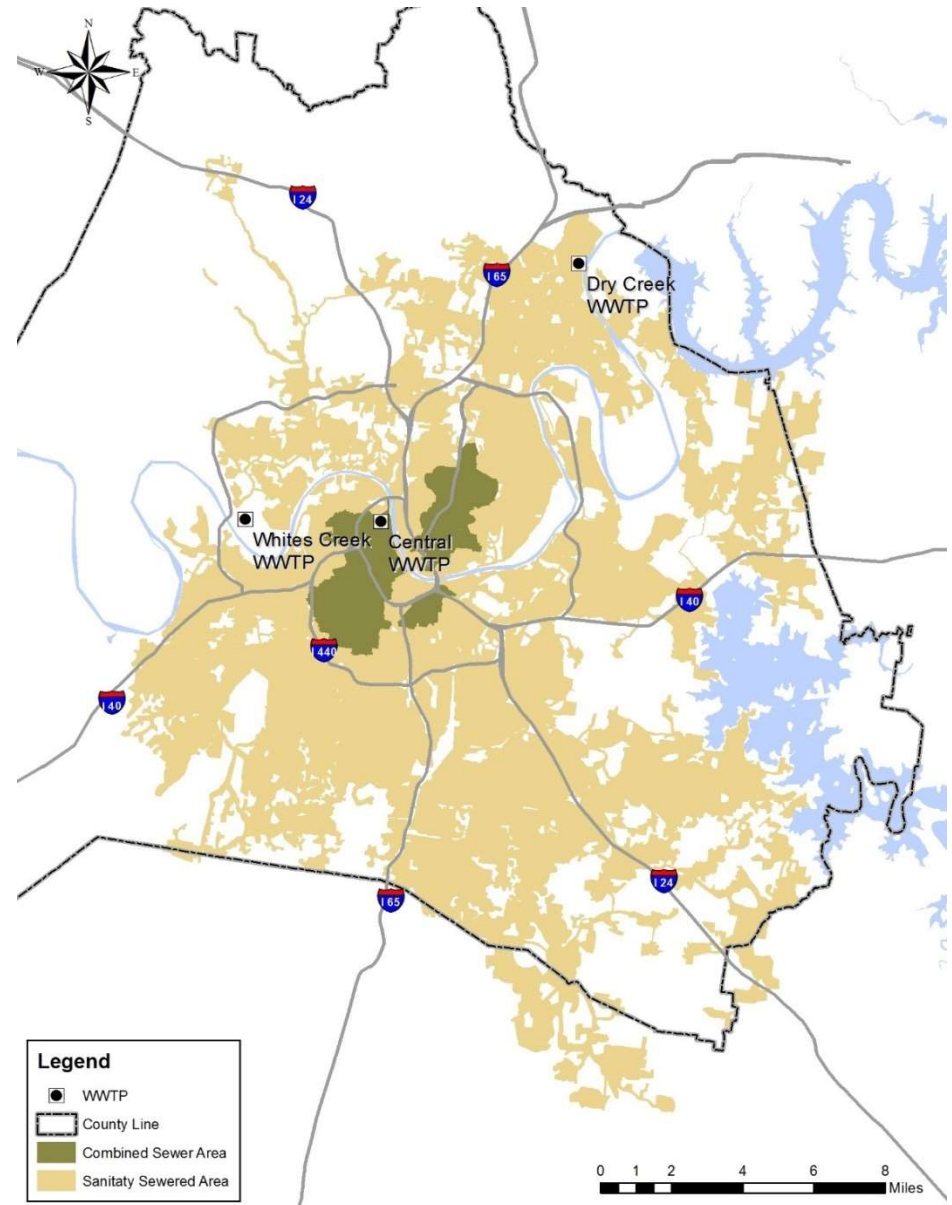
Whites Creek WWTP – 1976
37.5/120 MGD



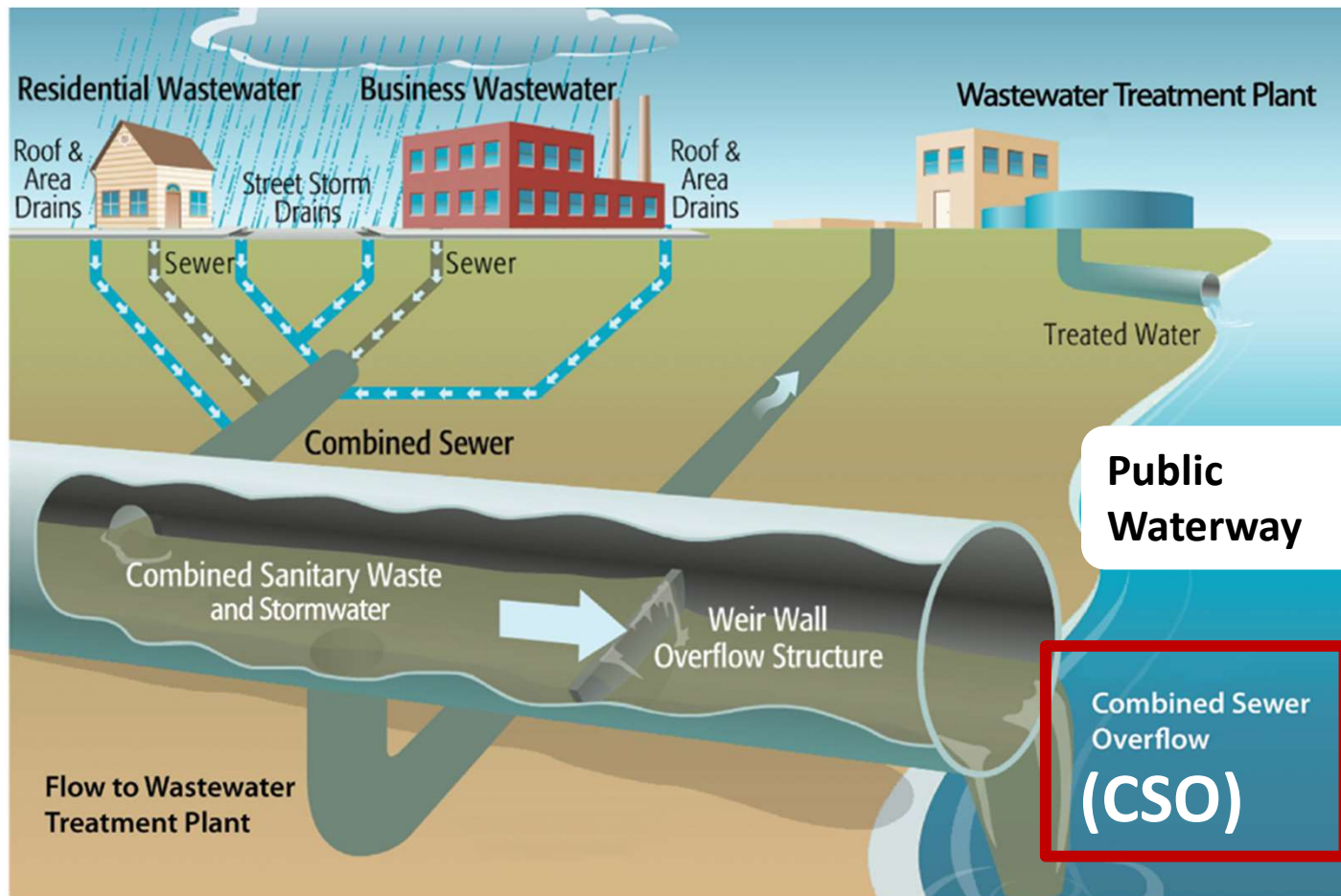
Biosolids

Nashville's Sewer System

- Serves a population of 700,000+
- Contains both combined sewers and separate sanitary sewers
- Receives flow from 9 satellite communities



Combined Sewer System



Overflows Led to a Consent Decree

Received
2007 OCT 24 AM 10:18
U.S. DISTRICT COURT
MIDDLE DISTRICT OF TN

UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF TENNESSEE
(Nashville Division)

THE UNITED STATES OF AMERICA and
THE STATE OF TENNESSEE,

Plaintiffs,

v.

METROPOLITAN GOVERNMENT
OF NASHVILLE AND
DAVIDSON COUNTY,

Defendant.

CIVIL ACTION
NO. 3 07 1056

JUDGE ECHOLS

CONSENT DECREE
INTRODUCTION

WHEREAS, the United States of America, on behalf of the Administrator of the United States Environmental Protection Agency ("EPA"), filed a Complaint alleging that the Defendant, the Metropolitan Government of Nashville and Davidson County, Tennessee ("Metro"), acting by and through its Department of Water and Sewerage Services, has violated the Clean Water Act, 33 U.S.C. § 1251, *et seq.* ("CWA"); and

WHEREAS, the CWA imposes strict liability based upon any violation of the CWA; and

WHEREAS, on April 30, 2007, the State of Tennessee ("State") issued a sixty (60) day notice of intent to sue Metro pursuant to 33 U.S.C. § 1365, and thereafter filed a Complaint

1



What is a Consent Decree?

Agreement
based on
enforcement
for violations
of the Clean
Water Act

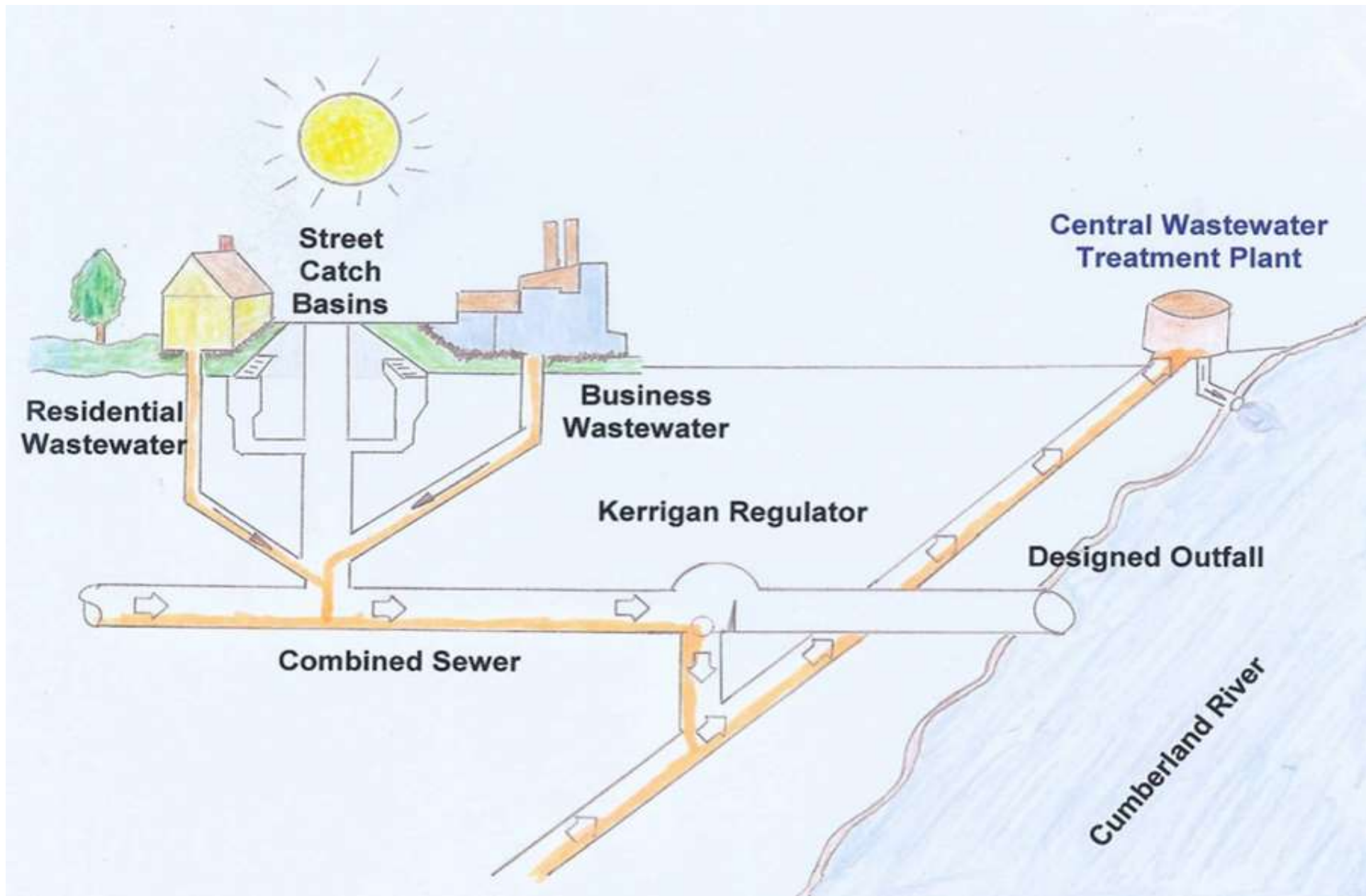
Metro Nashville

EPA

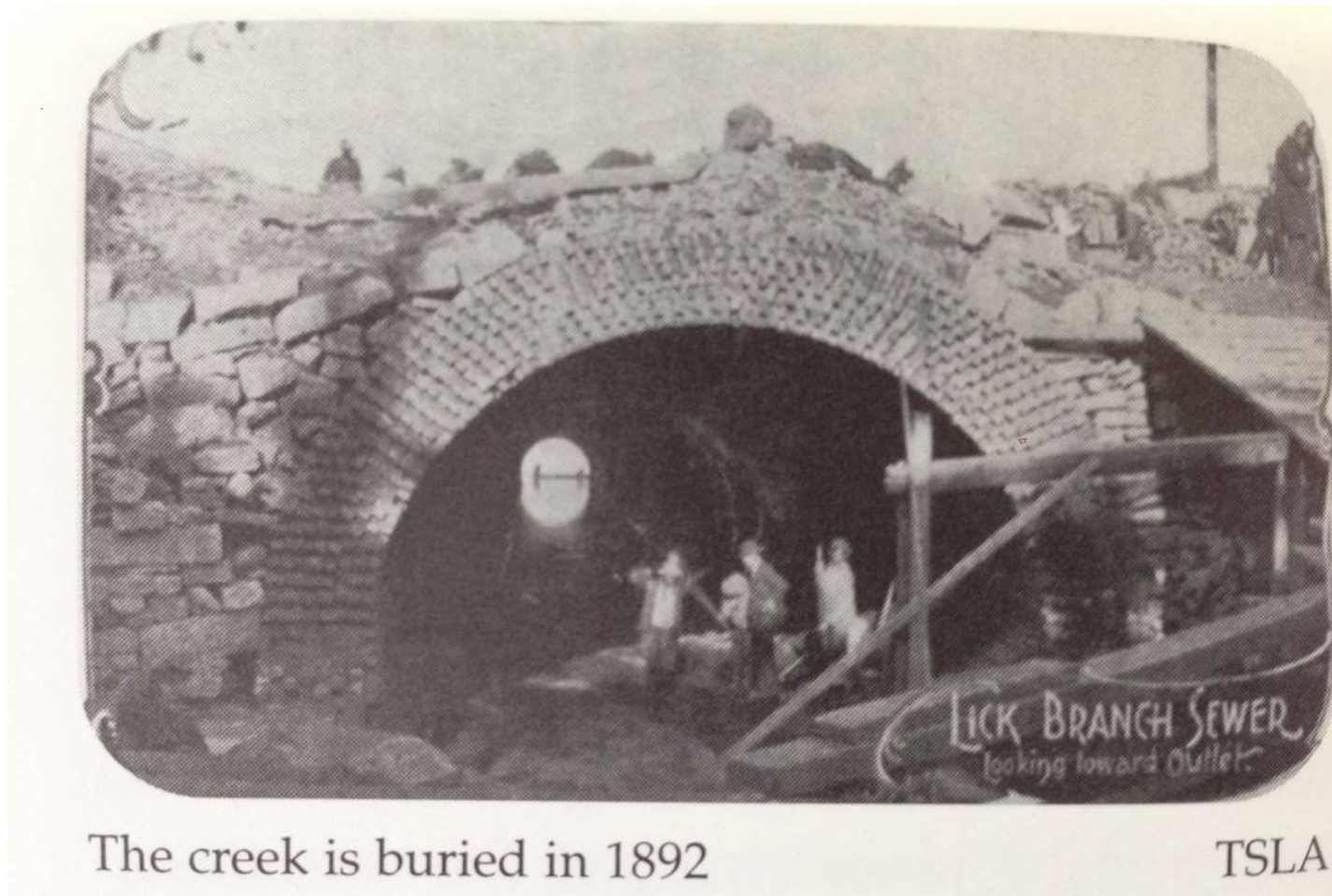
U.S. Department of Justice

TN Department of Environment and
Conservation

TN Attorney General



Kerrigan sewer dates to 1890s



Central Wastewater Treatment Plant (Central Water Reclamation Facility)



A Better Neighbor to Nashville



Central Headworks Improvements

- New 440 MGD headworks facility to reduce impacts of debris and achieve enhanced grit removal and removal of disposable wipes.
- Architectural features based on community feedback



Blasting for Central Headworks

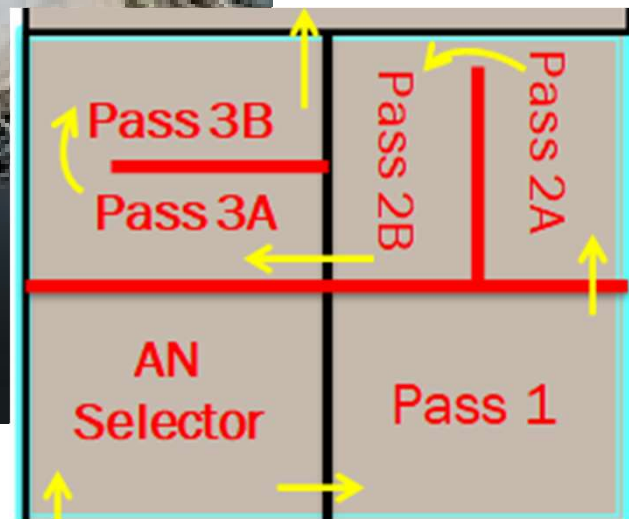


Area = 55,000 sq. ft.

- 35' deep
- 2 months
- 220 blasts

35,000 cu. yds of
material removed

Aeration Improvements



Disinfection Improvements

- Currently feed chlorine and sulfur dioxide
- Convert existing chlorine contact basins to UV disinfection



Improved Conveyance Piping



3rd Avenue Greenway



Dog Park

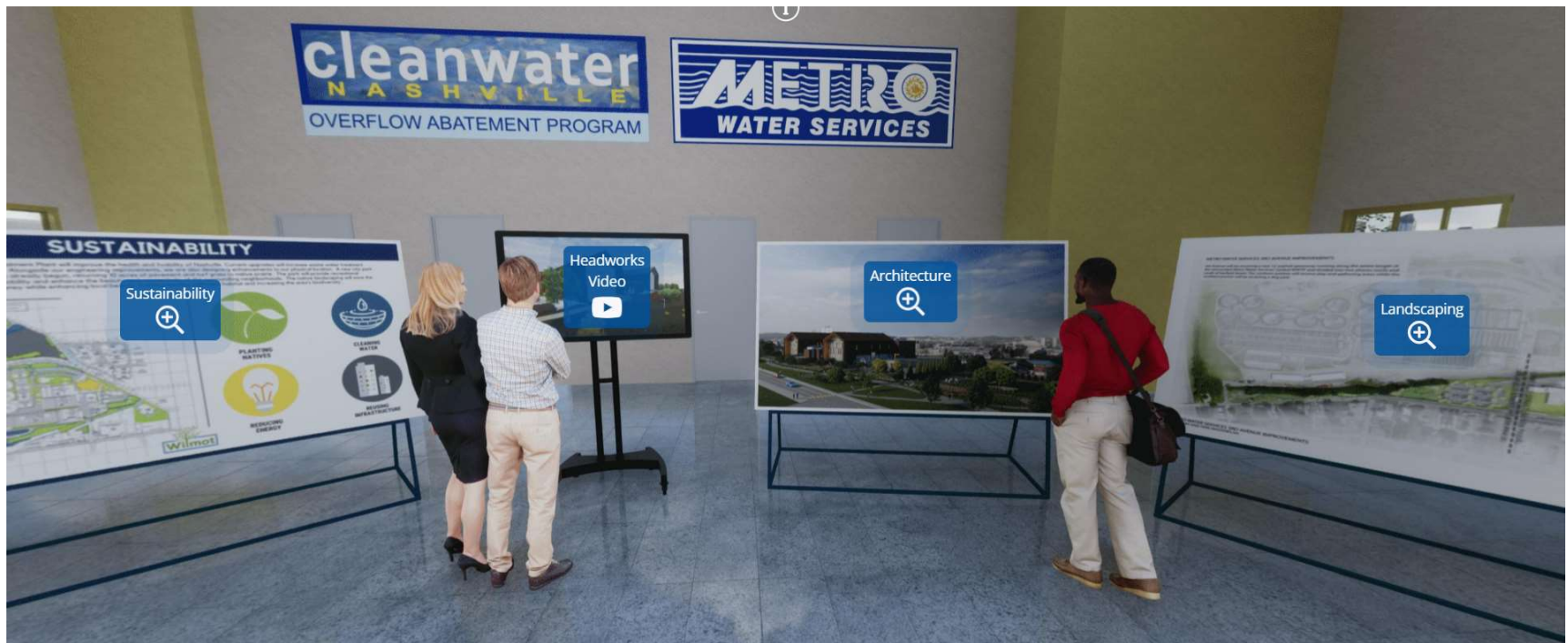


North Greenway and Park Improvements



Virtual Open House for Community

Flexible format allows audio tracks, embedded videos, slide shows, graphic displays to be shared via e-mail link



More info on Clean Water Nashville?

www.cleanwaternashville.org



The screenshot shows the homepage of the Clean Water Nashville website. At the top, there is a header with the 'cleanwater NASHVILLE' logo on the left and the 'METRO WATER SERVICES' logo on the right. Below the header is a navigation bar with links: Home, Projects, About the Program, Resources, News, and Contact Us. The main content area features a large blue box on the left with the title 'The Clean Water Nashville Overflow Abatement Program' and a paragraph describing the initiative. To the right of this box is a photograph of a large, modern, circular water treatment facility. Further right is a white box with the title 'West Park Improvements Complete' and a paragraph about the completion of major improvements at West Park. Below the photograph is a 'read more' link. At the bottom of the main content area, there are three colored boxes: 'Learn' (green), 'Highlighted Projects' (dark blue), and 'News' (light blue). Each box contains a list of links to various resources, projects, and news items.

cleanwater NASHVILLE
OVERFLOW ABATEMENT PROGRAM

METRO WATER SERVICES

Home Projects About the Program Resources News Contact Us

The Clean Water Nashville Overflow Abatement Program

is an initiative led by Metro Water Services (MWS) in coordination with partner agencies including the U.S. Environmental Protection Agency (EPA) and the Tennessee Department of Environment and Conservation (TDEC) for the purpose of meeting the Clean Water Act requirements and, in the process, ensuring the environmental health of the Cumberland River and its tributaries for future generations.

[MORE ABOUT US](#)

West Park Improvements Complete

Metro Parks and Metro Water Services (MWS) celebrated the completion of major improvements at West Park on August 18, 2018.

[read more](#)

Learn

- Program Overview and Mission
- History and Consent Decree
- Project Types

Highlighted Projects

- Annual Rehabilitation FY2014 - Whites Creek Trunk
- Brick Church Pike Pine Improvements

News

- West Park Improvements Complete | 05-Sep-2018
- CWWTP: Gathering neighborhood input

