



**METRO PARKS
AND RECREATION**



Working Together to Protect Public Health Conceptual Design Input Meeting

MSD Southwestern Parkway Combined Sewer Overflow Storage Basin & Shawnee Park Uplands Master Plan

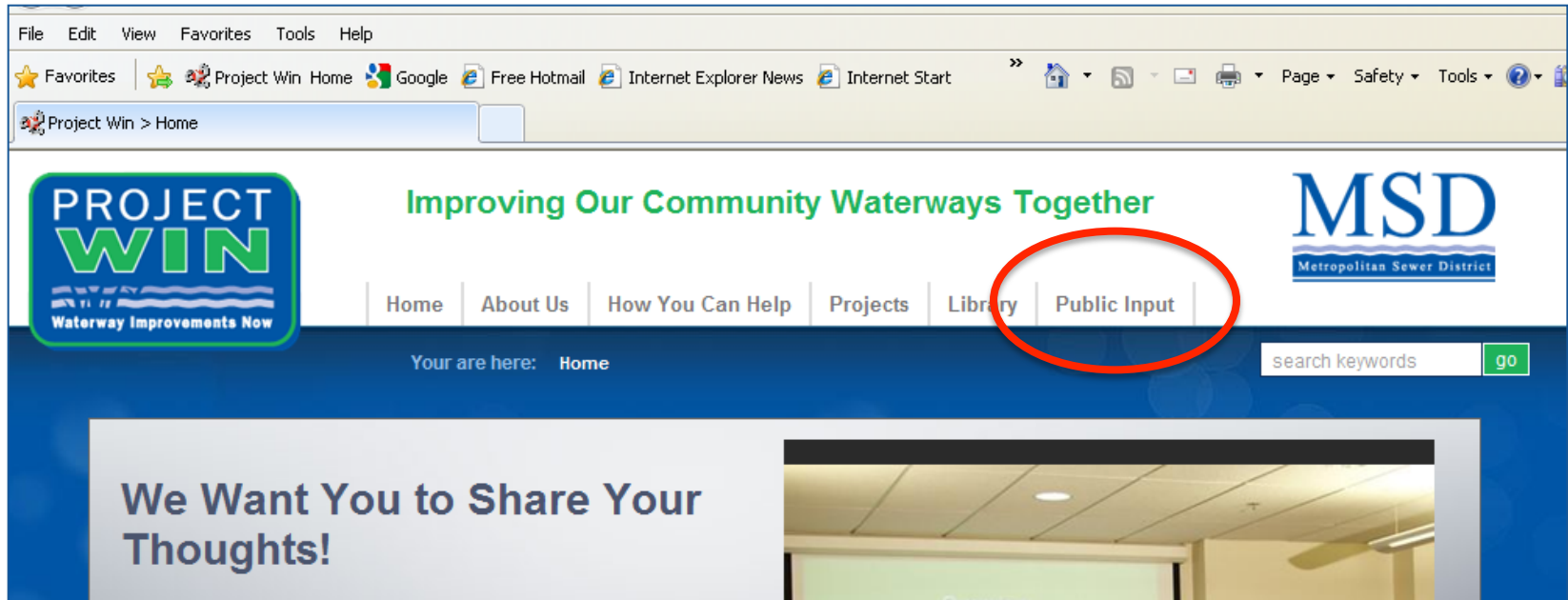
March 23, 2015

Agenda

- **Project Phases and Responsibilities**
- Consent Decree Background
- Demographic Questions
- Southwestern Parkway CSO Storage Basin Project and Feedback
- Shawnee Park Uplands Master Plan and Feedback
- Next Steps

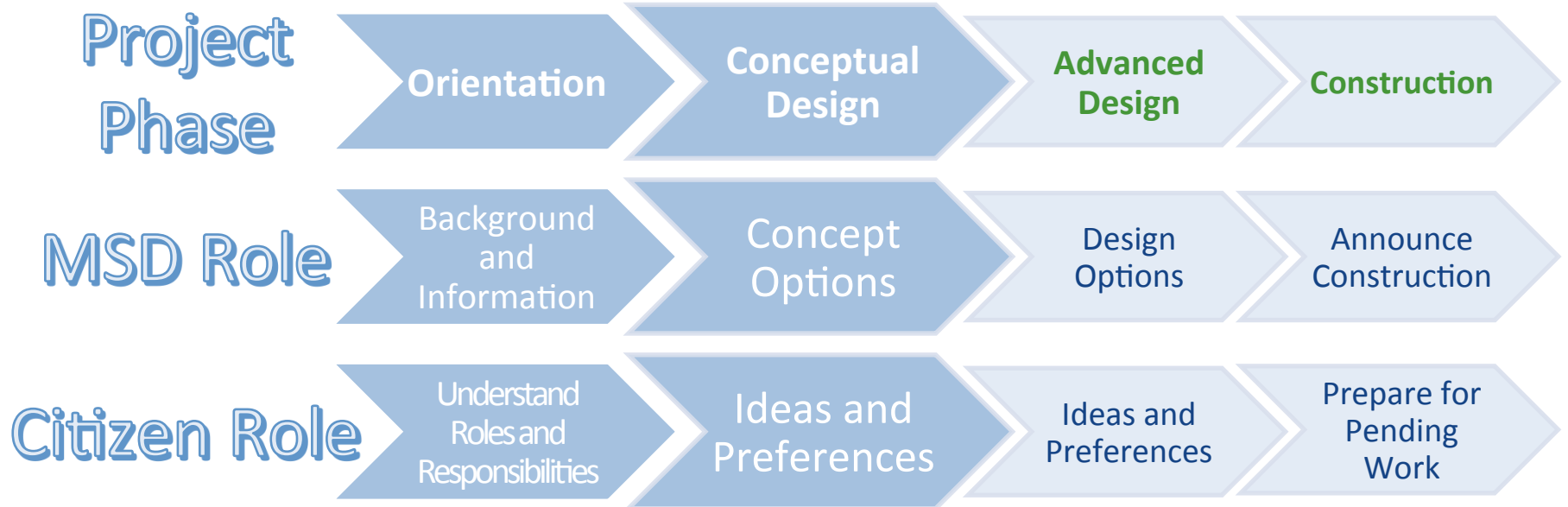
Find Out More

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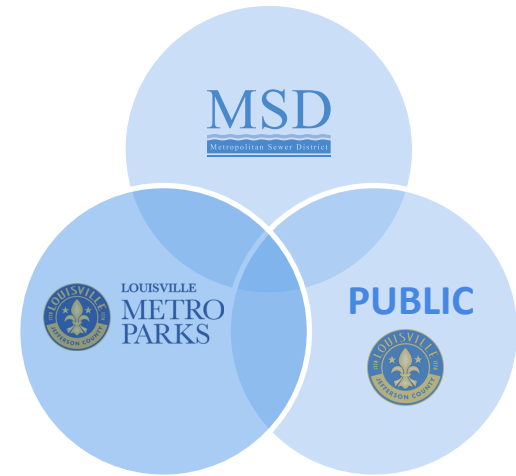
**Learn More at the Website Created Just for YOU!
Please Tell Your Friends and Neighbors to Take the
Survey Online!**

Project Phases and Responsibilities



Southwestern Pkwy CSO Basin Coordination

- Coordination
 - Louisville MSD
 - Public and Louisville Metro Council
 - Louisville Metro Parks
- Design Consultant Team
 - Gresham, Smith & Partners (Lead Designer)
 - Heritage Landscapes, LLC (Olmsted Expert)



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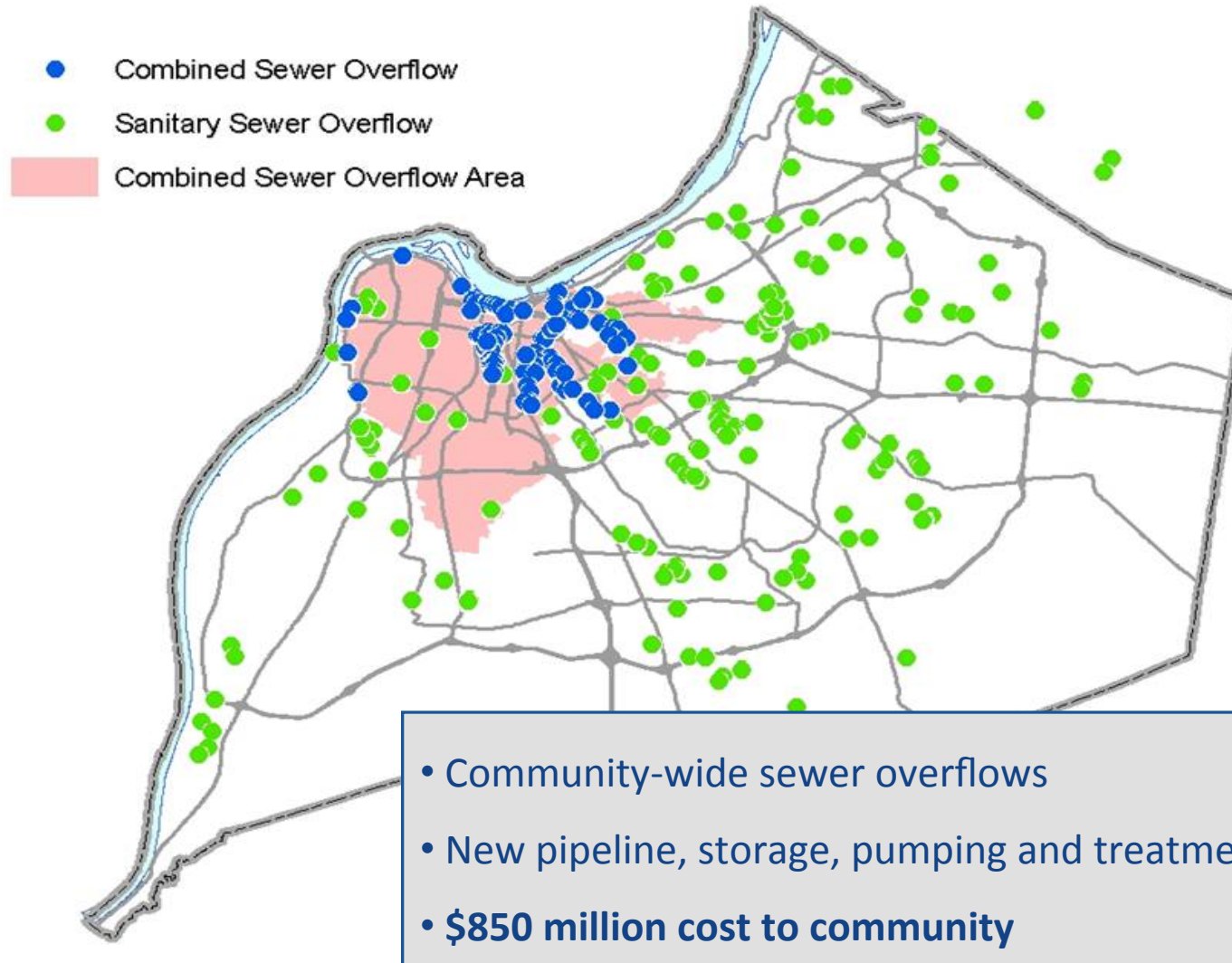






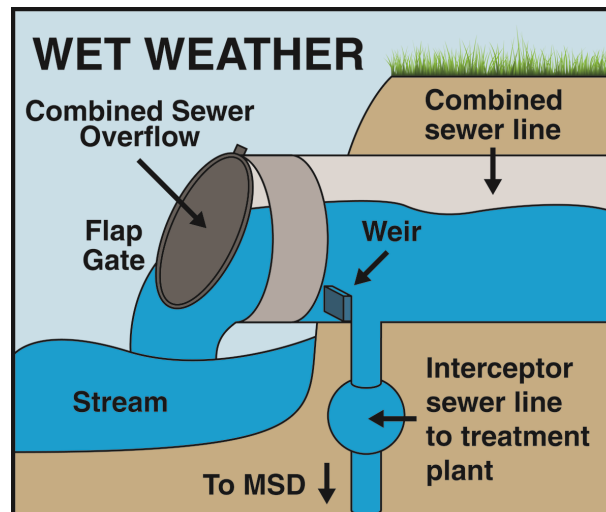


Sewer Overflow Locations (2008)



What is a Combined Sewer Overflow?

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



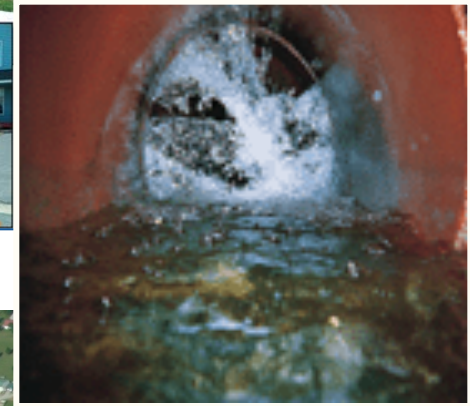
Public Health and Safety Mandate

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

How Do We Control Overflows?

Source Control Projects

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



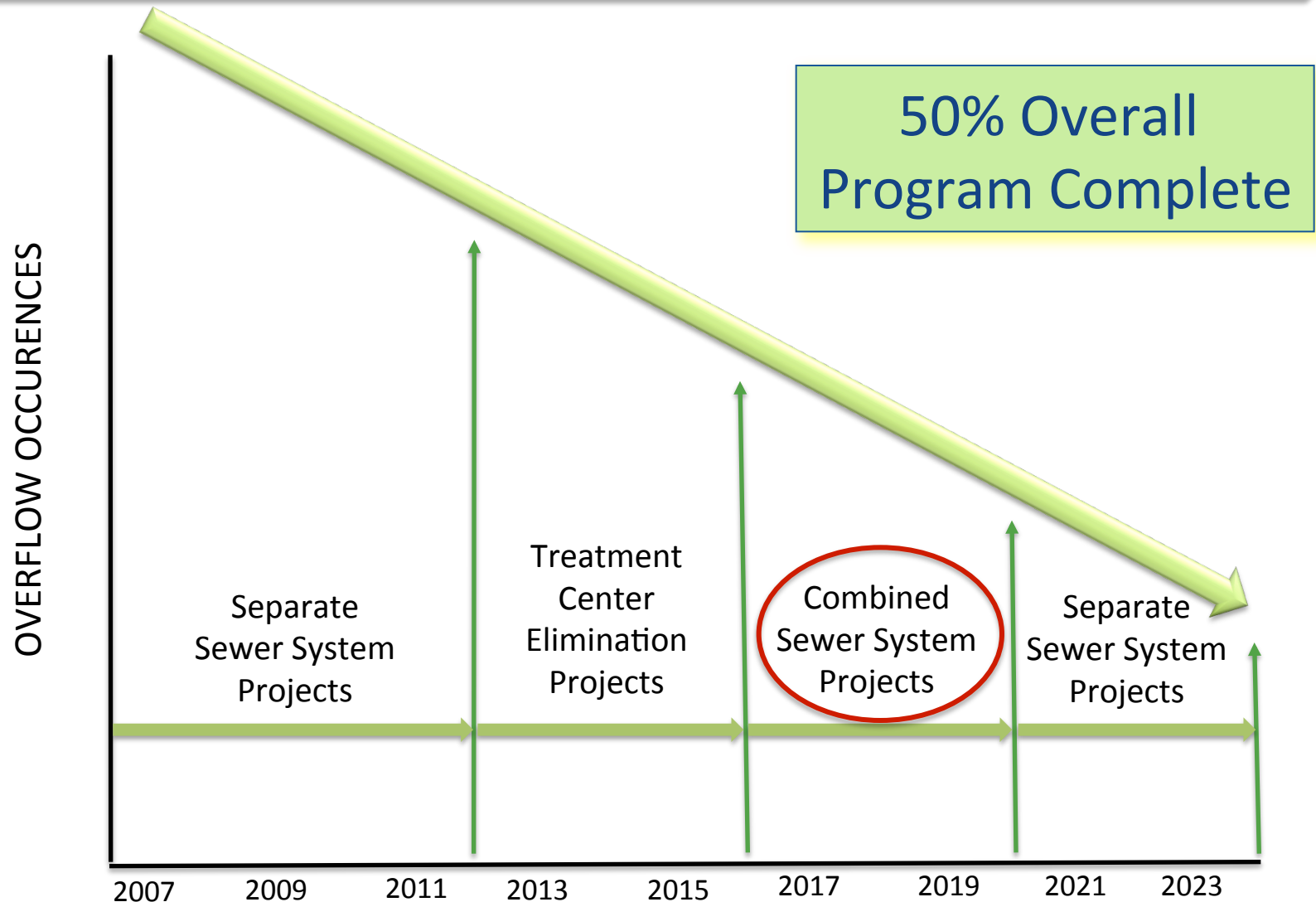
Gray Infrastructure Projects

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





Program Status



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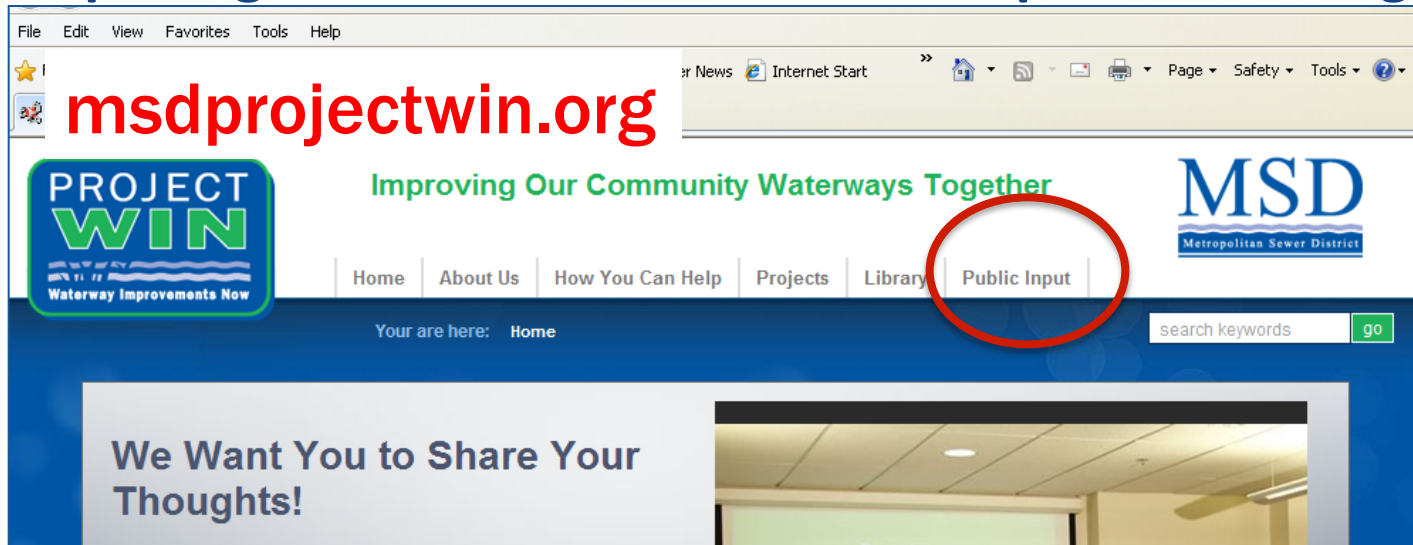
Public Engagement: “Clickers” and Online Polling

“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

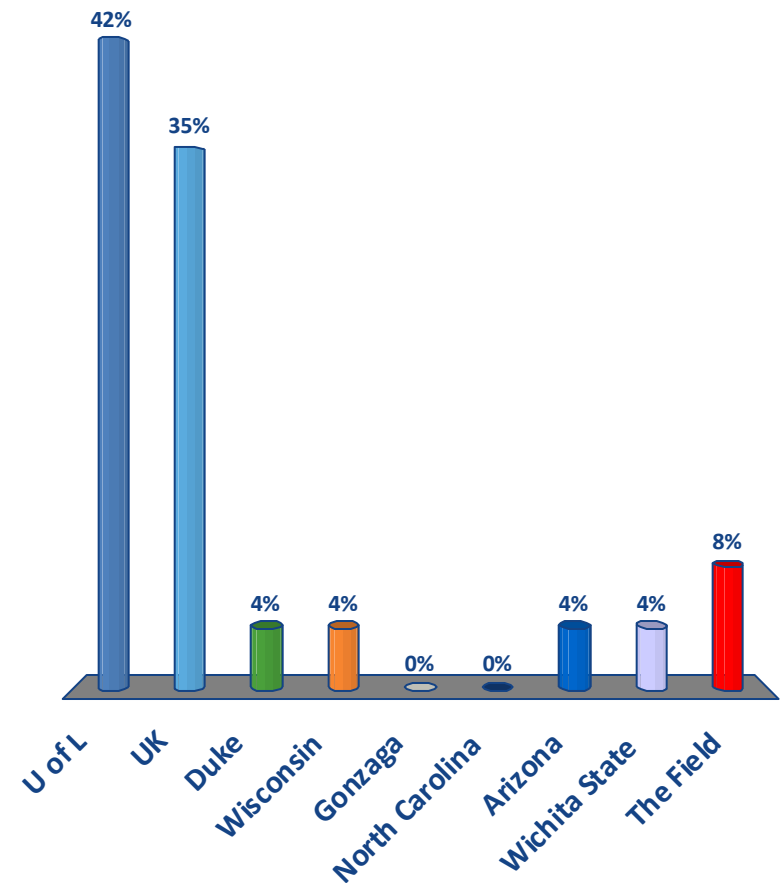


Online polling for those who can't attend public meetings



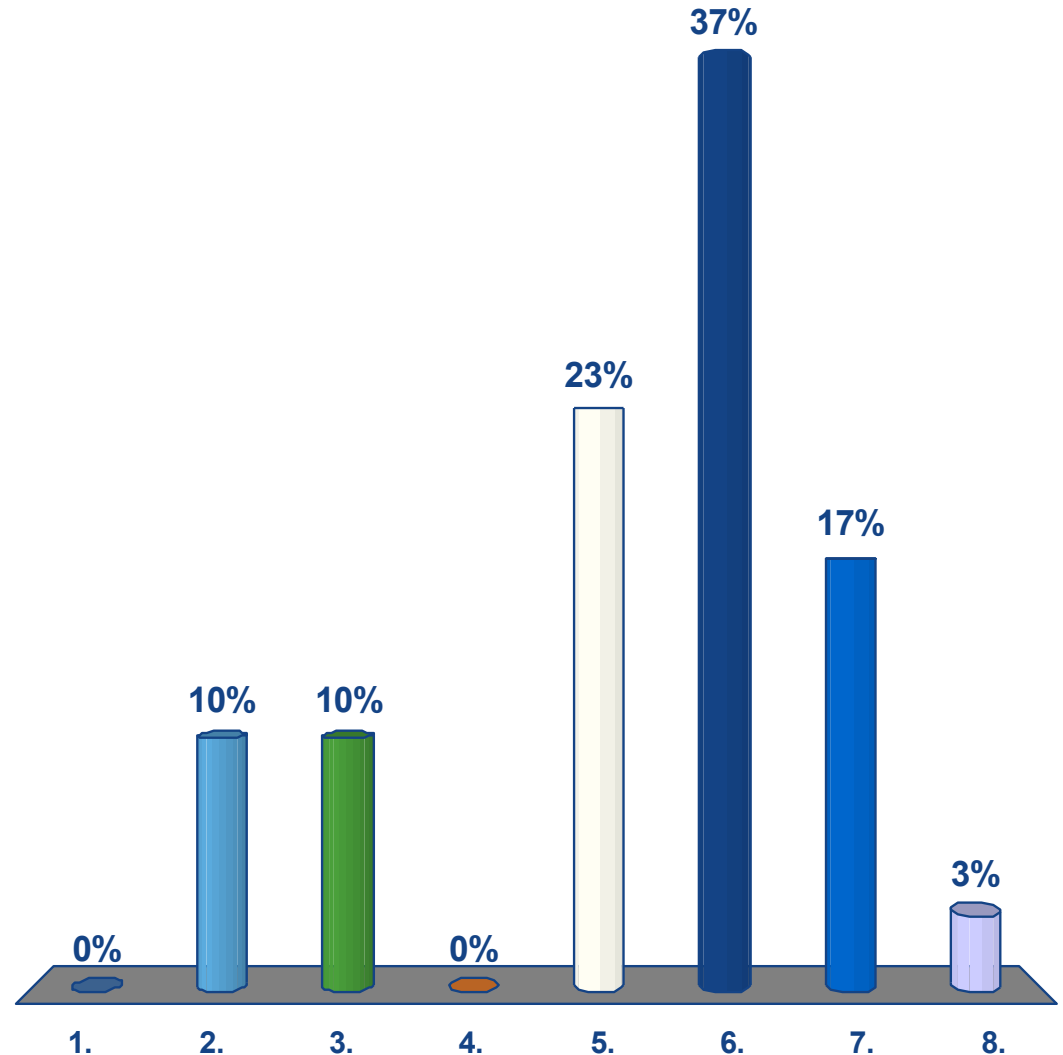
Who Will Win the NCAA Tournament?

1. U of L
2. UK
3. Duke
4. Wisconsin
5. Gonzaga
6. North Carolina
7. Arizona
8. Wichita State
9. The Field



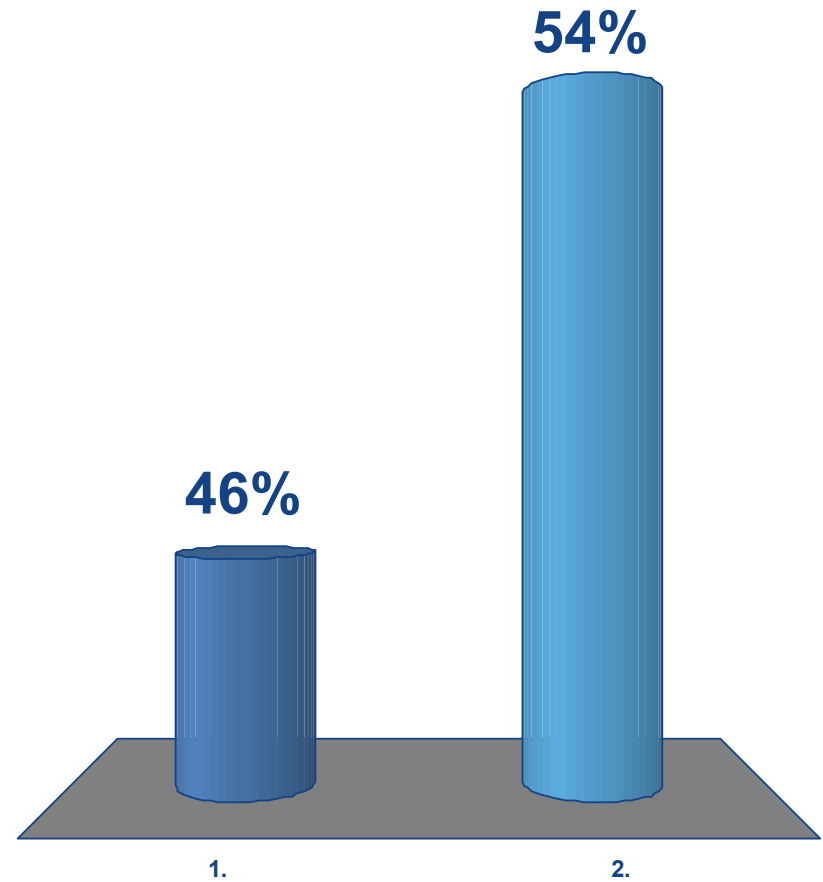
How Young Are You?

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



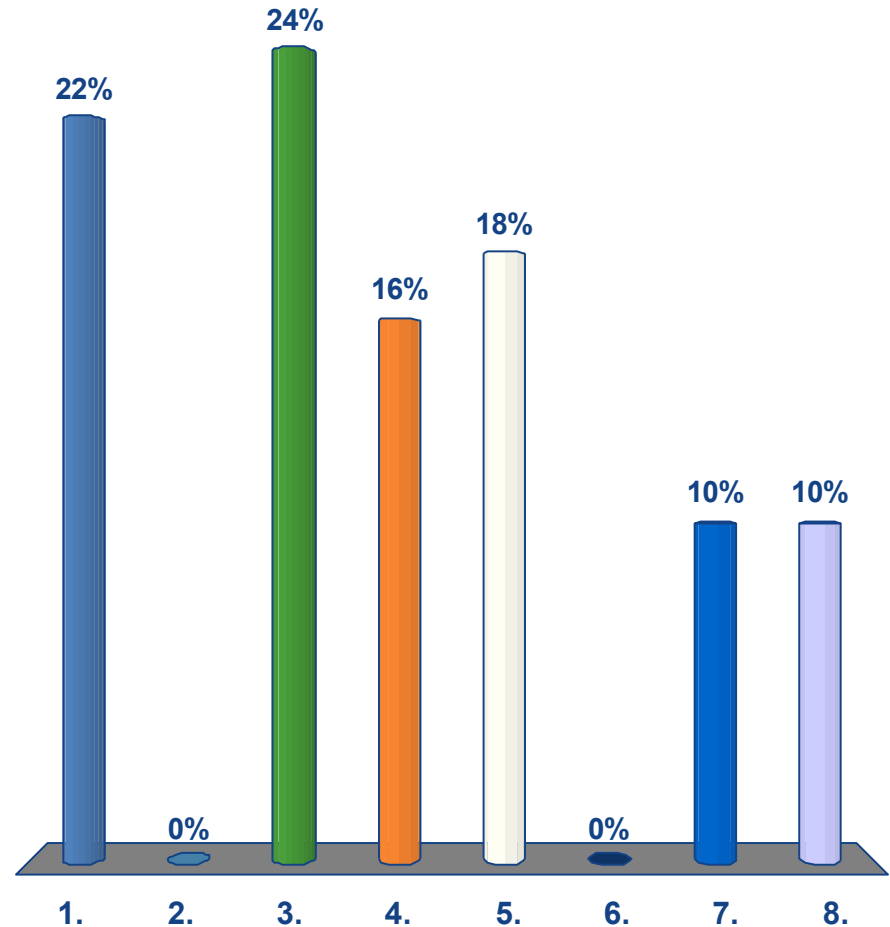
Gender?

1. Male
2. Female



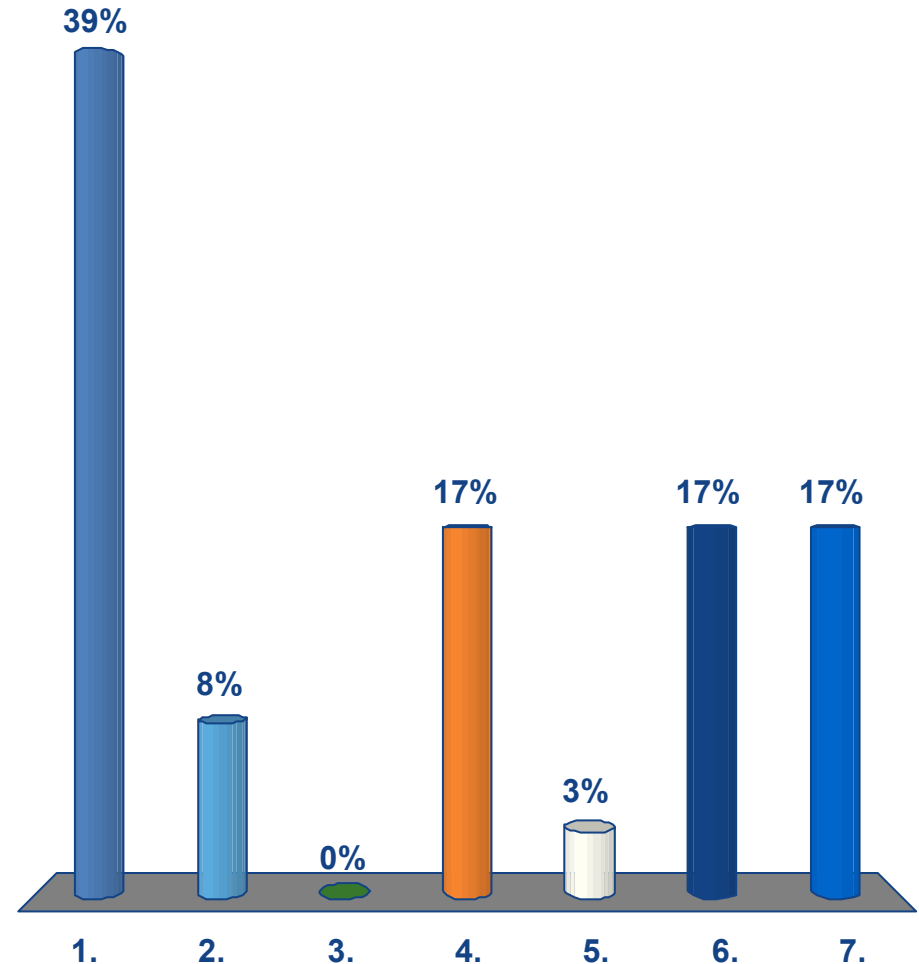
How Did You Hear About This Meeting? (Up to 3)

1. Post card
2. Courier Journal
3. Saw it in a council newsletter
4. Heard about it from someone
5. Received a flyer
6. Project WIN website
7. MSD e-mail
8. Other



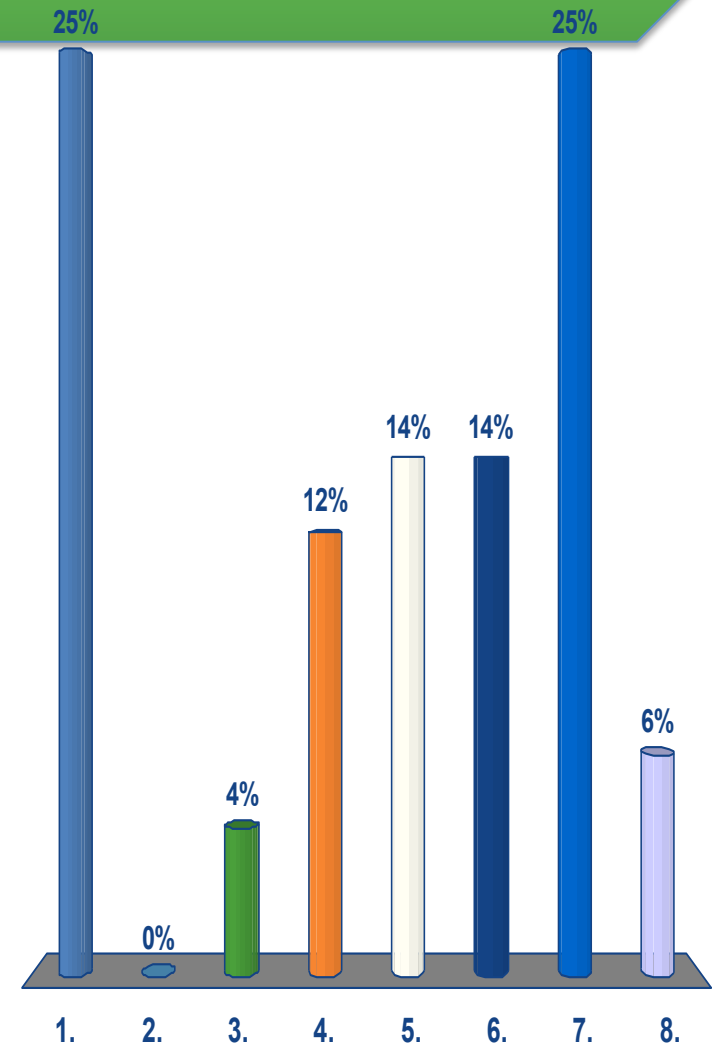
What Are Your Primary Sources of Information About MSD Projects? (Up to 3)

1. Public meetings
2. Metro TV videos
3. Project WIN website
4. Local mainstream print or broadcast media
5. Alternative press or online media
6. Word of mouth
7. I don't have any previous 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 e-mail
7. Metro Council District Newsletter
8. Bill inserts

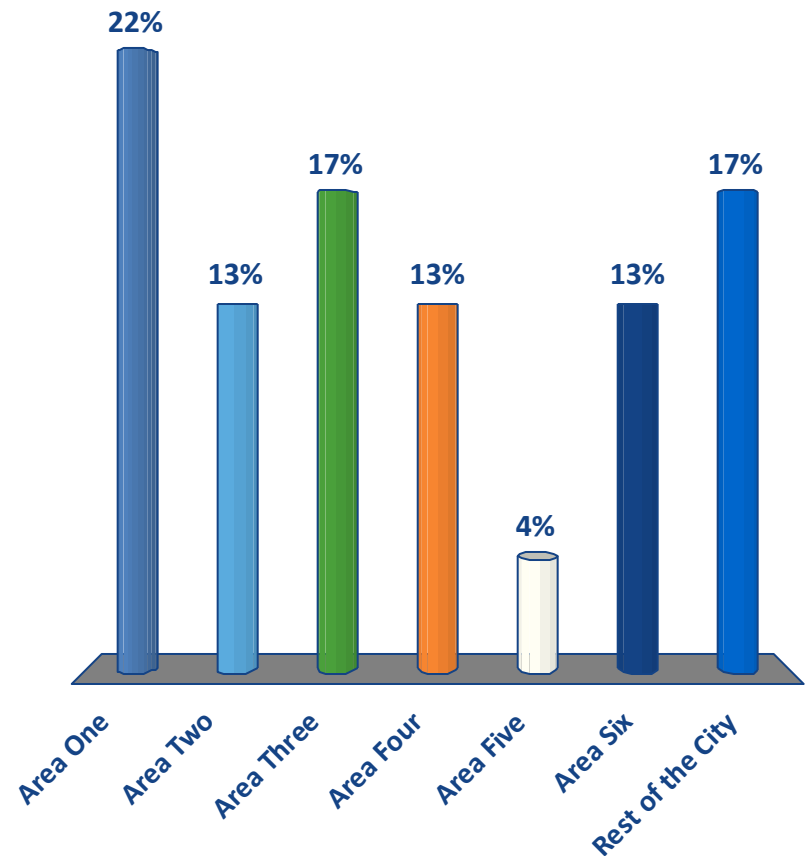


Where do you
live?



Where Do You Live?

1. Area One
2. Area Two
3. Area Three
4. Area Four
5. Area Five
6. Area Six
7. Rest of the City



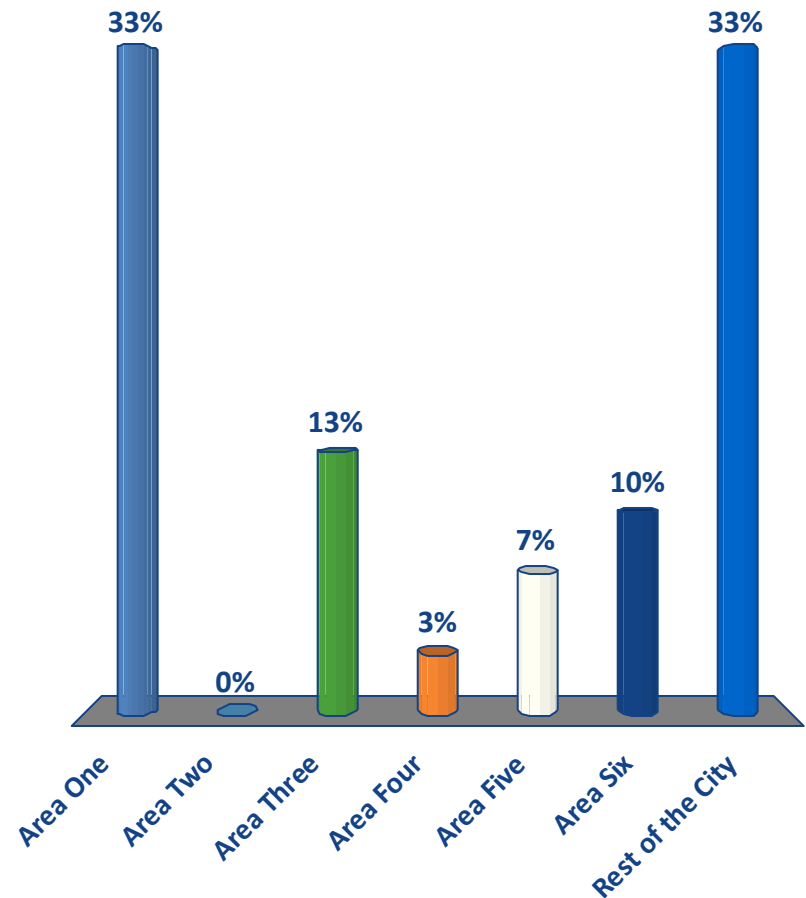
Where do you
spend your day
(work, play,
visit)?

- pick up to 3



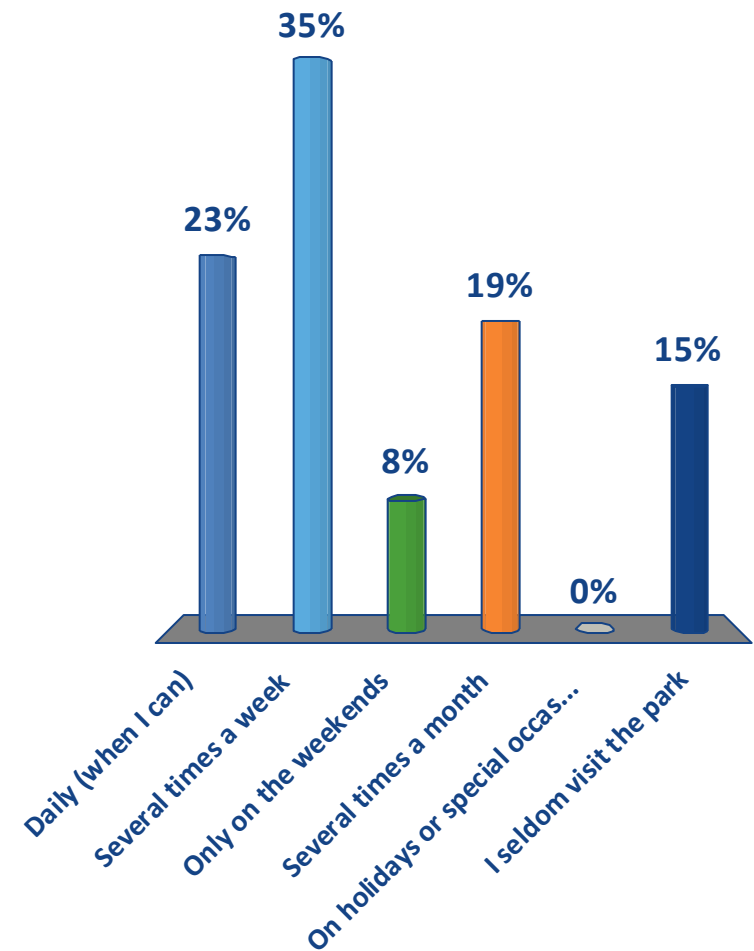
Where Do You Spend Your Days? (3)

1. Area One
2. Area Two
3. Area Three
4. Area Four
5. Area Five
6. Area Six
7. Rest of the City



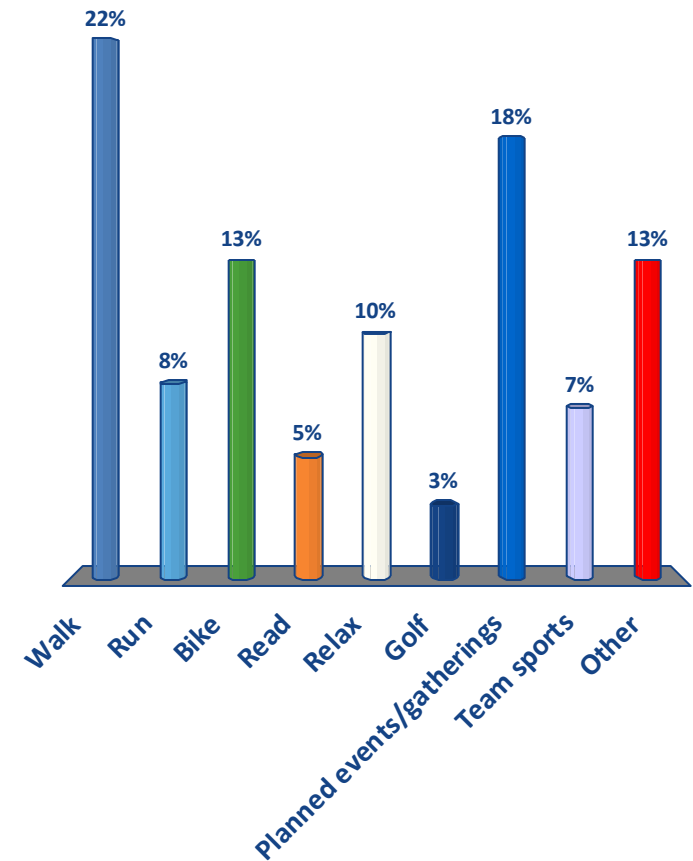
When Do You Visit the Park?

1. Daily (when I can)
2. Several times a week
3. Only on the weekends
4. Several times a month
5. On holidays or special occasions
6. I seldom visit the park



How Do You Use the Park? (up to 4)

1. Walk
2. Run
3. Bike
4. Read
5. Relax
6. Golf
7. Planned events/gatherings
8. Team sports
9. Other

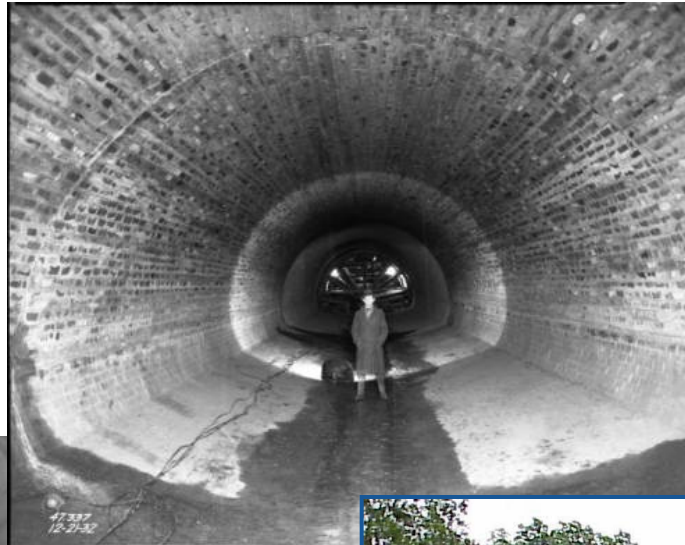


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Existing Sewers & Flood Protection in Park

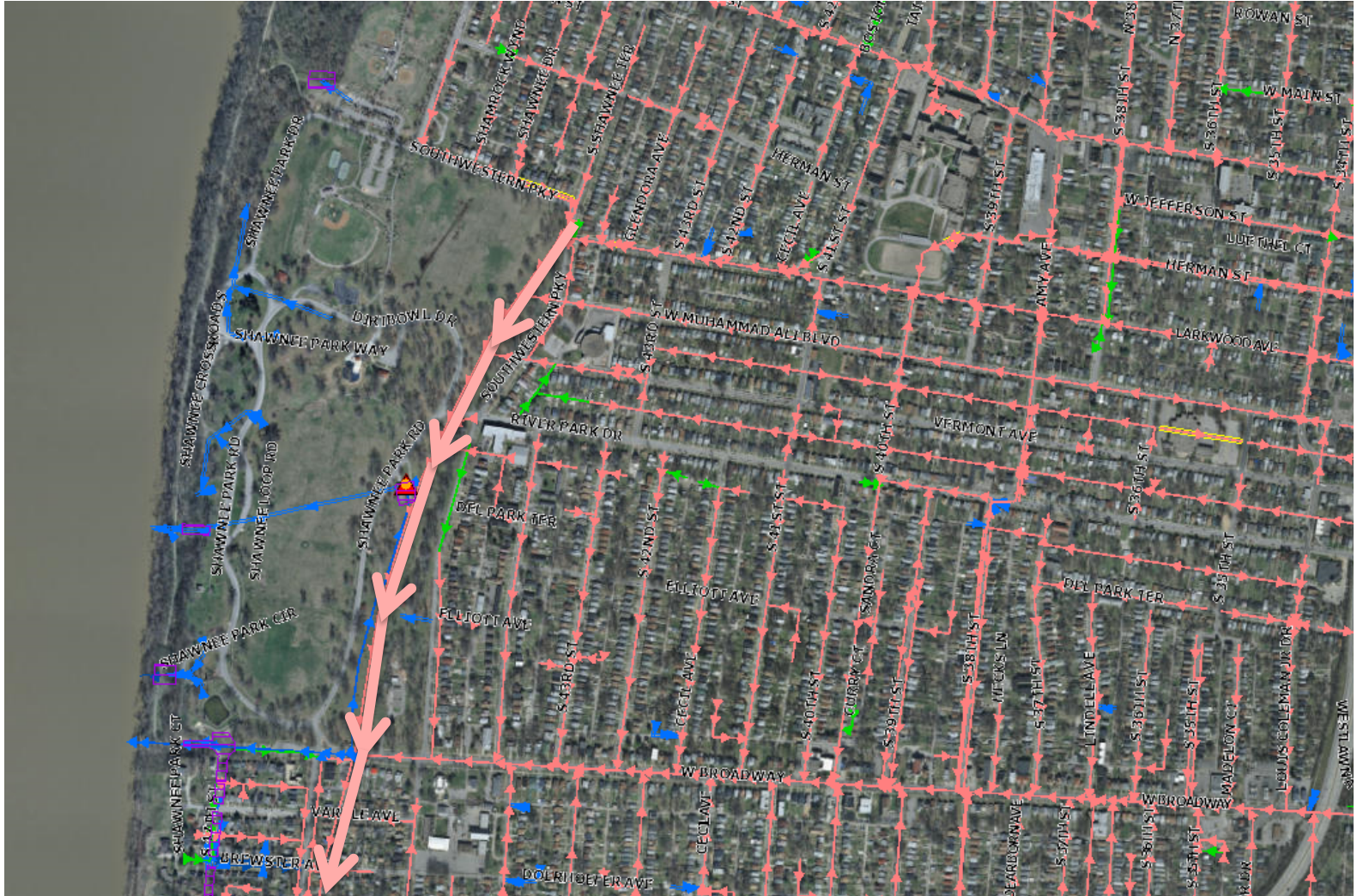
**Commissioners of
Sewerage built
Northwestern &
Western Sewers
through Shawnee Park
1910-1911**



**U.S. Army Corps of
Engineers built
Shawnee Flood Pumping
Station/Levee system in
Shawnee Park
1951**

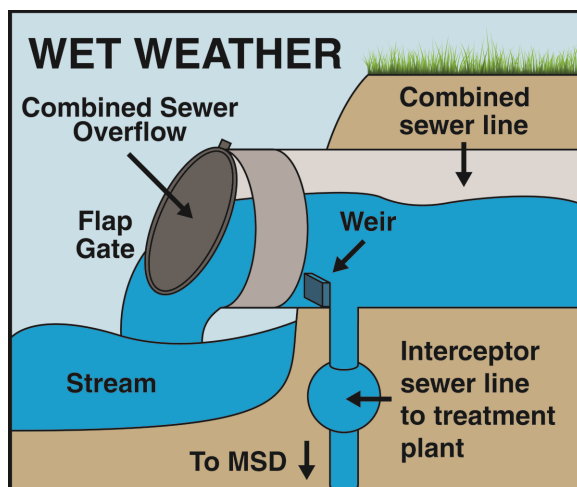


On a Normal, Dry Weather Day



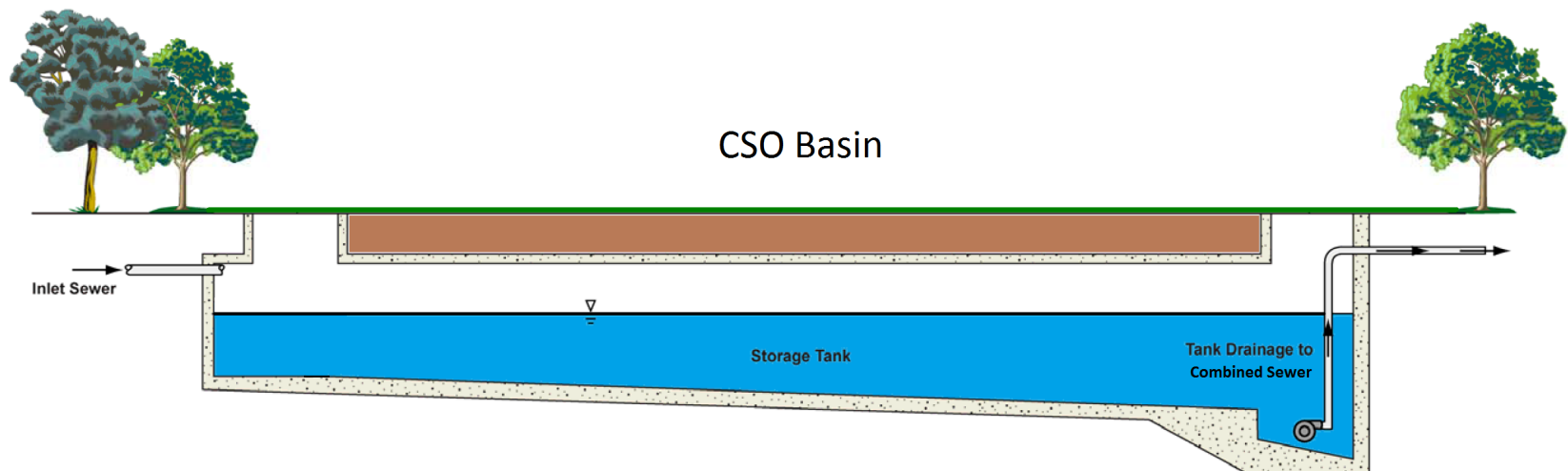
During Wet Weather Today

- Untreated combined sewage is discharged to Ohio River
 - Sewage overflows occur with **1/10 inch rainfall event**
- Overflow from three CSOs (115 MG/Year)



What is a CSO Storage Basin?

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



Southwestern Pkwy CSO Basin Information

- Project is a component of the Consent Decree
- Basin volume 17.5 million gallons
 - Total reduction from 74 overflows to 24 overflows per “typical year”
 - Final basin volume pending approval from EPA/DOW
- Basin size is approximately 150' x 400' x 45' deep
 - Underground, covered
 - No rock excavation anticipated
- **Required completion deadline of December 2018**

Project Design and Construction Schedule (est.)

- Project Design Dec 2014
 - **Conceptual Design Public Input Meeting** Mar 2015
 - Advanced Design Public Input Meeting Summer 2015
- Final Design Completion Dec 2015
- Advertise for Construction Jan 2016
 - Pre-Construction Public Meeting May 2016
- Construction Start Summer 2016
- **Consent Decree Completion Deadline Dec 2018**

Frequently Asked Questions

- Consideration of alternate sites?
- Will it create potential for back-ups?
- What happens when the basin is full?
- Odors – is it going to smell?
- Will the basin be visible?

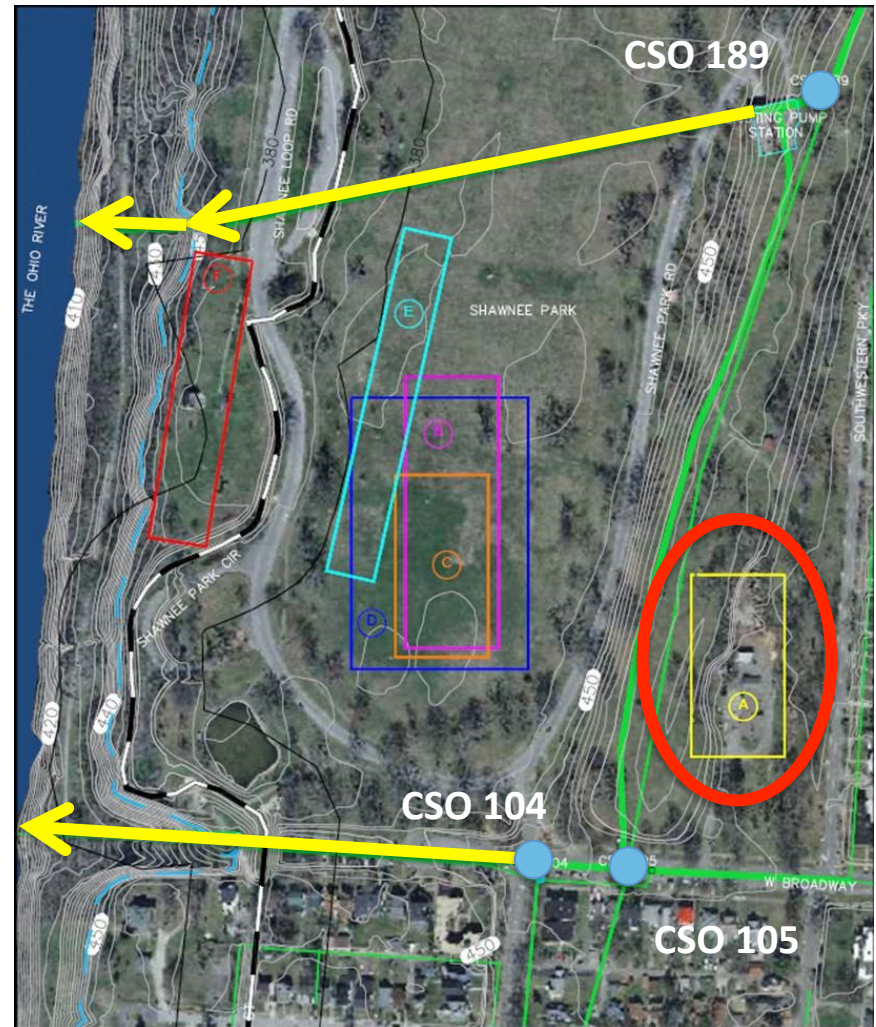
Alternate Site Evaluation

- Shawnee Park (Metro Parks ownership, current IOAP approved)
- Residential site (privately owned)
- Flaget Field (Metro Parks ownership)
- Chickasaw Park site (Metro Parks ownership)



Southwestern Pkwy CSO Basin Location

- Evaluated Six (6) Basin Locations within Shawnee Park
 - Evaluated from Two Perspectives
- **Site A is Recommended Location**
 - By both perspectives





Detail of Site A Location



Basin Preliminary Sketch Section



Advantages of Site A

- Minimizes impact to Shawnee Park and park users
- Allows enhancement to Parks maintenance facility
- Most cost effective option
 - Minimizes excavation
 - Proximity to existing CSOs
- Access to basin will be off West Broadway
 - Not from the park
- No modifications to the operation of existing flood protection facilities

Basin Functionality

- Gravity in – pump out system
- The water surface elevation in the basin (when full) will be below basement elevations
 - Minimizes the potential for back-ups
- When the basin is full, the system will act as it does today
 - Overflows will be discharged into the Ohio River

What About Odor?

- Diluted flow (mostly storm water)
- Basin is underground and covered
- Basin rinsed after each use
- Typically, odor control not necessary with these types of facilities
- MSD is being pro-active
 - Performing odor monitoring/testing
 - Basin will be designed to accommodate a future odor control system

Frequently Asked Questions

- Consideration of alternate sites?
 - Yes
- Will it create potential for back-ups?
 - No
- What happens when the basin is full?
 - System functions as it does today; overflows to river
- Odors – is it going to smell?
 - No; highly diluted, underground, covered, rinsed facility
- Will the basin be visible?
 - No; basin underground, covered; small controls building

Surface Restoration Concepts Example



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- **Shawnee Park Uplands Master Plan and Feedback**
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Shawnee Park Uplands Master Plan to accompany the Southwestern Parkway CSO Storage Basin

Shawnee Park Uplands Master Plan update triggered by Basin Project

- Engages community in planning process
- Updates and reviews 1994 Olmsted Parks and Parkways Master Plan and outcomes
- Documents park origins and evolution
- Analyzes Olmsted design & intended landscape character
- Maps and studies park today
- Proposes Improvements

Shawnee Park Paddy's Run

Public Meeting 23 March 2015

Patricia O' Donnell, FASLA, AICP, ICOMOS, IFLA

Heritage Landscapes LLC and
Environs Inc., Landscape Architects

Shawnee Park Olmsted Legacy Public Landscape

ORIGIN

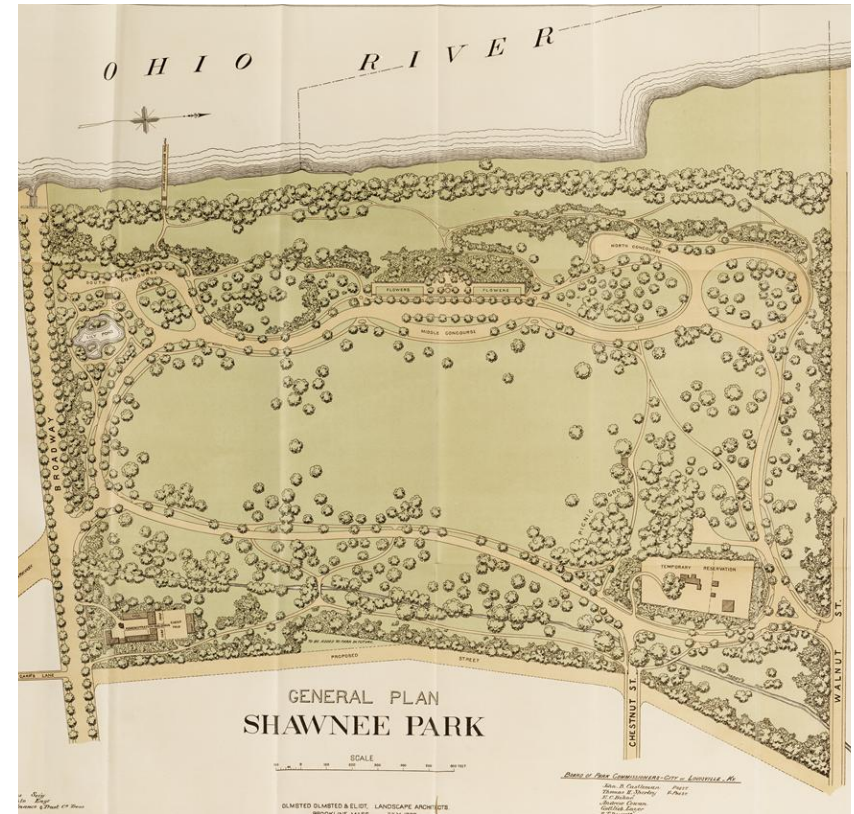
- 1891-1899 designed as 1 of 3 by the firm of Frederick Law Olmsted Sr.
- 1900 construction, 1915 expansion north

TRANSITION

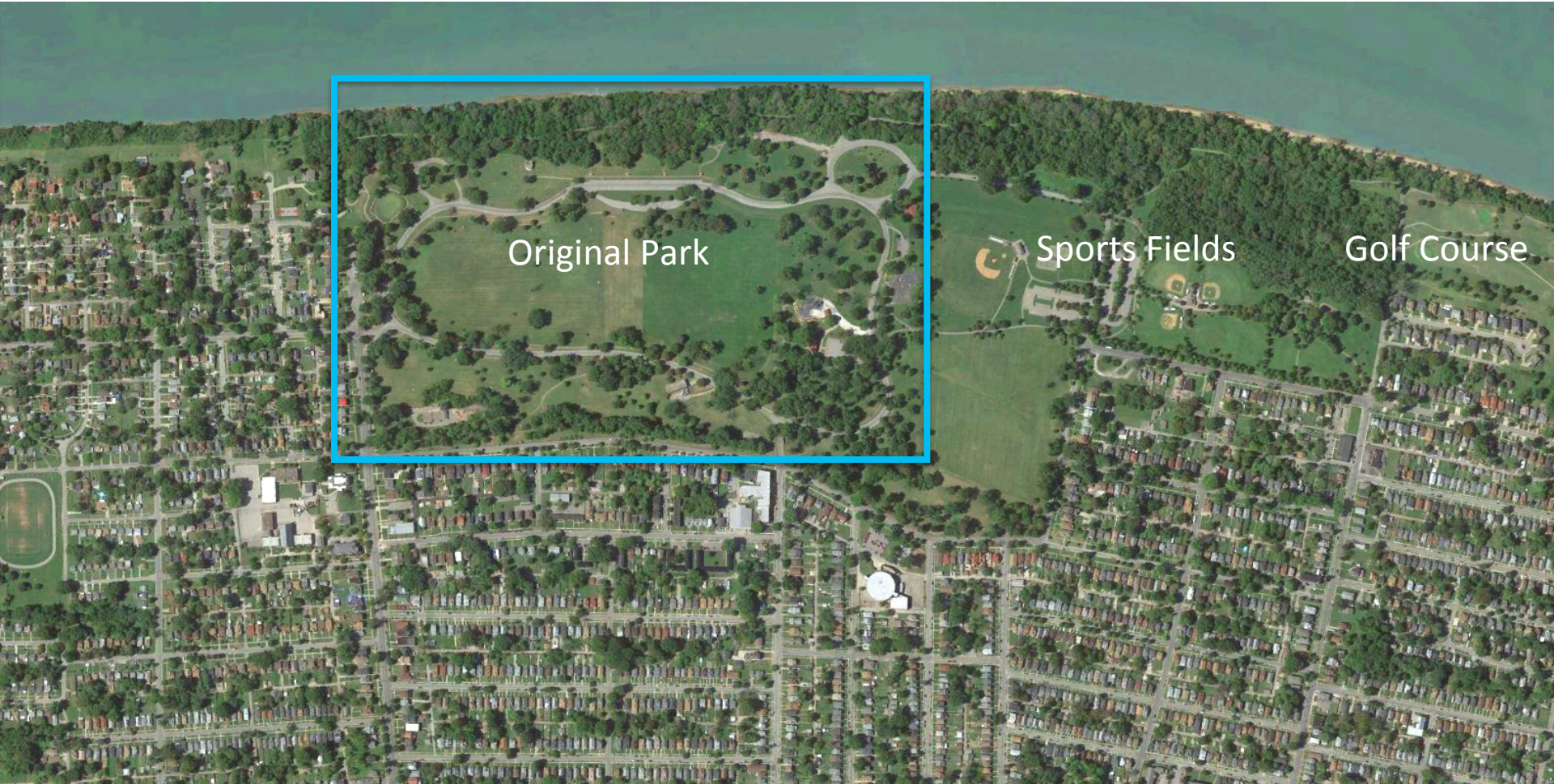
- 1920s active recreation on Great Lawn
- 1937 Great Flood, 1947 levee and structures
- 1950s-1980s wear and tear, reduced maintenance

REBIRTH

- 1994 Olmsted Parks & Parkways Master Plan and projects
- 2015 Master Plan update and Basin Project



Shawnee Park Uplands



Shawnee Park Uplands in 2015



Shawnee Park Landscape Character

Olmsted design shaped spaces with organization, views, topography, vegetation, circulation, water and structures:

- Spatial Organization & Views
- Topography, Grading & Surface Drainage
- Vegetation, Trees, Massing, Shrubs
- Circulation, Drives, Walks, Bridges
- Water Features
- Buildings, Structures



Shawnee Park Spatial Organization & Views



- Views within the park highlight the Great Lawn, divided into three subspaces
- Concourses feature Ohio River views over relatively open river slopes
- Paddy's Run is a long thin valley, characterized by a stream and vegetation
- Administration/Maintenance functional area, screened by informal trees, shrubs
- Overall variations in view character and depth, for rich park experience

Shawnee Park Topography, Grading & Surface Drainage

- Native topography altered using varied concave and convex, spiral curves
- Graceful character inherent in treatment of grades
- Ground plane variety present even with relatively level appearance
- Drives and paths drop into the grade, rolled edges reduce visual presence
- Drainage swales have meandering centerlines

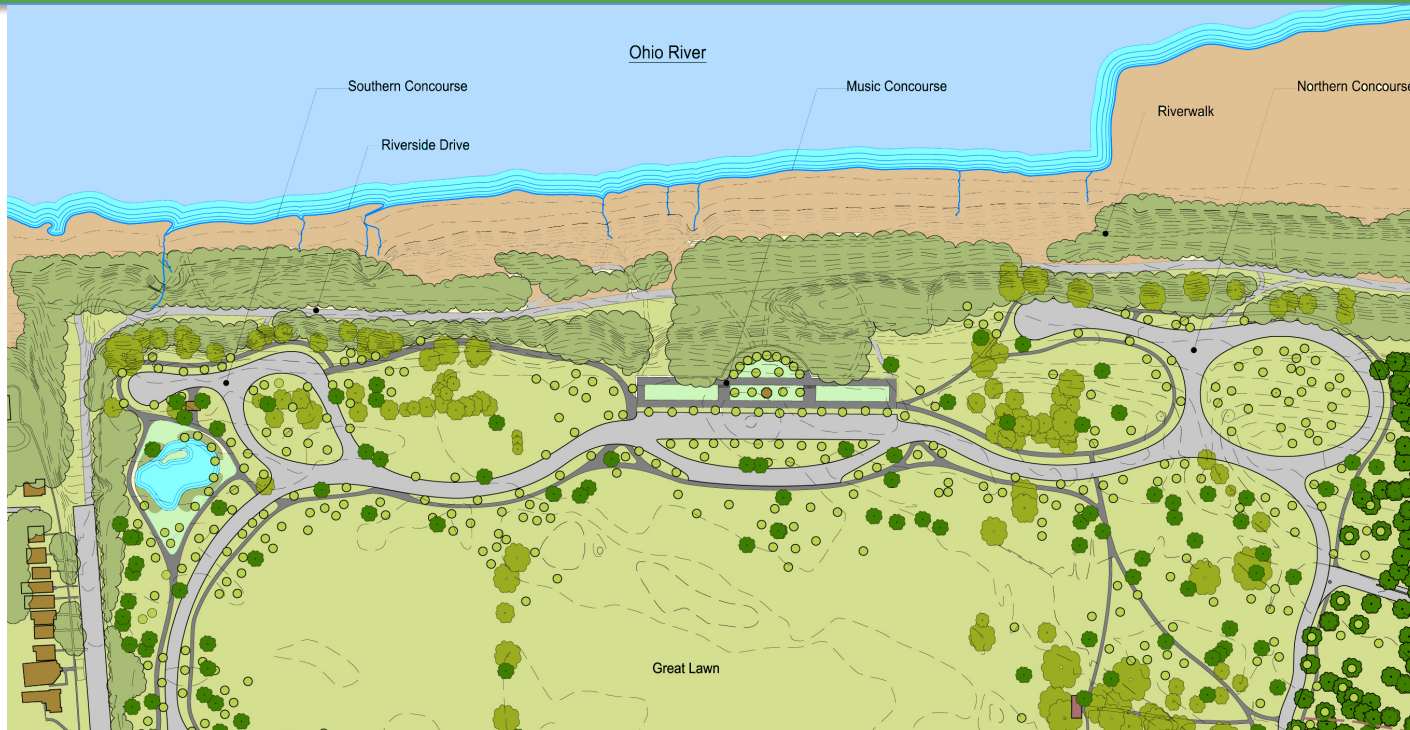


Shawnee Park Topography, Grading & Surface Drainage



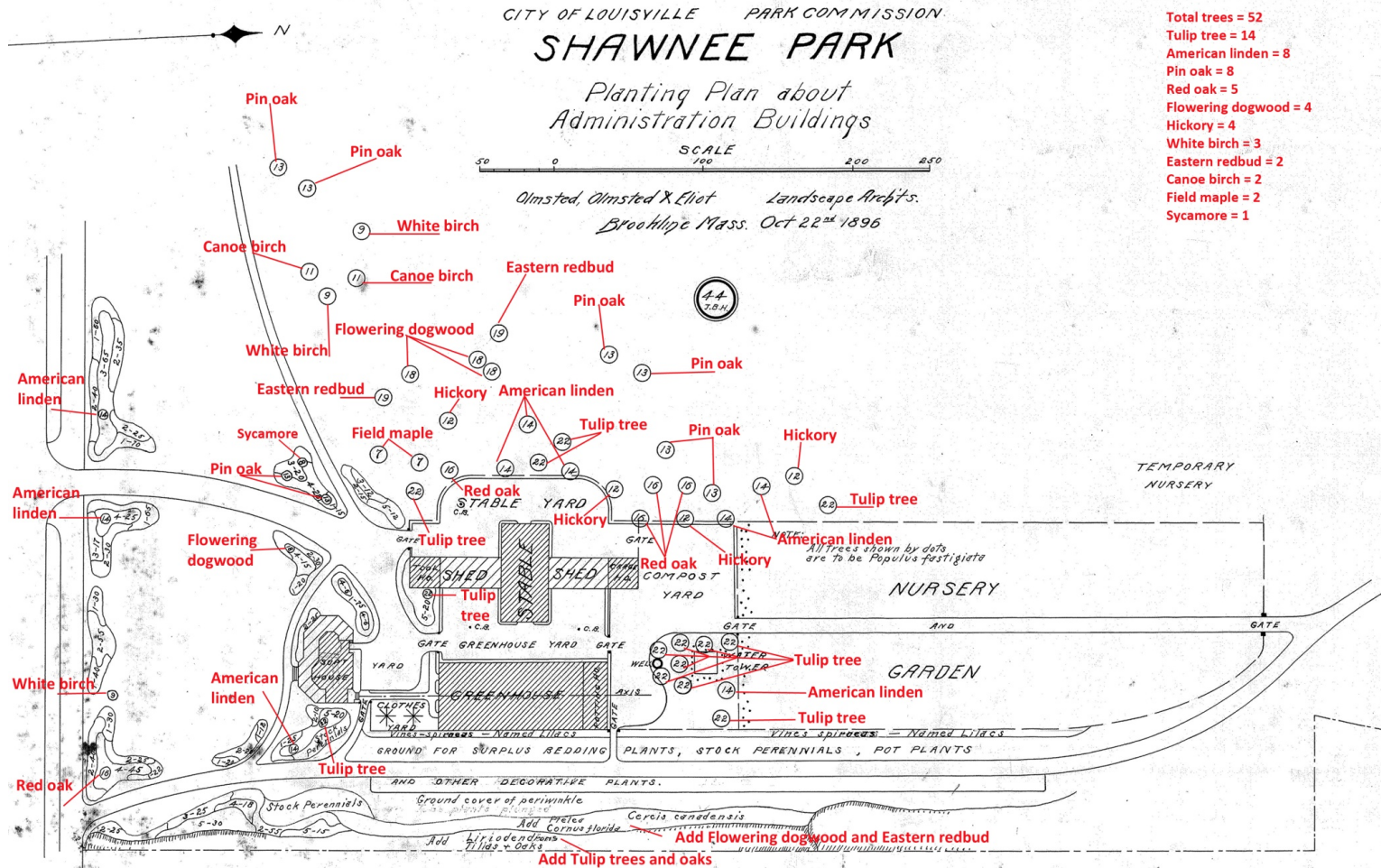
- The Great Lawn has been flattened and the flood levee added. Today we have a flatter park landscape with steep flood levees.

Shawnee Park Character in 1900, Vegetation



- Olmsted naturalistic layout blended existing and new trees
- Informally arranged trees provide vegetation structure
- Alternating expanses of lawn and clusters of trees
- Graceful non-geometric patterns of open and closed spaces
- Strong perimeter vegetation to screen neighborhood

Administration/Maintenance Tree Planting



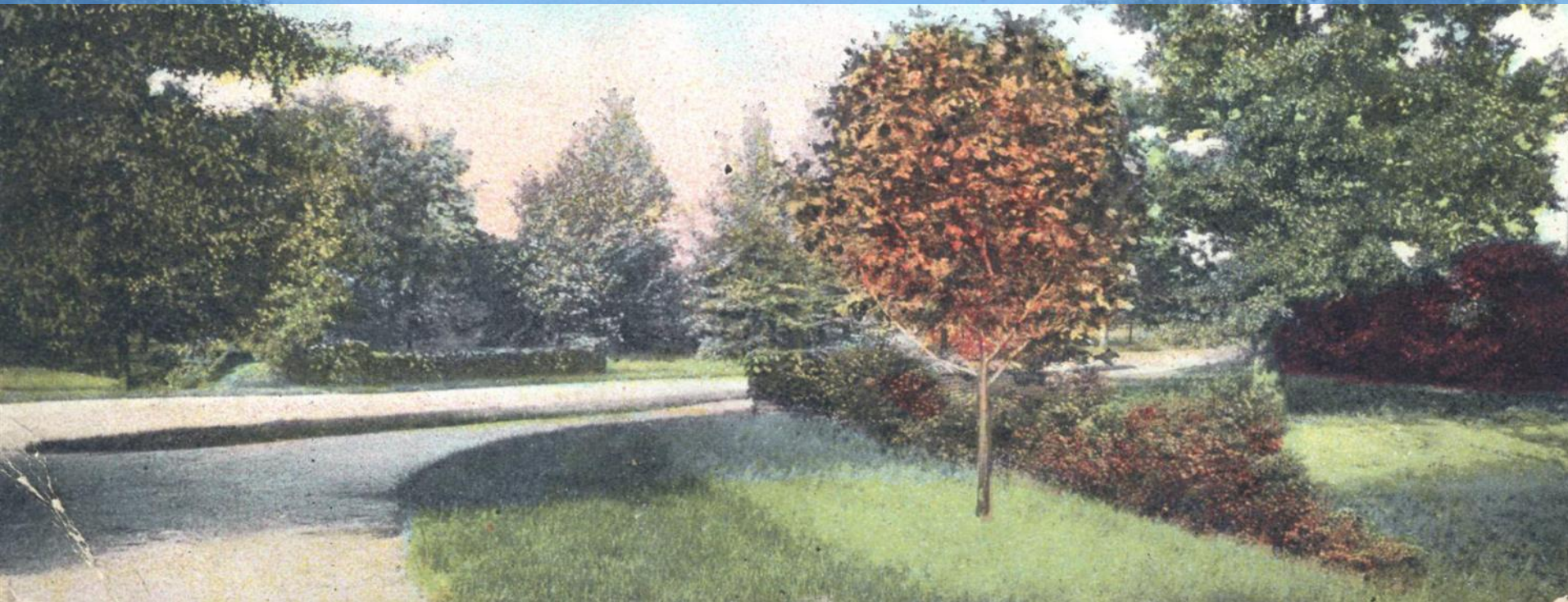
Shawnee Park Circulation, Drives, Walks

- Layout of drives and walks ease movements
- Employ graceful spiral curves with varying arcs
- Triangular intersections shape easy turnings
- Drives and walks edged with informal trees
- Walks and drives set into the grade for green lawn to dominate

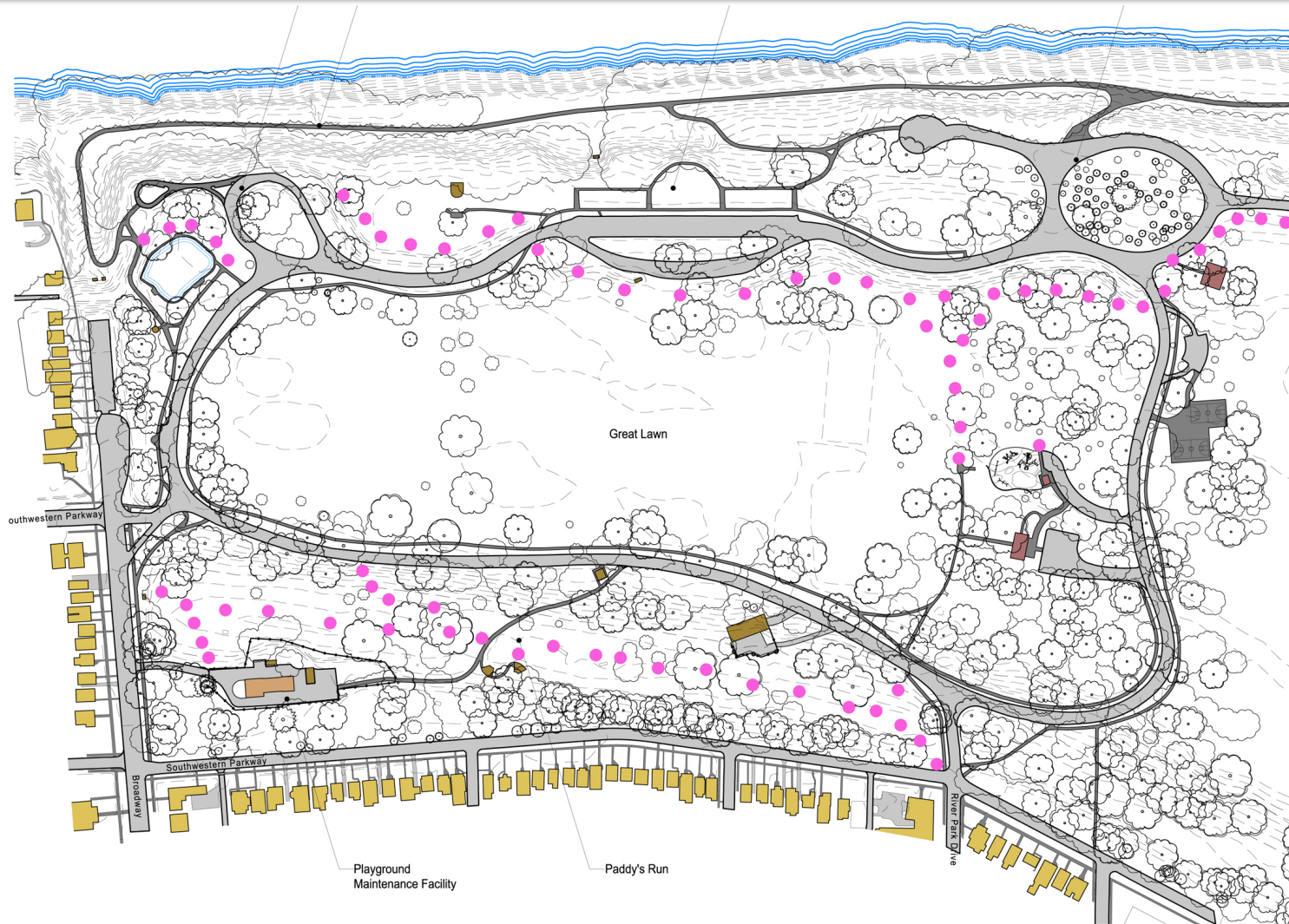


Shawnee Park Bridges

- Feature of scenic circulation ensemble
- Separation of walks and drives across bridge
- Set within lawn and plantings
- Blended into surrounds with boulders, shrubs and vines
- Chestnut St. Bridge 3ft, brick walls topped with terracotta coping



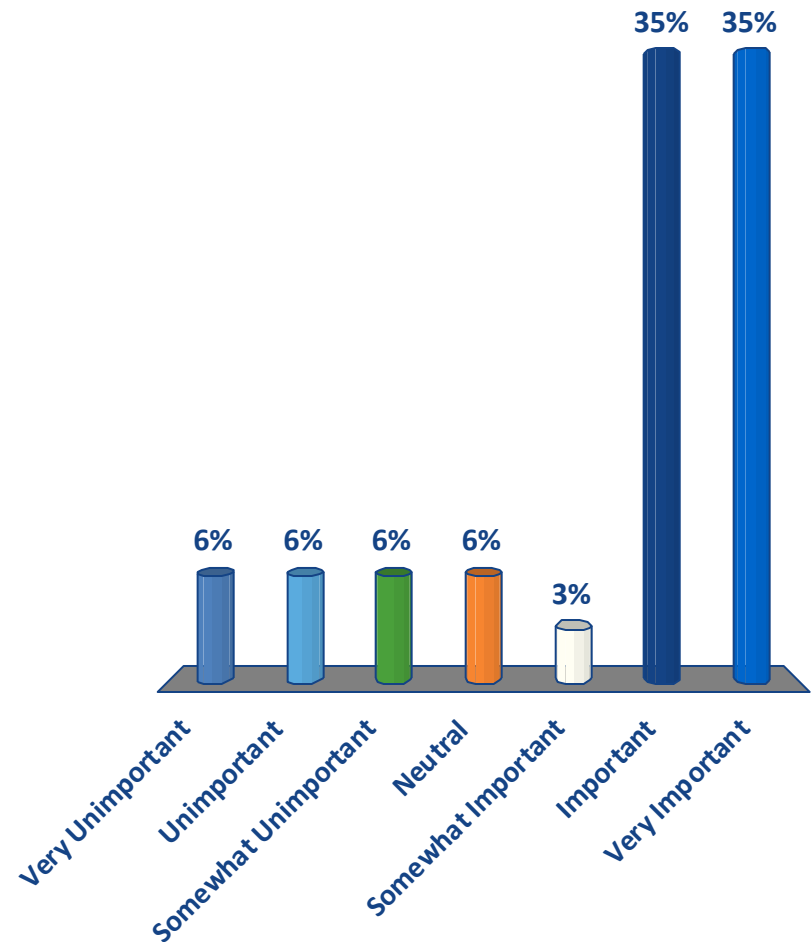
Disconnected Park Circulation Today



How important is connecting park circulation?

1. Very Unimportant
2. Unimportant
3. Somewhat Unimportant
4. Neutral
5. Somewhat Important
6. Important
7. Very Important

Mean = 5.42



Shawnee Park Water Features



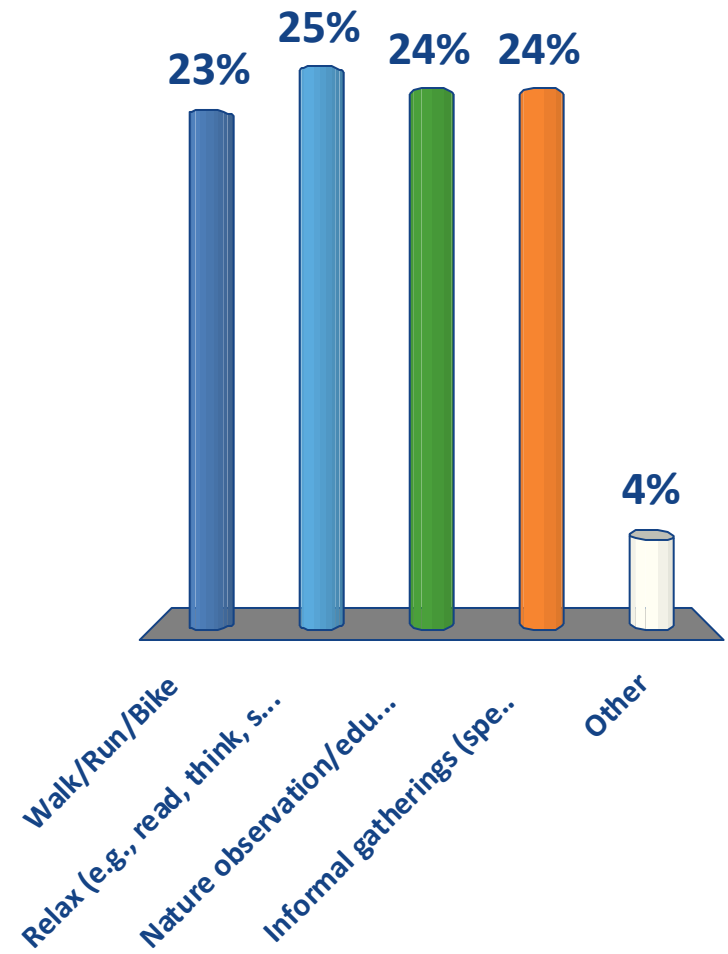
- Original or shaped naturalistic margins of pond, creek, shoreline
- Views over open water
- Edge plantings and floating aquatic vegetation
- Provision of water access with landings, beaches, docks
- Circulation around or along the water feature

Paddy's Run Water Feature

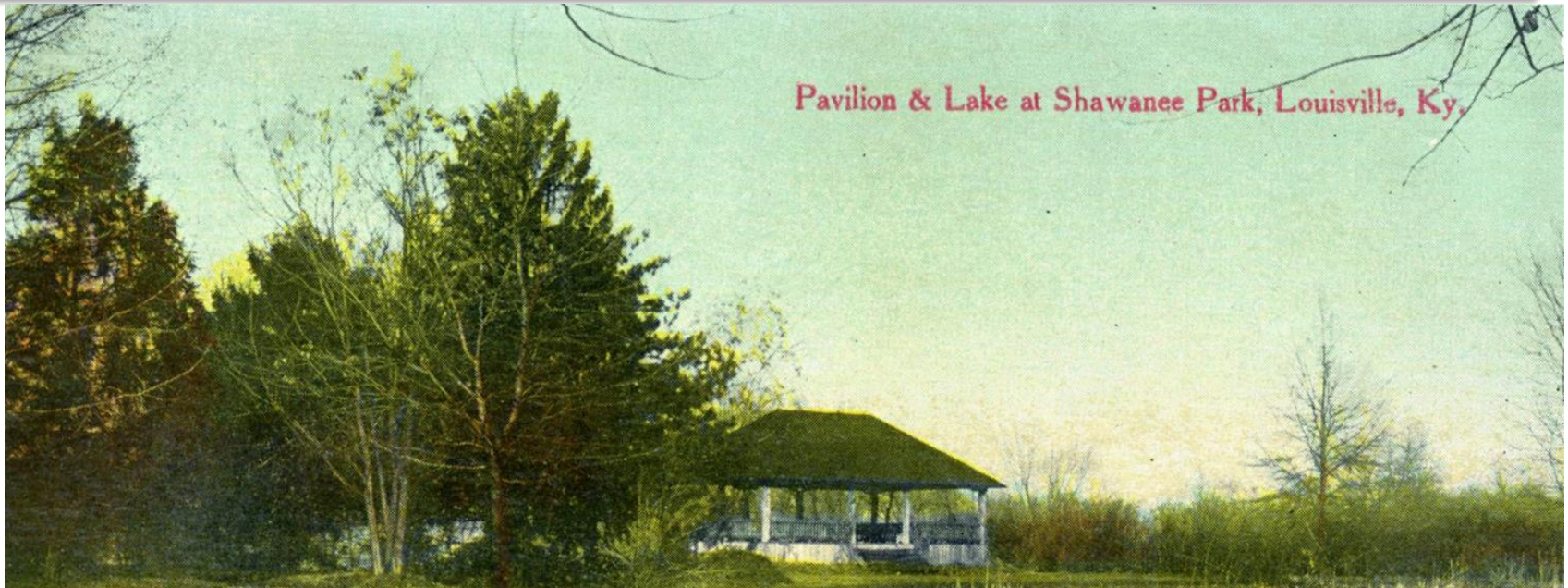


Some Things I'd Like to be able to do in the Paddy's Run area (up to 3)

1. Walk/Run/Bike
2. Relax (e.g., read, think, sketch/paint)
3. Nature observation/education
4. Informal gatherings
(spend time with friends, picnic, toss a ball or Frisbee with my kids)
5. Other



Shawnee Park Historic Buildings & Structures



- Careful siting within the park landscape for effective integration
- Hip roof forms, simple profile against the sky
- Dark olive green or brick red roof colors, durable materials
- Roof tiles or metal cladding
- Red Brick walls at Field House
- White to cream posts, walls, railings

Shawnee Park Middle Concourse Gazebo



Shawnee Park Post-1937 Flood Buildings



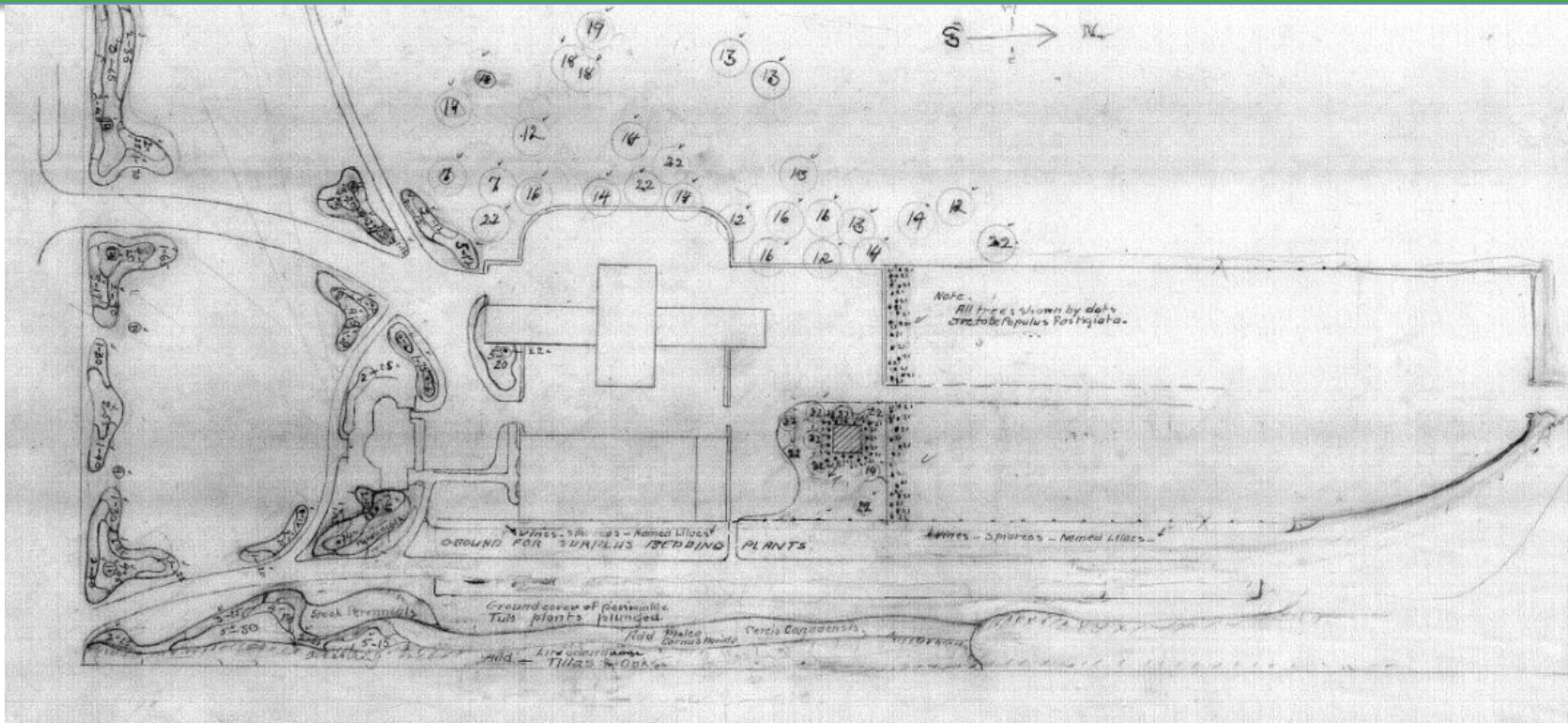
2015 Park Layout



Shawnee Park Historic Administration Area



Shawnee Park Administration Area Design



- Building grouping house, stable, greenhouse
- Drive arc gentle for indirect connection contains views
- Walk access well integrated
- Trees and shrubs screen area

Existing Site A Large Trees



Number	Species	DBH	Condition
1	Quercus palustris	33	Good
2	Quercus palustris	53	Good
3	Quercus macrocarpa	51	Good
4	Juglans nigra	30	Good
5	Liriodendron tulipifera	40	Fair
6	Juglans nigra	42	Good
7	Quercus lyrata	41	Good
8	Quercus palustris	28	Good
9	Liriodendron tulipifera	31	Fair
10	Ulmus americana	25	Good
11	Acer rubrum	25	Good
12	Liriodendron tulipifera	47	Good
13	Castanea dentata	34	Good
14	Quercus palustris	46	Excellent
15	Catalpa speciosa	51	Good
16	Liriodendron tulipifera	34	Good
17	Quercus lyrata	49	Good
18	Quercus alba	48	Good
19	Quercus lyrata	48	Good
20	Quercus coccinea	37	Good
21	Quercus shumardii	50	Good
22	Quercus palustris	46	Good
23	Taxodium distichum	30	Good
24	Quercus lyrata	36	Good
25	Quercus lyrata	43	Fair
26	Quercus palustris	36	Good
27	Quercus macrocarpa	40	Fair

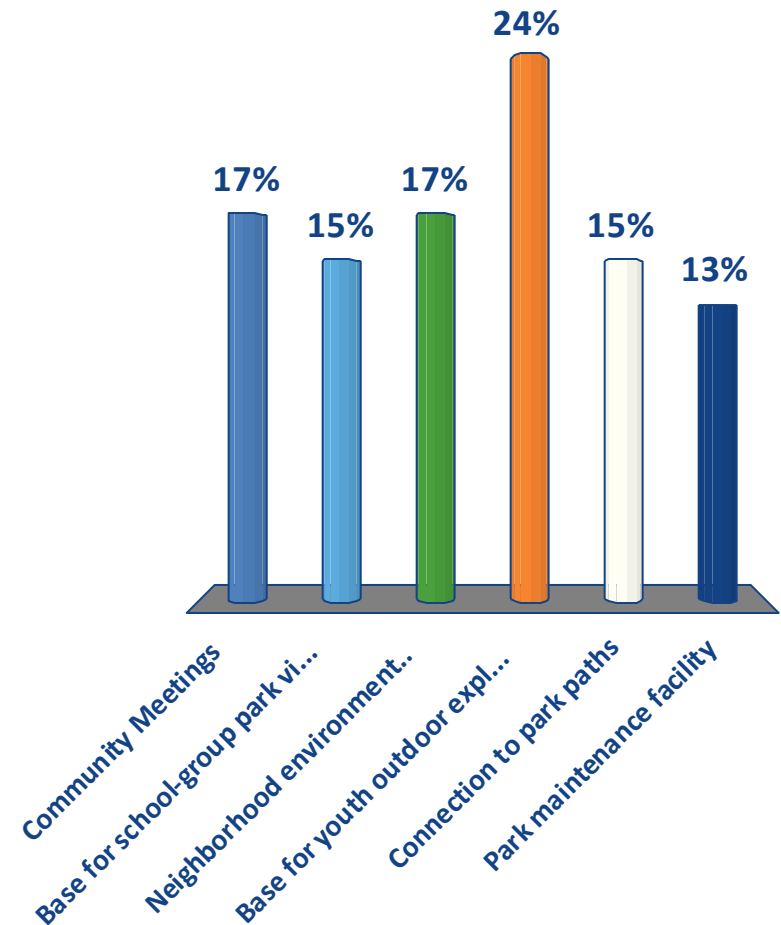
- 27 large trees in good to fair condition
- 6 Pin oak, 5 Overcup oak, 4 Tulip poplar
- 2 Black walnut, 2 Bur oak
- 1 each- White oak, Swamp Red oak, Scarlet oak, American elm, American chestnut, Bald cypress, Red maple and Catalpa.

2015 Site A Layout and Character



What uses would you prefer at Site A? (choose up to 3)

1. Community Meetings
2. Base for school-group park visits
3. Neighborhood environmental education
4. Base for youth outdoor exploration (skill building such as hiking, biking, paddling)
5. Connection to park paths
6. Park maintenance facility



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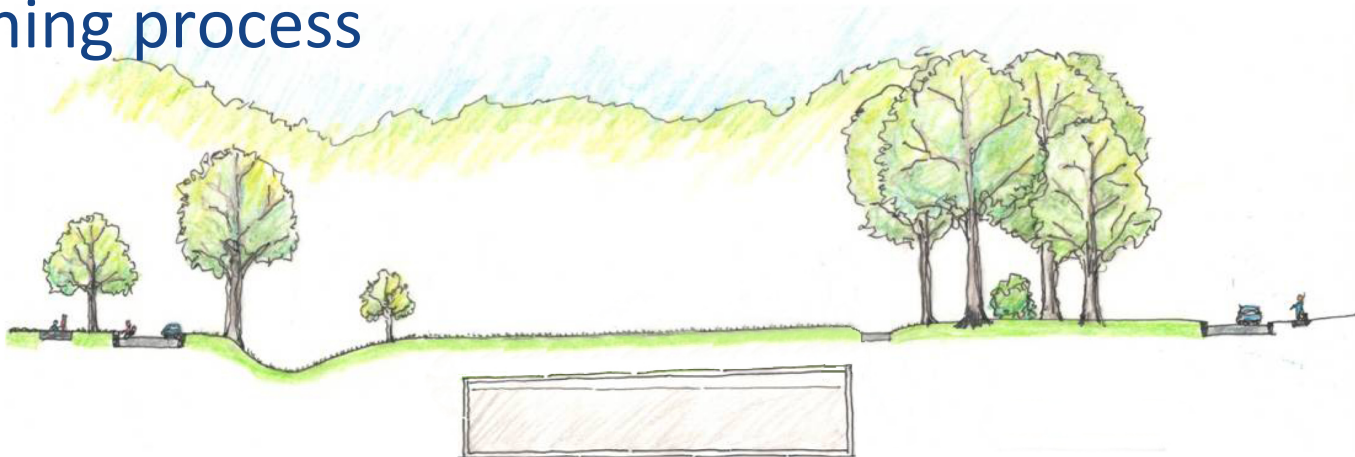


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Advantages of Project

- Protects public health and environment
- Provides cost effective solution
- Updates Shawnee Park Uplands Master Plan
- Upgrades existing Maintenance Facility location
- Provides opportunity for community input into planning process



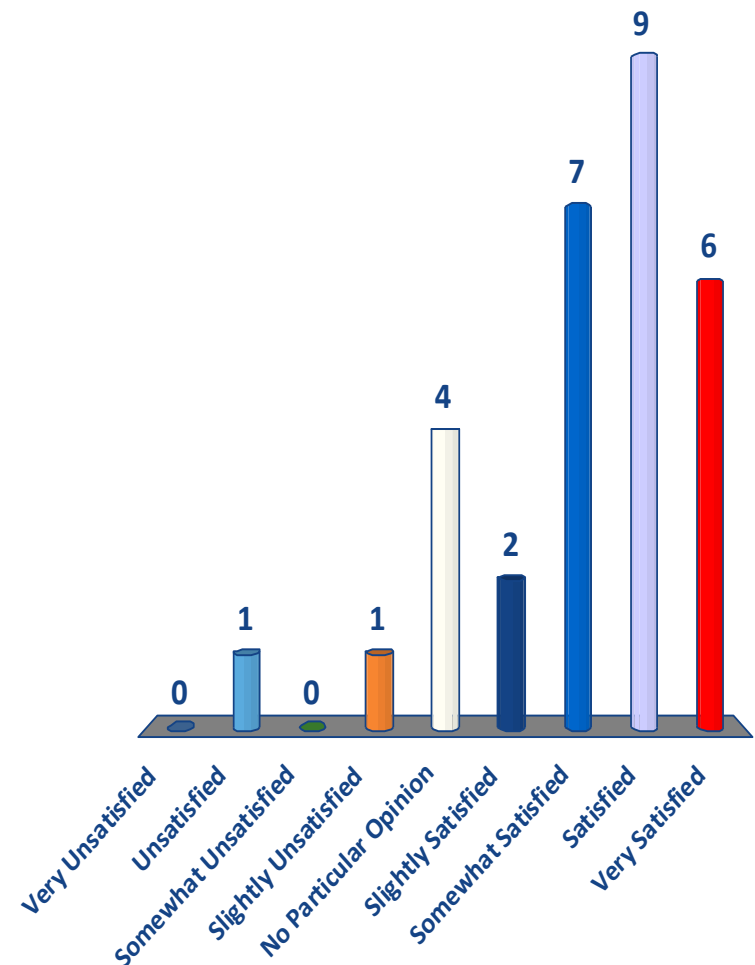
Next Steps

- Evaluate your input
- Advanced Design Public Input Meeting
 - **Summer 2015**

How satisfied are you with this process?

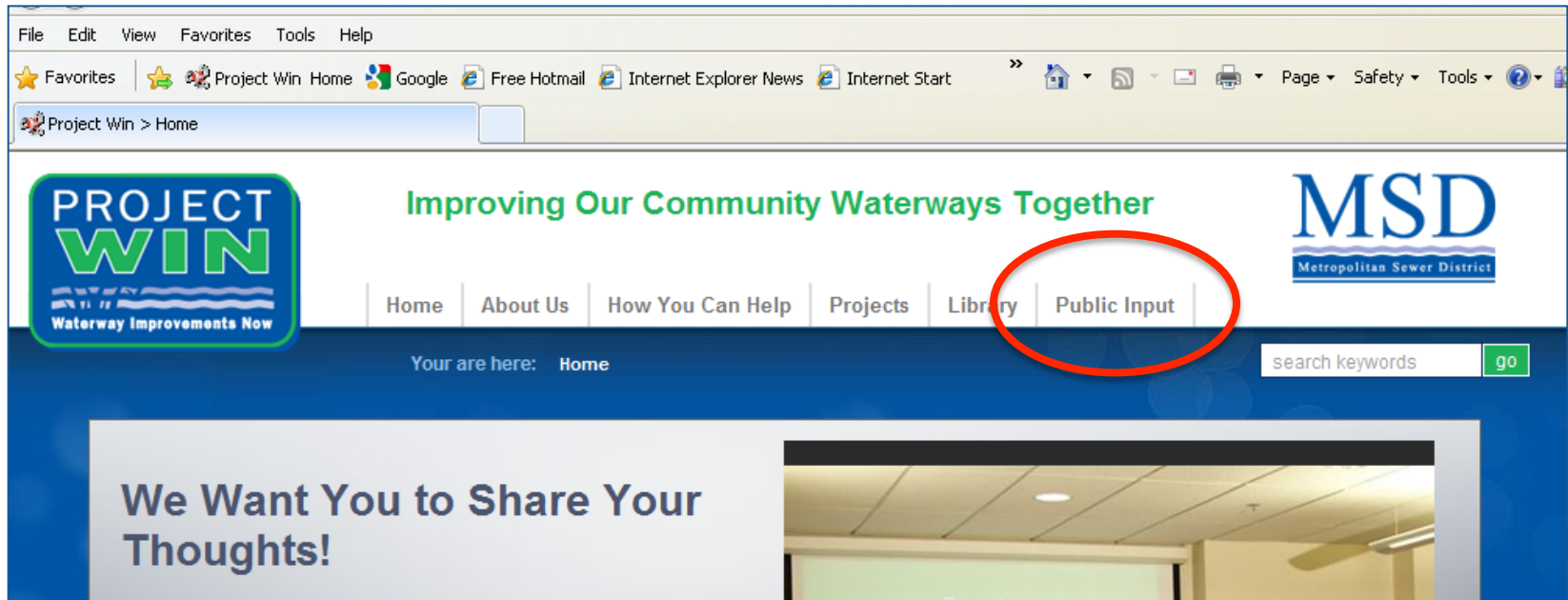
1. Very Unsatisfied
2. Unsatisfied
3. Somewhat Unsatisfied
4. Slightly Unsatisfied
5. No Particular Opinion
6. Slightly Satisfied
7. Somewhat Satisfied
8. Satisfied
9. Very Satisfied

Mean = 7.10



Find Out More

msdprojectwin.org



Learn More at the Website Created Just for YOU!
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