

Lakewood Resiliency Task Force



Objective Category: *Water* – *Contribute to a more healthy and productive community by maintaining safe and healthy water infrastructure—both supply and discharge.*

Summary: January 2019

Our Purpose Statement:

To understand current and emerging forces that can impact Lakewood and the wellbeing of its citizens. Examining environmental, political, social and economic forces through the lens of resiliency, the Task Force will pursue and recommend systemic process enhancements that will allow Lakewood to identify, prioritize, execute and measure solutions that will lead to a continuously improving and thriving city for all, especially the most vulnerable among us, for generations to come.

Indicators of the “Current State” in Lakewood:

Estimated Annual Overflow Events – 472 (84 Million Gallons)

Nitrate Level - .95mg/L (MCL = 10) [2017 Water Report]

Lead Level – Not Detected (Action level 15 µg/L) [2017 Water Report]

Residual Chlorine – 1mg/L (Maximum Residual Disinfectant Level = 4mg/L) [2017 Water Report]

Children with Elevated Blood Lead Level (>5 µg/L) 2016 – 5.7% [Cuyahoga Board of Health]

Children with Elevated Blood Lead Level (>10 µg/L) 2016 – 1.6% [Cuyahoga Board of Health]

Lead Service Lines Existing - ~5,000

Lead Service Lines Replaced (2017) –

Stormwater Retention Capacity from City-owned projects – 985,935 Gallons

Citywide Impervious Surface – XX% (CT Consultants)

Permeable Pavement - ~1acre (Muni Lots, Family Health Center, Cove Park, WR Distillery)

Task Force Additions:

- Affordability, % of income, equitable cost allocation
- Water consumed/household
- Days lake unswimmable
- Access to water
- Measure pharmaceuticals, microplastics
- % Land parks / Green Roofs
- Citizen engagement opportunities
- Tree canopy

Relevant highlights from previously adopted City of Lakewood Plans:

Vision – Community Wellness – “Educate about the responsibility of maintaining sewers citywide”

Vision – Community Wellness – “Provide information to residents looking to make “green” renovations”

Vision – Community Wellness – “Become a regional leader regarding storm water management

Vision – Housing “Maintain existing trees on residential streets and manage our urban forest”

Vision – Community Wellness – “Consider small-scale community-based solutions to help alleviate storm runoff including the use of rain barrels, bio-swales, storm water retention, and permeable pavements”

Vision – Economic Development “Promote the use of storm water management techniques such as bio-swales, rain gardens, and pervious pavements in commercial districts”

2016 Strategic Objectives – “Clean Water initiatives: West End outflow elimination, source control pilot study, citizen task force study due, and anaerobic digester co-energy plans developed”

Systems Level Connections to other Priorities:

Prosperity: Balancing sewer needs with the increasing cost burden of infrastructure upgrades on ratepayers

Living Infrastructure: Waste and storm water captured and repurposed. Soil toxins (e.g. lead) remediated through natural processes with industrial application

Resource Regeneration: Reclaimed water used for agriculture and industrial purposes and water is used efficiently.

Place: Accessible connections to Lake Erie and Rocky River, sense of identity for the City, something to be celebrated.

Place: Lakefront and riverfront public spaces are highly utilized.

Health: Toxic environmental conditions are eliminated to improve health and wellbeing.

Living Infrastructure: Natural features are protected and natural habitats are enhanced.

Current and Proposed Projects and Programs in Lakewood:

- Integrated Wet Weather Improvement Plan

- Chapter 1339 - Stormwater Pollution Prevention Plans (SWP3) required for any project that disturbs >8,000 square feet (more stringent than State or NEORS requirements)

- Lead Safe Cuyahoga Grant Program

Objective Category: Water

Primary Goal or Objective: (the change we seek):

-

Illustrative indicators, baseline measurements and performance targets:

1.) Toxicity: Measure additional pollutants – pharmaceuticals, microplastics

2.) Volume: What are the largest threats to CSO volume?

3.) Cost: How much will interventions cost? What is the plan to pay for ongoing maintenance?

Strategies and Interventions, Projects and Programs to meet the targets:

- Urban Tree Canopy – plant more trees
- Implement a stormwater impact fee (charge more for surface-level parking lots)
- Rethink crosswalks – water pools
- Mandate for more permeable pavement and other new construction requirements
- Determine what additional toxins should be measured (fertilizers, carcinogens, etc.)
- Additional stormwater diversion tactics – rain barrels

Necessary and desirable stakeholders and partners, within Lakewood and beyond Lakewood:

- LEAP
- Sustain Our Great Lakes
- Lakewood residents
- Adjacent regions with output to the lake

Required changes to Policies and Procedures

- How to remove the amount of impervious pavement?
- Tree canopy goal
- Test for microplastics, pharmaceuticals
- Require green infrastructure
- Make permeable pavement available for residential and commercial consumers

Resources required vs. resources available and the time frame: