

NEBRASKA WATER RESOURCES ASSOCIATION WATER ROUND TABLE MAY 14, 2008

WATERSHED MANAGEMENT PROGRAM
Lincoln Public Works Department



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OVERVIEW OF WATERSHED MANAGEMENT PROGRAM

Purpose Statement

Our primary purpose is to improve water quality, manage stormwater and reduce flood hazards, and to insure that the City meets Federal requirements relative to stormwater quality.

MAJOR PROGRAMS AND INITIATIVES INCLUDE:

- watershed master planning
- floodplain mapping
- capital projects
- water quality programs
- public education/outreach

Common Master Plan Elements

- ◆ Flood management, water quality, stream stability, resource protection
- ◆ Public process
- ◆ Database of watershed information/computer modeling system for analysis
- ◆ Address urban watershed issues
- ◆ Provide guidance for future development
- ◆ Plan for capital projects



LINCOLN AREA FLOODING





STREAM DEGRADATION and WATER QUALITY ISSUES



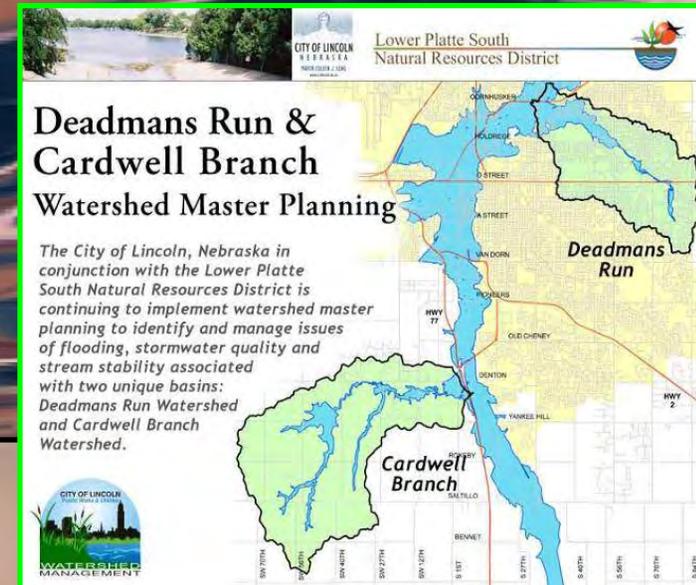
Deadmans Run Public Involvement



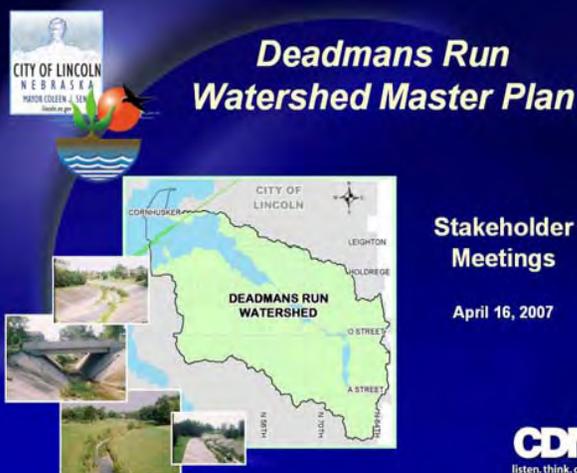
Open Houses



Watershed Newsletters



Web Page



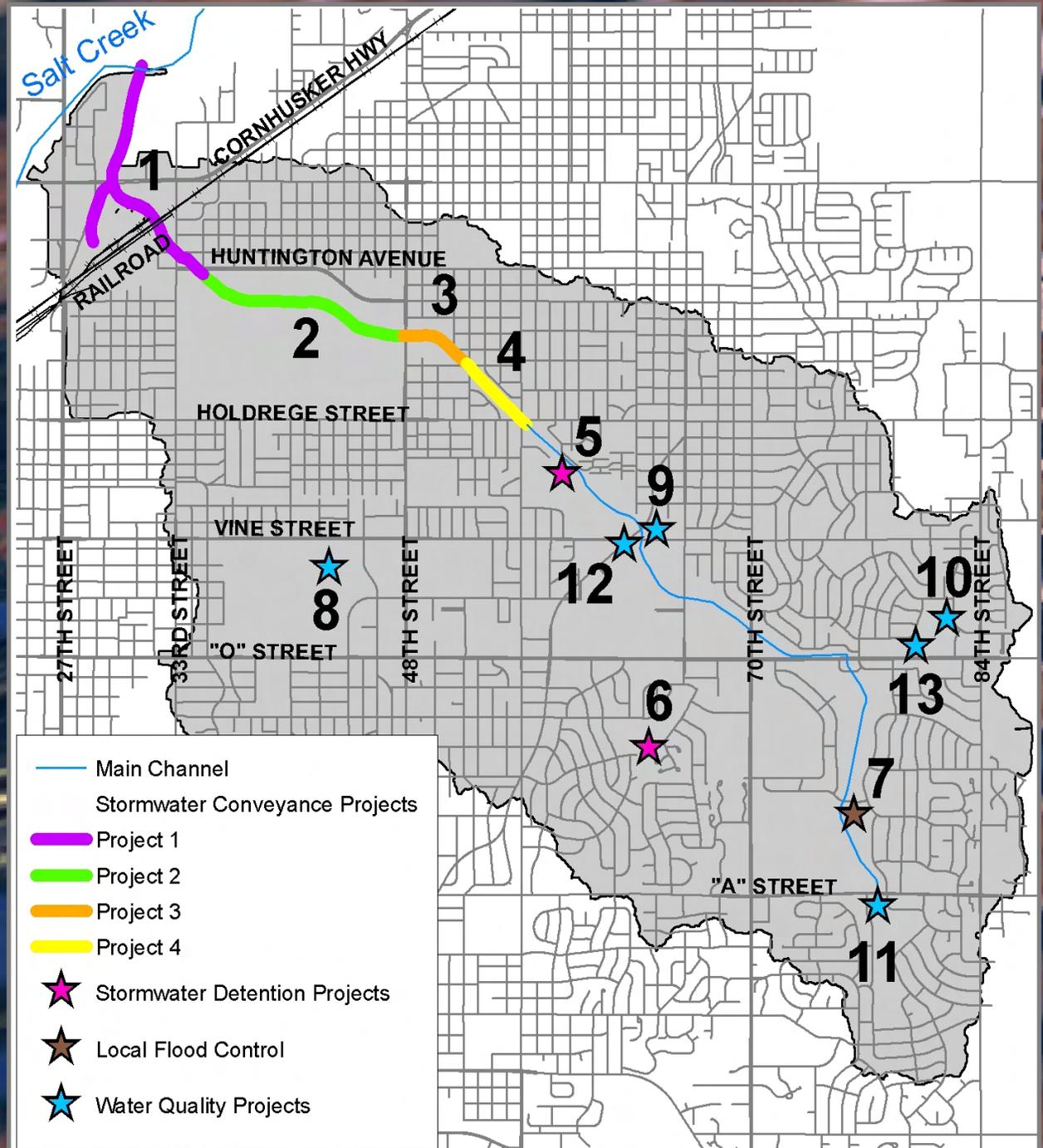
Information Sessions



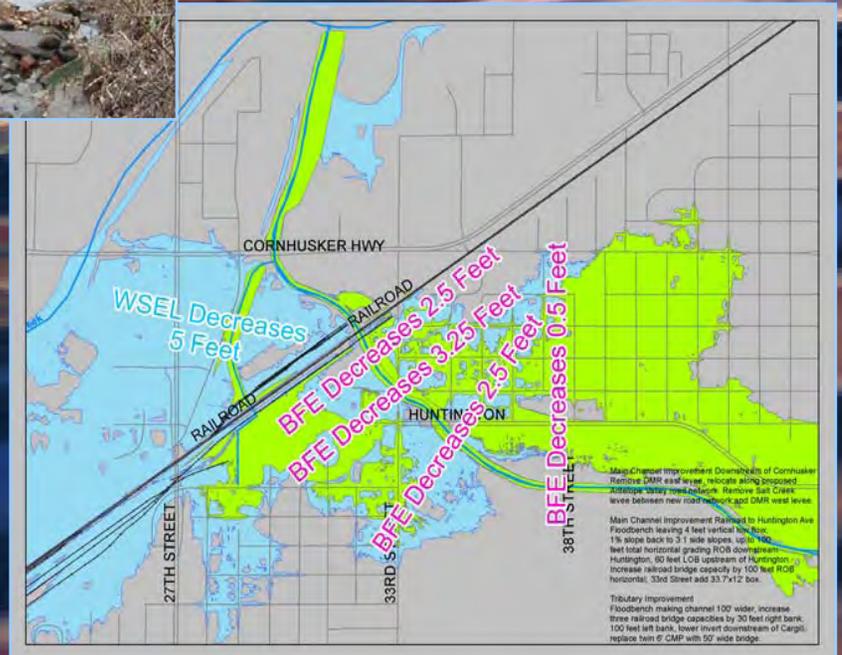
Citizen Advisory Committee

Deadmans Run Capital Projects

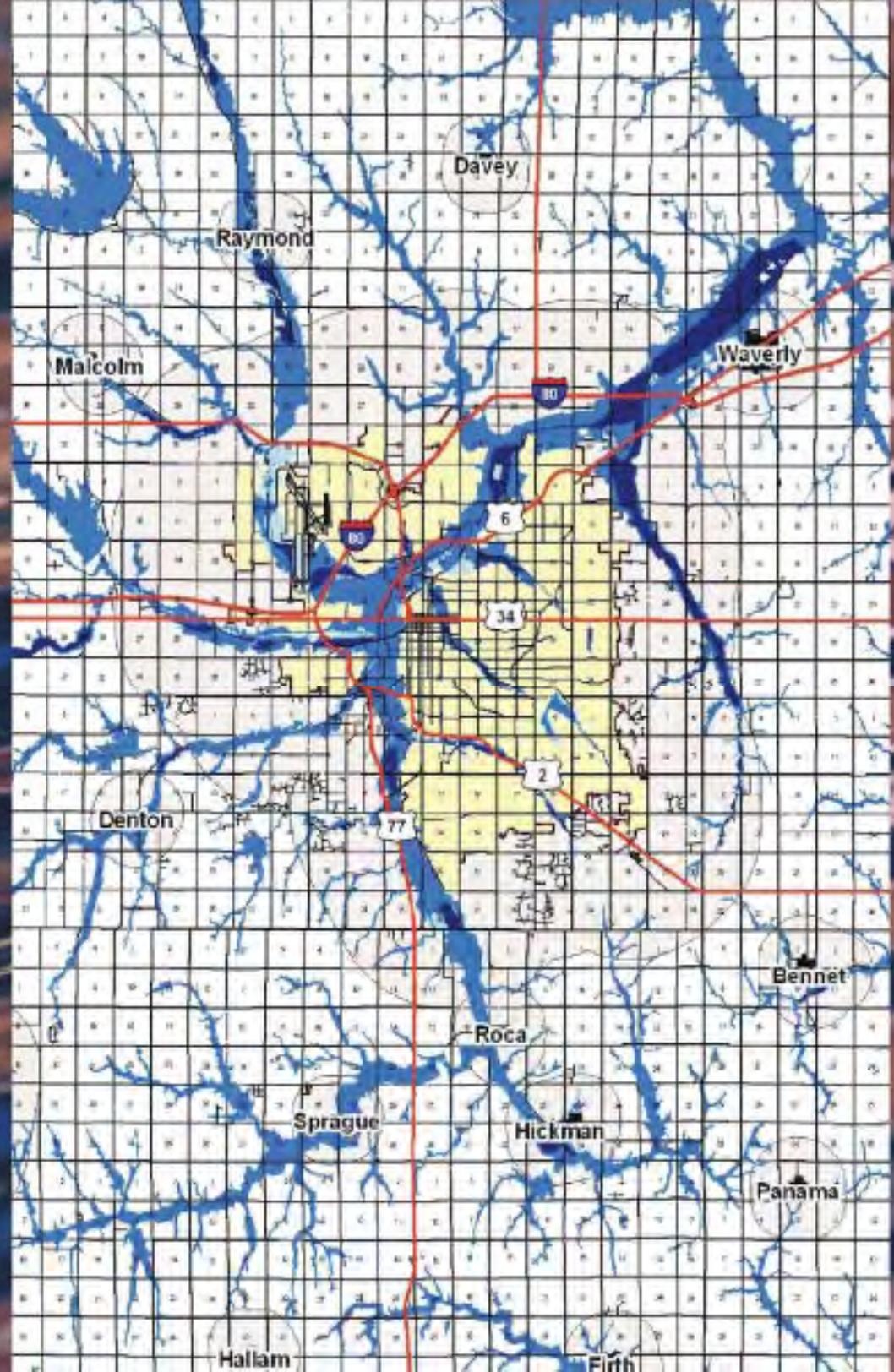
- Flood Control, Channel Capacity (Projects 1 - 4)
- Flood Control, Flow Reduction (Projects 5 – 6)
- Local Flood Control (Project 7)



Projects for Master Planned Basins



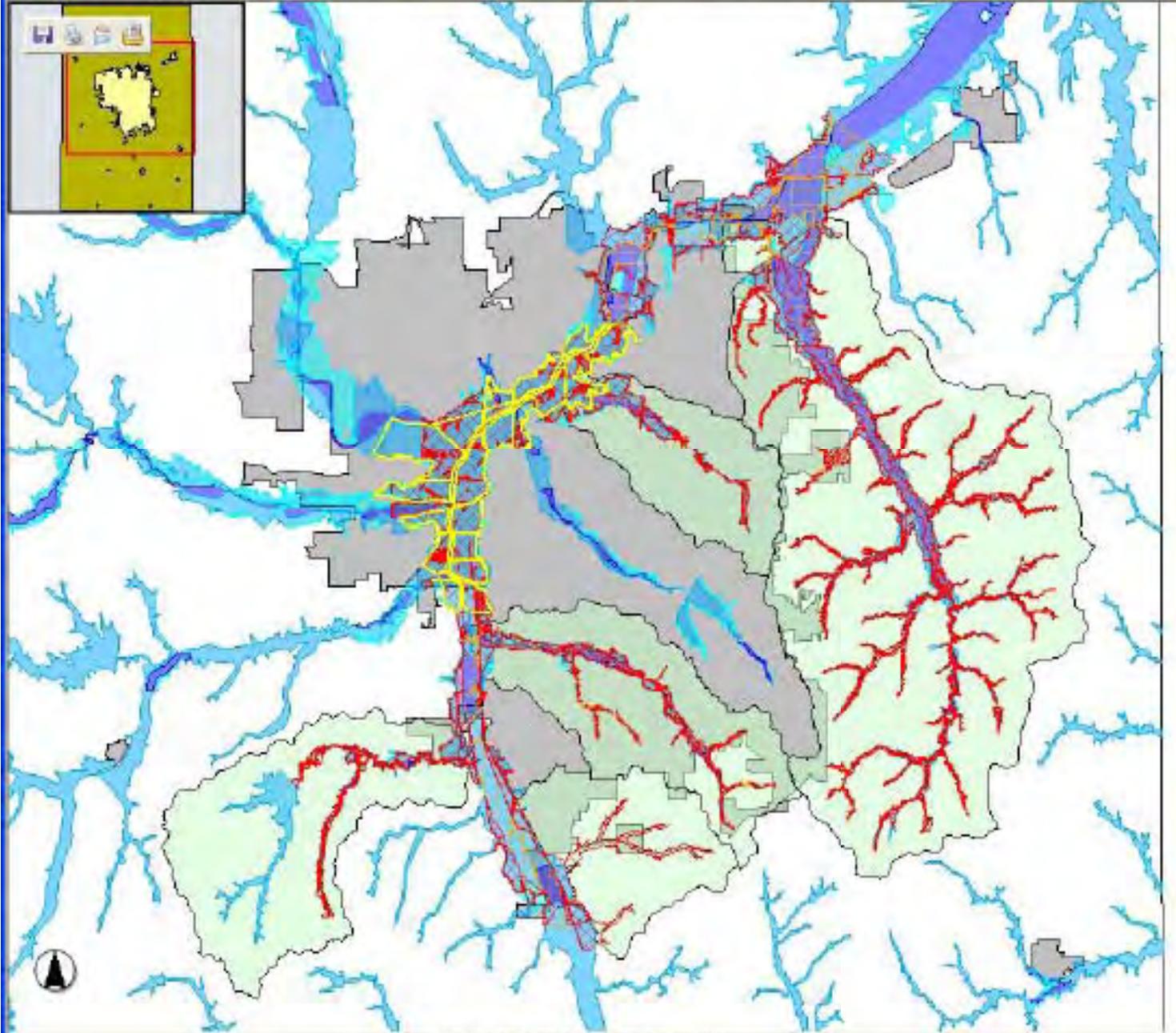
FLOODPLAIN in Lancaster County





NO ADVERSE IMPACT

Policy goal to insure that action of one property owner does not adversely impact flooding risk for other properties



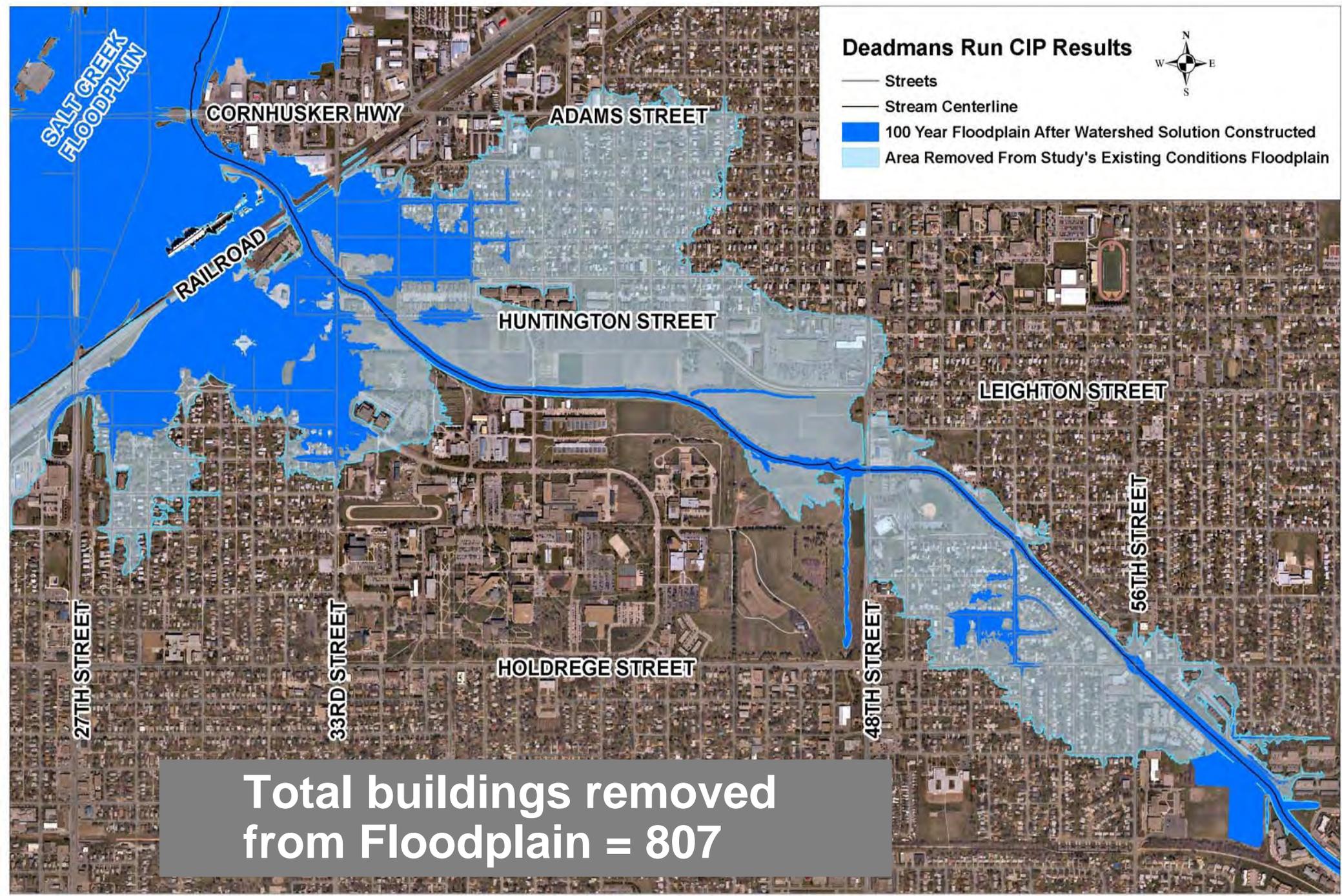
- Legend**
- Salt Creek Storage Area
 - Floodprone Area
 - Floodprone Area
 - Floodway
 - FEMA Floodplain
 - Floodway
 - NW of Floodplain
 - SW of Floodplain
 - Cardwell Basin
 - SEUSC Basin
 - Beal Slough Basin
 - Stevens Creek Basin
 - Deadmans Run Basin
 - City Limit
 - County

Salt Creek Storage Area Legend
 Salt Creek Storage Area Legend
 Floodway of Floodprone Area

Refresh Map

- Layers**
- Wetlands
- NW Wetlands
 - Salt Creek Storage Area
 - Floodprone Area
 - FEMA Floodplain
 - Cardwell Basin
 - SEUSC Basin
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100 Year Floodplain Comparison





CAPITAL PROJECTS



Urban Storm Drain Improvements



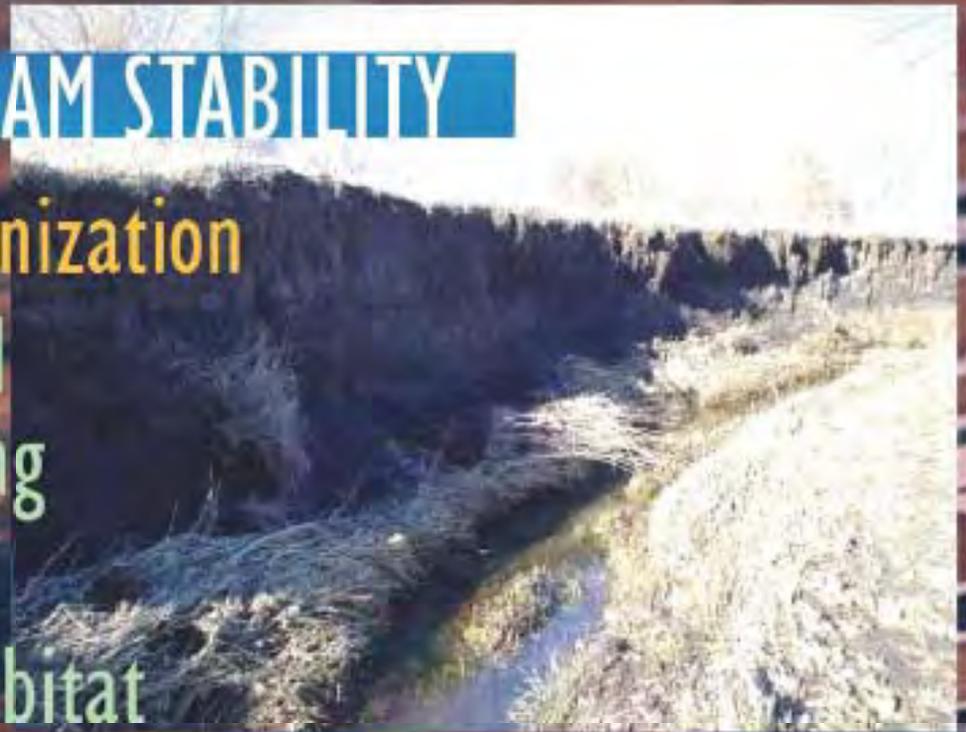
Flood Reduction/Conservation



WATER QUALITY and STREAM STABILITY

Addressing Impacts of Urbanization

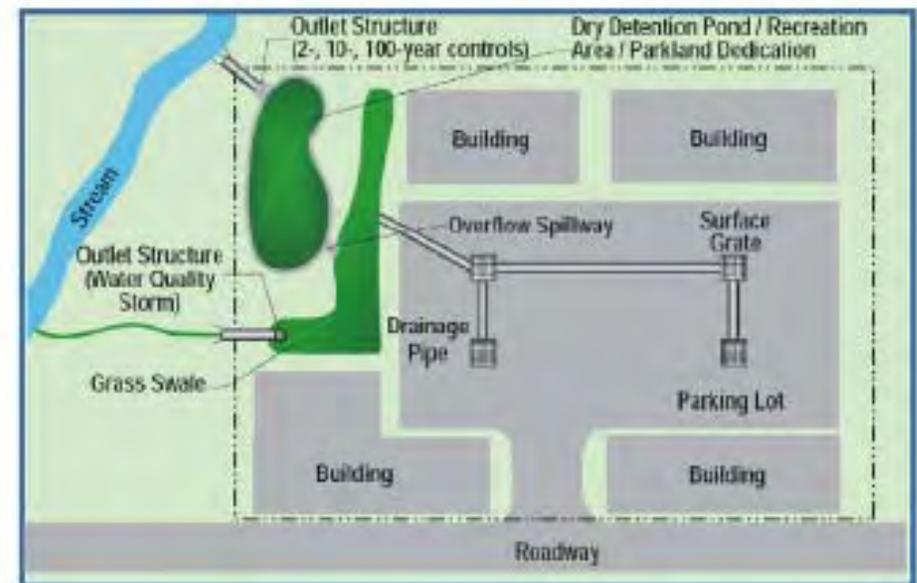
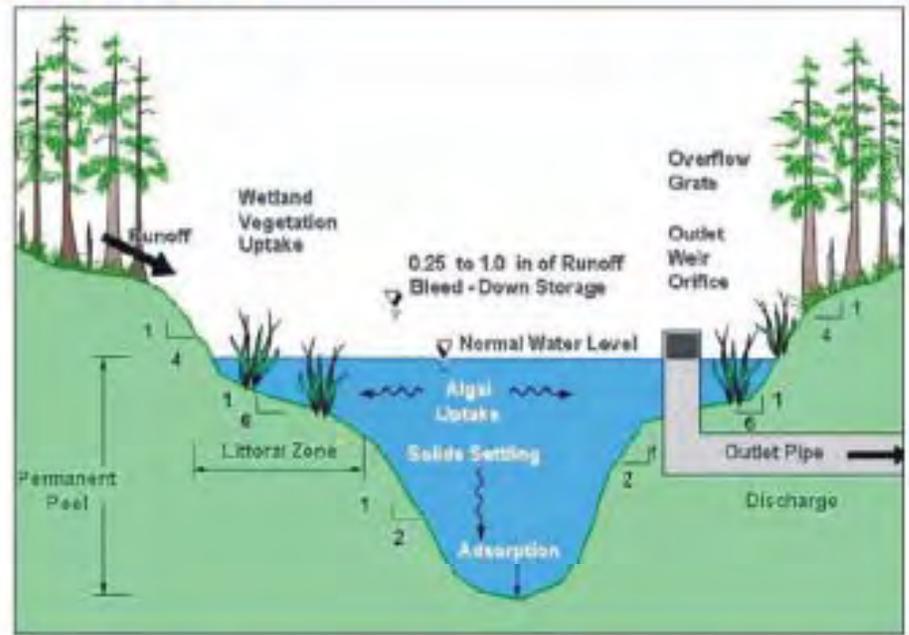
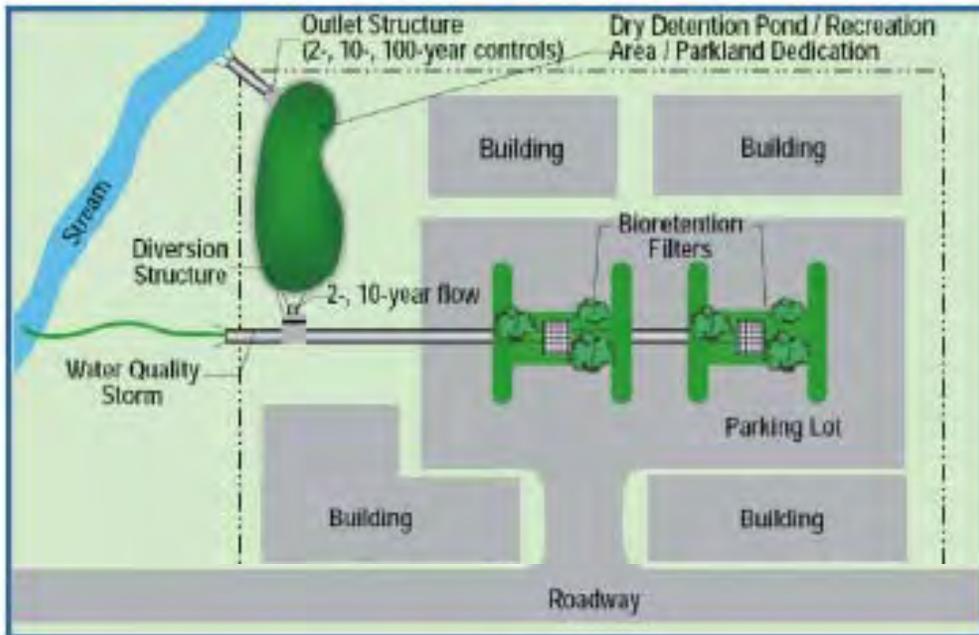
- ❑ Stormwater volumes and velocities increase causing erosion and flooding
- ❑ Erosion causes loss of habitat and impacts water quality
- ❑ Impervious surface areas collect pollutants
- ❑ Smaller rainstorms that occur many times per year are most critical



Water Quality Improvements



ALTERNATIVE DESIGN APPROACHES



Stream Rehabilitation in Parks



FLOODPLAIN & WETLANDS CONSERVATION



LINCOLN'S NPDES STORMWATER PERMIT

- ❑ NPDES municipal permit federally mandated under Clean Water Act. Permit required for discharging stormwater from urbanized areas.
- ❑ Lincoln received first 5 year permit in 2002; next permit is currently under public notice.
- ❑ Proposed permit:
50 activities under 8 major program components.

STORMWATER PERMIT ACTIVITIES



Public Education and Involvement



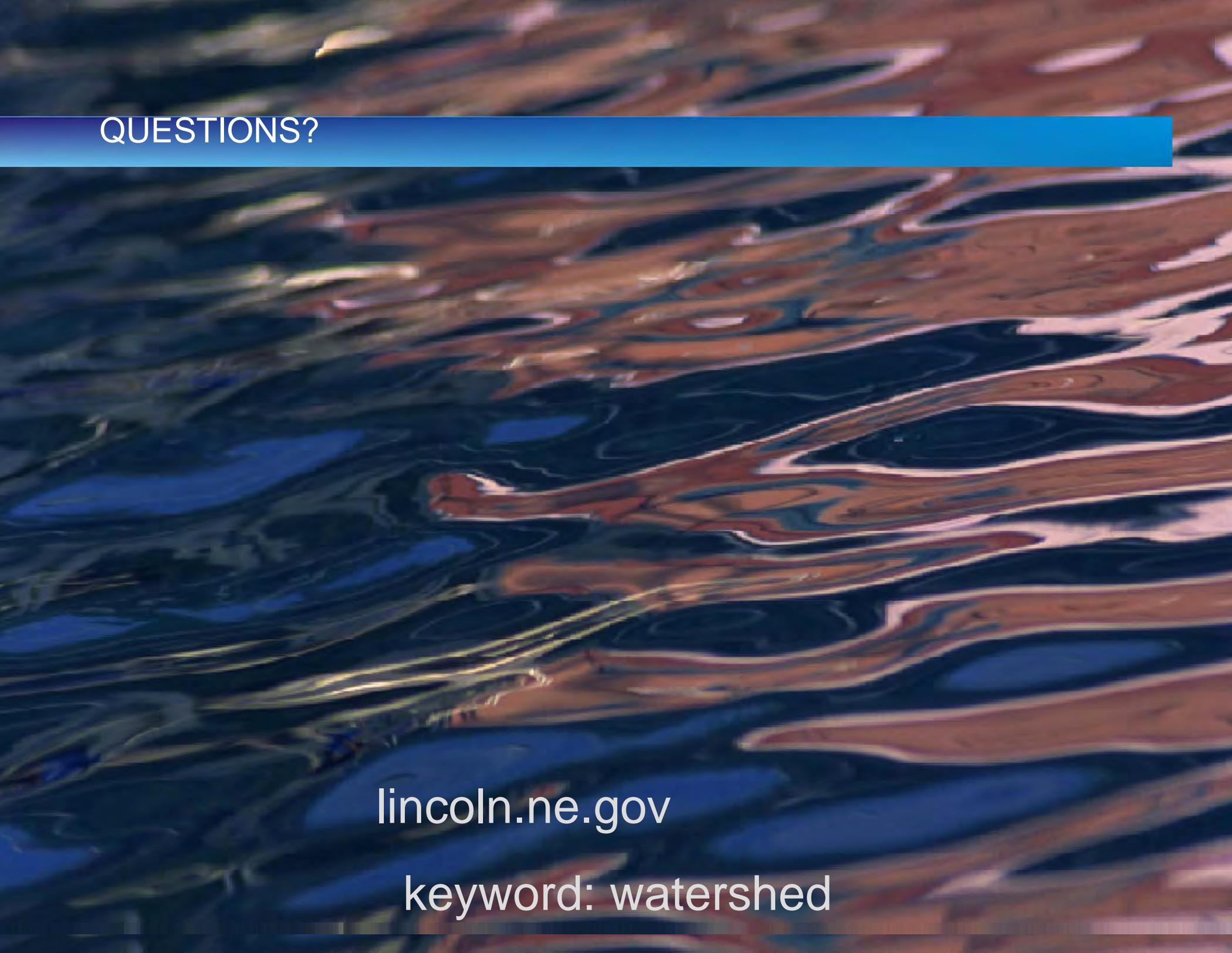
Illicit Discharge Detection



**Post Construction
Runoff Control**



**Construction Site
Runoff Control**



QUESTIONS?

lincoln.ne.gov

keyword: watershed