

# CITY OF CARBONDALE

## STORMWATER MANAGEMENT PLAN

JANUARY 11, 2024

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CITY OF CARBONDALE

GREATER EGYPT REGIONAL PLANNING AND  
DEVELOPMENT COMMISSION



# Agenda

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- I. Welcome and Introductions
- II. Greater Egypt RPDC & Grant Funding
- III. Stormwater Planning Process
- IV. MS4 & Other Regulations
- V. Future Planning & Timeline
- VI. Adjourn

# Greater Egypt Overview

## Five-County Planning Region

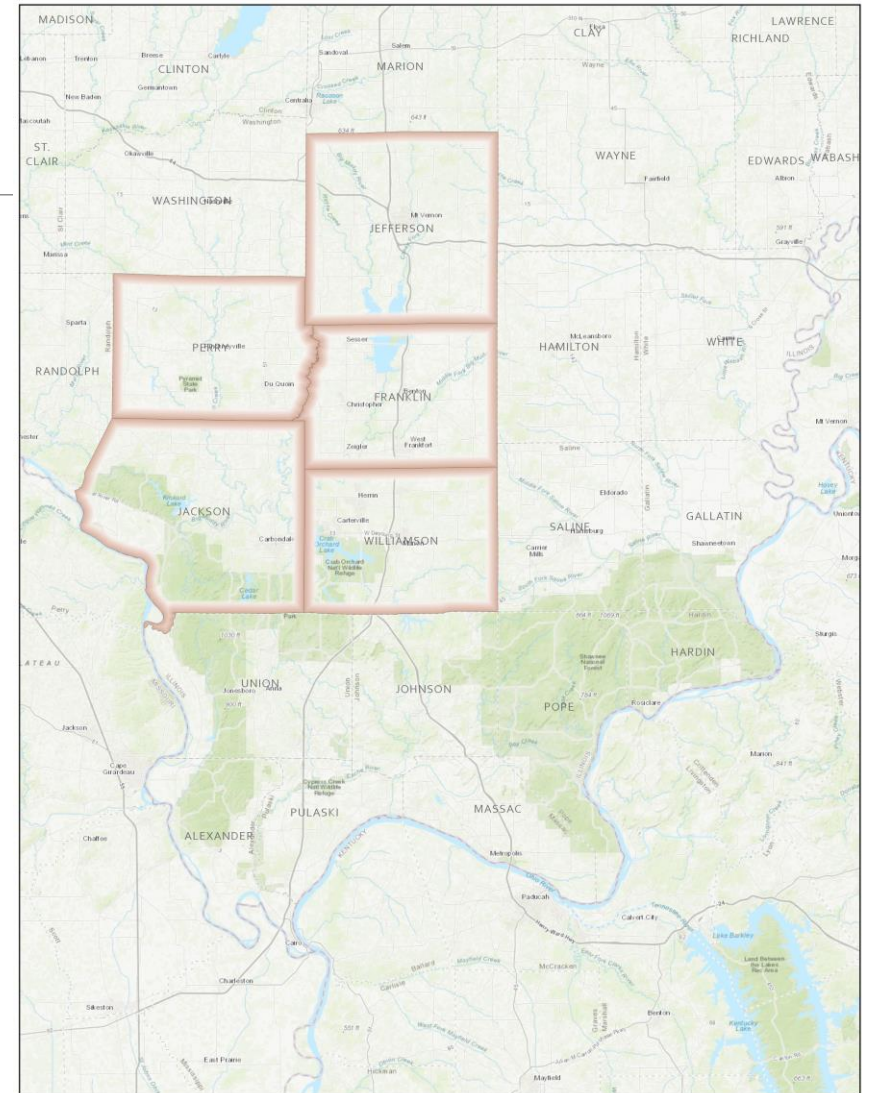
- Franklin, Jackson, Jefferson, Perry, Williamson

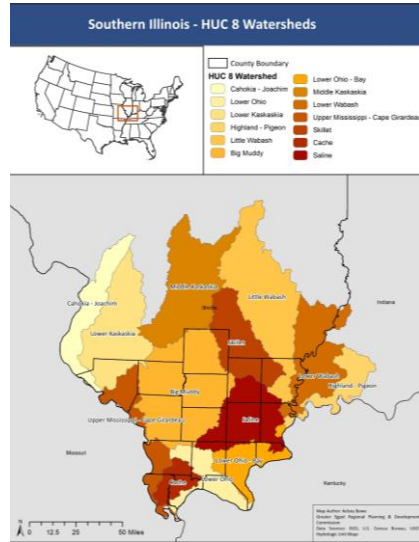
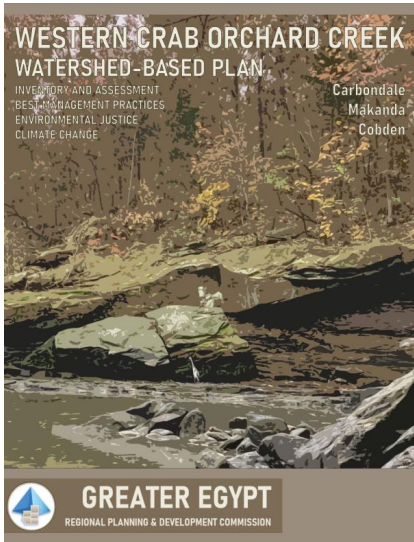
## Ten County Areawide Water Quality Planning Region

- Above counties plus Gallatin, Hamilton, Hardin, Pope, Saline

## Services offered:

- Economic Development
- Transportation Planning
- Grant writing and technical services
- Environmental Planning





# Environmental Planning Department



## Planning services

- Watersheds & Nutrient Reduction
- Hazard Mitigation
- Solid Waste
- Community Wildfire Protection Plans
- Urban Stormwater



## GIS and UAS (drone) Services

- Maps and web applications
- Aerial photography



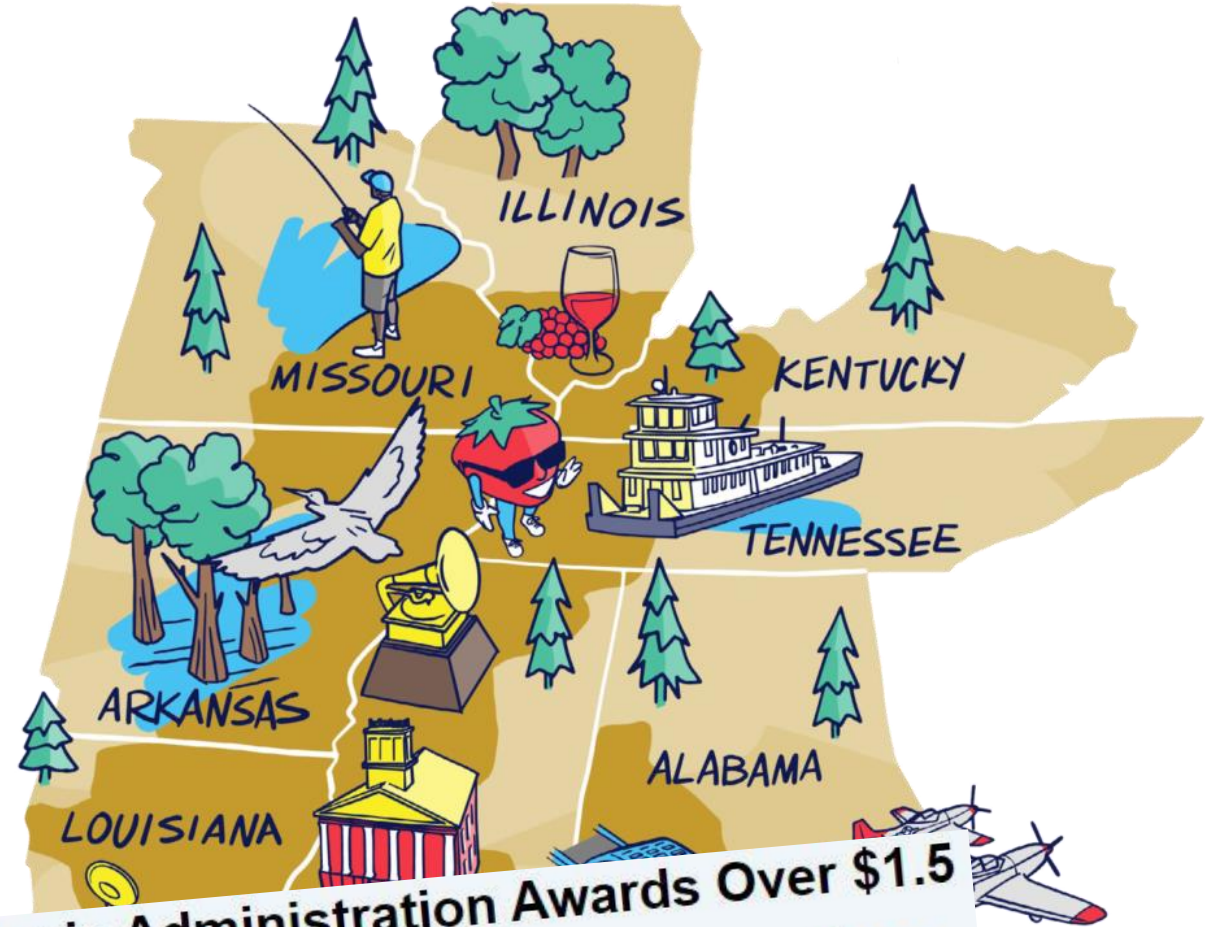
## Education/Outreach Programming

- Field trips
- School visits
- Handout materials
- Hands-on workshops



# Grant Funding

- Delta Regional Authority (DRA)
- Strategic Planning Grant
- \$150,000 (max)



## Biden-Harris Administration Awards Over \$1.5 Million in Funding to Address Infrastructure Needs

The **City of Carbondale** has been awarded \$150,000 for a master plan to address climate resiliency and flooding that has negatively impacted public services and underserved communities in the City of Carbondale.



# Stormwater Planning Process

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- I. Form Advisory Committee
- II. Organize Resources
- III. Assessment of Current Conditions
- IV. Water Quality/ Hydrologic Modeling
- V. Meetings
- VI. Review/Finalize Plan
- VII. Implementation

# Advisory Committee

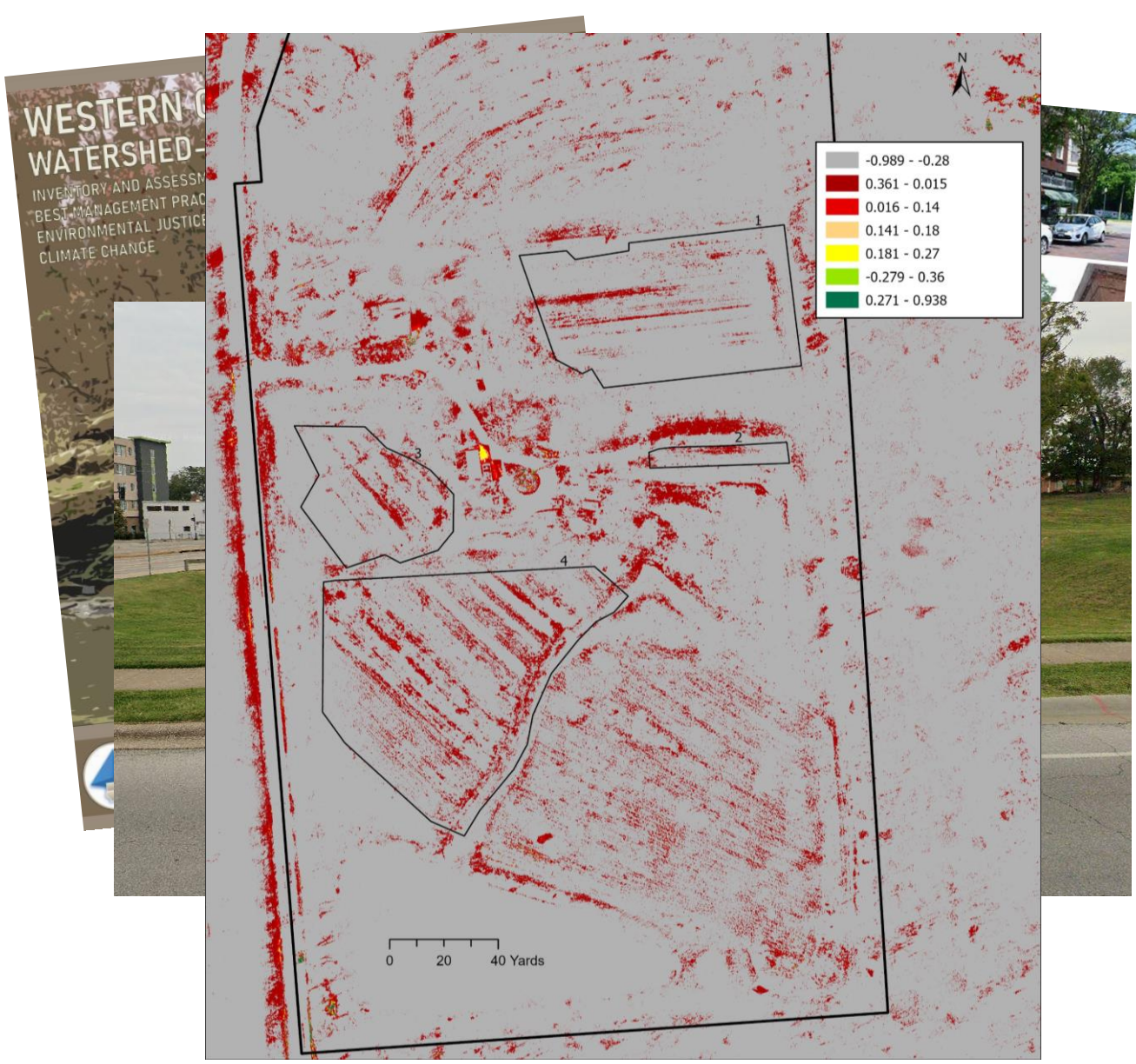
- City Departments
- Businesses
- Organizations

## Questions

- Will this group have authority?
- Meeting schedule







# Organize Resources

- Prior Plans
- Implementation
- Outreach
- Water Quality Data
- GIS datasets





# Assessment

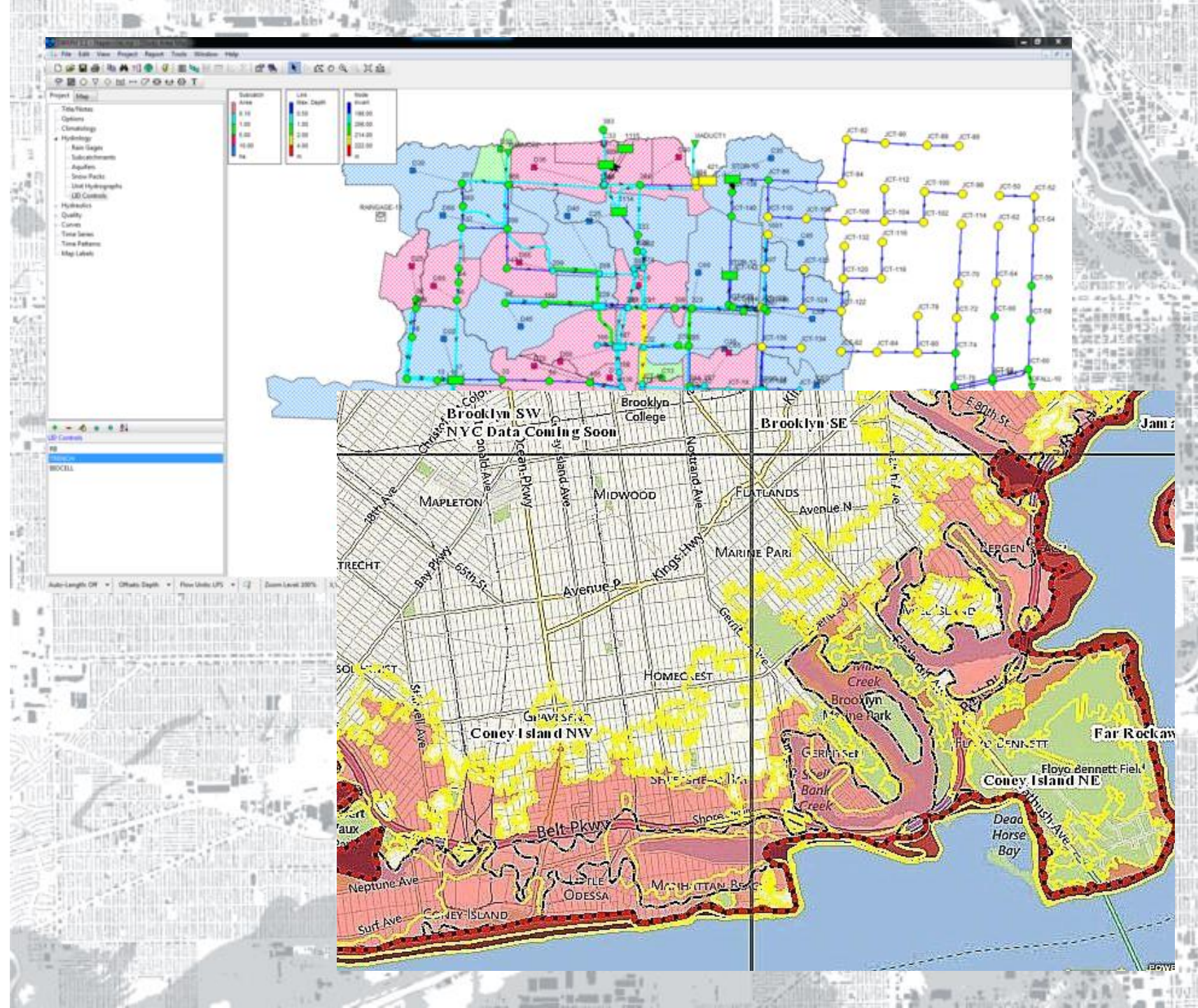
- Inventory of current conditions of main infrastructure affected by urban stormwater
- Impervious surfaces
- Management measures
- Existing codes and ordinances





# Water Quality/ Hydrologic Models

- STEPL
- SWMM
- Flood Vulnerability Index
- Suitability Score





# Meetings

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## Advisory Committee

- Meeting schedule
- Progress plan development
- Recommend management measures

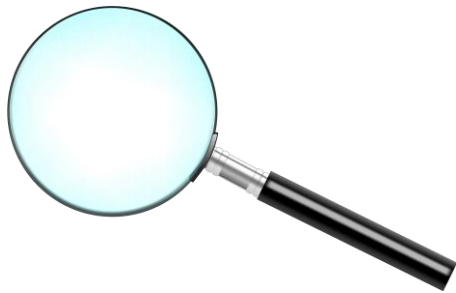
## Public Involvement

- Informal meetings
- Local input/ knowledge of stormwater
- Management measures
- Notifications



# Review

- Advisory Committee
- Public
- State/Federal Agencies



# Finalize

- Incorporate final changes
- Address public comments
- Forward to State/Federal Agencies



# Implement

- Apply for grants
- Assist businesses with hazard mitigation



# MS4 & Other Regulations

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## Quick Facts

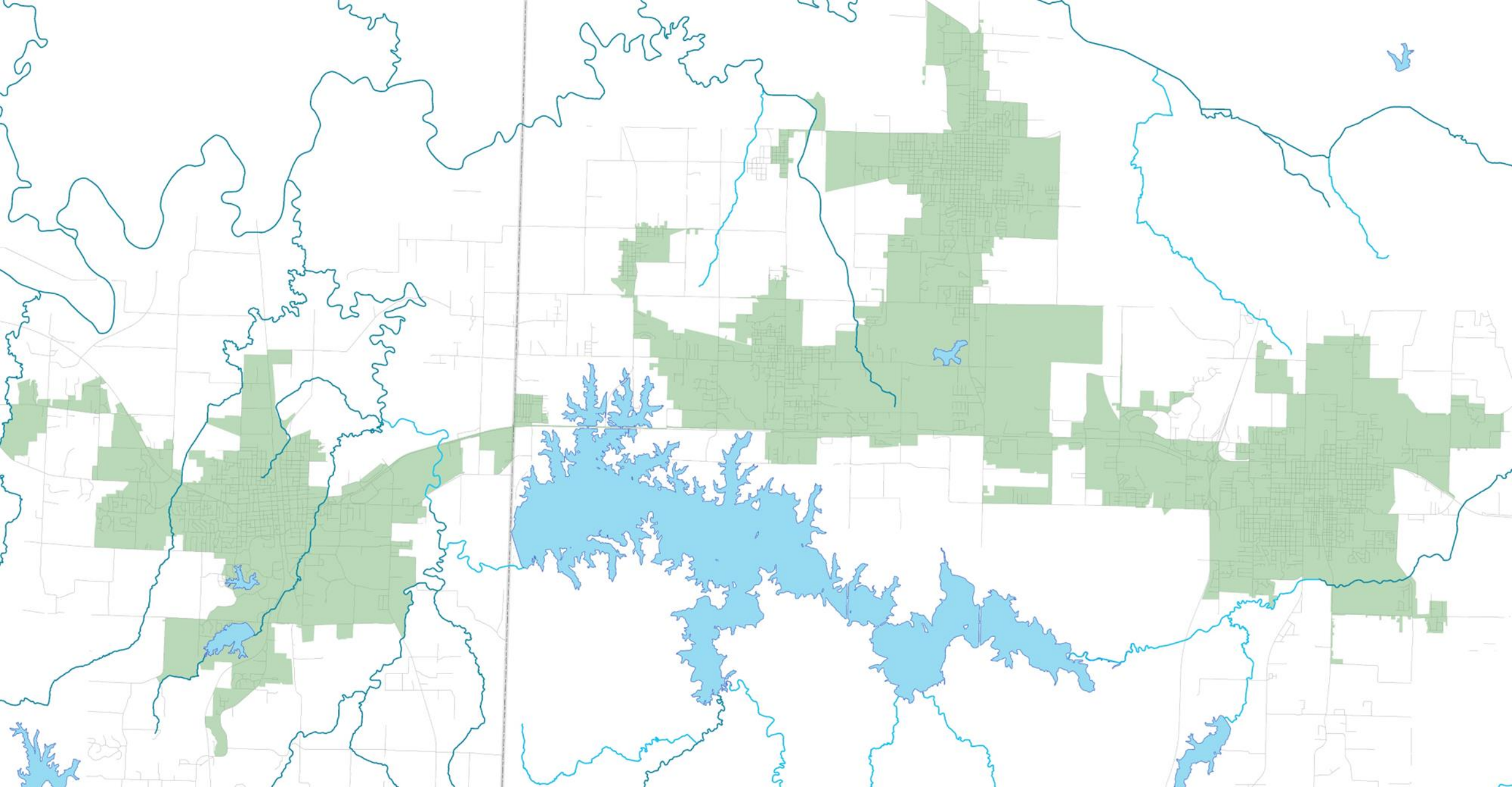
- Municipal Separate Storm Sewer Systems (MS4)
- Carbondale Urbanized Area
  - Phase II Program
- Require an NPDES General MS4 Permit

## Program Requirements

- Reduce the discharge of pollutants
- Protect water quality
- Meet requirements under the Clean Water Act

# MS4 Minimum Control Measures

1. Public Education and Outreach
2. Public Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post-Construction Runoff Control
6. Pollution Prevention





# Public Education and Outreach

- Distribute educational materials
- Perform outreach
- Information about the impacts of polluted stormwater runoff and affects of water quality



# Public Participation/ Involvement

- Public participation in program development and implementation
- Publicize public hearings
- Encourage citizen representatives on a stormwater panel or forum

Greater Egypt Stormwater Management



## Carbondale Urbanized Area Stormwater Management

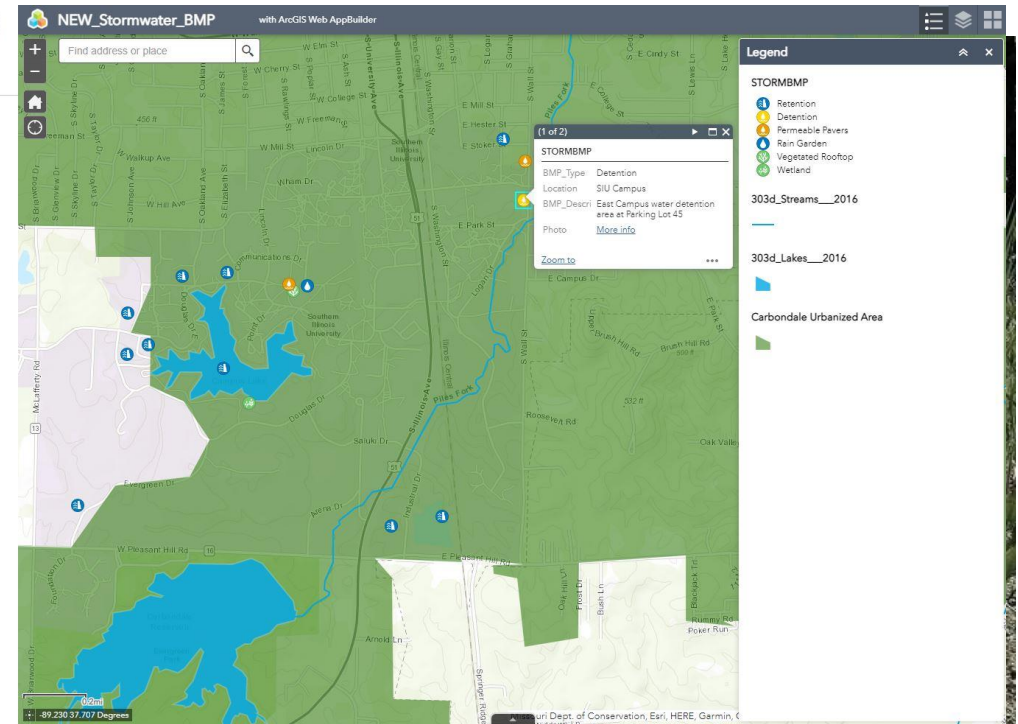
On a larger scale, stormwater management involves flood control, reducing erosion, and restoring or improving water quality. To achieve these goals, certain management measures need to be implemented.

### Best Management Practices

Best management practices (BMP) are utilized to reach our stormwater management goals. These can include residential practices from the previous list, or measures that are much larger in scale such as a municipal stormwater detention basin.

The map to the right displays stormwater BMP around our urbanized area. This includes smaller measures like rain gardens to larger practices such as green infrastructure design.

If you would like a BMP to be addressed, please contact Tyler Carpenter with the Greater Egypt Planning Commission, [tylercarpenter@greateregypt.org](mailto:tylercarpenter@greateregypt.org). Please submit: BMP type, a short description, and a photo (optional).

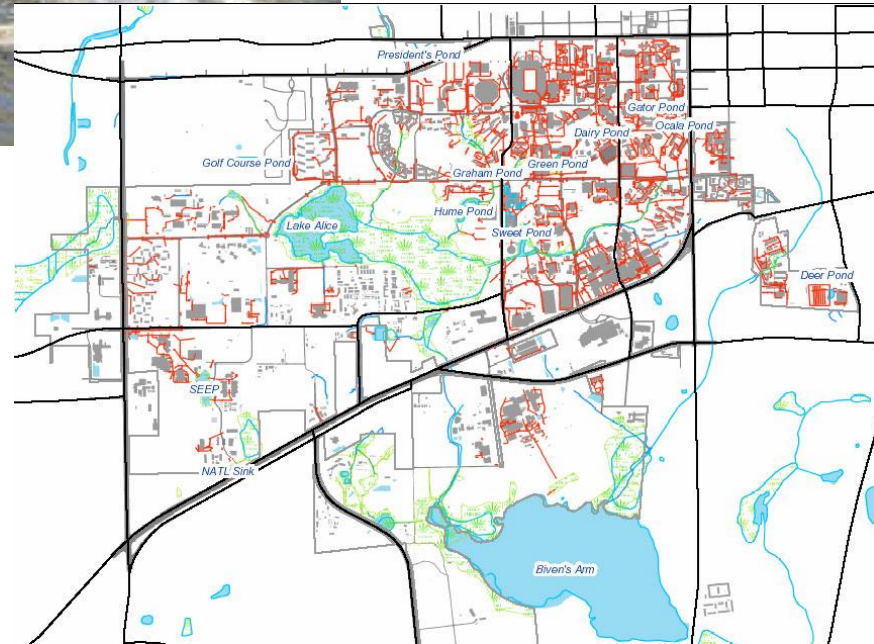




# Illicit Discharge Detection and Elimination

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- Develop and implement a plan to detect and eliminate illicit discharges to storm sewer systems
- Develop a system map and inform communities about hazards associated with illegal discharges and improper disposal of waste



# Construction Site Runoff Control

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- Develop erosion and sediment control program for construction activities that disturb one or more acres of land
  - Implementation
  - Enforcement
- Controls could include silt fences and temporary stormwater detention ponds

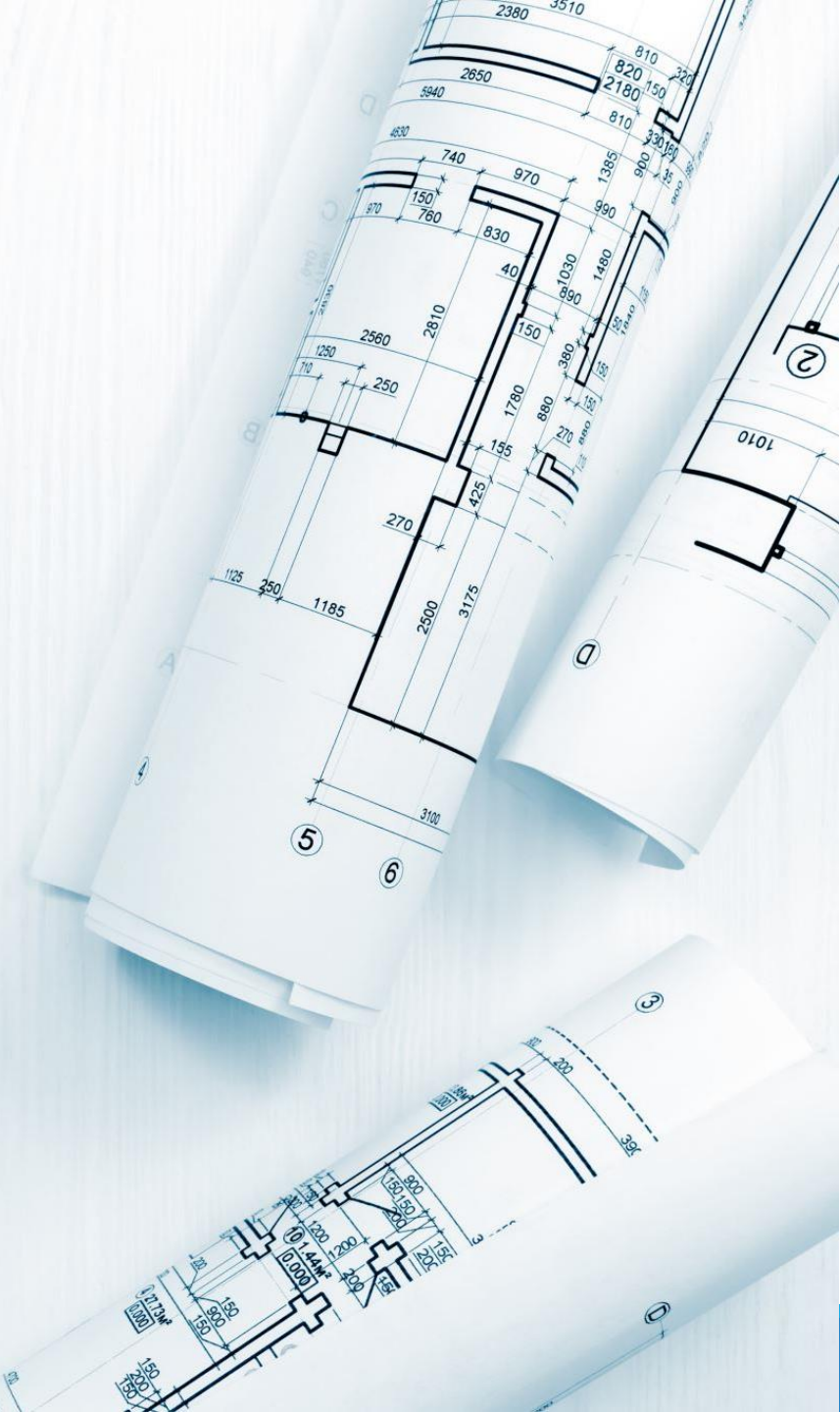




# Post-Construction Runoff Control

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- Develop program to address discharges of post-construction stormwater runoff from new development and redevelopment areas
  - Implementation
  - Enforcement
- Controls could include preventative actions
  - Protecting sensitive areas (e.g. wetlands)
  - Structural BMPs
    - Grassed Swales
    - Permeable pavement



# Pollution Prevention/ Good Housekeeping

- Develop and implement a program with the goal of preventing or reducing pollutant runoff from municipal operations
- Must include municipal staff training on pollution prevention measures and techniques
  - Street sweeping
  - Reductions of pesticide use or street salt
  - Frequent catch-basin cleaning





# Discussion

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