Flood Risk Management
Local Priorities –
Successes & Challenges

Engineering Services Department

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Tulsa’s Flood Risk Management Priority

- City’s needs outpace available resources
- Competing City obligations
- Floodplain management vs. development

- Floodplains & flooding? We fixed that.
- Partnerships, outreach & education
- Drought vs flood
Flood Risk Management – Local Point of View

- Tulsa’s Flood Risk Management
- Flood Control Projects
- Operations & Maintenance
- Education & Outreach
- Flood Alert & Monitoring
- Partnerships (USACE, County, State)
- Asset Management
- Regulations
- Master Planning
- Local Champion
Flood Risk Management – Road Map to Today

- Tulsa’s Flood Management Evolution
  - Flood
  - Public Demands & Local Champion
  - Regulations
  - Planning & Flood Control

- Operations & Maintenance
- Flood Alert
- Outreach, Education, & More Outreach
- Asset Management
Success Stories

- Master Planning & Flood Control Projects
  - Regional Detention & Channelization
  - Partnerships
  - Voluntary Flooded Structure Buyout

- Regulations
  - CRS Class 2
  - Fully Urbanized Floodplain
  - Freeboard
  - Compensatory Storage
Success Stories

- Operations & Maintenance
  - Routine & Preventative
    - All major waterways
  - Select vegetation control
    - All major waterways

- Flood Alert System
  - Over 50 sites
  - Real time alerts
  - Gauge Adjusted Radar
  - Rainfall (pending)
Success Stories

- Public Education
  - Direct notifications
  - HOA Workshops

- Silver Jackets - USACE
  - West Tulsa Levee EOP
  - West Tulsa Levee Outreach & Evacuation Planning (Kickoff)

- Program for Public Information
  - Measured outreach metrics
  - FEMA CRS Credit
Challenges – Flood Awareness

Flood
- “Why didn’t the City prepare more?”
- “Help! The City flooded my house!”
- “City fixed everyone else’s flooding”

VS.

Drought
- “The City fixed all the flooding.”
- “Lived here 50 years & it’s never flooded.”
- “There was a 100 year storm last year.”
Challenges - Funding

- Competing Needs & Public Desires
  - Public Safety
  - Streets
  - Parks, etc.
- Revenue Shortfalls
- Utility Rate Increases
  - Water
  - Sewer
  - Stormwater
Challenges – Regulations

• Development Community
  – Less floodplain & stormwater regulations
  – Defending higher than NFIP standards
  – Fully urbanized floodplain
• Water Quality
  – Increasing requirements
  – Education of public & officials
• Flood Insurance Coverage
• Repetitive Losses
Tulsa Flood Risk Management Priorities

• West Tulsa Levee System
• Stormwater Asset Management
  – Waterways, sewer, structures
  – Comprehensive O&M study
  – Utility rate study
• Flood Control Capital Program
  – Reduce increasing backlog
• Partnerships
  – Silver Jackets, Multi-jurisdictional
• Flood Awareness Public Education & Outreach
Questions?