# Clifton Heights CSO Basin Project Advanced Design Meeting

## Tuesday, September 15, 2015 American Printing House for the Blind

· A Barrow





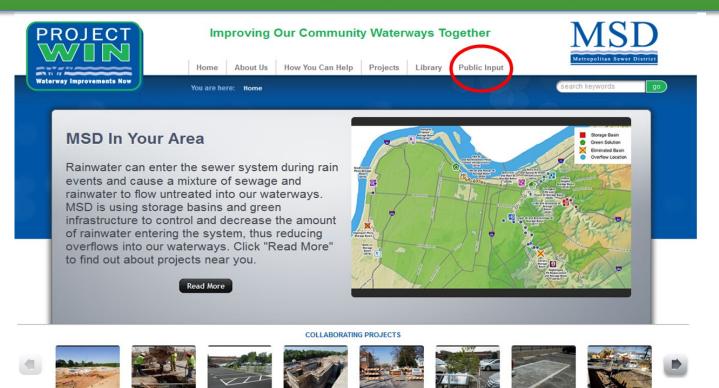
### Project Background

- Orientation Meeting was held on March 25, 2014
- Conceptual Design Meeting was held on May 19, 2015
  - Consent Decree background
  - How the project will address requirements
  - Gathered your preferences on some basin configurations
- We're Back to Talk With You About Again
  - Gather your input before we finalize the design
- Take Any Other Questions by Using Comment Cards

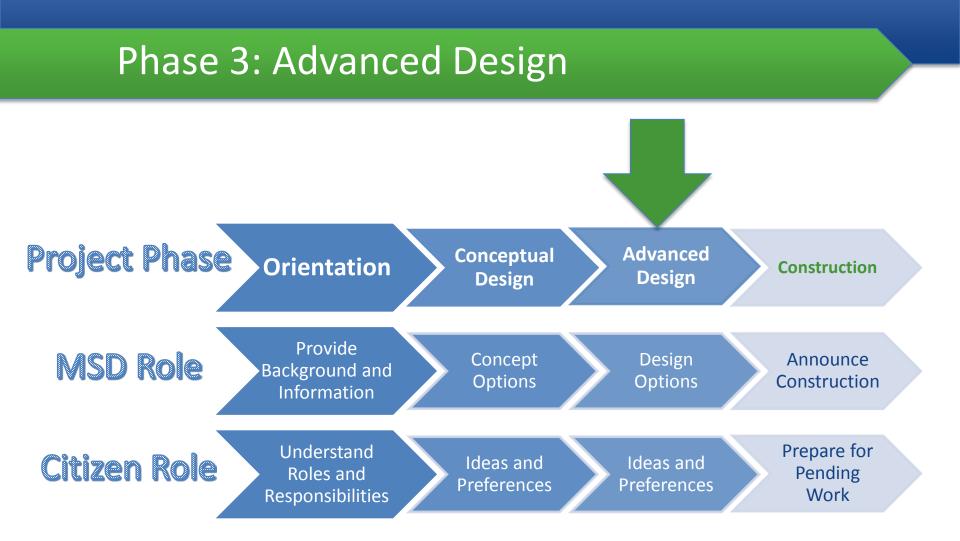




## Find Out More at msdprojectwin.org



Please Tell Your Friends and Neighbors to Take the Survey Online at: http://tinyurl.com/MSDCliftonHeights3 MSE







### Advanced Design Meeting Agenda

- 1. Consent Decree Background
- 2. Getting to Know You: Demographic and Clifton and Clifton Heights Area Use Questions
- 3. Update on Clifton Heights Design Process
  - Results from the Conceptual Design Meeting
- 4. Present Design Options to You
- 5. Gather Your Ideas & Preferences on Design Options
- 6. Collect Comments from You (Cards Provided)

### Advanced Design Meeting Agenda

### 1. Consent Decree Background

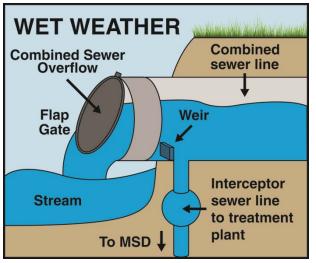
- 2. Getting to Know You: Demographic and Clifton and Clifton Heights Area Use Questions
- 3. Update on Clifton Heights Design Process
  - Results from the Conceptual Design Meeting
- 4. Present Design Options to You
- 5. Gather Your Ideas & Preferences on Design Options
- 6. Collect Comments from You (Cards Provided)





### What is a Combined Sewer Overflow?

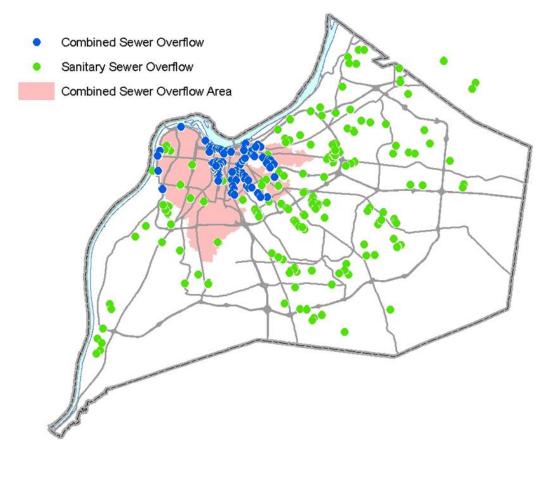
- What is a combined sewer?
  - Both stormwater and wastewater conveyed in the same pipe.
- What is a Combined Sewer Overflow (CSO)?
  - Untreated combined sewage discharged into a water body (creek, stream, river, etc.)







### Current Overflow Sites in Louisville Metro Area







### Public Health and Safety Mandate

2005	Federal EPA & State of Kentucky mandate overflow abatement
2008	MSD submitted \$850 million plan to satisfy the mandate
2009	Federal EPA & the State of Kentucky approve the plan
2020	Combined Sewer Overflow Program complete
2024	Separate Sewer Overflow Program complete





### MSD Overflow Projects Across Louisville

#### **IOAP Storage**

- I-64 and Grinstead Dr Storage Basin
- 13th St and Rowan St Storage Basin
- Lexington Rd and Payne St Storage Basin
- Bells Ln Storage Basin
- Clifton Heights Storage Basin
- Logan St and Breckinridge St Storage Basin
- Portland Wharf Storage Basin
- Southwestern Pkwy Storage Basin
- Story Ave and Main St Storage Basin
- Nightingale PS Replacement and Storage Basin

#### **Green Infrastructure Projects**

- Story Ave and Spring St Green Infrastructure
- 18th St and Northwestern Pkwy Green Infrastructure





### Advanced Design Meeting Agenda

- 1. Consent Decree Background
- 2. Getting to Know You: Demographic and Clifton and Clifton Heights Area Use Questions
- 3. Update on Clifton Heights Design Process
  - Results from the Conceptual Design Meeting
- 4. Present Design Options to You
- 5. Gather Your Ideas & Preferences on Design Options
- 6. Collect Comments from You (Cards Provided)

### Public Engagement Tools: "Clickers" and Online Polling

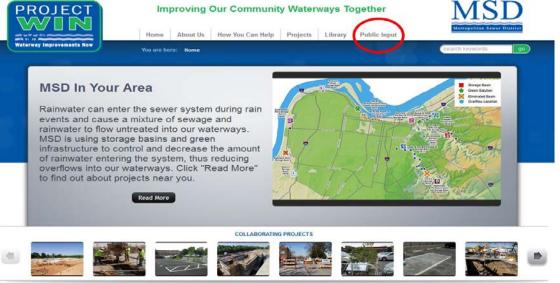
### "Clickers" for Public Meetings

- Simple To Use
- Anonymous (No One Knows Your Answers)
- Simultaneous (We All See the Results At the Same Time)
- Equal Voice for All



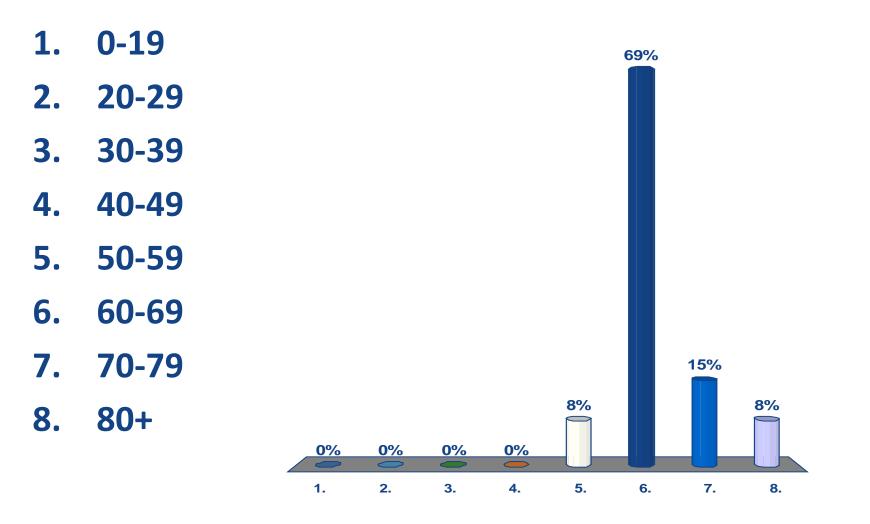
### **Online Polling for Those Who Can't Attend Public Meetings**

### msdprojectwin.org



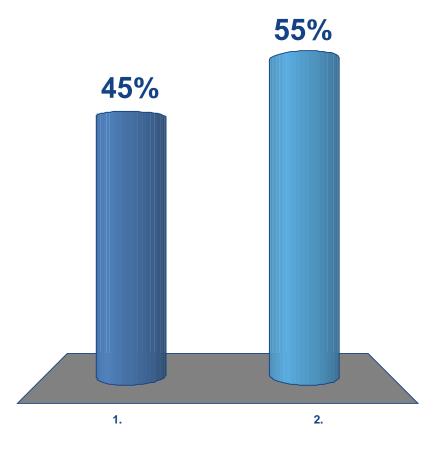


### How Young Are You?

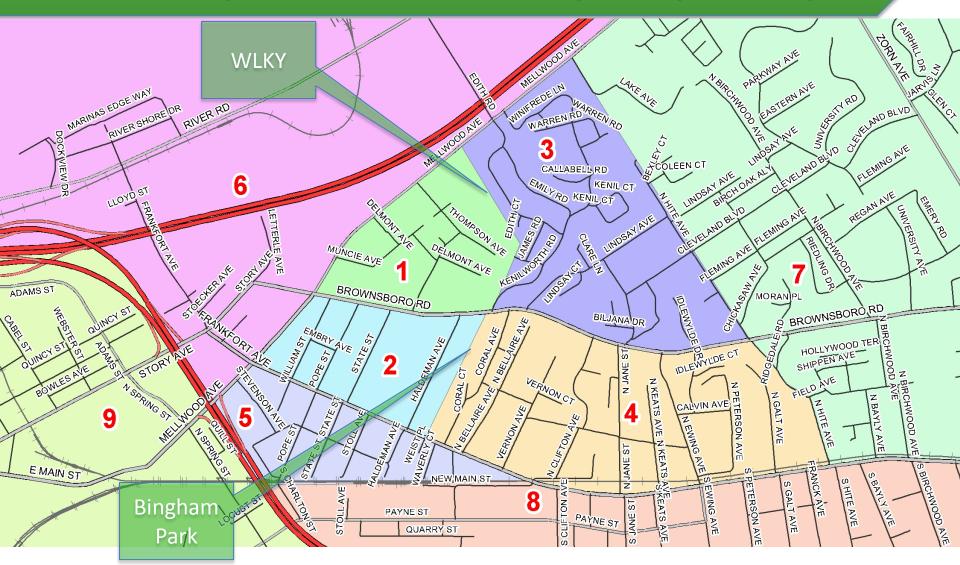


## Gender?

Male
Female

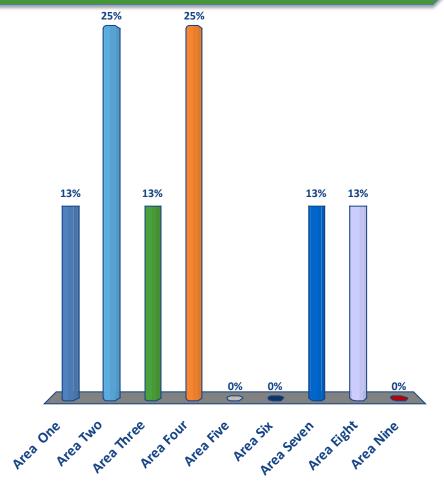


### Where do you live, work, and spend your days?

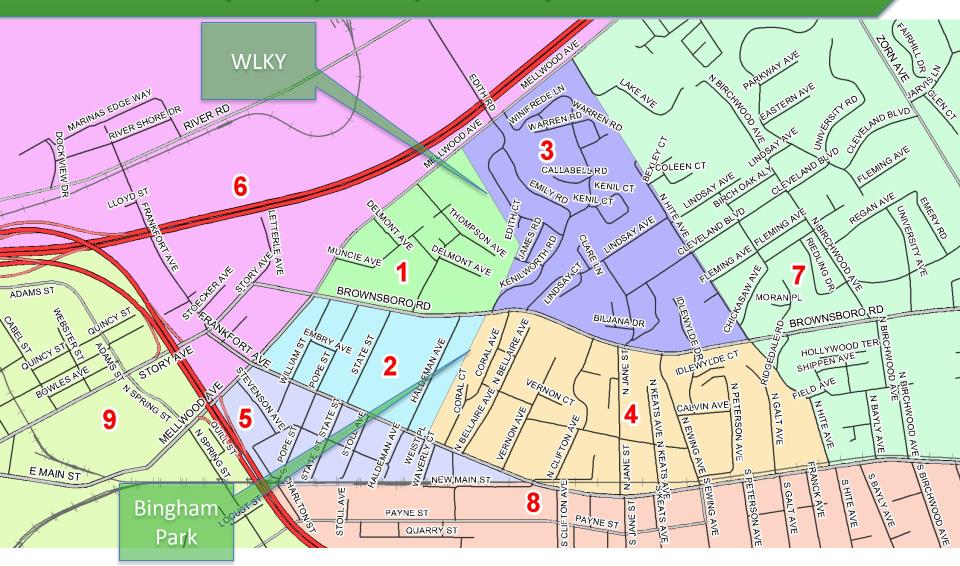


## Where Do You Live?

- 1. Area One
- 2. Area Two
- 3. Area Three
- 4. Area Four
- 5. Area Five
- 6. Area Six
- 7. Area Seven
- 8. Area Eight
- 9. Area Nine

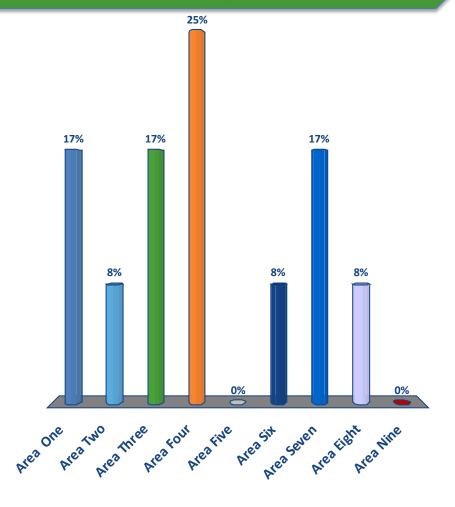


### Where do you spend your days?

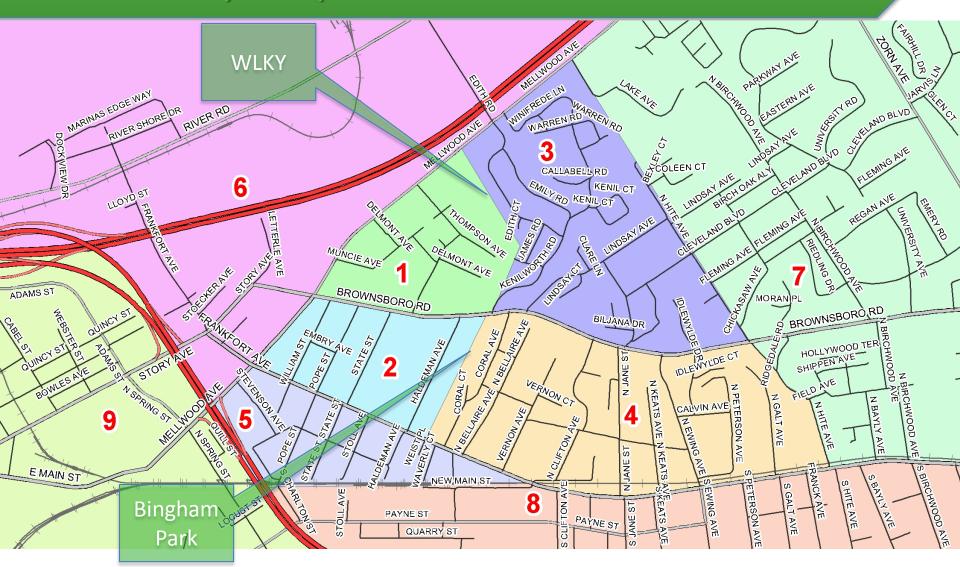


## Where Do You Spend Your Days? (3)

- 1. Area One
- 2. Area Two
- 3. Area Three
- 4. Area Four
- 5. Area Five
- 6. Area Six
- 7. Area Seven
- 8. Area Eight
- 9. Area Nine

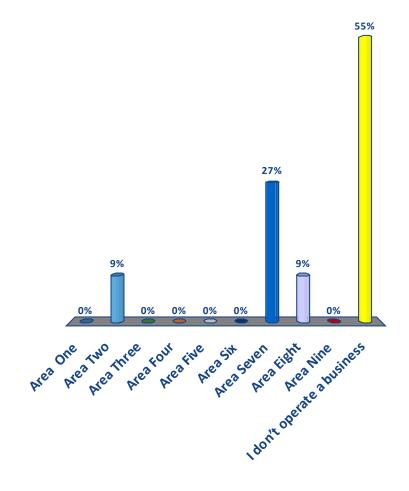


### Where do you operate a business?



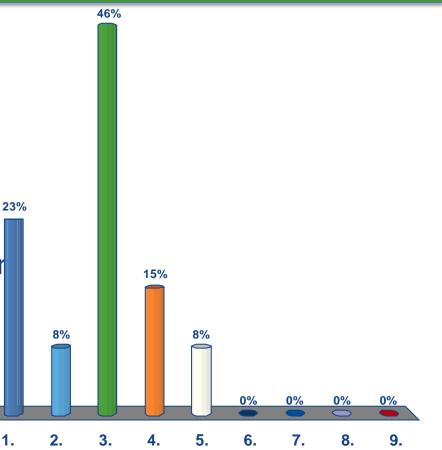
### Where Do You Operate a Business?

- 1. Area One
- 2. Area Two
- 3. Area Three
- 4. Area Four
- 5. Area Five
- 6. Area Six
- 7. Area Seven
- 8. Area Eight
- 9. Area Nine
- 10. I don't operate a business



### How Did You Hear About This Meeting? (Up to 3)

- 1. Post Card
- 2. Saw It in the CJ
- 3. Saw it in a Metro Council District Newsletter
- 4. Heard about it from Neighborhood Association
- 5. Heard About it From Someone
- 6. Received a Flyer
- 7. Project WIN website
- 8. MSD Email
- 9. Other



### What Are Your Primary Sources of Information About MSD Projects? (Up to 3)

1.

2.

3.

4.

5.

6.

7.

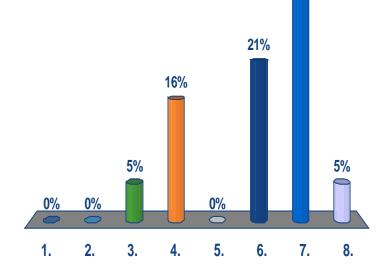
8.

9.

**Public Meetings** 48% Metro TV Videos **Project WIN website** 33% Local Mainstream Print or Broadcast Media Social Media MSD Email **Metro Council District** Newsletter 5% 5% 5% 5% **Bill Inserts** 0% 0% 0% I don't have any previous 2. 3. 5. 7. 4. 6. 8. 9. knowledge of MSD projects.

### How Would You Like to Learn About MSD's Projects? (Up to 3)

- 1. Public Meetings
- 2. Metro TV Videos
- 3. Project WIN website
- 4. Local Mainstream Print or Broadcast Media
- 5. Social Media
- 6. MSD Email
- 7. Metro Council District Newsletter
- 8. Bill Inserts



53%

### Advanced Design Meeting Agenda

- 1. Consent Decree Background
- 2. Getting to Know You: Demographic and Clifton and Clifton Heights Area Use Questions
- 3. Update on Clifton Heights Design Process
  - Results from the Conceptual Design Meeting
- 4. Present Design Options to You
- 5. Gather Your Ideas & Preferences on Design Options
- 6. Collect Comments from You (Cards Provided)

### **Clifton Heights Basin Project Update**

### **IOAP Storage**

- I-64 and Grinstead Dr Storage Basin
- 13th St and Rowan St Storage Basin
- Lexington Rd and Payne St Storage Basin
- Bells Ln Storage Basin
- Clifton Heights Storage Basin
- Logan St and Breckinridge St Storage Basin
- Portland Wharf Storage Basin
- Southwestern Pkwy Storage Basin
- Story Ave and Main St Storage Basin
- Nightingale PS Replacement and Storage Basin

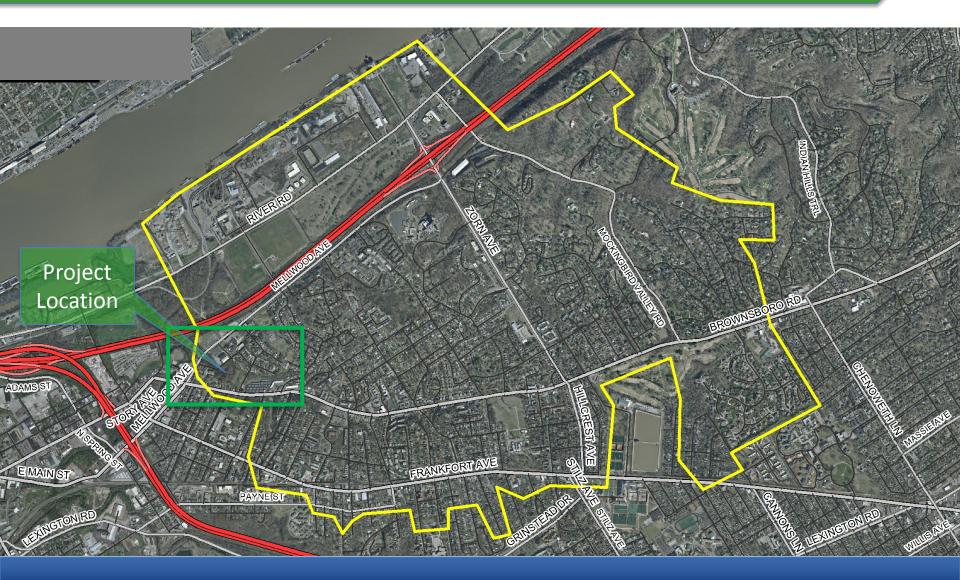
#### **Green Infrastructure Projects**

- Story Ave and Spring St Green Infrastructure
- 18th St and Northwestern Pkwy Green Infrastructure





### The Area That Drains to These CSO's



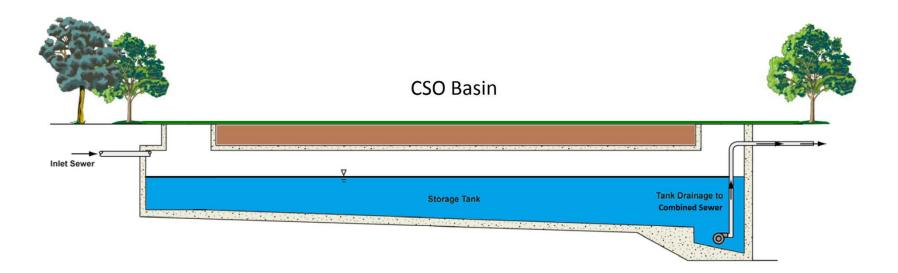
### What the Proposed Basin Will Do

- Overflow diverted to storage basin
- 7.0 Million Gallons
- Reduces the number of overflows from 127 to 6 in a typical year.
- Reduces the amount of overflow from 107 million to about 3.5 million gallons in a typical year



### **How Basins Function**

- Temporary storage for CSO overflows
- Overflow released back into the system for treatment when capacity is available, typically within 24 hours after the rain event
- Rinsed with an automatic system



### Access and Visibility

- Located on city property
- Limited road access
- Surrounded by trees



### Access and Visibility

• Within the 100-year floodplain of the Ohio River



**Conceptual Design Feedback** 

### What You Told Us About Basin Appearance





### **Basin Concepts**

- Concept #1 | Above Ground
  - Basin top is constructed completely above the 100year floodplain
- Concept #2 | Partially Above Ground
  - Only mechanical access points are constructed above the 100-year floodplain, the rest is at ground level
- Concept #3 | Below Ground
  - All basin access points are located at ground level and the basin top is below ground





### Clifton Heights CSO Basin Concept #1: Above Ground

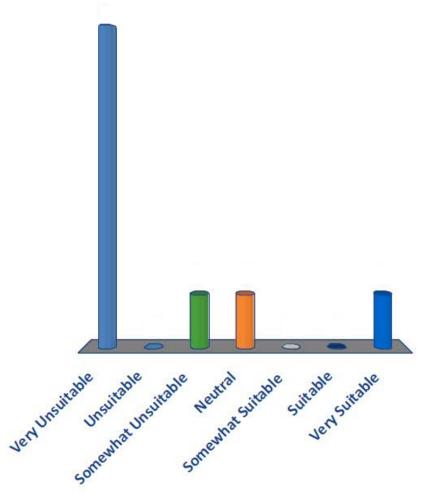
Drescher Bridge Avenue

Southeast

Brownsboro Rd.

### You Didn't Think Much of Concept 1

- 1. Very Unsuitable
- 2. Unsuitable
- 3. Somewhat Unsuitable
- 4. Neutral
- 5. Somewhat Suitable
- 6. Suitable
- 7. Very Suitable



Mean = 2.22

#### Clifton Heights CSO Basin Concept #2: Partially Above Ground

Drescher Bridge Avenue

H

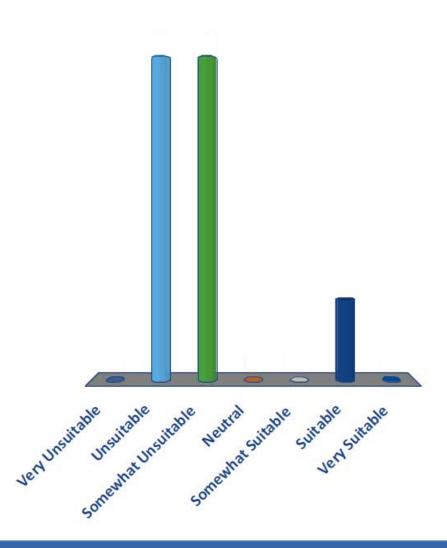
Southeast

Brownsboro Rd.

#### Concept 2 Fared a Little Better

- 1. Very Unsuitable
- 2. Unsuitable
- 3. Somewhat Unsuitable
- 4. Neutral
- 5. Somewhat Suitable
- 6. Suitable
- 7. Very Suitable

#### Mean = 2.89



#### Clifton Heights CSO Basin Concept #3: Below Ground

Drescher Bridge Avenue

H

Southeast

Brownsboro Rd.

#### **Concept 3 Was Clearly Preferred**

- 1. Very Unsuitable
- 2. Unsuitable
- 3. Somewhat Unsuitable
- 4. Neutral
- 5. Somewhat Suitable
- 6. Suitable
- 7. Very Suitable

#### Mean = 6.23

Somewhat Unsuitable

VeryUnsuitable

Somewhat Suitable

VerySuitable

Suitable

#### Clifton Heights CSO Basin Concept #3: Below Ground

Drescher Bridge Avenue

H

Southeast

Brownsboro Rd.

#### Considerations Important to You

- Should be visually aesthetic
- Should be environmentally friendly
- The surface should be useable
- Cost is important

#### Advanced Design Meeting Agenda

- 1. Consent Decree Background
- 2. Getting to Know You: Demographic and Clifton and Clifton Heights Area Use Questions
- 3. Update on Clifton Heights Design Process
  - Results from the Conceptual Design Meeting
- 4. Present Design Options to You
- 5. Gather Your Ideas & Preferences on Design Options
- 6. Collect Comments from You (Cards Provided)

#### **Remaining Design Options**

• Fencing

– What are the screening / appearance options?

• Security / Access

- What kind of access should there be to the basin area?





#### Fencing, Screening, and Appearance

- Much of the basin area is screened by existing trees.
- A portion would be visible without additional screening.
- Options include:
  - Chain link fence with or without green screening
  - Decorative metal fence
  - No fencing: View of grassed field





#### Option #1: Chain link fencing



#### Option #1: Chain link fencing









#### Option #3: Decorative metal fencing



#### Option #3: Decorative metal fencing

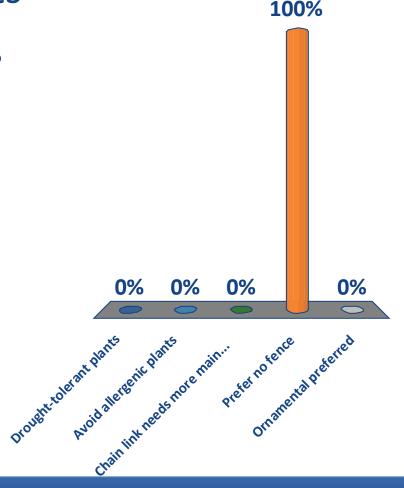


#### Advanced Design Meeting Agenda

- 1. Consent Decree Background
- 2. Getting to Know You: Demographic and Clifton and Clifton Heights Area Use Questions
- 3. Update on Clifton Heights Design Process
  - Results from the Conceptual Design Meeting
- 4. Present Design Options to You
- 5. Gather Your Ideas & Preferences on Design Options
- 6. Collect Comments from You (Cards Provided)

#### Pluses or Minuses About Any of These? (3)

- 1. Drought-tolerant plants
- 2. Avoid allergenic plants
- 3. Chain link needs more maintenance
- 4. Prefer no fence
- 5. Ornamental preferred

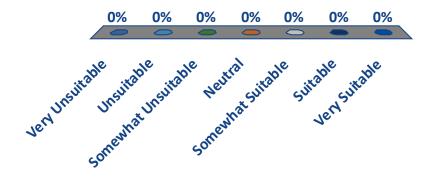


#### Option #1: Chain link fencing



## Suitability of Option 1?

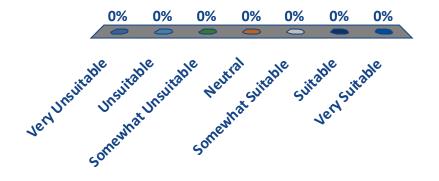
- 1. Very Unsuitable
- 2. Unsuitable
- 3. Somewhat Unsuitable
- 4. Neutral
- 5. Somewhat Suitable
- 6. Suitable
- 7. Very Suitable





## Suitability of Option 2 ?

- 1. Very Unsuitable
- 2. Unsuitable
- 3. Somewhat Unsuitable
- 4. Neutral
- 5. Somewhat Suitable
- 6. Suitable
- 7. Very Suitable

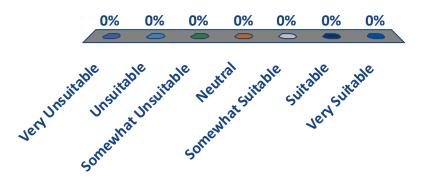


#### Option #3: Decorative metal fencing



## Suitability of Option 3?

- 1. Very Unsuitable
- 2. Unsuitable
- 3. Somewhat Unsuitable
- 4. Neutral
- 5. Somewhat Suitable
- 6. Suitable
- 7. Very Suitable



#### Security and Access Questions

- Open grassed area.
- No trees or large shrubs on the basin cover.
- No motorized access.
- No amenities.
- MSD control building in one corner, secured. Should we install fence to restrict access?



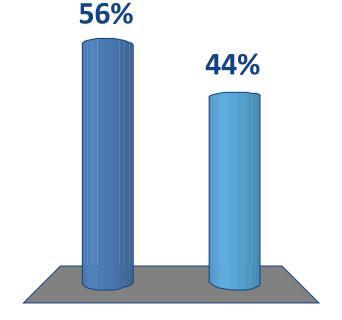


#### Clifton Heights CSO Basin



#### Thoughts About Granting or Restricting Access? (3)

- 1. Fence restricts wildlife movement
- 2. Open space won't catch flood debris



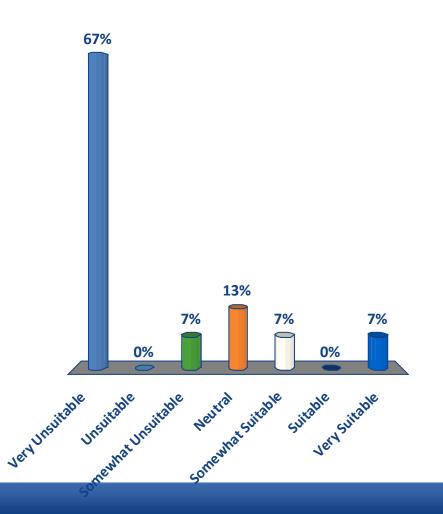


#### How Suitable is a Fence for This Location?

- 1. Very Unsuitable
- 2. Unsuitable
- 3. Somewhat Unsuitable

Mean = 2.20

- 4. Neutral
- 5. Somewhat Suitable
- 6. Suitable
- 7. Very Suitable



# THANK YOU. That helps us.

## Next Steps

- Evaluate your input
- Finalize the design
- Advertise the project for construction
- Meet with you before construction begins
  - Show you the final design
  - Tell you what to expect during the construction process
- Goal: Complete by Fall 2018
- To be put on the email list <u>for this project</u>, send a note mentioning <u>this project</u> to:

commentsIOAP@msdlouky.org

#### **Anticipated Schedule**

- Project Design
  - Conceptual Design Public Input Meeting
  - Advanced Design Public Input Meeting
- Final Design Completion
- Pre-Construction Public Meeting
- Construction Start
- Construction Completion Deadline

Dec 2014 May 2015 September 2015 *Winter 2015 Spring 2016 Summer 2016* **Dec. 31, 2018** 





#### Advanced Design Meeting Agenda

- 1. Consent Decree Background
- 2. Getting to Know You: Demographic and Clifton and Clifton Heights Area Use Questions
- 3. Update on Clifton Heights Design Process
  - Results from the Conceptual Design Meeting
- 4. Present Design Options to You
- 5. Gather Your Ideas & Preferences on Design Options
- 6. Collect Comments from You (Cards Provided)

#### Working Together for Public Health and Safety

# If you see this... Call MSD Immediately!

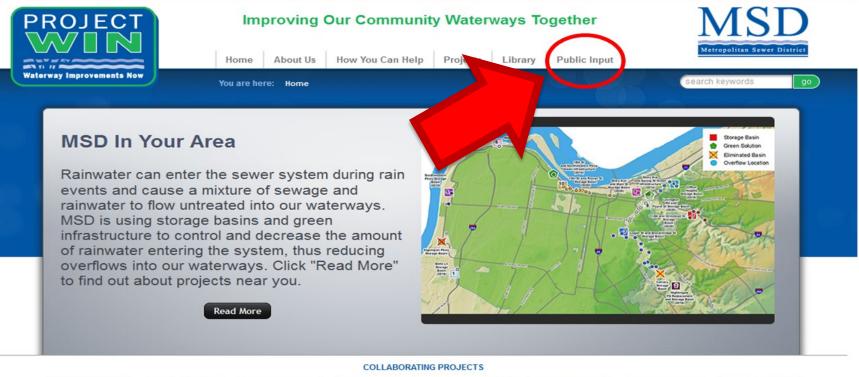






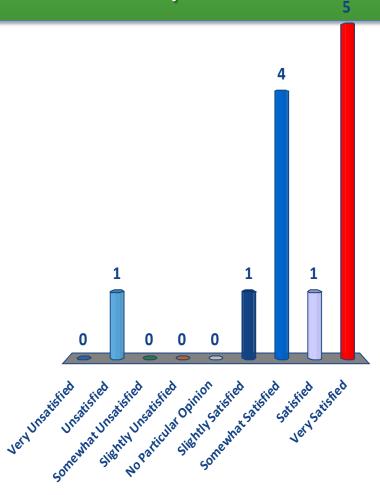
## Find Out More at msdprojectwin.org

#### Online Survey Available Within One Week at: http://tinyurl.com/MSDCliftonHeights3



#### How satisfied are you with this process?

- 1. Very Unsatisfied
- 2. Unsatisfied
- 3. Somewhat Unsatisfied
- 4. Slightly Unsatisfied
- 5. No Particular Opinion
- 6. Slightly Satisfied
- 7. Somewhat Satisfied
- 8. Satisfied
- 9. Very Satisfied



Mean = 7.42

**THANK YOU** FOR YOUR TIME AND ASSISTANCE! Watch the MSD website for updates and the online feedback version of this meeting, coming soon.

# For general information or emergencies regarding the MSD system, call: 502-587-0603

### Your Call Will be Answered

- By an MSD Staff Member
- Around the Clock
- Every Day of the Year



