

# 2021-2026 Stormwater Capital Plan and 20-year Plan Strategy

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Clark County Council Work Session

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# Local Framework and Regulatory Requirements

## Primary Policy and Goals

### Policy:

- Meet Phase I Municipal Stormwater Permit requirements

### Goals:

- Protect and enhance streams and wetlands
- Minimize stormwater impacts to receiving waters
- Maximize public benefits of county-owned lands

## Regulatory Requirements

### Phase 1 Municipal Stormwater Permit:

- Structural stormwater controls – prevent or reduce impacts to waters of state
- Stormwater Management Planning
- Maintenance and Operations

### Underground Injection Control Program:

- County must address any drywells that pose a threat to groundwater

### Growth Management Act:

- Capital Facilities Plan includes stormwater



# 20-year Plan Strategy



*Thomas Wetlands East, East Minnehaha Neighborhood*



# Overview

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## Team

- Seven county staff – Clean Water, Design, Operations, Community Planning
- Two Clean Water Commissioners – public input; professional expertise

## Principles (six-year principles plus...)

- Support sound asset management
- Identify leveraging and collaborative opportunities
- Achieve measurable water quality improvements and protection
- Address deficiencies in drainage systems to reduce flooding

## 6-year vs. 20-year

- 20-year = long-term, proactive, planning and prioritization; the “menu”
- Six-year = short-term needs and requirements; the “meal”



# Strategies and Considerations

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## **Strategic Investment**

- maximize positive impacts by investing in the most effective projects and programs

## **Sustainability**

- focus on holistic watershed health rather than “projects of opportunity”

## **Adaptability**

- develop a broad range of projects and programs that can adapt to changing needs and regulatory environment

## **Leveraging and Partnerships**

- continue and expand internal and external partnerships to leverage stormwater dollars for the greatest benefit

## **Population Growth/Climate/Environmental Justice**

- incorporate long-term projections into project prioritization
- address state objectives to assist overburdened communities



# 20-year Project Types

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## Same as current six-year plan

- Capital Repairs >\$25,000
- Water Quality and Hydrology Retrofits
- Underground Injection Control (UIC)
- Stream Stabilization, Habitat, and Fish Barrier Removal
- Reforestation
- Property Acquisition for Stormwater Benefit
- Sweeping Program

## Need for New Programs

- **Repair of Aging Infrastructure**
- **Conveyance System Inspection and Repair**
- Drainage Improvements/Flood Reduction
- Enhanced Sweeping



# Opportunities/Needs

## Conveyance System Inspection and Maintenance

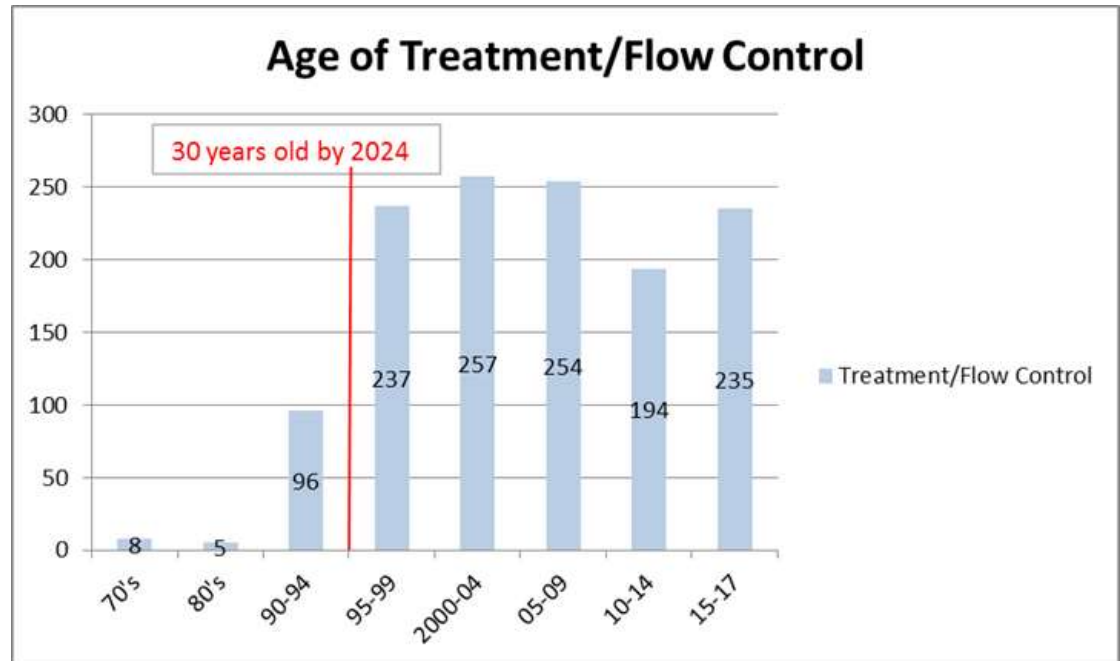
- 400 miles of stormwater pipe dating to 1952
- No current inspection program
- \$750,000 in emergency repairs during 2019-2020

### Need:

- Invest in pipe inspection
- Prioritize proactive repairs
- Include in 20-year and 6-year capital plans

## Repair of Aging Infrastructure

- Within 20 years over 800 treatment and flow control facilities will be at least 30 years old
- High-cost repairs or replacement will increase



# Next Steps

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## ***Six-year Plan***

- Incorporate Feedback from Clark County Council
- Adoption on November 3, 2020

## ***20-year Plan***

- Incorporate Feedback from Clark County Council
- Re-convene planning team in 2021
  - Program development, prioritization, project matrix
- Council adoption – Q3 2021





## 20-year Stormwater Capital Opportunities Summary

DESCRIPTION	NEED/OPPORTUNITY	FUNDING
<b>ASSET MANAGEMENT</b>		
<b>CAPITAL REPAIRS &gt;\$25,000/TREATMENT &amp; FLOW CONTROL REPLACEMENT</b>		
Repair required by Permit	Twelve (12) repairs not currently programmed	Within current revenues
Repair required by Permit when fail, or systematically replace	850 Treatment and Flow Control facilities aged 30-60 years by 2040	No funding identified
<b>CONVEYANCE SYSTEM INSPECT AND REPAIR</b>		
400 miles existing piped stormwater conveyance Aged to 1952	Current complaint or emergency only	Current budget \$50,000/year
No existing inspection or replacement	Inspection/Repair Program needed - \$750,000 capital investment - 2-3 FTE staff investment	Fund balance held for initial capital outlay  No funding identified for repair/replace
<b>RETROFIT PROJECTS</b>		
<b>WATER QUALITY and HYDROLOGY</b>		
Add or enhance water quality or flow control practices in areas lacking or underserved	At least fifty (50) identified not currently programmed	Exceeds projected revenues
<b>LARGE-SCALE CIP LEVERAGING</b>		
Apply Clean Water dollars to expand/enhance treatment or flow control for major CIP road projects	At least four (4+) current potential; high-dollar projects	No funding identified



## 20-year Stormwater Capital Opportunities Summary

DESCRIPTION	NEED/OPPORTUNITY	FUNDING
<b>UNDERGROUND INJECTION CONTROL (UIC)</b>		
Retrofit or Decommission required under UIC regulations for all High-Threat drywells	Sixteen to eighteen (16-18) wells not currently programmed	Within current revenues
<b>DRAINAGE/FLOODING IMPROVEMENTS</b>		
Install drainage infrastructure to alleviate flooding in areas that have no existing infrastructure	Nine (9) identified issues; high dollar projects	No funding identified
<b>STREAM HABITAT RESTORATION</b>		
Improve stream habitat and function	Three (3) priority projects not currently programmed; 9 additional identified	Grant-dependent; match within current revenues
<b>REFORESTATION</b>		
Enhance county properties with native vegetation for stormwater and environmental benefit	Current target to plant an average of six (6) acres annually	Within current revenues
<b>PROPERTY ACQUISITION FOR STORMWATER BENEFIT</b>		
Leverage Clean Water funds to assist Legacy Lands purchase properties from Conservation Areas Acquisition Plan	Opportunities identified through current and 20-year acquisition plans	Within current revenues
<b>STREET SWEEPING</b>		
Utilize Clean Water funds to provide arterial sweeping	Clean Water currently funds ~75% of annual arterial sweeping	Within current revenues
Provide enhanced sweeping program to maximize water quality benefit and reduce other maintenance costs	Enhanced sweeping program -\$250,000 per sweeper capital outlay -1 FTE staff investment per sweeper	No funding identified



# Thank You!

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## Comments and Questions

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