The Miami Conservancy District is working to improve the integrated flood protection system so communities continue to stay safe. Without improvement, there is an increased risk of failure and threat from catastrophic flooding.

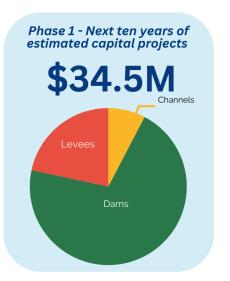
- The Conservancy Court authorized a new capital spending authority of \$34.5M in February 2024.
- Potential needed improvement to the system is estimated at \$140M.
- The capital assessment rate is anticipated to be set in July 2024 and collections will begin in 2025.

## Phased approach

- Prioritize projects using rigorous monitoring, inspections, and risk analysis.
- Develop strategies to ensure a high level of protection.
- Pursue diverse funding opportunities such as grants and low interest loans to reduce the burden on local communities.
- The Board of Consultants recommended a phased approach to prioritize projects and future phases through the mid-2030s. Each year the Conservancy Court determines the rate for the following year.

## Types of improvements needed

- MCD Dams have held back floodwaters over 2,100 times. They need concrete wall and spillway improvements to restore the stability of the structures.
- Levees, floodwalls, revetments, floodgates, and outfalls undergo harsh conditions and protect densely populated areas. Many require major repairs, replacement, or upgrade.
- Erosion problems in maintained channels such as the Great Miami, Stillwater, and Mad Rivers are threatening levee stability. This also threatens community assets including critical infrastructure such as water treatment facilities, roads, bridges, and more.
- Multiple MCD facilities do not meet current standards including ADA requirements.
- MCD's fleet is not secure from weather, vandalism, and damages, which reduces their life cycle.



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## Immediate need

The flood protection system has stayed strong for over 100 years. It now requires reinvestment and rehabilitation to continue protecting communities from destructive flooding.

- Inspections by regulatory agencies resulted in findings that require Miami Conservancy District to make improvements to all dams immediately.
- The levees are subject to the costly, federallymandated FEMA accreditation process.
- Miami Conservancy District is seeking state and local funding to ease the burden on local assessment payers.



Deteriorating concrete of an emergency spillway



Scan to watch a 90 second video about the flood protection system.

## **Keeping The Promise**

## Dam Safety Initiative (DSI) 1999 - 2022

The Dam Safety Initiative (DSI) was a capital program that expired in 2022. The DSI was authorized to address a limited scope of high-risk concerns related to dam underseepage, crest permeability, and concrete deterioration. MCD has no long-term capital funding for rehab and renewal since the DSI expired.

# \$24.5M

Spent through 2023 for analysis, design, and construction of projects which improved the safety of the flood protection system.

- Installed over 208 relief wells to control threat of underseepage at all five MCD dams
- Placed impervious material at the crest of three dams to protect against seepage
- Repaired concrete and walls at Lockington Dam to improve stability
- Improved floodgates, revetment, and floodwalls in multiple cities



Improvements were made to the crest of Englewood Dam during the Dam Safety Initiative.



Inspecting concrete during rehab work on Lockington Dam.

### DSI projects wrapping up

- Underseepage performance monitoring
- Germantown Dam spillway, stability, and floor improvements
- Taylorsville Dam hydraulic analysis
- · Wall stability design
- · Concrete revetment projects
- Rehabilitation of Lockington Dam left wall

#### Critical repairs still needed

More capital work is still needed at the MCD Dams. The DSI did not include funds for levee projects. Levee stability represents a risk to the system and very little funding was allocated to levees in the original DSI program. The total cost of projects over the next ten years is estimated at \$80M in 2023, and much more work is anticipated beyond the next ten years.



Concrete repair and rehab is needed throughout the system.

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