Water Quality Protection in Northeast Ohio The Role of Science in Environmental Regulation/Policy Decisions



Frank Greenland Director of Watershed Programs | March 24, 2022



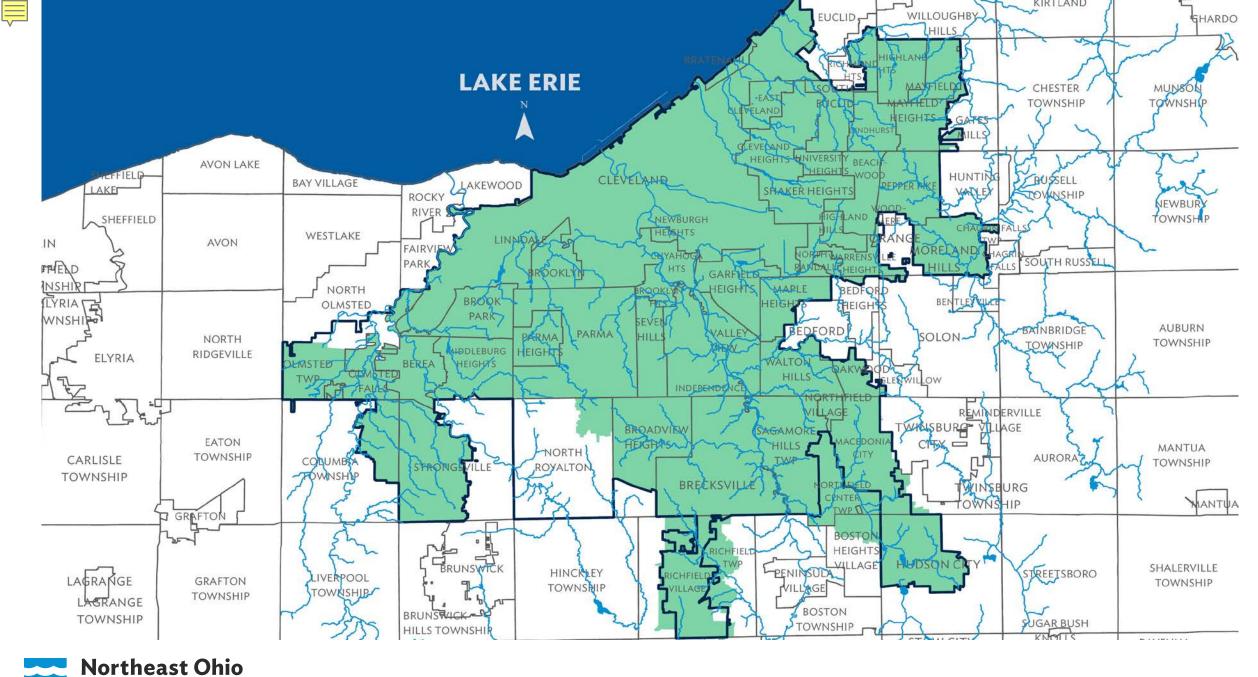


Cuyahoga River, 1952

NEORSD at a Glance

- Service area: 355 square miles
- Services: Regional sewer and stormwater management, water quality monitoring, Lake Erie beach monitoring, maintenance
 - Water Quality and Industrial Surveillance
 - Analytical Services
- Serving: Cleveland and 61 communities (1 million residents)
- Governance: 7-member Board of Trustees





Regional Sewer District

What we do

- Own, operate 3 wastewater treatment plants
- 330 miles of sewers
- \$3 billion, 25-year combined sewer overflow control program
- 476+ mile regional stormwater system



50 Years of Environmental Investment

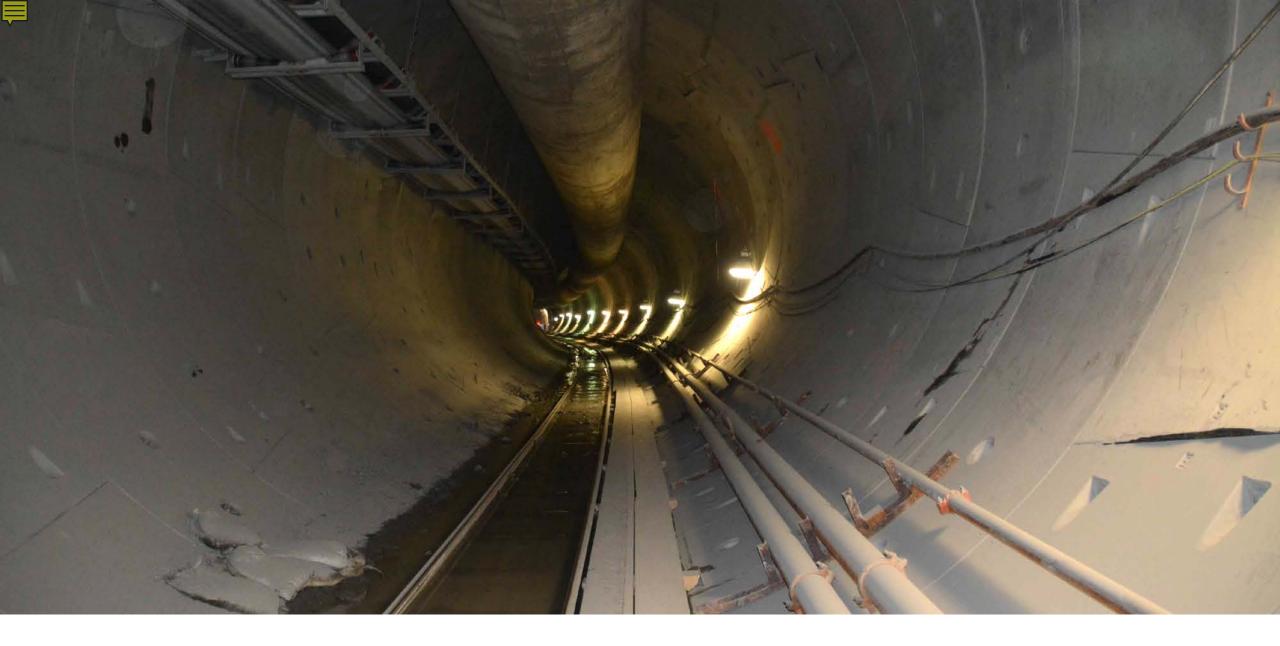
• Since 1972: Billions invested in clean water

- Wastewater treatment plants
- Interceptor and relief sewers
- CSO control and interceptor rehabilitation
- Regional Stormwater Management
- Other facility upgrades











Project Clean Lake,

\$3 billion in 25 years, CSO Control, Sewer Fees





Regional Stormwater Management Program,

\$46 million annually, Flooding and Erosion, Impervious Surface Fee

WARNING: OVERFLOW EVENT PUBLIC ADVISORY

STORMWATER AND SEWAGE OVERFLOWED TO THIS BEACH AREA ON

As a result, the beach area and water may have been affected. Visitors – particularly children, the elderly, and those in ill health – are advised to avoid contact with the water and debris.



NORTHEAST OHIO REGIONAL SEWER DISTRICT CSO INFORMATION HOTLINE (216) 432-7330 | www.NEORSD.org

FOR MORE INFORMATION ABOUT WATER-RELATED HEALTH CONCERNS:

DATESTIME

CLEVELAND DEPARTMENT OHIO DEPARTMENT OF PUBLIC HEALTH OF HEALTH (216) 664-4292 (614) 466-1390

THIS SIGNAGE IS PROVIDED AS A COURTESY OF THE NORTHEAST OHIO REGIONAL SEWER DISTRICT

WATER QUALITY NOWCAST: POOR

A "Nowcast" system is being tested on this beach to predict bacterial levels that may be present in the water.

POOR WATER QUALITY IS PREDICTED TODAY

based on conditions observed this morning. This means that bacteria levels are likely to be high. Swimming is not advised, especially for children, the elderly, and those in ill health. Full body water contact may result in illness.



Cleveland Lakefront State Park • Cleveland Department of Public Health • United States Geological Survey **For more information, call (216) xxx-xxxx.**



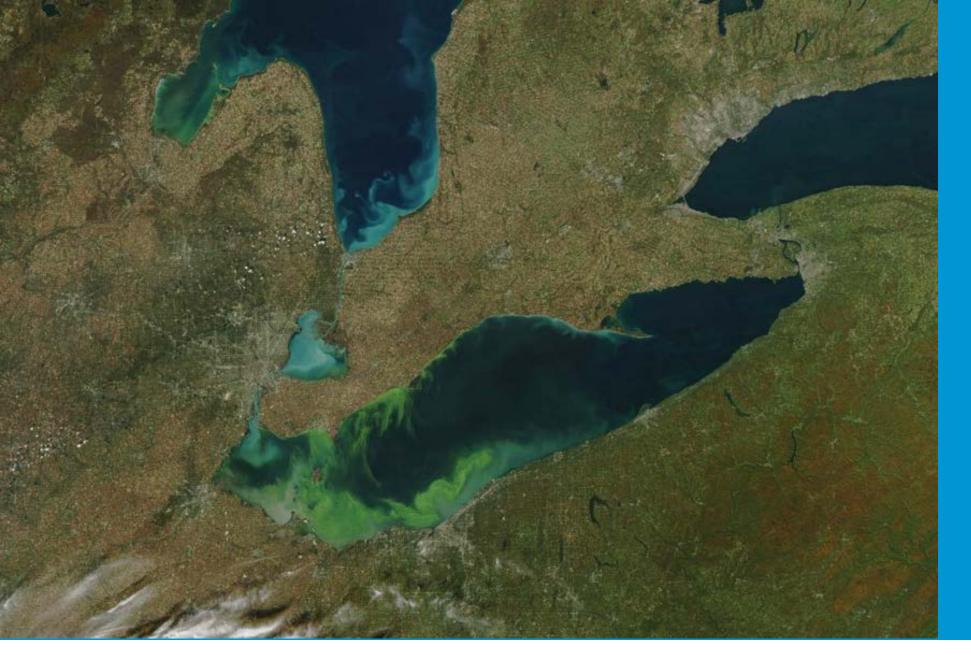
Public Notification







Public Health Impacts: Basement Flooding





Harmful Algal Blooms

NEORSD Examples of Collaboration

- E. *coli* Tracking
 - Rapid test development
 - Genetic fecal indicator markers
 - Flow current studies (impact of urban streams on beaches)
 - Source tracking
- HAB Analysis/Health Advisories
- PFAS Analysis/Treatment
- COVID 19 Analysis
- Member Community/Infrastructure Program (MCIP)



Future Environmental Investments

- Regulations need to be driven by sound science
- Environmental investment needs are significant and sound science helps drive decision making
- Environmental \$\$s are limited, projects need prioritization to maximize benefits (MCIP is an example)



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