



Storm Water Master Plan

PBS!



City of Norman
Cleveland County,
Oklahoma

Public Meeting
September 18, 2007

Presentation Overview

- Introductions
 - » Team Organization
 - » Key Project Leaders
- Project Approach
- Schedule
- Questions & Comments



Project Approach – Key Issues: The City's Vision



- Build consensus and support
 - » All stakeholders
 - » **Creative outreach** approach
- Address water and drainage challenges
 - » **Water supply protection**, flooding, erosion
 - » Apply integrated approach to challenges
 - » Water quality, **flooding**, trails, **greenbelts**, quality of life
- Comply with storm water quality requirements (Phase II)
 - » Use efficient approach
 - » Implement plans
 - » **Storm water as a resource**
- Define **funding** solutions

Project Team Meetings and Coordination

- **Develop Partnerships**
 - » PBS&J Team
 - » City Staff
 - » SWMP Committee
 - » Other **Stakeholders**
- **Continuous Communication**
- **Specifically Set Meetings**
 - » Consultant/Staff/SWMP Committee
- **Special Phase II Meetings**
- **Open Public Meetings**
 - » Communicate, Coordinate and Build Consensus



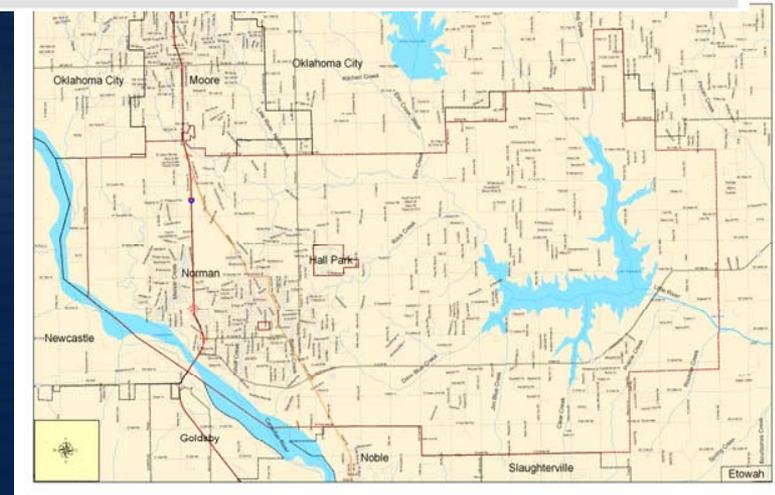
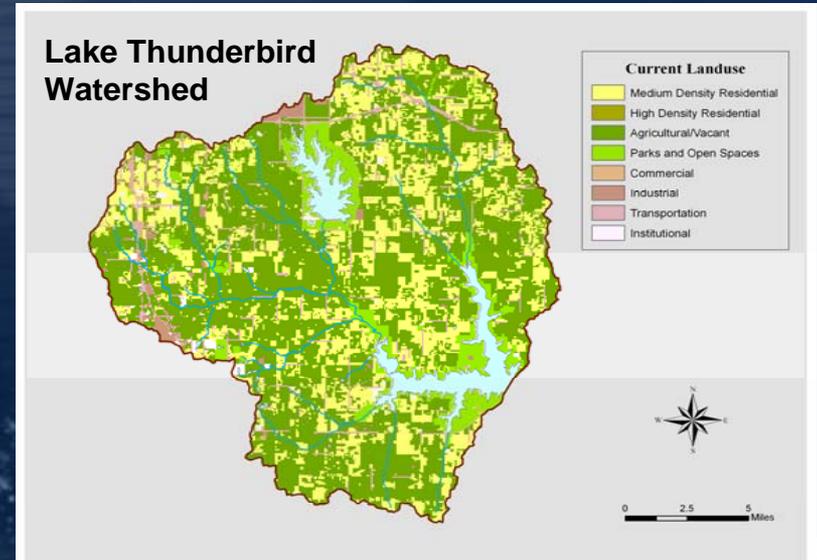
Public Involvement, Outreach & Support



- **Brainstorming with Stakeholders**
 - » SWMP Committee
 - » Other Citizen Committees
 - » Use City's Web Page
 - » **Outreach to Community Groups**
 - » School Activities
 - » Museum of Natural History
 - » Council and Planning Dept. Presentations
- **Integrate Input**
 - » Better define problems
 - » Develop creative solutions

City-wide Considerations

- Uniqueness of **City Watersheds**
- Existing Studies / Data
 - » City's GIS
 - » Norman 2025 Plan
 - » **2007 Topography and Photography**
 - » COMCD and OCC **Water Quality** Studies
 - » **Greenbelt Commission**
- City Services and Capabilities
 - » GIS
 - » **Local Flooding Problems**
 - » MS4 Phase II
 - » Planning / Parks
- Policy, Ordinances and Criteria
 - » MS4 Phase II
 - » **Floodplain Dedications**
 - » **Storm Water Detention**



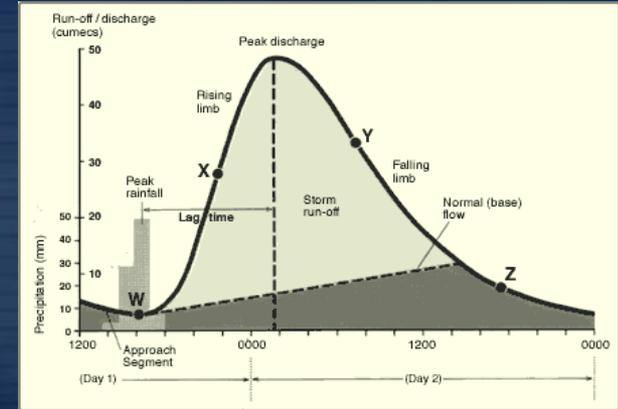
Integrated Watershed-Specific Assessments

- Develop evaluation criteria
- Assess existing conditions
 - » **Riparian** conditions, channel types, **floodplains**, tree canopy, **erosion** issues, soils, **greenbelts**, **water quality data**, etc.
- Document in GIS/database



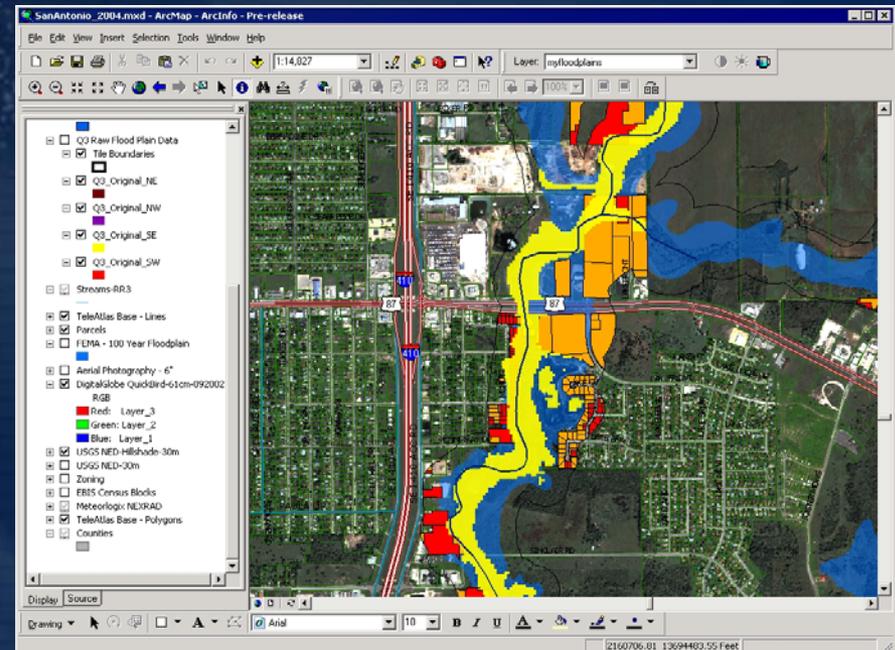
Hydrology & Hydraulics

- GIS tools
- Integrate **topography data**
- Determine peak flows at **key locations**
- Consider **existing and ultimate development conditions**

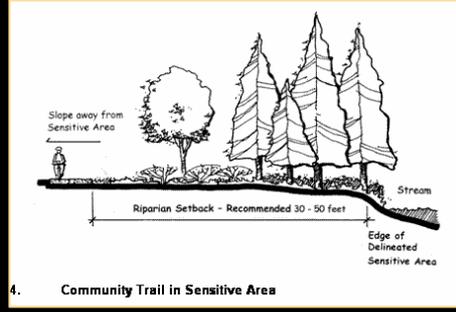


Identify Watershed Concerns and Opportunities

- **Flooding**
- **Erosion / Stream Stability**
- **Storm water quality**
- **Water supply protection**
- **Recreation**



Integrated Solutions









AFTER



Storm Water Permitting Assistance



- Storm water management program elements
 - » Public Education
 - » **Public Involvement**
 - » Illicit Discharge Detection & Elimination
 - » Construction Site Runoff Controls
 - » Post Construction Site Runoff / New Development Controls
 - » **Pollution Prevention** / Good Housekeeping

OKLAHOMA DEPARTMENT OF
ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION

GENERAL PERMIT
OKR04

PHASE II SMALL MUNICIPAL
SEPARATE STORM SEWER SYSTEM
DISCHARGES WITHIN THE
STATE OF OKLAHOMA

February 8, 2005

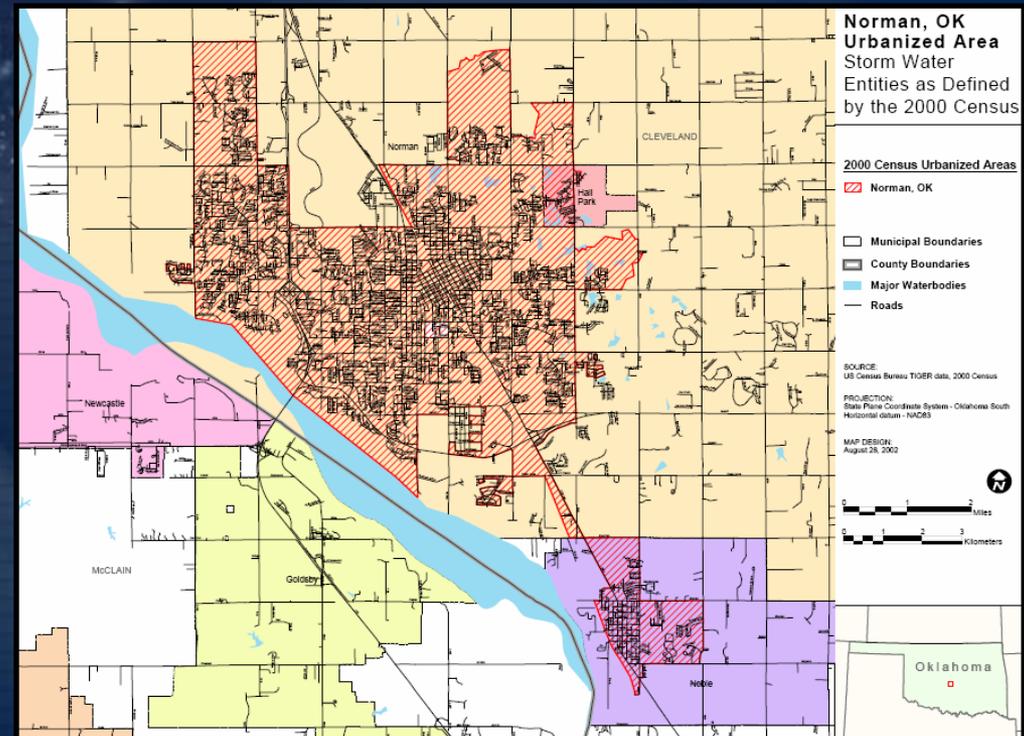


GENERAL PERMIT FOR STORM WATER DISCHARGES



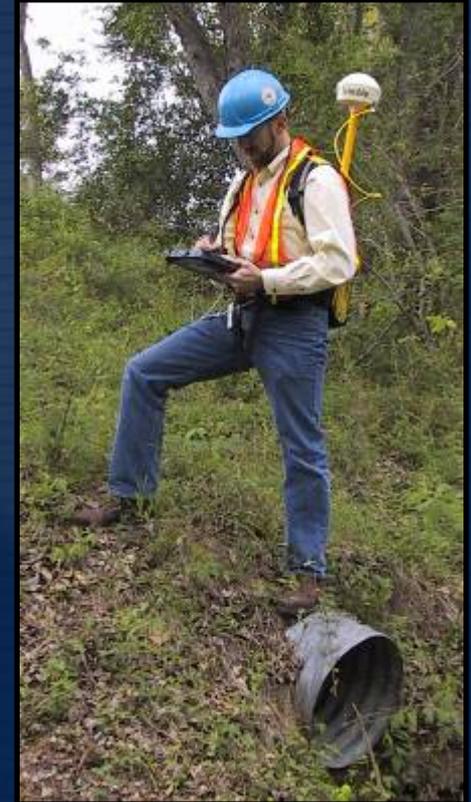
Storm Water Permitting Assistance

- Strategies
 - » Take credit for **current activities**
 - » **Document costs** fully (especially new ones)
 - » **Don't over-commit**
 - » Use **information technology** as appropriate
 - » Consider **limiting geographic scope**



Storm Water Permitting Assistance

- Strategies (continued)
 - » Review and **modify SWMP** as necessary
 - » **Reconsider monitoring/sampling** commitments in SWMP on file with ODEQ
 - » Illicit discharge screening can be accomplished with **visual and observations only**



Storm Water Funding – Drainage Utility

- **Concept**
 - » A **user** pays for a **benefit**
 - » User: a piece of property
 - » **Benefit: storm water management services**
- **Legal authority**
 - » State law imposes structure and formation requirements

Storm Water Funding

- Conduct needs assessment:
What is desired level of service?
- Estimate revenue requirements:
How much will this cost?
- Evaluate alternative rate structures:
How much will specific properties pay?
- Prepare revenue estimates:
How much will be raised?
- Create **financial plan**
- Adopt utility formation **ordinance**
- Implement utility

Master Plan Elements

- **Watershed** assessments
 - » Existing conditions and concerns
- Recommendation of **integrated solutions**
 - » Water quality protection, **recreation**, restoration, runoff controls
- Storm water permitting and Basic program elements
 - » **Ordinances**, monitoring, inspections
- Financing and **funding approaches**
 - » Costs and revenue estimates, budgets
- **Implementation** plans
 - » Schedules and responsible parties



Storm Water Master Plan



QUESTIONS AND COMMENTS