# I-64 and Grinstead CSO Basin

## Conceptual Design Meeting

## Girl Scouts of Kentuckiana

03.10.2016

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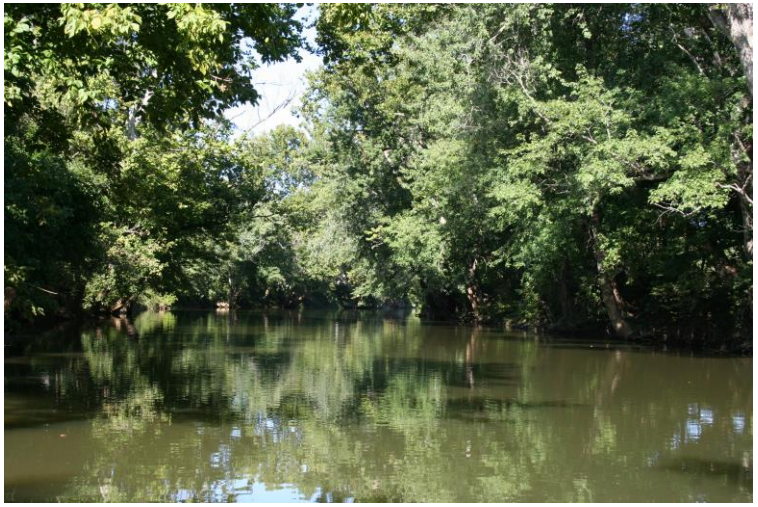
# What We Will Talk About Tonight

1. Why We Are Here
2. Public Outreach Process
3. Getting to Know You
4. I-64 and Grinstead CSO Basin Project
5. Next Steps
6. Feedback



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# 1. Why We Are Here

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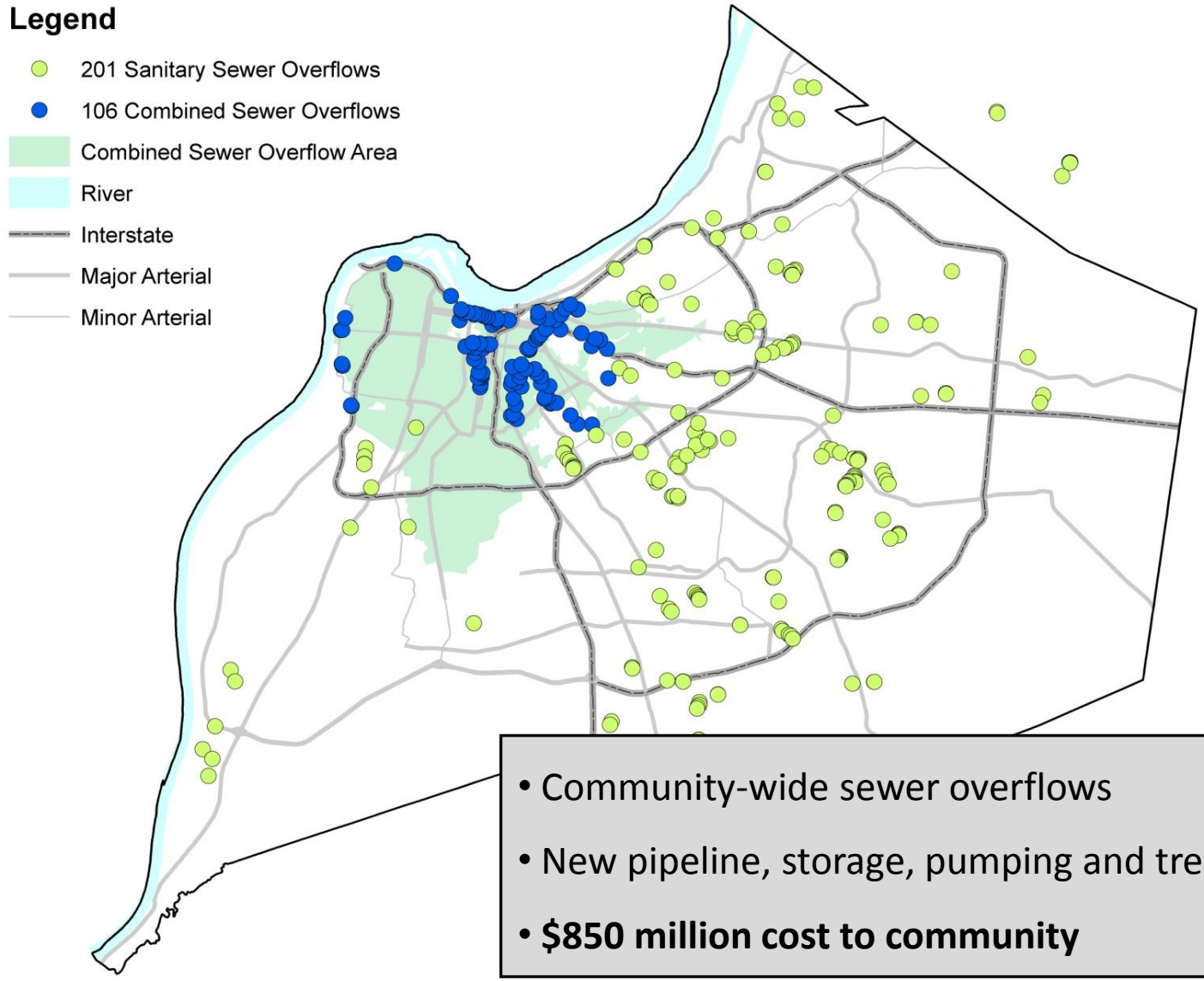
# Sewer Overflow Locations (2008)

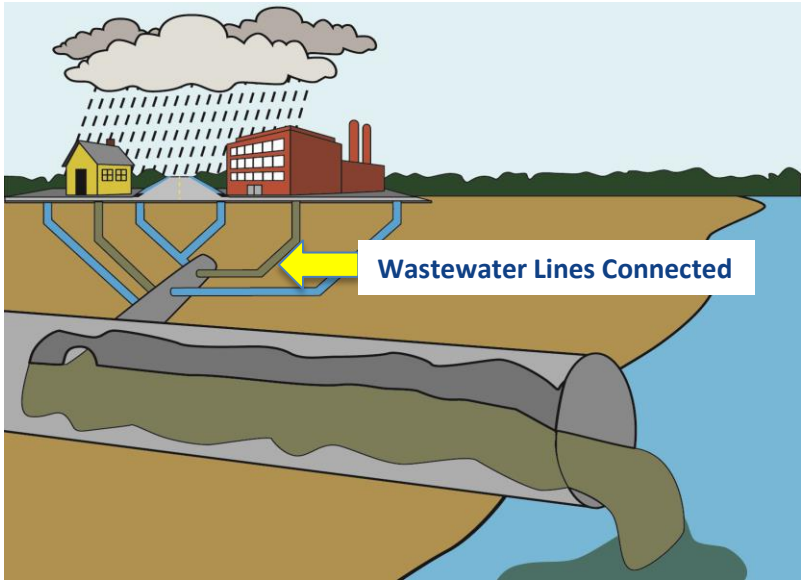



- Community-wide sewer overflows
- New pipeline, storage, pumping and treatment
- **$850 million cost to community**

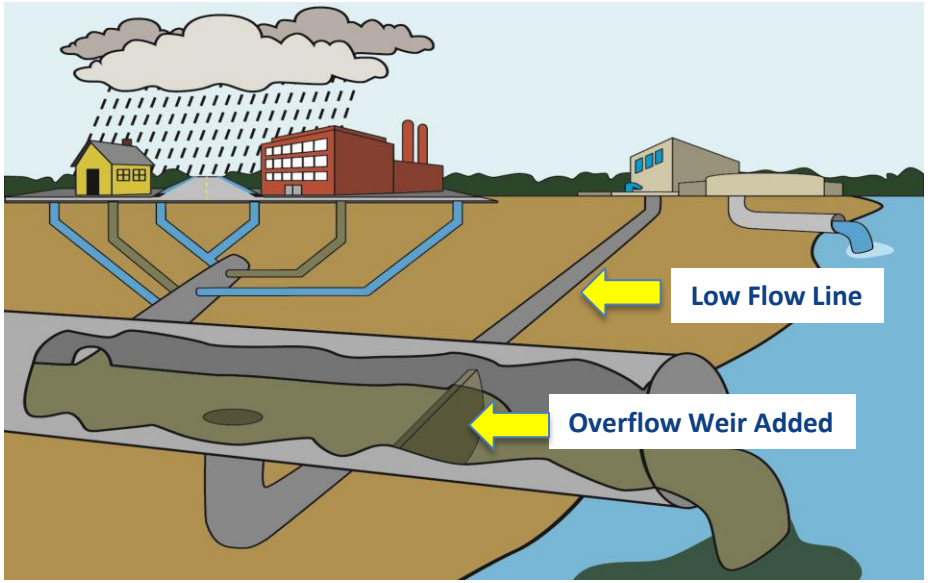
# What is a Combined Sewer?

## What is a combined sewer?

– Both storm water and wastewater conveyed in the same pipe




Original Combined Sewers discharged directly to rivers and streams




Wastewater treatment added in 1958. Dry weather flow treated. Some wet weather flow discharged to prevent flooding.

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# How Do We Control Overflows?

## Source Control Projects

- Green infrastructure
- Downspout disconnections
- Sump pump disconnections
- Sewer rehabilitation

## Gray Infrastructure Projects

- Pipeline projects
- Pump station expansions
- Wastewater treatment plant expansions
- **Storage Basins**

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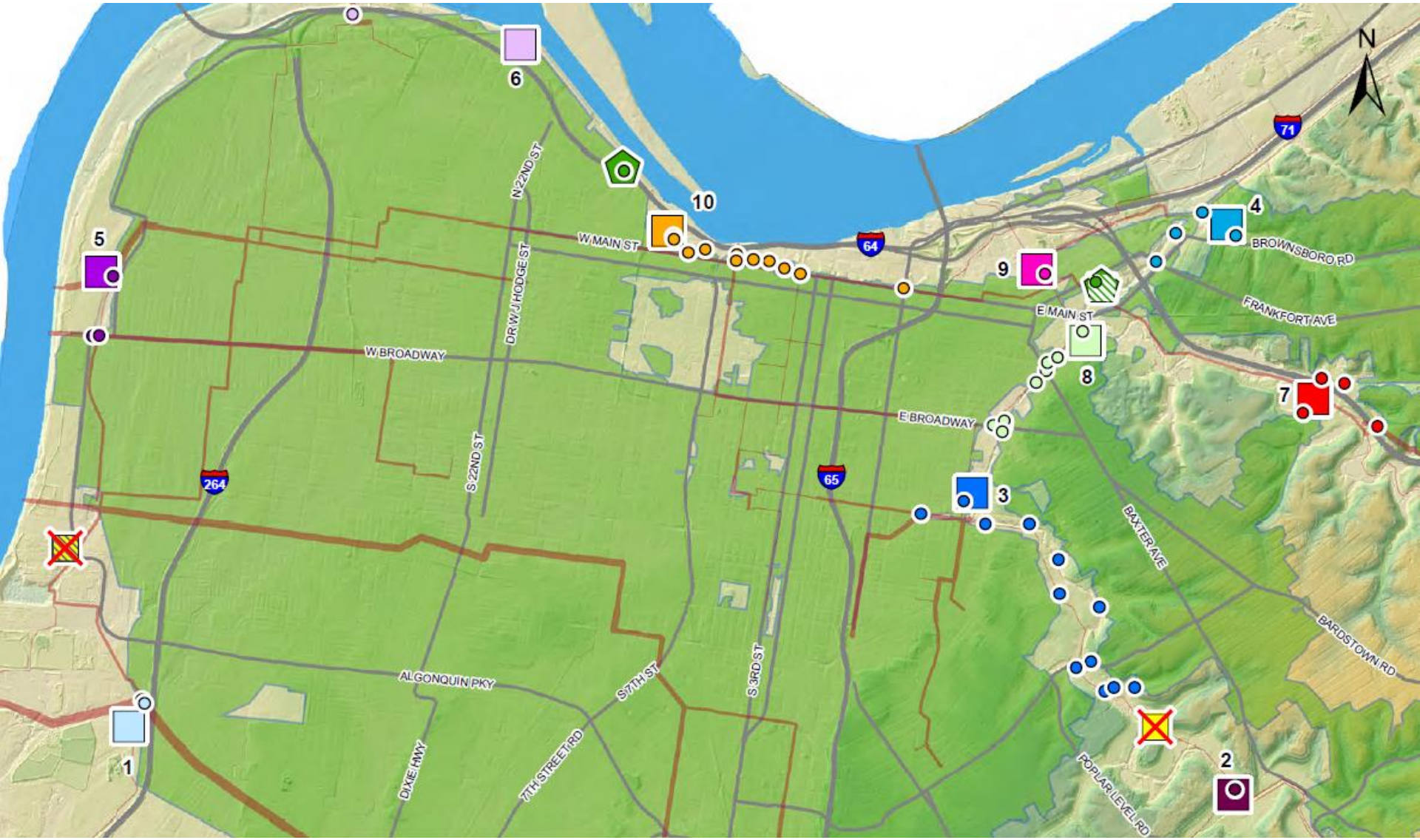
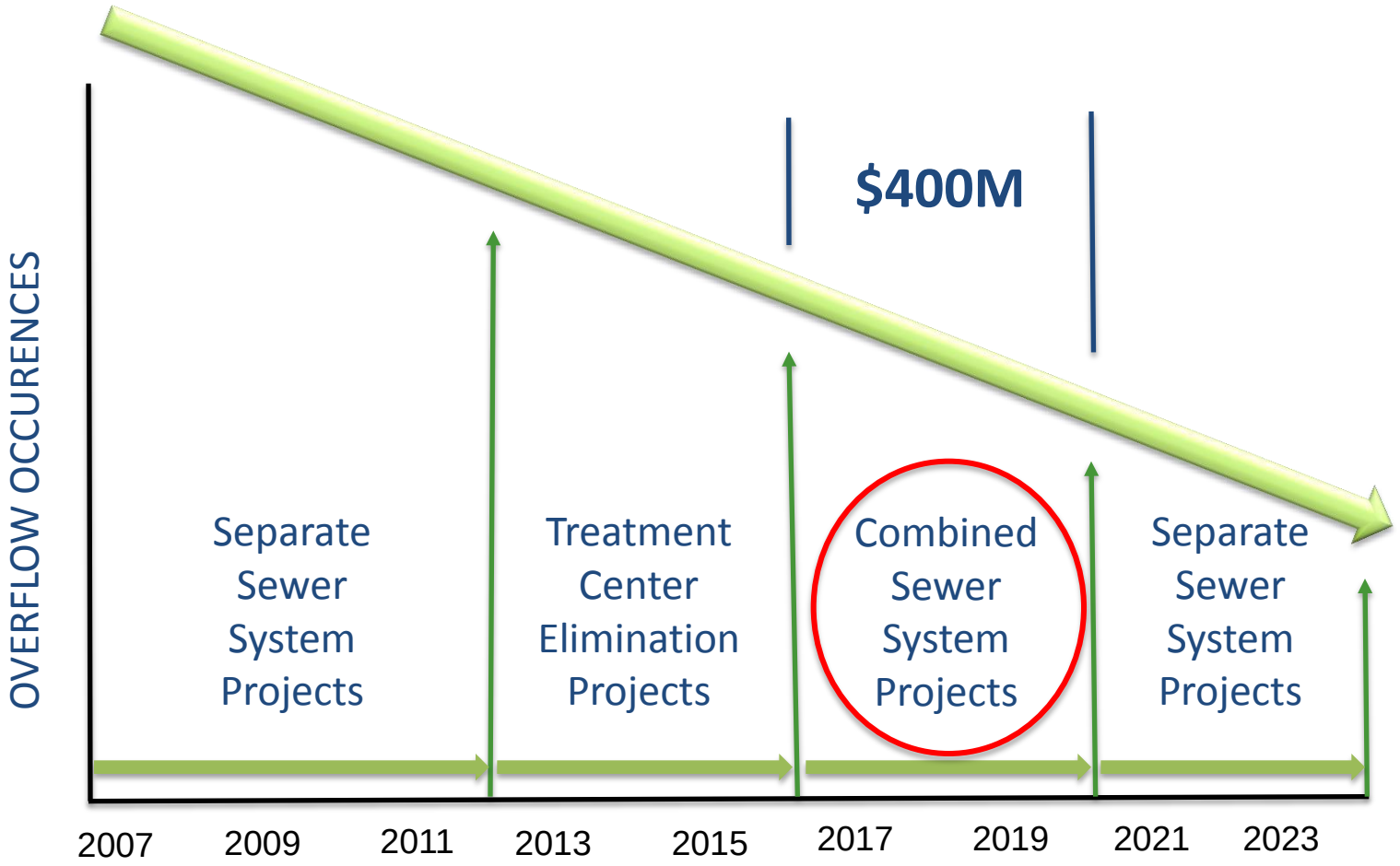
# CSO Storage Basins per Consent Decree



# Program Status

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# 2. Public Outreach Process

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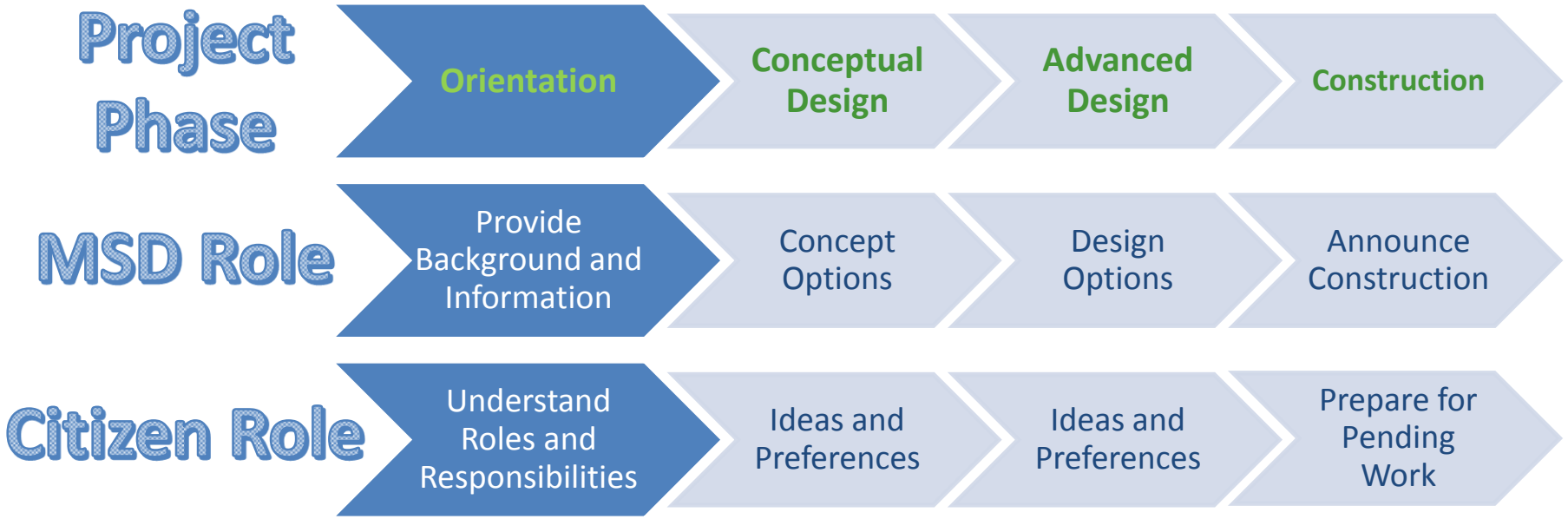
# Project Phases and Roles

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# Project Phases and Roles

- IOAP Public Input Meeting was held at Girl Scouts of Kentuckiana on January 24, 2012
- Public Input Meeting (Orientation) was held at Louisville Collegiate School on September 16, 2014
  - The presentation and video are available on the ProjectWIN website
- We're back to talk with you about the Conceptual Design

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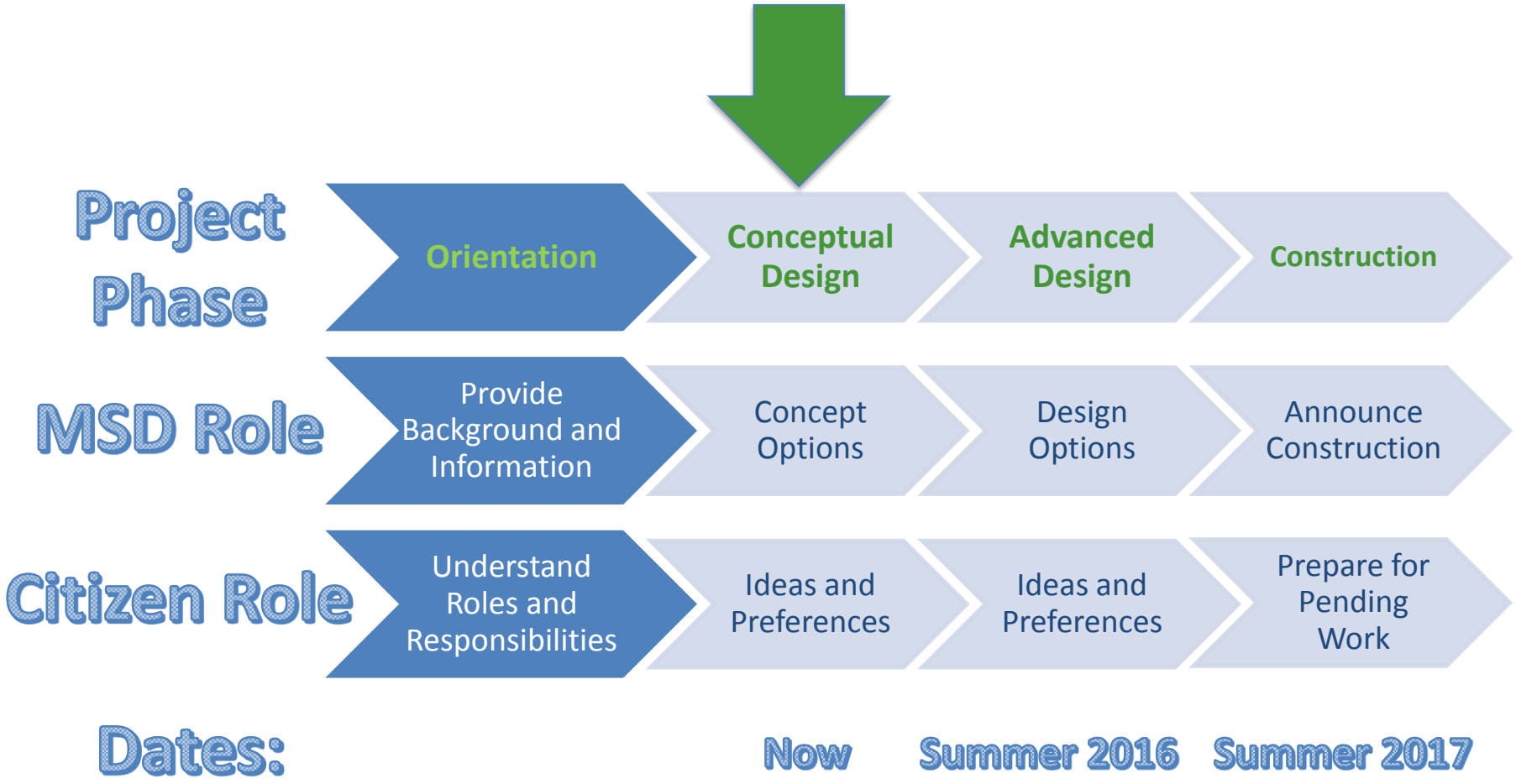
# Project Phases and Roles

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# 3. Getting to Know You

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# Public Engagement Tools: “Clickers” and Online Polling

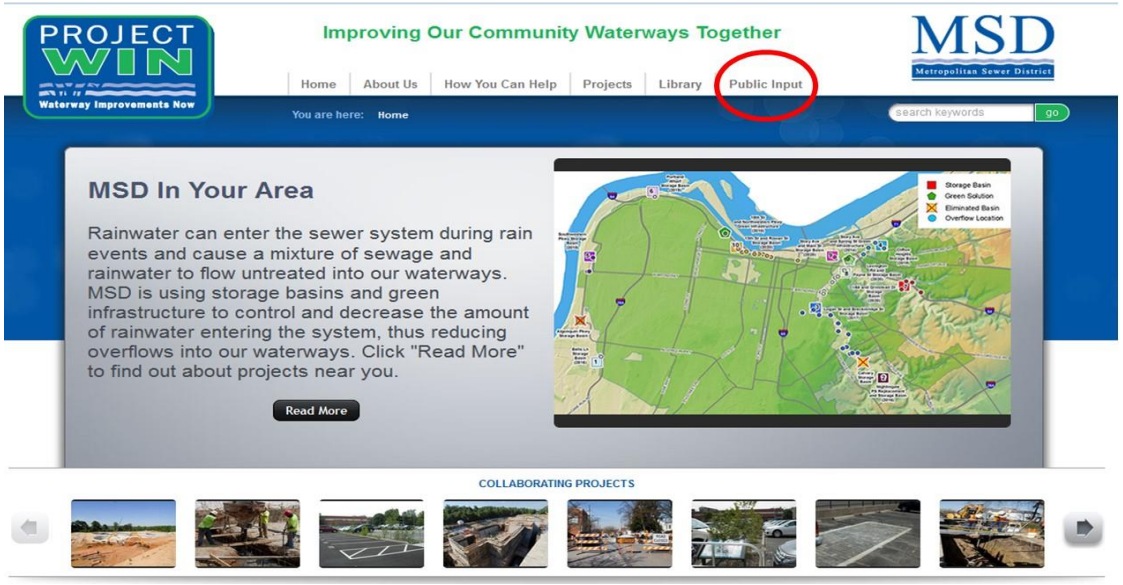
## “Clickers” for Public Meetings

- 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

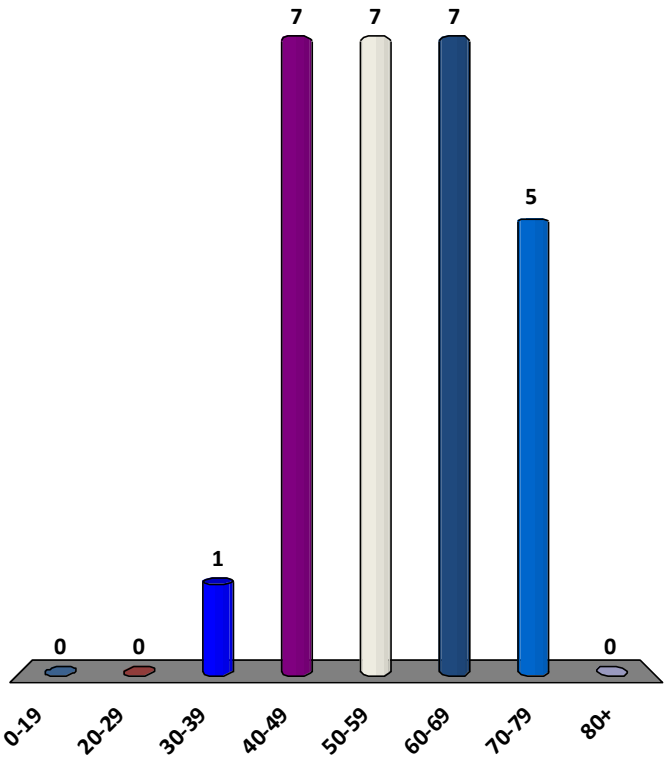
**tinyurl.com/MSDI-64Grinstead2**

**msdprojectwin.org**



# How Young Are You?

1. 0-19
2. 20-29
3. 30-39
4. 40-49
5. 50-59
6. 60-69
7. 70-79
8. 80+

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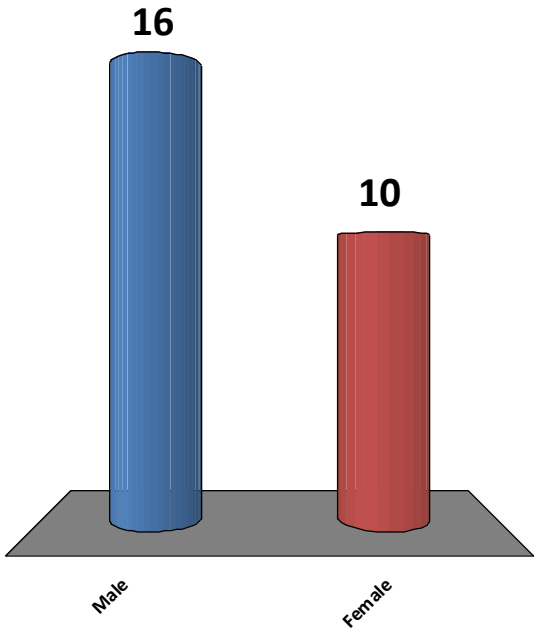
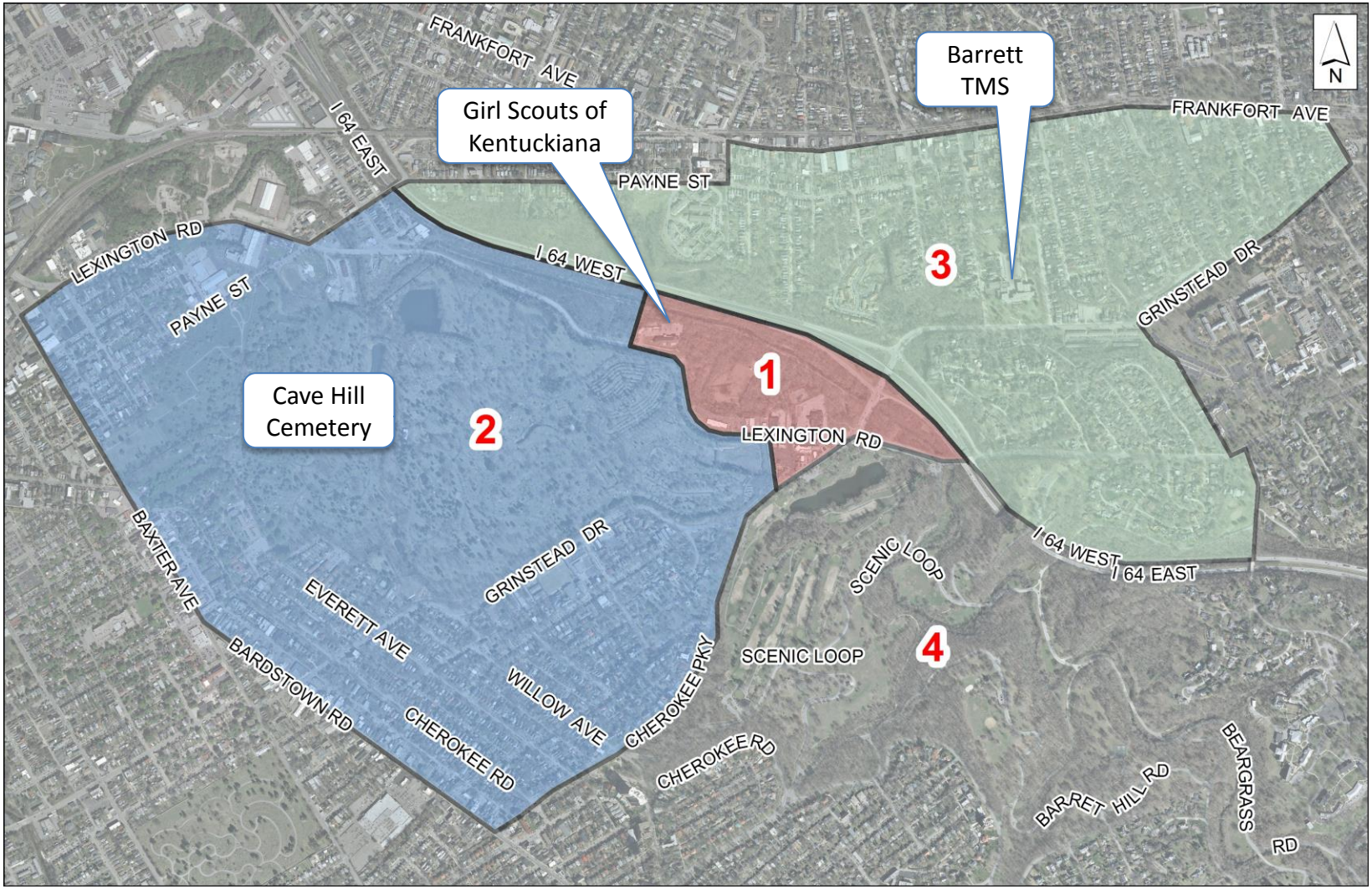
# Gender?

1. Male
2. Female



# Where Do You Live, Work and Spend Your Days?

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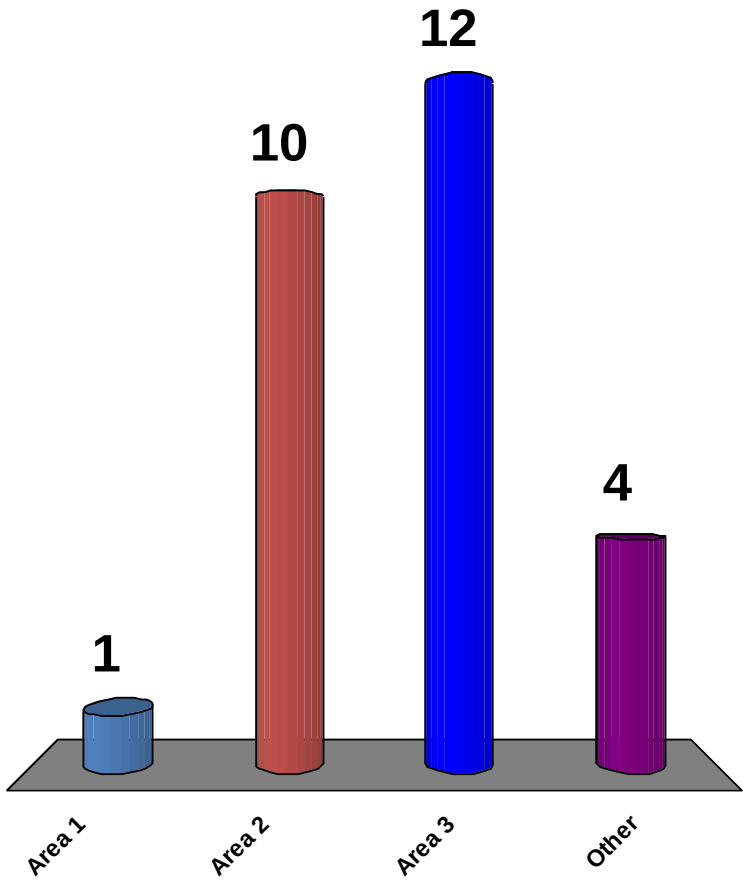
# Where Do You Live?

1. Area 1
2. Area 2
3. Area 3
4. Area 4 (Rest of the City)

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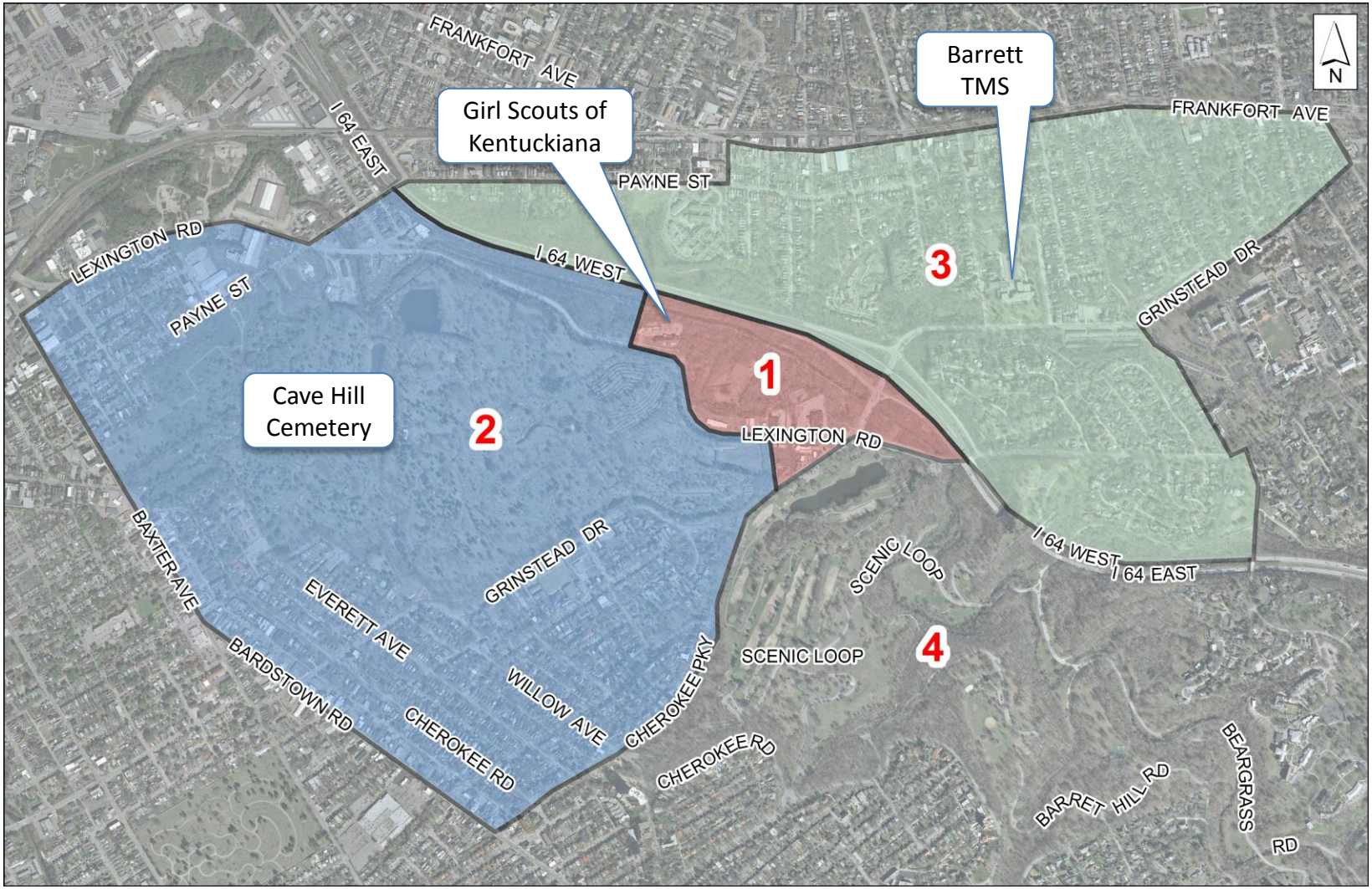
# Where Do You Operate a Business?

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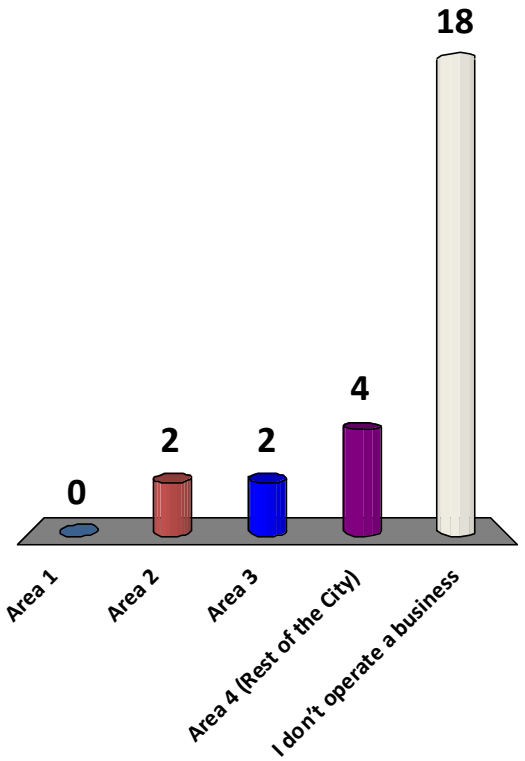
# Where Do You Operate a Business?

1. Area 1
2. Area 2
3. Area 3
4. Area 4 (Rest of the City)
5. I don't operate a business

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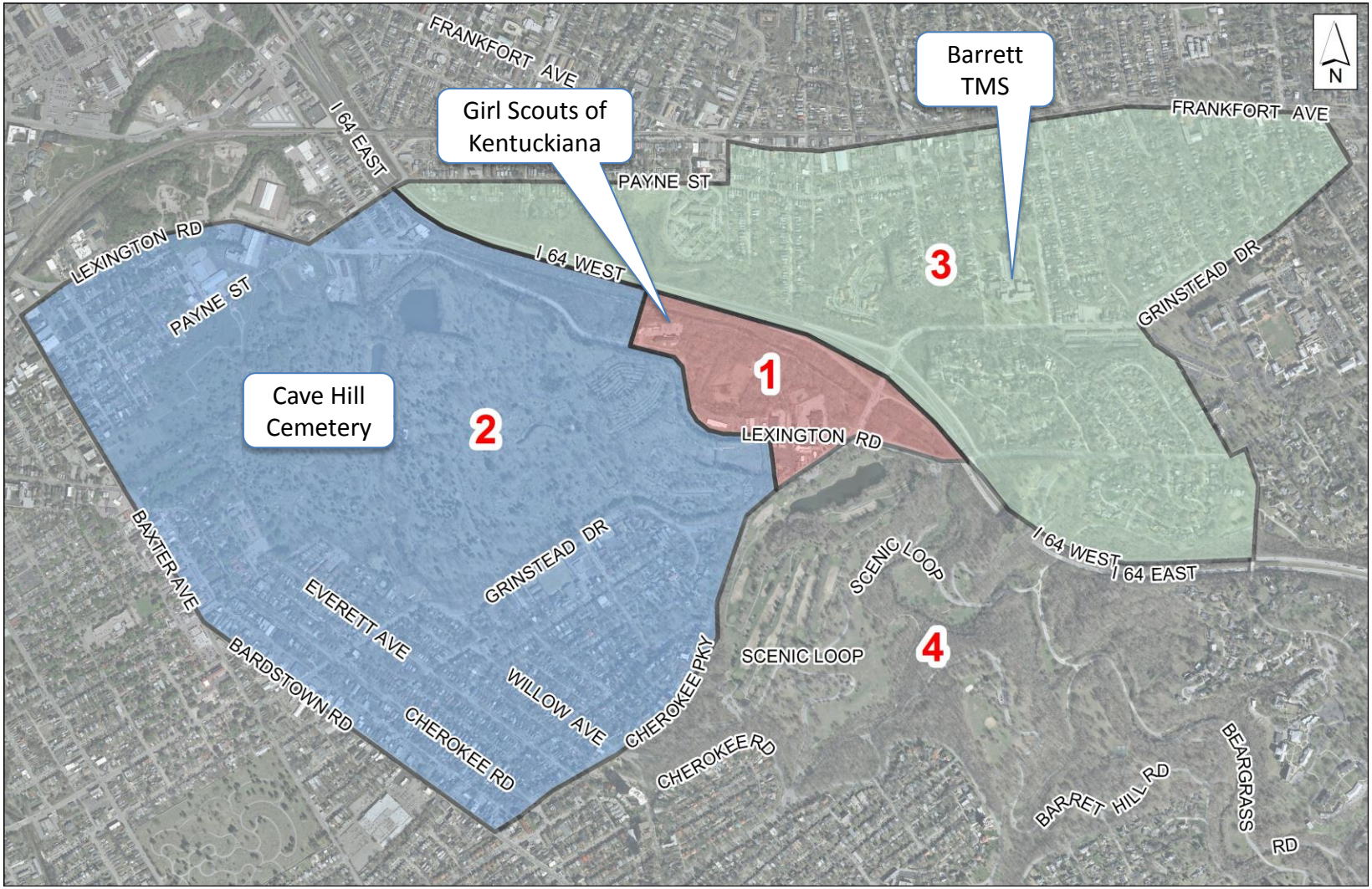
# Where Do You Spend Your Days?

## (i.e. work, school, volunteer, etc.)

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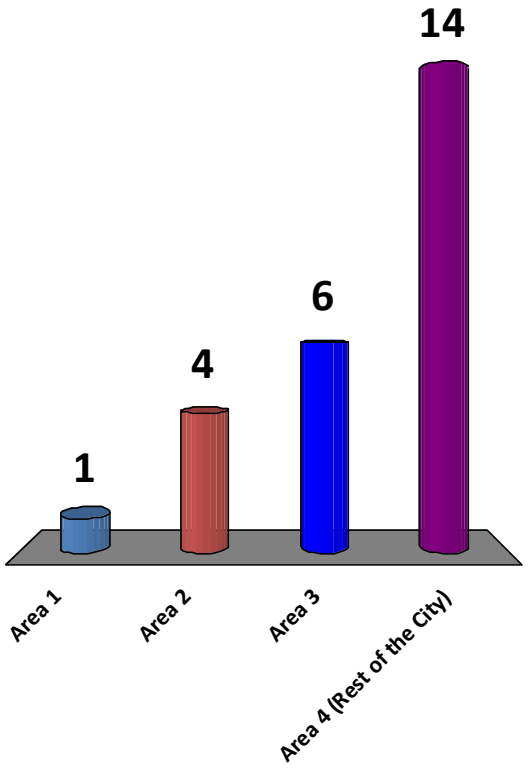
# Where Do You Spend Your Days? (i.e. work, school, volunteer, etc.) *(2)*

1. Area 1
2. Area 2
3. Area 3
4. Area 4 (Rest of the City)

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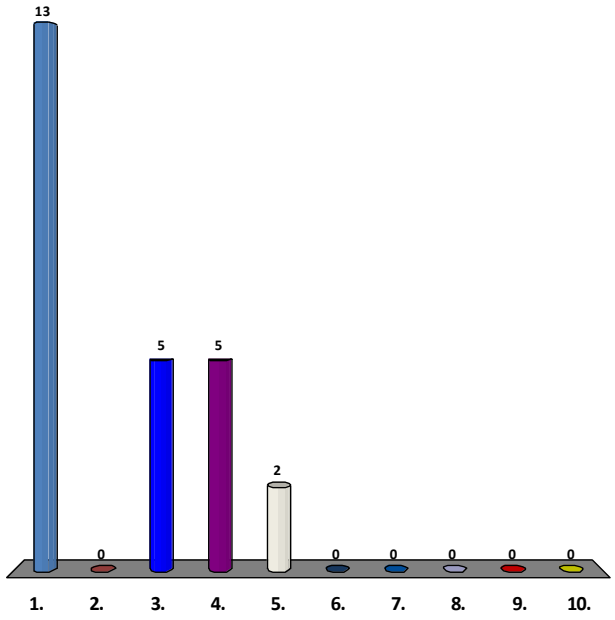
# How Did You Hear About this Meeting? (Up to 3)

1. Received a Post Card
2. Courier Journal
3. Metro Council District Newsletter
4. Neighborhood Association
5. Word of Mouth
6. Flyer
7. Project WIN Website
8. MSD e-mail
9. @LouisvilleMSD (Twitter)
10. Other

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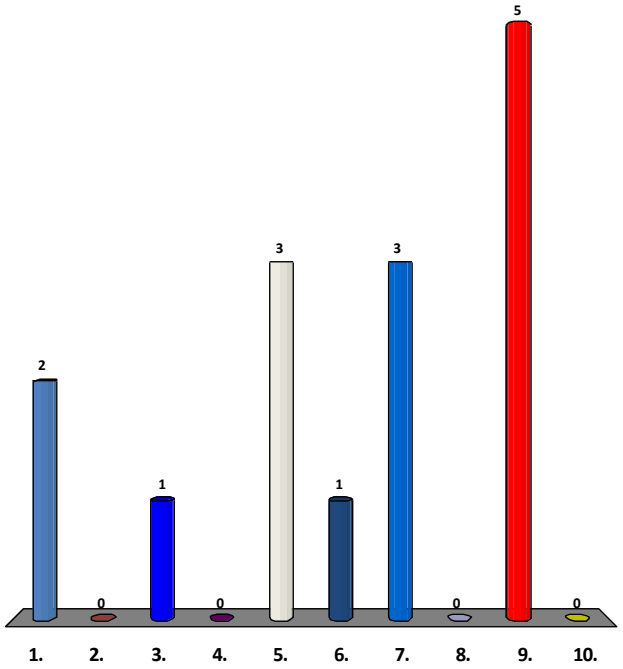
# How Would You Like to Learn About MSD's Projects? (3)

1. Public Meetings
2. Metro TV Videos
3. Local Mainstream Print or Broadcast Media
4. Metro Council District Newsletter
5. Neighborhood Association
6. Project WIN Website
7. MSD email
8. @LouisvilleMSD (Twitter)
9. Post Card
10. MSD Streamline Newsletter

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# 4. I-64 and Grinstead CSO Basin Project

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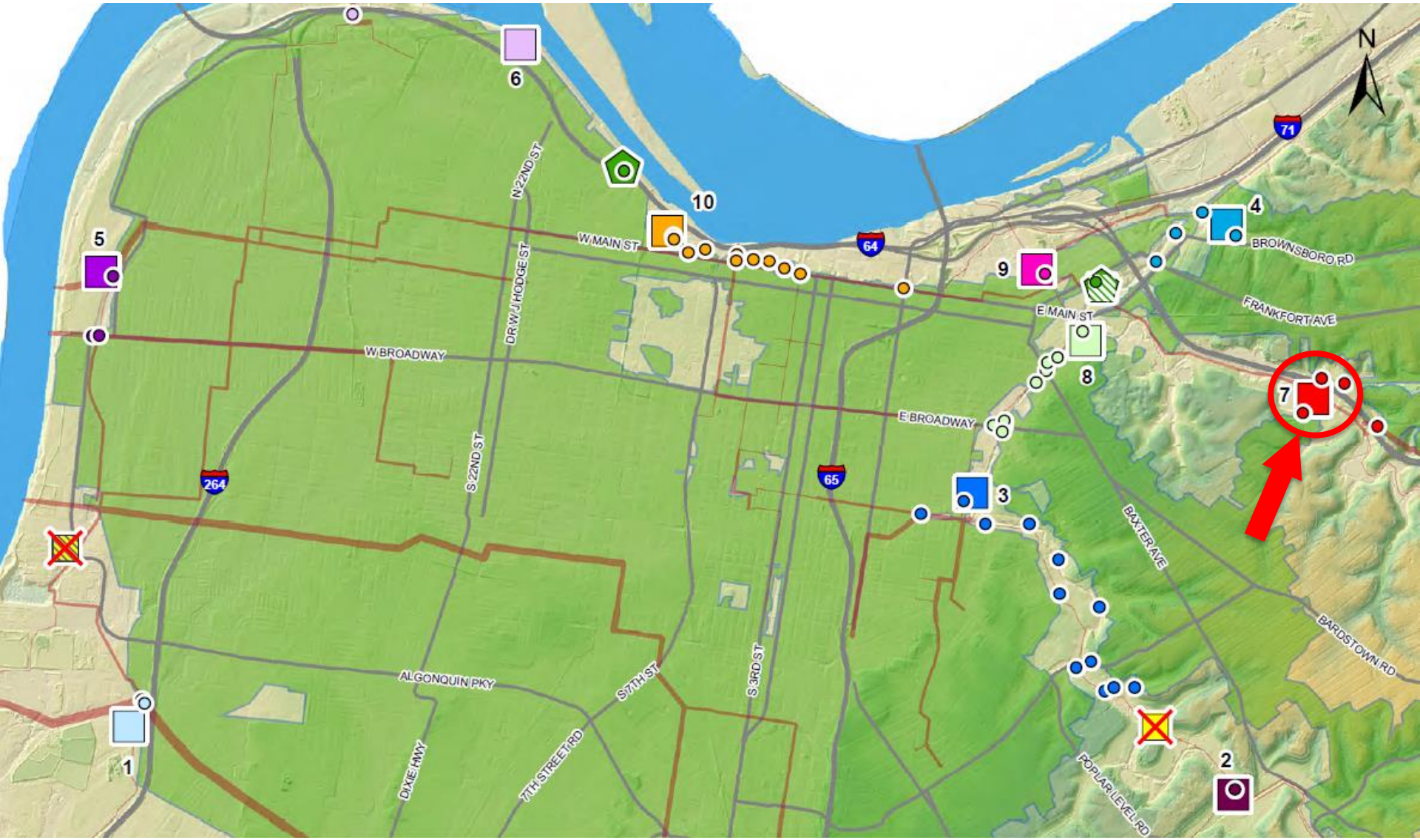
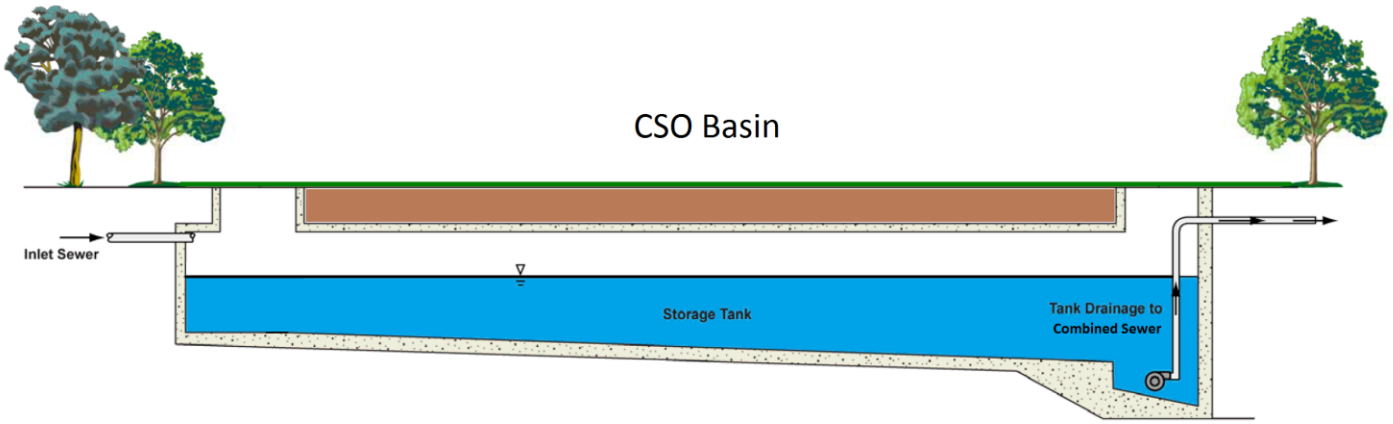
# CSO Storage Basins per Consent Decree



# What is a CSO Basin?

- A CSO Basin provides temporary storage for wet weather overflows that would otherwise flow directly to creeks, streams and rivers
- Released back into the collection system for treatment when system capacity is available

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# Frequently Asked Questions

- Will it create potential for back-ups?
  - No, the high-water elevation will be below basement elevations
  - Also will not eliminate the potential of back-ups
- What happens when the basin is full?
  - The system will function as it does today with the overflows being discharged to Beargrass Creek
- Will this project reduce flooding?
  - The basin will increase capacity of the combined sewer system during wet weather events
- Will the basin be visible?
  - No; underground, covered facility
  - There will be a control building and a screened generator
  - Access points/hatches may be visible

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# Frequently Asked Questions

- What about odor?
  - Highly diluted flow (mostly storm water)
  - Basin is underground and covered
  - Basin will be equipped with flushing equipment
  - Typically, odor control is not necessary with these types of facilities
  - MSD is being pro-active
    - Performing odor control monitoring/testing
    - Basin will be designed to accommodate a future odor control system

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# Project Development

| | 2012 | 2016 |
|---|---|---|
| Basin Size (MG) | 15.33 | 8.50 |
| Level of Control | 4 | 0 |

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# Project Development

- Impacts of associated private property projects:
  - Boyce College (Southern Baptist Seminary)
  - Sacred Heart Campus
- Impacts of associated MSD projects:
  - CSO 125 Stormwater Separation
  - Downspout disconnections
- Taking into account both the private property and MSD projects, the Basin size was reduced from 15.33 MG to 8.50 MG

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# CSO 125 Stormwater Separation Project


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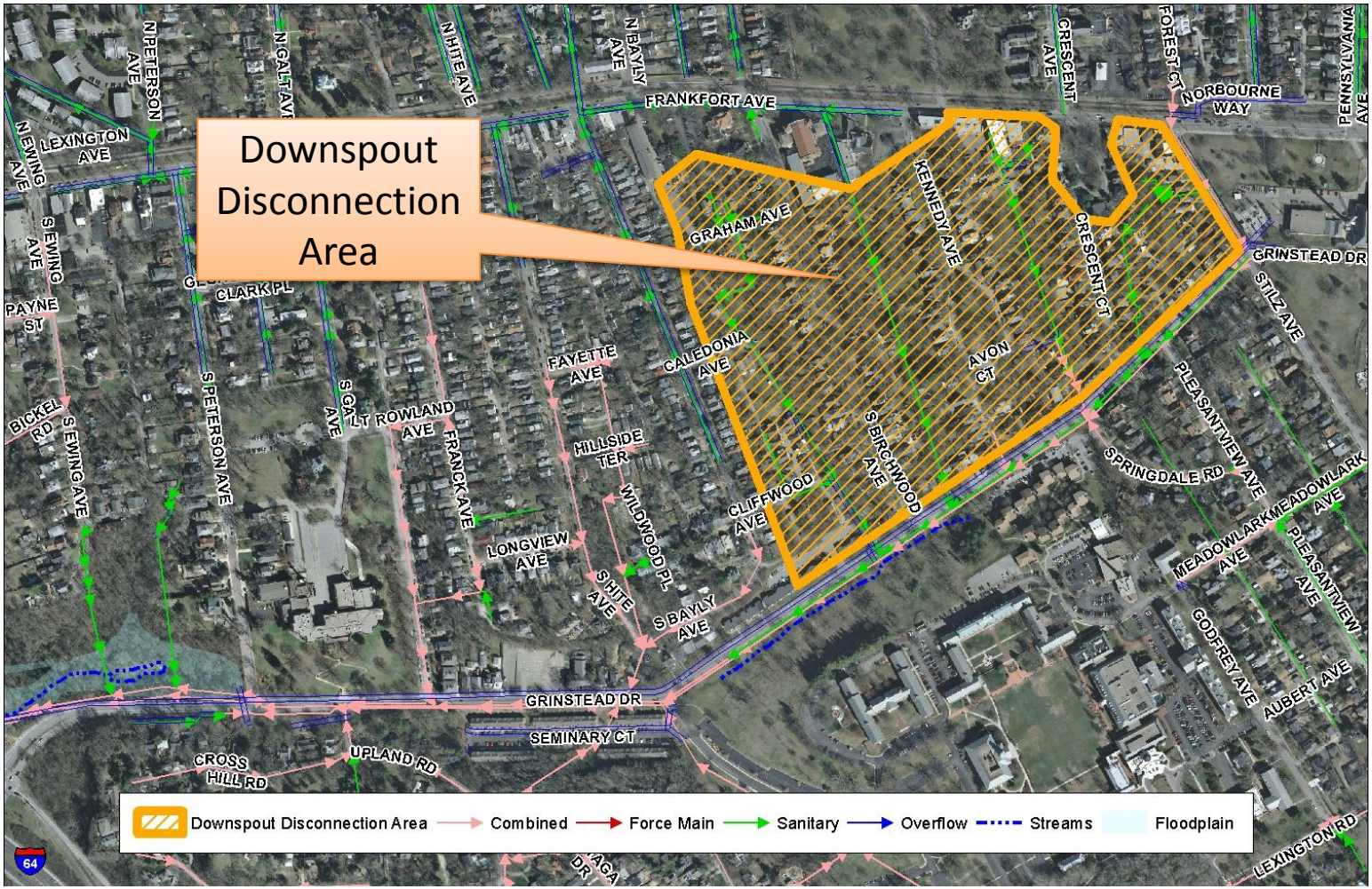
# Downspout Disconnection Target Area

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# CSO Facts

| CSO | Drainage Area (Acres) | # of Overflows | Overflow Volume (Million Gallons) |
|---|---|---|---|
| 125 | 359.3 | 43 | 24.36 |
| 127 | 216.0 | 39 | 11.99 |
| 166 | 751.6 | 46 | 52.47 |
| | | 128 | 88.82 |

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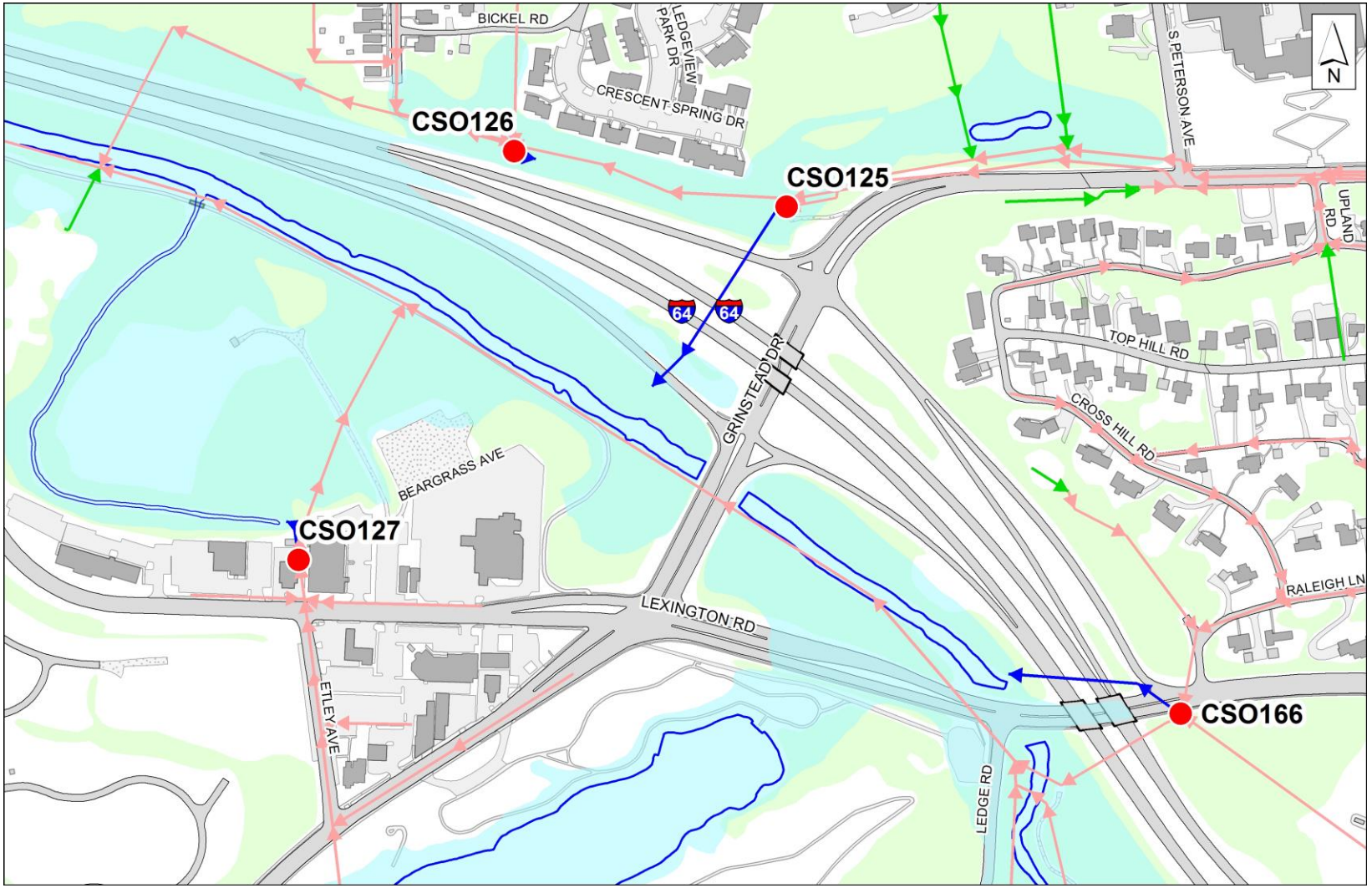
# CSO Locations

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# Project Design Parameters

- Basin storage volume is 8.5 Million Gallons
- Basin will be underground and covered
- Addresses three (3) CSO locations
  - Rehab of CSO 126 in a separate project
- Level of Control (per Typical Year):
  - Zero overflows per Typical Year
    - There were 128 overflows in 2015 resulting in 88,820,000 gallons of combined sewer overflows entering Middle Fork Beargrass Creek

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# Site Selection

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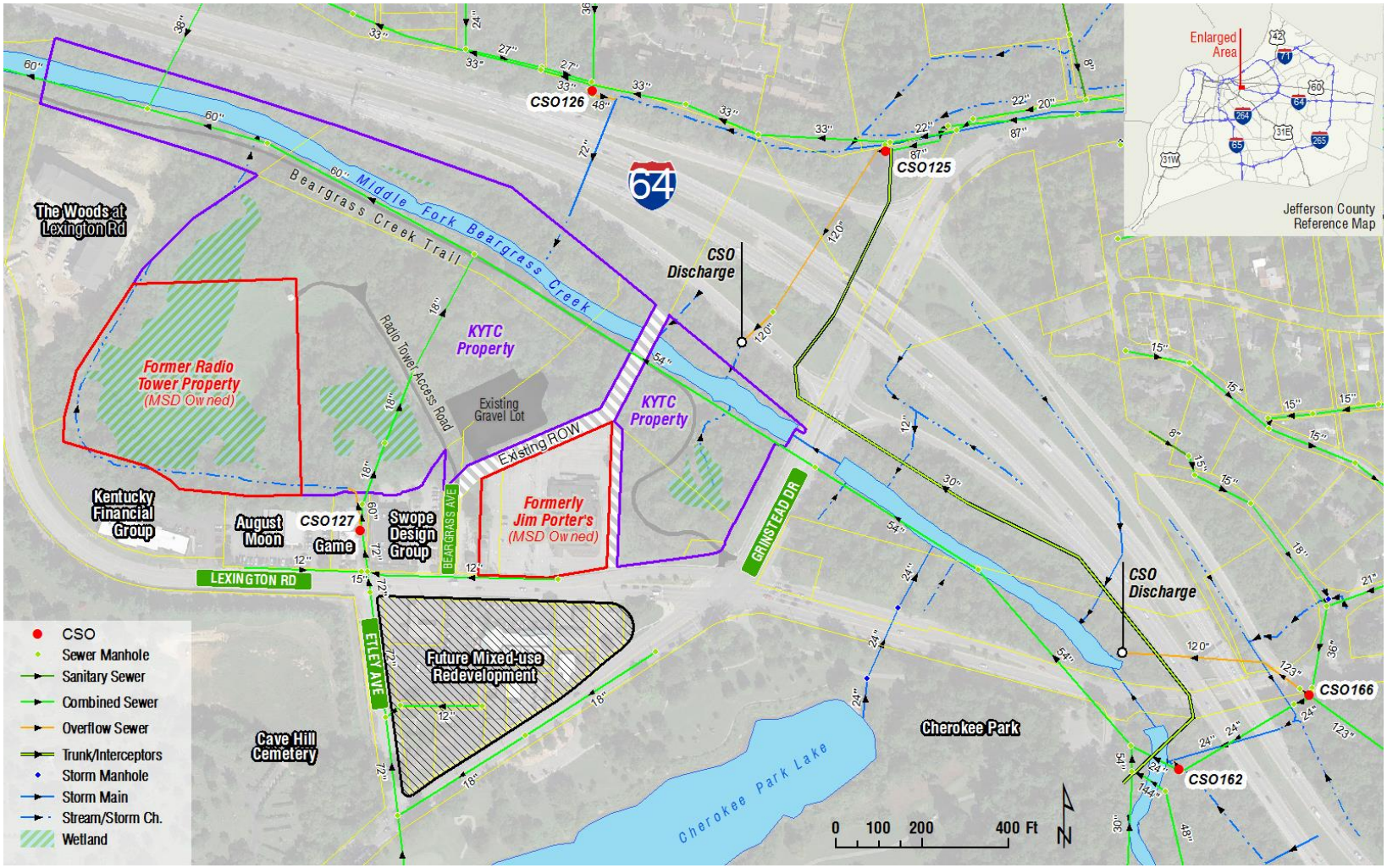
# Existing Site Conditions

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# Considerations for Site Selection

- Construction costs
- Potential cost recovery opportunities
- Potential community improvement opportunities
- Ecological health of the area

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# Selected Basin Site


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# Constructability Considerations

- Area for free-flow construction access
- Area for material and equipment staging out of the floodplain
- Minimize clearing needed for basin construction
- Area for possible public or environmental improvements
- Possible area for placement of excavated material

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# MSD Property Acquisitions

- MSD purchased the following properties:
  - 2345 Lexington Road (former Jim Porter's Good Time Emporium)
  - 2315 Lexington Road (white house next to Jim Porter's)
  - 2301 Lexington Road (former radio tower property)
- Residual properties after construction provide cost recovery opportunities

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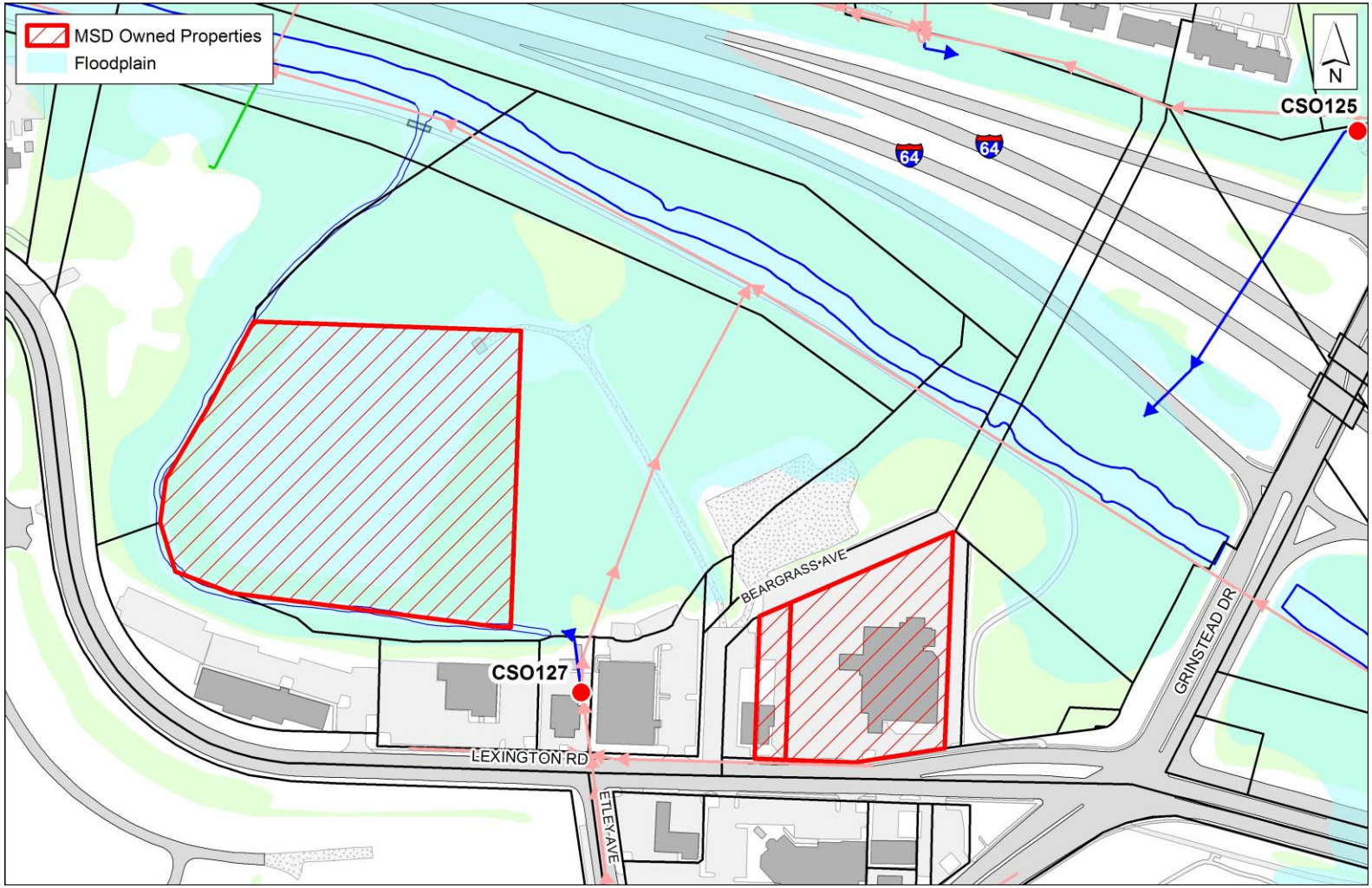
# Properties Purchased by MSD

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# Pending Property Acquisitions


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# Existing Site Conditions
# Former Jim Porter's

# Existing Site Conditions
## Area of Proposed Basin Site

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# Existing Site Conditions
## Shared Use Path Along Beargrass Creek

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# Existing Site Conditions
## Former Radio Tower Property

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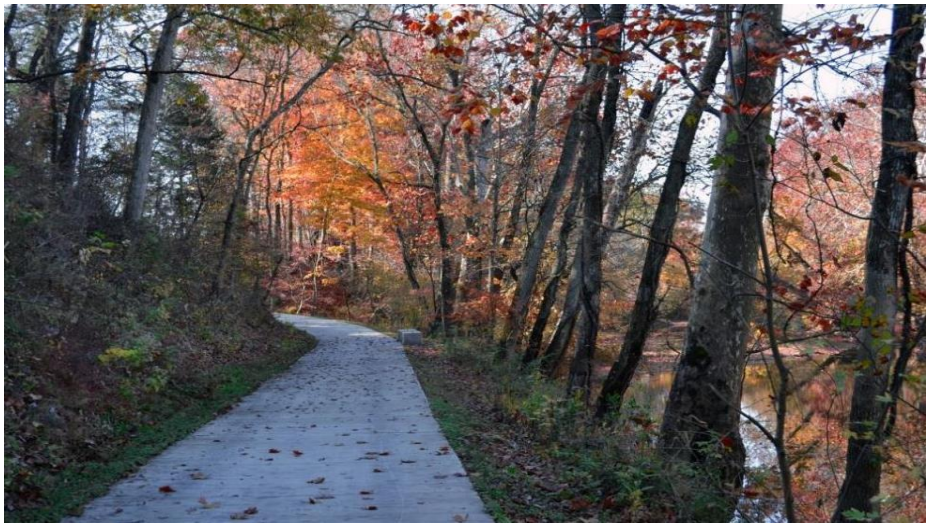
# Potential Improvements



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# Summary of Previous Polling Results

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# Polling Results

- Public meeting held on September 16, 2014 and Online Polling through December 2, 2014
  - 133 participants
  - 113 provided feedback
- Participants provided feedback about alternatives for **basin cover concepts**
- Participants also suggested, and then rated importance of, additional considerations regarding **concerns, opportunities, and enhancements**

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# Basin Cover Concepts

## Concept 1: No Public Access

## Concept 2: Parking and Trailhead Access

## Concept 3: Open Access with Passive Recreation

## Concept 4: Open Access with Structured Recreation

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# Basin Cover Concepts Feedback from 2014 Public Meeting and Online Survey

| Concept | Description | Average Score |
|---|---|---|
| 1 | No Public Access | 3.35 |
| 2 | Parking and Trailhead Access | 5.75 |
| 3 | Open Access with Passive Recreation | 7.06 |
| 4 | Open Access with Structured Recreation | 6.59 |

Polling was conducted on a scale of 1-9, where 1 is least preferred and 9 is most preferred

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# Summary of Polling Results from 2014

Additionally, previous meeting and online survey polling results found that some of the more important concerns, opportunities, and enhancements included:

1. Green infrastructure for parking lot
2. Impact on the existing trails
3. Educational signage along the trails
4. Offsite mitigation for tree loss
5. New trailhead including a parking lot
6. Community garden
7. Bicycle facilities
8. Picnic facilities
9. Playground
10. Aesthetics of the proposed control building and fencing

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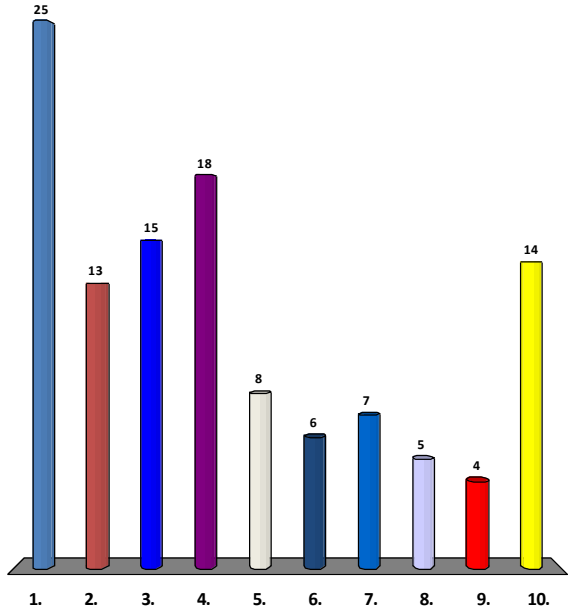
# Which of These are Most Important to You? (5)

1. Preserve/enhance existing trail
2. Aesthetics of the proposed control building
3. New trailhead including a parking lot
4. Green infrastructure for parking lot
5. Offsite mitigation for tree loss
6. Educational signage along the trail
7. Community garden
8. Picnic facilities
9. Playground
10. Bicycle facilities

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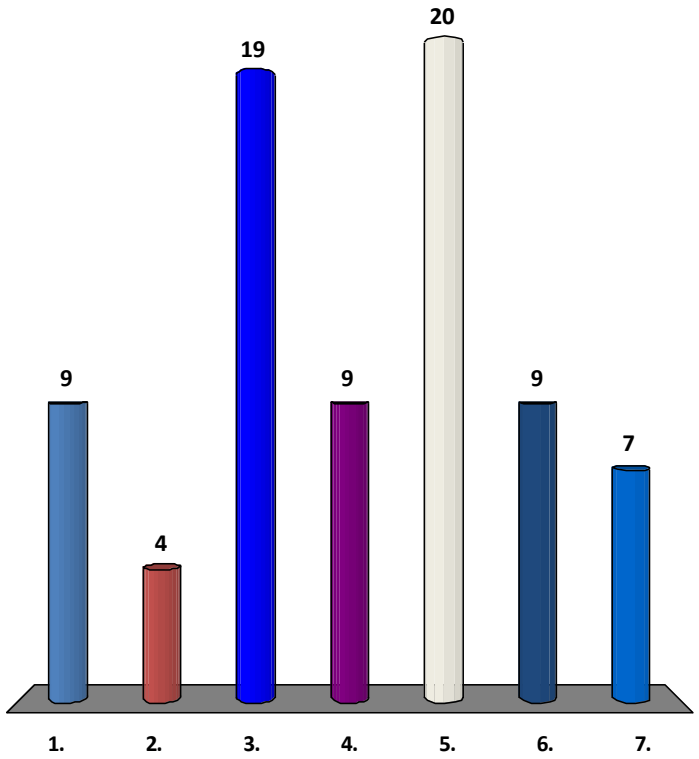
# Other Project or Site Considerations?

1. Dog Run /Agility field
2. Athletic field
3. Preserve and Enhance Wetlands
4. Lighting for paths
5. Tree replacement
6. Stream meanders
7. Site aesthetics during construction

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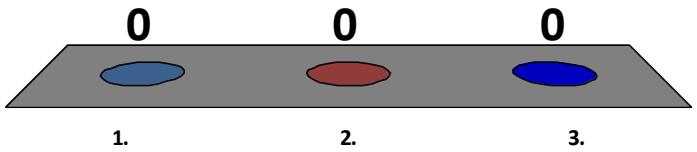
# Other Project or Site Considerations?

1. Your comment
2. Your comment
3. Your comment

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# 5. Next Steps

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# Next Steps

- Begin Advanced Project Design
- Coordinate with Agency Stakeholders
- Future Public Outreach:
  - Advanced Design Public Input Meeting — Summer 2016
  - Pardon our Dust Meeting — Summer 2017
- Construction Start — Summer 2017
- Construction Completion — Winter 2019
- Consent Decree Deadline — December 31, 2020

For more information and to give input for this project please attend our Advanced Design Meeting in the Summer of 2016.

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# 6. Feedback

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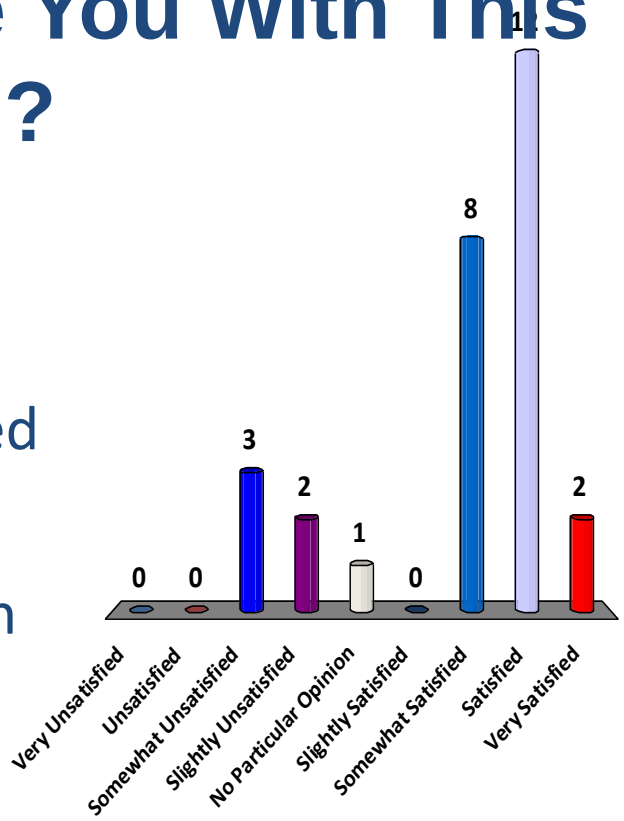
# How Satisfied Are You With This Feedback Method?

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 = 6.86**

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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

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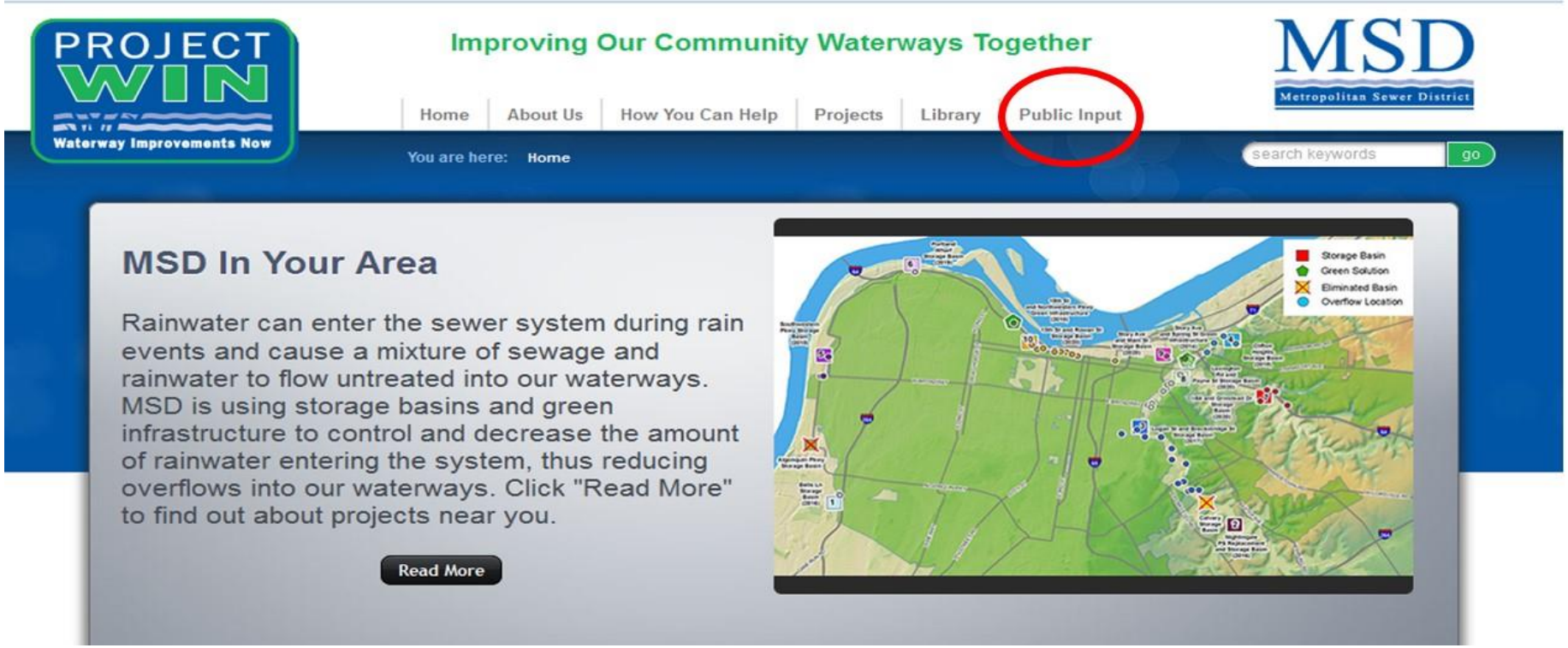
# Find Out More

## msdprojectwin.org




**Please Tell Your Friends and Neighbors to Take the Survey Online!**

**tinyurl.com/MSDI-64Grinstead2**

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# THANK YOU FOR YOUR PARTICIPATION

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