

APPENDIX

EXTERNAL STAKEHOLDER

ENGAGEMENT

STORMWATER MANAGEMENT PROGRAM MASTER PLAN



- January 26, 2017 - Stakeholder Meeting 1 Open to Public
- May 16, 2017 - Stakeholder Meeting 2 Open to Public
- August 3, 2017 - Stakeholder Meeting 3 Open to Public
- October 19, 2017 - Stakeholder Meeting 4 Open to Public
- February 28, 2018 – Public Hearing at the Plan Commission
- April 17, 2018 – Council Work Session Briefing
- May 1, 2018 – Plan Adoption
- Water Quality Survey Questions and Responses
- Additional Comments
- Meeting Advertisements

EXTERNAL STAKEHOLDER ENGAGEMENT

STORMWATER MANAGEMENT PROGRAM MASTER PLAN



- January 26, 2017 - Stakeholder Meeting 1 Open to Public

Stormwater Management Program Master Plan Update



External Stakeholder Meeting 1
January 26, 2017

Greg Simmons – Transportation & Public Works, Stormwater
Management Division, Assistant Director

Chris Johnson – TPW Stormwater, Engineering Manager

Jennifer Dyke – TPW Stormwater, Senior Planner

Agenda

- Introductions
- Goals of Master Plan Update
- Stakeholder Roles & Responsibilities
- Stormwater Program Overview
- Initial Program Objectives
- Progress and Current Program Status
 - ** 5 minute break**
- Future Program Investment
- Public Comment Period

Introductions

- Monica Hamilton- Mayor's office
- Roxanne Martinez- CD 2
- Gary Havener- CD 3
- Aric Head- CD 4
- Rafael McDonnell- CD 5
- Patrick Clay- CD 6
- Si Rowlett- CD 7
- Howard Rattliff- CD 8
- David Motheral- CD 9
- Art Cavazos- FW ISD
- Rusty Fuller- N. FW Alliance
- La Wayne Hauser- Resident
- Lairy Johnson- Large Commercial/Miller Coors
- Rick Kubes- Resident/Small Commercial
- Lee Nicol- Streams & Valleys
- Joe Schneider- Hillwood Development

Goals of Master Plan Update

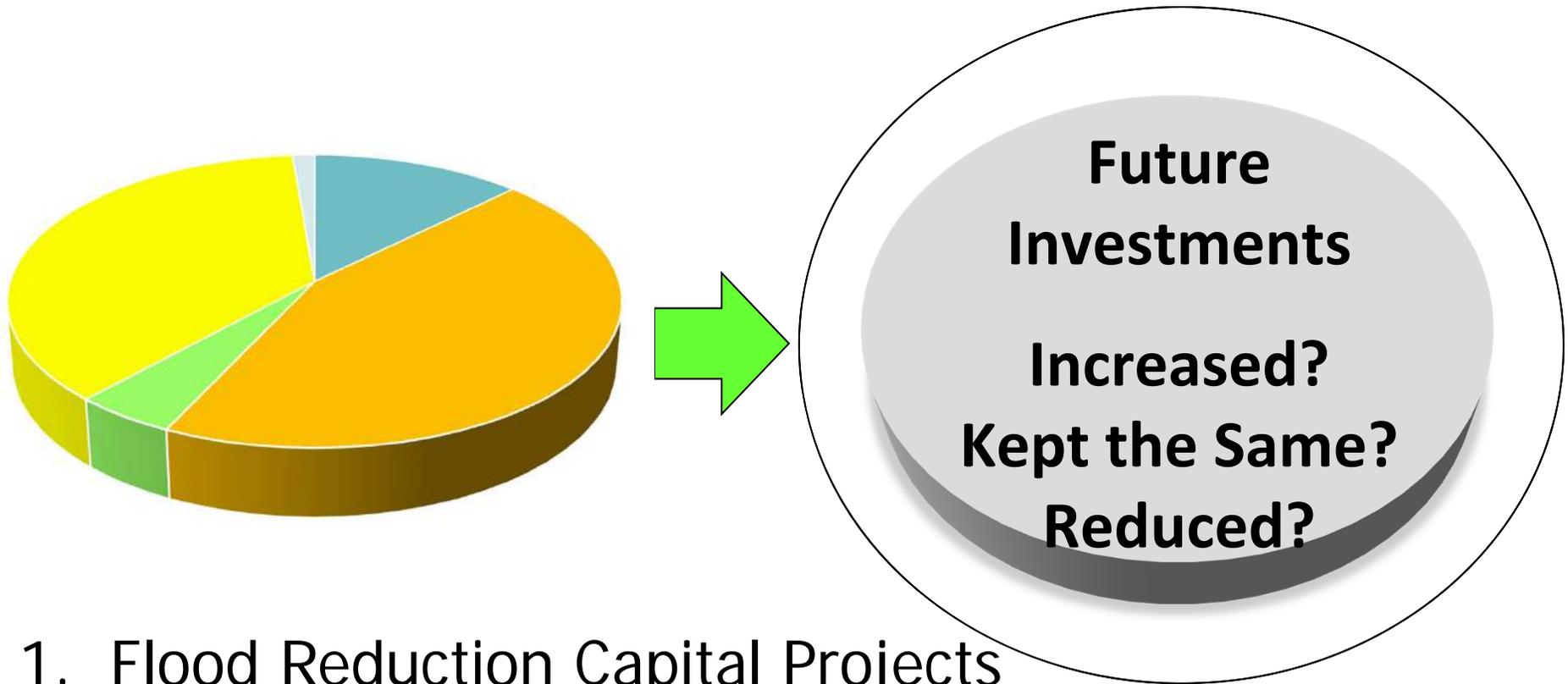
- Assess progress and lessons learned
- Evaluate opportunities and efficiencies
- Engage and align with stakeholders
- Refine strategies, policies, and priorities
- Determine future resource allocations
- Develop implementation plan
- Stakeholder endorsement
- Council adopted plan

Stakeholder Roles & Responsibilities

- Attendance: 4 – 2 hour stakeholder mtgs.
- Participation: Provide feedback at meetings and build agreement with other stakeholders
- Perspective: Help us achieve the best possible City of Fort Worth community

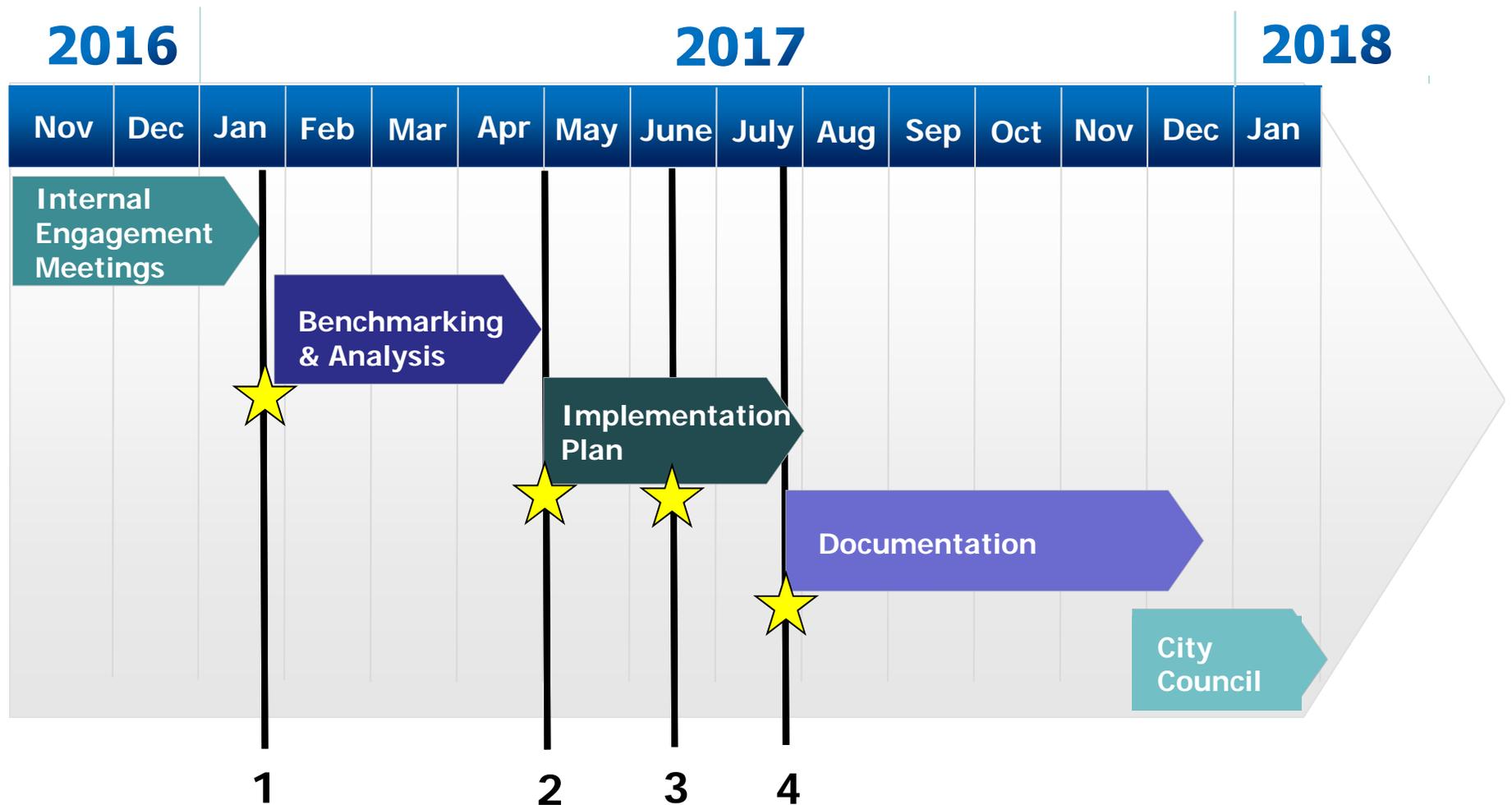


Future Objectives



1. Flood Reduction Capital Projects
2. Storm Drain Rehabilitation
3. Maintenance
4. Flood Warning
5. Development Services

Schedule Overview



Approximate Stakeholder Engagement Meetings ★

What is your preferred time for stakeholder meetings?

- 33% 1. Weekday morning
- 17% 2. Weekday afternoon
- 50% 3. Weekday evening

Overview – How We Got Here

- Summer 99 – Stormwater program 1st discussed
- Summer 04 – Major flooding in several areas
- October 04 – Citizen's advisory committee established
- December 05 – Stormwater program approved

Overview – How We Got Here

Pre-2006	Desired
Flood reduction capital projects– over \$500 million backlog	Funded capital program (stable funding source) that reduces backlog in a reasonable timeframe
Reactive maintenance	Proactive, prioritized, scheduled, effective, maintenance program
Incomplete inventory	Complete inventory and condition assessment of facilities
Planning – Limited studies (5% of city) focused only on water quantity issues	Comprehensive master planning - Setting priorities with cost-effective solutions (including water quality issues)
Development Services/Design Standards - 1967 era with limited enforcement	Up-to-date standards that protect from flooding & erosion without slowing growth
Outdated equipment/technology	Up-to-date hardware, software, and field equipment
Public Education primarily limited to water quality issues	Effective education/outreach on all aspects of storm water issues

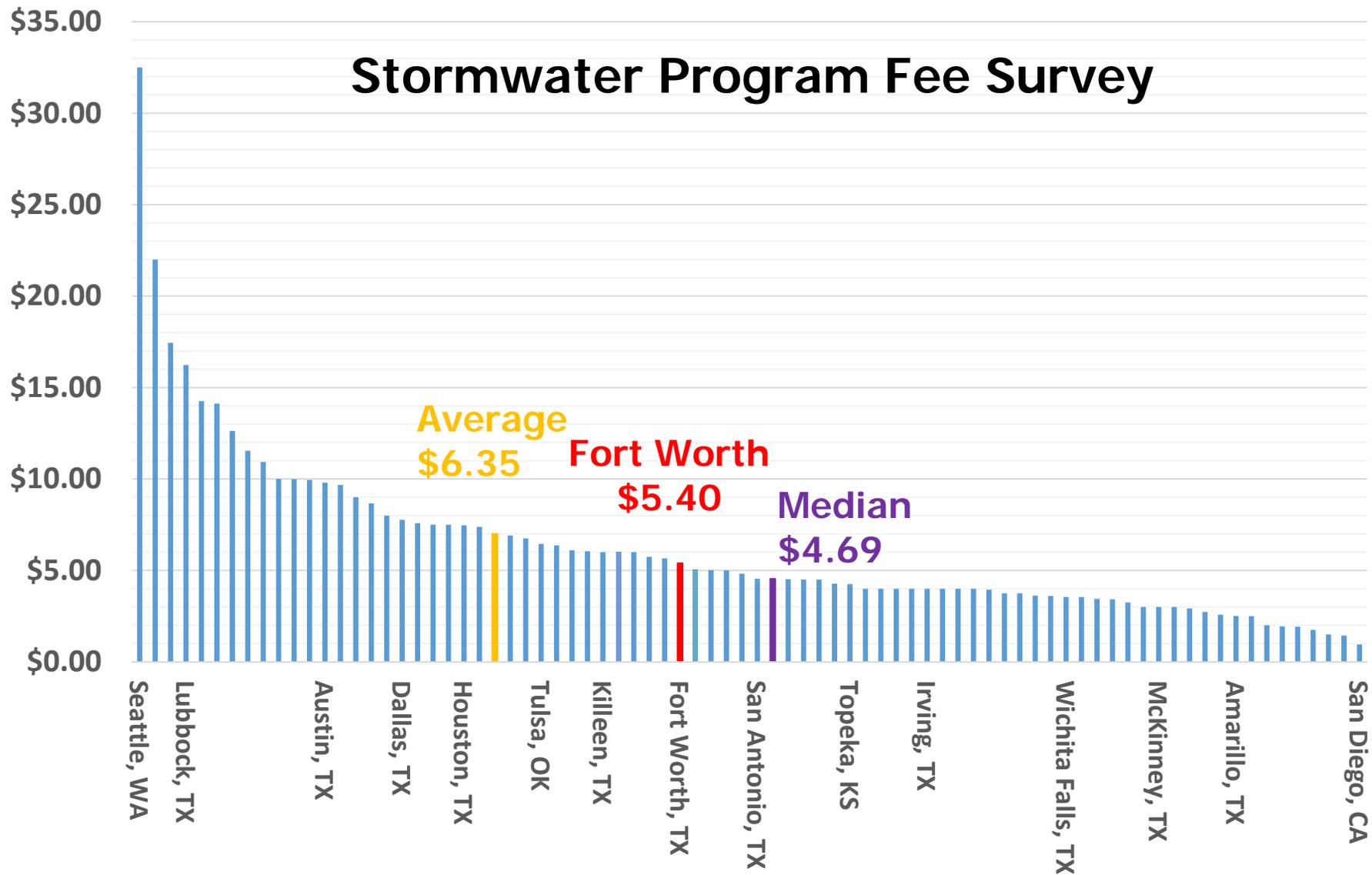
Overview – How We Got Here

Stormwater Program Spectrum	Annual Cost Per Acre	Annual Budget
“Incidental”	\$25	\$5 million
City of Fort Worth program before 2006 – Limited improvements; mostly reactive maintenance	\$38	\$7.6 million
“Minimal”	\$50	\$10 million
“Moderate”	\$75	\$15 million
“Aggressive”	\$150	\$30 million
City of Fort Worth – <i>Desired Program</i>– “Aggressive” master planning, inventory, drainage reviews, maintenance; “Moderate” CIP	\$160	\$32 million by year 5
“Exceptional”	\$250	\$50 million

Overview – How We Fund It

	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>	<u>FY12 – FY 17</u>
Original projected monthly fee per billing unit (2005)	\$2.90	\$3.25	\$3.75	\$4.25	\$4.50	Original projection did not go beyond Year 5
Actual monthly fee/annual budget	\$2.90/ \$10.2M	\$3.20/ \$15.1M	\$3.75/ \$19.3M	\$4.75/ \$25.7M	\$4.75/ \$28.1M	\$5.40/ \$38M in FY 17

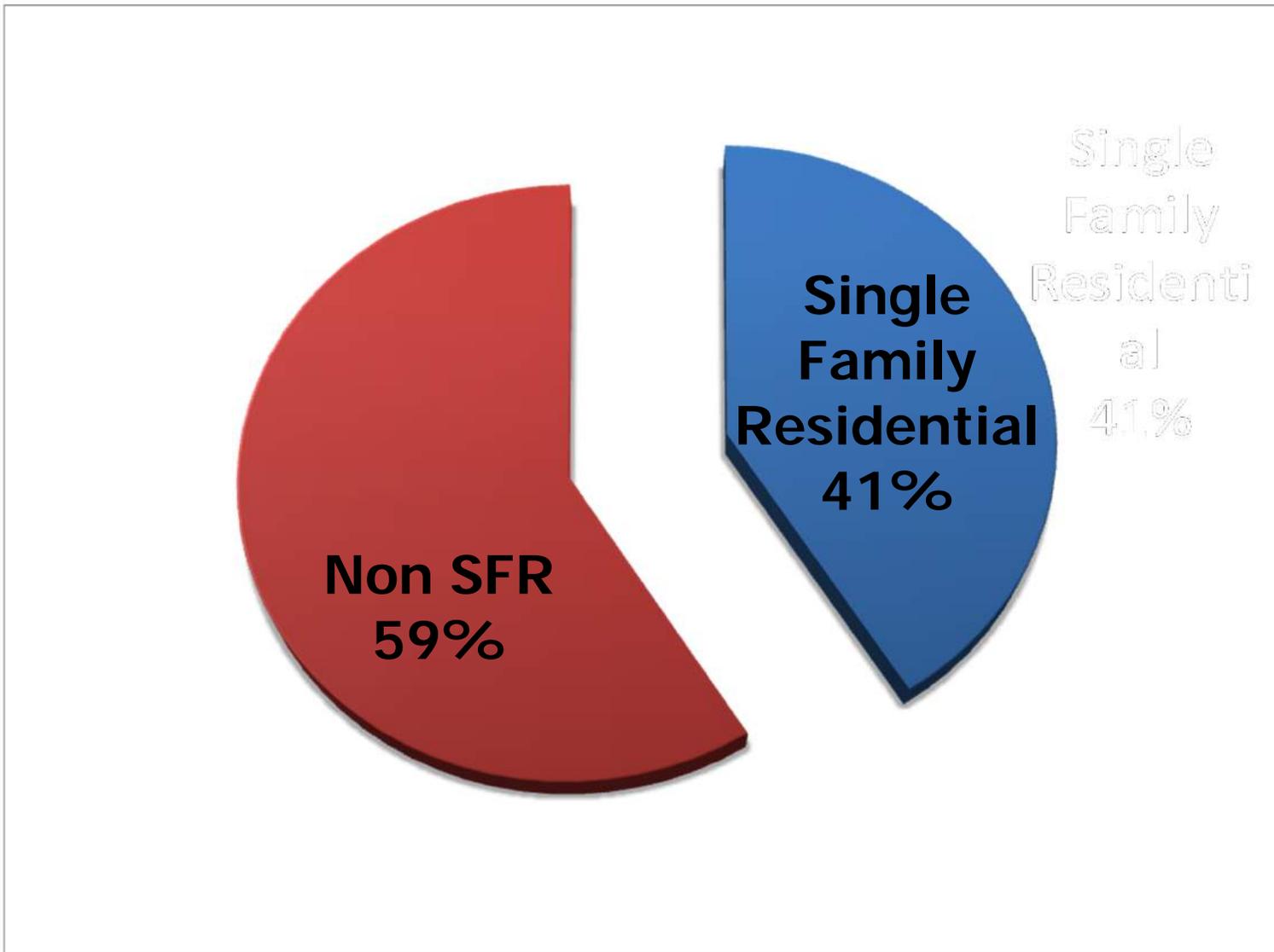
Overview – How We Fund It



Includes 2016 Stormwater Utility Survey data prepared by Black & Veatch Management Consulting, LLC

Overview – How We Fund It

Revenue Sources



Before this meeting, did you know the City of Fort Worth had a stormwater fee?

- 0% 1. No, unfamiliar with the fee
- 67% 2. Yes, but do not know the amount
- 33% 3. Yes, I know the exact fee that I pay

Overview - What We Do

- City Council Strategic Goals:
 - Safe City
 - Strengthen economic base
 - Mobility
 - Orderly/sustainable development
 - Clean/Attractive
- Stormwater Mission:
 - “Protect people and property from harmful stormwater runoff”
 - Make things better:
 - Get the drainage system performing as designed (Maintenance and Repair)
 - Identify and correct deficiencies in the drainage system (Flood Reduction Capital Improvement Program)
 - Warn of road hazards
 - Keep things from getting worse:
 - Keep the drainage system performing as designed (Maintenance and Repair)
 - Development services

Overview – How Far We’ve Come

Pre - 2006	Desired
Flood reduction capital projects – Over \$500 million backlog	Funded capital program (stable funding source) that reduces backlog in a reasonable timeframe
Reactive Maintenance	Proactive, prioritized, scheduled, effective, maintenance program
Incomplete Inventory	Complete inventory and condition assessment of facilities
Planning –Limited studies (5% of City) focused only on water quantity issues	Comprehensive master planning – Setting priorities with cost-effective solutions (including water quality issues)
Development Services/Design Standards – 1967 era with limited enforcement	Up-to-date standards that protect from flooding & erosion without slowing growth
Outdated equipment/technology	Up-to-date hardware, software, and field equipment
Public Education primarily limited to water quality issues	Effective education/outreach on all aspect of stormwater issues.

Capital Program – Last 10 years

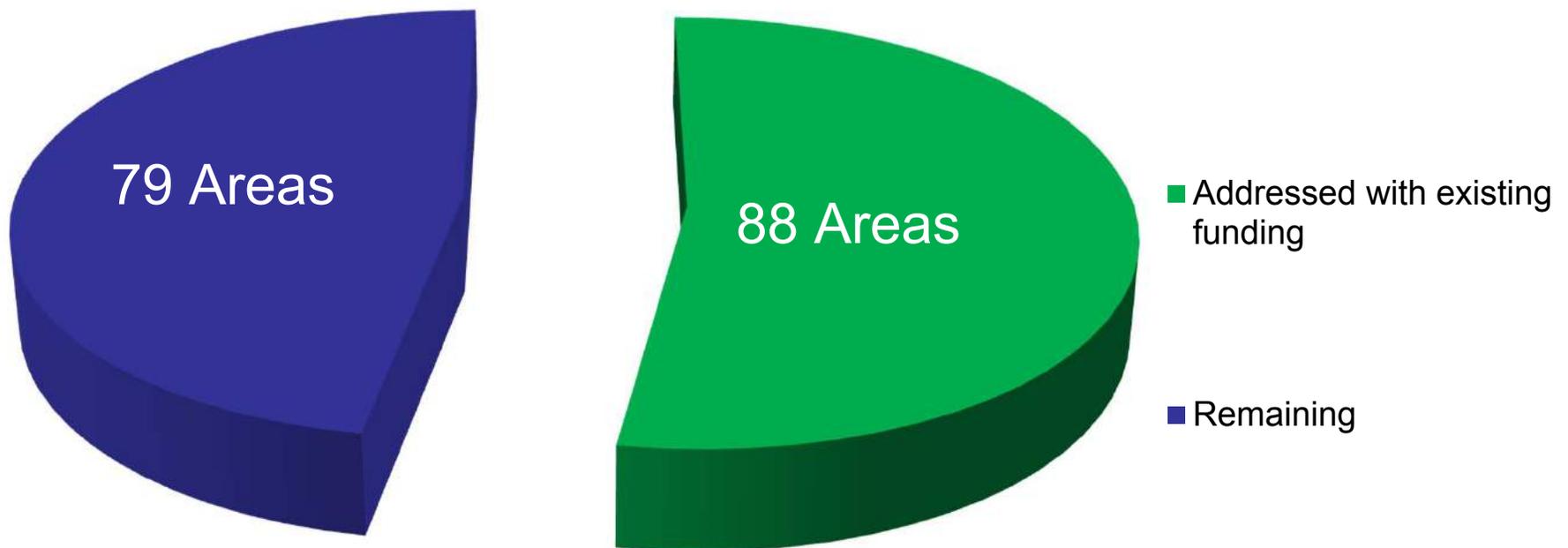
Output

- \$150 million in revenue bonds since 2008
 - ~ \$15 million/year
- Average project cost less than \$1 million
- Largest single project ~ \$6 million
- Successful partnerships with FWISD, Tarrant County, Fort Worth T, etc...
- \$9.4 million/year in debt service
 - First bonds paid off in 2033
- Most “low hanging fruit” projects completed

Capital Program – Last 10 years

Outcomes

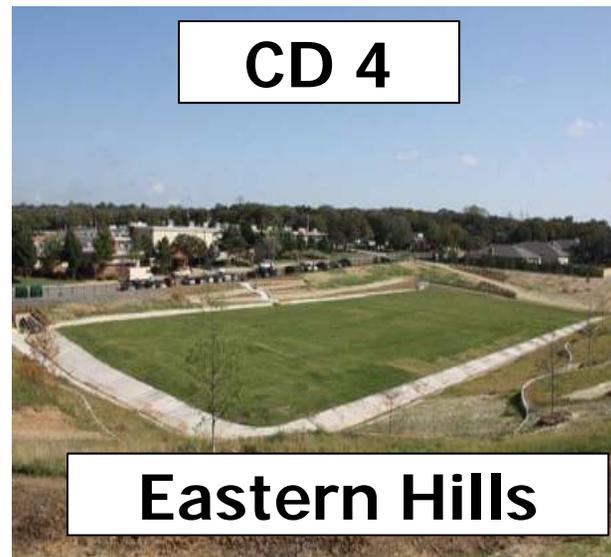
Critical Drainage Problems (167 Areas Total)



Capital Program – Last 10 years

Outcomes

<u>Outcome</u>	<u>FY 08 - Present</u>
Number of properties with mitigated flood risk (protection & acquisition)	700 +
Avg daily traffic on roads no longer subject to overtopping	250,000 +



Luella Merrett

Stormwater Solutions Magazine

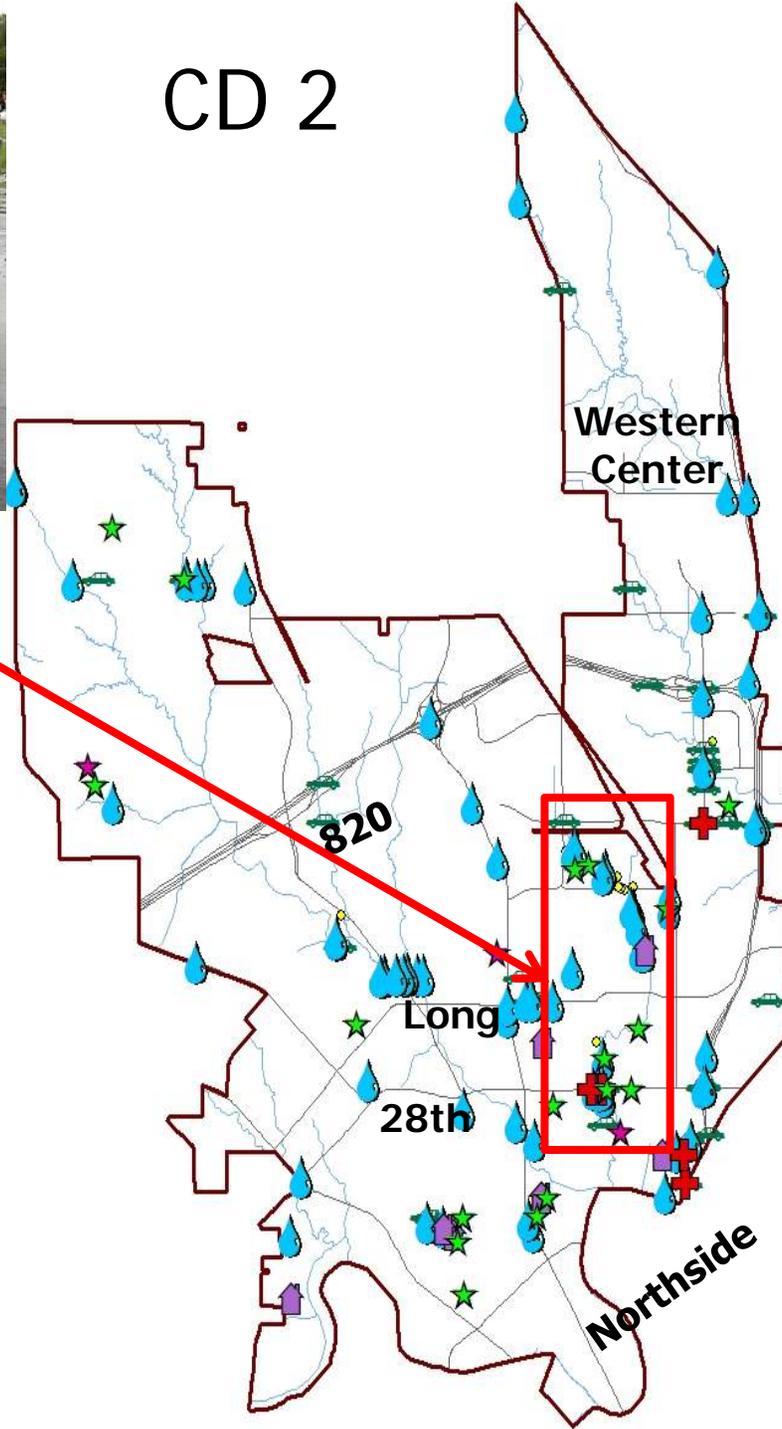
Project of the Year





Lebow Channel

CD 2



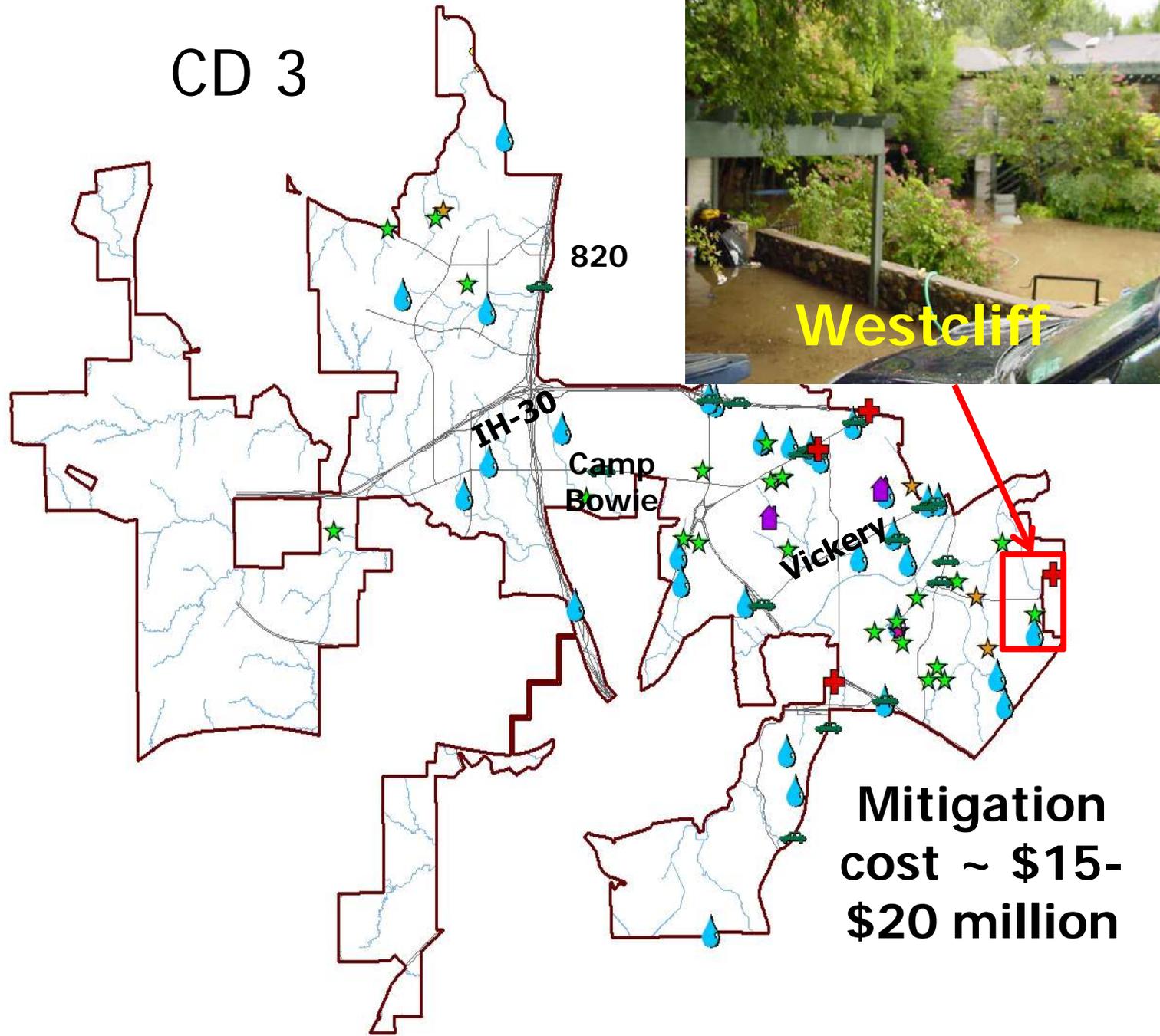
Mitigation cost ~ \$40-\$50 million (phaseable)

- AWS Flasher
- High Water Incidents**
- ✚ Rescue
- 🏠 Structure Flooded
- 🚗 Car Stalled (Road)
- 💧 Road Overtop
- Storm Water Projects**
- ★ Current
- ★ Future
- ★ Complete

IH-35



CD 3



• AWS Flasher

High Water Incidents

- +
- +
- +
- +

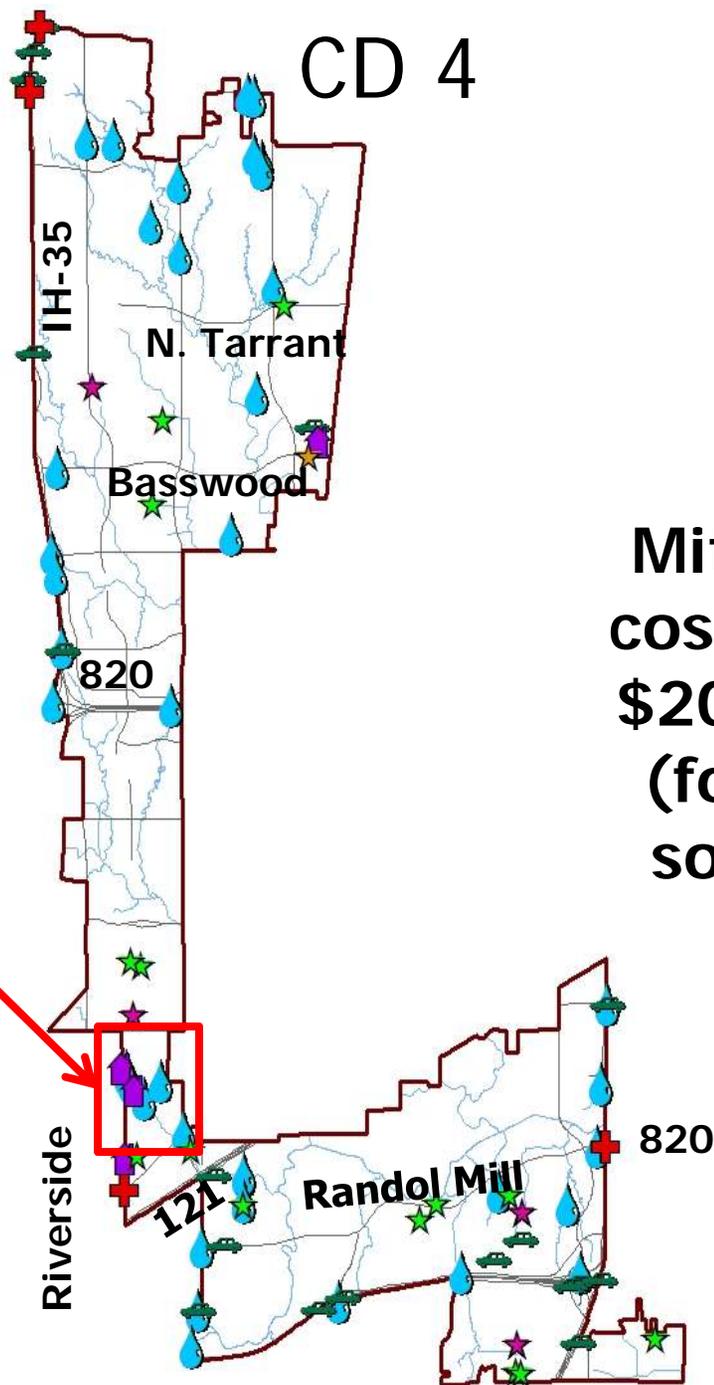
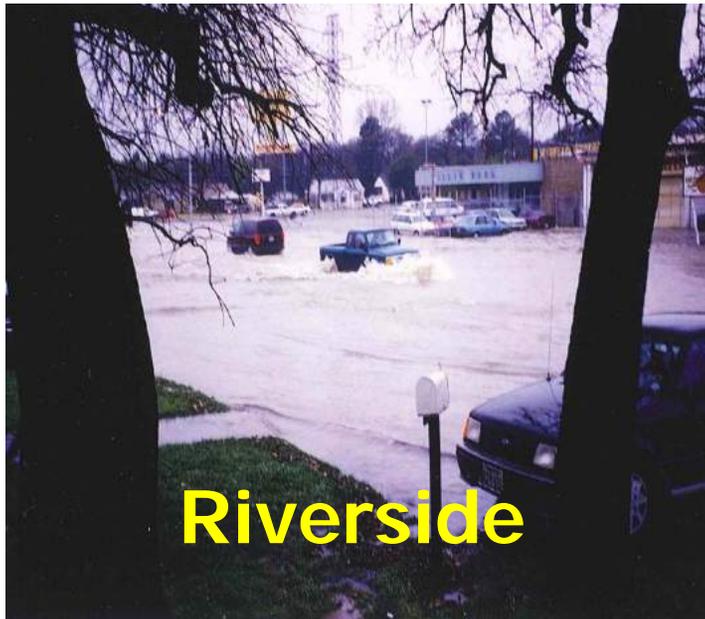
Storm Water Projects

- ★
- ★
- ★

0 0.5 1 2 Miles

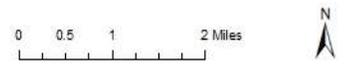


**Mitigation
cost ~ \$15-
\$20 million**



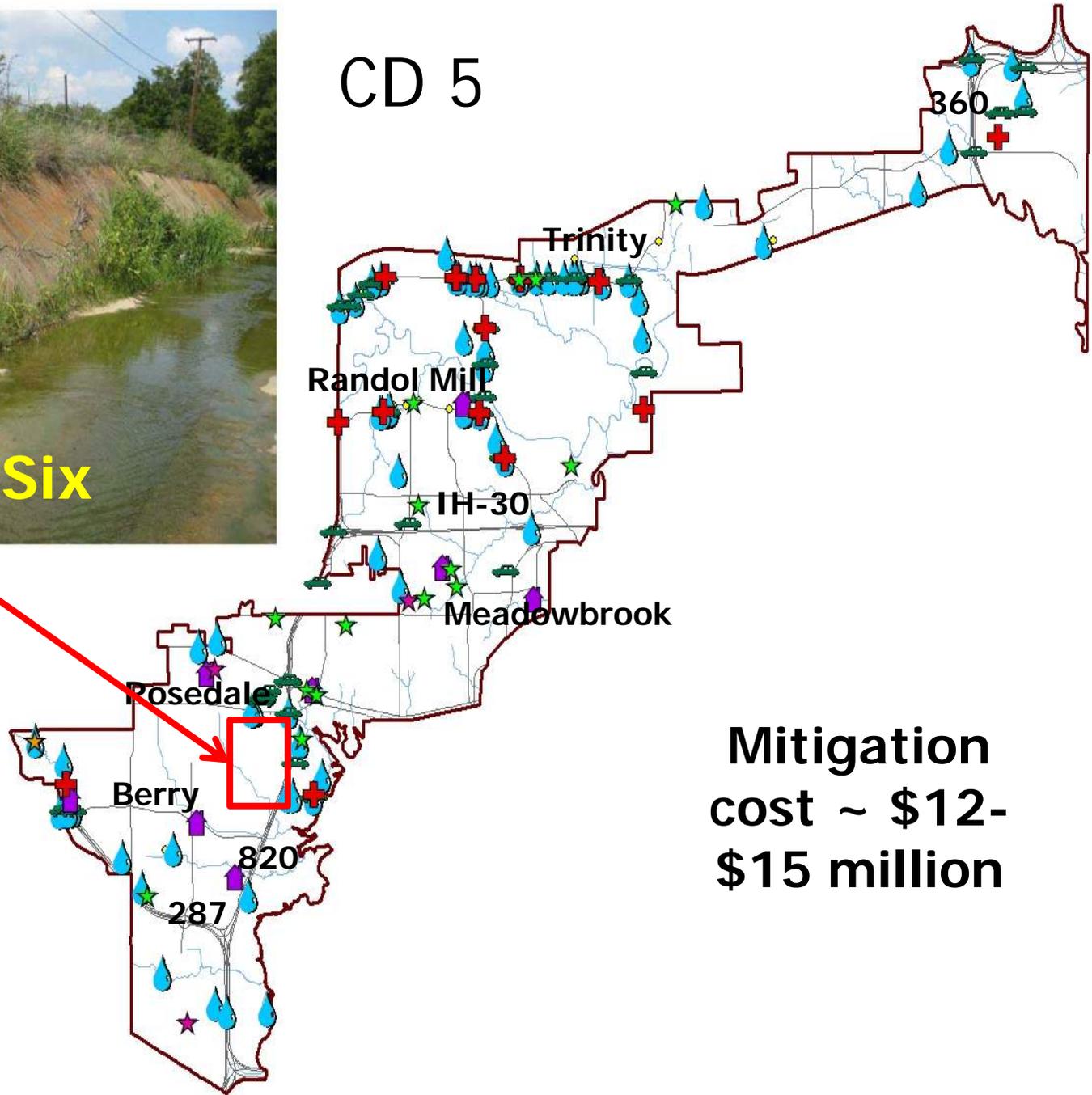
**Mitigation
cost ~ \$15-
\$20 million
(for 50 yr
solution)**

- ◊ AWS Flasher
- High Water Incident**
- ✚ Rescue
- 🏠 Structure Flooded
- 🚗 Car Stalled (Road)
- 💧 Road Overtop
- Storm Water Projects**
- ★ Current
- ★ Future
- ★ Complete





CD 5

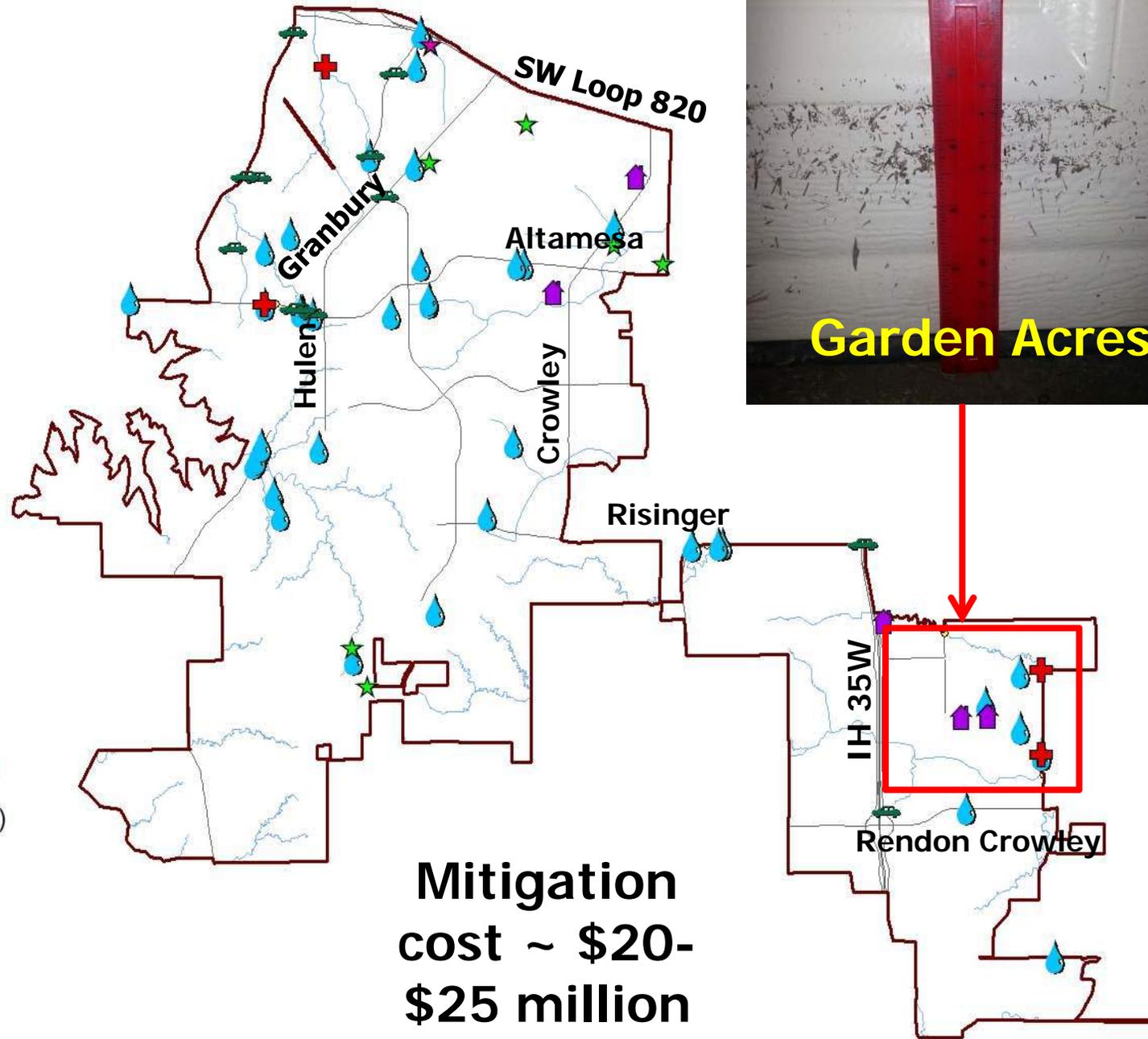


Mitigation
cost ~ \$12-
\$15 million

- ◊ AWS Flasher
- High Water Incident**
- ✚ Rescue
- 🏠 Structure Flooded
- 🚗 Car Stalled (Road)
- 💧 Road Overtop
- Storm Water Projects**
- ★ Current
- ★ Future
- ★ Complete



CD 6



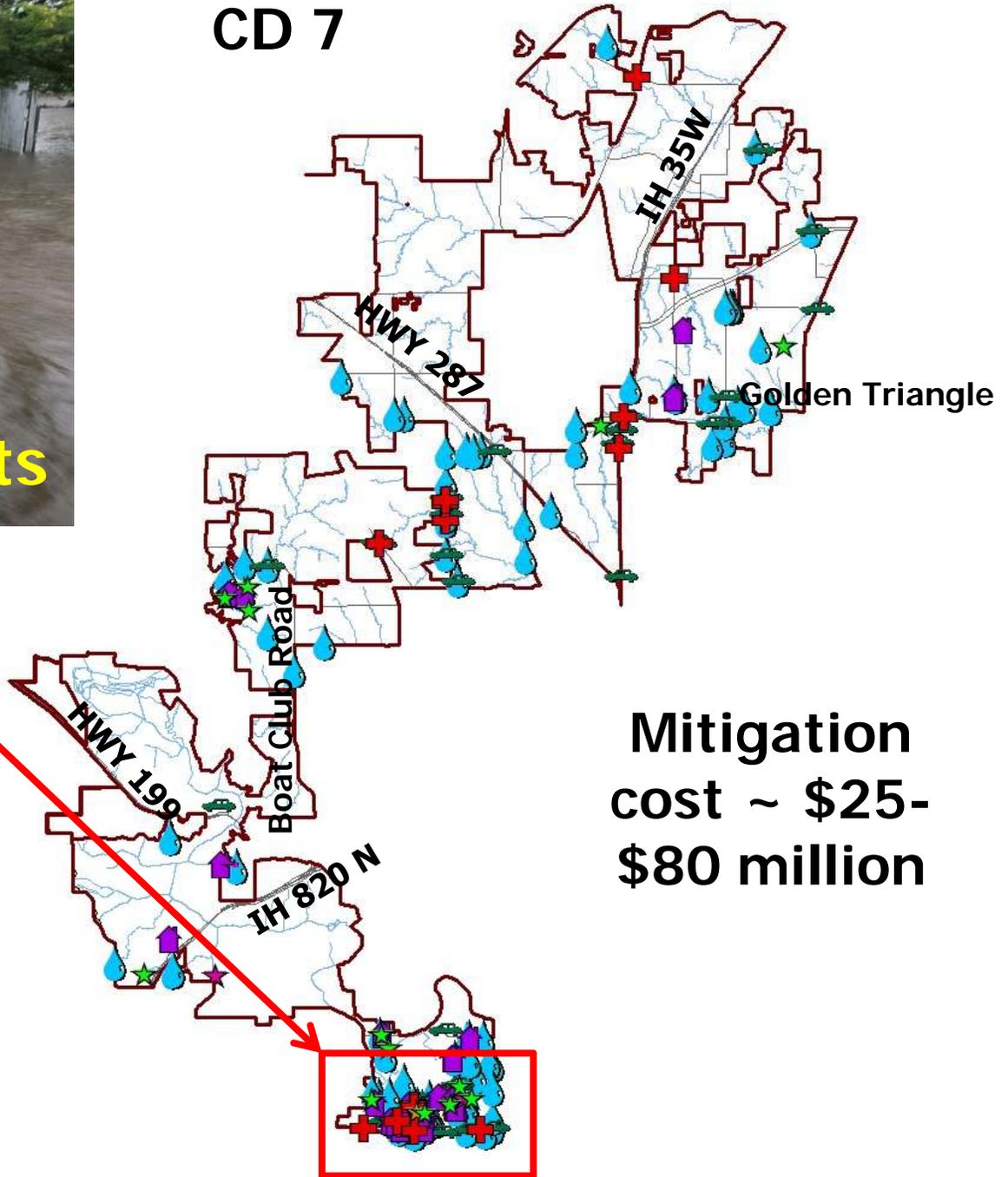
- AWS Flasher
- High Water Incident**
 - ✚ Rescue
 - 🏠 Structure Flooded
 - 🚗 Car Stalled (Road)
 - 💧 Road Overtop
- Storm Water Projects**
 - ★ Future
 - ★ Complete





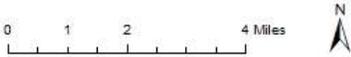
Arlington Heights

CD 7



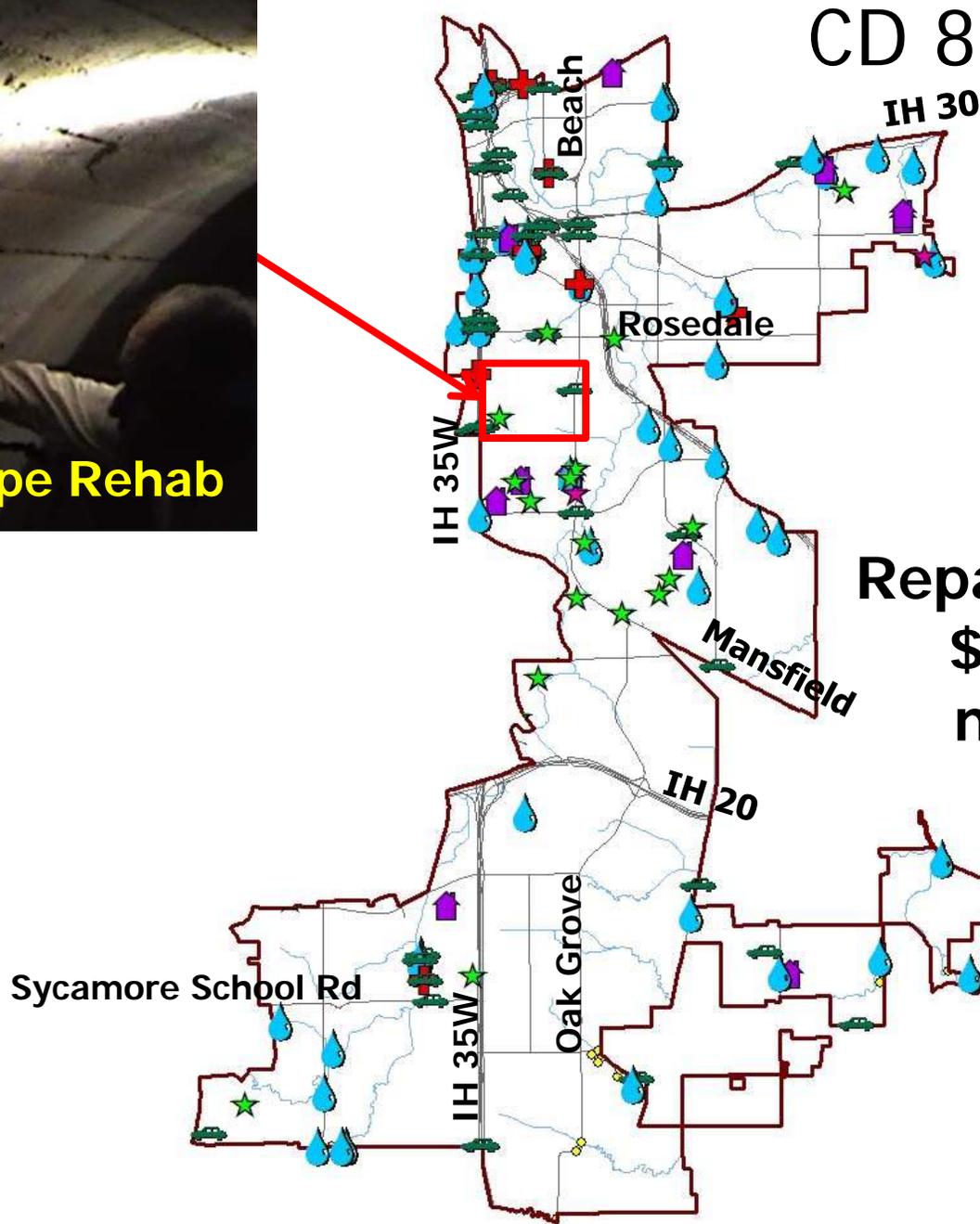
**Mitigation
cost ~ \$25-
\$80 million**

- ◊ AWS Flasher
- High Water Incident**
- ✚ Rescue
- 🏠 Structure Flooded
- 🚗 Car Stalled (Road)
- 💧 Road Overtop
- Storm Water Projects**
- ★ Current
- ★ Future
- ★ Complete





Morningside Pipe Rehab



CD 8

**Repair cost ~
\$8-\$10
million**

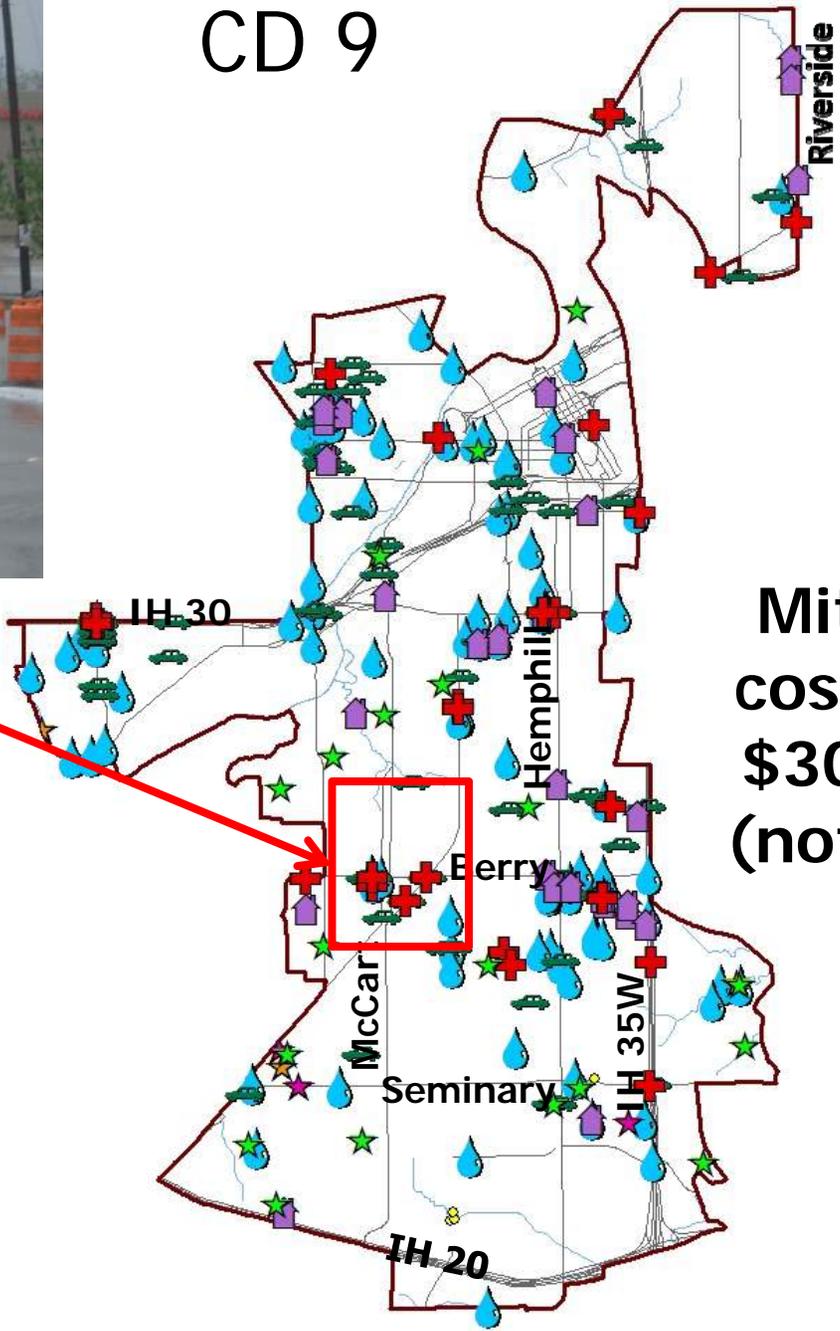
- ◊ AWS Flasher
- High Water Incident**
- ✚ Rescue
- 🏠 Structure Flooded
- 🚗 Car Stalled (Road)
- 💧 Road Overtop
- Storm Water Projects**
- ★ Future
- ★ Complete





Berry/McCart

CD 9



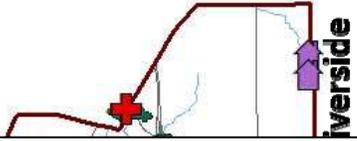
**Mitigation
cost ~ \$25-
\$30 million
(not 100 yr)**

- ◊ AWS Flasher
- High Water Incident**
- ✚ Rescue
- 🏠 Structure Flooded
- 🚗 Car Stalled (Road)
- 💧 Road Overtop
- Storm Water Projects**
- ★ Current
- ★ Future
- ★ Complete

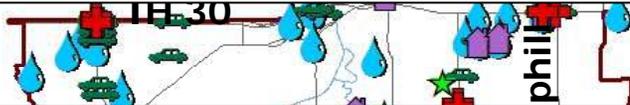




CD 9



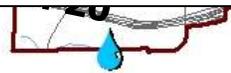
Total of all example projects:
\$160 - \$350 million



Mitigation cost ~ \$25-

Expected capital project budget for near term:
\$8 - \$10 million/year

Hi
St
Complete
0 0.45 0.9 1.8 Miles

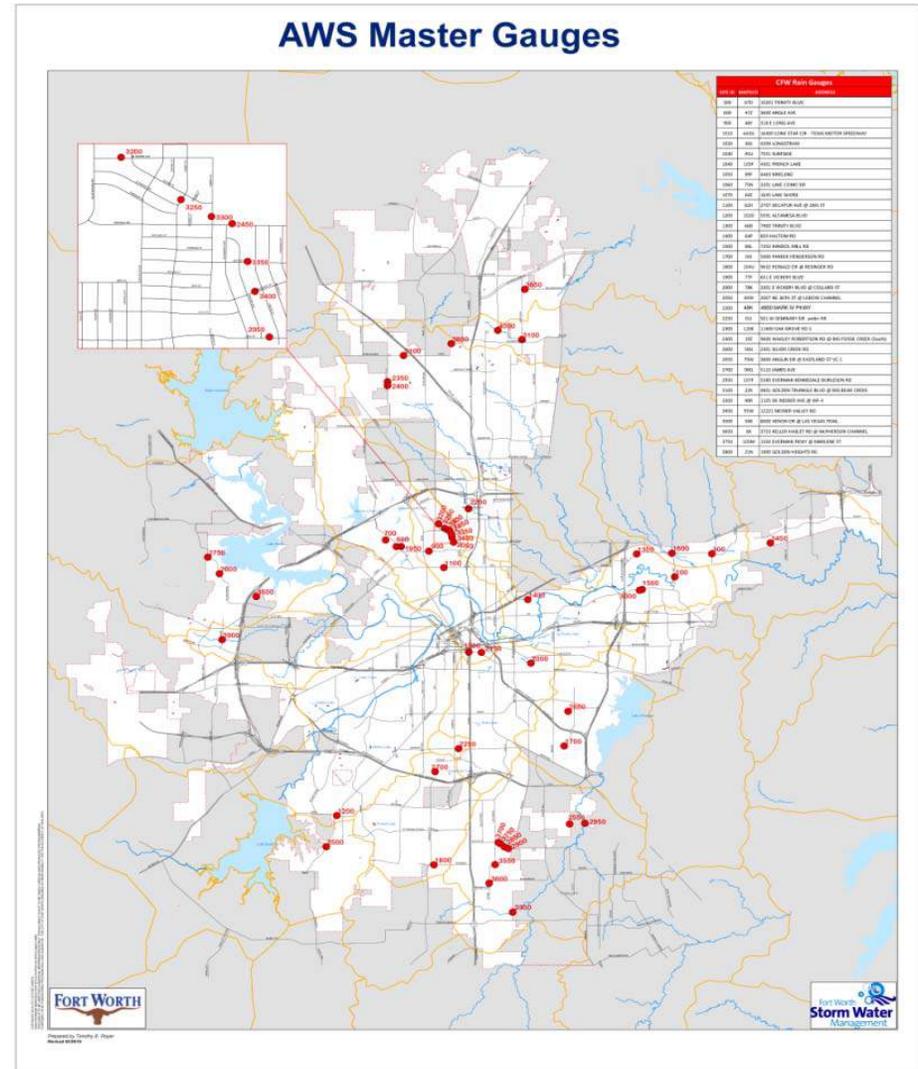


Flood Warning Program – Current Status

- Expanded system includes 53 total high water warning sites.



700 S Collard St.



Overview – How Far We've Come

Pre - 2006	Desired
Flood reduction capital projects – Over \$500 million backlog	Funded capital program (stable funding source) that reduces backlog in a reasonable timeframe
Reactive Maintenance	Proactive, prioritized, scheduled, effective, maintenance program
Incomplete Inventory	Complete inventory and condition assessment of facilities
Planning –Limited studies (5% of City) focused only on water quantity issues	Comprehensive master planning – Setting priorities with cost-effective solutions (including water quality issues)
Design Standards – 1967 era with limited enforcement	Up-to-date standards that protect from flooding & erosion without slowing growth
Outdated equipment/technology	Up-to-date hardware, software, and field equipment
Public Education primarily limited to water quality issues	Effective education/outreach on all aspect of stormwater issues.

Maintenance - Last 10 years

- New technology = work smarter
 - Work Order Management
 - Field deployment of GIS data
 - Automatic Vehicle Locator
- Focused Priorities
 - Improved processes
 - Realigned and focused resources
- Seeking Efficiencies
 - North Service Center
 - 3 Year rolling Maintenance Plan



Maintenance – Current Status

- **Channel Maintenance**

- *170 + miles*
- *~ 25% actively maintained*
- *Rehab/Stabilize/Maintain*
- *400 + culverts*



- **Vegetation Maintenance**

- *Currently 50+ mi of channel/ditches*



- **Inlet Cleaning Program**

- *30,000 + inlets*
- *Clean/inspect 8,000 +/-year*

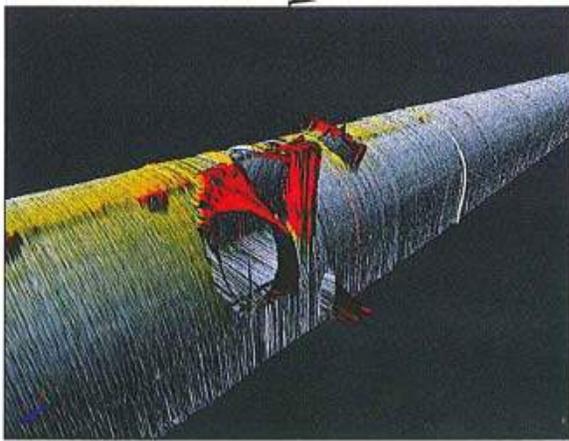


- **Concrete Maintenance**

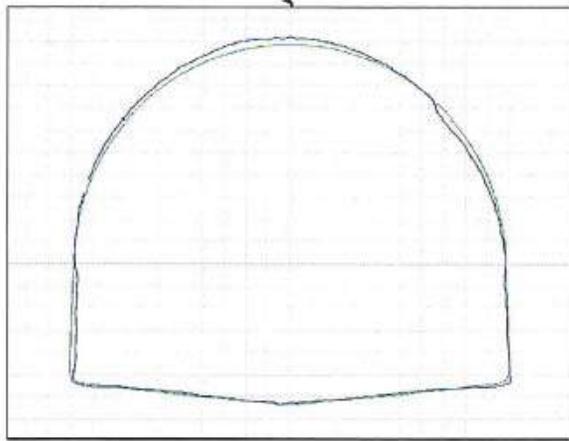
- *Headwalls/pipes/aprons/bank armoring*
- *~ 30% of pipes > 50 years old*

Storm Drain Rehabilitation – Current Status

- Minimal pipe rehabilitation program currently
- Reactive to failures and cave-ins
- Many storm drain pipes have reached or exceeded estimated effective life
- Implementing condition based assessment (video) to further define need



496.7ft 3D Laser Scan - Pipe through soffit, MH, laterals and cracking visible



500.5ft General Observation - Corrosion to 1.7", Debris to 1.4"



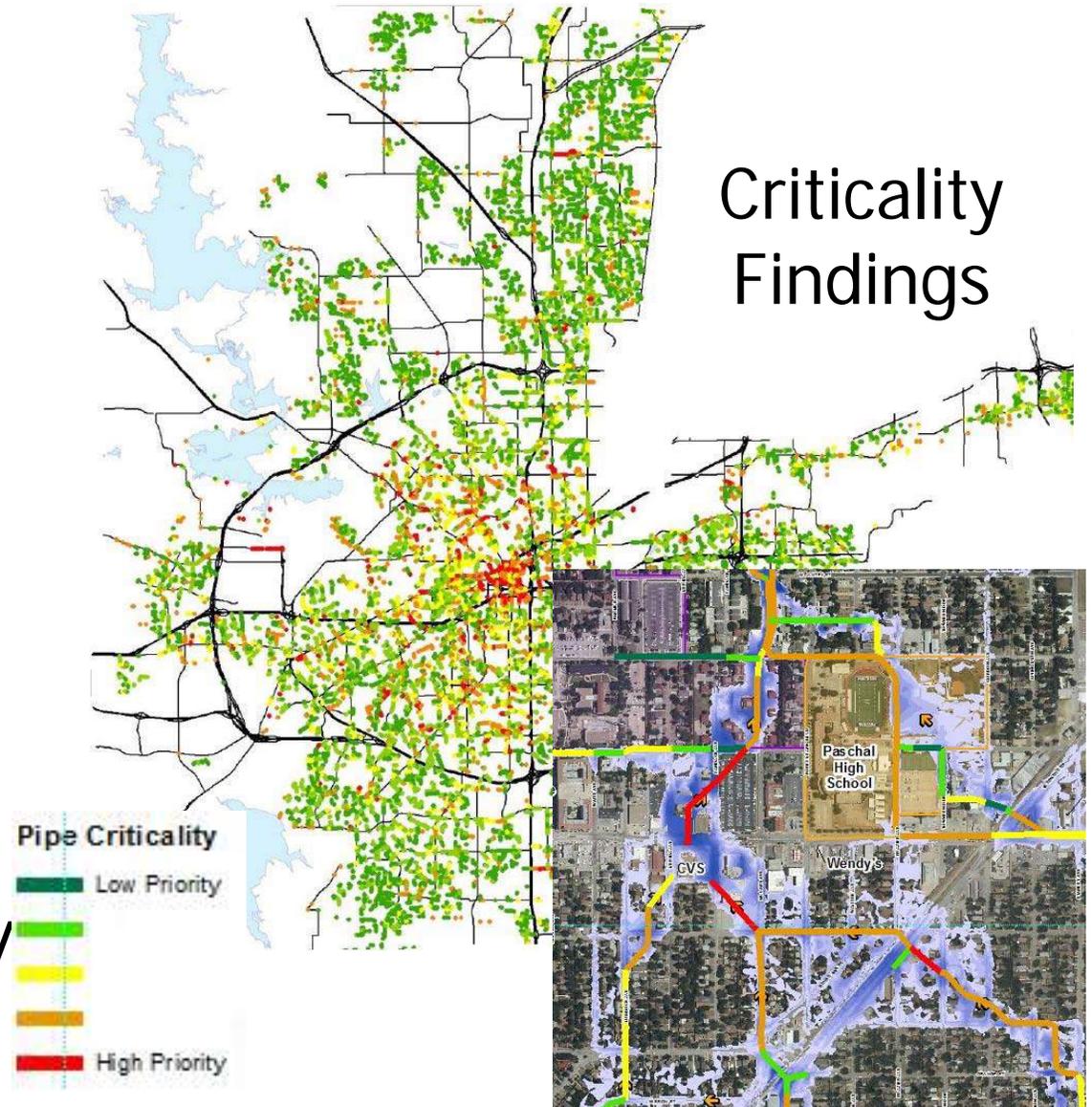
502.9ft Point of Interest - MH, laterals and cracking visible

Overview – How Far We've Come

Pre - 2006	Desired
Flood reduction capital projects – Over \$500 million backlog	Funded capital program (stable funding source) that reduces backlog in a reasonable timeframe
Reactive Maintenance	Proactive, prioritized, scheduled, effective, maintenance program
Incomplete Inventory	Complete inventory and condition assessment of facilities
Planning –Limited studies (5% of City) focused only on water quantity issues	Comprehensive master planning – Setting priorities with cost-effective solutions (including water quality issues)
Design Standards – 1967 era with limited enforcement	Up-to-date standards that protect from flooding & erosion without slowing growth
Outdated equipment/technology	Up-to-date hardware, software, and field equipment
Public Education primarily limited to water quality issues	Effective education/outreach on all aspect of stormwater issues.

Inventory & Condition Assessment

- Complete
 - Storm Drain Inventory
 - Criticality Assessment
- In Progress
 - Storm Drain Condition Assessment
 - Channel Inventory

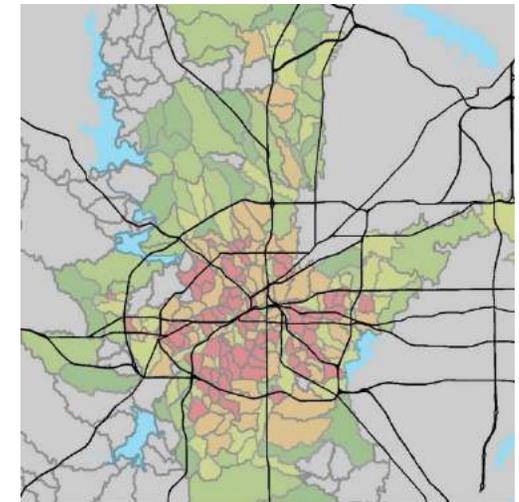
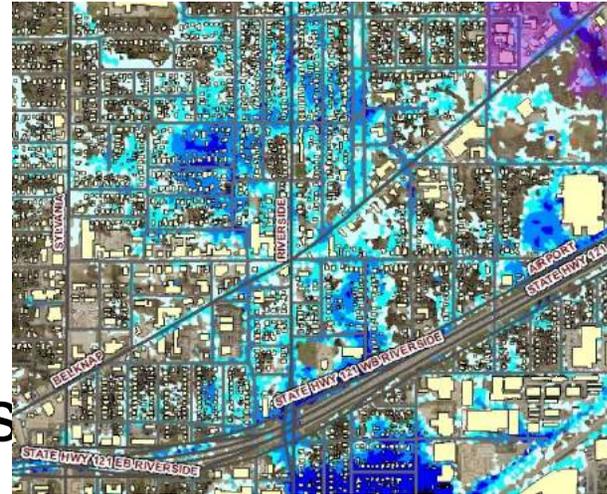


Overview – How Far We've Come

Pre - 2006	Desired
Flood reduction capital projects – Over \$500 million backlog	Funded capital program (stable funding source) that reduces backlog in a reasonable timeframe
Reactive Maintenance	Proactive, prioritized, scheduled, effective, maintenance program
Incomplete Inventory	Complete inventory and condition assessment of facilities
Planning – Limited studies (5% of City) focused only on water quantity issues	Comprehensive master planning – Setting priorities with cost-effective solutions (including water quality issues)
Design Standards – 1967 era with limited enforcement	Up-to-date standards that protect from flooding & erosion without slowing growth
Outdated equipment/technology	Up-to-date hardware, software, and field equipment
Public Education primarily limited to water quality issues	Effective education/outreach on all aspect of stormwater issues.

Planning – Last 10 years

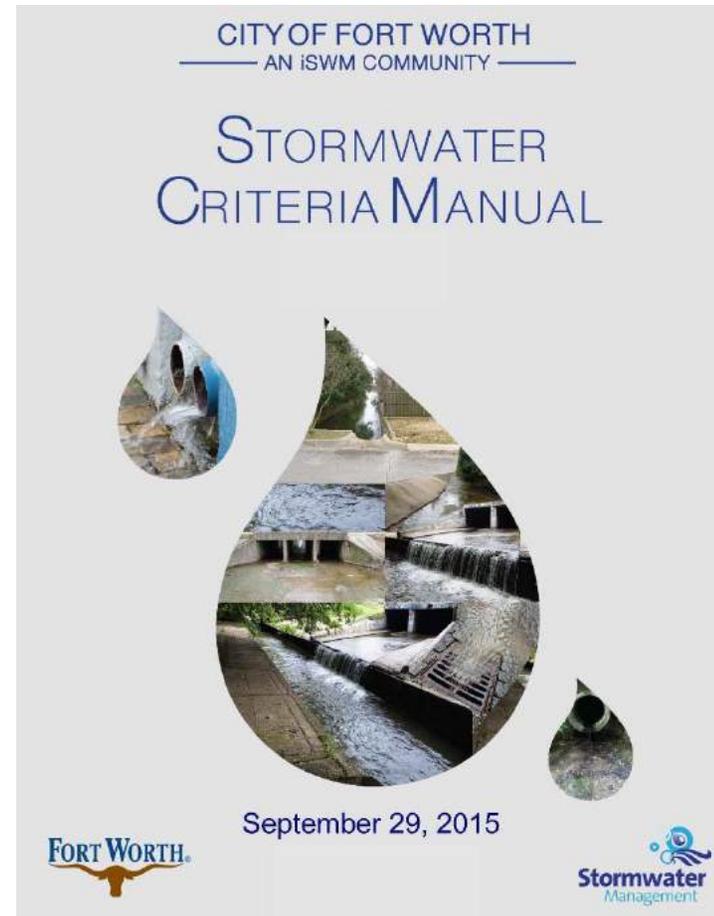
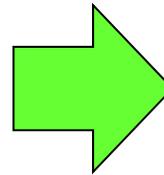
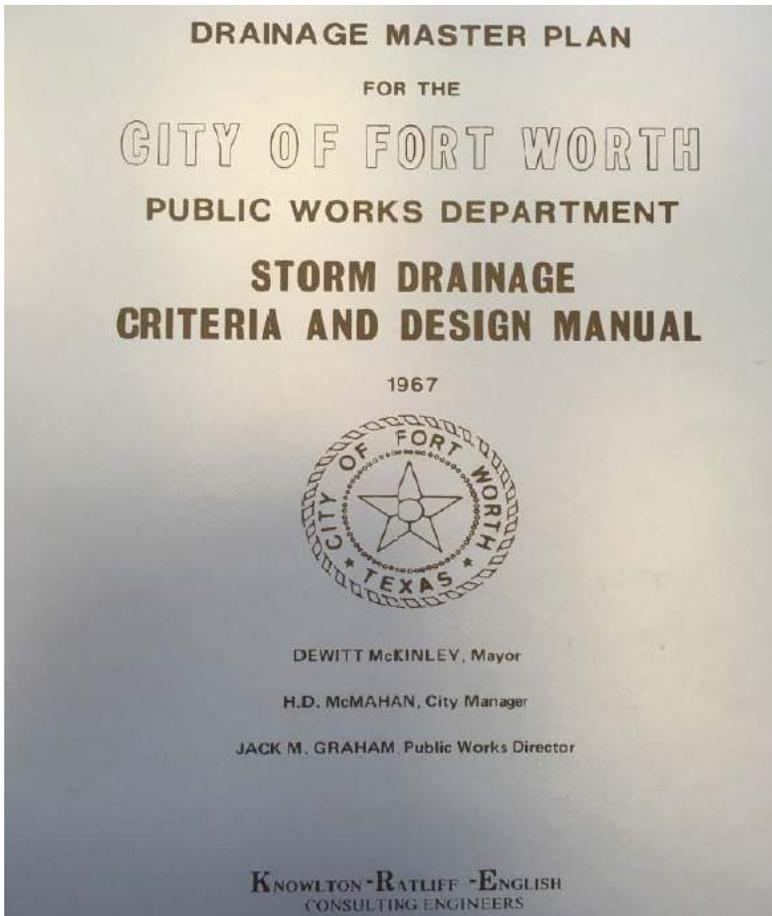
- Citywide Assessments
 - Potential High Water
 - Potential Erosion Hazard
- Engineering Assessments
 - Over 40 watershed assessments
- Citywide Graded Drainage Basins
- Citywide Flood Reduction Project Prioritization (ongoing)
- 16 water quality devices inspected quarterly



Overview – How Far We’ve Come

Pre - 2006	Desired
Flood reduction capital projects – Over \$500 million backlog	Funded capital program (stable funding source) that reduces backlog in a reasonable timeframe
Reactive Maintenance	Proactive, prioritized, scheduled, effective, maintenance program
Incomplete Inventory	Complete inventory and condition assessment of facilities
Planning –Limited studies (5% of City) focused only on water quantity issues	Comprehensive master planning – Setting priorities with cost-effective solutions (including water quality issues)
Design Standards – 1967 era with limited enforcement	Up-to-date standards that protect from flooding & erosion without slowing growth
Outdated equipment/technology	Up-to-date hardware, software, and field equipment
Public Education primarily limited to water quality issues	Effective education/outreach on all aspect of stormwater issues.

Design Standards – Last 10 years



Development Services – Current Status

- Review drainage plans for private development
 - Goals: No Adverse Impact/Don't squelch development
 - 7 full-time employees
 - 2 consultant contracts for 3rd party reviews
 - Over 1500 reviews completed in 2016
 - Average turnaround time per review = 8.7 business days
 - Countless meetings (scheduled and impromptu)/phone calls/e-mails/site visits

Overview – How Far We've Come

Pre - 2006	Desired
Flood reduction capital projects – Over \$500 million backlog	Funded capital program (stable funding source) that reduces backlog in a reasonable timeframe
Reactive Maintenance	Proactive, prioritized, scheduled, effective, maintenance program
Incomplete Inventory	Complete inventory and condition assessment of facilities
Planning –Limited studies (5% of City) focused only on water quantity issues	Comprehensive master planning – Setting priorities with cost-effective solutions (including water quality issues)
Design Standards – 1967 era with limited enforcement	Up-to-date standards that protect from flooding & erosion without slowing growth
Outdated equipment/technology	Up-to-date hardware, software, and field equipment
Public Education primarily limited to water quality issues	Effective education/outreach on all aspect of stormwater issues.

Equipment/Technology

- Equipment and Technology has been significantly improved
 - Accela Asset Management Software
 - Track maintenance work orders
 - Geographic Info System Software
 - Field Tablets
 - Vehicle Locators
 - Maintenance Equipment

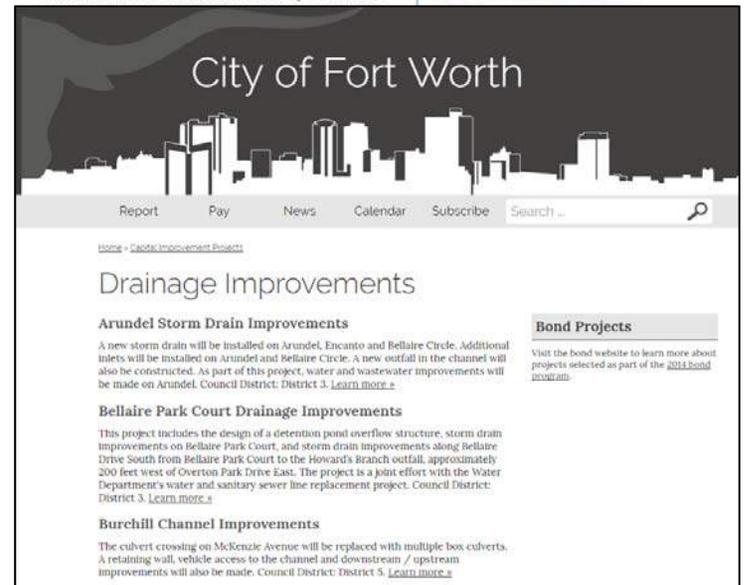
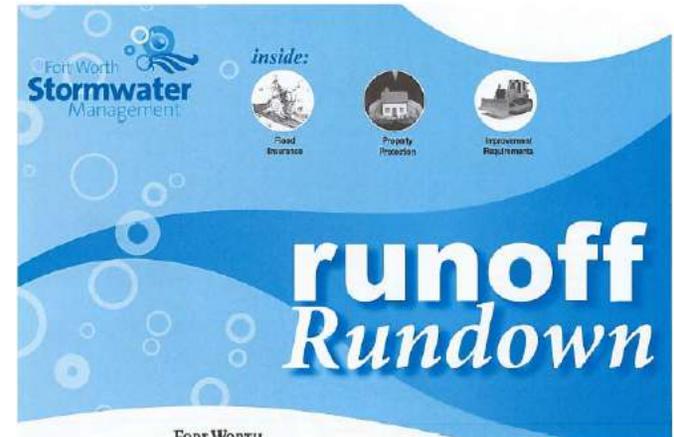


Overview – How Far We've Come

Pre - 2006	Desired
Flood reduction capital projects – Over \$500 million backlog	Funded capital program (stable funding source) that reduces backlog in a reasonable timeframe
Reactive Maintenance	Proactive, prioritized, scheduled, effective, maintenance program
Incomplete Inventory	Complete inventory and condition assessment of facilities
Planning – Limited studies (5% of City) focused only on water quantity issues	Comprehensive master planning – Setting priorities with cost-effective solutions (including water quality issues)
Design Standards – 1967 era with limited enforcement	Up-to-date standards that protect from flooding & erosion without slowing growth
Outdated equipment/technology	Up-to-date hardware, software, and field equipment
Public Education primarily limited to water quality issues	Effective education/outreach on all aspect of stormwater issues.

Public Education

- Newsletters
 - Runoff Rundown Newsletter
 - Direct Mail Newsletters
- Online
 - City Stormwater Website
 - Project specific webpages
 - Online Questionnaires
 - Neighborhood Email Blasts
- Public Meetings
- Social Media Campaigns



Overview – Where We Are Today

Rate-payers

- Average Single Family Residence = \$65/year
- City of Fort Worth organization = \$778,000/year
 - ~ 15 new police officers
- Fort Worth ISD = \$729,000/year
 - ~ 13 new teachers
- Alliance Airport (AA + FEDEX) = \$250,000/year

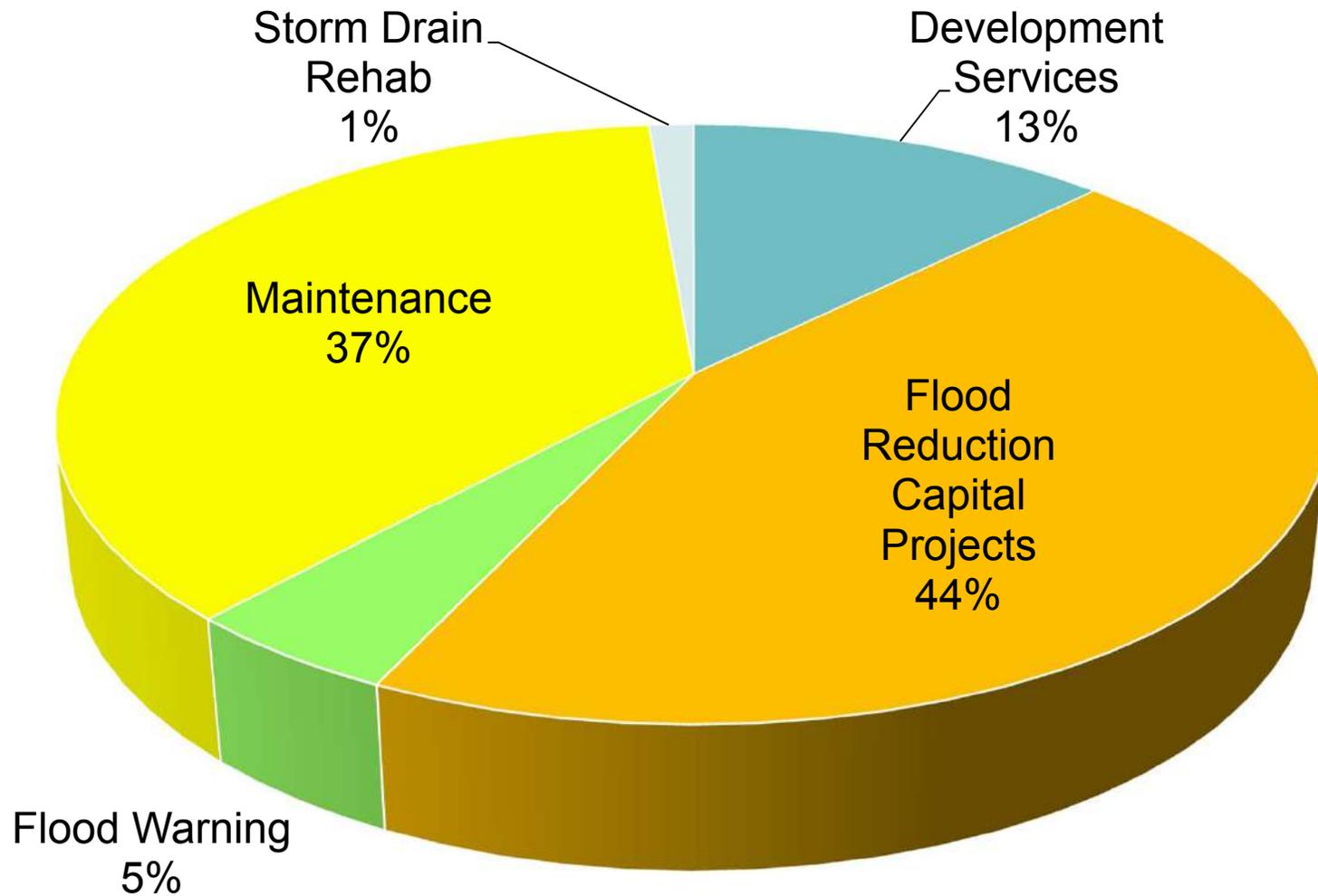
Overview – Where We Are Today

FY 2017 Budget

<u>Service</u>	<u>Budget (\$ millions)</u>
Flood reduction capital projects	\$19.1 (includes \$9.4 for debt service)
Maintenance	\$8.2
Development Services	\$2.8
Storm drain rehabilitation	\$0.3
Flood Warning	\$1.1
Business Support	<u>\$6.6</u>
Total	\$38.1

Overview – Where We Are Today

FY 2017 Discretionary Budget (\$22.1M)



Before this meeting, how familiar were you with the City of Fort Worth Stormwater Program?

- 8% 1. Completely unaware
- 8% 2. Mostly unaware
- 50% 3. Somewhat familiar
- 33% 4. Very familiar

5 Minute Break

Initial Stormwater Program Objectives in 2006

Pre-2006	Desired
Minimal capital program – over \$500 million backlog	Funded capital program (stable funding source) that reduces backlog in a reasonable timeframe
Reactive maintenance	Proactive, prioritized, scheduled, effective, maintenance program
Incomplete inventory	Complete inventory and condition assessment of facilities
Planning – Limited studies (5% of city) focused only on water quantity issues	Comprehensive master planning - Setting priorities with cost-effective solutions (including water quality issues)
Design Standards - 1967 era with limited enforcement	Up-to-date standards that protect from flooding & erosion without slowing growth
Outdated equipment/technology	Up-to-date hardware, software, and field equipment
Public Education primarily limited to water quality issues	Effective education/outreach on all aspects of storm water issues

Stormwater Master Plan Update



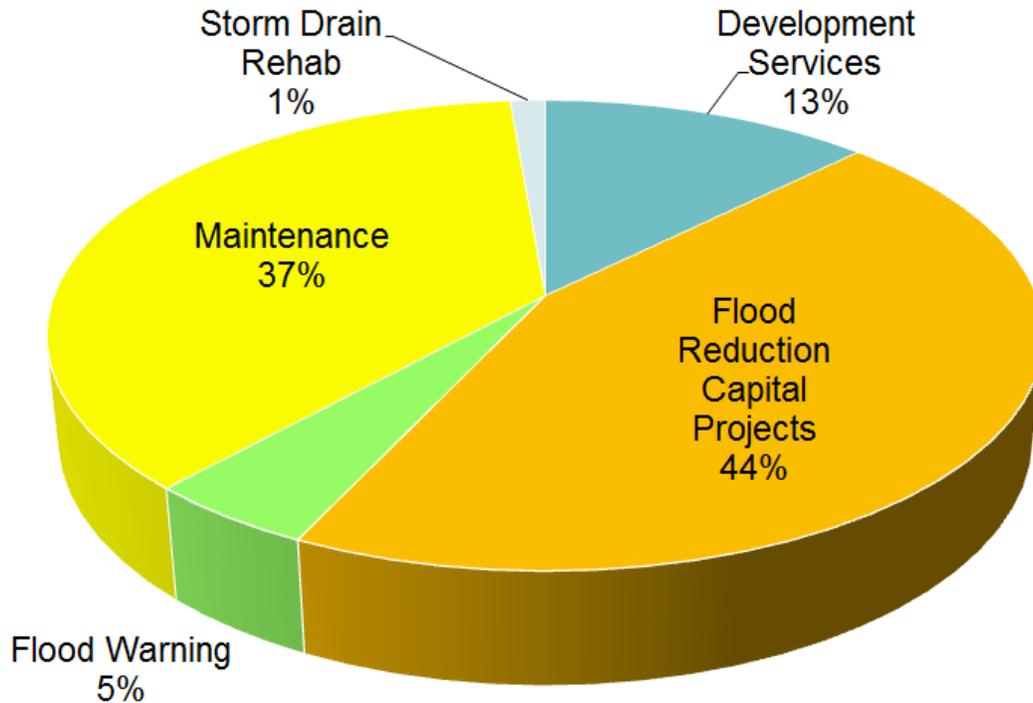
Vision for the Community

- a. Safer from flooding, from poor water quality, from erosion, and from unexpected costs for emergency response and reconstruction efforts**
- b. Neighborhoods and business areas are desirable because of floodplain amenities (such as trails and green space) and protection from the harmful effects of stormwater**
- c. By realizing this vision, additional results have also been achieved:**
 - i. Stormwater policies and actions strike the appropriate balance between the community's risks and benefits**
 - ii. Stormwater issues are well-integrated into the community's awareness & initiatives and partnerships provide community education on these issues**
 - iii. City leadership considers stormwater management to be a valuable program which needs to be funded**
 - iv. Residents and property owners can rely on a predictable program of planning, funding and investment in stormwater management**
 - v. Fort Worth is meeting the regulatory requirements from Federal and State authorities**

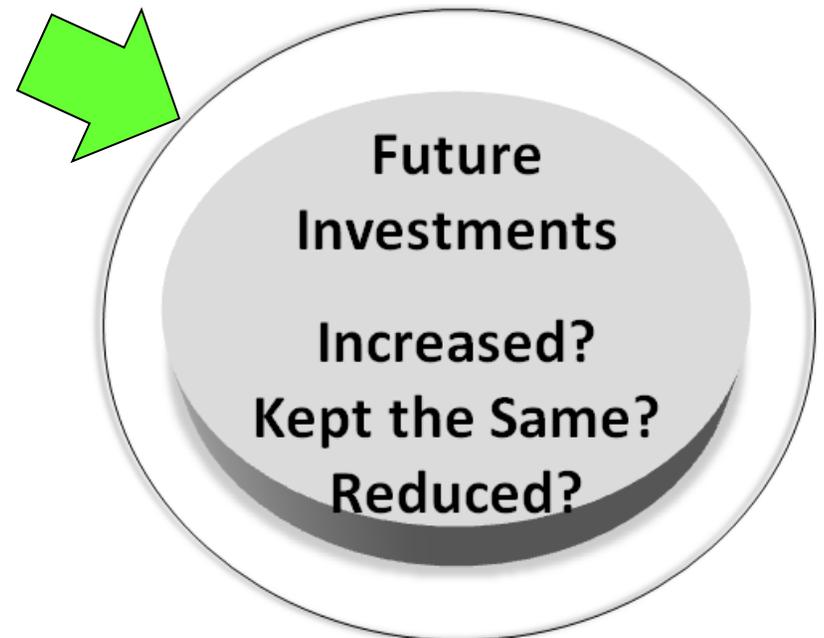
Vision for the Stormwater Program

- a. Resources are assigned to program areas so they are optimally balanced to provide the best possible overall level of service that addresses community needs and priorities**
- b. Prepared, ready to respond and effective in achieving changing objectives**
- c. Strategic, intentional, opportunistic, and proactive**
- d. Well-known and respected resource for expertise, innovation and leadership**
- e. Collaborative**
- f. Partner in achieving others' goals, including plans such as the Floodplain Management Plan and the Local Mitigation Action Plan**

Future Objectives



FY 2017 Discretionary
Budget (\$22.1M)



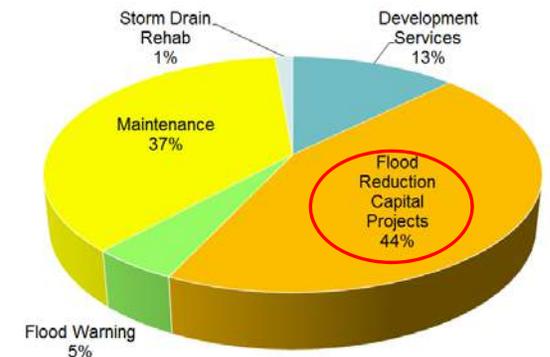
What is the Difference?

- Flood reduction capital projects
- Maintenance
- Storm drain rehabilitation
- Development services
- Flood warning



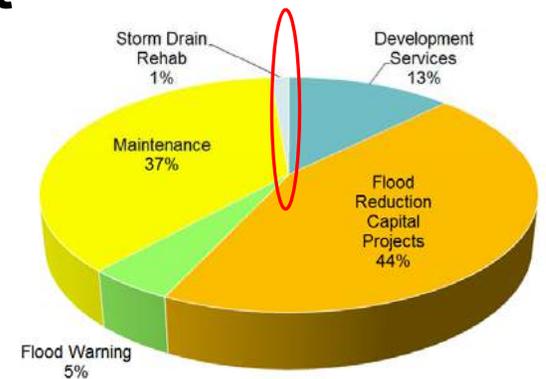
Should the investment in flood reduction capital projects be....

- 10% 1. Reduced a lot
- 0% 2. Reduced a little
- 20% 3. Kept the same
- 20% 4. Increased a little
- 30% 5. Increased a lot
- 20% 6. Not sure



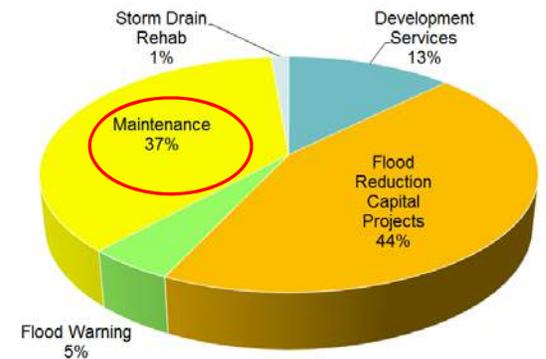
Should the investment in storm drain rehabilitation be

- 0% 1. Reduced a lot
- 0% 2. Reduced a little
- 45% 3. Kept the same
- 18% 4. Increased a little
- 18% 5. Increased a lot
- 18% 6. Not sure



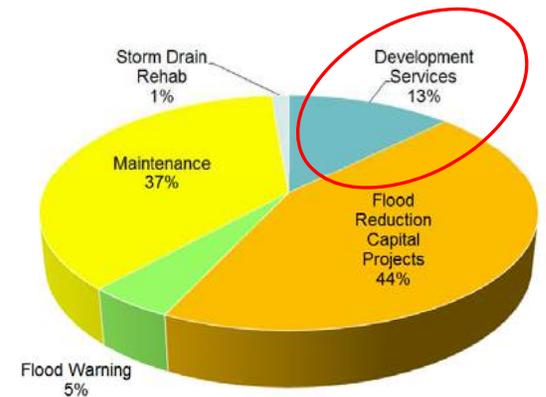
Should the investment in maintenance be

- 9% 1. Reduced a lot
- 0% 2. Reduced a little
- 36% 3. Kept the same
- 36% 4. Increased a little
- 0% 5. Increased a lot
- 18% 6. Not sure



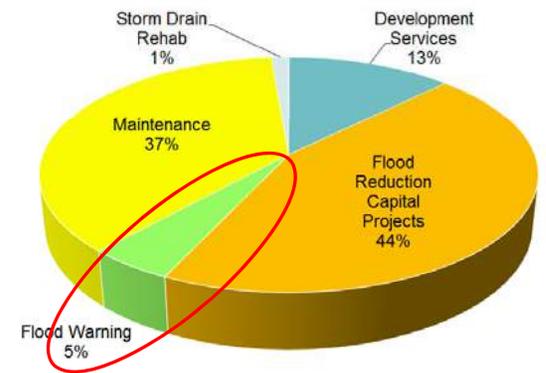
Should the investment in development services be ...

- 11% 1. Reduced a lot
- 11% 2. Reduced a little
- 11% 3. Kept the same
- 44% 4. Increased a little
- 0% 5. Increased a lot
- 22% 6. Not sure



Should the investment in flood warning be ...

- 0% 1. Reduced a lot
- 9% 2. Reduced a little
- 55% 3. Kept the same
- 18% 4. Increased a little
- 0% 5. Increased a lot
- 18% 6. Not sure



Based on achieving the discussed vision, rank these service areas in order of importance. (Final)

A. Flood Reduction Capital
Projects Storm Drain
Rehab Maintenance Development
Services Flood Warning



(1 = most important, 5 = least important)

Communication Plan

- Stakeholder group that is open to the public
- Website
- Emails to interested people
- Next Door posting to inform neighborhoods

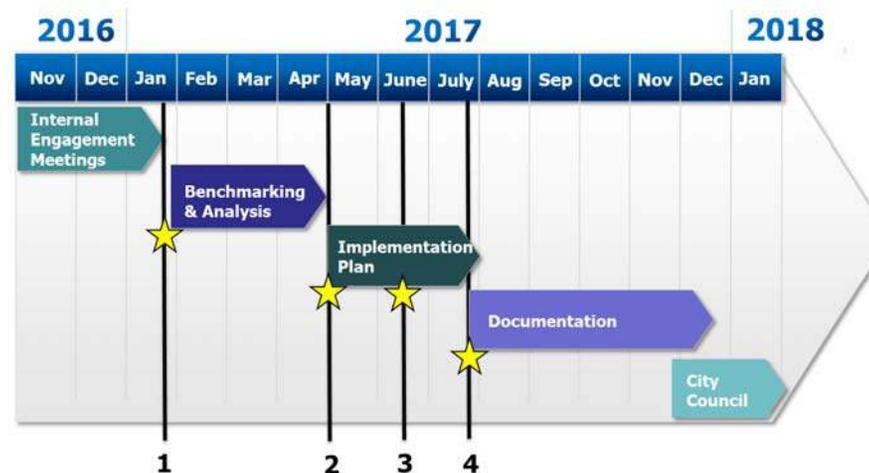


Discussion- Are these communication tools adequate?

Stormwater Master Plan Update

Public Discussion & Questions

<http://fortworthtexas.gov/stormwaterMasterPlanUpdate/>



Approximate Stakeholder Engagement Meetings ★

Greg Simmons – Gregory.Simmons@FortWorthTexas.gov

Chris Johnson – Christopher.Johnson@FortWorthTexas.gov

Jennifer Dyke – Jennifer.Dyke@FortWorthTexas.gov

**Stormwater Master Plan Update
Summary of Stakeholder Feedback
Meeting 1 - January 26, 2017**

Meeting Purpose: Provide a background on the Stormwater Program, set the context, and provide an overview of the master planning update

Stakeholders in Attendance

Roxanne Martinez

Si Rowlett

Lee Nicol

Gary Havener

Howard Rattliff

Rusty Fuller

Aric Head

David Motheral

Bill Schur

Rafael McDonnell

Rick Kubes

Patrick G. Clay

La Wayne Hauser

City of Fort Worth Staff, Master Plan Consultant, Halff Associates, and Public- sign in sheets available

Questions brought up by stakeholders during the presentation and discussed at the meeting:

1. What do you mean by maintained channels?
2. What types of channels are maintained?
3. Are the flooding issues primarily in developed areas?
4. Will the Trinity River Vision Project help with the stormwater issues?
5. How much acreage is included in remaining capital project areas?
6. Is there a difference between fixing something and mitigating it?
7. Are you sharing the engineering assessments and prioritizations with other departments and decision makers like parks, planning, etc.?
8. Can you give an idea of what is involved in an engineering study and what are some actions that have been initiated as a result of these studies?
9. What do you mean by development services?
10. What do you call your planning department?

Questions and feedback regarding the vision for the Fort Worth community and Stormwater Program:

1. How does poor water quality play into the vision?
2. Vision seems to lack aspirational goals and vision. Need something to get behind like water is a valuable resource and something that we can rally behind.

3. Need to integrate our streams and organizations with current funding to push this vision.
4. Would like to hear more about quality of life and overall goals. It is understood there is better quality of life when you don't have erosion.
5. From development perspective, inside the city make sure we are taking care of these problems. The last phase of development gets to be extremely expensive. The iSWM development works really well with large areas outside of the loop. Recognize it is almost punitive on redevelopment or smaller developments.
6. These seem more like goals than vision. Vision needs to be higher level.
7. There are a lot of places that already have streets and sewers. We are losing greenspace and farm land as the city is becoming more developed. There are lots of rundown and vacant buildings that could be renewed or redeveloped. We can't go back. The redevelopment of older areas could be an opportunity and could have an impact on property values.
8. What is stormwater telling mayor, council, etc.? We need more green space returning water to the ground.
9. Collaborative needs to be expanded to include internal and external collaboration.
10. Collaboration and partnerships are the same. Could be collapsed.
11. Be clear about the negative impacts of poor drainage.
12. We assume city management and council are on top of everything. Where is leadership on this? How aware is city leadership of stormwater? Do you have their respect? Do they understand how serious the stormwater issues are?
13. This and previous slide are not visions, these are strategic goals. No idea how you can achieve your goal with this level of detail. Need to clean up verb tenses.
14. Need to identify opportunity. Come up with metrics. For example, measure/quantify the problem like reducing flooded area by a certain percentage with galvanized resources. Get some of the mushy/mushy out of the way. Address the opportunities ahead of us.

Questions and feedback regarding the discussion on program investment:

1. What do you need to allocate to storm drain rehab to meet your goal? If I knew how much you needed for rehab then I could make a better decision. For instance, rehab might just need a little more investment to make big impact.
2. I am not comfortable with question. I would spend capital budget on reducing debt service so that we could issue more debt and fix some problems.
3. Don't want to pass up opportunity to fix an issue now when it is less expensive than it will be in the future.
4. In tonight's meeting, we only talked about residential and businesses paying fees. Is there ever an opportunity to utilize grant funds? Need to show how it's easier to develop new areas than older areas. Maybe city can bring federal funds to rehab.
5. Is there ever an opportunity for general fund budget to be spent on stormwater efforts?

Summary of feedback received on the hard copy comment forms passed out during the meeting:

See separate handout

Summary of feedback from electronic polling questions asked to stakeholders during the meeting:

See separate handout

Meeting Conclusions:

1. Conduct an informal follow-up meeting with the stakeholders to discuss outstanding questions related to the background and context of the Stormwater Program
2. Clarify the mission and vision of the Stormwater Program and how it supports the City Vision and Strategic Goals
3. Provide an overview of the external stakeholder engagement process and the focus for future stakeholder meetings
4. Include recommendations from City staff for future strategies and policies for stakeholder consideration
5. Develop a list of key questions and answers that can be added to the website
6. Record the background information presented at the stakeholder meeting and add it to the website for reference and to give background to others who may become involved later in the process

STAKEHOLDERS



PROJECT MEETING SIGN-IN

Stormwater Master Plan Mtg #1 • 01/26/2017 • 6:00 • Hazel Harvey Peace Center

Name	Address	ZIP	Phone	Email	How did you hear about this meeting? (Email, Phone, Nextdoor, other)
St Rowlett	2220 Corleton	76107	817-269-7826	✓	
Lee Nicol	3882 South Hills ^{Circle}	76109	817 308 5929	✓	
William B. ...	9200 Bailey	76107	817 880 4167		
Rick Kubies	6801 River PK Cir	76116	817 726 9695		
GARY HAVENER	2501 Museum Way		817 239 1717		
Rusty Fuller	5317 Alta Loma Dr	76244	817 741 3378	-	
LaRayne Zaiser	6001 Monterey	76112	3907	✓	

Topic: _____ Title: _____
 Location: _____ Location: _____
 Date: _____ Date: _____



PUBLIC



PROJECT MEETING SIGN-IN

Stormwater Master Plan Mtg #1 • 01/26/2017 • 6:00 • Hazel Harvey Peace Center

Name	Address	ZIP	Phone	Email	How did you hear about this meeting? (Email, Phone, Nextdoor, other)
Wilton Schur	912 N Bailey Ave	76107	817 880 4167	wmschur@smbell.net	Email
Brenda Helmer	4900 Birchman Ave	76107	(817) 371-5800	BHelmer@SBGLOBAL.NET	
CHRISTINA PATOSKI	4237 EL CAMPO	76107	817 738 0380	CHRISTINA.PATOSKI@EMILYLINK.NET	
Rick Chevalier	1008 Crockett Dr	76028	817-551-6129	rick.chevalier@gmail.com	Nextdoor
DON SANDERSON	9025 WEST WOOD STREET	76179	817 235 5297	CD SANDERSON@AOL.COM	
S. ELBANKS	3251 W. FULLER AVE	76133	817/781-7063	ABCERIODAOL.COM	N/A
Mary Kelleher	7901 Randol Mill	76120	817 880 5419	mkk4263@gmail.com	
Curtis Beitel	6813 Toledo Ct	76133	817 263 9245	curtis.beitel@hdrinc.com	Next Door
PAUL E. HILK		76133	817-292-8857		N/A

Topic: _____
 Location: _____
 Date: _____



PUBLIC



PROJECT MEETING SIGN-IN

Stormwater Master Plan Mtg #1 • 01/26/2017 • 6:00 • Hazel Harvey Peace Center

Name	Address	ZIP	Phone	Email	How did you hear about this meeting? (Email, Phone, Nextdoor, other)
Veronica Villegas	1330 6th Ave	76104	817 642-1609	valanzvillegas@gmail.com	Other
Bart Hines	3720 Winifred	76133	817 683-2191	bhines@lrv inc.com	email
Mikel Wilkins				M.Wilkins@evanscounty.com	
Kelly Dillard	4600 Cloudview Rd	76109	817 808 4139	kdd@treeze.com	Project Team
Prudencio Bevis	3208 Tangwood Trail	76109			nextdoor has
Ryan Hill	1600 W 7th St	76008	817.810.0696	Ryan.Hill@seppllc.com	
Jacob Wadley	1600 W 7th St	76008	817.810.0696	Jacob.Wadley@seppllc.com	
David Thomas	2509 Merrick	76107	817 806 5500	david@bridgeeast.com	
Linda Cozzon	4017 Anita Ave	76109	817 991 5748	cozzl@earthlink.net	

*CFW

Topic: _____
 Location: _____
 Date: _____



STAFF



PROJECT MEETING SIGN-IN

Stormwater Master Plan Mtg #1 • 01/26/2017 • 6:00 • Hazel Harvey Peace Center

Name	Address	ZIP	Phone	Email	How did you hear about this meeting? (Email, Phone, Nextdoor, other)
CHRIS JOHNSON				christopher.johnson@fortworthtexas.gov	
Lisa Biggs			92446		Nextdoor
CLAIR DAN					
Mike Bennett			7891		
Alex Rivens			2782		
LINDA YOUNG			2485	linda.young@fortworthtexas.gov	
Vicente Elias			5191	Vicente.Elias@FortWorthTexas.gov	
Jennifer Dyke			2714		
Debbie Wilhelm			2481	Debbie.Wilhelm@fortworthtexas.gov	
KIRAN KONDURU			7598	Kiran.Konduru@fortworthtexas.gov	
Avan Cadem			5196		
Michael Curran					

Topic: _____
 Location: _____
 Date: _____



STAFF



PROJECT MEETING SIGN-IN

Stormwater Master Plan Mtg #1 • 01/26/2017 • 6:00 • Hazel Harvey Peace Center

Name	Address	ZIP	Phone	Email	How did you hear about this meeting? (Email, Phone, Nextdoor, other)
Cannon Henry					
* Steve Zubovics					
Stephen Nichols					
Eric Fladager			-8011		
Jackie Parks			8179296099		
Linda Sterne					
Veronica Carneal					
* Veronica Villegas					
Ranjan Muthala			x 7919		
Veronica Carneal					
T. LYNN LOVELL					

Topic: _____
 Location: _____
 Date: _____





Capital Improvement Project

Stormwater Master Plan

Comment Card

Name: Howard Rattliff Date: 1/26/2016

Email Address: rattlh@yahoo.com

Organization: COMPLIANS ETC LLC

Address: _____

City, State, ZIP: _____

Telephone #: 682-365-6369
(include area code)

Check One:

Yes, I want to speak on this issue.

No, I do not want to speak, but I would like City Staff to see my comments:

Comment: Use AN ASPIRATION GOAL such AS
Reduce storm water Run off for new
development by 50% by 2027.

- Do to do this you will have ^{a grant}
sensitive for FW Development model.

- Develop new standards for FW that result
in less run-off / techniques (all cost effective)

- Provide incentives for developers that adopt
and implement. Recognize their work.

PLEASE RETURN TO CITY STAFF
Or Mail to: Jennifer Dyke, City of Fort Worth, TPW/Stormwater Management, 600 Texas St. Fort Worth, TX 76102

Measure the results of sample developments
and see if results are improving.



Capital Improvement Project

Stormwater Master Plan

Comment Card

Name: Brenda Helmer Date: _____

Email Address: BDHelmer@SBCGLOBAL.NET

Organization: Arlington Heights Neighborhood Assn. (AHNA)

Address: 4900 BIRCHMAN

City, State, ZIP: FW 76107

Telephone #: (8) 3715800
(include area code)

Check One:

- Yes, I want to speak on this issue.
- No, I do not want to speak, but I would like City Staff to see my comments:

Comment: _____

Show me the money.

If not now, when?

"Mitigate" v. Fix -

PLEASE RETURN TO CITY STAFF

Or Mail to: Jennifer Dyke, City of Fort Worth, TPW/Stormwater Management, 200 Texas St. Fort Worth, TX 76102



Capital Improvement Project

Stormwater Master Plan

Comment Card

Name: William Schur Date: 1-26-2017
 Email Address: Wmschur@subek.wt
 Organization: Crestwood Association
 Address: 912 N Bailey Ave
 City, State, ZIP: FtA Worth TX 76107-1012
 Telephone #: (817) - 880 - 4167
(include area code)

Check One:

- Yes, I want to speak on this issue.
- No, I do not want to speak, but I would like City Staff to see my comments:

Comment: Stormwater diversion onto smaller lots -
under 1 acre; failure to enforce permit
requirement by builders

(Lesser priority to the City than the
big projects but important to property
owners in neighborhoods being redeveloped

PLEASE RETURN TO CITY STAFF

Or Mail to: Jennifer Dyke, City of Fort Worth, TPW/Stormwater Management, 200 Texas St. Fort Worth, TX 76102



Stormwater Management Program Master Plan Update 1/26/17

PUBLIC 817-880-4167 COMMENTER

1. Before this meeting, did you know the City of Fort Worth had a stormwater fee?

- 1. No, unfamiliar with the utility fee
- 2. Yes, but did not know the amount
- 3. Yes, I know the exact fee that I pay

2. Before this meeting, how familiar were you with the City of Fort Worth Stormwater Program?

- 1. Completely unaware
- 2. Mostly unaware
- 3. Somewhat familiar
- 4. Very familiar

3. Should the investment in flood reduction capital projects be....

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

4. Should the investment in storm drain rehabilitation be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

I have not given sufficient thought to the relative priorities for our city - do not agree that benchmarking with communities not comparable to our provider much guidance



5. Should the investment in maintenance be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot

If you wish, briefly note why:

6. Not sure

6. Should the investment in development services be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

The scope of development services is much too restrictive - entire neighborhoods are developed piecemeal and stormwater issues are not, in my opinion, adequately addressed in changing neighborhoods being redeveloped on a lot-by-lot basis.

7. Should the investment in flood warning be.....

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot

If you wish, briefly note why:

I would want to see statistics before reaching a conclusion

6. Not sure

8. Based on achieving the discussed vision, rank these service areas in order of importance.

(1= most important, 5 = least important)

- 1 A. Flood Reduction Capital Projects
- 4 B. Storm Drain Rehabilitation
- 3 C. Maintenance
- 2 D. Development Services
- 5 E. Flood Warning



5. Should the investment in maintenance be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

6. Should the investment in development services be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

7. Should the investment in flood warning be.....

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

8. Based on achieving the discussed vision, rank these service areas in order of importance.

(1= most important, 5 = least important)

- 4 1 A. Flood Reduction Capital Projects
- 3 2 B. Storm Drain Rehabilitation
- 3 3 C. Maintenance
- 2 4 D. Development Services
- 5 5 E. Flood Warning



1. Before this meeting, did you know the City of Fort Worth had a stormwater fee?

- 1. No, unfamiliar with the utility fee
- 2. Yes, but did not know the amount
- 3. Yes, I know the exact fee that I pay

2. Before this meeting, how familiar were you with the City of Fort Worth Stormwater Program?

- 1. Completely unaware
- 2. Mostly unaware
- 3. Somewhat familiar
- 4. Very familiar

3. Should the investment in flood reduction capital projects be....

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

4. Should the investment in storm drain rehabilitation be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:



5. Should the investment in maintenance be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

6. Should the investment in development services be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

7. Should the investment in flood warning be.....

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

8. Based on achieving the discussed vision, rank these service areas in order of importance.

(1= most important, 5 = least important)

- 1 A. Flood Reduction Capital Projects
- 3 B. Storm Drain Rehabilitation
- 2 C. Maintenance
- 4 D. Development Services
- 5 E. Flood Warning



Stormwater Management Program Master Plan Update 1/26/17

1. Before this meeting, did you know the City of Fort Worth had a stormwater fee?

- 1. No, unfamiliar with the utility fee
- 2. Yes, but did not know the amount
- 3. Yes, I know the exact fee that I pay

2. Before this meeting, how familiar were you with the City of Fort Worth Stormwater Program?

- 1. Completely unaware
- 2. Mostly unaware
- 3. Somewhat familiar
- 4. Very familiar

3. Should the investment in flood reduction capital projects be....

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

4. Should the investment in storm drain rehabilitation be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:



1. Before this meeting, did you know the City of Fort Worth had a stormwater fee?

- 1. No, unfamiliar with the utility fee
- 2. Yes, but did not know the amount
- 3. Yes, I know the exact fee that I pay

2. Before this meeting, how familiar were you with the City of Fort Worth Stormwater Program?

- 1. Completely unaware
- 2. Mostly unaware
- 3. Somewhat familiar
- 4. Very familiar

3. Should the investment in flood reduction capital projects be....

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

4. Should the investment in storm drain rehabilitation be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:



5. Should the investment in maintenance be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

6. Should the investment in development services be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

7. Should the investment in flood warning be.....

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

8. Based on achieving the discussed vision, rank these service areas in order of importance.

(1= most important, 5 = least important)

- 3 A. Flood Reduction Capital Projects
- 5 B. Storm Drain Rehabilitation
- 4 C. Maintenance
- 3 D. Development Services
- 1 E. Flood Warning



1. Before this meeting, did you know the City of Fort Worth had a stormwater fee?

- 1. No, unfamiliar with the utility fee
- 2. Yes, but did not know the amount
- 3. Yes, I know the exact fee that I pay

2. Before this meeting, how familiar were you with the City of Fort Worth Stormwater Program?

- 1. Completely unaware
- 2. Mostly unaware
- 3. Somewhat familiar
- 4. Very familiar

3. Should the investment in flood reduction capital projects be....

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

4. Should the investment in storm drain rehabilitation be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:



Stormwater Management Program Master Plan Update 1/26/17

5. Should the investment in maintenance be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

6. Should the investment in development services be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

7. Should the investment in flood warning be.....

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

8. Based on achieving the discussed vision, rank these service areas in order of importance. (1= most important, 5 = least important)

- 1 A. Flood Reduction Capital Projects
- 2 B. Storm Drain Rehabilitation
- 3 C. Maintenance
- 4 D. Development Services
- 5 E. Flood Warning



1. Before this meeting, did you know the City of Fort Worth had a stormwater fee?

- 1. No, unfamiliar with the utility fee
- 2. Yes, but did not know the amount
- 3. Yes, I know the exact fee that I pay

2. Before this meeting, how familiar were you with the City of Fort Worth Stormwater Program?

- 1. Completely unaware
- 2. Mostly unaware
- 3. Somewhat familiar
- 4. Very familiar

3. Should the investment in flood reduction capital projects be....

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

- need more debt financing for this task.
 - investigate impact fees for storm water rev.
 - We need to understand priority. Discuss benefit cost ratio. Biggest bang for the buck.

4. Should the investment in storm drain rehabilitation be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

Increased a lot. If you have facilities 100yr old + decay, we need to protect our current investment.



Stormwater Management Program Master Plan Update 1/26/17

5. Should the investment in maintenance be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

need more consultants
to help

6. Should the investment in development services be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

keep same or ~~increase~~ need more consultant or hire staff - Pending development (impact fee pay for consultant review)

7. Should the investment in flood warning be.....

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

keep same

8. Based on achieving the discussed vision, rank these service areas in order of importance.

(1= most important, 5 = least important)

- 1 A. Flood Reduction Capital Projects
- 2 B. Storm Drain Rehabilitation
- 3 C. Maintenance
- 4 D. Development Services
- 5 E. Flood Warning



1. Before this meeting, did you know the City of Fort Worth had a stormwater fee?

- 1. No, unfamiliar with the utility fee
- 2. Yes, but did not know the amount
- 3. Yes, I know the exact fee that I pay

2. Before this meeting, how familiar were you with the City of Fort Worth Stormwater Program?

- 1. Completely unaware
- 2. Mostly unaware
- 3. Somewhat familiar
- 4. Very familiar

3. Should the investment in flood reduction capital projects be....

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

4. Should the investment in storm drain rehabilitation be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:



5. Should the investment in maintenance be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

6. Should the investment in development services be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

7. Should the investment in flood warning be.....

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

8. Based on achieving the discussed vision, rank these service areas in order of importance.

(1= most important, 5 = least important)

- 2 A. Flood Reduction Capital Projects
- 1 B. Storm Drain Rehabilitation
- 3 C. Maintenance
- 4 D. Development Services
- 5 E. Flood Warning



1. Before this meeting, did you know the City of Fort Worth had a stormwater fee?

- 1. No, unfamiliar with the utility fee
- 2. Yes, but did not know the amount
- 3. Yes, I know the exact fee that I pay

2. Before this meeting, how familiar were you with the City of Fort Worth Stormwater Program?

- 1. Completely unaware
- 2. Mostly unaware
- 3. Somewhat familiar
- 4. Very familiar

3. Should the investment in flood reduction capital projects be....

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

4. Should the investment in storm drain rehabilitation be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:



Stormwater Management Program Master Plan Update 1/26/17

5. Should the investment in maintenance be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

6. Should the investment in development services be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

7. Should the investment in flood warning be.....

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

**8. Based on achieving the discussed vision, rank these service areas in order of importance.
(1= most important, 5 = least important)**

- 2 A. Flood Reduction Capital Projects
- 4 B. Storm Drain Rehabilitation
- 3 C. Maintenance
- 1 D. Development Services
- 5 E. Flood Warning



1. Before this meeting, did you know the City of Fort Worth had a stormwater fee?

- 1. No, unfamiliar with the utility fee
- 2. Yes, but did not know the amount
- 3. Yes, I know the exact fee that I pay

2. Before this meeting, how familiar were you with the City of Fort Worth Stormwater Program?

- 1. Completely unaware
- 2. Mostly unaware
- 3. Somewhat familiar
- 4. Very familiar

3. Should the investment in flood reduction capital projects be....

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

4. Should the investment in storm drain rehabilitation be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:



5. Should the investment in maintenance be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

6. Should the investment in development services be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

7. Should the investment in flood warning be.....

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot
- 6. Not sure

If you wish, briefly note why:

8. Based on achieving the discussed vision, rank these service areas in order of importance.

(1= most important, 5 = least important)

- 1 A. Flood Reduction Capital Projects
- 3 B. Storm Drain Rehabilitation
- 2 C. Maintenance
- 4 D. Development Services
- 5 E. Flood Warning



1. Before this meeting, did you know the City of Fort Worth had a stormwater fee?

- 1. No, unfamiliar with the utility fee
- 2. Yes, but did not know the amount
- 3. Yes, I know the exact fee that I pay

2. Before this meeting, how familiar were you with the City of Fort Worth Stormwater Program?

- 1. Completely unaware
- 2. Mostly unaware
- 3. Somewhat familiar
- 4. Very familiar

3. Should the investment in flood reduction capital projects be....

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot

If you wish, briefly note why:

- 6. Not sure

4. Should the investment in storm drain rehabilitation be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot

If you wish, briefly note why:

- 6. Not sure



5. Should the investment in maintenance be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot

If you wish, briefly note why:

6. Not sure

6. Should the investment in development services be

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot

If you wish, briefly note why:

6. Not sure

7. Should the investment in flood warning be.....

- 1. Reduced a lot
- 2. Reduced a little
- 3. Kept the same
- 4. Increased a little
- 5. Increased a lot

If you wish, briefly note why:

6. Not sure

8. Based on achieving the discussed vision, rank these service areas in order of importance.
(1= most important, 5 = least important)

- 1 A. Flood Reduction Capital Projects
- 2 B. Storm Drain Rehabilitation
- 3 C. Maintenance
- 4 D. Development Services
- 5 E. Flood Warning

EXTERNAL STAKEHOLDER ENGAGEMENT

STORMWATER MANAGEMENT PROGRAM MASTER PLAN



- May 16, 2017 - Stakeholder Meeting 2 Open to Public



Stormwater Management Program Master Plan Update

External Stakeholder Meeting 2

May 16, 2017

Presented by:

Jennifer Dyke – Transportation & Public Works Dpt. /Stormwater, Senior Planner

Ben Pylant – Halff Associates, Inc.

Karen Walz – Strategic Community Solutions LLC



Agenda

- Background & Peer community review (6:00 – 6:15)
- Focused discussion on “big 4” topics
 - Local floodplains (6:15 – 6:45)
 - Private property channel erosion policy (6:45 – 7:05)
 - Voluntary buyout program (7:05 – 7:30)
 - Development oversight - infill, cumulative impacts, etc. (7:30 – 7:55)
- Verbal public comment – (if time permits)
 - Please use comment forms for additional written comments

Background





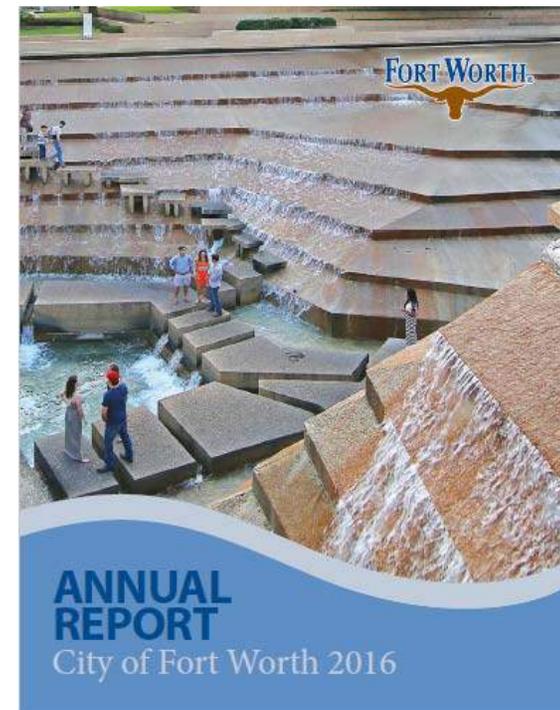
Fort Worth Mission & Vision

Mission

Working together to build a strong community

Vision

...be the most livable and best managed city in the country





Fort Worth Strategic Goals

- Be the Nation's Safest City
- Improve Mobility and Air Quality
- Create and Maintain a Clean & Attractive City
- Strengthen Economic Base, Develop Workforce, Create Quality Jobs
- Promote Orderly and Sustainable Development





Stormwater Mission

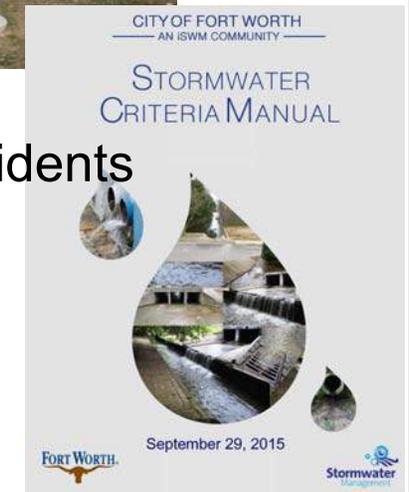
Protect people and property from harmful stormwater runoff





Overview – What we do

- Maintain our stormwater infrastructure
- Warn residents about flooded roadways
- Build projects to mitigate flooding
- Oversee development to protect current & future residents



<http://fortworthtexas.gov/stormwaterMasterPlanUpdate/>



Why Are We Doing This Update?

- Optimize use of existing resources
- Refine strategies, policies and priorities
 - Tonight's objective- Gain input on key topics
- Identify and prioritize gaps and/or needs
- Create a living implementation plan for next 10 years

***Council adopted & stakeholder endorsed program master plan*





Stakeholder Group

-  **Monica Hamilton**
Mayor's office
-  **Roxanne Martinez**
Council District 2
-  **Gary Havener**
Council District 3
-  **Aric Head**
Council District 4
-  **Rafael McDonnell**
Council District 5
-  **Patrick Clay**
Council District 6
-  **Si Rowlett**
Council District 7
-  **Howard Rattliff**
Council District 8
-  **David Motheral**
Council District 9
-  **Art Cavazos**
Fort Worth ISD
-  **Rusty Fuller**
North FW Alliance
-  **La Wayne Hauser**
Resident
-  **Lairy Johnson**
Large Commercial Miller Coors
-  **Rick Kubes**
Resident Small Commercial
-  **Lee Nicol**
Streams & Valleys
-  **Joe Schneider**
Hillwood Development
-  **Bill Schur**
Resident

Peer Community Review





Peer Cities Reviewed



Population



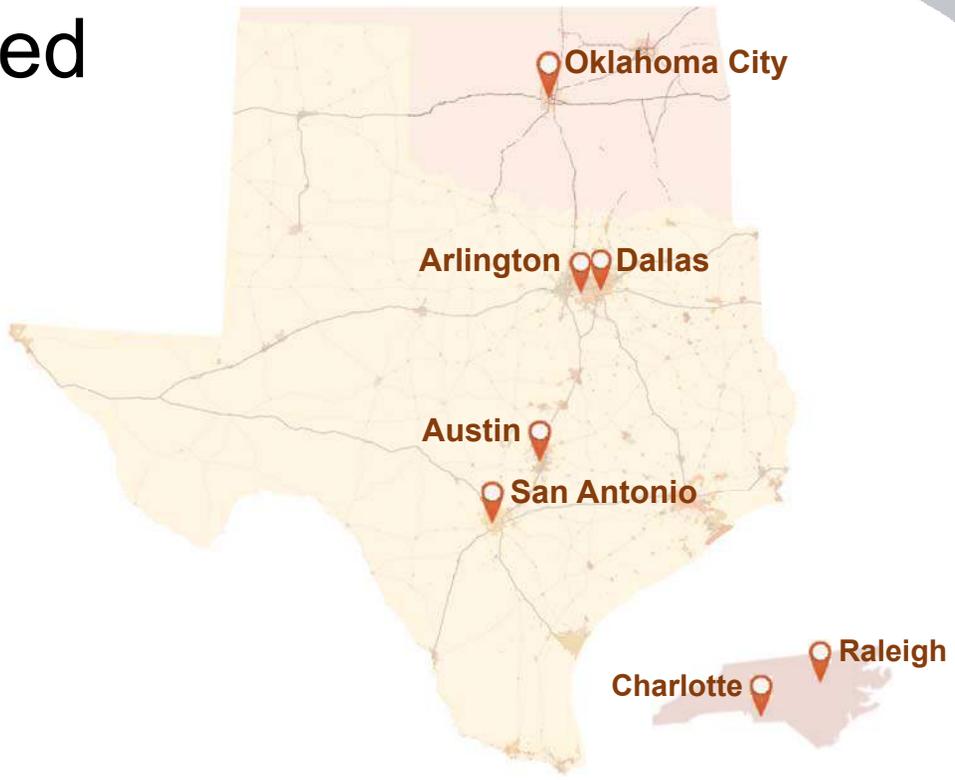
Age of SWU



Area (square miles)

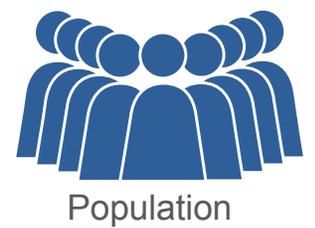


SWU Fee

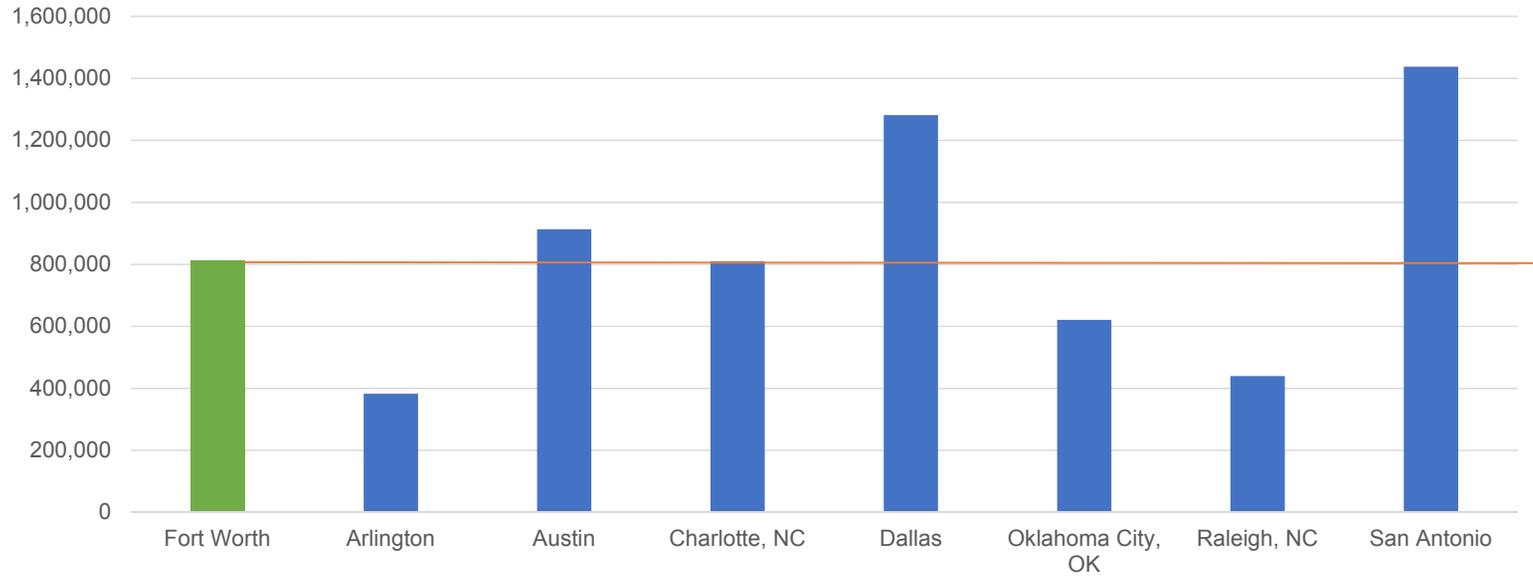




Peer Cities



Fort Worth expected to grow 20,000 – 25,000 per year

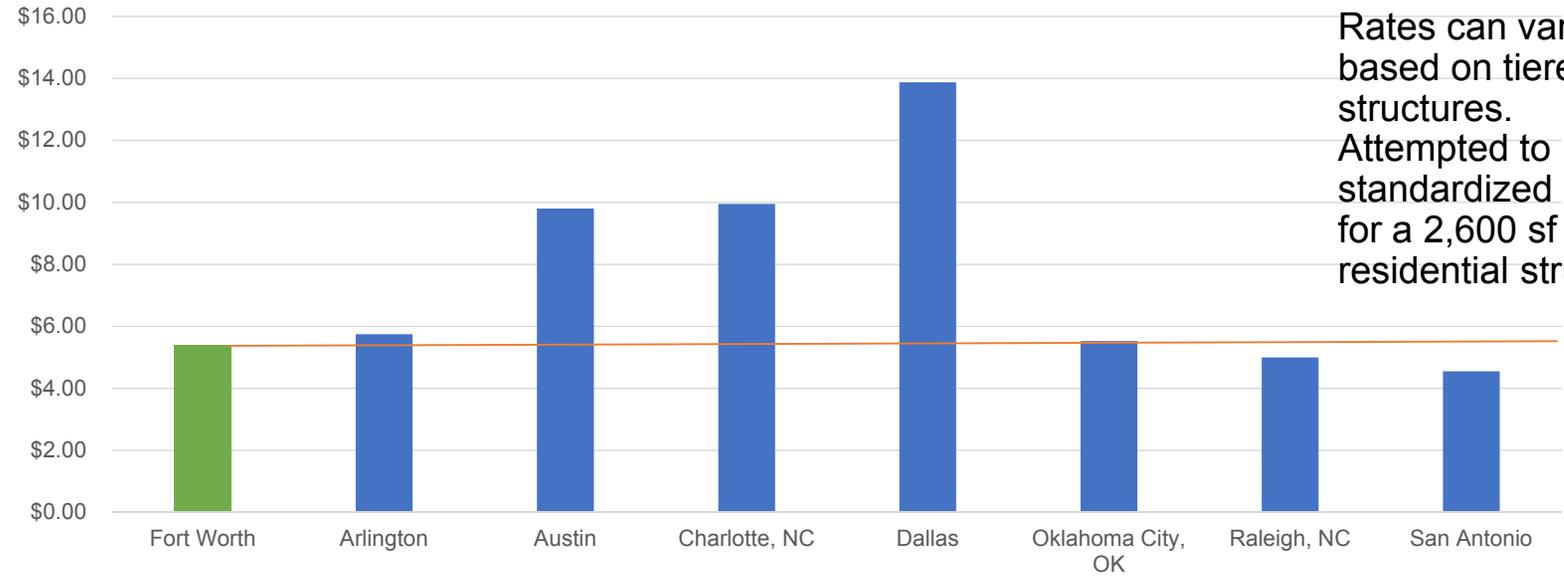




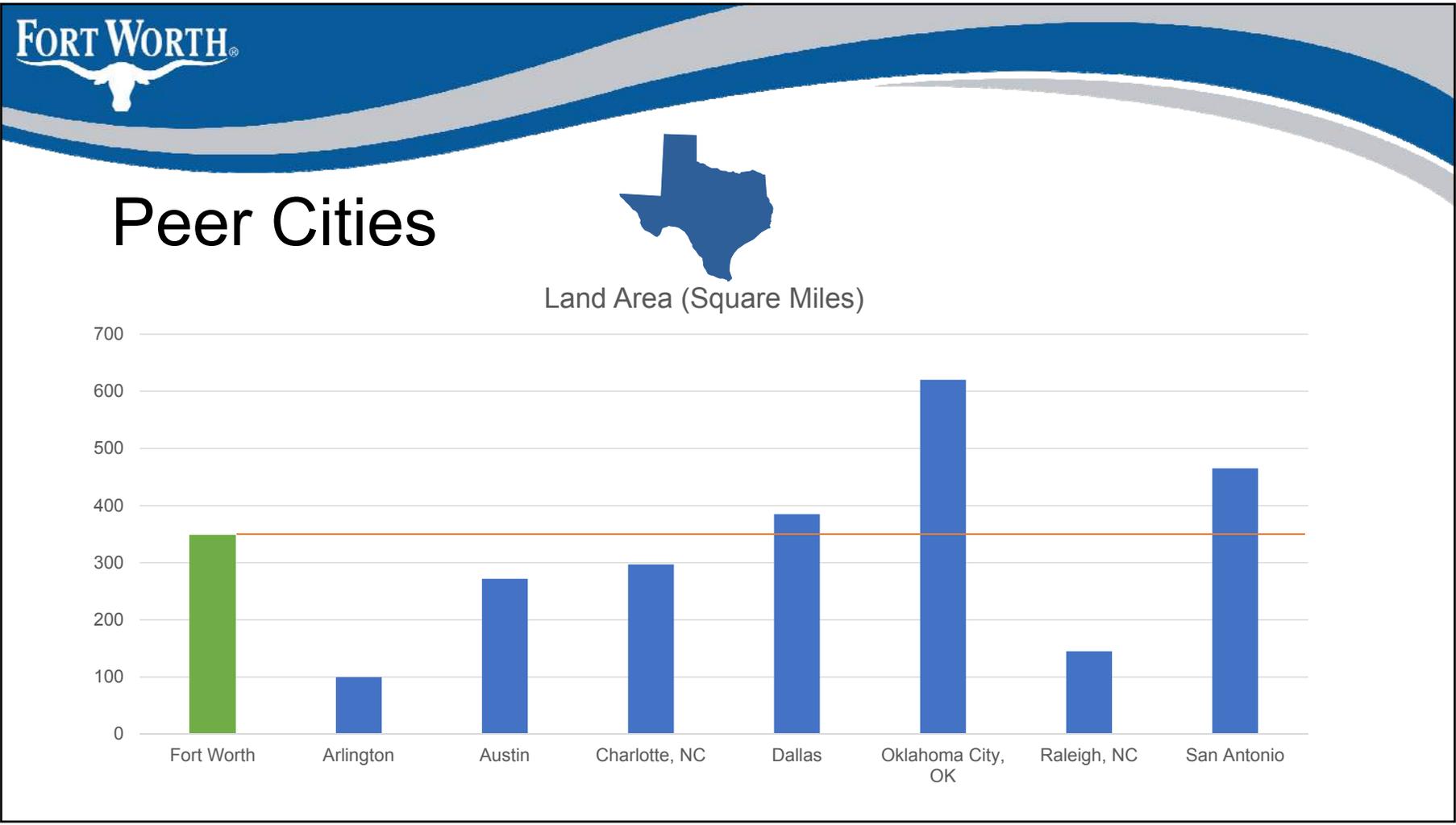
Peer Cities



Stormwater Utility Fee



Rates can vary based on tiered structures. Attempted to standardized rates for a 2,600 sf residential structure

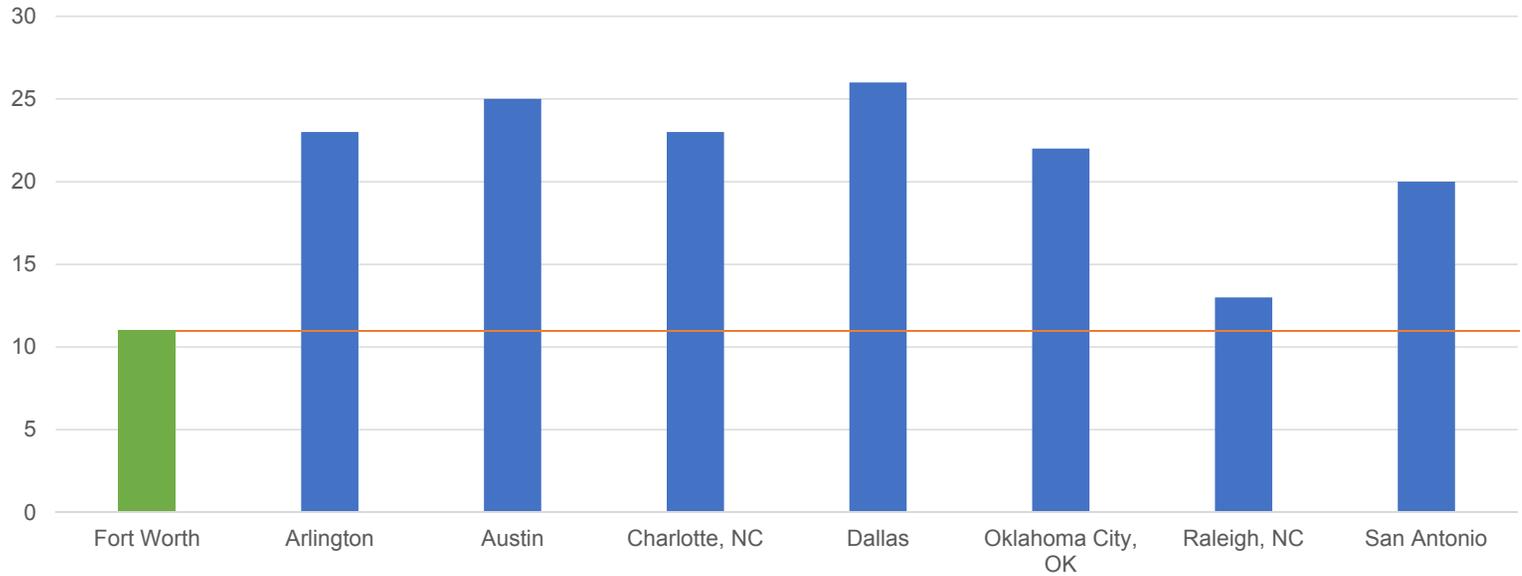




Peer Cities



Age of Stormwater Utility (Years)





Master Plan Topics & “Big 4”

In no specific order...

- **Local Floodplains**
- **Private Property Channel Erosion Policy**
- **Voluntary Buyout Program**
- **Development Oversight**
- Debt Service obligations
- Public / Private Partnership Planning
- Funding for large stormwater capital projects
- Water Quality requirements
- Flood Warning



Today's Feedback



Why keypad polling?

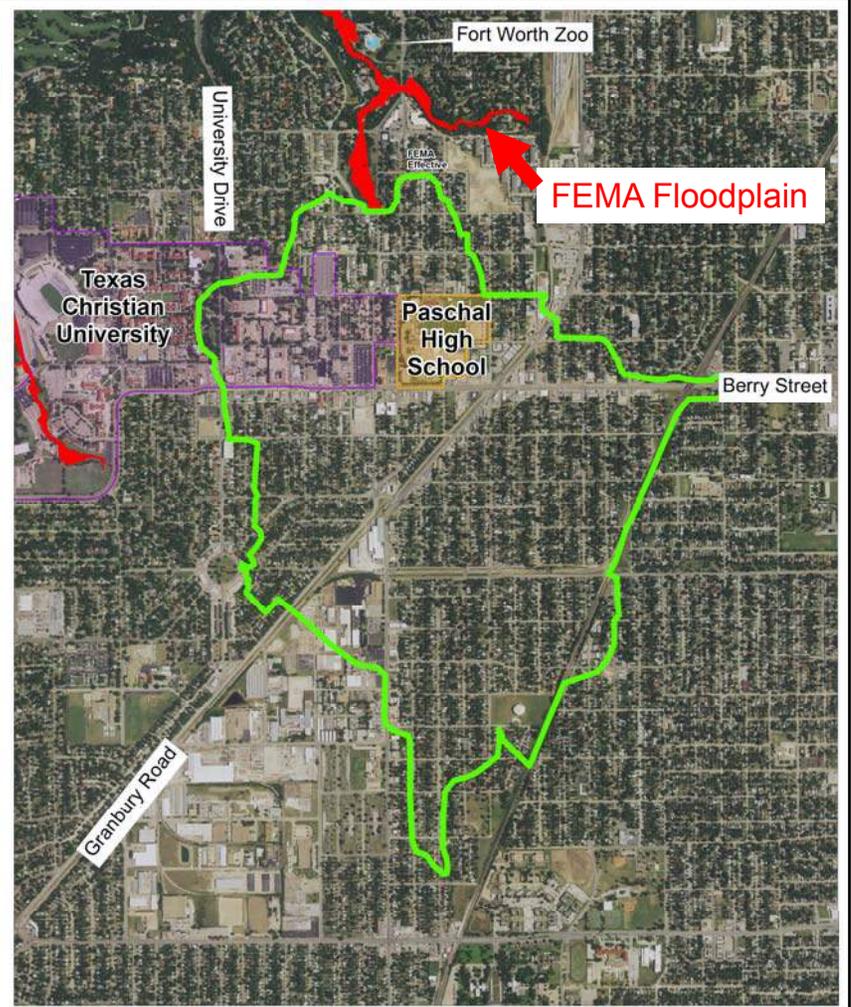
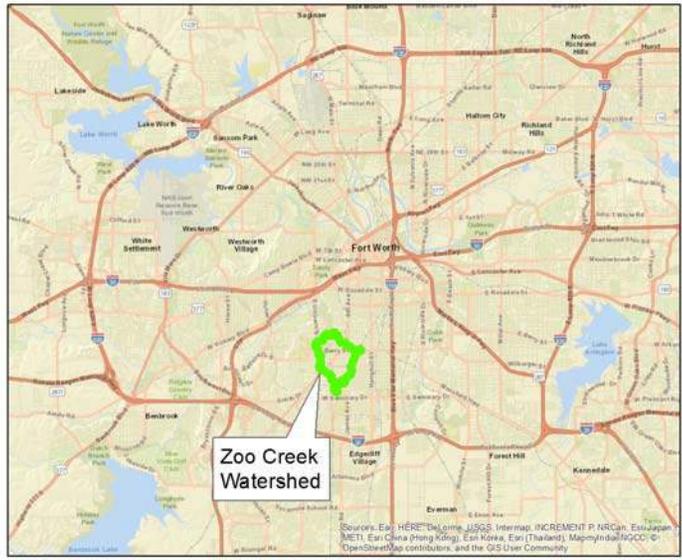
- Provides feedback from all individuals participating in the session
- Can reflect the discussion at the session
- Is anonymous
- Shows results immediately
- Allows more detailed analysis after the session



Topic 1: Local Floodplains

FORT WORTH Local Floodplains

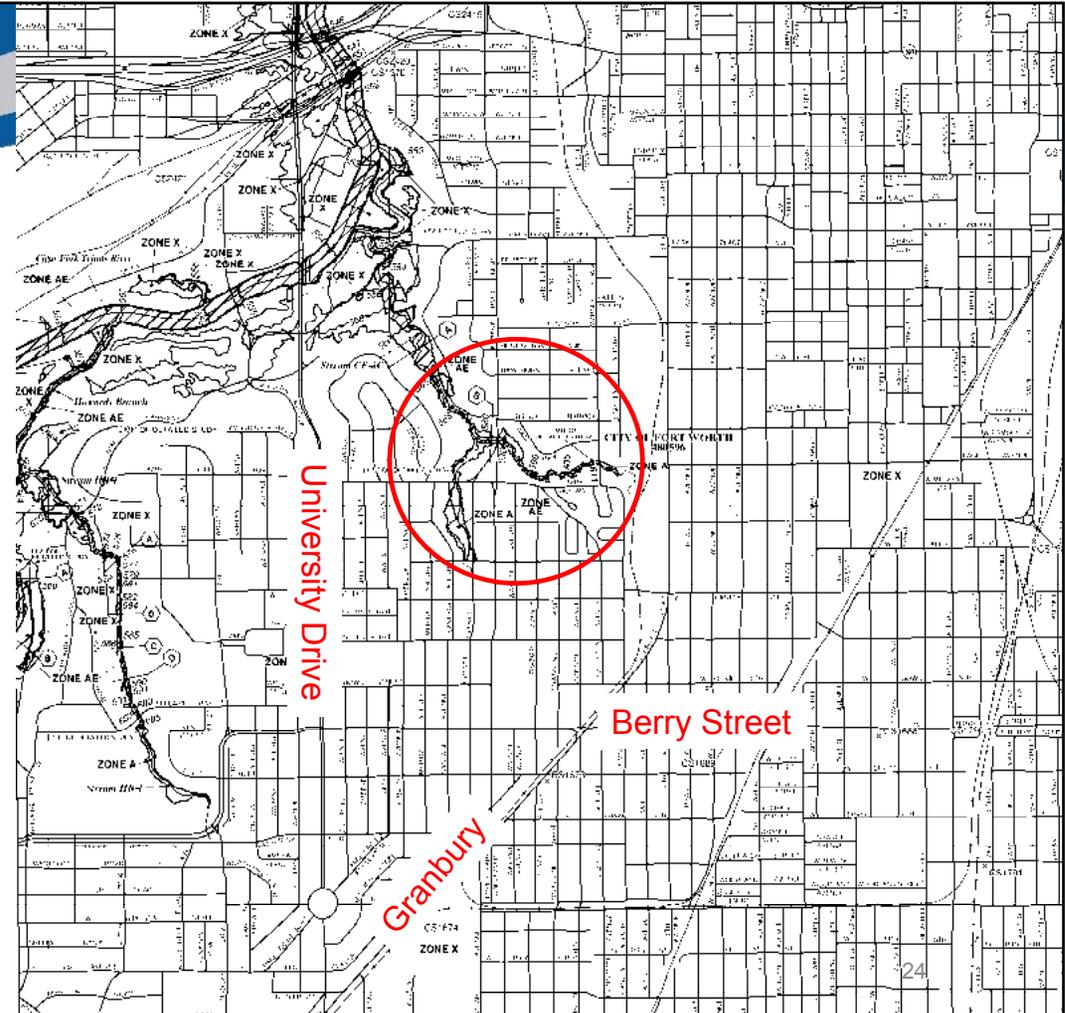
Zoo Creek Storm Drain Watershed



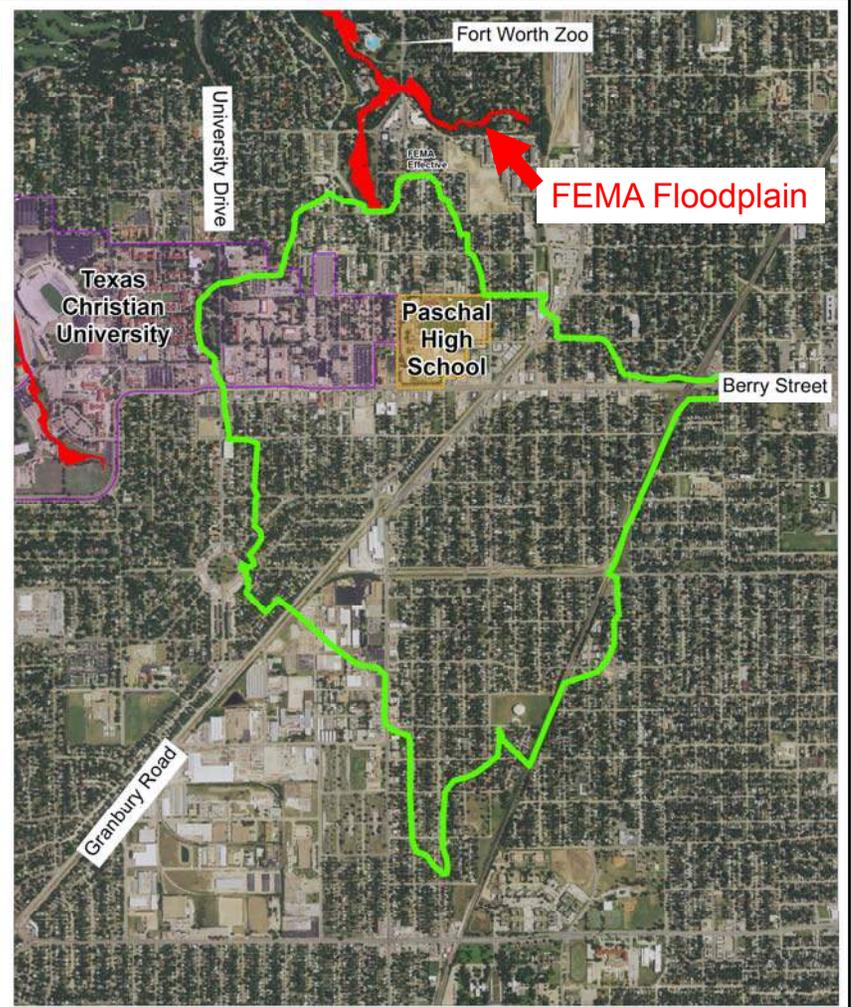
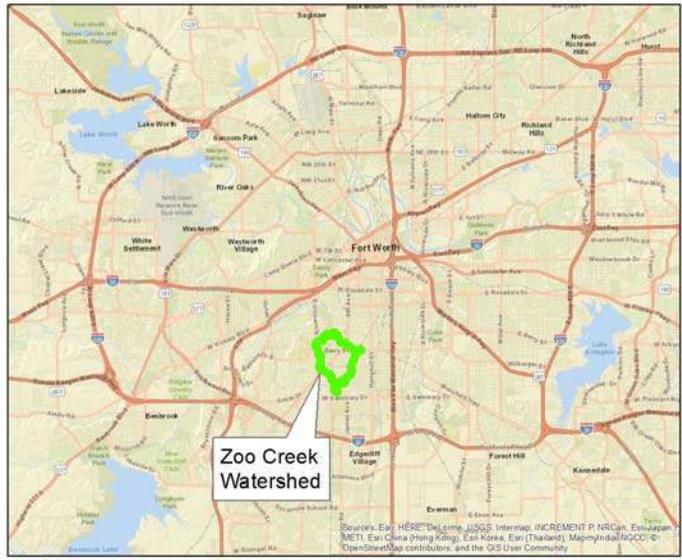


What are FEMA Floodplains?

- Identify flood hazard
- FEMA National Flood Insurance Program
- Local communities regulate development
 - Example- Require structure elevated 2' above flood elevation



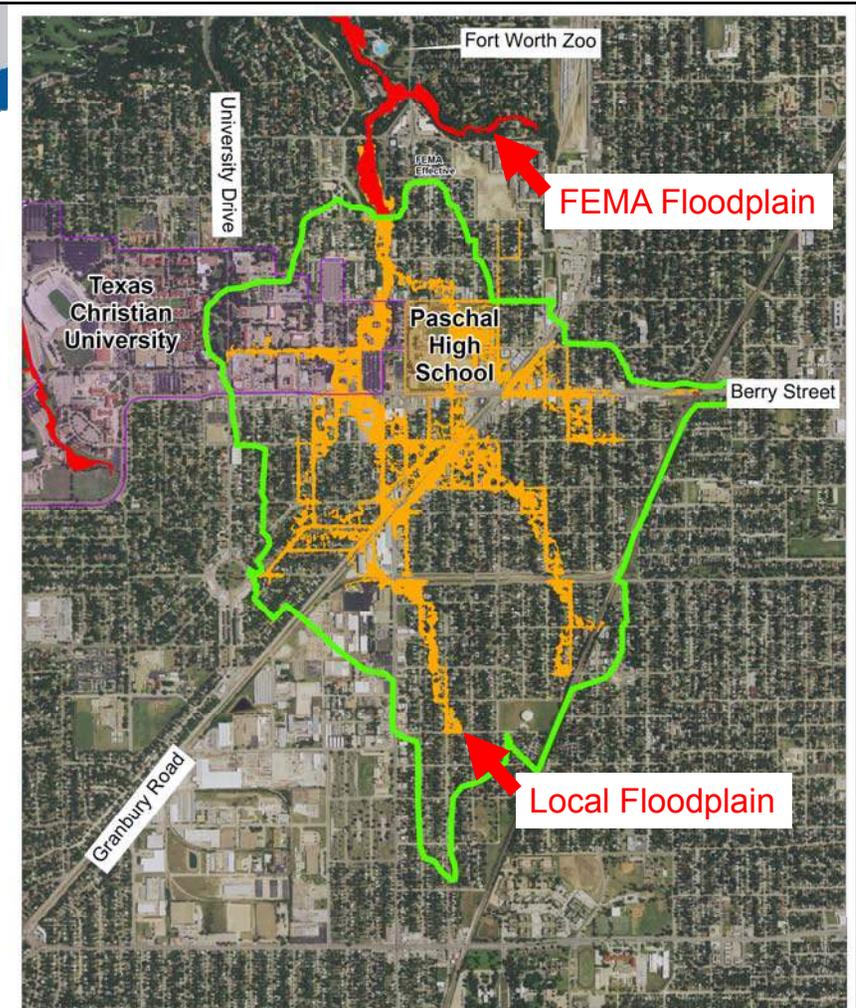
Zoo Creek Storm Drain Watershed



FORT WORTH Local Floodplains

What are Local Floodplains?

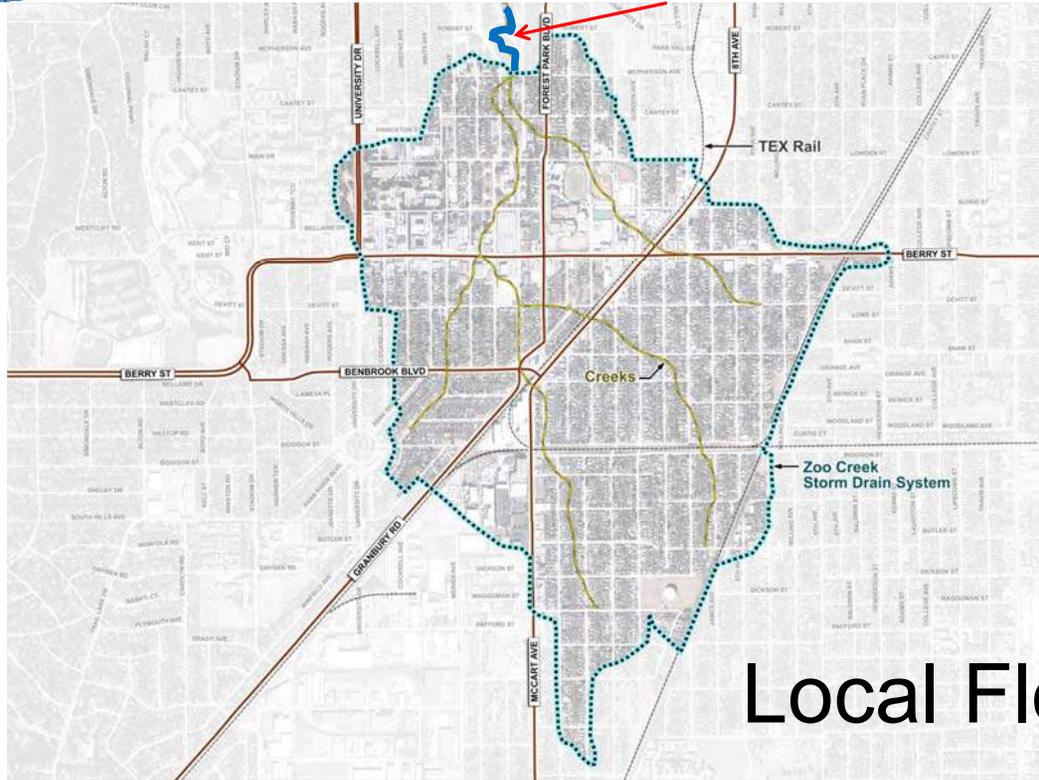
- Areas of flood risk not shown on FEMA Maps



FORT WORTH Local Floodplains

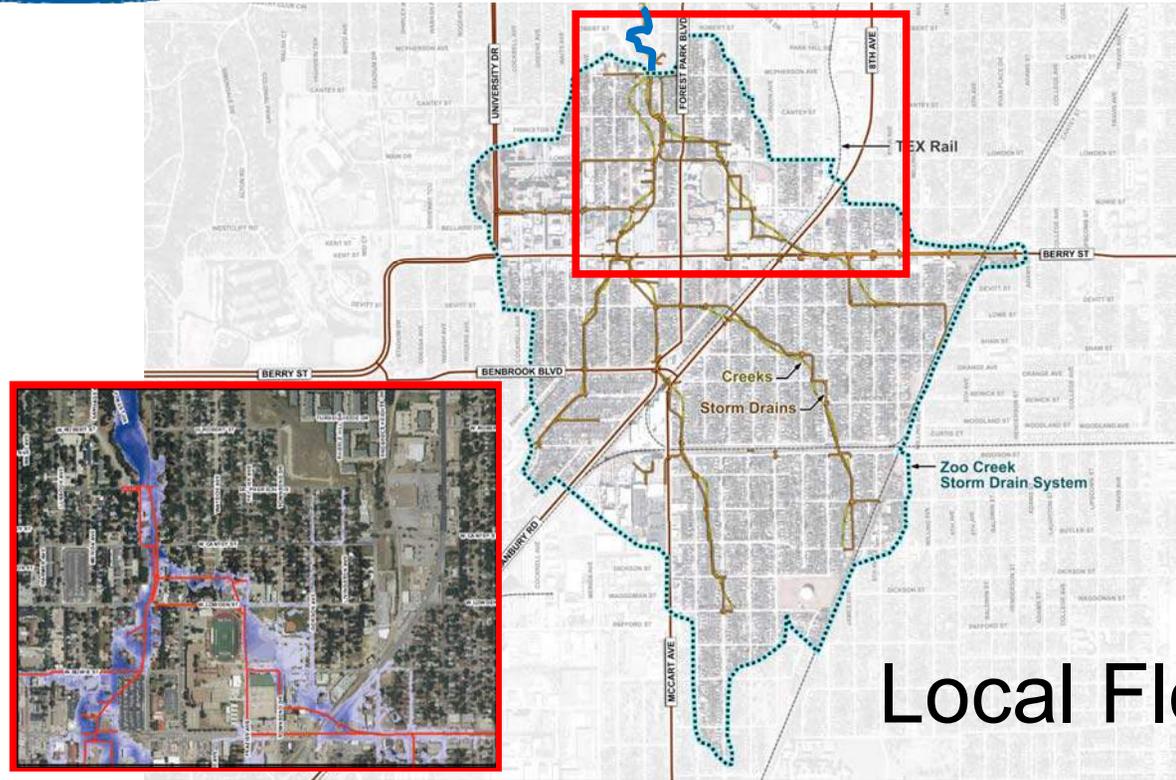


Zoo Creek drains north to the Trinity



Local Floodplains

FORT WORTH Local Floodplains

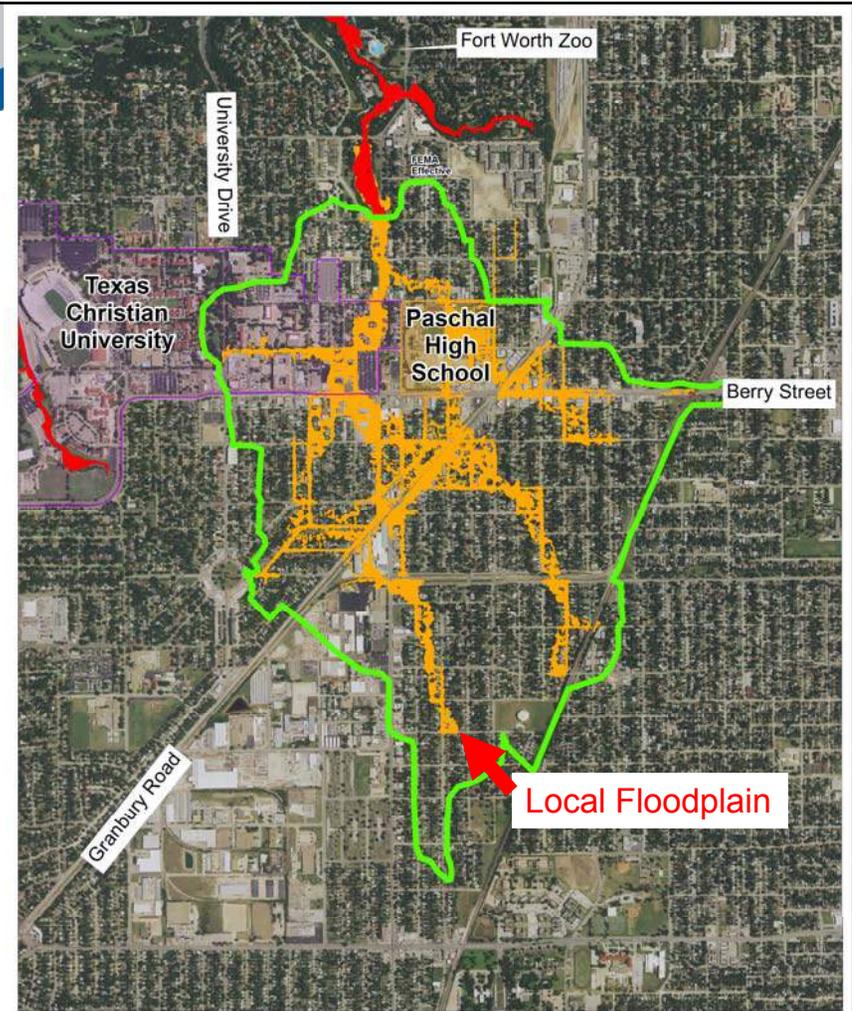



Local Floodplains

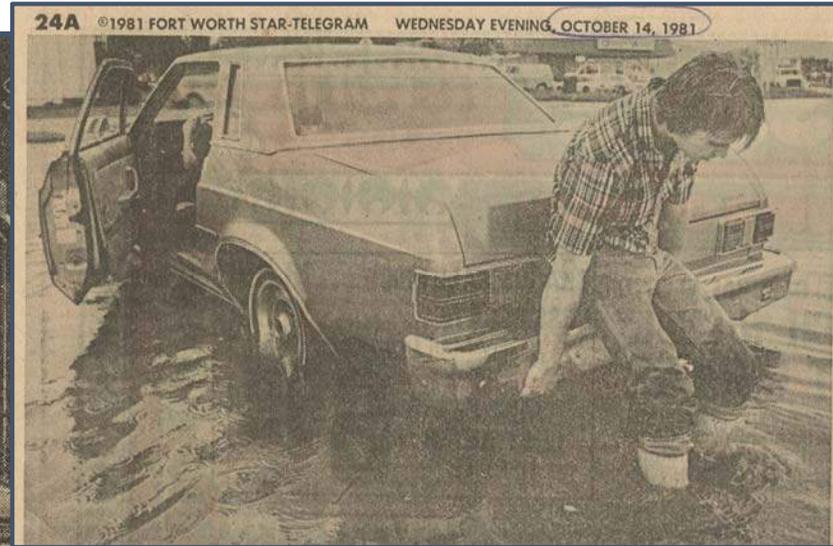
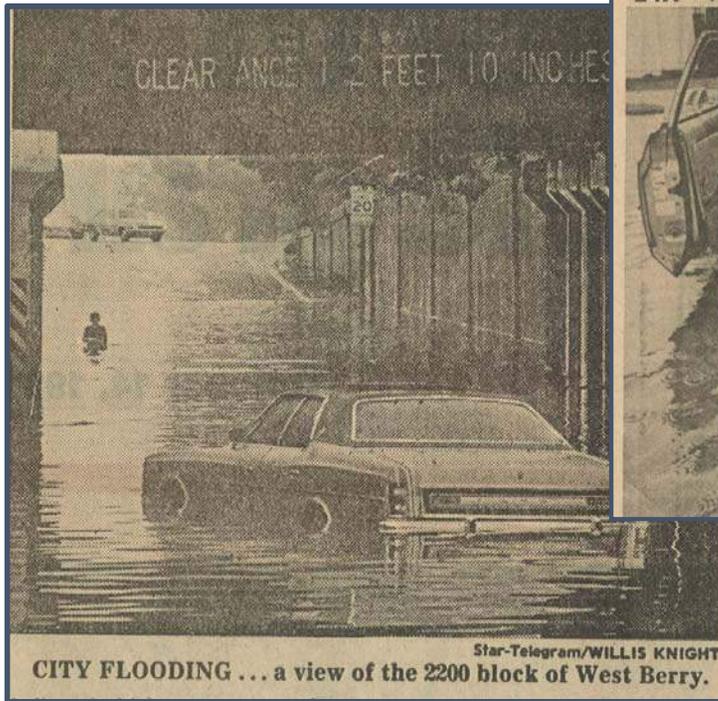
FORT WORTH Local Floodplains

Local Floodplains

- Orange = Local Floodplain
- 538 properties at risk within green boundary



FORT WORTH Local Floodplains



1981

FORT WORTH Local Floodplains



2004

FORT WORTH Local Floodplains



FORT WORTH Local Floodplains



2004
33

FORT WORTH Local Floodplains



FORT WORTH Local Floodplains



2007

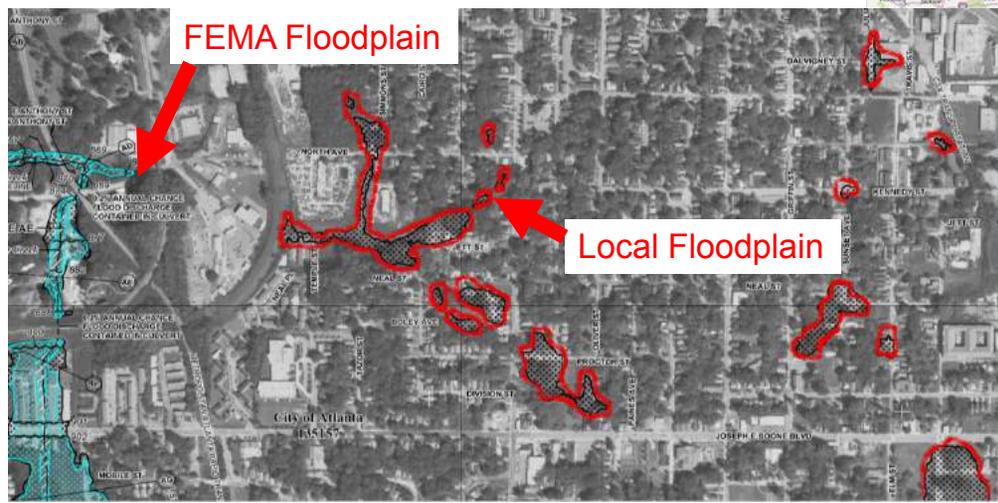
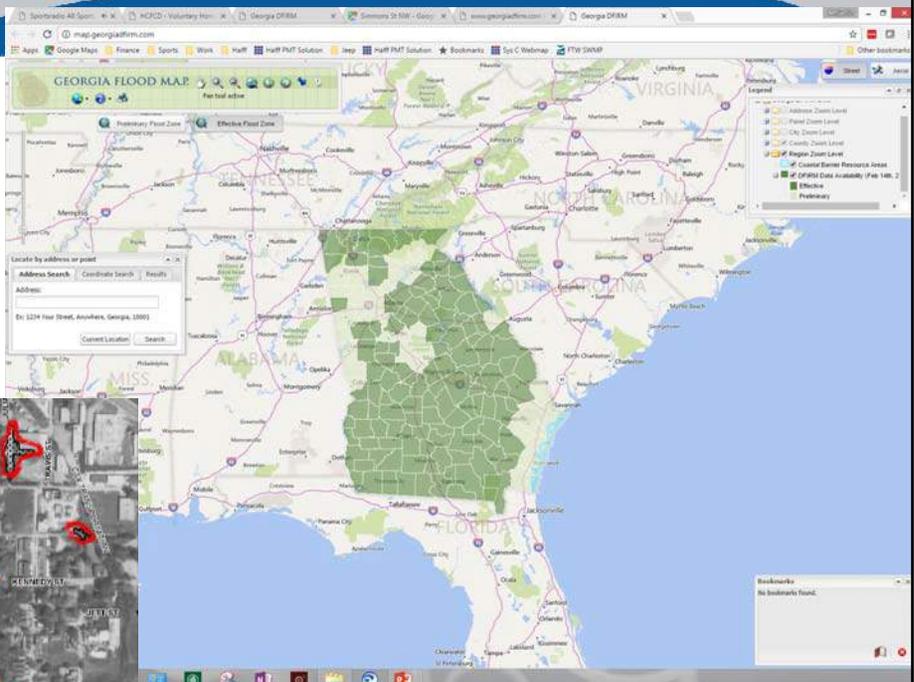
35

*75% of Repetitive Flood Loss
Properties in the City of Fort Worth
with are outside of the FEMA
floodplains*



Local Floodplains

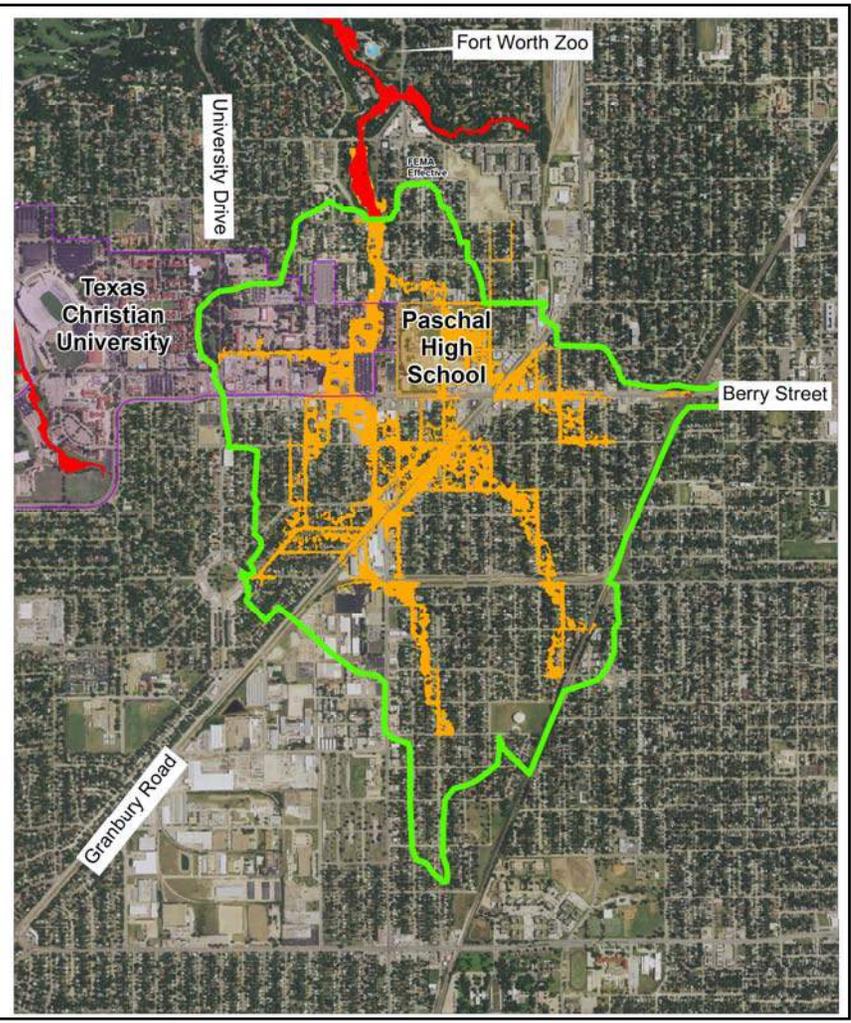
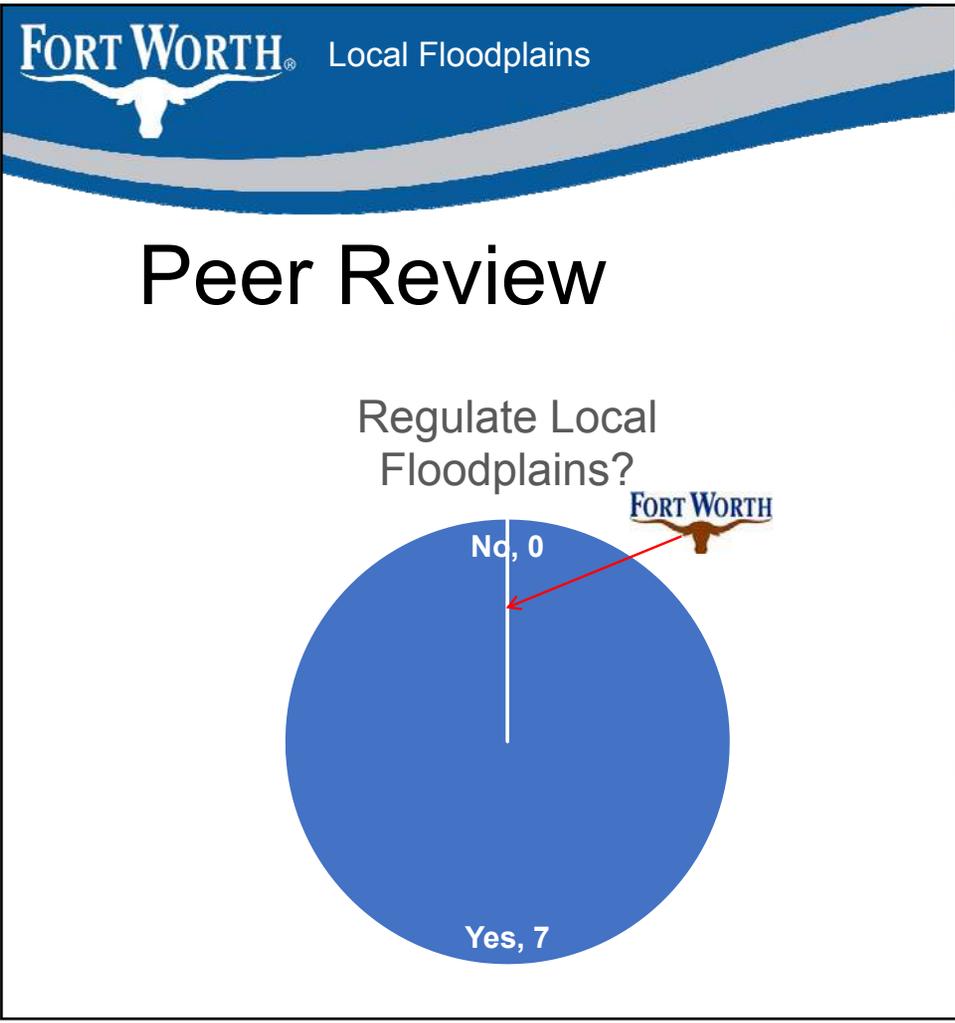
- Georgia Flood Maps



<http://georgiadfirm.com/>

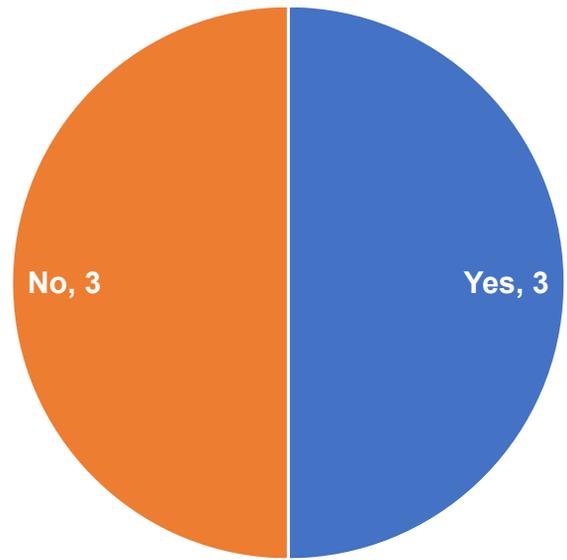
Local Floodplain - Considerations

- Communicate flood risk
- Potential implications to property values and flood insurance premiums
- Development
 - Review timeliness
 - Cost to develop due to higher standards
 - Potential impact to zoning/density
 - Reduction of future flood damages
- City resources



FORT WORTH Local Floodplains

Peer cities that regulate local floodplains the same as FEMA



City Staff Recommendation

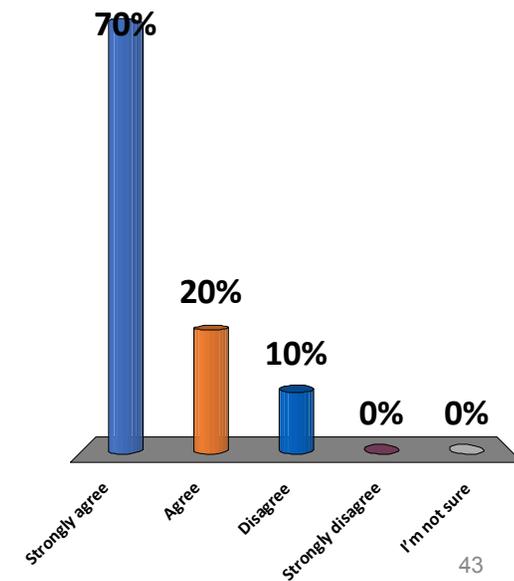
- Develop local floodplain policy
 - Communicate risk better
 - Consider regulations
 - Balance advisory and regulation
 - Maintain our general “no adverse flooding impact” policy

Informational Questions?

To clarify material in the presentation

Fort Worth should address issues of flooding risk in local floodplains.

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree
5. I'm not sure

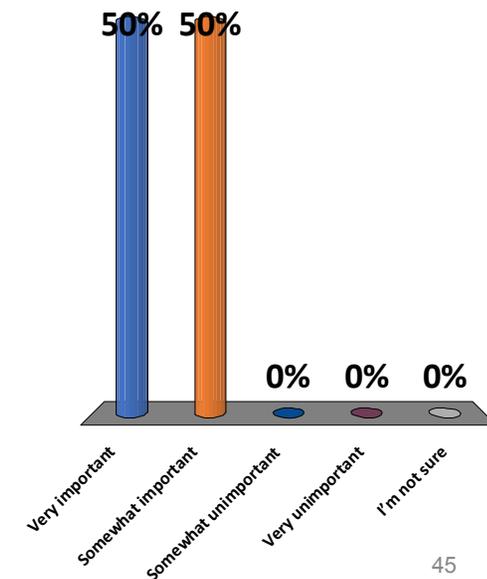


43

How important are these strategies for addressing local floodplains?

Reflecting these flood risks in City plans and policies, such as the Comprehensive Plan.

1. Very important
2. Somewhat important
3. Somewhat unimportant
4. Very unimportant
5. I'm not sure

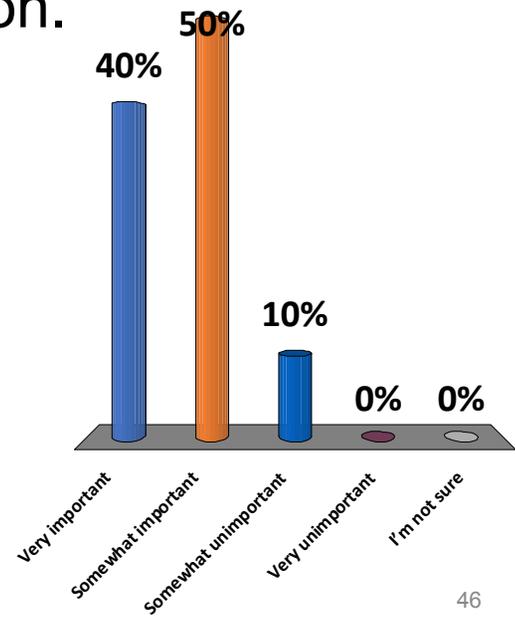


45



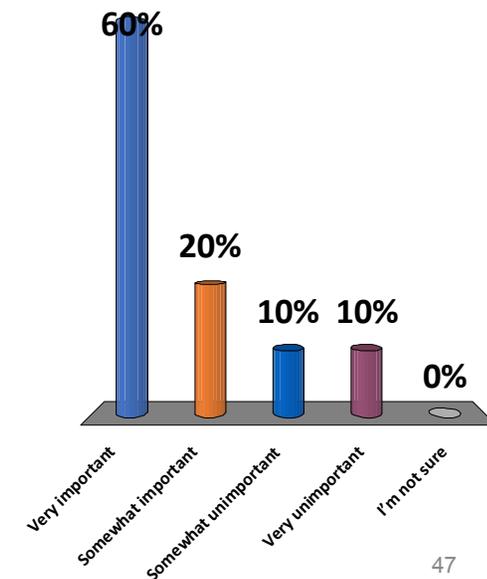
Requiring that any substantial rehabilitation, renovation or new development (including after a flood) maintain finished floor elevations above the 100-year flood elevation.

- 1. Very important
- 2. Somewhat important
- 3. Somewhat unimportant
- 4. Very unimportant
- 5. I'm not sure



Considering these floodplains in evaluating requests for rezoning, subdivision, special use permits & other development approvals.

1. Very important
2. Somewhat important
3. Somewhat unimportant
4. Very unimportant
5. I'm not sure

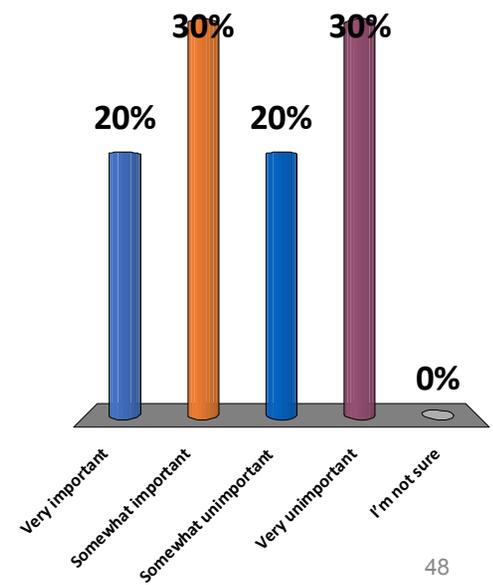


47



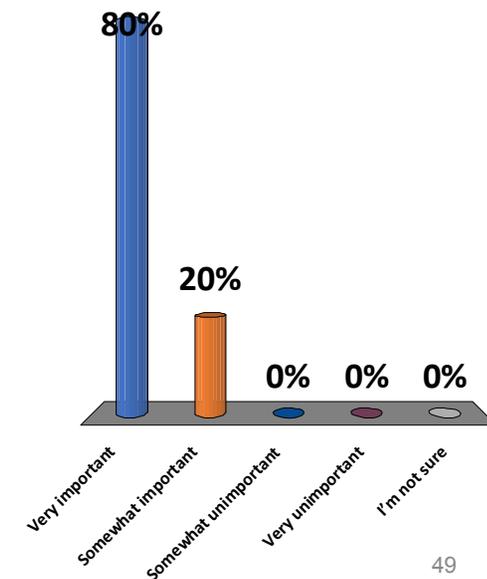
Considering the impact a local floodplain approach would have on property values.

- 1. Very important
- 2. Somewhat important
- 3. Somewhat unimportant
- 4. Very unimportant
- 5. I'm not sure



Having the City provide the local floodplain maps to the public.

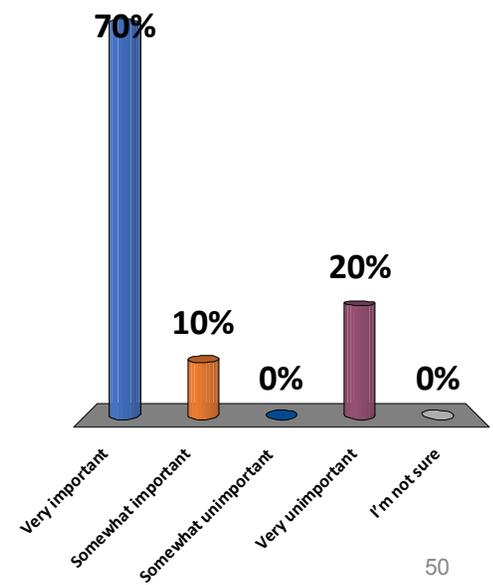
1. Very important
2. Somewhat important
3. Somewhat unimportant
4. Very unimportant
5. I'm not sure





Reviewing all development in local floodplains, even those smaller than 1 acre.

- 1. Very important
- 2. Somewhat important
- 3. Somewhat unimportant
- 4. Very unimportant
- 5. I'm not sure





Local Floodplains

Feedback & Discussion



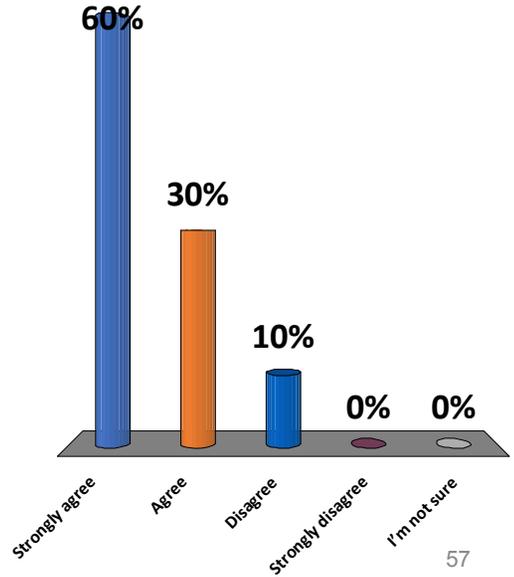
Local Floodplains

Based on our discussion ...



Fort Worth should address issues of flooding risk in local floodplains.

- 1. Strongly agree
- 2. Agree
- 3. Disagree
- 4. Strongly disagree
- 5. I'm not sure





Topic 2: Private Property Channel Erosion Policy

What is Private Property Channel Erosion?

- Erosion resulting from streams and channels
- Typically natural creeks where private property lines extend to channel
- City has no ownership or maintenance responsibility
- Can threaten property, fences, structures, etc.

Private Property Erosion Example

- Haltom City – 2007
- 50 feet of erosion in 7 days
- \$1.2 million project
 - Several residents contributed \$5k each
 - City funded remainder



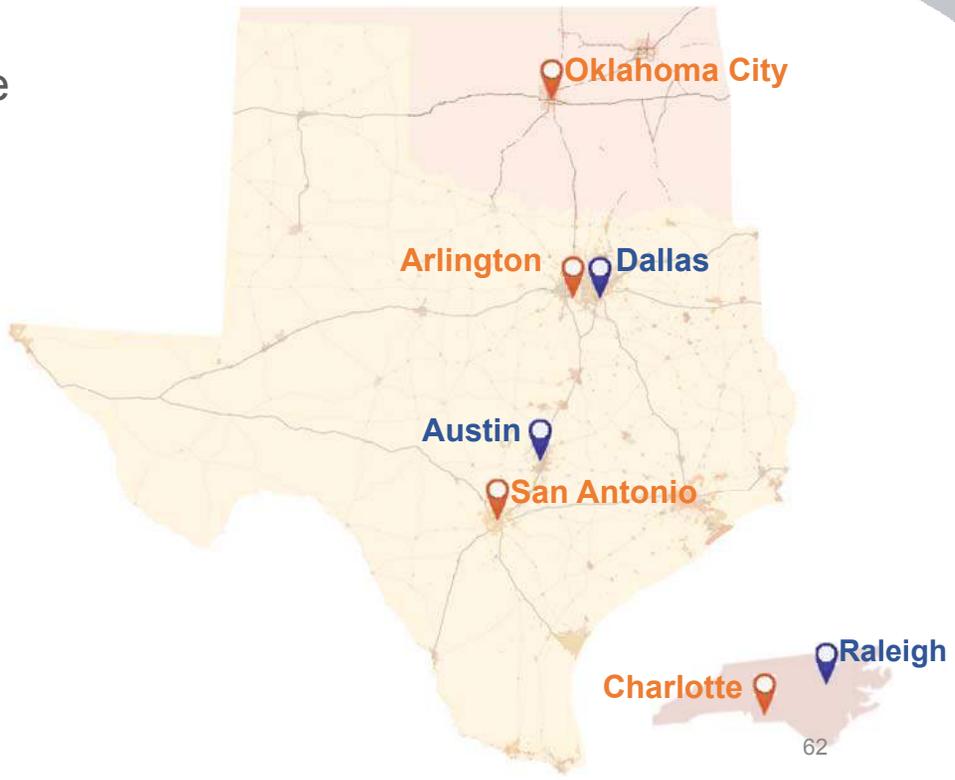
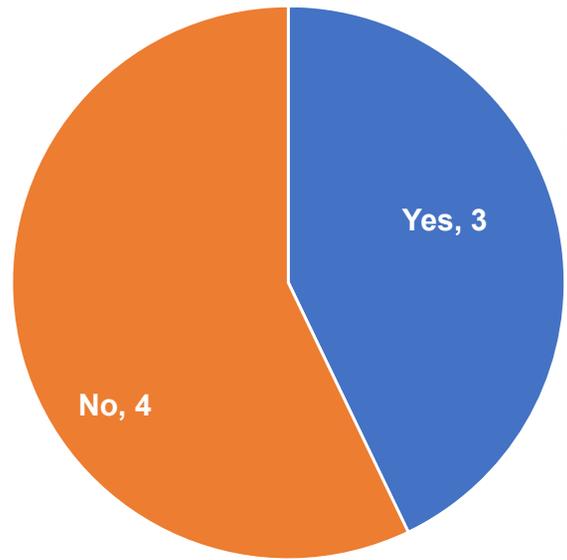
Private Property Erosion - Considerations

- Buffer zones or erosion setbacks (not currently required)
- Residents often cannot afford solution
- Water quality issues / sedimentation / blockages
- Conveyance of waterways
- Threat to public or private structures and infrastructure
- Maintenance/liability of capital projects
- Isolated project can make overall issues worse

FORT WORTH Private Erosion



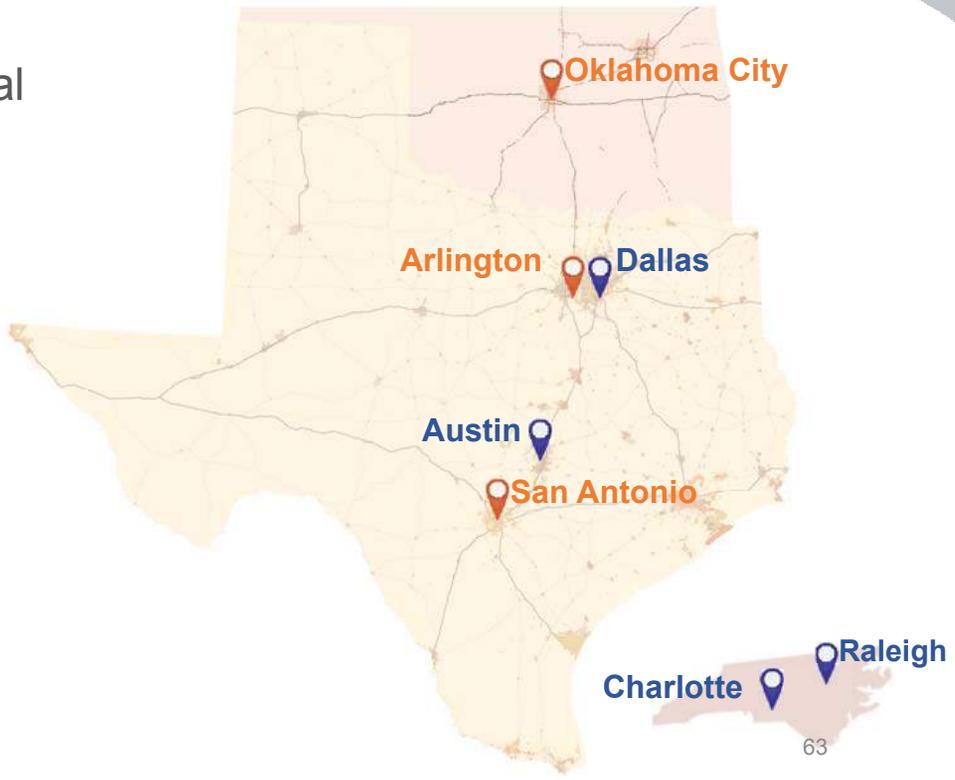
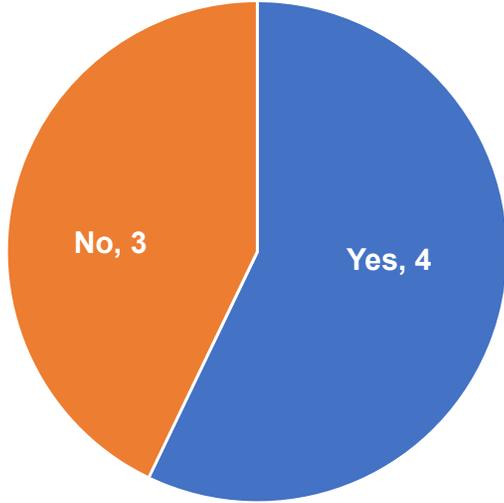
Will you help address private property channel erosion?



FORT WORTH Private Erosion



Will you participate in a capital project for private property channel erosion?



City Staff Recommendation

Develop private channel erosion policy

- Require public benefit
- Require private participation
- Defined priority/criteria
- Define long-term maintenance responsibility
- Limit liability of City

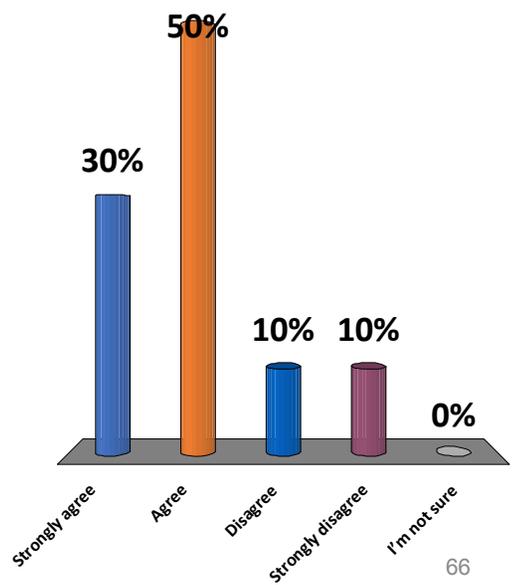
Informational Questions?

To clarify material in the presentation



Fort Worth should have a standard policy for addressing channel erosion impacts to private property.

- 1. Strongly agree
- 2. Agree
- 3. Disagree
- 4. Strongly disagree
- 5. I'm not sure

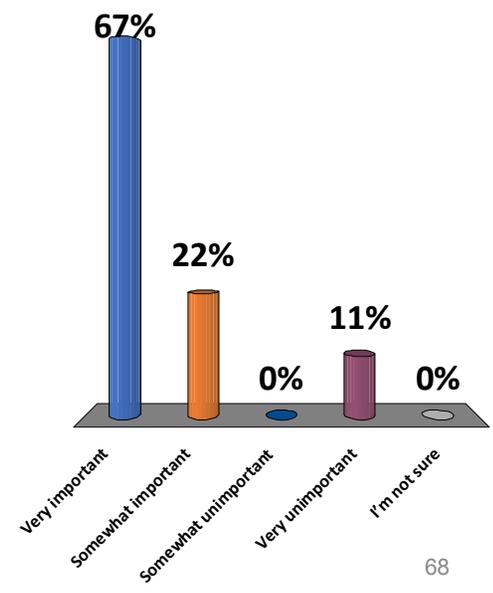


How important is each of these issues to a private property channel erosion policy?



City capital investment should be considered only when there is a public benefit.

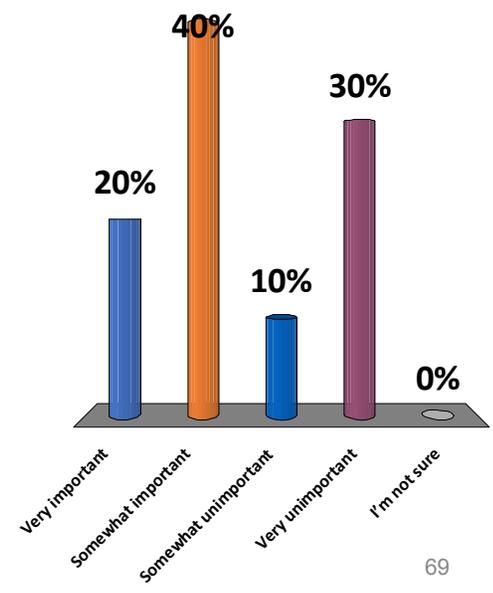
- 1. Very important
- 2. Somewhat important
- 3. Somewhat unimportant
- 4. Very unimportant
- 5. I'm not sure





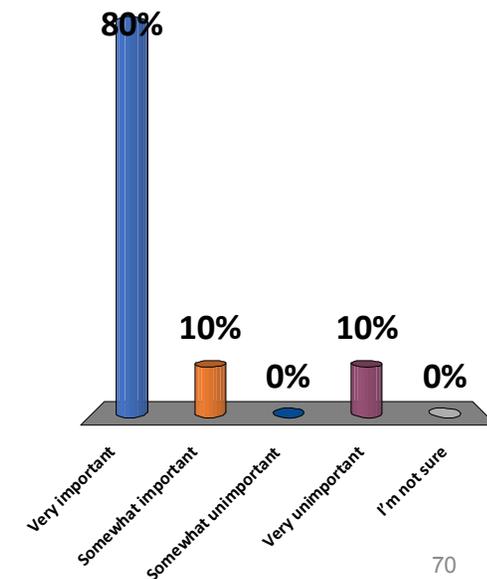
City capital investment should depend on the amount of private cost-sharing match.

- 1. Very important
- 2. Somewhat important
- 3. Somewhat unimportant
- 4. Very unimportant
- 5. I'm not sure



Natural stream buffers should be created so future development has less risk from erosion.

1. Very important
2. Somewhat important
3. Somewhat unimportant
4. Very unimportant
5. I'm not sure

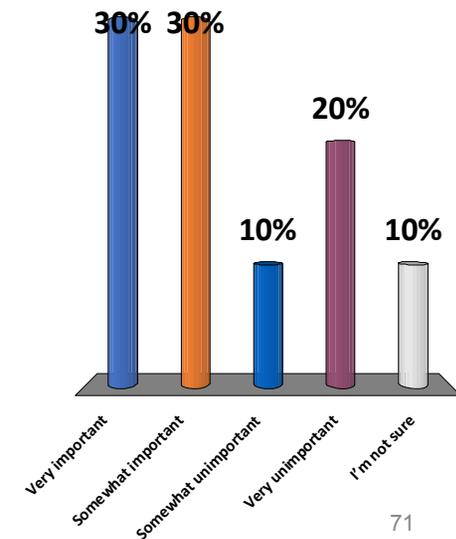


70



Even though the City capital investment has provided erosion protection on private property, the City should be responsible for maintenance.

1. Very important
2. Somewhat important
3. Somewhat unimportant
4. Very unimportant
5. I'm not sure



71

Feedback & Discussion



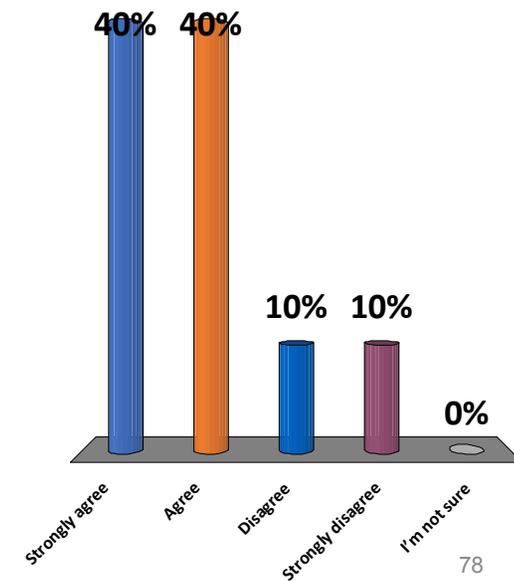
FORT WORTH Private Erosion

Based on our discussion ...



Fort Worth should have a standard policy for addressing channel erosion impacts to private property.

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree
5. I'm not sure



78



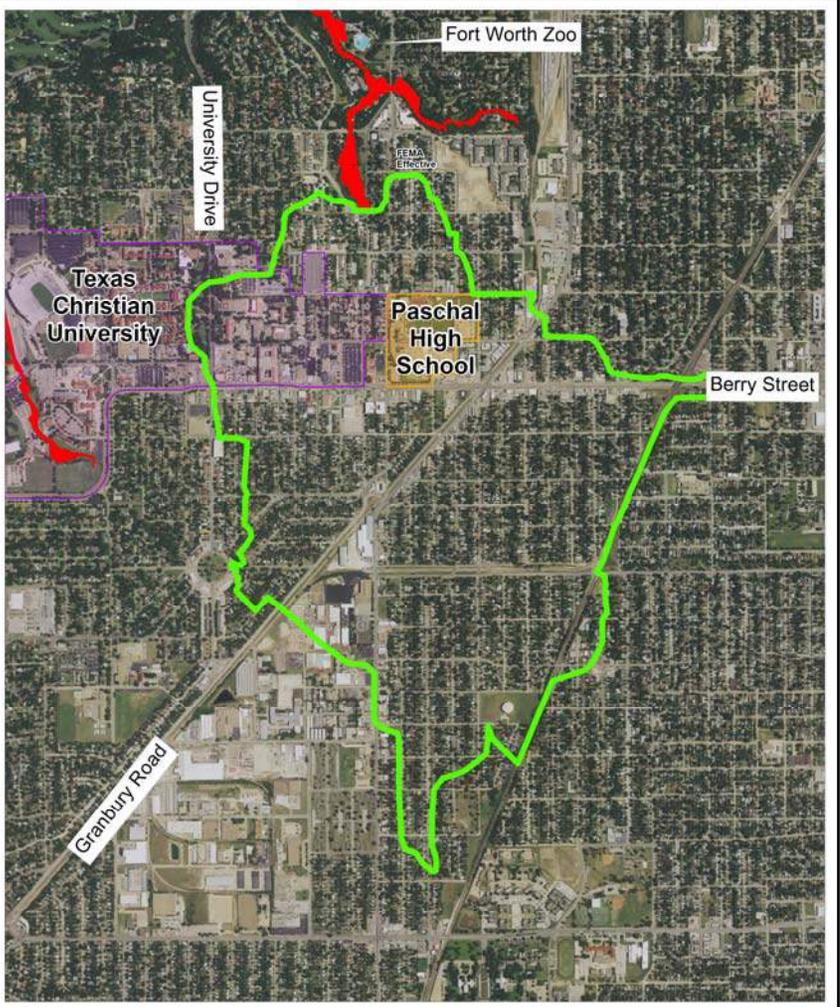
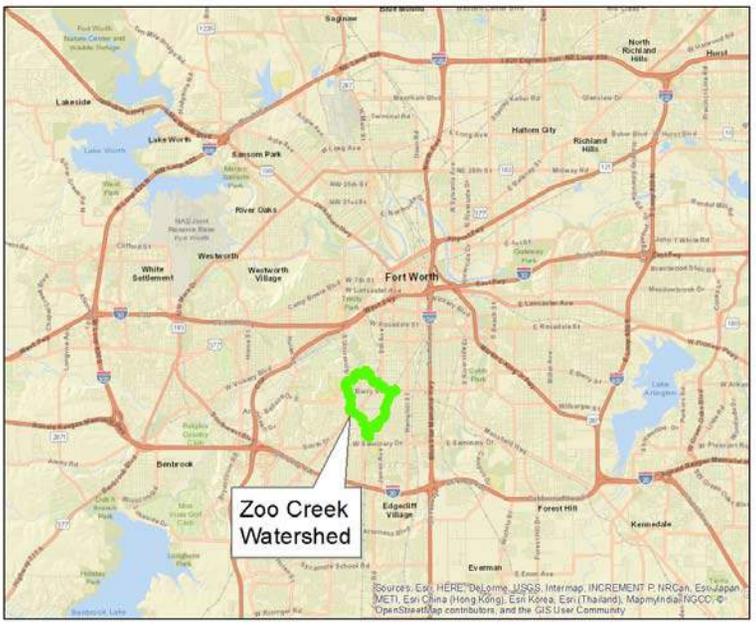
Topic 3: Voluntary Buyout Program

What is a Voluntary Buyout Program?

- City purchase of flood prone structures or structures at risk from channel erosion
- Voluntary purchase requested by owners
- Eliminates flood or erosion risk to structures
- Flood risk remains but vacant property could potentially be used to reduce risk to surrounding area
- Opportunity for amenities and value additions



Zoo Creek Watershed

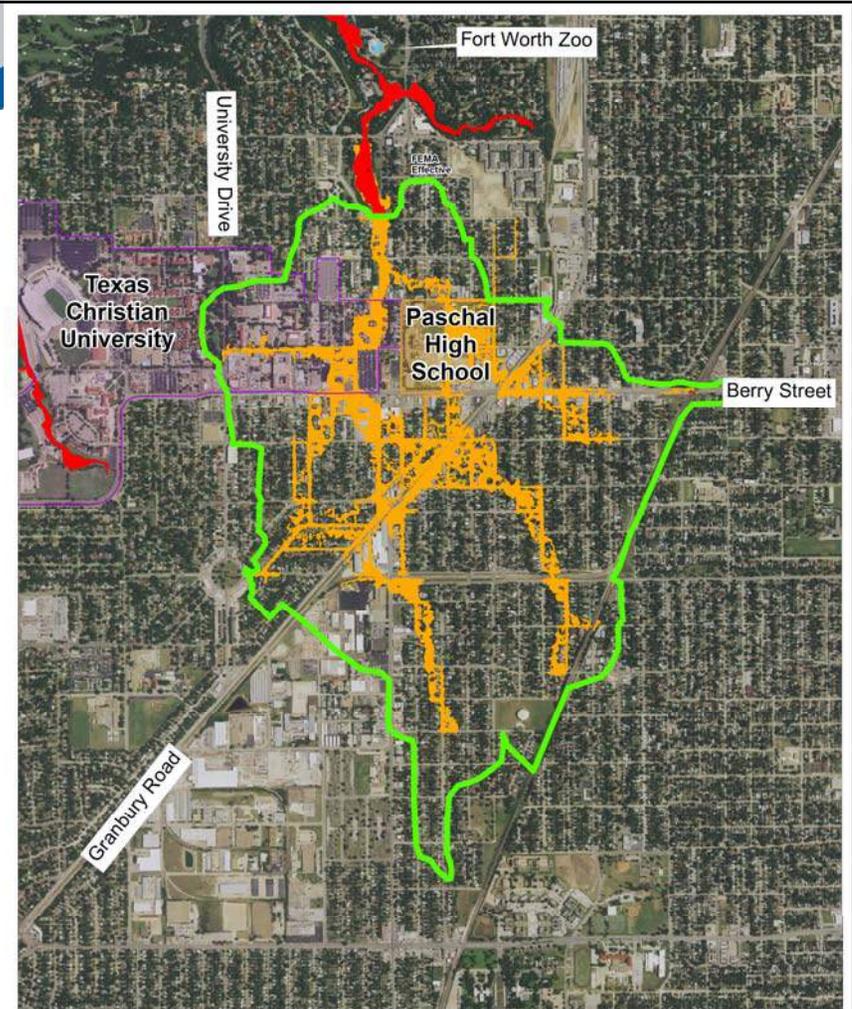


Alternative Options

Alternative	Capital Project Cost	Average Buyout / Residential Structure
1% Storm (100-Year) Protection	\$65M-\$100M	\$180k
20% Storm (5-Year) Protection	\$20M-\$40M	

Notes:

1. Due to cost, phaseability is important for implementation
2. Focus on structures protection; street flooding remains



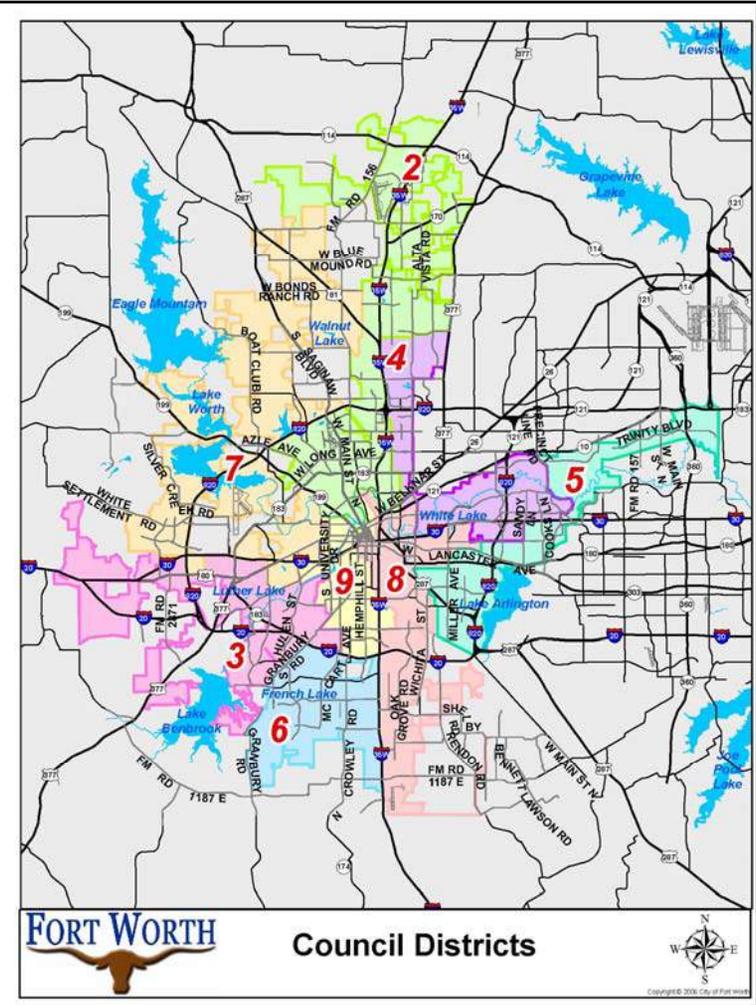


Capital Program

- Expected capital project budget:
 - \$8 – \$10 million/year

<http://fortworthtexas.gov/stormwaterMasterPlanUpdate/>

Fort Worth Land Area:
~350 square miles



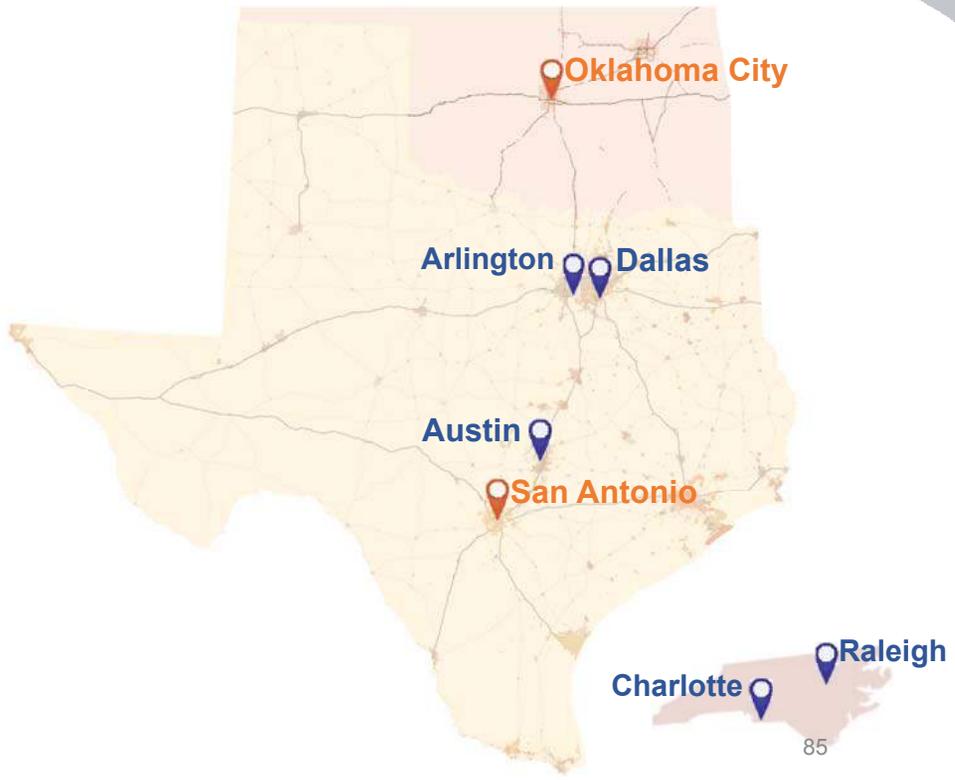
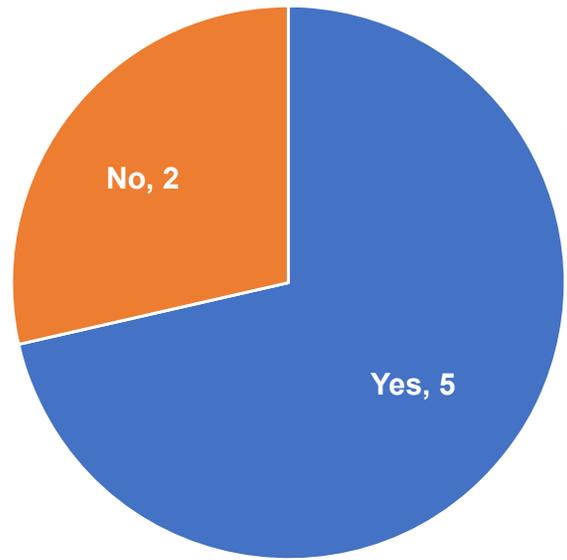
Voluntary Buyout Program - Considerations

- Relief option for priority locations
- Neighborhood Integrity
- Manage capital costs
- Tax revenue
- Maintenance
- Amenity opportunities
- Grant Opportunities



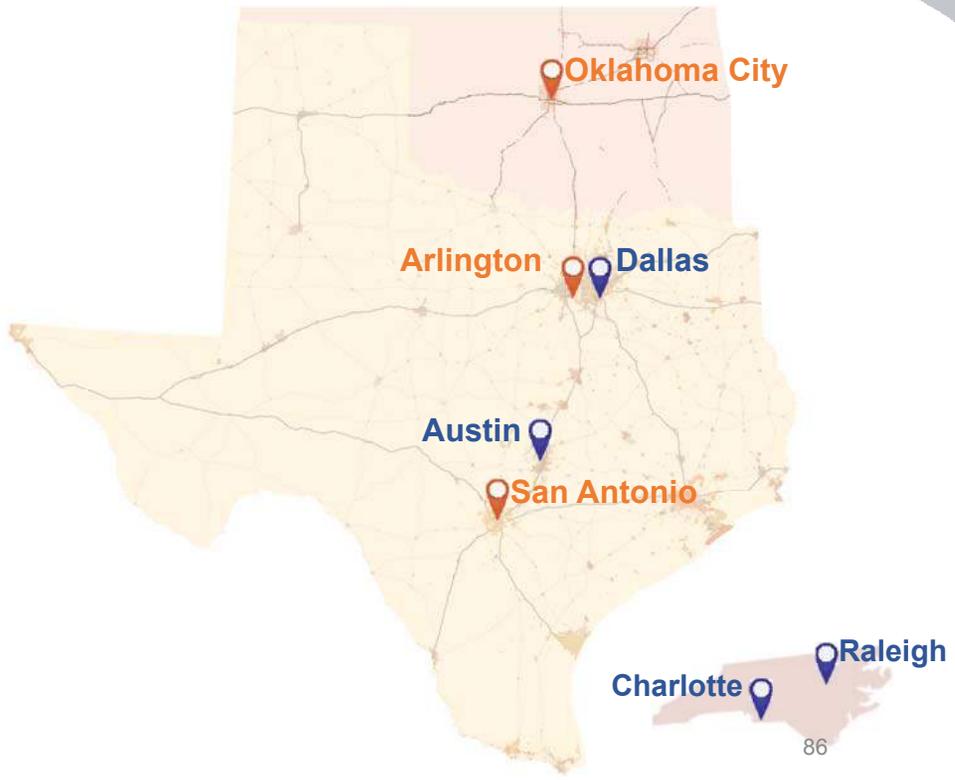
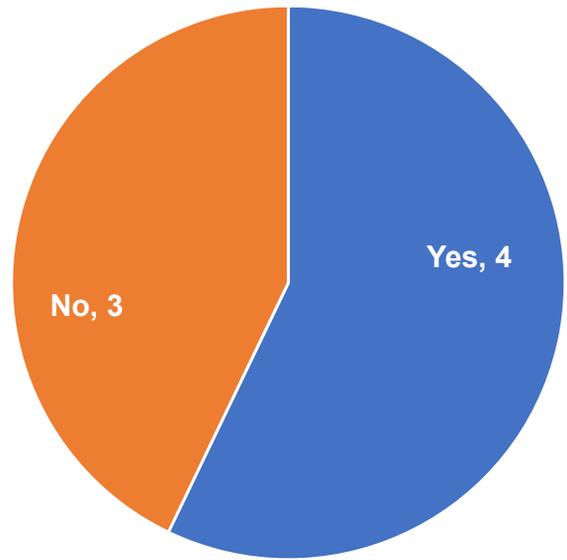
FORT WORTH Voluntary Buyout

Do you have a Voluntary Buyout Program?



FORT WORTH Voluntary Buyout

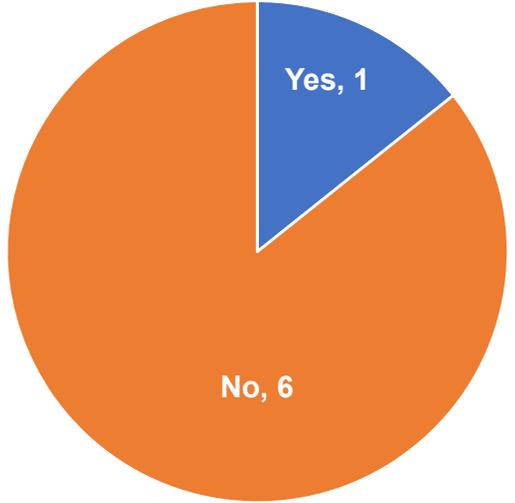
Do you have a policy for prioritizing buyouts?



FORT WORTH Private Erosion



Is voluntary buyout considered for private property channel erosion?



City Staff Recommendation

Develop a Voluntary Buyouts Program policy

- Develop clear set of criteria to prioritize
- Focus on frequently flooded structures
- Be ready to act
- Evaluate benefit to cost
- Address grant funding



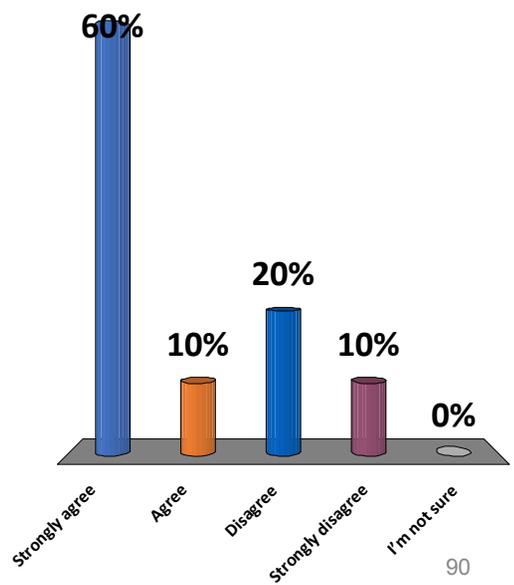
Informational Questions?

To clarify material in the presentation



Fort Worth should have a voluntary buyout program for flood prone or erosion threatened properties.

- 1. Strongly agree
- 2. Agree
- 3. Disagree
- 4. Strongly disagree
- 5. I'm not sure

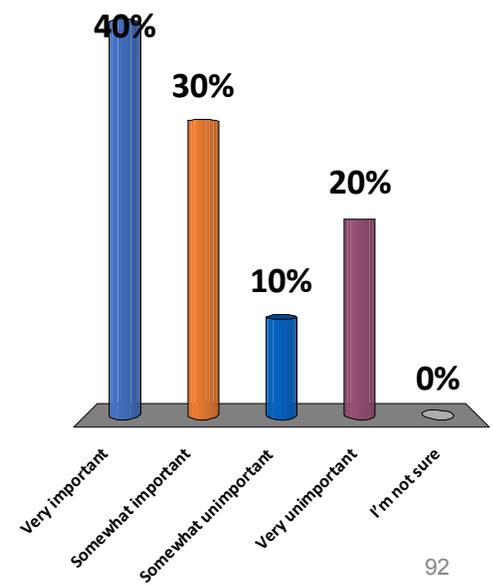


In setting priorities for a voluntary buyout program, how important is each of these issues?



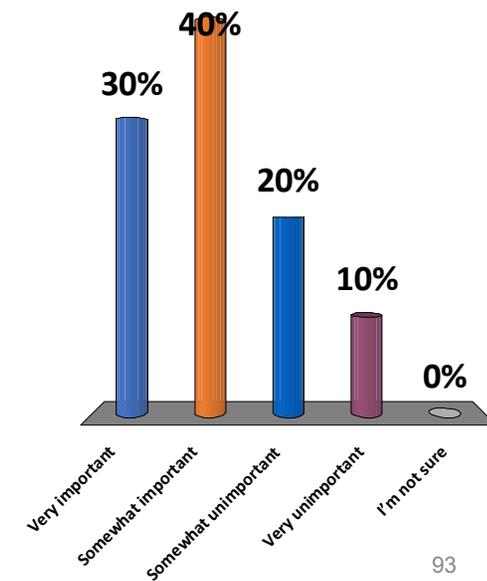
Impact on neighborhood fabric and integrity.

- 1. Very important
- 2. Somewhat important
- 3. Somewhat unimportant
- 4. Very unimportant
- 5. I'm not sure



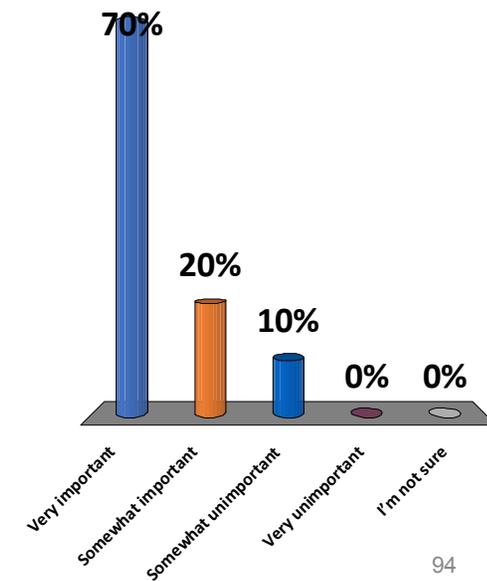
Adjacency to public property (i.e., parks, greenbelts).

1. Very important
2. Somewhat important
3. Somewhat unimportant
4. Very unimportant
5. I'm not sure



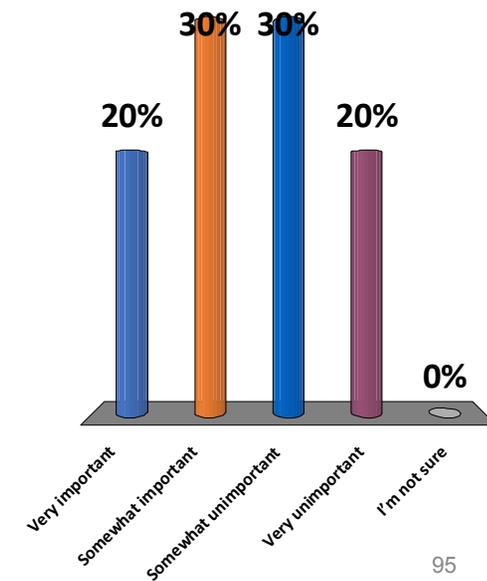
Frequency of the property's past flooding

1. Very important
2. Somewhat important
3. Somewhat unimportant
4. Very unimportant
5. I'm not sure



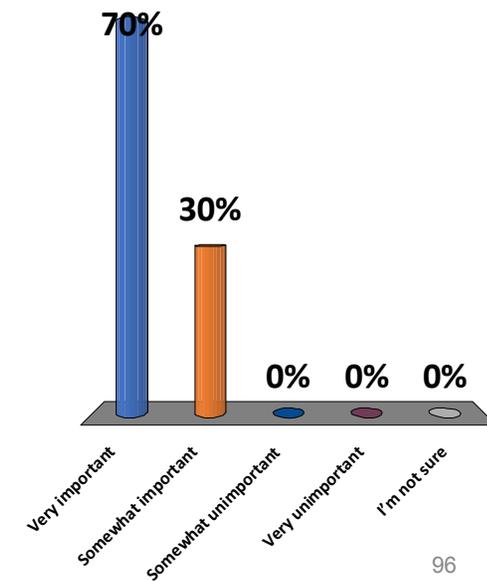
Level of threat to structure due to channel erosion

1. Very important
2. Somewhat important
3. Somewhat unimportant
4. Very unimportant
5. I'm not sure



Cost-benefit ratio of buyout vs. stormwater capital project.

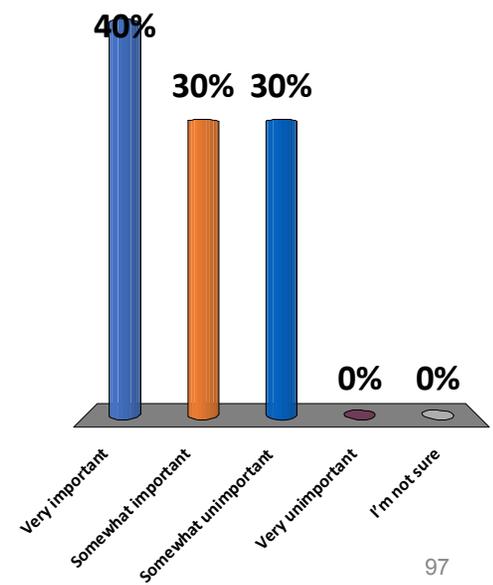
1. Very important
2. Somewhat important
3. Somewhat unimportant
4. Very unimportant
5. I'm not sure





Potential to use the property as a neighborhood amenity or an addition to the City's open space network.

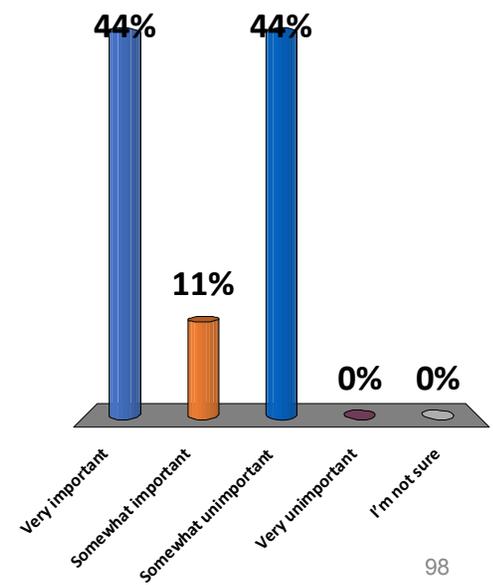
- 1. Very important
- 2. Somewhat important
- 3. Somewhat unimportant
- 4. Very unimportant
- 5. I'm not sure





The buyout qualifies for grant funding.

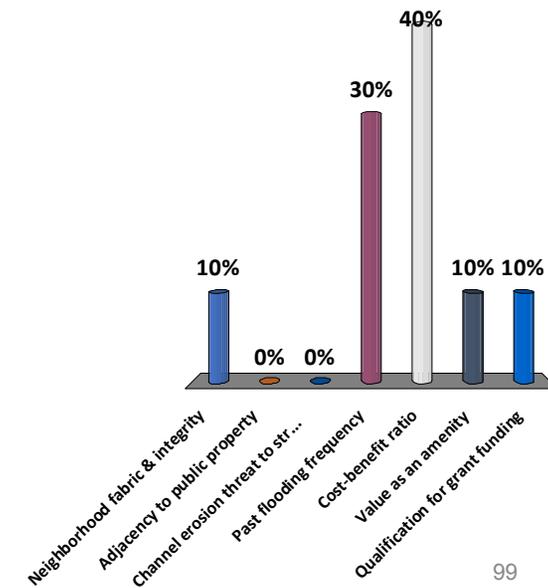
- 1. Very important
- 2. Somewhat important
- 3. Somewhat unimportant
- 4. Very unimportant
- 5. I'm not sure





Which factor is most important in setting priorities for voluntary buyouts?

1. Neighborhood fabric & integrity
2. Adjacency to public property
3. Channel erosion threat to structure
4. Past flooding frequency
5. Cost-benefit ratio
6. Value as an amenity
7. Qualification for grant funding





FORT WORTH[®] Voluntary Buyout

Feedback & Discussion



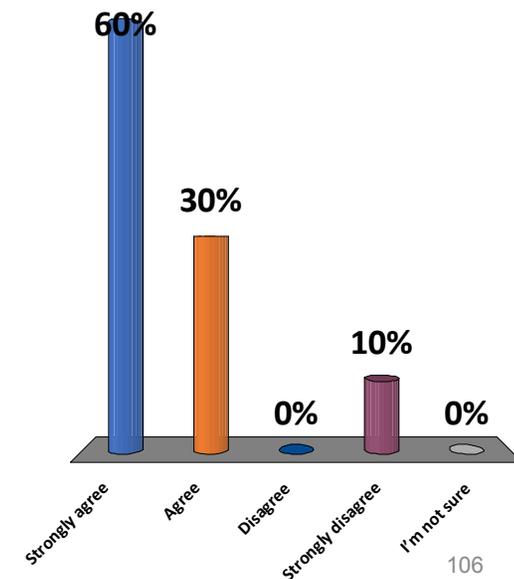
Voluntary Buyout

Based on our discussion ...



Fort Worth should have a voluntary buyout program for flood prone or erosion threatened properties.

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree
5. I'm not sure





Topic 4: Development Oversight

What are we hearing?

Community / Residents

- Water quality
- Review sites less than 1 acre
- Standards for flood prone areas
- Cumulative Impacts

Developers

- Consistency of review comments
- Reviews are too detailed
- Standards are too conservative
- Schedule delays

What is Development Oversight?

- Promote orderly growth and development, safe construction and neighborhood vitality
- Examples of Development Oversight:
 - Plat review
 - Building permits
 - Zoning
 - Infrastructure reviews
 - Water
 - Transportation Public Works
 - Urban Forestry
 - **Stormwater reviews**
 - **“No Adverse Flooding Impact” onsite or offsite**

Stormwater Development Oversight

- 2016:
 - 353 new projects entered the system
 - 950 reviews
- 2017:
 - On pace for 336 new projects entering the system
 - On pace for 1,200 reviews
- 7.5 staff positions
- 2 consultant contracts
- ~ \$1.6 million/year total budget

Level of Stormwater Development Review

- Same criteria for greenfield and infill sites with one exception for small infill lots
- Review sites 1 acre and larger
- Goal is to minimize risk of adverse drainage impacts onsite or offsite
 - Significant level of detail but still just an “audit”
- Water quality requirements only during construction

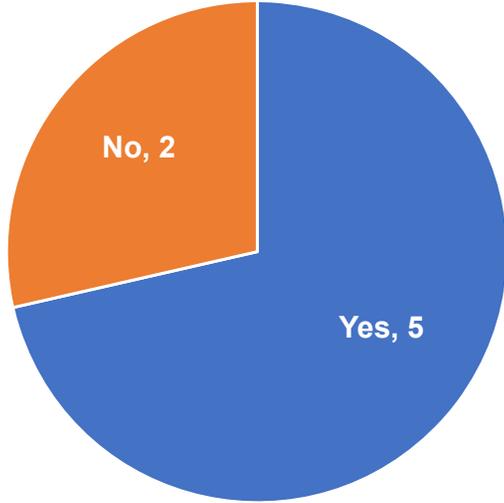
Development Oversight - Considerations

- Ensure compliance with drainage standards
 - Goal is to minimize the possibility of adverse impacts onsite/offsite
- Timely review process
- Flexibility
 - Regulate to the “spirit” of the standards not just “the letter”
 - Works against timeliness
- Predictability
 - Trying to be “Predictably flexible”
- Manage Stormwater resources
 - No specific fee for reviews

FORT WORTH Development Oversight



Do you prevent increase in stormwater flow rate from development?

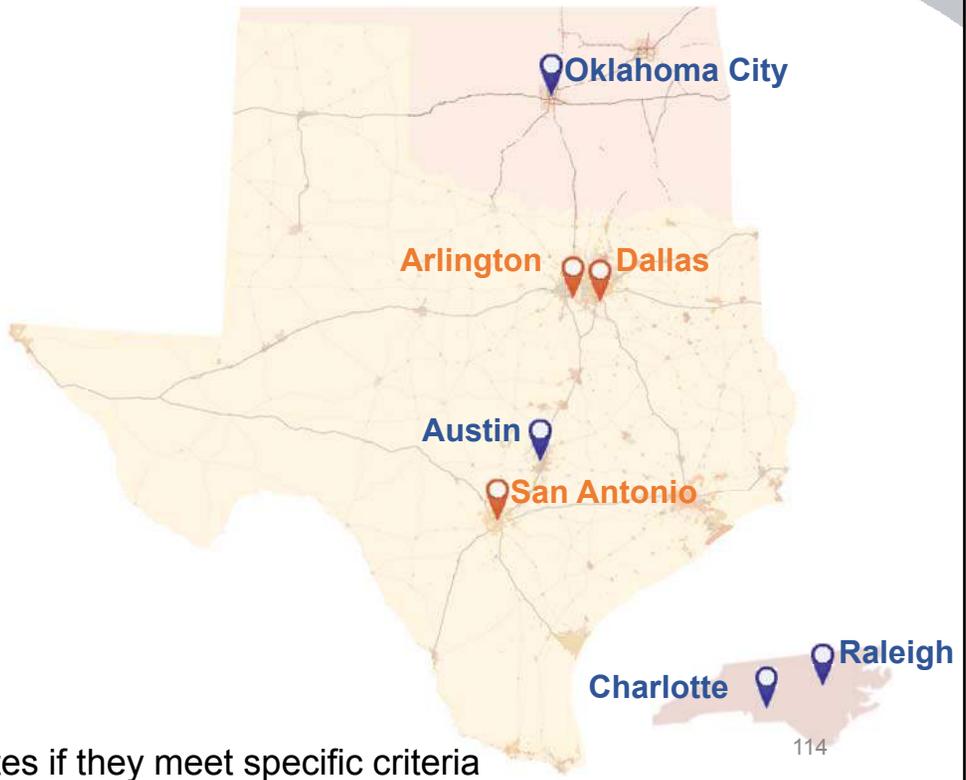
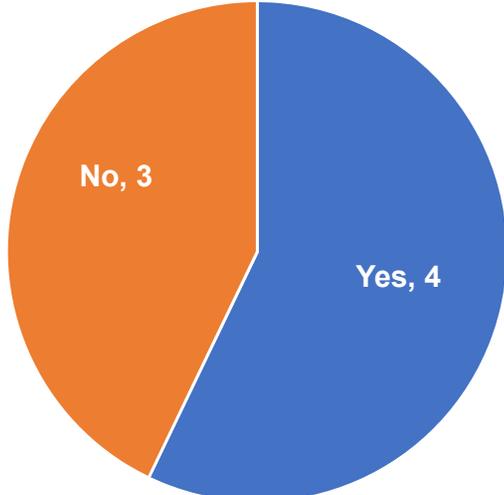


Fort Worth allows increase in stormwater flow rates if shown to not cause flooding

FORT WORTH Development Oversight

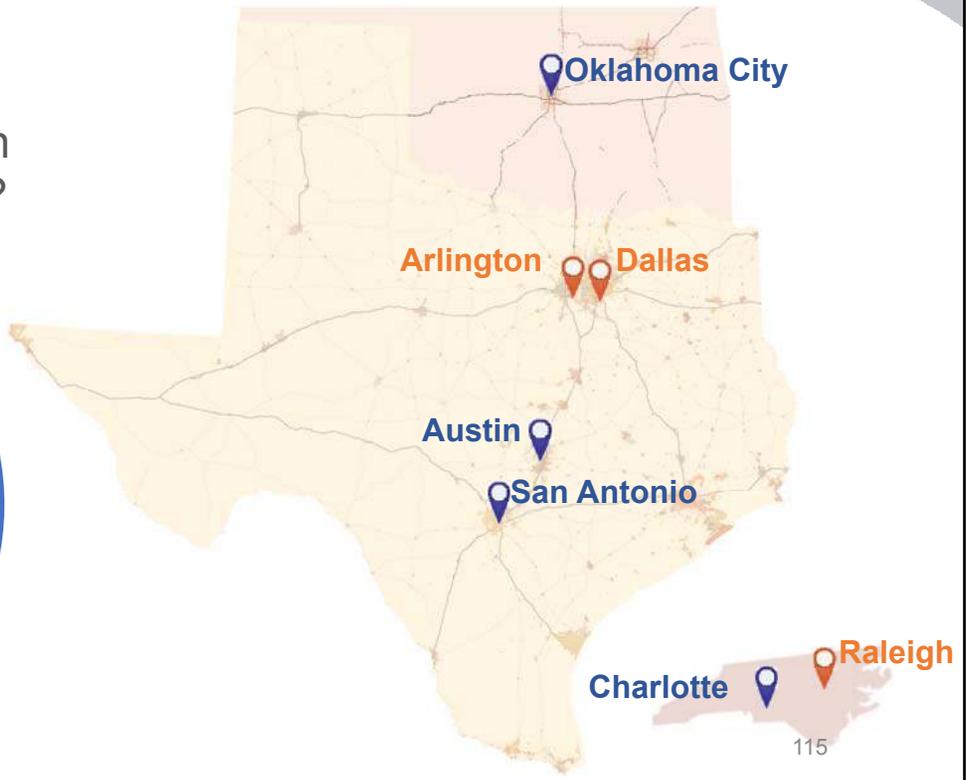
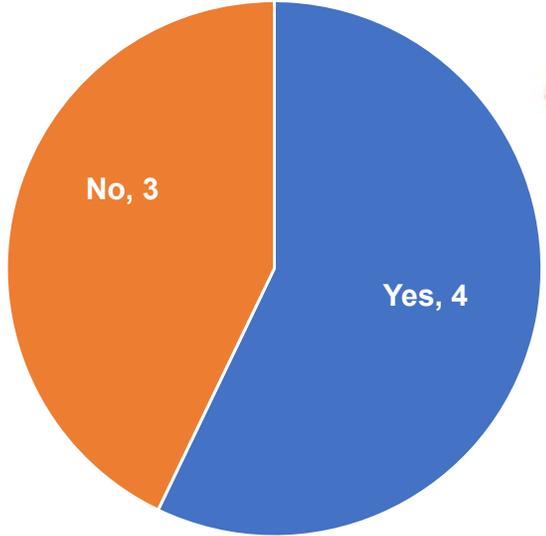


Do you have different criteria for greenfield development and infill?



Fort Worth has a simplified method for small, infill sites if they meet specific criteria

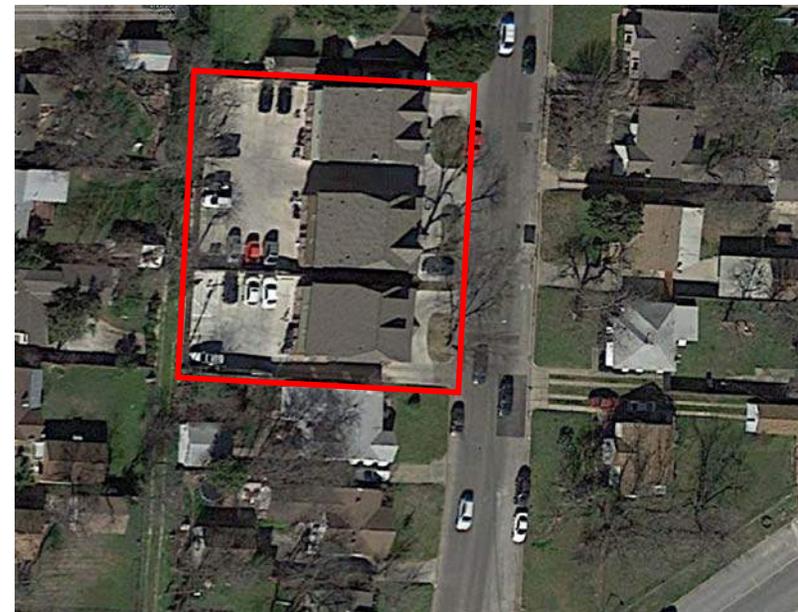
Do you have regulations specific to watersheds with known stormwater issues?



Prior to 2013



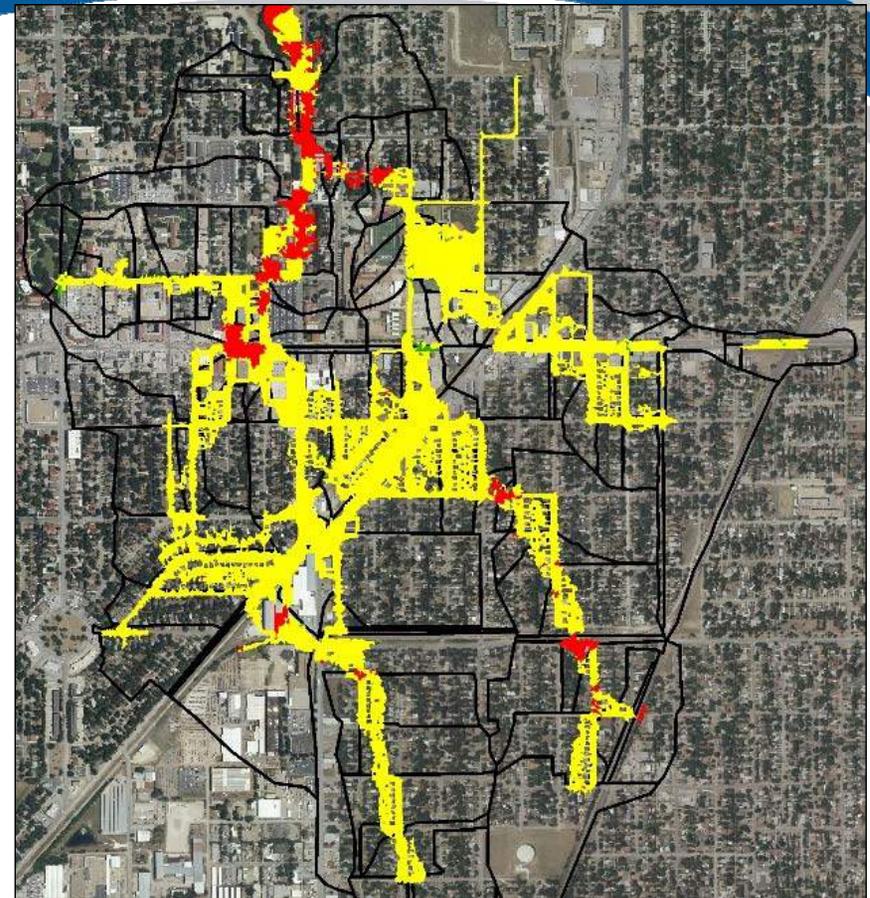
Present



Cumulative Impacts - Example



**Flooding increases
exceed City standards**



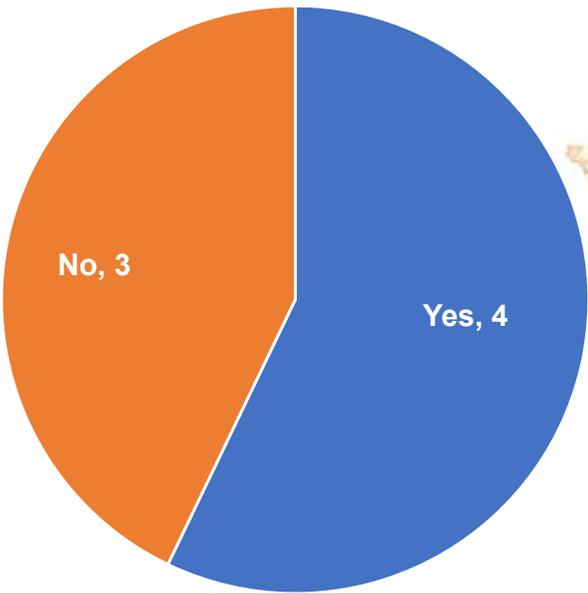
FORT WORTH Development Oversight



Do you review sites smaller than 1 acre?



Are small projects and large projects reviewed differently?



City Staff Recommendation

Continue to improve efficiency and effectiveness

- Maintain status quo:
 - Significant review oversight and timeliness
 - 1 acre threshold for review
 - Compliance with state/federal water quality regulations
- Consider policy development for the following:
 - Cumulative impacts
 - Areas of known flooding
 - Incentivize development to reduce flooding

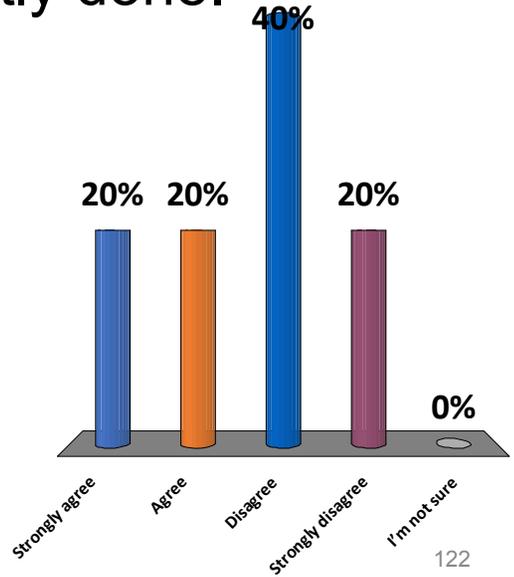
Informational Questions?

To clarify material in the presentation



Fort Worth's stormwater management oversight during the development review process should provide a more thorough evaluation of stormwater impact than currently done.

- 1. Strongly agree
- 2. Agree
- 3. Disagree
- 4. Strongly disagree
- 5. I'm not sure



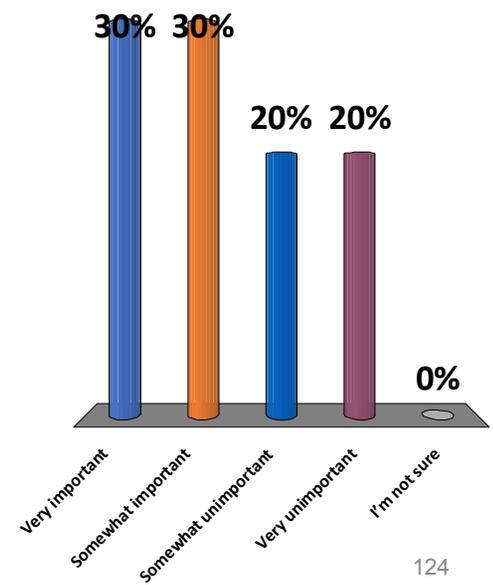
122

How important are these
development review issues?



The City should review stormwater issues thoroughly even if this takes longer for complex projects.

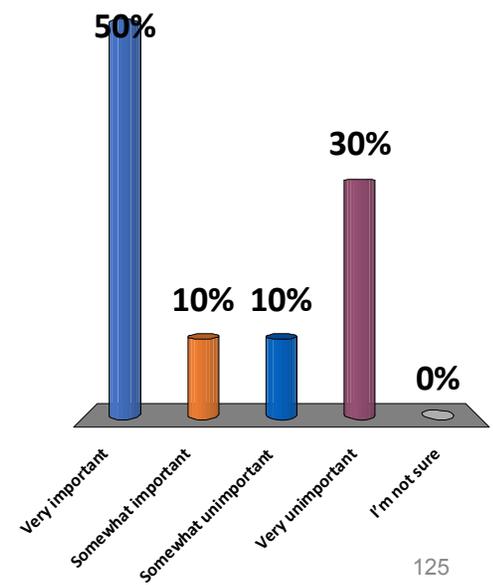
- 1. Very important
- 2. Somewhat important
- 3. Somewhat unimportant
- 4. Very unimportant
- 5. I'm not sure





The City should establish a stormwater review threshold of less than 1 acre in size.

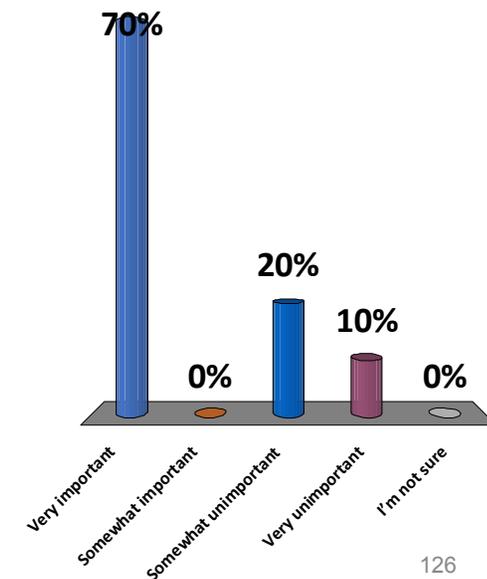
- 1. Very important
- 2. Somewhat important
- 3. Somewhat unimportant
- 4. Very unimportant
- 5. I'm not sure



125

The City should have more protective standards in areas with known flooding problems.

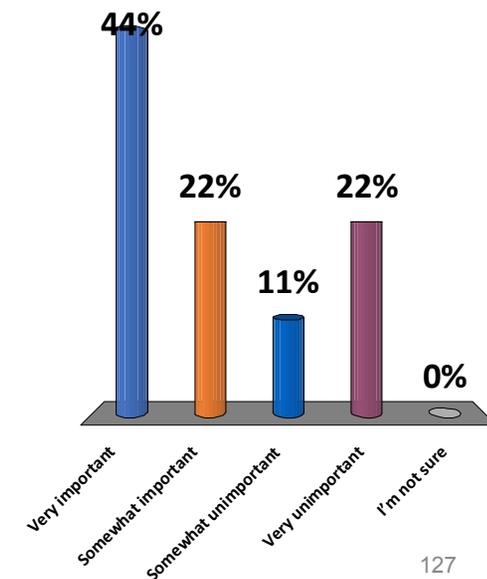
1. Very important
2. Somewhat important
3. Somewhat unimportant
4. Very unimportant
5. I'm not sure



126

The cumulative stormwater impacts of future development in a watershed should be considered when reviewing development proposals.

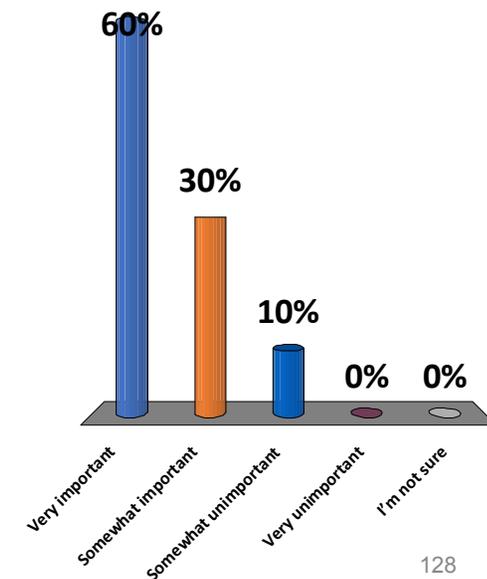
1. Very important
2. Somewhat important
3. Somewhat unimportant
4. Very unimportant
5. I'm not sure



127

Providing an incentive or bonus to development that contributes to reducing existing flooding in identified floodprone areas

1. Very important
2. Somewhat important
3. Somewhat unimportant
4. Very unimportant
5. I'm not sure



128

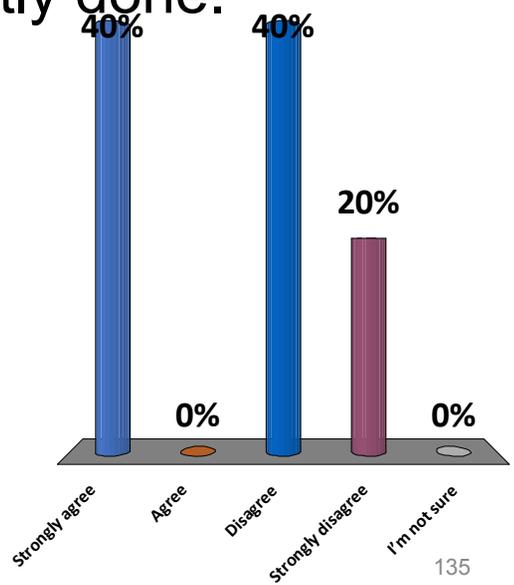
Feedback & Discussion

Based on our discussion ...



Fort Worth’s stormwater management oversight during the development review process should provide a more thorough evaluation of stormwater impact than currently done.

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree
5. I’m not sure





Next Steps

- Begin drafting updated plan based on today's feedback
 - Policies
 - Strategies
 - Implementation recommendations
- Target next Stakeholder group meeting for late summer



Website

- Slides from first stakeholder mtg.
- Stakeholder mtg. notes
- List of frequently asked questions
- Schedule
- Comment form

<http://fortworthtexas.gov/stormwaterMasterPlanUpdate/>

Stormwater Management Program Master Plan Update

Purpose and Objectives

This update to the Stormwater Management Program Master Plan will assess the progress and lessons learned from the first 10 years of the program.

Opportunities for efficiencies and improvements will be objectively evaluated to ensure the City of Fort Worth is in line with representative communities. Strategies, priorities, and policies will be refined to optimize the use of resources to best meet the stormwater related needs of the City of Fort Worth community over the next 10 years. This initiative will include significant stakeholder engagement and input with the updated Master Plan ultimately being submitted for adoption by City Council.

About the Update

Expected Completion
End of 2017

Goal
Update the Stormwater Management Program's Strategic Master Plan to gather feedback, refine policies and optimize resource distribution.

Calendar

Stormwater Master Plan Stakeholder Meeting

6 p.m. May 16, 2017
Hazel Harvey Peace Center for Neighborhoods
818 Missouri Ave, Room 20L
Stakeholder group meetings are open to the public and will provide an opportunity to gather feedback for updating the stormwater strategic master plan.

Contact

Jennifer Dyke
Senior Planner
Transportation & Public Works
817-392-2714

Program Spectrum	Annual Cost Per Acre	Area of Budget
"Backhaul"	\$25	\$7 million
City of Fort Worth program dollars 2006 - Limited implementation, mostly historic maintenance	\$30	\$7.6 million
"Midlevel"	\$50	\$1.6 million
"Midlevel"	\$75	\$1.7 million
"Aggressive"	\$150	\$3.6 million
City of Fort Worth - "Aggressive" water planning, incentives, drainage systems, maintenance, "Midlevel" CIP	\$160	\$3.2 million by year 8
"Enterprise"	\$250	\$5.6 million

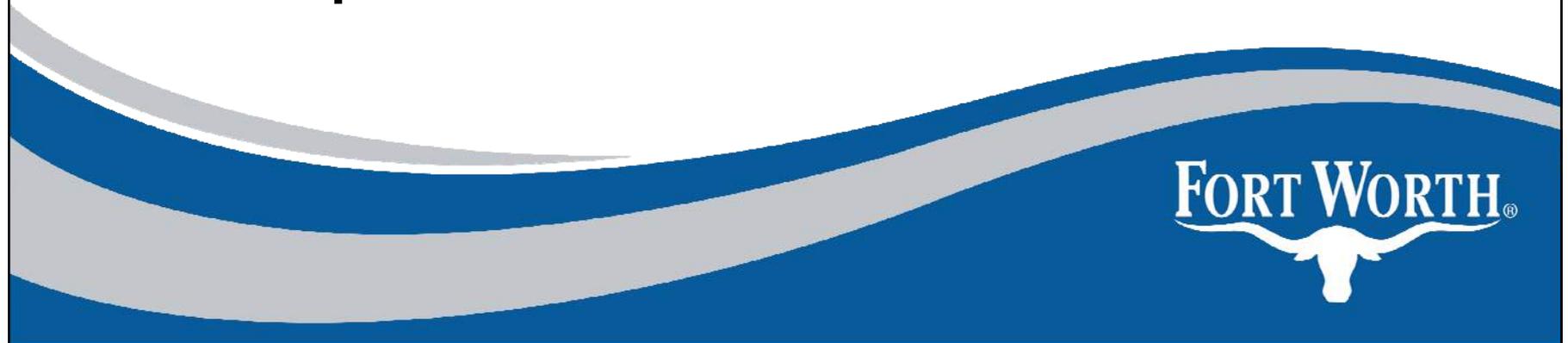
This video is a modified version of the January 2017 stakeholder meeting presentation, which provides an overview of the stormwater program and progress over the past decade.

Schedule Overview



Thank you for your input and
participation!

Open for Public Comments



**Stormwater Master Plan Update
Summary of Stakeholder Feedback
Meeting 2 – May 16, 2017**

Meeting Purpose: Discuss results of peer community reviews and receive feedback from stakeholders on four major topics: Local floodplains, Private Property Channel Erosion, Voluntary Buyout Program, and Development Services.

Stakeholders in Attendance

Rusty Fuller	David Motheral	Howard Rattliff
Gary Havener	Rick Kubes	Aric Head
Rafael McDonnell	Joe Schneider	
Bill Schur	Lee Nicol	

City of Fort Worth Staff, Master Plan Consultant, Halff Associates, and Public- sign in sheets available

Questions/Comments brought up by stakeholders during the presentation and discussed at the meeting:

1. Is it a 1% storm event that is typically the focus of local floodplains?
2. Does Fort Worth have a floodplain regulation for local floodplain? But the City does maintain general no adverse plain impact policy. Is that the same thing?
3. What kind of effort would it take to reproduce this local floodplain analysis across the city?
4. Why would the City review local floodplain developments smaller than once acre?
5. Will the local floodplains address the actual problem? Or will the problem be transferred somewhere else once the developed property is elevated? Need to make sure the problem is addressed holistically.
6. How does buying out a house eliminate flood or erosion risks to structures?
7. Where are the grant opportunities coming from?
8. The grants themselves, are they for FEMA floodplain area or are they local?
9. The \$65-100 million is the cost of capital projects, but how many houses they would have to buyout so they wouldn't have to spend \$100 million?
10. Do we really want to establish hardened, fast policies and take the decision away from people? The geography of the City has so many different areas to look at, I think it's almost impossible to set hard standards that the people have to follow. I think you have to give people the discretion that are in charge of these things to make some decisions.
11. Incentivized development – what does that mean?

12. Can cumulative impacts be addressed while not reviewing anything smaller than an acre?
13. Is development paying for their fair share of the cumulative impact for the areas in the City of Fort Worth that are having these problems? Or is that spread out across the city?
14. Are there grants for incentivized developments and local areas?
15. What's the right balance to decide whether a development needs a stormwater permit?

Questions/Comments brought up by public following the presentation and discussed at the meeting:

1. Is there any type of stormwater management that looks into the whole development even though each lot is under an acre?
2. When living in Florida, there were impermeability limitations placed on every property which forced owners to make decisions on what types of impervious area could be constructed on their property.
3. The City Planning Department and Stormwater do not always count impervious areas in the same way.
4. Curious what impacts were caused by paving over an empty lot near Walgreens. How much did this cost the City?
5. We would like to see more focus on public safety. Not just property but loss of life and potential threats to people.
6. If we want to have a nice City and a livable community, we all have to pay into that.
7. New development is not necessarily what is causing the issue, it is more about the older developments.
8. Do you anticipate that there would be any stormwater capital project funding in upcoming bonds?

Summary of feedback received on the hard copy comment cards passed out during the meeting:

See separate handout

Summary of feedback received from public on polling questions during the meeting:

See separate handout

Summary of feedback from electronic polling questions asked to stakeholders during the meeting:

See separate handout

Meeting Conclusions:

1. Feedback, comments, and polling results from the stakeholder meeting will be compiled and reviewed to inform future direction of the Master Plan.
2. The City will move forward with the implementation planning phase of the Master Plan.
3. The next stakeholder meeting will be planned for late summer. More information will be sent out prior to the meeting.
4. "Parking lot" questions were identified during the meeting. These were questions brought up by the public and stakeholders that were relevant to the Master Plan but were not part of the agenda for Stakeholder Meeting 2. These questions will be considered for future Master Plan implementation and coordination:
 1. The stormwater utility funding level is currently inadequate and needs to be addressed.
 2. The City should look into ways to minimize conflicts with impervious surfaces and current City standards such as street widths.

← STAKEHOLDERS →



PROJECT MEETING SIGN-IN

Stormwater Master Plan • May 16, 2017 • Time 6:00 • Hazel Harvey Peace Center

Name	Address	ZIP	Phone	Email	How did you hear about this meeting? (Email, Phone, Nextdoor, other)
Krusty Fuller	Alta Loma	76244	-	-	
G Hayden		76107			
Reba McDaniel	901 Mym FWS	76118			
William M Schur	912 N Batey Ave	76107	-	-	
DAVID MOTHERAL	3950 Summercrest	76109			
Bick Kubas					
Joe Sewerel	7800 Hinesway	76177	817 224 6000		
*CHRISTINA PATOSKI	4237 EL CAMPO	76107	817 738 3300	*See Public sign-in	
Lee Nicol	3882 South Hills Circle, FTW	76109	817.308.5929		
HOWARD RATH	2781 Glen Garden	76119	682 365-6369	rath@esmed.com	

Topic: Topic Stakeholder Mtg #2
 Location: Location Hazel Harvey Peace Center
 Date: Date 05-16-17

Aric Head
 CD4 -
 attended but
 did not sign in



PUBLIC RESIDENTS



PROJECT MEETING SIGN-IN

Stormwater Master Plan • May 16, 2017 • Time 6:00 • Hazel Harvey Peace Center

Name	Address	ZIP	Phone	Email	How did you hear about this meeting? (Email, Phone, Nextdoor, other)
John Walker?					
John Fitzgerald	2624 Ryan Place Dr.	76110	8327237076	johnfitzgerald86@gmail.com	website
Michelle Pettit		76109		ghpmzpa@aol.com	
Curtis Beitel	6813 Toledo Ct	76133	8172639245	curtis.beitel@hdrinc.com	
Jim Johnson	3224 Rogers Ave	76109		jimjohnson@swbell.net	
Scott Hubley	4055 Intimate Plaza	76109	817735-7372	skh@fruse.com	
Cheryl Sturwood	4927 Birchman	76107	817-240-8433	Seraphim50@sbcglobal.net	
Christina Proski	4237 El Campo	76107	817-738-3307*		
Linda Cozza	4017 Anita Av	76109	817-991-5748	Cozzi@earthlink.net	
Bobbie McCurdy	7316 Valencia ⁷⁶¹³³ Grove Ct.		817-832-8937	bshosby@yahoo.com	Clare Davis
D. Tucker	1203 E. W. eda	76104	817-721-0839	Dani@earthhaulters.com	email

Topic: Stakeholder Mtg #2
 Location: Hazel Harvey Peace Center
 Date: 05-16-17



PUBLIC / RESIDENTS



PROJECT MEETING SIGN-IN

Stormwater Master Plan • May 16, 2017 • Time 6:00 • Hazel Harvey Peace Center

Name	Address	ZIP	Phone	Email	How did you hear about this meeting? (Email, Phone, Nextdoor, other)
JEAN-MARIE ALEXANDER				JEANMARIE.ALEXANDER@SEG.PLC.COM	EMAIL
CRAIG BARNES				CRAIG.BARNES@SEG.PLC.COM	

Topic: Stakeholder Mtg #2
Location: Hazel Harvey Peace Center
Date: 05-16-17



STAFF/contractor*



PROJECT MEETING SIGN-IN

Stormwater Master Plan • May 16, 2017 • Time 6:00 • Hazel Harvey Peace Center

Name	Address	ZIP	Phone	Email	How did you hear about this meeting? (Email, Phone, Nextdoor, other)
CLAIR DAVIS	1000 PARK MORTON	76102	817-392-594	CLAIR.DAVIS@FORTWORTHTEXAS.GOV	
* LYNN LOVELL	2824 Winterhawk	76054	817-301-3401	llovell@halff.com	
Greg Simmon		76114	817-276-985	greg.simmon@fort.com	
CODY WHITTENBURG		76102	X5455	cody.whittenburg@...	
Lisa Biggs		76116	X2446	lisa.biggs@FortworthTexas.gov	
CHRIS JOHNSON				christopher.johnson@fortworthtexas.gov	
Vince Elias			5191	vince1131@vntel.com CFW	
* Michael Crenshaw					
LINDA YOU NG		2495			
Christina Osterlund			817-944-4363	christina.osterlund@fortworthtexas.gov	
Ranjana Muttiah			X7919	ranjan.muttiah@...	
KIRAN KONDURU	200 Texas St	76102	817-392-7598	Kiran.Konduru@fortworthtexas.gov	CFW

Topic: Topic Stakeholder Mtg #2
 Location: Local on Hazel Harvey Peace Center
 Date: Date 05-16-17



STAFF / Contractor



PROJECT MEETING SIGN-IN

Stormwater Master Plan • May 16, 2017 • Time 6:00 • Hazel Harvey Peace Center

Name	Address	ZIP	Phone	Email	How did you hear about this meeting? (Email, Phone, Nextdoor, other)
Jennifer Dyke	CFW SWM		Xt.		
Linda Sterne	CFW SWM		Xt. 2690		
* MIKEL WILKINS			214 729 2860	M.WILKINS@VELOCITY.COM	
* Mike Bennett	CFW SWM		817 392 7891	mike.bennett@fordw.com	
Carro-Henry	CFW SWM				
Eric Fladager	CFW PE'D				

Topic: Stakeholder Mtg #2
 Location: Hazel Harvey Peace Center
 Date: 05-16-17





Capital Improvement Project

Stormwater Master Plan

Comment Card

Name: David Motheral Date: May 16, 2017

Email Address: david.motheral@motheraldev.com

Organization: ANNE ZEDAK'S Appointee - New South Side & Hemphill Task Force

Address: 3950 Summercrest Dr

City, State, ZIP: FT. Worth, TX 76109

Telephone #: 817-832-2988
(include area code)

Check One:

Yes, I want to speak on this issue.

No, I do not want to speak, but I would like City Staff to see my comments:

GENERALLY SPEAKING

Comment: ① CAUTION when CONSIDERING URBAN (SMALL) vs. SUBDIVISIONS (LARGE) DEV.

② View in Wholist Approach for RISK SOLUTIONS

③ Working with Planning Dept for Benefit to Community AS AN AMENITY

④ No HARD & FAST policy / MUST HAVE FLEXIBILITY ALWAYS

⑤ Need flexibility for URBAN vs Greenfield "Must"

PLEASE RETURN TO CITY STAFF

Or Mail to: Jennifer Dyke, PM , City of Fort Worth, TPW/Stormwater Management

, 100 Texas Street Fort Worth, TX 76102

6) Voluntary buyout program — what role of Neighborhood Associations and preservation of look & feel of neighborhood



7) (Cumulative impacts) — in-fill development — extremely important

Capital Improvement Project

Stormwater Master Plan

Comment Card

8) Permeability percentage — worth considering

Name: Bill Schur Date: 5-16-2017

Email Address: wmschur@swbell.net

Organization: Self / Stakeholder Resident

Address: 912 N Bailey Ave

City, State, ZIP: Fort Worth TX 76107-1012

Telephone #: 817-880-4167

(include area code)

Check One:

Yes, I want to speak on this issue.

No, I do not want to speak, but I would like City Staff to see my comments:

Comment: ^① Refer to local floodplains as "non-FEMA local floodplains" to eliminate confusion.

^② Piecemeal rezoning in local floodplain areas must be reviewed carefully → not just impact on new structure but impact of new structure on diversion of surface waters

^③ Special local floodplain overlay zoning with appropriate lot coverage development standards

^④ Private channel erosion policy — may engage not will engage

PLEASE RETURN TO CITY STAFF

Or Mail to: Jennifer Dyke, PM, City of Fort Worth, TPW/Stormwater Management

100 Texas Street Fort Worth, TX 76102

^⑤ Maintenance — policy should state criteria for public expenditure for maintenance — when public will maintain



Capital Improvement Project

Stormwater Master Plan

Comment Card

Name: HOWARD RATTLEFF, JR Date: 5-16-2017

Email Address: rattlehjr@yahoo.com

Organization: _____

Address: _____

City, State, ZIP: _____

Telephone #: 682-365-4369
(include area code)

Check One:

Yes, I want to speak on this issue.

No, I do not want to speak, but I would like City Staff to see my comments:

Comment: Does the city have a GRANT
program to apply / manage grants / and
TRACK GRANTS. GRANTTREKKER™

PLEASE RETURN TO CITY STAFF

Or Mail to: Jennifer Dyke, PM, City of Fort Worth, TPW/Stormwater Management

, 100 Texas Street Fort Worth, TX 76102



Capital Improvement Project

Stormwater Master Plan

Comment Card

Name: Rusty Fuller Date: 5/16/17
 Email Address: refuller2001@yahoo.com
 Organization: NFWA
 Address: 5317 Alta Loma Dr
 City, State, ZIP: FW, TX 76244
 Telephone #: 817 301 3378
(Include area code)

Check One:

- Yes, I want to speak on this issue.
- No, I do not want to speak, but I would like City Staff to see my comments:

Comment: When it comes down to < 1 acre development
the regulation can be "much less." Booklet to developer
with building permit data.

Caution should be exercised in drawing up erosion
policy as to not "rescue" private property
Maintenance of erosion prevention structures
should be assigned based on the benefiting entity's
ability to maintain.

PLEASE RETURN TO CITY STAFF



Capital Improvement Project

Stormwater Master Plan

Comment Card

Name: _____ Date: _____

Email Address: _____

Organization: _____

Address: _____

City, State, ZIP: _____

Telephone #: _____
(include area code)

Check One:

- Yes, I want to speak on this issue.
- No, I do not want to speak, but I would like City Staff to see my comments:

Comment:

Take Holders unbalanced

Room space not used!!!

Thank you

PLEASE RETURN TO CITY STAFF

Or Mail to: Jennifer Dyke, PM, City of Fort Worth, TPW/Stormwater Management, 100 Texas Street Fort Worth, TX 76102



Capital Improvement Project

Stormwater Master Plan

Comment Card

Name: John Fitzgerald Date: 5/16/17

Email Address: johnfitzgerald86@gmail.com

Organization: _____

Address: 2624 Ryan Place Dr.

City, State, ZIP: Fort Worth TX 76110

Telephone #: 832-723-9076
(include area code)

Check One:

- Yes, I want to speak on this issue.
- No, I do not want to speak, but I would like City Staff to see my comments:

Comment: Thank you for putting together this meeting and allowing public input.
• \$8-10 Million isn't nearly enough to fix all of FW
Stormwater problems, even with the voluntary buyout program
these problems keep getting worse and more expensive to fix.
• Funding for ^{some of} this needs to be included in the upcoming
2018 bond package. We should require developments less than
an acre to have a stormwater management plan that doesn't
make these problems worse. Our city council needs to start
taking these concerns seriously.

PLEASE RETURN TO CITY STAFF

Or Mail to: Jennifer Dyke, PM, City of Fort Worth, TPW/Stormwater Management, 100 Texas Street Fort Worth, TX 76102

NO, I DO NOT WANT TO SPEAK, BUT I WOULD LIKE CITY STAFF TO SEE MY COMMENTS:

Comment: dirt will be needed, it will require an aerial view of all areas being addressed.

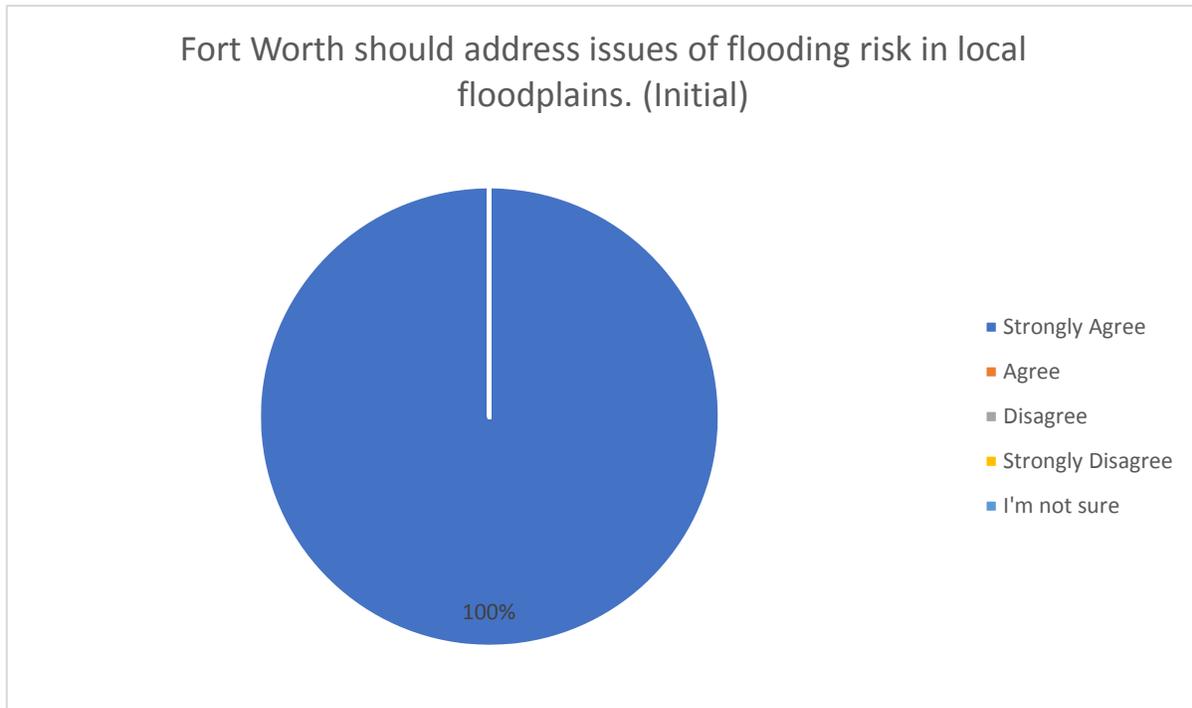
Fair value for all property assessed through the buyout process.

Permanent erosion control, will be needed.

PLEASE RETURN TO CITY STAFF

Or Mail to: Jennifer Dyke, PM , City of Fort Worth, TPW/Stormwater Management , 100 Texas Street Fort Worth, TX 76102

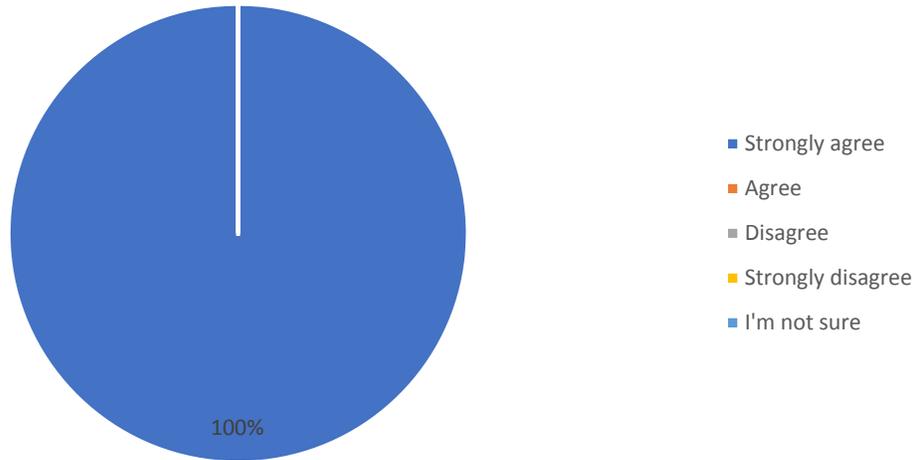
Topic 1: Local Floodplains



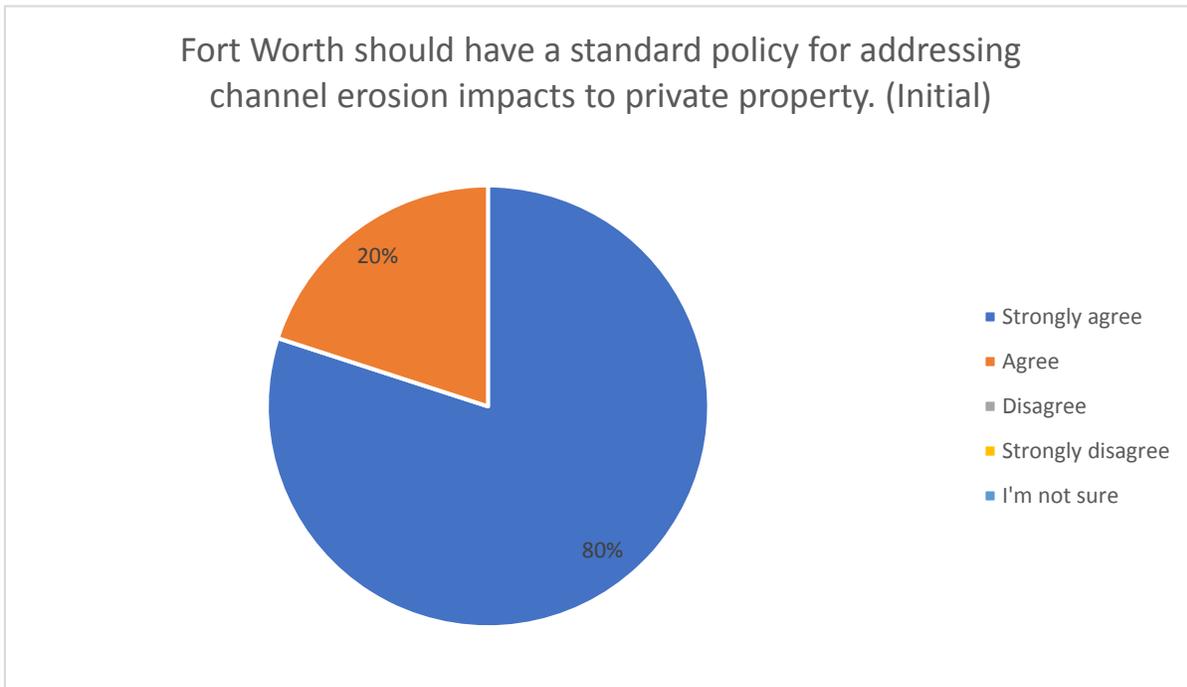
How important are these strategies for addressing local floodplains?

	Very important	Somewhat important	Somewhat unimportant	Very unimportant	I'm not sure
Having the City provide the local floodplain maps to the public.	100.0%	0.0%	0.0%	0.0%	0.0%
Reviewing all development in local floodplains, even those smaller than 1 acre.	80.0%	20.0%	0.0%	0.0%	0.0%
Considering these floodplains in evaluating requests for rezoning, subdivision, special use permits & other development approvals.	80.0%	20.0%	0.0%	0.0%	0.0%
Reflecting these flood risks in City plans and policies, such as the Comprehensive Plan.	100.0%	0.0%	0.0%	0.0%	0.0%
Requiring that any substantial rehabilitation, renovation or new development (including after a flood) maintain finished floor elevations above the 100-year flood elevation.	60.0%	40.0%	0.0%	0.0%	0.0%
Considering the impact a local floodplain approach would have on property values.	60.0%	40.0%	0.0%	0.0%	0.0%

Fort Worth should address issues of flooding risk in local floodplains. (Final)



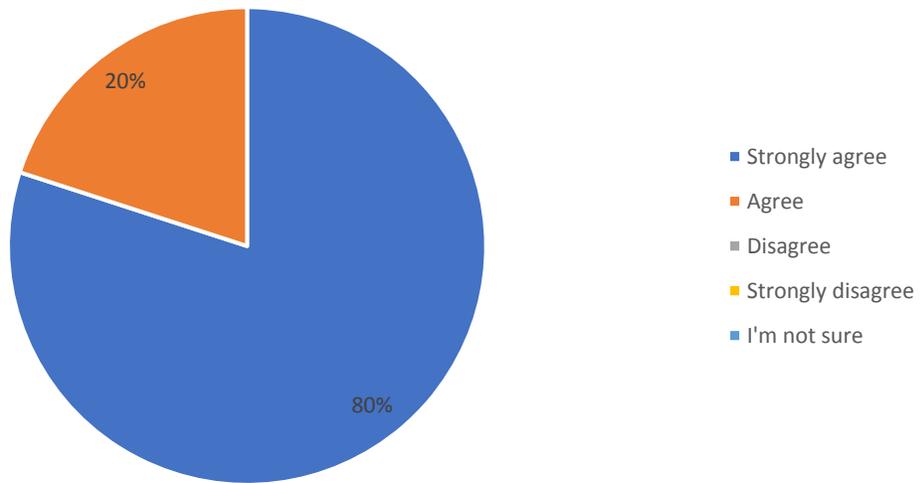
Topic 2: Private Property Channel Erosion Policy



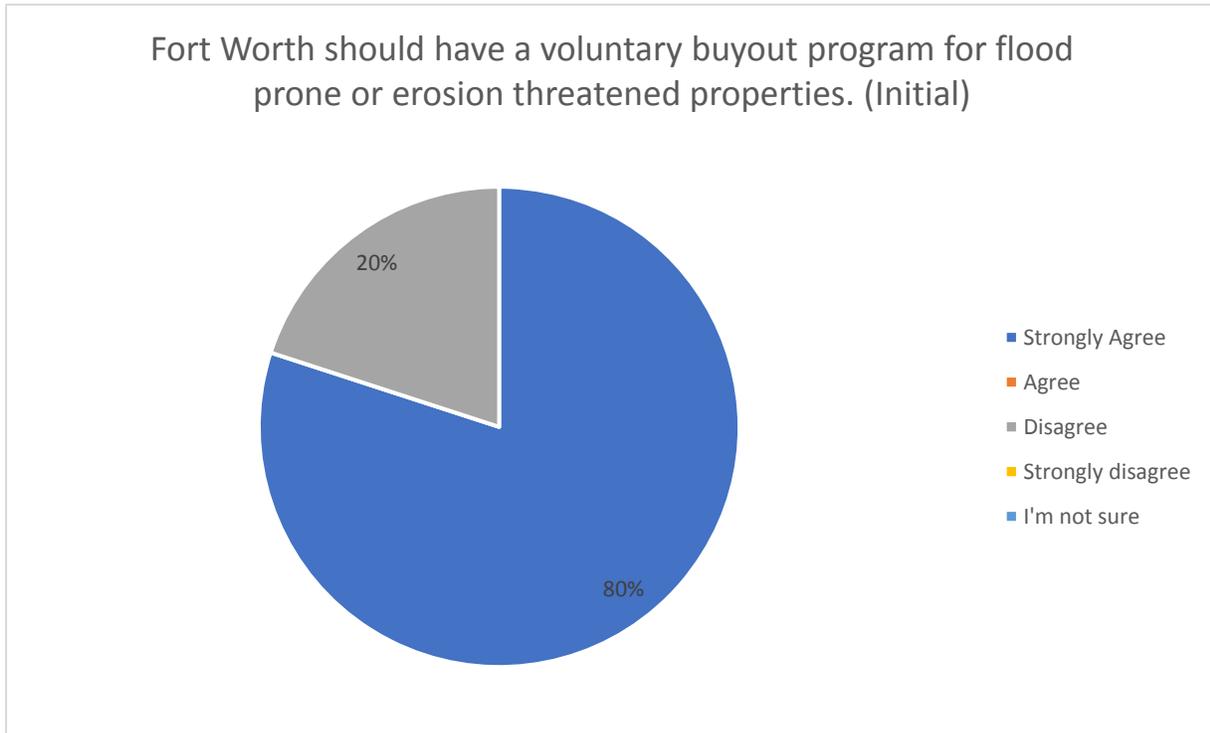
How important is each of these issues to a private property channel erosion policy?

	Very important	Somewhat important	Somewhat unimportant	Very unimportant	I'm not sure
Natural stream buffers should be created so future development has less risk from erosion.	60.0%	20.0%	20.0%	0.0%	0.0%
City capital investment should be considered only when there is a public benefit.	75.0%	25.0%	0.0%	0.0%	0.0%
Even though the City capital investment has provided erosion protection on private property, the City should be responsible for maintenance.	20.0%	60.0%	20.0%	0.0%	0.0%
City capital investment should depend on the amount of private cost-sharing match.	25.0%	50.0%	25.0%	0.0%	0.0%

Fort Worth should have a standard policy for addressing channel erosion impacts to private property. (Final)



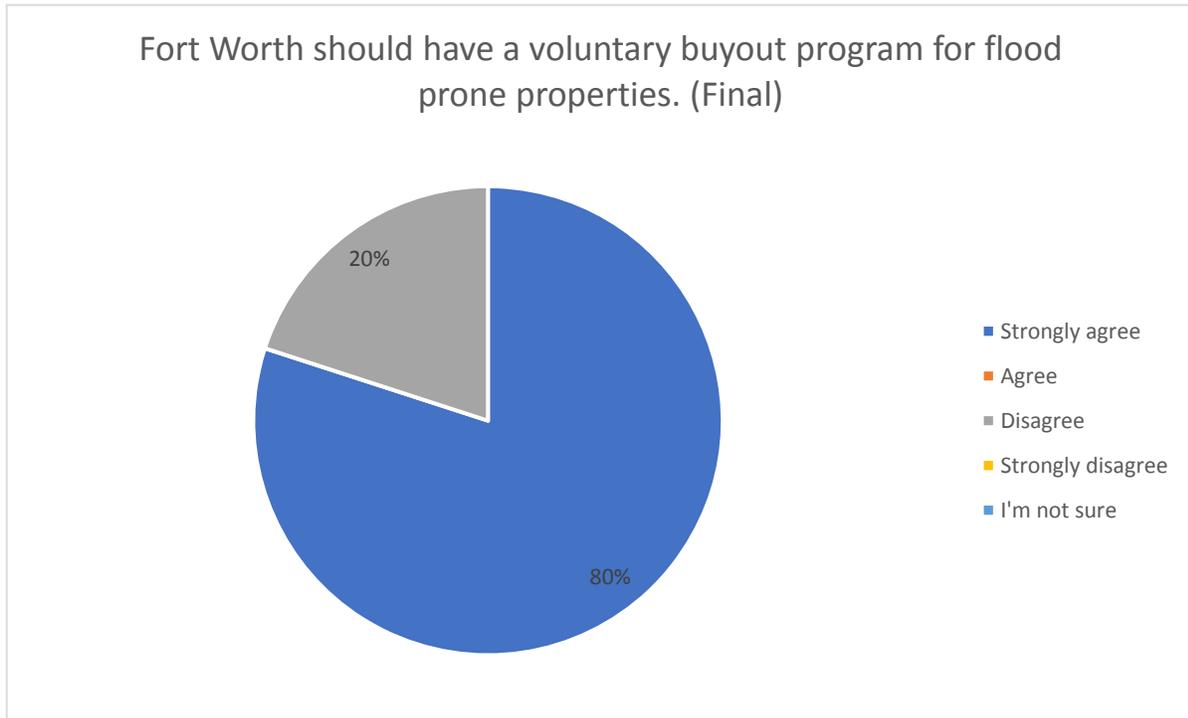
Topic 3: Voluntary Buyout Program



In setting priorities for a voluntary buyout program, how important is each of these issues?

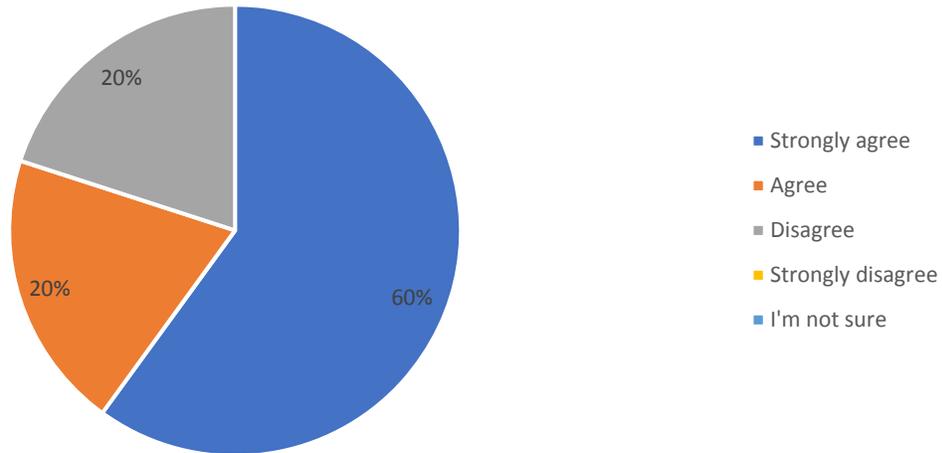
	Very important	Somewhat important	Somewhat unimportant	Very unimportant	I'm not sure
Cost-benefit ratio of buyout vs. stormwater capital project.	100.0%	0.0%	0.0%	0.0%	0.0%
Frequency of the property's past flooding.	100.0%	0.0%	0.0%	0.0%	0.0%
The buyout qualifies for grant funding.	25.0%	50.0%	25.0%	0.0%	0.0%
Potential to use the property as a neighborhood amenity or an addition to the City's open space network.	50.0%	25.0%	25.0%	0.0%	0.0%
Impact on neighborhood fabric and integrity.	75.0%	25.0%	0.0%	0.0%	0.0%
Adjacency to public property (i.e., parks, greenbelts).	25.0%	75.0%	0.0%	0.0%	0.0%
Level of threat to structure due to channel erosion.	25.0%	75.0%	0.0%	0.0%	0.0%

Which factor is most important in setting priorities for voluntary buyouts?	
Cost-benefit ratio	25.0%
Past flooding frequency	50.0%
Neighborhood fabric & integrity	25.0%
Value as an amenity	0.0%
Qualification for grant funding	0.0%
Adjacency to public property	0.0%
Channel erosion threat to structure	0.0%



Topic 4: Development Oversight

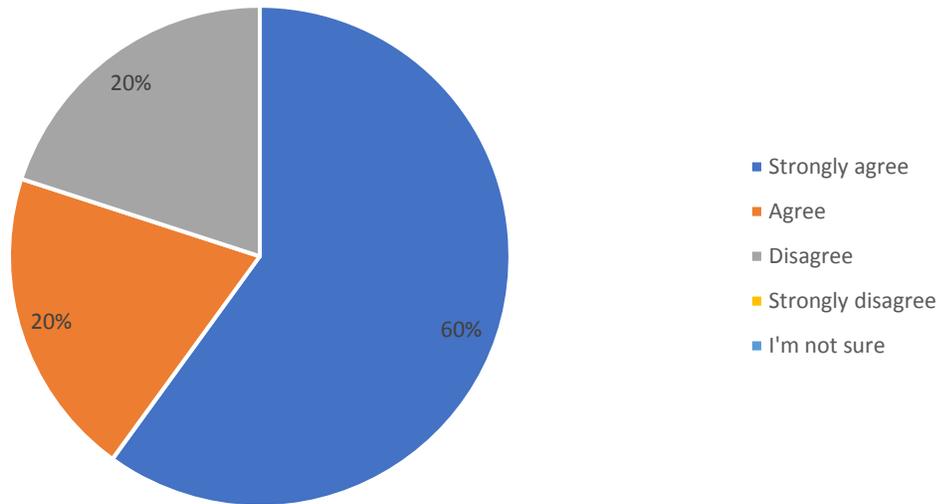
Fort Worth's stormwater management oversight during the development review process should provide a more thorough evaluation of stormwater impact than currently done. (Initial)



How important are these development review issues?

	Very important	Somewhat important	Somewhat unimportant	Very unimportant	I'm not sure
The City should have more protective standards in areas with known flooding problems.	80.0%	20.0%	0.0%	0.0%	0.0%
Providing an incentive or bonus to development that contributes to reducing existing flooding in identified floodprone areas	50.0%	25.0%	0.0%	25.0%	0.0%
The City should establish a stormwater review threshold of less than 1 acre in size.	40.0%	60.0%	0.0%	0.0%	0.0%
The cumulative stormwater impacts of future development in a watershed should be considered when reviewing development proposals.	75.0%	25.0%	0.0%	0.0%	0.0%
The City should review stormwater issues thoroughly even if this takes longer for complex projects.	80.0%	0.0%	20.0%	0.0%	0.0%

Fort Worth's stormwater management oversight during the development review process should provide a more thorough evaluation of stormwater impact than currently done. (Final)



Stormwater Management Program Master Plan Update Stakeholder Meeting - 5/16/17 – Public Feedback

Name (optional): _____

Local Floodplain Questions

1. Fort Worth should address issues of flooding risk in local floodplains.
- a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

Please wait and answer these questions along with the stakeholder group once we get to this portion of the presentation

How important are these strategies for addressing local floodplains?

2. Reflecting these flood risks in city plans and policies, such as the Comprehensive Plan.
- a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
3. Requiring that any substantial renovation or new development (including after a flood) maintain finished floor elevations above the 100-year flood elevation.
- a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
4. Considering these floodplains in evaluating requests for rezoning, subdivision, special use permits & other development approvals.
- a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
5. Considering the impact a local floodplain approach would have on property values.
- a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
6. Having the City provide the local floodplain maps to the public.
- a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback



Local Floodplain Questions, continued

7. Reviewing all development in local floodplains, even those smaller than 1 acre.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

8. Fort Worth should address issues of flooding risk in local floodplains.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

Private Property Channel Erosion Questions

1. Fort Worth should have a standard policy for addressing channel erosion impacts to private property.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

How important is each of these issues to a private property channel erosion policy?

2. City capital investment should be considered only when there is a public benefit.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

3. City capital investment should depend on the amount of private cost-sharing match.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

4. Natural stream buffers should be created so future development has less risk from erosion.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback

Private Property Channel Erosion Questions, continued

5. Even though the City capital investment has provided erosion protection on private property, the City should be responsible for maintenance.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

6. Fort Worth should have a standard policy for addressing channel erosion impacts to private property.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

Voluntary Buyout Questions

1. Fort Worth should have a voluntary buyout program for flood prone or erosion threatened properties.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

In setting priorities for a voluntary buyout program, how important is each of these issues?

2. Impact on neighborhood fabric and integrity.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

3. Adjacency to public property (i.e., parks, greenbelts).
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

4. Frequency of the property's past flooding
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback

Voluntary Buyout Questions, continued

5. Level of threat to structure due to channel erosion
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

6. Cost-benefit ratio of buyout vs. stormwater capital project.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

7. Potential to use the property as a neighborhood amenity or an addition to the city's open space network.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

8. The buyout qualifies for grant funding.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

9. Which factor is most important in setting priorities for voluntary buyouts?
 - a. Neighborhood fabric & integrity
 - b. Adjacency to public property
 - c. Past flooding frequency
 - d. Channel erosion threat to structure
 - e. Cost-benefit ratio
 - f. Value as an amenity
 - g. Qualification for grant funding

10. Fort Worth should have a voluntary buyout program for flood prone properties.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure



Development Oversight Questions

1. Fort Worth's stormwater management oversight during the development review process should provide a more thorough evaluation of stormwater impact than currently done.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

How important are these development review issues?

2. The City should review stormwater issues thoroughly even if this takes longer for complex projects.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
3. The City should establish a stormwater review threshold of less than 1 acre in size.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
4. The City should have more protective standards in areas with known flooding problems.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
5. The cumulative stormwater impacts of future development in a watershed should be considered when reviewing development proposals.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure



Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback

Development Oversight Questions, continued

6. Providing an incentive or bonus to development that contributes to reducing existing flooding in identified floodprone areas.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

7. Fort Worth's stormwater management oversight during the development review process should provide a more thorough evaluation of stormwater impact than currently done.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure



**Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback**

Name (optional): _____

Local Floodplain Questions

1. Fort Worth should address issues of flooding risk in local floodplains.

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. I'm not sure

Please wait and answer these questions along with the stakeholder group once we get to this portion of the presentation

How important are these strategies for addressing local floodplains?

2. Reflecting these flood risks in city plans and policies, such as the Comprehensive Plan.

- a. Very important
- b. Somewhat important
- c. Somewhat unimportant
- d. Very unimportant
- e. I'm not sure

3. Requiring that any substantial renovation or new development (including after a flood) maintain finished floor elevations above the 100-year flood elevation.

- a. Very important
- b. Somewhat important
- c. Somewhat unimportant
- d. Very unimportant
- e. I'm not sure

4. Considering these floodplains in evaluating requests for rezoning, subdivision, special use permits & other development approvals.

- a. Very important
- b. Somewhat important
- c. Somewhat unimportant
- d. Very unimportant
- e. I'm not sure

5. Considering the impact a local floodplain approach would have on property values.

- a. Very important
- b. Somewhat important
- c. Somewhat unimportant
- d. Very unimportant
- e. I'm not sure

6. Having the City provide the local floodplain maps to the public.

- a. Very important
- b. Somewhat important
- c. Somewhat unimportant
- d. Very unimportant
- e. I'm not sure



**Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback**

Local Floodplain Questions, continued

7. Reviewing all development in local floodplains, even those smaller than 1 acre.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

8. Fort Worth should address issues of flooding risk in local floodplains.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

Private Property Channel Erosion Questions

1. Fort Worth should have a standard policy for addressing channel erosion impacts to private property.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

How important is each of these issues to a private property channel erosion policy?

2. City capital investment should be considered only when there is a public benefit.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

3. City capital investment should depend on the amount of private cost-sharing match.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

4. Natural stream buffers should be created so future development has less risk from erosion.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

2

**Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback**

Private Property Channel Erosion Questions, continued

5. Even though the City capital investment has provided erosion protection on private property, the City should be responsible for maintenance.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

6. Fort Worth should have a standard policy for addressing channel erosion impacts to private property.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

Voluntary Buyout Questions

1. Fort Worth should have a voluntary buyout program for flood prone or erosion threatened properties.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

In setting priorities for a voluntary buyout program, how important is each of these issues?

2. Impact on neighborhood fabric and integrity.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

3. Adjacency to public property (i.e., parks, greenbelts).
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

4. Frequency of the property's past flooding
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback

Voluntary Buyout Questions, continued

5. Level of threat to structure due to channel erosion
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

6. Cost-benefit ratio of buyout vs. stormwater capital project.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

7. Potential to use the property as a neighborhood amenity or an addition to the city's open space network.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

8. The buyout qualifies for grant funding.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

9. Which factor is most important in setting priorities for voluntary buyouts?
 - a. Neighborhood fabric & integrity
 - b. Adjacency to public property
 - c. Past flooding frequency
 - d. Channel erosion threat to structure
 - e. Cost-benefit ratio
 - f. Value as an amenity
 - g. Qualification for grant funding

10. Fort Worth should have a voluntary buyout program for flood prone properties.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure



**Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback**

Development Oversight Questions

1. Fort Worth's stormwater management oversight during the development review process should provide a more thorough evaluation of stormwater impact than currently done.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

How important are these development review issues?

2. The City should review stormwater issues thoroughly even if this takes longer for complex projects.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
3. The City should establish a stormwater review threshold of less than 1 acre in size.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
4. The City should have more protective standards in areas with known flooding problems.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
5. The cumulative stormwater impacts of future development in a watershed should be considered when reviewing development proposals.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure



Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback

Development Oversight Questions, continued

6. Providing an incentive or bonus to development that contributes to reducing existing flooding in identified floodprone areas.
- a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
7. Fort Worth's stormwater management oversight during the development review process should provide a more thorough evaluation of stormwater impact than currently done.
- a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure



Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 - Public Feedback

Name (Optional): _____

Local Floodplain Questions

1. Fort Worth should address issues of flooding risk in local floodplains.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

Please wait and answer these questions along with the stakeholder group once we get to this portion of the presentation

How important are these strategies for addressing local floodplains?

2. Reflecting these flood risks in city plans and policies, such as the Comprehensive Plan.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

3. Requiring that any substantial renovation or new development (including after a flood) maintain finished floor elevations above the 100-year flood elevation.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

What if the 7 requirement?

4. Considering these floodplains in evaluating requests for rezoning, subdivision, special use permits & other development approvals.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

5. Considering the impact a local floodplain approach would have on property values.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

6. Having the City provide the local floodplain maps to the public.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

What if the 7 requirement?

Jennifer Vito

Ben Karen

Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback



Local Floodplain Questions, continued

7. Reviewing all development in local floodplains, even those smaller than 1 acre.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

8. Fort Worth should address issues of flooding risk in local floodplains.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

Private Property Channel Erosion Questions

1. Fort Worth should have a standard policy for addressing channel erosion impacts to private property.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

How important is each of these issues to a private property channel erosion policy?

2. City capital investment should be considered only when there is a public benefit.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

3. City capital investment should depend on the amount of private cost-sharing match.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

4. Natural stream buffers should be created so future development has less risk from erosion.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

3

**Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback**

Private Property Channel Erosion Questions, continued

5. Even though the City capital investment has provided erosion protection on private property, the City should be responsible for maintenance.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

6. Fort Worth should have a standard policy for addressing channel erosion impacts to private property.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

Voluntary Buyout Questions

1. Fort Worth should have a voluntary buyout program for flood prone or erosion threatened properties.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

In setting priorities for a voluntary buyout program, how important is each of these issues?

2. Impact on neighborhood fabric and integrity.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

3. Adjacency to public property (i.e., parks, greenbelts).
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

4. Frequency of the property's past flooding
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback



Voluntary Buyout Questions, continued

5. Level of threat to structure due to channel erosion
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

6. Cost-benefit ratio of buyout vs. stormwater capital project.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

7. Potential to use the property as a neighborhood amenity or an addition to the city's open space network.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

8. The buyout qualifies for grant funding.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

9. Which factor is most important in setting priorities for voluntary buyouts?
 - a. Neighborhood fabric & integrity
 - b. Adjacency to public property
 - c. Past flooding frequency
 - d. Channel erosion threat to structure
 - e. Cost-benefit ratio
 - f. Value as an amenity
 - g. Qualification for grant funding

10. Fort Worth should have a voluntary buyout program for flood prone properties.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

W. J. ...
has zero value
already own
the property

Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback



Development Oversight Questions

1. Fort Worth's stormwater management oversight during the development review process should provide a more thorough evaluation of stormwater impact than currently done.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

How important are these development review issues?

2. The City should review stormwater issues thoroughly even if this takes longer for complex projects.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
3. The City should establish a stormwater review threshold of less than 1 acre in size.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
4. The City should have more protective standards in areas with known flooding problems.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
5. The cumulative stormwater impacts of future development in a watershed should be considered when reviewing development proposals.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback



Development Oversight Questions, continued

6. Providing an incentive or bonus to development that contributes to reducing existing flooding in identified floodprone areas.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

7. Fort Worth's stormwater management oversight during the development review process should provide a more thorough evaluation of stormwater impact than currently done.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure



**Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback**

Name (optional): John Fitzgerald

Local Floodplain Questions

1. Fort Worth should address issues of flooding risk in local floodplains.

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. I'm not sure

Please wait and answer these questions along with the stakeholder group once we get to this portion of the presentation

How important are these strategies for addressing local floodplains?

2. Reflecting these flood risks in city plans and policies, such as the Comprehensive Plan.

- a. Very important
- b. Somewhat important
- c. Somewhat unimportant
- d. Very unimportant
- e. I'm not sure

3. Requiring that any substantial renovation or new development (including after a flood) maintain finished floor elevations above the 100-year flood elevation.

- a. Very important
- b. Somewhat important
- c. Somewhat unimportant
- d. Very unimportant
- e. I'm not sure

4. Considering these floodplains in evaluating requests for rezoning, subdivision, special use permits & other development approvals.

- a. Very important
- b. Somewhat important
- c. Somewhat unimportant
- d. Very unimportant
- e. I'm not sure

5. Considering the impact a local floodplain approach would have on property values.

- a. Very important
- b. Somewhat important
- c. Somewhat unimportant
- d. Very unimportant
- e. I'm not sure

6. Having the City provide the local floodplain maps to the public.

- a. Very important
- b. Somewhat important
- c. Somewhat unimportant
- d. Very unimportant
- e. I'm not sure

Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback



Local Floodplain Questions, continued

7. Reviewing all development in local floodplains, even those smaller than 1 acre.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

8. Fort Worth should address issues of flooding risk in local floodplains.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

Private Property Channel Erosion Questions

1. Fort Worth should have a standard policy for addressing channel erosion impacts to private property.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

How important is each of these issues to a private property channel erosion policy?

2. City capital investment should be considered only when there is a public benefit.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

3. City capital investment should depend on the amount of private cost-sharing match.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

4. Natural stream buffers should be created so future development has less risk from erosion.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback



Private Property Channel Erosion Questions, continued

5. Even though the City capital investment has provided erosion protection on private property, the City should be responsible for maintenance.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

6. Fort Worth should have a standard policy for addressing channel erosion impacts to private property.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

Voluntary Buyout Questions

1. Fort Worth should have a voluntary buyout program for flood prone or erosion threatened properties.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

In setting priorities for a voluntary buyout program, how important is each of these issues?

2. Impact on neighborhood fabric and integrity.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

3. Adjacency to public property (i.e., parks, greenbelts).
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

4. Frequency of the property's past flooding
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

4

Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback



Voluntary Buyout Questions, continued

5. Level of threat to structure due to channel erosion
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

6. Cost-benefit ratio of buyout vs. stormwater capital project.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

7. Potential to use the property as a neighborhood amenity or an addition to the city's open space network.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

8. The buyout qualifies for grant funding.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

9. Which factor is most important in setting priorities for voluntary buyouts?
 - a. Neighborhood fabric & integrity
 - b. Adjacency to public property
 - c. Past flooding frequency
 - d. Channel erosion threat to structure
 - e. Cost-benefit ratio
 - f. Value as an amenity
 - g. Qualification for grant funding

10. Fort Worth should have a voluntary buyout program for flood prone properties.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure



Development Oversight Questions

1. Fort Worth's stormwater management oversight during the development review process should provide a more thorough evaluation of stormwater impact than currently done.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

How important are these development review issues?

2. The City should review stormwater issues thoroughly even if this takes longer for complex projects.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
3. The City should establish a stormwater review threshold of less than 1 acre in size.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
4. The City should have more protective standards in areas with known flooding problems.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
5. The cumulative stormwater impacts of future development in a watershed should be considered when reviewing development proposals.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback



Development Oversight Questions, continued

6. Providing an incentive or bonus to development that contributes to reducing existing flooding in identified floodprone areas.
- a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
7. Fort Worth's stormwater management oversight during the development review process should provide a more thorough evaluation of stormwater impact than currently done.
- a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure



**Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback**

Name (optional): Bobbie McCurdy

Local Floodplain Questions

1. Fort Worth should address issues of flooding risk in local floodplains.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

Please wait and answer these questions along with the stakeholder group once we get to this portion of the presentation

How important are these strategies for addressing local floodplains?

2. Reflecting these flood risks in city plans and policies, such as the Comprehensive Plan.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
3. Requiring that any substantial renovation or new development (including after a flood) maintain finished floor elevations above the 100-year flood elevation.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
4. Considering these floodplains in evaluating requests for rezoning, subdivision, special use permits & other development approvals.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
5. Considering the impact a local floodplain approach would have on property values.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
6. Having the City provide the local floodplain maps to the public.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

#5



**Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback**

Local Floodplain Questions, continued

7. Reviewing all development in local floodplains, even those smaller than 1 acre.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

8. Fort Worth should address issues of flooding risk in local floodplains.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

Private Property Channel Erosion Questions

1. Fort Worth should have a standard policy for addressing channel erosion impacts to private property.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

How important is each of these issues to a private property channel erosion policy?

2. City capital investment should be considered only when there is a public benefit.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

3. City capital investment should depend on the amount of private cost-sharing match;
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

4. Natural stream buffers should be created so future development has less risk from erosion.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback



Private Property Channel Erosion Questions, continued

5. Even though the City capital investment has provided erosion protection on private property, the City should be responsible for maintenance.
- a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
6. Fort Worth should have a standard policy for addressing channel erosion impacts to private property.
- a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

Voluntary Buyout Questions

1. Fort Worth should have a voluntary buyout program for flood prone or erosion threatened properties.
- a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

In setting priorities for a voluntary buyout program, how important is each of these issues?

2. Impact on neighborhood fabric and integrity.
- a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
3. Adjacency to public property (i.e., parks, greenbelts).
- a. Very important
 - b. Somewhat important *Depends on the benefit*
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
4. Frequency of the property's past flooding
- a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback

Voluntary Buyout Questions, continued

5. Level of threat to structure due to channel erosion
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

6. Cost-benefit ratio of buyout vs. stormwater capital project.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

7. Potential to use the property as a neighborhood amenity or an addition to the city's open space network.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

8. The buyout qualifies for grant funding.
 - a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

9. Which factor is most important in setting priorities for voluntary buyouts?
 - a. Neighborhood fabric & integrity
 - b. Adjacency to public property
 - c. Past flooding frequency
 - d. Channel erosion threat to structure
 - e. Cost-benefit ratio
 - f. Value as an amenity
 - g. Qualification for grant funding

Threat to the general Public's Safety is NOT even mentioned & should be considered (roadways that flood, etc.) as a criteria to consider.

10. Fort Worth should have a voluntary buyout program for flood prone properties.
 - a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure



Development Oversight Questions

1. Fort Worth's stormwater management oversight during the development review process should provide a more thorough evaluation of stormwater impact than currently done.
- a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

How important are these development review issues?

2. The City should review stormwater issues thoroughly even if this takes longer for complex projects.
- a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure

3. The City should establish a stormwater review threshold of less than 1 acre in size.

- a. Very important
- b. Somewhat important
- c. Somewhat unimportant
- d. Very unimportant
- e. I'm not sure

— should definitely be lowered
on a case by case basis when
certain criteria are met.
i.e. - frequency of flooding
- threat to public safety
- loss of property.

4. The City should have more protective standards in areas with known flooding problems.

- a. Very important
- b. Somewhat important
- c. Somewhat unimportant
- d. Very unimportant
- e. I'm not sure

Yes!

5. The cumulative stormwater impacts of future development in a watershed should be considered when reviewing development proposals.

- a. Very important
- b. Somewhat important
- c. Somewhat unimportant
- d. Very unimportant
- e. I'm not sure

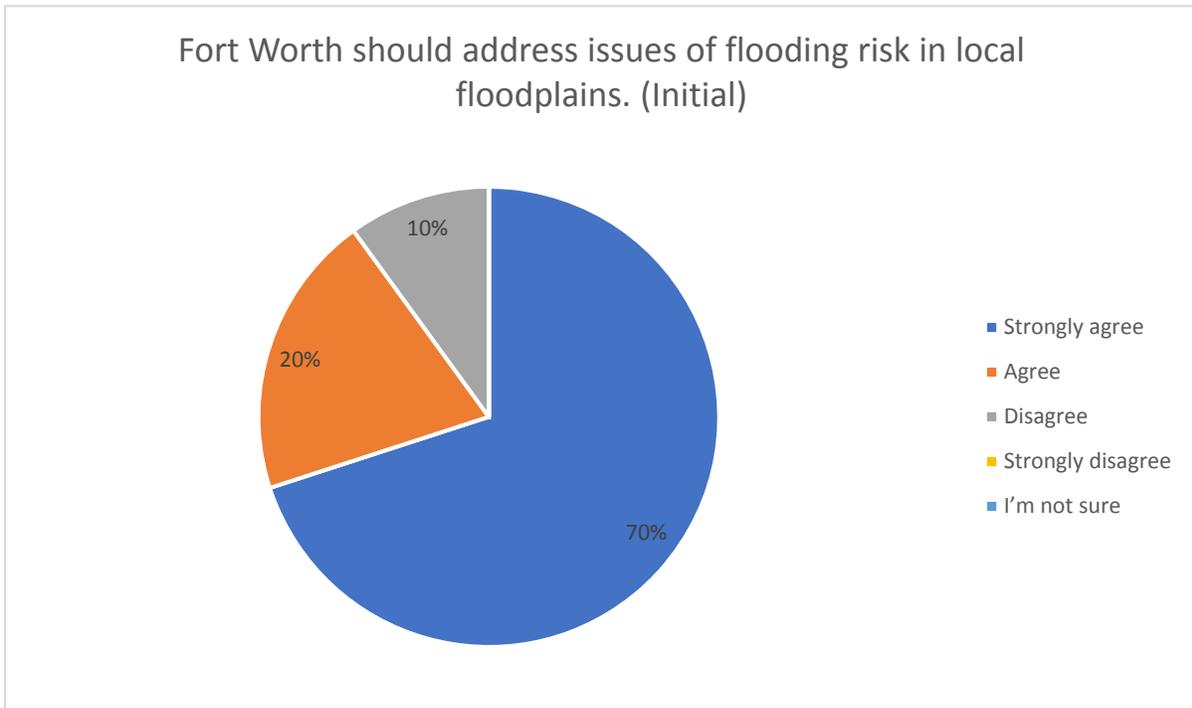


Stormwater Management Program Master Plan Update
Stakeholder Meeting - 5/16/17 – Public Feedback

Development Oversight Questions, continued

6. Providing an incentive or bonus to development that contributes to reducing existing flooding in identified floodprone areas.
- a. Very important
 - b. Somewhat important
 - c. Somewhat unimportant
 - d. Very unimportant
 - e. I'm not sure
7. Fort Worth's stormwater management oversight during the development review process should provide a more thorough evaluation of stormwater impact than currently done.
- a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. I'm not sure

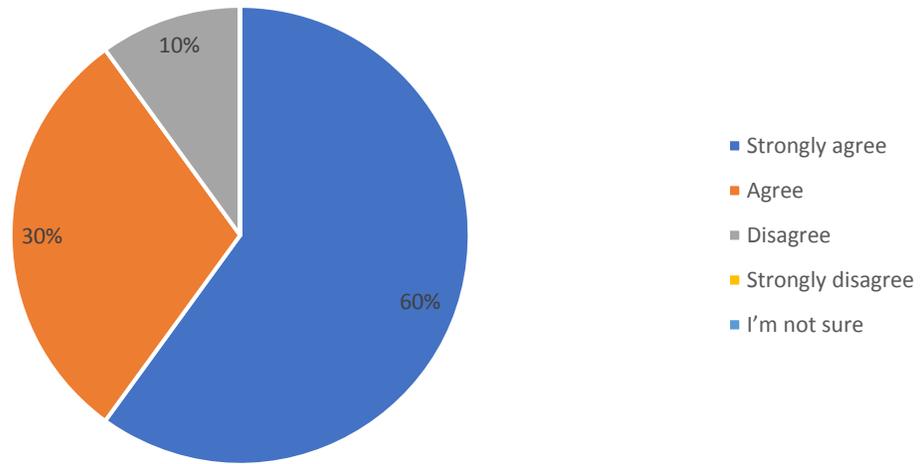
Topic 1: Local Floodplains



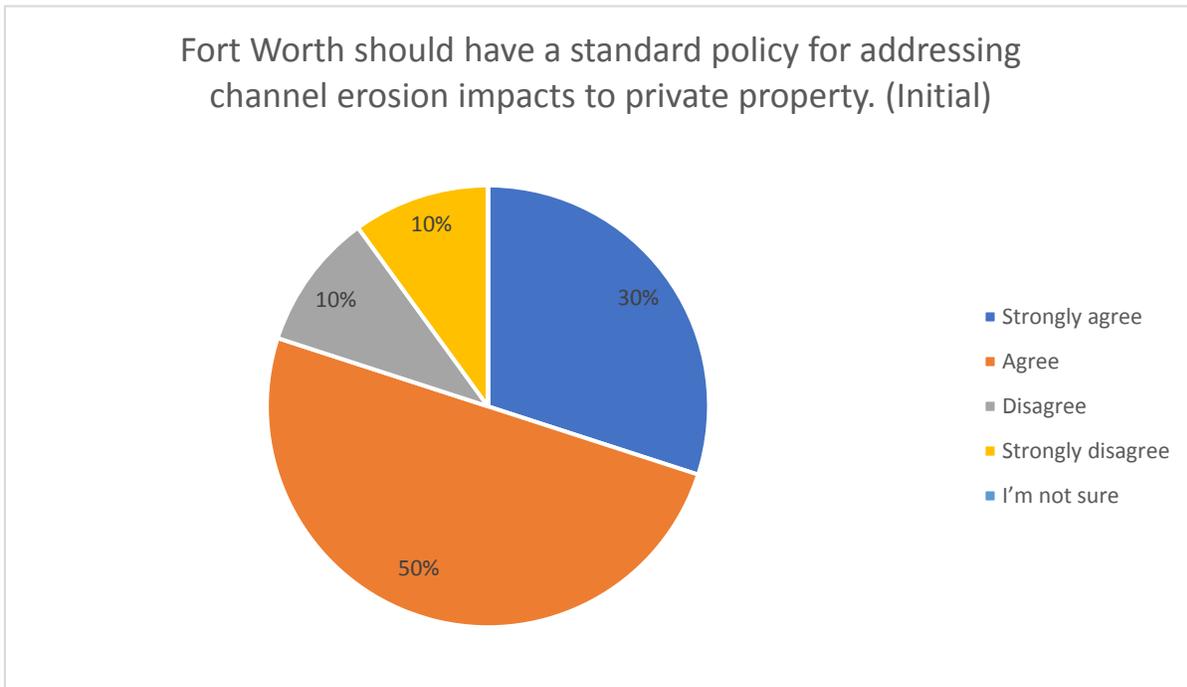
How important are these strategies for addressing local floodplains?

	Very important	Somewhat important	Somewhat unimportant	Very unimportant	I'm not sure
Having the City provide the local floodplain maps to the public.	80.0%	20.0%	0.0%	0.0%	0.0%
Reviewing all development in local floodplains, even those smaller than 1 acre.	70.0%	10.0%	0.0%	20.0%	0.0%
Considering these floodplains in evaluating requests for rezoning, subdivision, special use permits & other development approvals.	60.0%	20.0%	10.0%	10.0%	0.0%
Reflecting these flood risks in City plans and policies, such as the Comprehensive Plan.	50.0%	50.0%	0.0%	0.0%	0.0%
Requiring that any substantial rehabilitation, renovation or new development (including after a flood) maintain finished floor elevations above the 100-year flood elevation.	40.0%	50.0%	10.0%	0.0%	0.0%
Considering the impact a local floodplain approach would have on property values.	20.0%	30.0%	20.0%	30.0%	0.0%

Fort Worth should address issues of flooding risk in local floodplains. (Final)



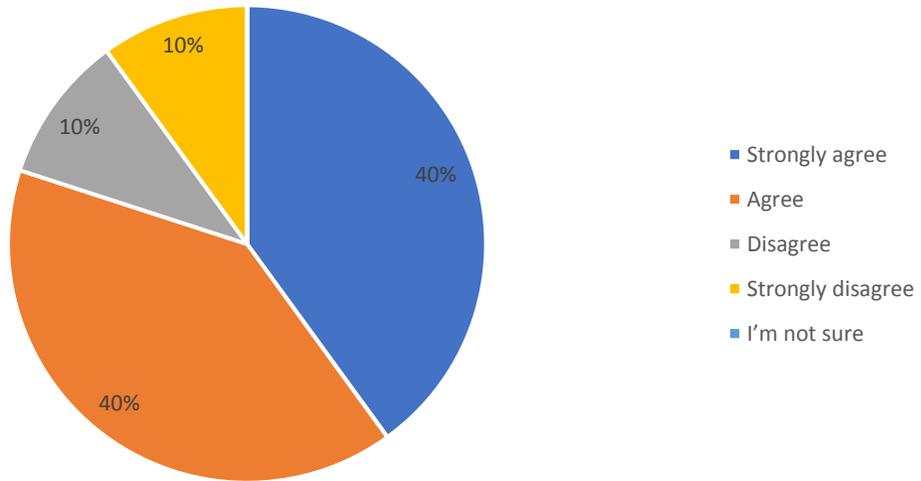
Topic 2: Private Property Channel Erosion Policy



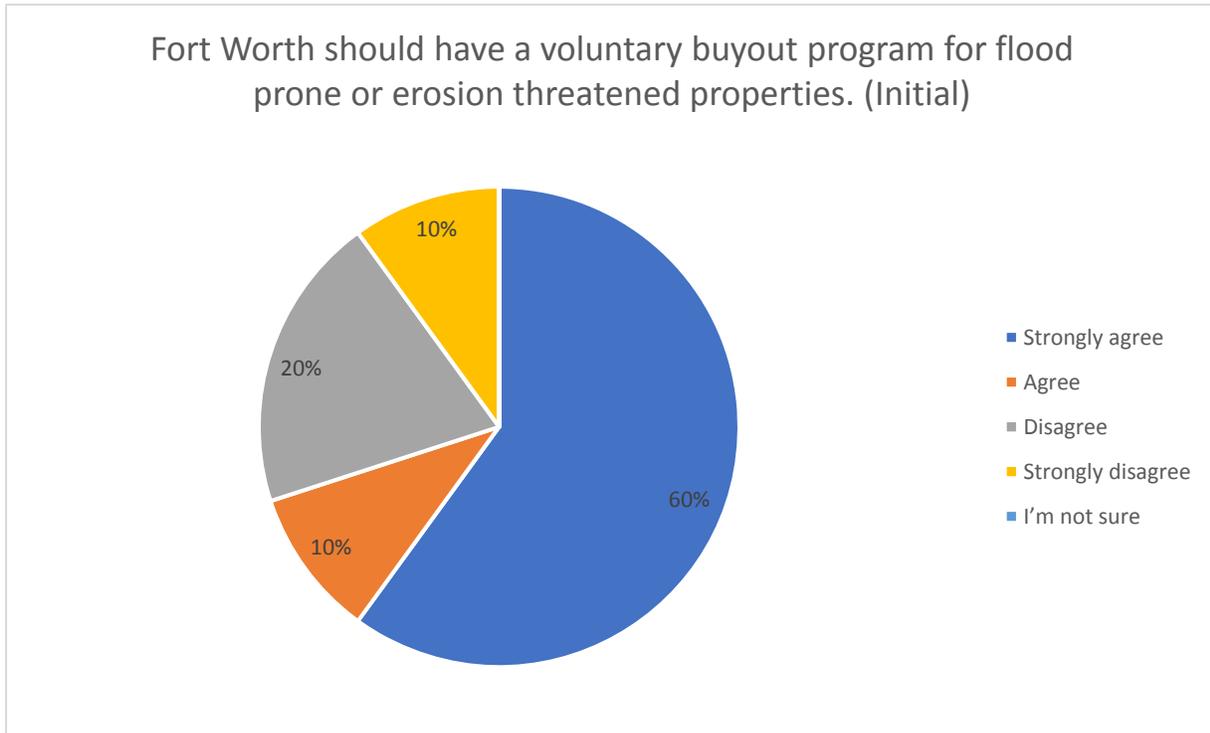
How important is each of these issues to a private property channel erosion policy?

	Very important	Somewhat important	Somewhat unimportant	Very unimportant	I'm not sure
Natural stream buffers should be created so future development has less risk from erosion.	80.0%	10.0%	0.0%	10.0%	0.0%
City capital investment should be considered only when there is a public benefit.	66.7%	22.2%	0.0%	11.1%	0.0%
Even though the City capital investment has provided erosion protection on private property, the City should be responsible for maintenance.	30.0%	30.0%	10.0%	20.0%	10.0%
City capital investment should depend on the amount of private cost-sharing match.	20.0%	40.0%	10.0%	30.0%	0.0%

Fort Worth should have a standard policy for addressing channel erosion impacts to private property. (Final)



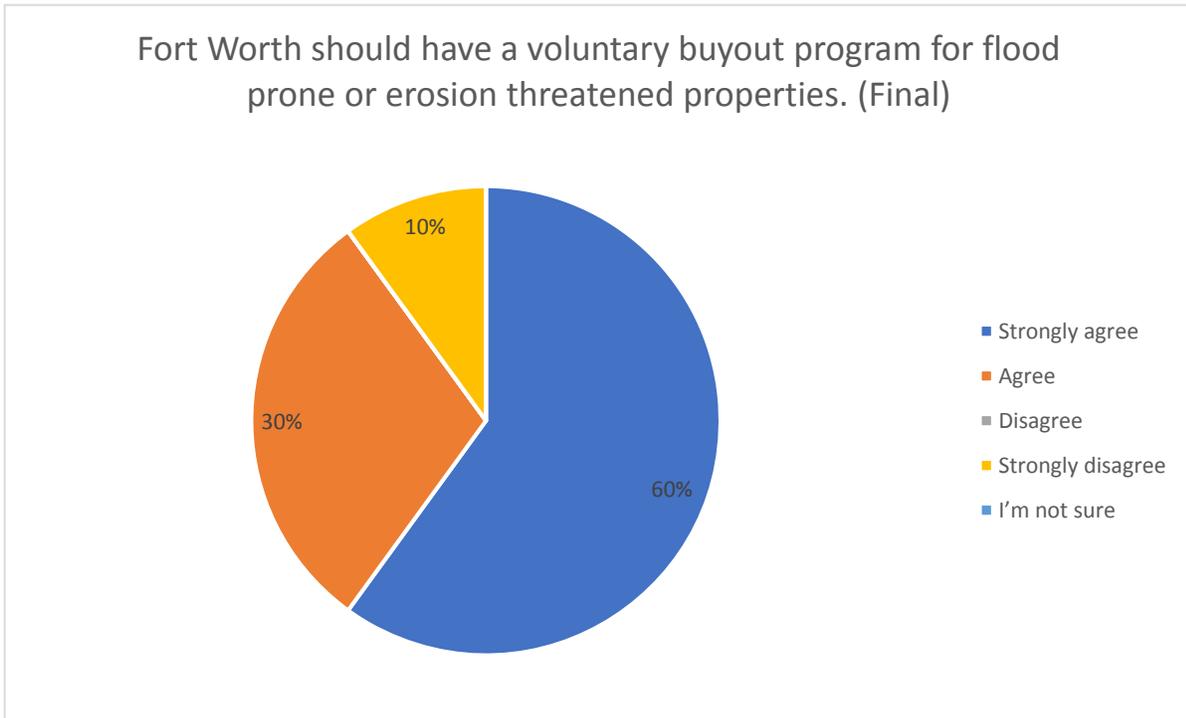
Topic 3: Voluntary Buyout Program



In setting priorities for a voluntary buyout program, how important is each of these issues?

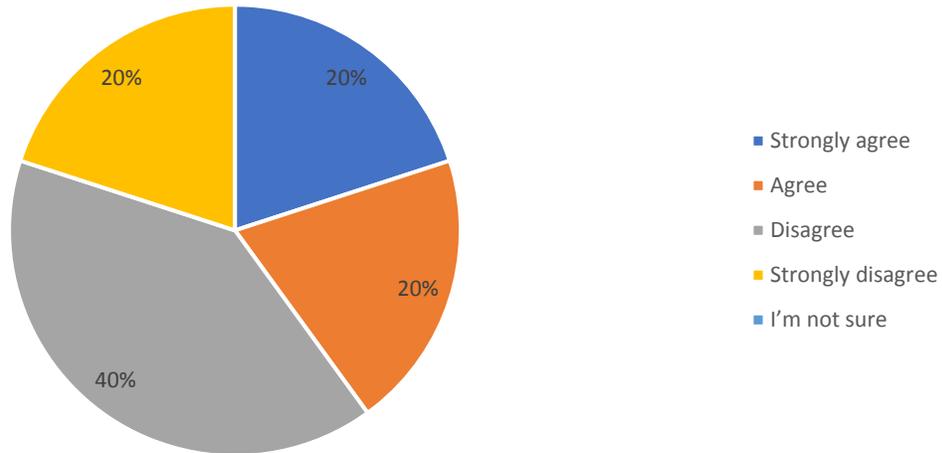
	Very important	Somewhat important	Somewhat unimportant	Very unimportant	I'm not sure
Cost-benefit ratio of buyout vs. stormwater capital project.	70.0%	30.0%	0.0%	0.0%	0.0%
Frequency of the property's past flooding.	70.0%	20.0%	10.0%	0.0%	0.0%
The buyout qualifies for grant funding.	44.4%	11.1%	44.4%	0.0%	0.0%
Potential to use the property as a neighborhood amenity or an addition to the City's open space network.	40.0%	30.0%	30.0%	0.0%	0.0%
Impact on neighborhood fabric and integrity.	40.0%	30.0%	10.0%	20.0%	0.0%
Adjacency to public property (i.e., parks, greenbelts).	30.0%	40.0%	20.0%	10.0%	0.0%
Level of threat to structure due to channel erosion.	20.0%	30.0%	30.0%	20.0%	0.0%

Which factor is most important in setting priorities for voluntary buyouts?	
Cost-benefit ratio	40.0%
Past flooding frequency	30.0%
Neighborhood fabric & integrity	10.0%
Value as an amenity	10.0%
Qualification for grant funding	10.0%
Adjacency to public property	0.0%
Channel erosion threat to structure	0.0%



Topic 4: Development Oversight

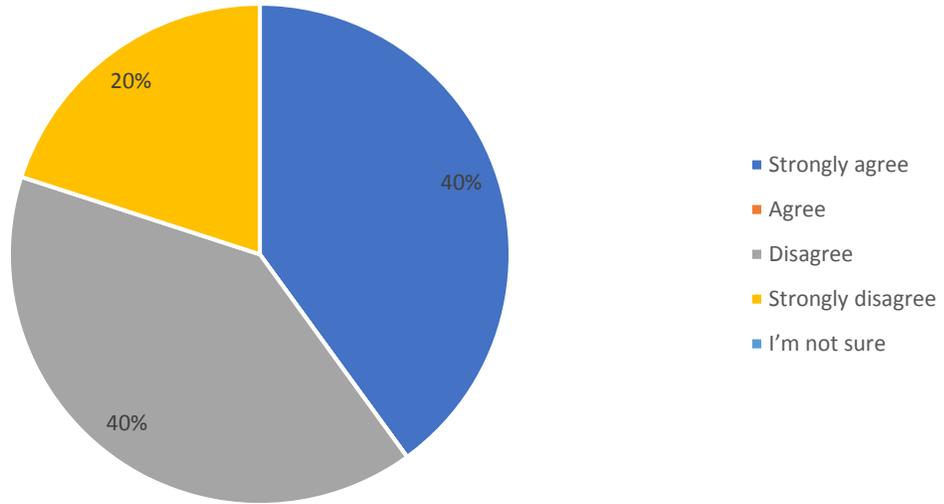
Fort Worth’s stormwater management oversight during the development review process should provide a more thorough evaluation of stormwater impact than currently done. (Initial)



How important are these development review issues?

	Very important	Somewhat important	Somewhat unimportant	Very unimportant	I'm not sure
The City should have more protective standards in areas with known flooding problems.	70.0%	0.0%	20.0%	10.0%	0.0%
Providing an incentive or bonus to development that contributes to reducing existing flooding in identified floodprone areas	60.0%	30.0%	10.0%	0.0%	0.0%
The City should establish a stormwater review threshold of less than 1 acre in size.	50.0%	10.0%	10.0%	30.0%	0.0%
The cumulative stormwater impacts of future development in a watershed should be considered when reviewing development proposals.	44.4%	22.2%	11.1%	22.2%	0.0%
The City should review stormwater issues thoroughly even if this takes longer for complex projects.	30.0%	30.0%	20.0%	20.0%	0.0%

Fort Worth's stormwater management oversight during the development review process should provide a more thorough evaluation of stormwater impact than currently done. (Final)



EXTERNAL STAKEHOLDER ENGAGEMENT

STORMWATER MANAGEMENT PROGRAM MASTER PLAN



- August 3, 2017 - Stakeholder Meeting 3 Open to Public



Stormwater Management Program Master Plan Update

Stakeholder Meeting 3

August 3, 2017

Presented by:

Jennifer Dyke – Transportation & Public Works Dpt. /Stormwater, Senior Planner

Ben Pylant – Halff Associates, Inc.

Karen Walz- Strategic Community Solutions



Agenda

- Introduction (6:00 – 6:15)
 - Background
 - Citizen Survey
 - Recent Flooding
- “Big 4” Topics - Action Plan
 - Local floodplains (6:15 – 6:30)
 - Private property channel erosion policy (6:30 – 6:45)
 - Voluntary buyout program (6:45 – 7:00)
 - Development oversight - infill, cumulative impacts, etc. (7:00 – 7:15)
- Water Quality (7:15 – 7:30)
- Master Plan Content Overview – (7:30 – 8:00)
- Public Comments- please fill out comment form and provide it to us and/or visit with us after today’s meeting

Background





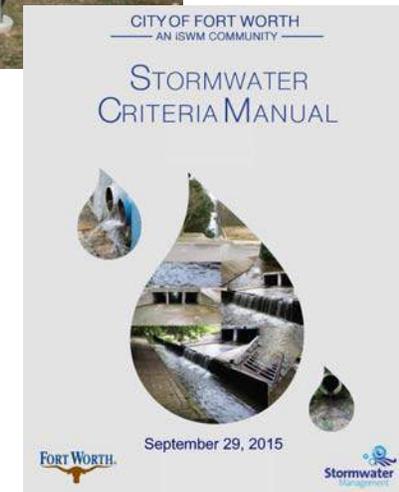
Stormwater Mission

Protect people and property from harmful stormwater runoff

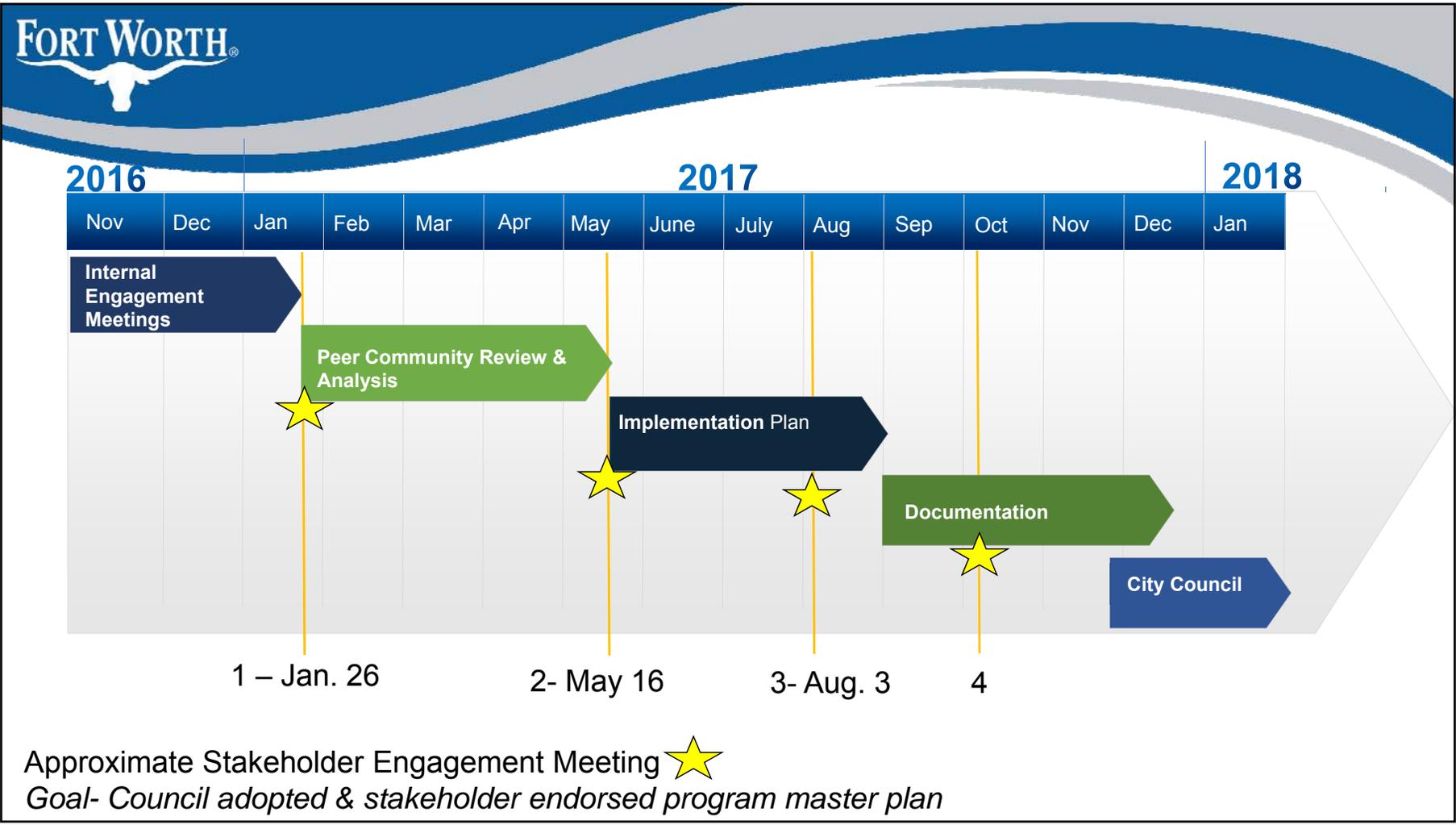


Overview – What We Do

- Maintain our stormwater infrastructure
- Warn residents about flooded roadways
- Mitigate flooding and erosion
- Oversee development to protect current & future residents



<http://fortworthtexas.gov/stormwaterMasterPlanUpdate/>





Stakeholder Group

-  **Monica Hamilton**
Mayor's office
-  **Roxanne Martinez**
Council District 2
-  **Gary Havener**
Council District 3
-  **Aric Head**
Council District 4
-  **Rafael McDonnell**
Council District 5
-  **Bo Cung**
Council District 6
-  **Si Rowlett**
Council District 7
-  **Howard Rattliff**
Council District 8
-  **David Motheral**
Council District 9
-  **Art Cavazos**
Fort Worth ISD
-  **Rusty Fuller**
North FW Alliance
-  **La Wayne Hauser**
Resident
-  **Lairy Johnson**
Large Commercial Miller Coors
-  **Rick Kubes**
Resident Small Commercial
-  **Lee Nicol**
Streams & Valleys
-  **Joe Schneider**
Hillwood Development
-  **Bill Schur**
Resident

Community Survey

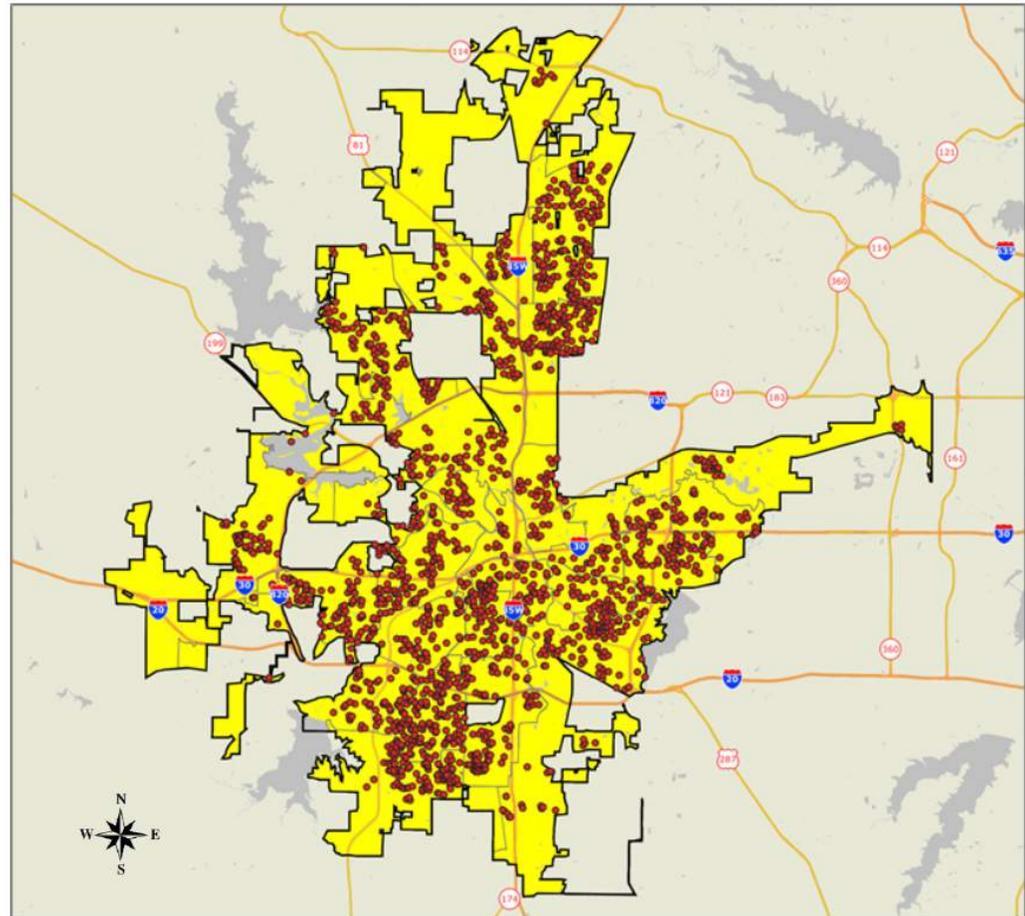


Community Survey

June 2017

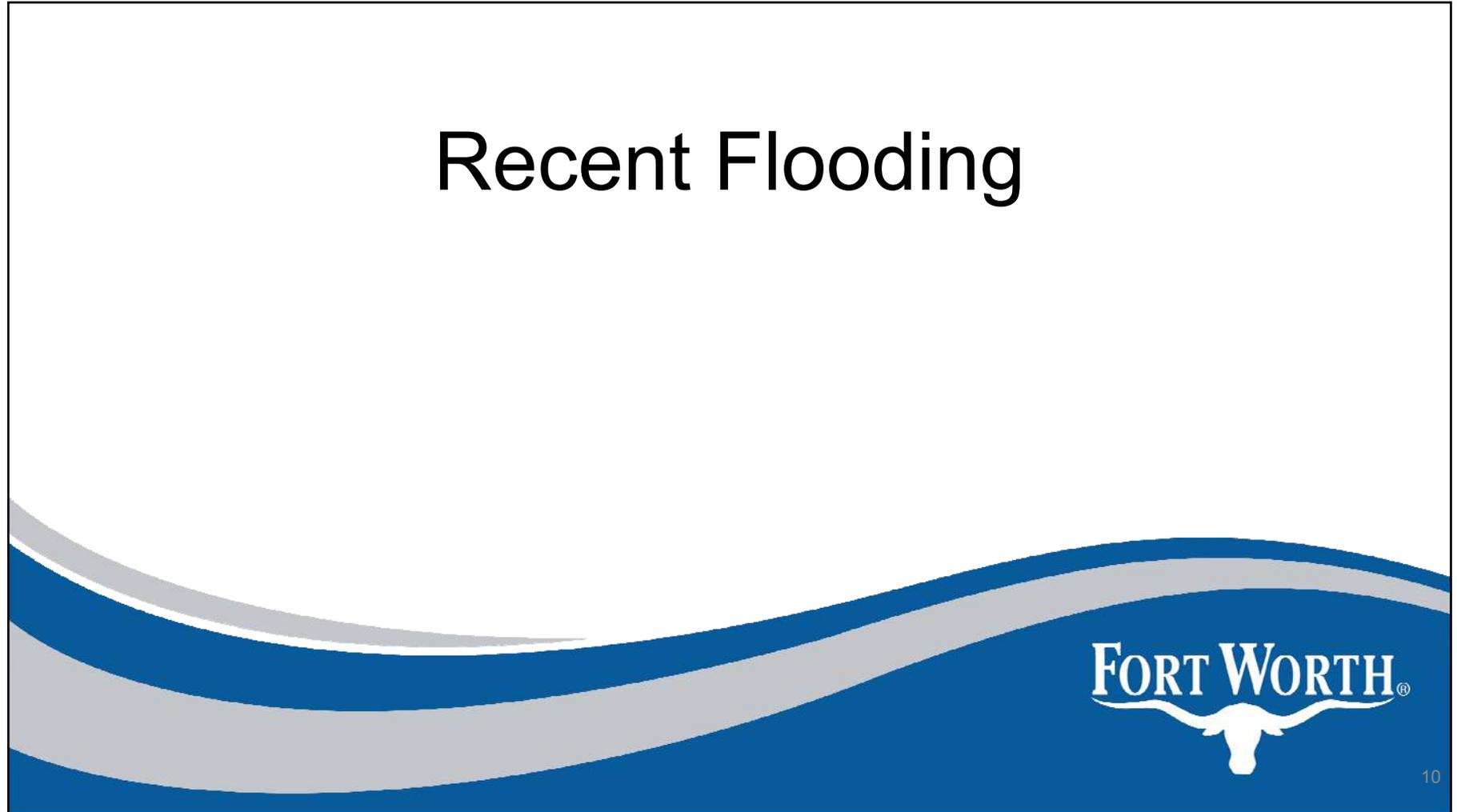
- 1,988 completed surveys (at least 200 per district)
- Stormwater is in the middle in terms of overall city service satisfaction
- Traffic, streets, & public safety are the most important city services to emphasize over the next 2 years

<http://fortworthtexas.gov/news/2017/06/Citizen-Survey-results/>



2017 City of Fort Worth Community Survey

Recent Flooding



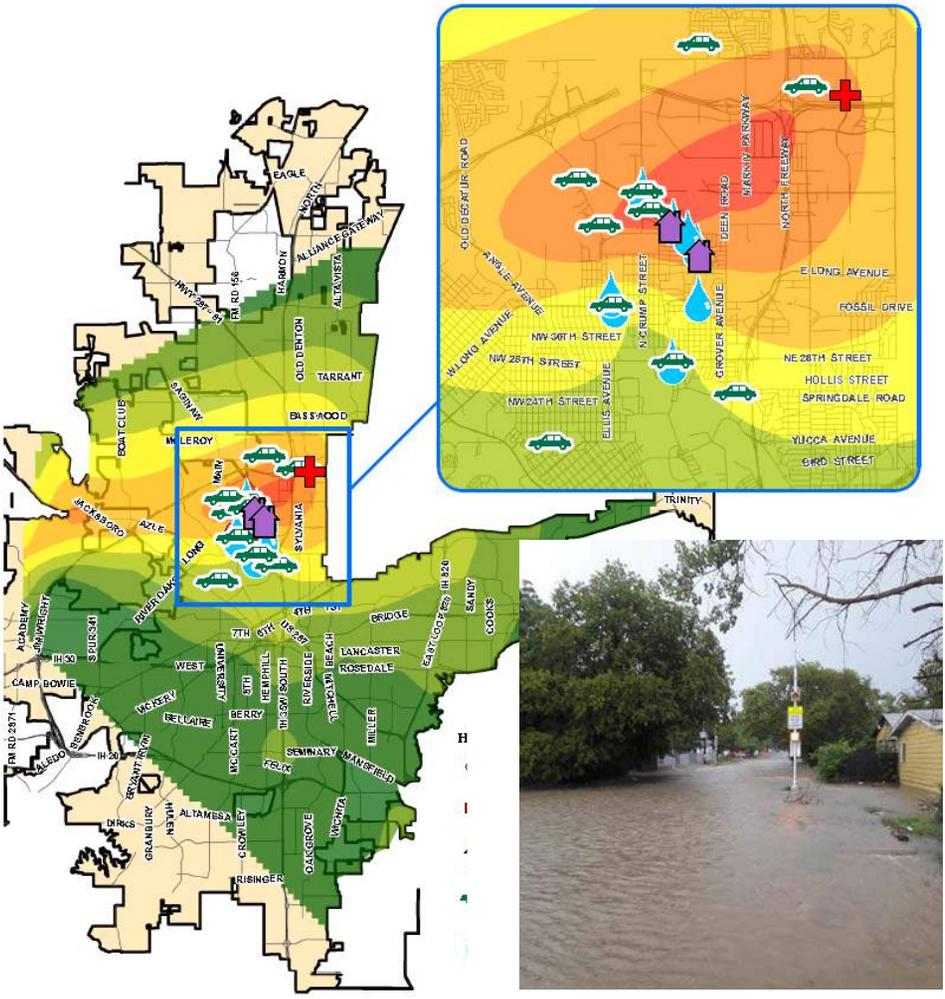
High Water Incidents July 5, 2017

High Water Incident

-  Fire Response (1)
-  Rescue (1)
-  Structure Flooded (2)
-  Car Stalled (Road) (10)
-  Road Over top (8)

Total Rainfall (inches) from 7 AM on 7/5 to 6 AM on 7/6

-  0.1 - 0.5
-  0.6 - 1
-  1.1 - 1.5
-  1.6 - 2
-  2.1 - 2.5
-  2.6 - 3
-  3.1 - 3.5



<http://dfw.cbslocal.com/2017/07/05/flooding-evacuations-fort-worth/>

Big 4 Topics





Proposed Future Actions

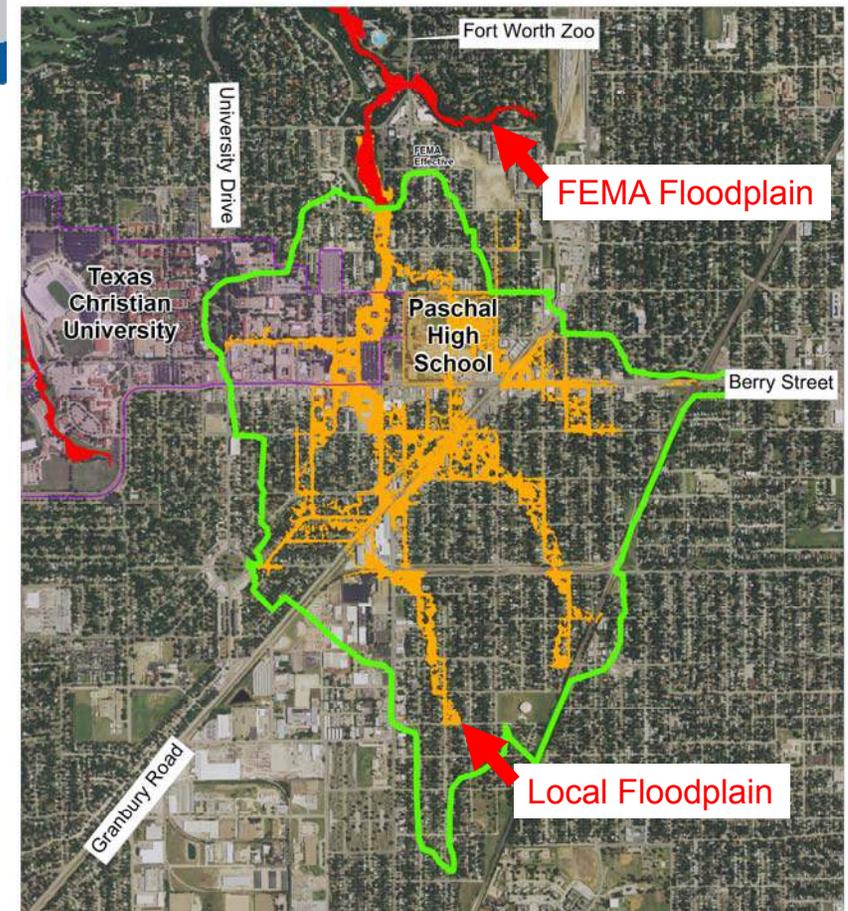
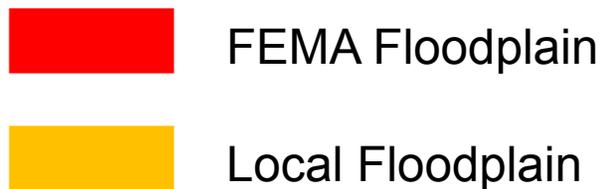
- Limited sample size of feedback received so far – starting point for policy development
- The proposed future actions for each “Big 4” topic will involve some sort of additional resident/stakeholder feedback opportunity
- Next mtg. will discuss more about how this will be implemented
- Let me know if you may want to be involved in future collaboration opportunities



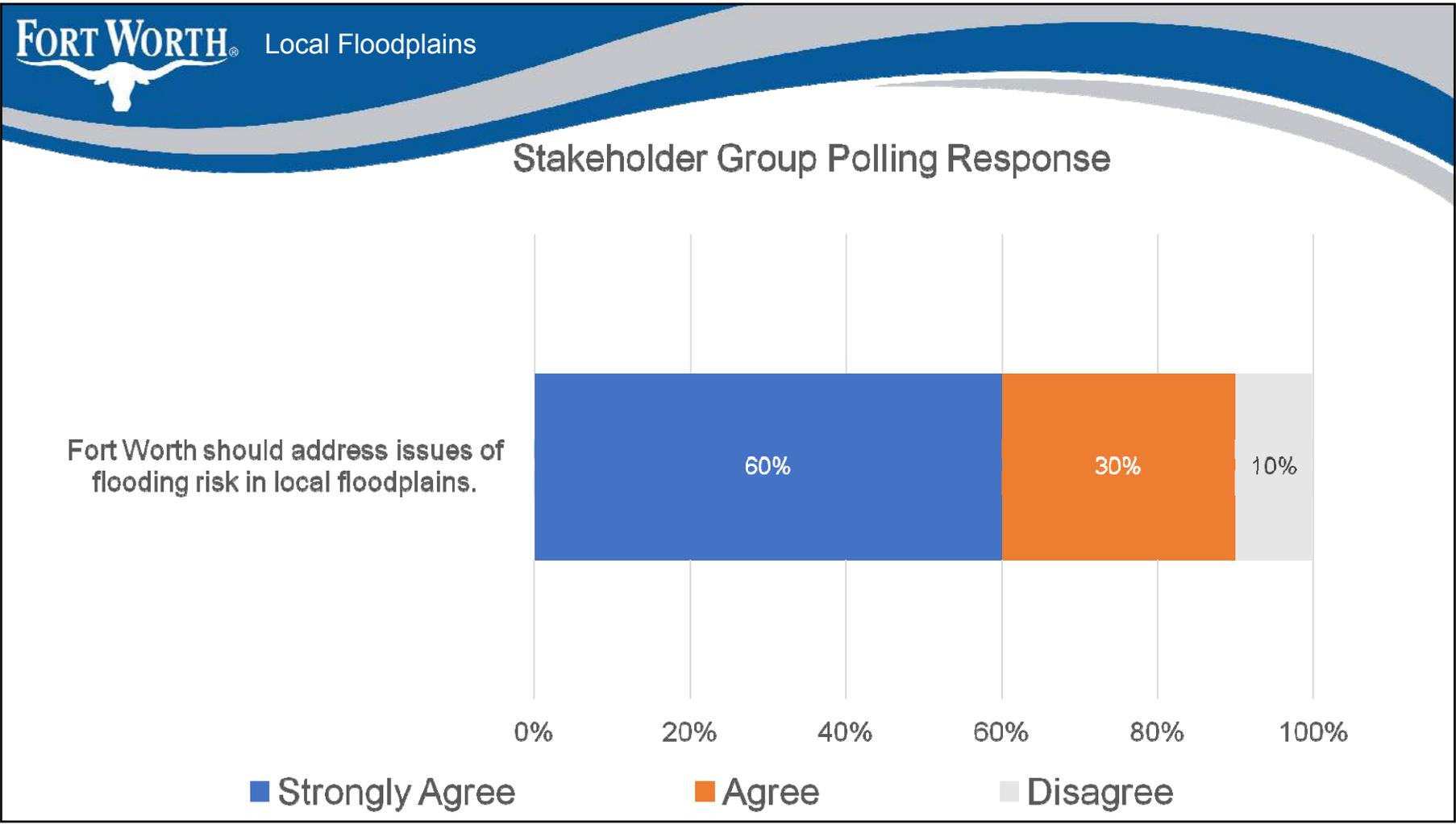
Topic 1: Local Floodplains

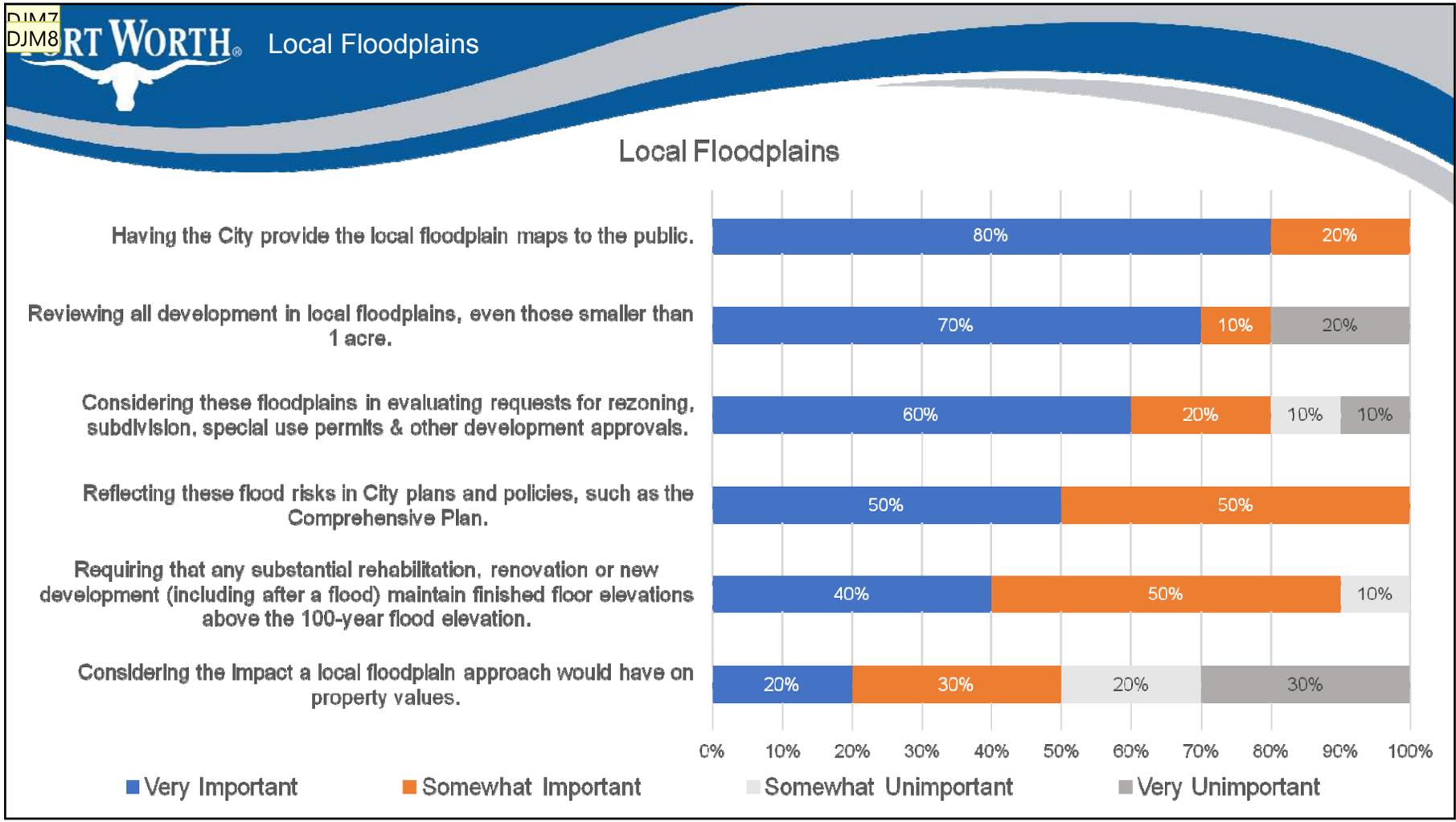
What are Local Floodplains?

- Areas of flood risk not shown on FEMA Maps



Just one example of local floodplains in Fort Worth





Local Floodplains – Future Actions

- ★ • Communicate existing information externally and internally
- Undergo a separate evaluation to determine how local floodplain information should be used during the development review process
 - Develop a written policy, vetted by public and City staff

★ *Already initiated some effort*

General Discussion





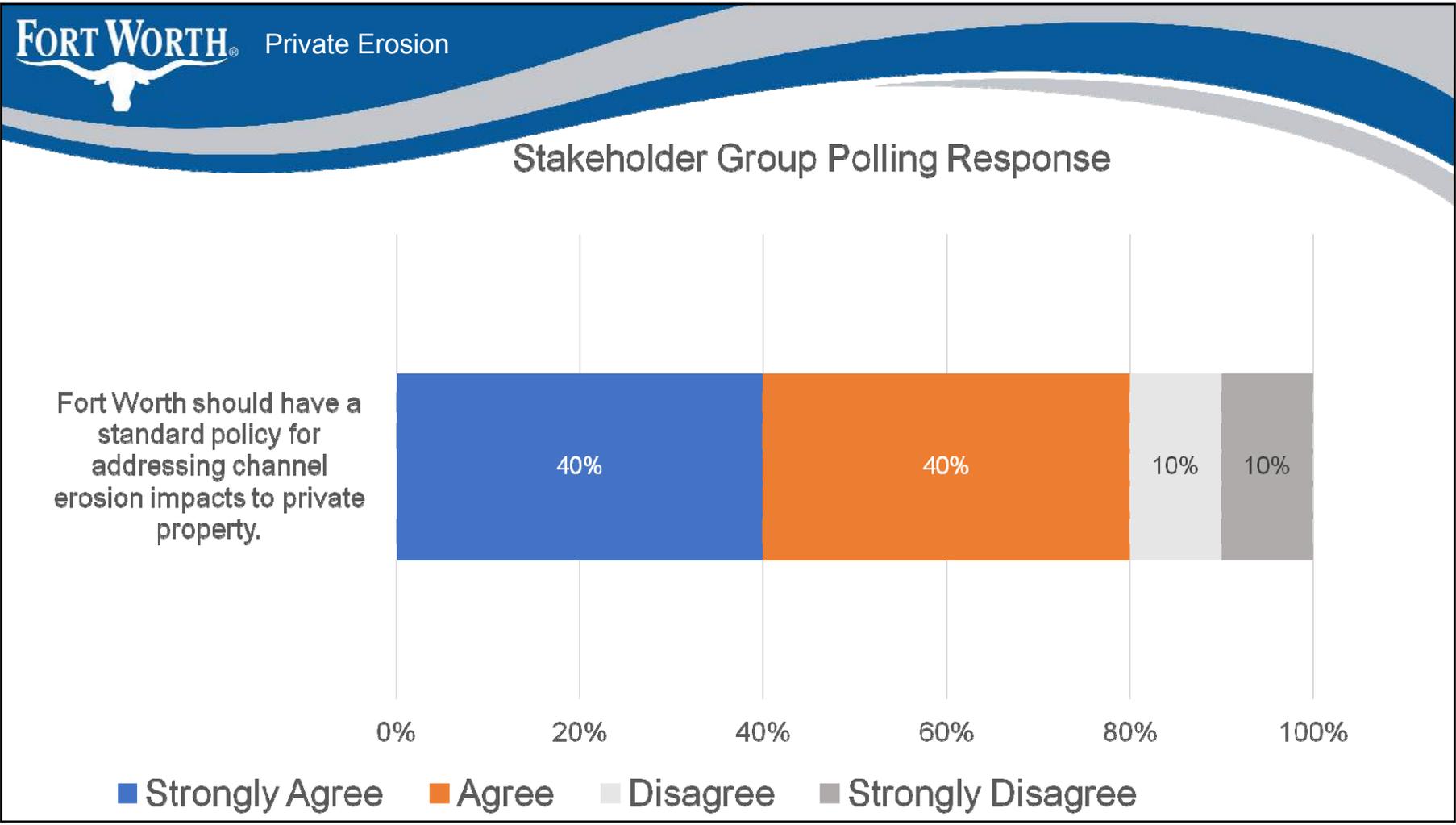
Topic 2: Private Property Channel Erosion Policy

What is Private Property Channel Erosion?

- Erosion resulting from streams and channels
- Typically natural creeks where private property lines extend to channel
- City has no ownership or maintenance responsibility
- Can threaten property, fences, structures, etc.



21





Private Property Channel Erosion Policy

Natural stream buffers should be created so future development has less risk from erosion.



City capital investment should be considered only when there is a public benefit.



Even though the City capital investment has provided erosion protection on private property, the City should be responsible for maintenance.



City capital investment should depend on the amount of private cost-sharing match.



■ Very Important
 ■ Somewhat Important
 ■ Somewhat Unimportant
 ■ Very Unimportant
 ■ I'm Not Sure

Private Channel Erosion – Future Actions

How to prevent future private channel erosion issues:

- ★ • Communicate internally and externally about high erosion risk areas
- Develop a written buffer zone policy vetted by public and City staff to protect future development

★ *Already initiated some effort*

Private Channel Erosion – Future Actions

How to handle current private channel erosion issues:

- Write a private channel erosion mitigation policy vetted by public and City staff
 - Prioritize mitigation for imminent threats
 - Projects focus on public benefits – maintain channel conveyance, protect public utilities, infrastructure, and water quality
 - Evaluate projects against other stormwater capital needs
- Develop criteria to determine maintenance responsibility

General Discussion

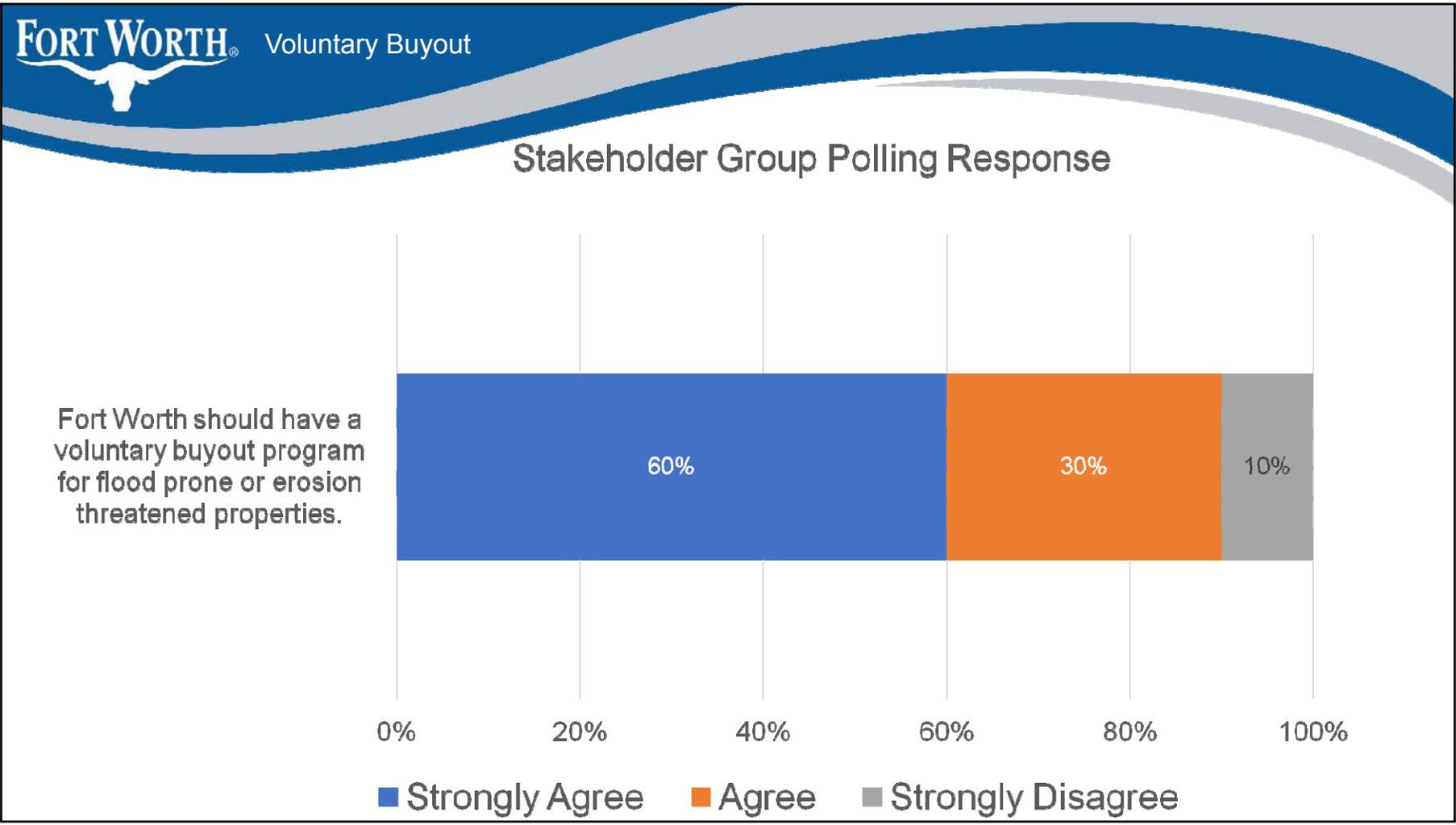




Topic 3: Voluntary Buyout Program

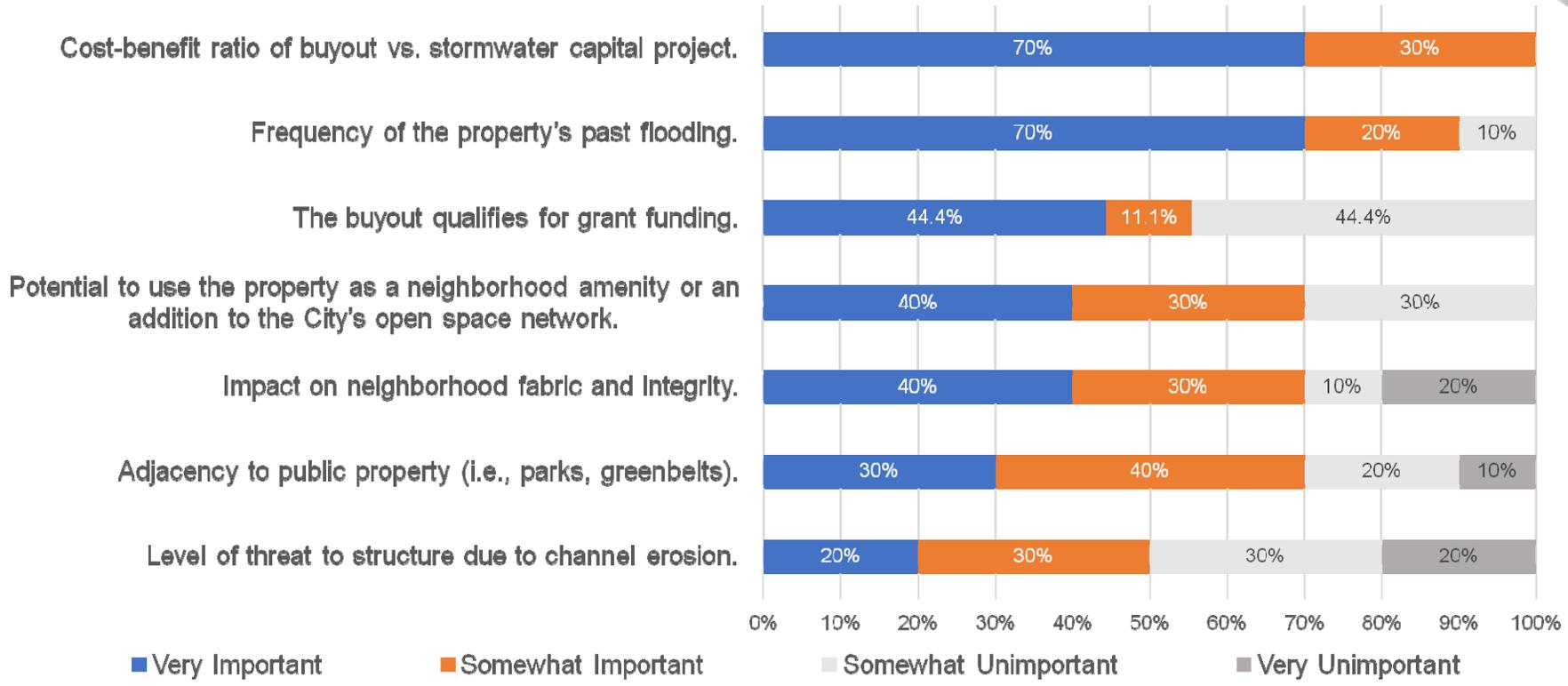
What is a Voluntary Buyout Program?

- City purchase of flood prone structures or structures at risk from flooding or channel erosion
- Voluntary purchase requested by owners
- Eliminates flood or erosion risk to structures
- Flood risk remains for surrounding area but vacant property could potentially be used to reduce risk to surrounding area
- Opportunity for amenities and value additions





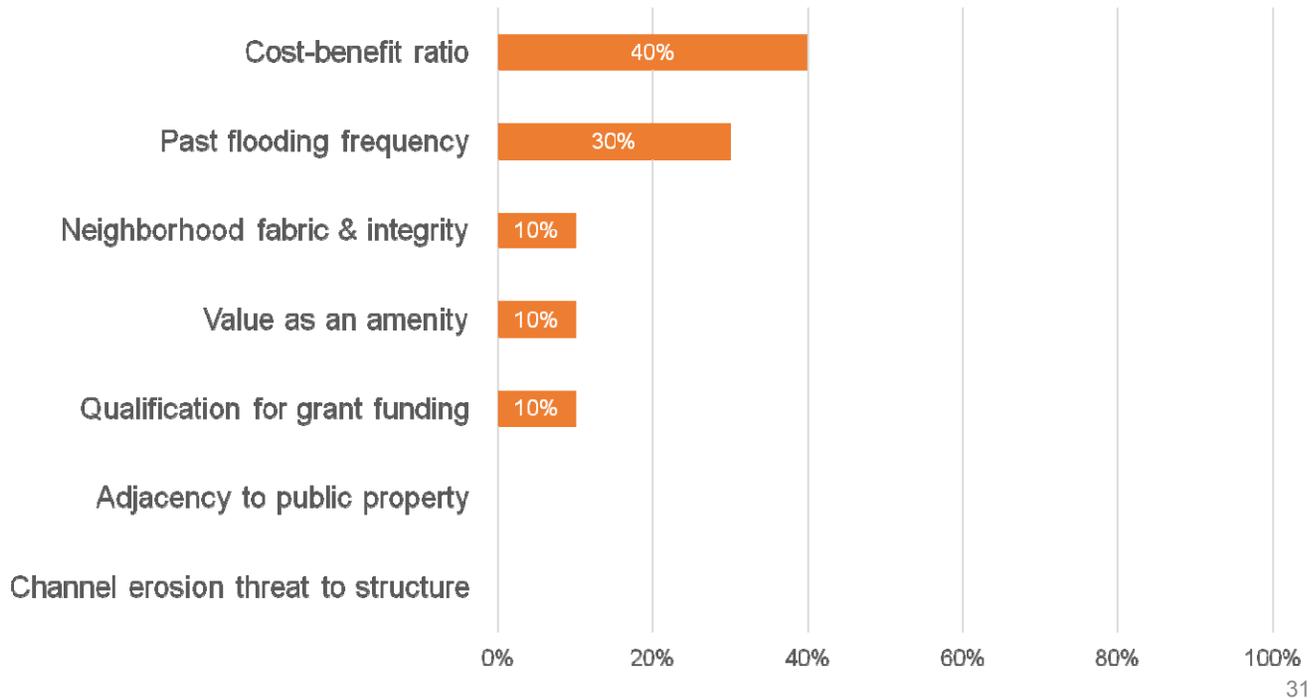
Voluntary Buyout Program





Voluntary Buyout

Which factor is most important in setting priorities for voluntary buyouts?





Voluntary Buyout Program – Future Actions

- Written policy, vetted by public and City staff
 - Initial focus on benefit-to-cost & historical flooding
- Include voluntary buyouts as an element in our flood mitigation budget
- Maintain prioritized list of potential buyouts

General Discussion



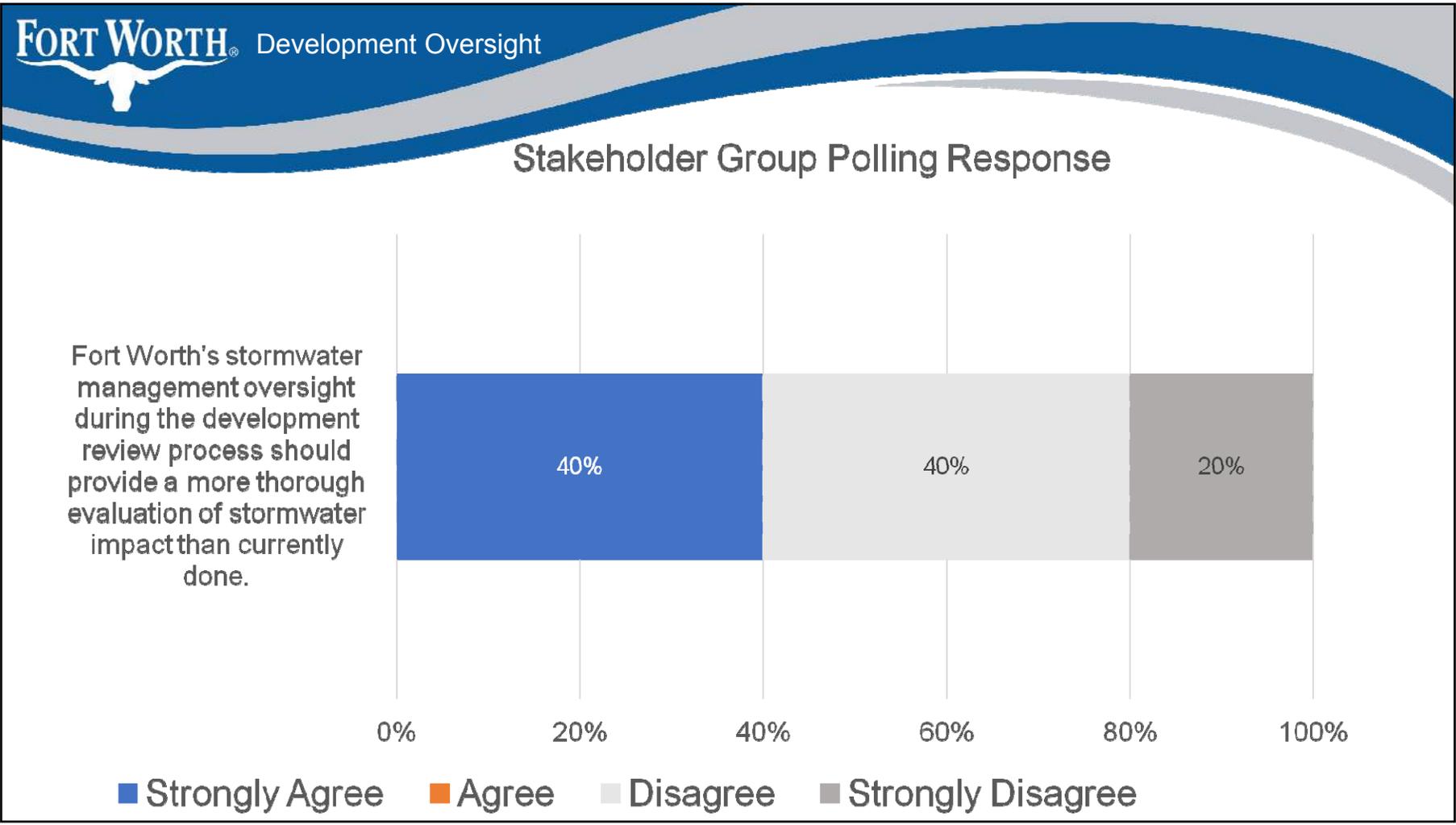


Topic 4: Development Oversight

What is Development Oversight?

- Promote orderly growth and development, safe construction and neighborhood vitality

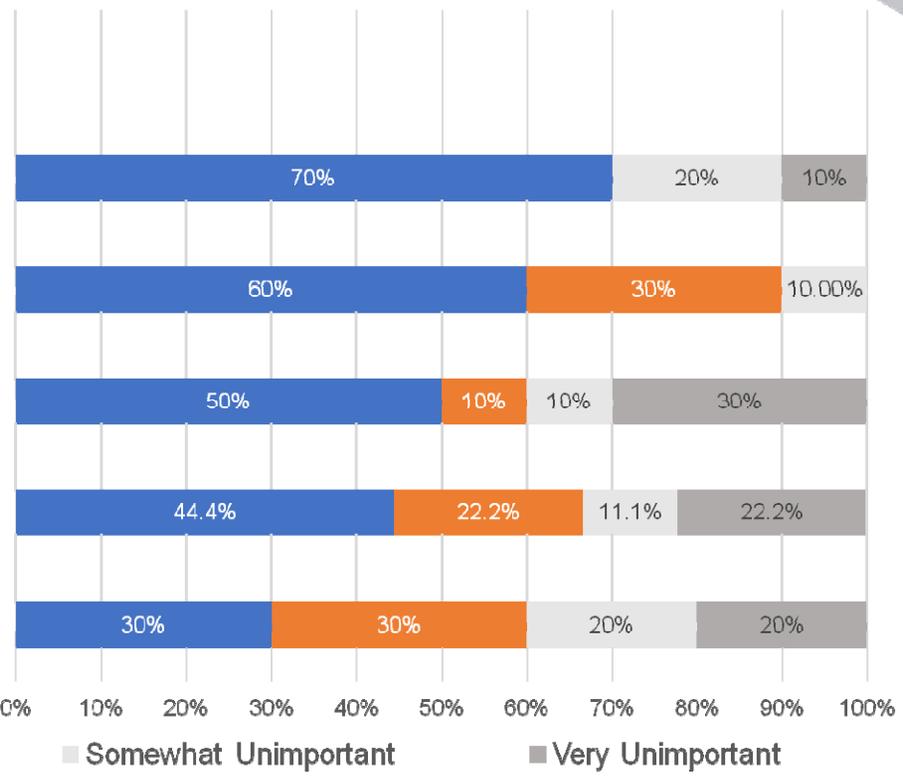
Stormwater reviews goal: “No Adverse Flooding Impact” onsite or offsite





Development Oversight

- The City should have more protective standards in areas with known flooding problems.
- Providing an incentive or bonus to development that contributes to reducing existing flooding in identified floodprone areas
- The City should establish a stormwater review threshold of less than 1 acre in size.
- The cumulative stormwater impacts of future development in a watershed should be considered when reviewing development proposals.
- The City should review stormwater issues thoroughly even if this takes longer for complex projects.



Development Oversight –Future Actions

- Work with the public and development community to evaluate if more protective standards should be used in areas with known flooding problems
- Consider reducing the 1 acre review threshold in areas of known flood risk
- ★ • Work with the Planning Department and stakeholders to identify potential development incentives
- Evaluate options to help minimize cumulative impacts of development
- ★ • Recent briefing to Planning Commission at their request

★ *Already initiated some effort*

General Discussion



Water Quality



Water Quality at the City of Fort Worth

- The Environmental Mgmt. Division is responsible for the City's water quality permit compliance
- The City's approach has been to meet the minimum permit requirements (EPA/TCEQ)
 - Over time, the permit requirements may become more stringent based on what is happening across the country
- Under the SW development review process, WQ provisions are encouraged but not mandatory

What We Are Hearing Externally



- Lake Worth Greenprint
- Tarrant Regional Water District
- Trinity River Vision Master Plan
- Stakeholder Group
- Peer Review Communities
- Increases cost of development, review, and permitting
- Takes more time
- Expensive to maintain
- Is it really providing a benefit?

What We Are Hearing Internally

- Impacts stormwater program resource allocations
 - Design and cost of capital project construction
 - Development review
 - Maintenance
- City staff understand water quality importance and want to be ready to respond if/when increased regulations occur





Environmental Master Plan

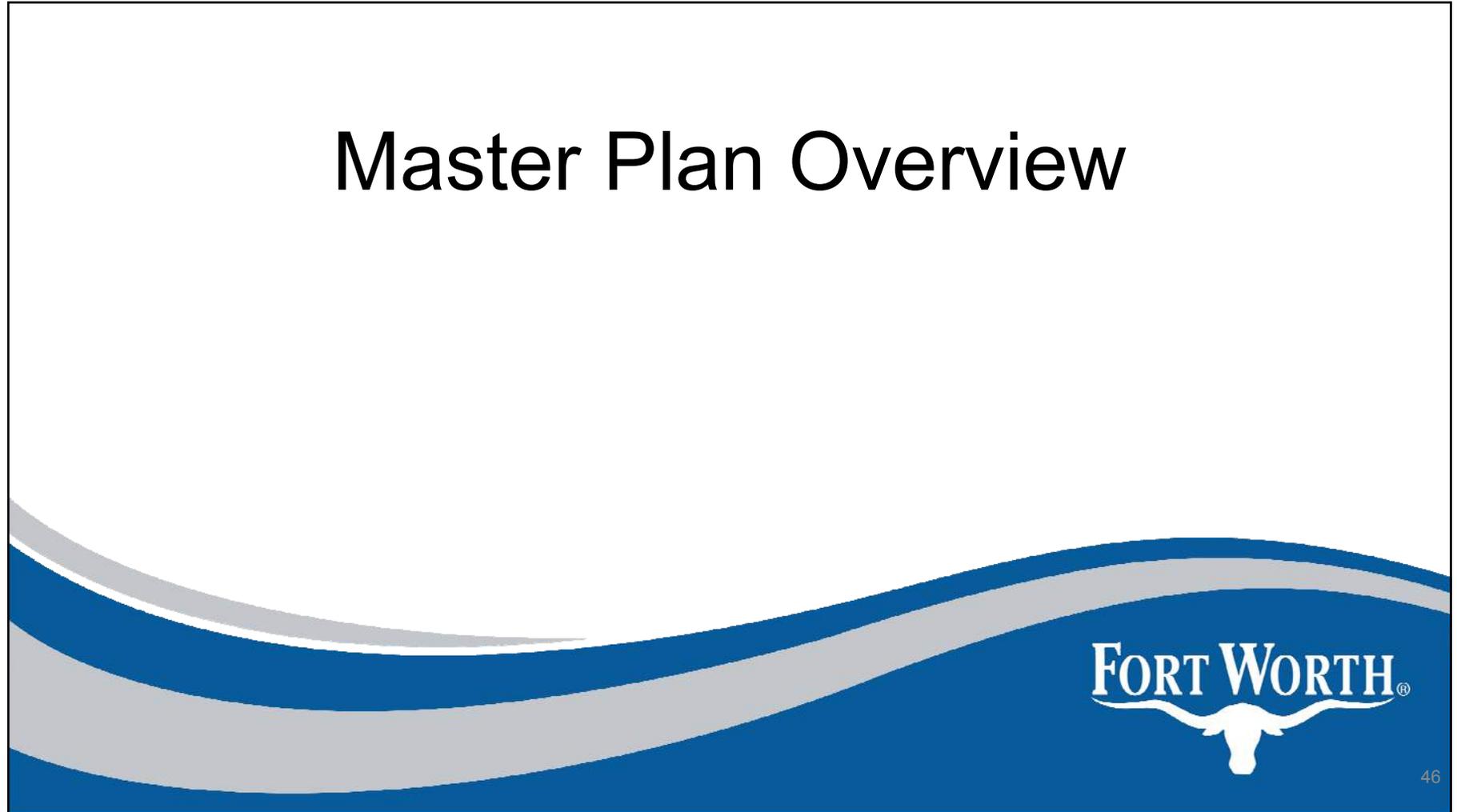
- Environmental Management Division
- 20 year horizon covering many environmental topics
 - Water quality chapter
- Fall kick-off
- Spring targeted completion
- “Survey Monkey” questions

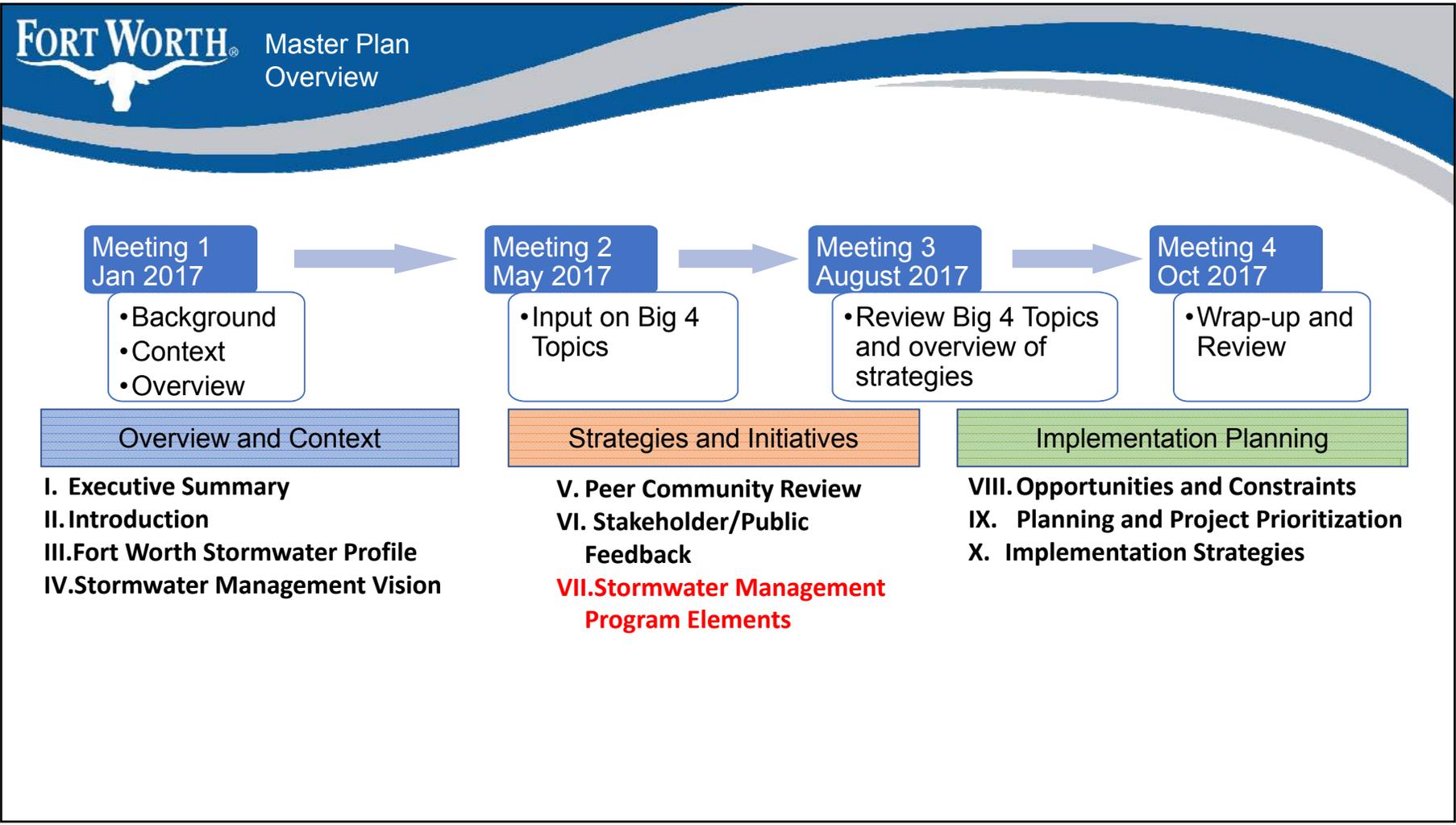


General Discussion



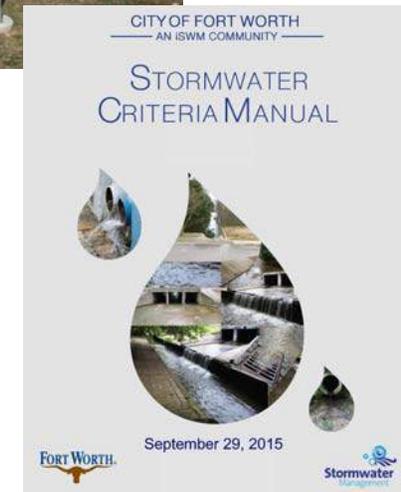
Master Plan Overview





Program Elements

- **Maintain** our stormwater infrastructure
- **Mitigate** flooding and erosion
- **Warn** residents about flooded roadways
- **Oversee development** to protect current & future residents



<http://fortworthtexas.gov/stormwaterMasterPlanUpdate/>



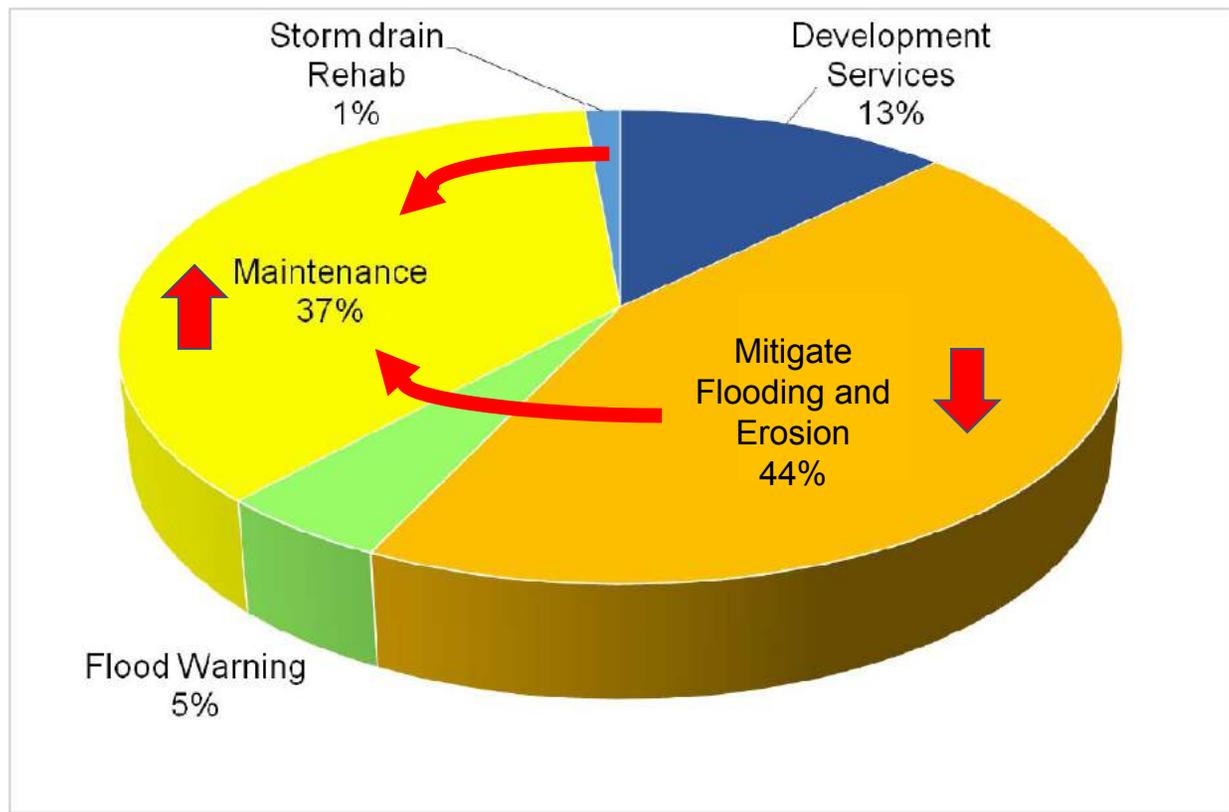
Maintain Stormwater Infrastructure – Program Elements

- ★ • *Private Channel Erosion*
- ★ • Pipe Rehabilitation Program
 - Inspection – In progress
- Public Channel Maintenance
 - Inventory and Criticality Assessment – In progress

★ *TPW Stormwater staff priorities*

Overview – Where We Are Today

FY 2017 Discretionary Budget (\$22.1M)





Mitigate Flooding and Erosion – Program Elements

- ★ • *Voluntary Buyout Program*
- ★ • Capital Project Development and Prioritization
- ★ • Financial Planning and Partnerships
 - Costs/benefits of environmental mitigation strategies
 - Opportunistic Construction of Small CIPs
 - Capital Program Financing
- ★ • *TPW Stormwater staff priorities*



Warn and Inform – Program Elements

- ★ • *Local Floodplains*
- ★ • *Cumulative Impacts of Development*
- ★ • *Channel Buffer Zones & Natural Area Preservation*
 - *Water Quality*
- ★ • Flood Preparedness (warn, respond, recover)
 - Data Transparency
 - Outreach and Engagement
- ★ • *TPW Stormwater staff priorities*



Oversee Development – Program Elements

- ★ • *Development Oversight*
- Resource Management
- Customer Service

★ *TPW Stormwater staff priorities*

General Discussion





Next Steps

- Continue drafting updated plan based on today's feedback
 - Big 4 Topics & Water Quality
 - Other Program Elements
 - Implementation Priorities
 - Future Stormwater Program public engagement effort
- Last Stakeholder group meeting target- Fall 2017



Website

- Slides & audio from stakeholder mtgs.
- Stakeholder meeting notes
- List of frequently asked questions
- Schedule
- Comment form

Stormwater Management Program Master Plan Update

Purpose and Objectives

This update to the Stormwater Management Program Master Plan will assess the progress and lessons learned from the first 10 years of the program.

Opportunities for efficiencies and improvements will be objectively evaluated to ensure the City of Fort Worth is in line with representative communities. Strategies, priorities, and policies will be refined to optimize the use of resources to best meet the stormwater related needs of the City of Fort Worth community over the next 10 years. This initiative will include significant stakeholder engagement and input with the updated Master Plan ultimately being submitted for adoption by City Council.

About the Update

Expected Completion
End of 2017

Goal
Update the Stormwater Management Program's Strategic Master Plan to gather feedback, refine policies and optimize resource distribution.

Calendar

Stormwater Master Plan Stakeholder Meeting
6 p.m. Aug. 3, 2017
Hazel Harvey Peace Center For Neighborhood
809 Missouri Ave.
Stakeholder meetings are open to the public.

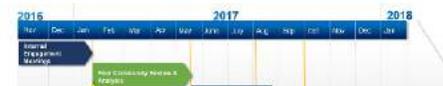
Contact

Jennifer Dyke
Senior Planner
Transportation & Public Works
817-392-2714



This video is a modified version of the May 16, 2017, stakeholder meeting presentation, which provides an overview of the peer review communities and a focused discussion on four specific that we wanted feedback on: non-FEMA local floodplains, private property channel erosion, voluntary buyout, and development oversight.

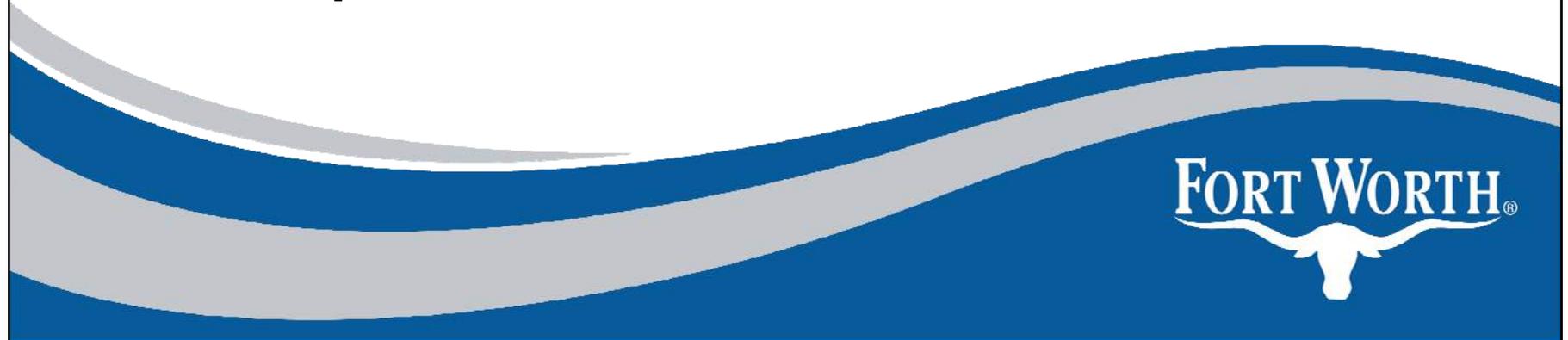
Schedule Overview



<http://fortworthtexas.gov/stormwaterMasterPlanUpdate/>

Thank you for your
feedback & participation!

Open for Public Comments



**Stormwater Master Plan Update
Summary of Stakeholder Feedback
Meeting 3 – August 3, 2017**

Meeting Purpose: Discuss proposed future actions for Local floodplains, Private Property Channel Erosion, Voluntary Buyout Program, and Development Services. Review the Master Plan Topics Overview and additional program elements.

Stakeholders in Attendance

Gary Havener	Rick Kubes	Aric Head
Bill Schur	Joe Schneider	Bo Cung
David Motheral	Lee Nicol	Si Rowlett

City of Fort Worth Staff, Master Plan Consultant, Halff Associates, and Public- sign in sheets available

Questions/Comments brought up by stakeholders during the presentation and discussed at the meeting:

Local Floodplains

1. Generally, I think we are headed in the right direction.
2. Most people know they are already in a floodplain. Would like to know how we move forward. What are the next steps? What are the implications? Need education to understand how local floodplains impact me.
3. To what level is the city going? Will there be a base flood elevation determined? What is the liability of the city with adding a floodplain? How does this affect existing floodplains? What do we as the City need to communicate?
4. The written policy would also establish what information is communicated externally and internally.

Private Property Channel Erosion

5. From past meetings, we understand we need to do something. Concerned that if the City does something for one property owner that we have to do it for all.
6. Cautious of buffer zone. We need to recognize that it's very difficult to accurately estimate channel erosion and horizontal/vertical shifting of the channel.
7. Is there something we can do besides creating buffer zones?
8. There is a development issue? Maybe we should consider whether development oversight should try to prevent causes of erosion.

Voluntary Buyout Program

9. If we complete a buyout, what is the chance we could do mitigation to benefit the rest of the neighborhood? That should be an important factor.
10. Two years ago, the city showed rendering of buyouts with amenities and ponds. Very impressive and recommend that you show these pictures in the future.
11. There are two perceptions: 1) We are buying the property because the owner is in trouble. 2) We are buying the property because there is an opportunity to construct improvements for the public benefit. Stakeholder in favor of the second and opposed to the first.
12. Availability of grant funding was relatively unimportant in the polling but it is something that we need to keep looking at it.
13. Historical flooding is not always well documented in some areas. Voluntary buyout could take years to become a high priority if there is not already good documentation. .
14. Note that everything with the voluntary buyout program is assumed to apply to businesses too.
15. We foresee a situation where city would need a lot that homeowners won't sell. Voluntary buyout does not prevent City from using other powers/authority.
16. Best thing is internal and external communication and coordination. It is great that City is coming up with a game plan. In the Zoo Creek watershed near Berry Street there are empty lots (with The T) that we have an opportunity to plan before we pave.

Development Oversight

17. The City needs to identify potential development centers. Any incentives should be vetted with public before they are provided. The preferred incentives need to be acceptable to the public. In the Berry/University Development Plan, I disagree with allowing parking reduction and building height increase as an incentive for providing stormwater improvements.
18. It is my opinion that changing the development review threshold to look at lots less than 1 acre would not be very effective. If you start reviewing lots that are too small it could negatively impact ability to redevelop.
19. Need to understand what is established as existing condition. An intermediate condition when a lot is redeveloping should not be held as the existing conditions.
20. For TCU area, the stealth dorms cumulatively have a stormwater impact. I think it is important that the City is aware of what is going on.
21. The 1 acre review threshold is defined by platted lot. Three consecutive lots that are redeveloped at the same time would not be looked at unless each lot is greater than 1 acre.
22. Concerned with 2nd bullet and the consideration of reducing the 1 acre review threshold in areas of known flood risk. City should not do anything that will slow down development.

23. Would like to see stated that we want vetted policy with resident feedback.
24. Agree with the future actions regarding Cumulative Impacts.

Water Quality

25. Lake Worth example demonstrates there are some areas where more stringent requirements make sense. Would like process to identify targeted areas. Especially in areas where stormwater is resulting in flow leaving a polluted site.
26. Drinkable, swimmable, etc. – there are different levels that need to be defined. Multiple aspects of water quality that need to be considered.
27. Very low priority for environmental improvement. Turning dirt as part of development is a small issue compared to historical and industrial impacts. There are more stringent standards now. Most of the problem is caused by a few.
28. Long term O&M issue is important. TCEQ & USACE are already requiring some water quality improvements. The City removed the inlet protection around downtown that was constructed as part of the pilot evaluation. Why was it removed? Was it determined that the trash removal benefit was not worth the cost and effort to maintain these devices?
29. In Austin, every development has 2 ponds essentially. Not good for Fort Worth. BMPs (silt fences, etc.) should be considered only if they are actually affective. Practical solutions are good for Fort Worth.
30. Lake Worth watershed mostly uncontrolled because it is outside of the Fort Worth City limits. Need NCTCOG or someone to help program to coordinate adjacent communities.
31. Pollution control has issues in existing neighborhoods because of used car oil, etc. Agrilife Texas Watershed Stewards has an educational program to help inform existing residents about stormwater pollution. We need more education.

Mitigate

32. Do we limit voluntary buyouts to residential properties? That will be decided as part of the future policy development but the residential voluntary buyouts are typically more controversial and that is why it was a focus of the stakeholder meetings.

Warn & Inform

33. Agree with Warn & Inform program elements and like the title of the category.

Oversee Development

34. Do it faster in order to keep development moving along.

Questions/Comments brought up by general public during the presentation and discussed at the meeting:

35. Based on voluntary buyouts, what is next step if no grant funds are awarded? Personally I am already mired in federal red tape and now local red tape that prevents me from moving forward.
36. If buyouts do not occur for low lying areas we are left with very few option. Neighbors are angry if we elevate a flood prone property. Can the property owner get tax abatements if we do not receive service from the City? Would City support us against neighbor's opposition in raising houses?
37. Warn & Inform can be controversial – Flood insurance doesn't cover erosion.

Comment Cards from Stakeholders and Public:

38. After an area has been named/labeled a floodplain, can it be reversed after it no longer applies? Like, if it's been determined that it no longer floods here.
39. I believe after 5 years of being on the Stormwater Citizen Committee and the FEMA Stormwater Committee that the City needs to raise financial support and awareness of these issues.
40. Interested in community involvement aspect of voluntary buyout program development.
41. Meeting was very well planned and well conducted. Stakeholder's input is obviously valued. Good job!

Meeting Conclusion: It is the City's understanding that the Stakeholder Group is in agreement with the proposed action plan so we will be moving forward to refine that action plan for inclusion in the master plan update.

Resources

The City discussed the proposed budget changes and shifting funding from the mitigate flooding and erosion category to the maintenance category to focus more effort in the future on storm drain rehab. The purpose of storm drain rehab is to make sure the existing storm drain infrastructure continues to function as designed. It is not to increase the system's existing capacity. The storm drain rehabilitation budget category will be included with the maintenance category in the future. Mitigate flooding and erosion will continue to be its own category, however there will be less funding available for this effort even though the needs remain high.



MEETING SIGN-IN

STAKEHOLDER COMMITTEE

Stormwater Master Plan – Stakeholder Meeting #3 -Thursday, August 3, 2017 – Hazel Harvey Peace for Neighborhoods

Name	Address	City/ZIP	Phone	Email
Rich Kubes				
Bill Schur	912 N Bailey Ave	Ft Worth / 76107		
BO CUNG	8033 SUNSCAPE	76123		bocung@hotmail.com
Maize				
Angie Sotom				
Si Rowlett				
G. Havener		76107		
JOE SCHWEMER		76177		
DAVID MOTHERAL	3950 SUMMERCREST	76109		david.motheral@motheraldev.com
Aric Head	9821 Bowman Dr.	76244		aric.head@pelotoland.com
Lee Nicol	3882 South Hills Cir	76109		lee@leenicolinterests.com



MEETING SIGN-IN

Stormwater Master Plan – Stakeholder Meeting #3 -Thursday, August 3, 2017 – Hazel Harvey Peace for Neighborhoods

Name	Address	City/ZIP	Phone	Email
Kenneth Kinkorof	2205 Western	PL 76107	817 312 3057	runforyourlife66@gmail.com
Stephanie V Coffman	2225 Randal Mill Suite 550	ArL 76133	251 554 1847	stephanie.coffman@stakeholder.com
RANDALL LANTZ	812 DANVILLE DR, DENTON TX	DENTON 76210	940 390 1749	RLANTZ@ENRACORP.COM
AMARCA MANGIZ	2209 WESTERN	76107	817 475-8098	AMANGIZ
CURTIS BEITEL	6813 Toledo Ct	76133	817 263-9245	curtis.beitel@hdrinc.com



MEETING SIGN-IN

Stormwater Master Plan – Stakeholder Meeting #3 -Thursday, August 3, 2017 – Hazel Harvey Peace for Neighborhoods

Name	Address	City/ZIP	Phone	Email
LYNN LOVELL	4000 Fossil Rd Blvd.	Fort Worth 76137	817-847-1422	llovelle@haff.com
Linda Sterne	TPW/SWM	City of Fort Worth	X#2690	Linda.sterne@fortworthtexas.gov
Greg Simmons	" "	" "		
Jennifer Dyke	" "	" "		
Karen Walz		SOS		
Ben Pflant		Haff		
Andy Kittenburg		City of Fort Worth		
Lind Young	CFW TPW/SWM	CFW		
Christopher Johnson	" "			
MIKEL WILKINS	VERACITY			
KIRAN KONDURU	TPW/SWM	CFW	817-392-7598	Kiran.Konduru@fortworthtexas.gov
Christina Osterlund	Code/Environmental	CFW	9596	christina.osterlund@fortworthtexas.gov



MEETING SIGN-IN

Stormwater Master Plan – Stakeholder Meeting #3 -Thursday, August 3, 2017 – Hazel Harvey Peace for Neighborhoods

STAFF/contractor

Name	Address	City/ZIP	Phone	Email
Mike Bennett	TPW STM UTR	76102	817 392 7891	mike.bennett@fortworthtx.gov
Angie Solomon			817.392.6063	angie.solomon@fortworthtx.gov
Ranjan Muttiah	TPW-SUM	76103	817-392-7919	ranjan.muttiah@fortworthtx.gov
Lisa Biggs	TPW- Floodplain	76116	817 244 6	lisa.biggs@fortworthtx.gov
Scott Hubley	4055 International Pl. Ft TX 76109		817-735-7378	shh@freese.com
Naren Kathurajm	TPW Storm water	76102	817-392-7388	NAREN.KATHURAJM@fortworthtx.gov
Stephan Nichols	TPW SW	76102	817 392 8731	stephan.nichols@fortworthtx.gov
CLARE DAVIS	TPW / SWM			

For more information about capital projects, visit FortWorthTexas.Gov

Stormwater Master Plan

COMMENT CARD

STAFF

Name: Angie Solomon (CM Rivers office) Date: Aug. 3, 2017

Email Address: _____

Organization: City Hall

Address: _____

City, State, ZIP: _____

Telephone #: 817. 392. 6063
(include area code)

Check One:

- Yes, I would like to speak with a city representative on this issue.
- No, I do not need to speak with a representative, but I would like city staff to see my comments:

Comment: _____

after an area has been named / labeled a floodplain,
can it be reversed after it no longer applies? like if
it's been determined that it no longer floods there...

PLEASE RETURN TO CITY STAFF

Stormwater Master Plan

COMMENT CARD

Name: ARIC HEAD Date: 8-3-17

Email Address: aric.head@pelotonland.com

Organization: DISTRICT 4 STAKEHOLDER

Address: 9621 BOWMAN DRIVE

City, State, ZIP: FORT WORTH, TX 76244

Telephone #: 817-832-8694
(include area code)

Check One:

- Yes, I would like to speak with a city representative on this issue.
- No, I do not need to speak with a representative, but I would like city staff to see my comments:

Comment: _____

PLEASE RETURN TO CITY STAFF

Stormwater Master Plan

COMMENT CARD

Name: JOE SCHNEIDER Date: 8/3/17

Email Address: JOE.SCHNEIDER@HILLWOOD.COM

Organization: HILLWOOD

Address: 9800 HILLWOOD PARKWAY SUITE ~~200~~ 300

City, State, ZIP: FTW TX 76177

Telephone #: 817 224 6054
(include area code)

Check One:

- Yes, I would like to speak with a city representative on this issue.
- No, I do not need to speak with a representative, but I would like city staff to see my comments:

Comment: _____

PLEASE RETURN TO CITY STAFF

Stormwater Master Plan

COMMENT CARD

Name: Rick Kubas Date: 8-3-17

Email Address: RickKubas22@gmail.com

Organization: BSI / Kubas Jewelers

Address: 6801 RIVER PK. CIRCLE

City, State, ZIP: FTW, TX 76116

Telephone #: 817-726-9695
(include area code)

Check One: WE SHOULD GO AS A GROUP

- Yes, I would like to speak with a city representative on this issue.
- No, I do not need to speak with a representative, but I would like city staff to see my comments:

Comment: _____

I BELIEVE, AFTER 5 YEARS OF BEING ON STORMWATER CITIZEN COMMITTEE AND THE FEMA STORMWATER COMMITTEE THAT THE CITY NEEDS TO RAISE FINANCIAL SUPPORT AND AWARENESS OF THESE ISSUES.

PLEASE RETURN TO CITY STAFF

Stormwater Master Plan

COMMENT CARD

Name: SI Rowlett Date: _____

Email Address: _____

Organization: _____

Address: _____

City, State, ZIP: _____

Telephone #: _____
(include area code)

Check One:

- Yes, I would like to speak with a city representative on this issue.
- No, I do not need to speak with a representative, but I would like city staff to see my comments:

Comment: _____

Interested in community involvement
aspect of voluntary budget program
development

PLEASE RETURN TO CITY STAFF

Stormwater Master Plan

COMMENT CARD

Name: BO CUNG Date: 8/3/17

Email Address: bo.cung@fwta.org

Organization: F.W. TRANSPORTATION AUTHORITY

Address: 8033 SUNSCAPE LN.

City, State, ZIP: FORT WORTH, 26123

Telephone #: 817-556-1591
(include area code)

Check One:

- Yes, I would like to speak with a city representative on this issue.
- No, I do not need to speak with a representative, but I would like city staff to see my comments:

Comment: MEETING WAS VERY WELL PLANNED & WELL CONDUCTED. STAKEHOLDERS' INPUT IS OBVIOUSLY VALUED. GOOD JOB!

PLEASE RETURN TO CITY STAFF

EXTERNAL STAKEHOLDER ENGAGEMENT

STORMWATER MANAGEMENT PROGRAM MASTER PLAN



- October 19, 2017 - Stakeholder Meeting 4 Open to Public



Stormwater Management Program Master Plan Update

Stakeholder Meeting 4

October 19, 2017

Presented by:

Jennifer Dyke - Transportation & Public Works Dpt. /Stormwater, Senior Planner

Ben Pylant - Half Associates, Inc.

Karen Walz- Strategic Community Solutions



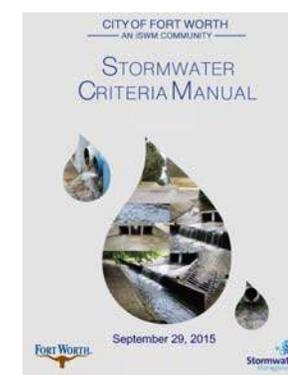
Agenda

- Walk Through Table of Contents
 - Chapter 1- What is the Stormwater Management Program?
 - Chapter 2- Why and How was the Master Plan Updated?
 - Chapter 3- Background
 - Chapter 4- Challenges (6:15-6:45)
 - Chapter 5- Strategic Direction (6:45-7:15)
 - Chapter 6- Implementation (7:15-7:45)
- Next Steps (7:45-7:50)
- Public Comments - please fill out comment form and provide it to us and/or visit with us after today's meeting (7:50-8:00)



Chapter 1- What is the Stormwater Management Program?

- City and Stormwater Vision, Mission, & Goals
- Program Elements
 - Maintain, Mitigate, Warn, Oversee Development
- How the Stormwater Program Operates
- What About Water Quality?





Chapter 2- Why and How was the Master Plan Updated?

- Why Was the Plan Updated?
- What Was the Process for Updating the Plan?
- What Does this Plan Provide?

Public Comment: "Thank you for putting together this meeting and allowing public input."

Stakeholder Comment: "Meeting was very well planned and well conducted. Stakeholder's input is obviously valued. Good job!"



Chapter 3- Background

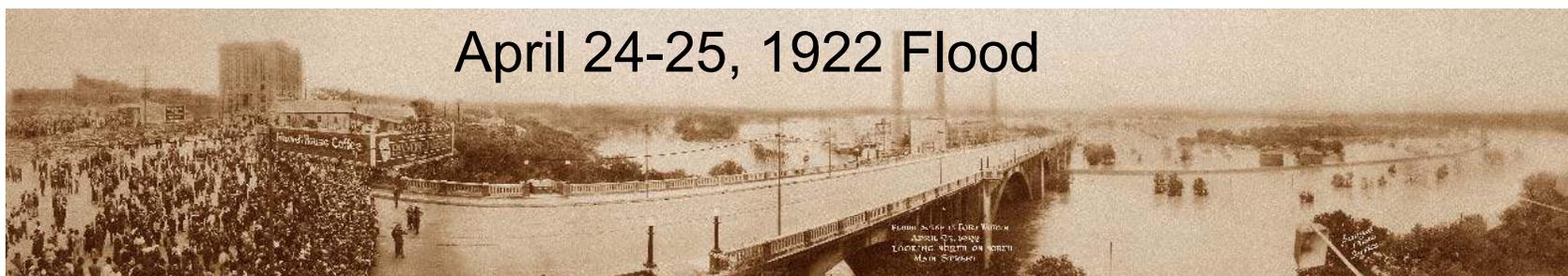
- Historical Context
- Initial Program Objectives and Funding
- Accomplishments Since 2006



May 17, 1949 Flood



April 24-25, 1922 Flood





Chapter 4- Challenges

- Program Wide Challenges
 - Financial, Prioritization, Resource Programming
- Program Element Challenges
 - Maintain, Mitigate, Warn, Oversee Development
- Policy Challenges
 - Local Floodplains, Private Property Channel Erosion, Buyout, Level of Development Oversight



PB6 FORT WORTH® 4. Challenges

Program Wide Challenges

- Financial
- Prioritization
- Resource Programming – see next slide



1. Financial



3. Resource Programming



2. Prioritization

DIMS1
DJM52

High Priority



Lower Priority

	Maintain	Mitigate	Warn	Oversee Development
High Priority	1. Project	1. Project	1. Project	1. Initiative
	2. Project	2. Project	2. Project	2. Initiative
	3. Project	3. Project	3. Project	3. Initiative
Lower Priority	4. Project	4. Project	4. Project	4. Initiative

Resource Programming

Programming resources over time & over program elements to get things done

- How do we compare the priorities between the 4 program elements to allocate resources?
- What is the proper balance between large and small projects?
- What is the appropriate level of budget for reactive needs?
- How to understand and track overall community priorities and accomplish them?

Program Element Challenges

- Maintain System
- Warn Residents
- Mitigate Hazards
- Review Development

Maintain System – Challenges

- Funding Gap (*\$8.4M annual budget*)
 - Pipe Rehabilitation Need (*60+ miles over 70 years old*)
 - Channel Rehabilitation Need (*~23 month backlog*)
 - Concrete Maintenance Need (*~48 month backlog*)
 - Vegetation Maintenance Need (*~48 month backlog*)
- Information Gap (*current condition of pipes and channels*)

Stakeholder Comments: “Until the assessment of the condition of infrastructure is completed, I don’t know how you can know what the investment in storm drain rehabilitation should be.”

Mitigate Hazards – Challenges

- Funding gap
 - \$300-\$400+ Million Backlog of Critical Needs
 - \$10-\$11 Million Annual Budget for Capital Projects
- Assessing relative priorities of different types of hazards
 - Structural flooding vs. road flooding vs erosion
- Balancing short-term and long-term focus
- Budgeting for reactive needs

Public Comment: “\$8-10 million isn’t nearly enough to fix all of Fort Worth stormwater problems, even with the voluntary buyout program these problems keep getting worse and more expensive to fix.”

Warn Residents – Challenges

- Assessing relative priorities (*mitigate risk vs. warning strategy*)
- Data reliability gap (*gauge data subject to glitches, varied precision levels*)
- Limited advanced warning capability (*short, flashy storm events*)
- Communication gap (*real time data & historical/current data*)
- Collaboration gap (*intensive coordination internally, with NWS, & interjurisdictional*)

Review Development – Challenges

- Determining the overall appropriate level of care
 - Ensure new/redevelopment doesn't create/aggravate drainage issues
- Balancing flexibility, responsiveness, and predictability

Policy Challenges

- Local Floodplains
- Private Property Channel Erosion
- Voluntary Buyout Program
- Level of Development Oversight



General Discussion



Chapter 5- Strategic Direction

- Program Wide Strategies
 - Financial, Prioritization, Resource Programming
- Program Element Strategies
 - Maintain, Mitigate, Warn, Oversee Development
- Policy Refinement Strategies
 - Local floodplains, Private Property Channel Erosion, Voluntary Buyout, Level of Development Oversight



Financial Strategy

Leverage available resources and opportunities to expand program capacity & meet our vision/mission

- Grant Opportunities
- Partnership Opportunities
- Rate Structure Refinement
- Bonds
- Special Tax/Drainage Districts
- Mitigation Banking

Stakeholder Comment:

"I believe after 5 years of being on the Stormwater Citizen Committee and the FEMA Stormwater Committee that the City needs to raise financial support and awareness of these issues."



Public Comment:

"Funding for some of this needs to be included in the upcoming 2018 bond package. We should require developments less than an acre to have a stormwater management plan that doesn't make these problems worse. Our city council needs to start taking these concerns seriously."



5. Strategic Direction

Prioritization Strategy

Continue to expand the acquisition and effective use of data to inform programming decisions

Stakeholder Comment:

"I think you have to prioritize and achieve results over time without increasing budget/expenditures."

19



Prioritization Strategy

Objective Criteria

- Structural Flood Risk
- Level of Service
- Criticality
- Cost efficiency
- Road hazard

Subjective Criteria

- Public Opinion
- Economic Development Impacts
- Aesthetics
- Neighborhood impact

Capital Project Prioritization



Data Entry | Results | Project Assessment Form | Funding Request Criteria

Report Number: SWS-017 Report Name: SWS-017 Wildcat Branch Database ID: 224

Alternative Name: Alternative 2B - Lower Channel Improvements and Culvert Replacements

Date Identified: 3/1/2016 Consultant: Halff Associates Source Information Link

Report Type: Planning Analysis Type: InfoWorks Project Type: Roadway Crossings and Channel Improvements

Scheduled Start: Status: Planning Planning Stage: Strategic Precondition:

Phase: Related Alternative DBID: 225 Relationship Type: Alternate

Related Alternative Name: Alternative 2C - Lower Channel Overbank Cuts

Council District: 5 Mapsheet Number: 138 Planning Sector: Southeast Source of Flooding: Wildcat Branch

Land Acquisition Needs: Count of flood prone parcels acquired: 0 Count of properties taken out of FEMA Floodplain: 66

Description: Channel improvements from Village Creek Drive to the existing channel drop near Candace/Burger. The alternative also includes culvert improvements at Dillard Street and Stalcup Road. Increased conveyance would need to be mitigated with additional culvert capacity at IH 620 or improvements to the frac pond. A Corps permit and mitigation would be required.

Comments:

Longitude (X): -97.2402538277 Photo 1 Link: Pictures/Photos/224.jpg Photo 2 Link: Pictures/Photos/224_2.jpg Map Link: Pictures/Maps/DBID_224.jpg

Latitude (Y): 32.70980625244 Photo 1 Description: Downstream face of Dillard Street culverts Photo 2 Description: Upstream face of Dillard Street culverts Area Map Link: Pictures/Area Maps/ODBID_224.jpg

Recommended (Report) Viable Alternative Include in Ranking Data Mining Data Class: 3 Filter Tag: Clear All Filter Tags

STRUCTURE FLOODING		ROAD HAZARD	
Count of flood prone structures pre-project:	76	Count of hazardous crossings/sumps pre-project:	6
Count of structures with reductions in structural flooding:	66	Count of improved crossings/sumps post-project:	2
Lowest return event at which structural flooding begins pre-project:	100	Pre-project level of service:	2
Lowest return event at which structural flooding begins post-project:	Greater than 100-yr	Post-project level of service:	25
Count of affected repetitive loss structures:	0	Road classification:	Neighborhood/Local
Count of affected critical facilities:	0	Comments:	Page 35, Page 45
Community response:	Unknown	Benefit from report:	\$549,600
Count of reported drainage issues:	4	Cost from report:	\$5,822,000
Figure 2.1		Cost (Updated OPC):	\$5,851,745
Scoring Guidelines		Updated OPC Date:	3/1/2017
		SW Share:	100%
		Potential Funding Partners:	
		Grouped Rank:	11
		Rank:	13
		Last Modified:	6/28/2017 12:20:44 PM

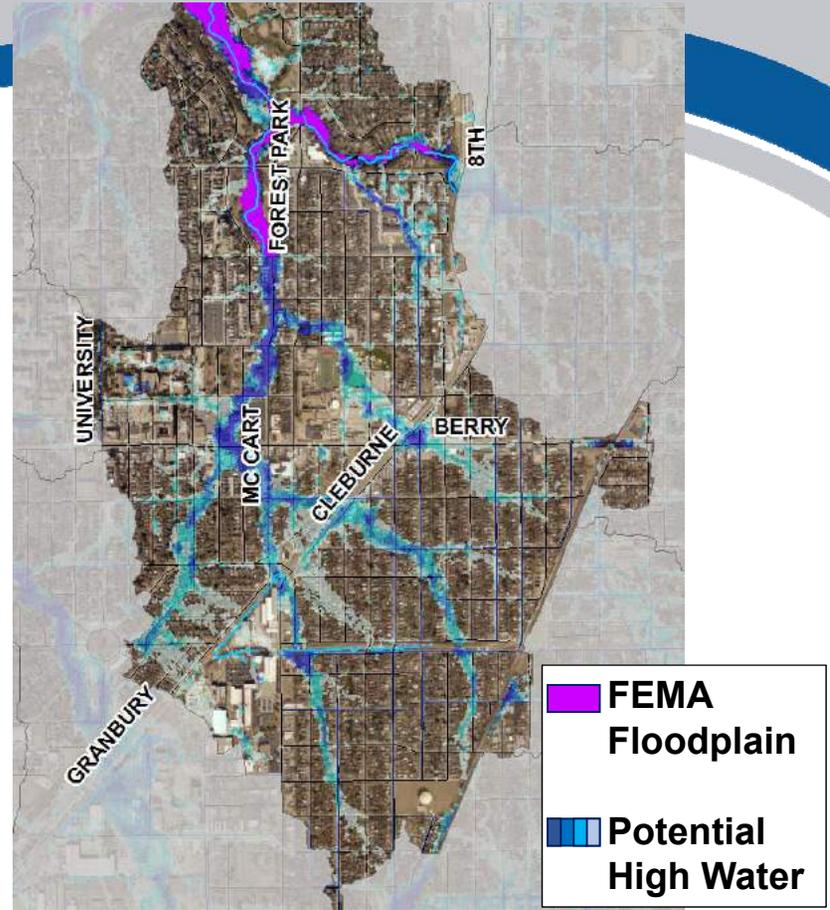
Buttons: Apply Filter/Sort, Remove Filter/Sort, One Page Report Current Project, One Page Report Filtered Projects, Input Report Current Project, Input Report Filtered Projects, Combined Report Current Project, Combined Report Filtered Projects, Ranked List All Projects, Ranked List Filtered Projects, Export to Excel All Data, Export to Excel Ranked List, Add Project, Update Rankings

Public Comment:
 "We need to understand priority. Discuss benefit cost ratio.
 Biggest bang for the buck."

Citywide Areas of Potential High Water

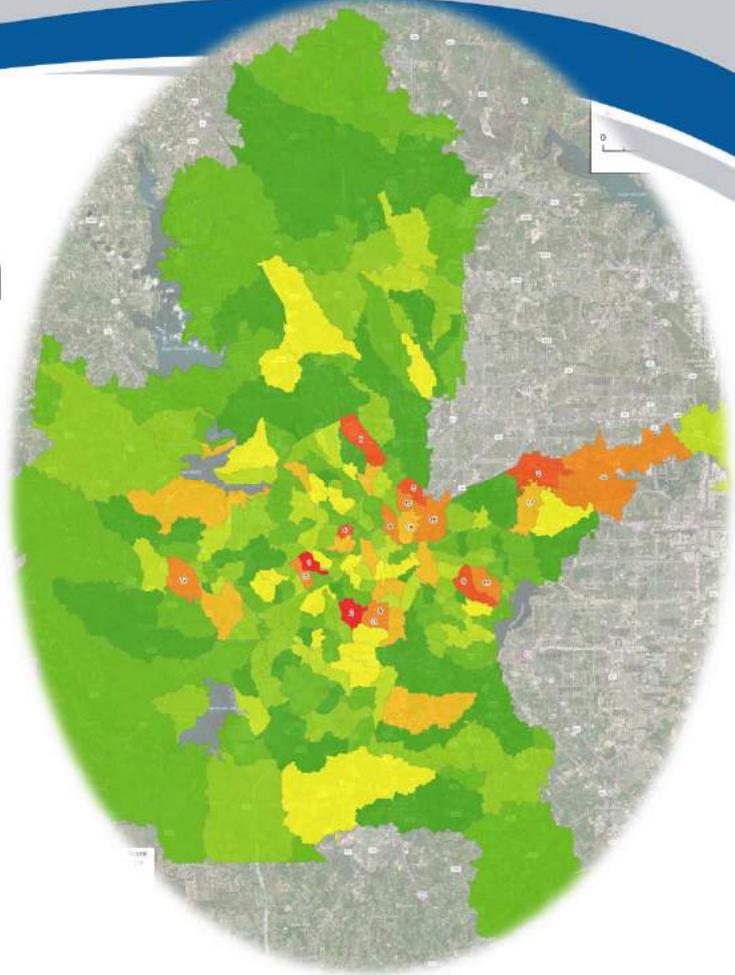
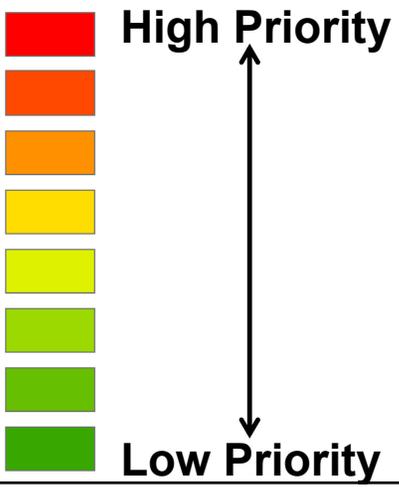


Public Comment:
"We would like to see more focus on public safety. Not just property but loss of life and potential threats to people."

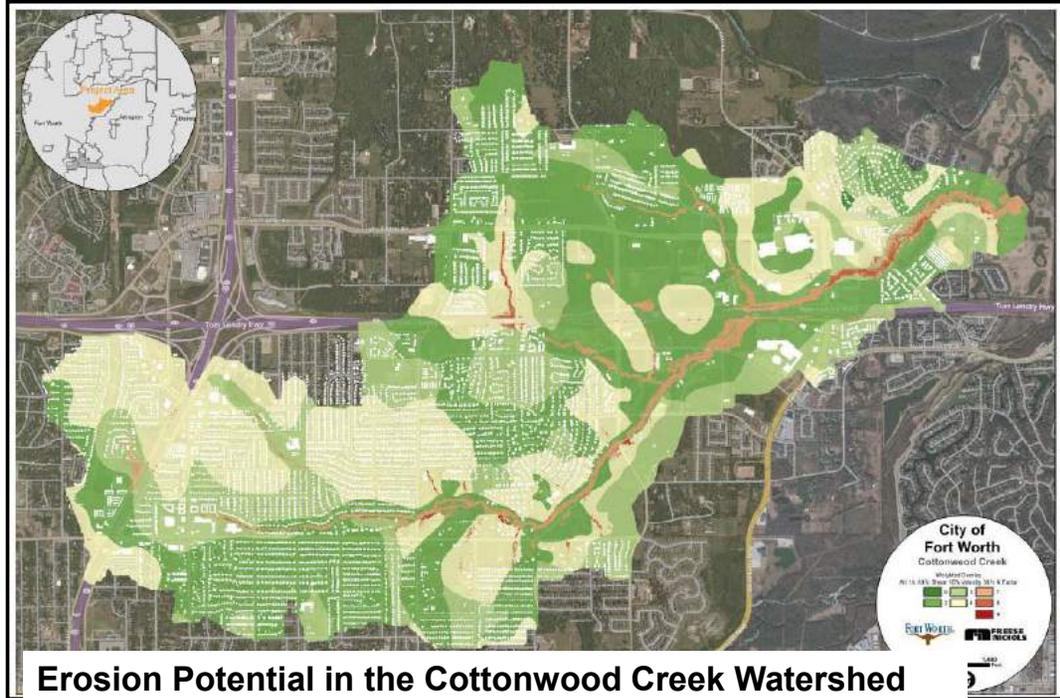
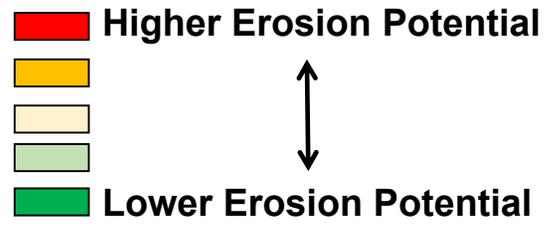


Just one example of potential high water/local floodplains in Fort Worth

Drainage Area Prioritization



Citywide Erosion Hazard Potential



Maintenance Project Prioritization



TPW STORMWATER CHANNEL RATING FORM



Channel Name:
Address:

Council District:
MapSCO:

Date: 01/24/2017
Inspected By: Karla Morales

CATEGORY	SCORING				
	LOW	2	3	4	HIGH
SEDIMENTATION					
Sedimentation condition			2		
Sediment movement			2		
Blockage/Clogging			2		
Trash/Debris			3		
EROSION					
Erosion Bank & Channel stability			3		
Bank cutting			4		
VEGETATION					
Vegetation condition			2		
Vegetative Bank protection			1		
PROPERTY DAMAGE					
Flooding roads			1		
Flooding of Private structures			1		
Utility Asset Damage			4		
Structural Components (Channel concrete condition)			1		
Scoring Total					26
CHANNEL TYPE					
Earthen Maintained			1		
Concrete					
Earthen Unmaintained					
Scoring Total					1.1
LOCATION (adjacent property)					
Undeveloped					
Service Road					
Commercial					
Residential			1		
Scoring Total					2

Notes:

Recommendation:

Total Score 57.20

Formula:

Scoring Total*Channel Type*Location=Total Score

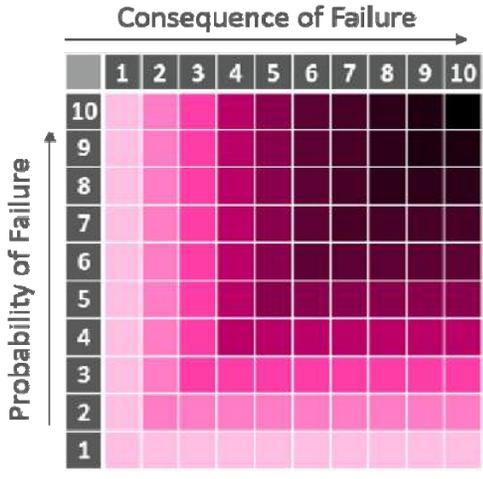
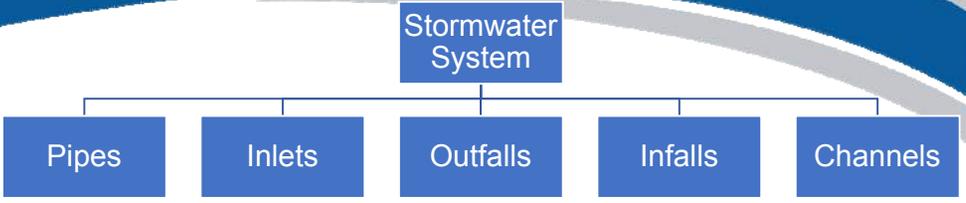
Priority Level Scale

> 50	High Priority Work Order
>30 and <50	Low Priority Work Order
>28 and <30	Reactive Maintenance
<27	Routine Maintenance

Condition Rating Scale

- 1 = Good
- 2 = Okay
- 3 = Fair/Degrading Condition
- 4 = Poor/In need of Attention
- 5 = Failure/Worst Condition

Criticality of Stormwater Infrastructure



Risk Assessment Matrix

Consequence of Failure x Probability of Failure = Criticality

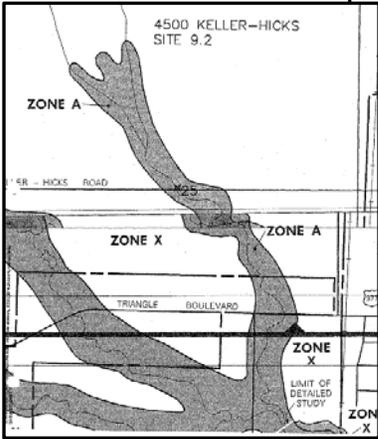


Stream Crossing Inventory

~300 crossings reviewed



Keller-Hicks Crossing

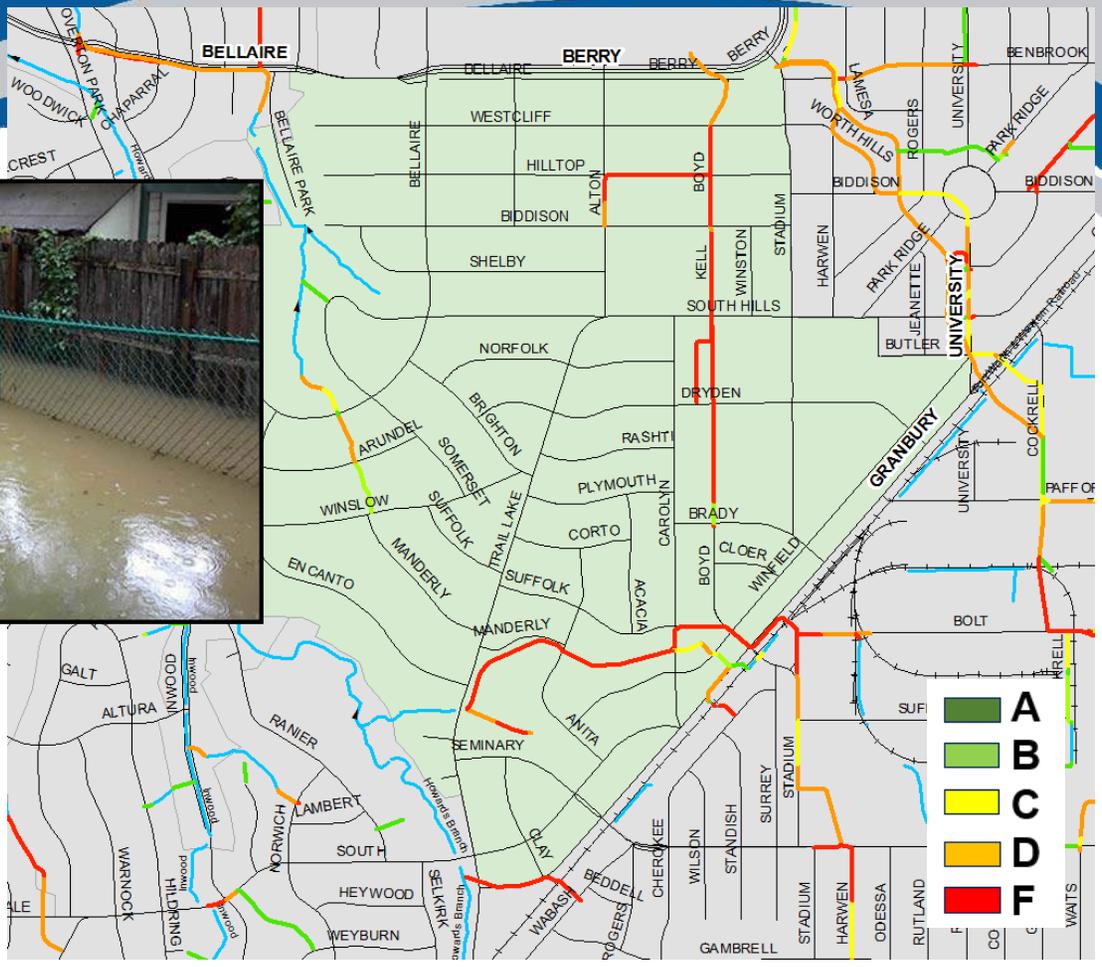


ROADWAY FLOOD HAZARD INFORMATION SHEET		TO BE COMPLETED AT SITE DURING SITE OBSERVATION	
GENERAL SUMMARY DATE: _____ D. EXISTING STORM INFRASTRUCTURE (1) BRIDGE: SPANS _____ HEIGHT: _____ (2) PIPE CULVERT: NO DIAMETER MATERIAL: _____ HEADWALLS: YES NO _____ (3) BOX CULVERT: SPAN/HEIGHT: _____ HEADWALLS: YES NO _____ (4) MILLS: NO. _____ DIET FROM LOW POINT: _____ (5) UNMADE OPEN CHANNEL: _____ E. VEGETATION (1) LIGHT _____ MODERATE _____ HEAVY _____ (2) DESCRIPTION: _____ F. SEDIMENT BUILDUP (1) HEIGHT: _____ (2) CULVERTS AFFECTED: _____ (3) VEGETATION: YES NO _____ G. EVIDENCE OF EROSION: _____ H. VISUAL EVIDENCE OF FLOW DEPTH: _____ I. PLAN VIEW (or attach aerial photo): _____ J. NATURE OF FLOODING (1) PONDING _____ (2) WATER OVER TOPPING ROAD / FLOWING ACROSS ROAD _____ (3) WATER FLOWS OVER AND ALONG ROAD _____ (4) STREET FLOODING _____ (5) OTHER _____ K. NOTED SAFETY ISSUES: _____ L. MAINTENANCE REQUIRED: _____ M. FLOOD HAZARD ASSESSMENT (1) NON-THREATENING _____ (2) HAZARDOUS _____ (3) LIFE THREATENING _____ N. CROSS SECTIONAL VIEW (or attach site photo): _____		PHOTOS: 2189 100-2306 Keller Hicks If description of existing conditions help update checklist 1-3?	
STREET ADDRESS: 4500 Keller-Hicks Rd CREEK/TRIB. NAME:		MAPSCO NO.: 22-M SITE NO.: 9.2	
FORT WORTH TRANSPORTATION AND PUBLIC WORKS DEPARTMENT			

FORT WORTH Prioritization Tools



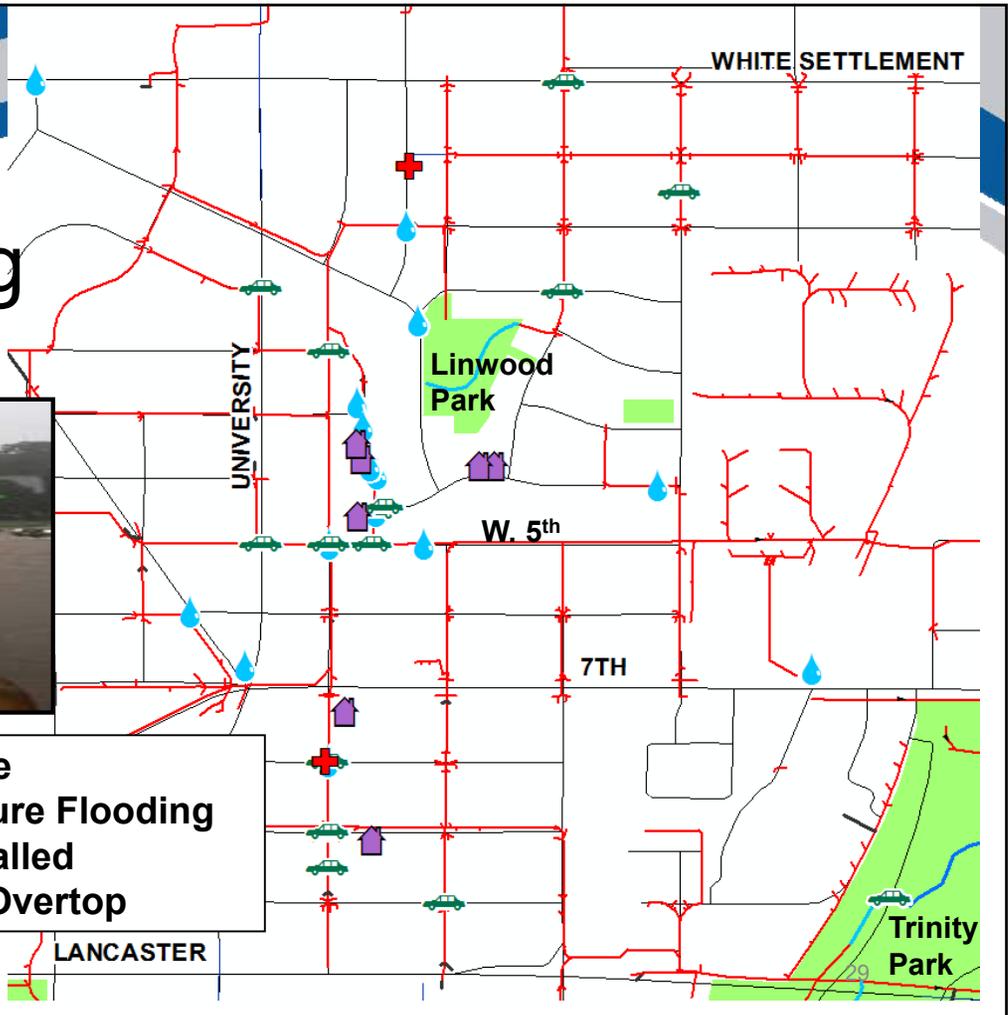
Citywide Pipe Capacity



Documented Flooding Incidents Data Set



-  Rescue
-  Structure Flooding
-  Car Stalled
-  Road Overtop





Resource Programming Strategy

Develop frameworks to integrate and process prioritization data to optimize programming decisions

- Normalized prioritization score across program elements
- Balance large and small projects
- Set aside appropriate budget for reactive needs
- Create and sustain effective community engagement



General Discussion



Program Element Strategies

- Maintain
- Mitigate
- Warn
- Oversee Development



5. Strategic Direction

Maintain System – Strategic Direction

Increase emphasis on pipe rehabilitation



Stakeholder Comments: “Take funds from capital projects to be used for storm drain rehabilitation major problems to reduce impact and occurrence using rehab funding.”

“Don’t want to pass up opportunity to fix an issue now when it is less expensive than it will be in the future.”



5. Strategic
Direction

Maintain System – Other Key Initiatives

- Public Channel Maintenance
- North Service Center
- Native Vegetation Program (low maintenance)



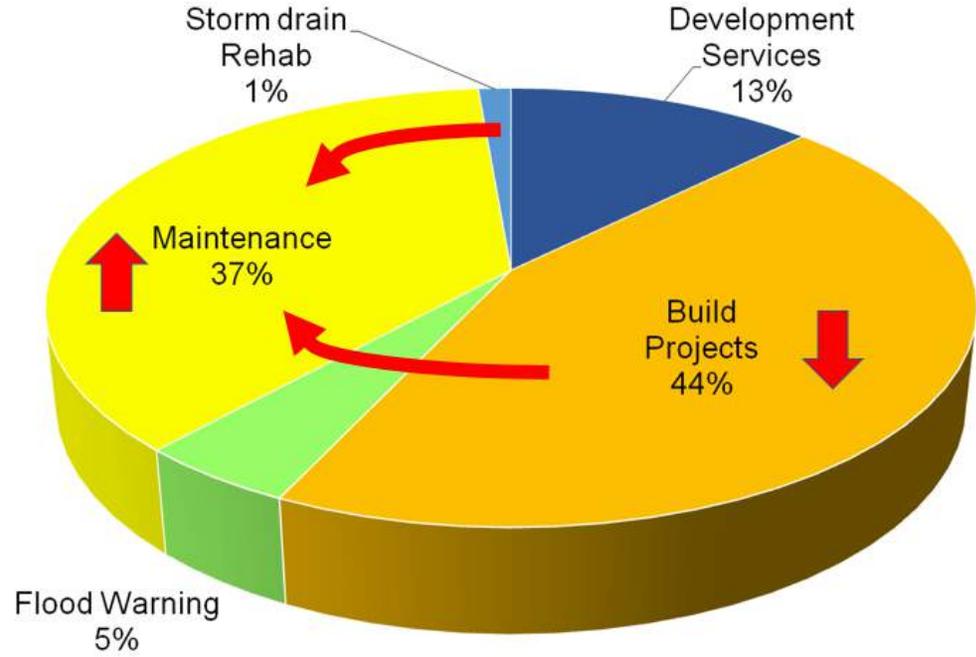
5. Strategic
Direction

Maintain System – Policy Implications

- Private Property Channel Erosion
- Voluntary Buyout



Maintain System—Funding Implications





5. Strategic
Direction

Mitigate Hazards – Strategic Direction

*Emphasize smaller project execution
with operating budget and seek
partnerships for larger projects*



Mitigate Hazards - Other Key Initiatives

- Mitigation Banking Strategies
- Opportunistic construction of small CIPs



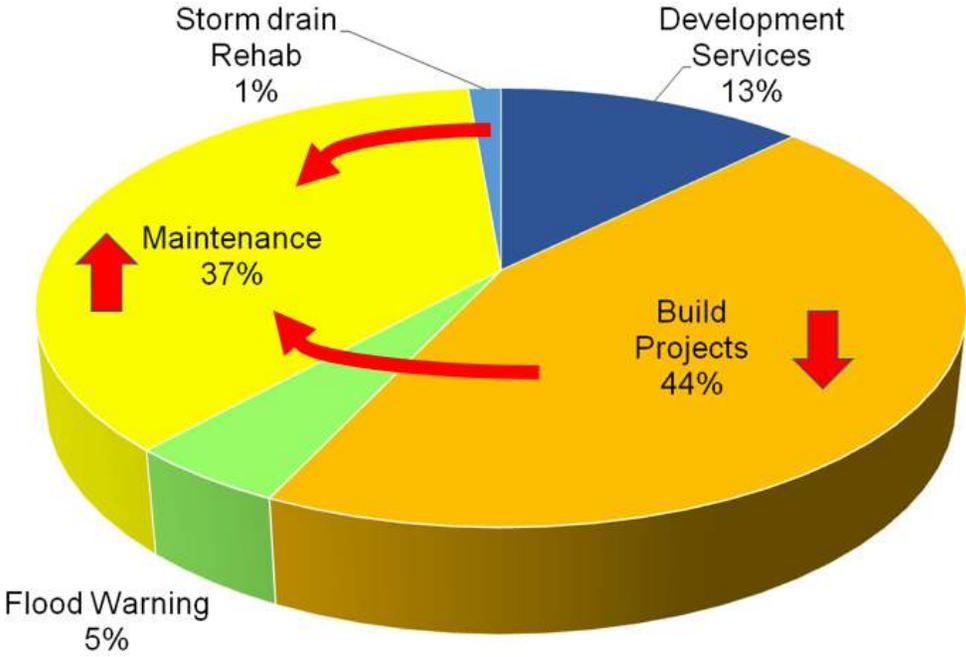
5. Strategic
Direction

Mitigate Hazards – Policy Implications

- Private Property Channel Erosion
- Voluntary Buyout



Mitigate Hazards – Funding Implications





Warn Residents – Strategic Direction

Increase communication of flood and erosion risk through mapping and other tools in areas where risk mitigation is not affordable

Warn Residents – Other Key Initiatives

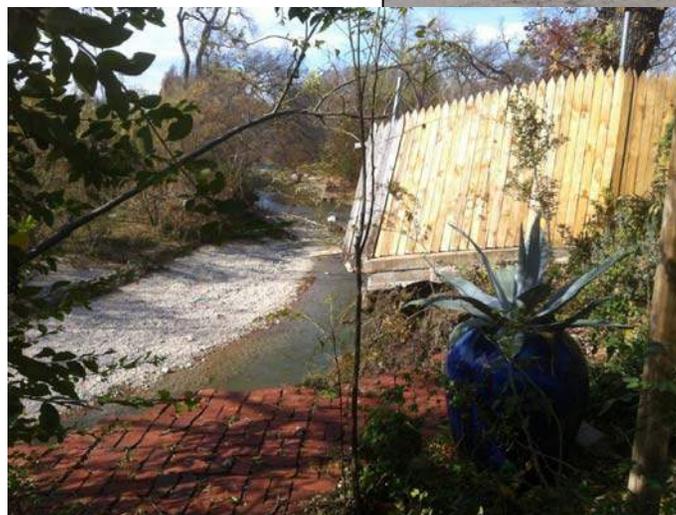
- Flood Preparedness
- Data Transparency
- Outreach and Engagement



5. Strategic
Direction

Warn Residents – Policy Implications

- Local Floodplain
- Private Property Channel Erosion





5. Strategic
Direction



Warn Residents - Financial Implications

- Not expecting a significant change to the level of resources



5. Program
Strategies

Oversee Development – Strategic Direction

*Maintain the current level of oversight
and evaluate regulation revision for
flood prone areas.*



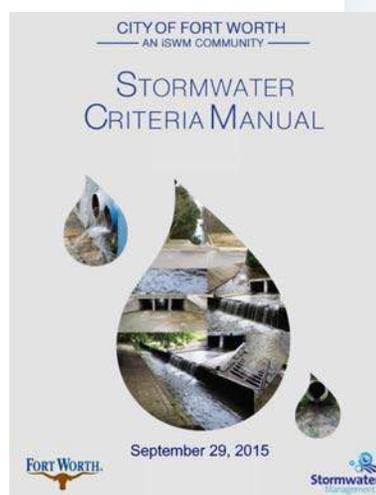
5. Strategic
Direction

Oversee Development – Key Initiatives

- No specific initiatives

Oversee Development – Policy Implications

- Local Floodplains
- Private Channel Erosion
- Level of Development Oversight





Oversee Development - Financial Implications

- Not expecting a significant change to the level of resources
- As the policies are investigated in more detail, this could impact resource levels in the future



Policy Refinement Strategies

- Local Floodplains
- Private Property Channel Erosion Policy
- Voluntary Buyout Program
- Level of Development Oversight



Policy Strategies – Local Floodplains

Improve identification, communication, and planning for flood hazards that exist beyond the limits of the FEMA floodplains

Stakeholder Comments: “Most people know they are already in a floodplain. Would like to know how we move forward. What are the next steps? What are the implications? Need education to understand how local floodplains impact me.”

“The written policy would also establish what information is communicated externally and internally.”



Policy Strategies— Private Property Channel Erosion

Develop a consistent city policy regarding private property erosion resulting from streams and channels that are not located within a public drainage easement

Stakeholder Comments: "Caution should be exercised in drawing up erosion policy as to not "rescuing" private property."

"No hard and fast policy /must have flexibility always."



Policy Strategies— Voluntary Buyout Program

Define a consistent City policy regarding participation in the voluntary buyout of properties at risk of flooding or erosion.

Stakeholder Comments: “There are two perceptions: 1) We are buying the property because the owner is in trouble. 2) We are buying the property because there is an opportunity to construct improvements for the public benefit. Stakeholder in favor of the second and opposed to the first.”

“Availability of grant funding was relatively unimportant in the polling but it is something that we need to keep looking at it.”



Policy Strategies— Oversight for Private Development

Investigate and refine policies that prevent the adverse impacts of flooding as a result of development in floodprone areas, incentivize development to help reduce flood risk, and properly account for the cumulative impacts of development.

Stakeholder Comments: “Any incentives should be vetted with public before they are provided. The preferred incentives need to be acceptable to the public.”

“Cumulative impact – infill development – extremely important.”

“Changing the development review threshold to look at lots less than 1 acre would not be very effective. If you start reviewing lots that are too small it could negatively impact ability to redevelop.”⁵³



General Discussion



Chapter 6- Implementation Plan

How do we get there?

 6. Implementation Plan		Initiative Priorities	
Level 1 Priority	Level 2 Priority	Level 3 Priority	
Local Floodplain & Level of Development Oversight Considerations <ul style="list-style-type: none"> • <i>Communicating local floodplains</i> • <i>Considering higher review standards in floodprone areas (includes review of 1 acre Stormwater review threshold)</i> 	Resource Programming Normalization Tools	Public Channel Maintenance	
Storm Drain Rehabilitation Program	Voluntary Buyout Policy	Mitigation Banking	
Private Property Channel Erosion Policy <ul style="list-style-type: none"> • <i>Communicating erosion risk and buffer zone policy development</i> 	Opportunistic Construction of Small CIPs	Outreach and Engagement for overall program	
Data Transparency <ul style="list-style-type: none"> • <i>Communicating local floodplains and erosion risk</i> 	North Service Center	Native Vegetation Program (Low Maintenance)	
Flood Preparedness (warn, respond, recover)	Level of Development Oversight <ul style="list-style-type: none"> • <i>Cumulative impacts</i> 		



General Discussion



Flexibility

- Regulatory changes
- Major flooding events
- Rehabilitation costs / needs exceed expectations
- Critical infrastructure failure
- Partnership opportunities
- Resource allocations priority driven





Future Updates

- Living implementation plan
 - How updates will be documented
 - How often updates will be performed



Future Stakeholder Group

- Master Plan, Floodplain Management Plan, & CAC stakeholders are invited to participate
- Other members added as needed to ensure major stakeholder categories are represented
- Commitment requested
- Planned to begin after Master Plan adoption - approximately summer 2018
- Initial focus will be policy development
 - City staff will provide technical expertise



Future Stakeholder Engagement

- Other City Departments
- Development Advisory Committee
- Plan Commission
- City Council
- Others as appropriate





General Discussion



Next Steps

- Stakeholder feedback
- Complete Implementation Plan
- Complete draft report- make it look visually pleasing!
- Present to Plan Commission
 - Stakeholders and Plan Commission concurrent review of the report
- Present for City Council Adoption & incorporation into Comp Plan
 - Report that stakeholders endorsed the process and direction

Future Plan Look & Feel

PEER COMMUNITY REVIEW

Opportunities for Stormwater program efficiencies and improvements were objectively evaluated through comparisons with peer communities. This process helped to identify current best practices and to ensure the City of Fort Worth is in line with state and national representative communities. The following peer communities were contacted and interviewed as part of this process:

1. Arlington, TX (ARL)
2. Austin, TX (AUS)
3. Dallas, TX (DAL)
4. Oklahoma City, OK (OKC)
5. Raleigh, NC (RAL)
6. San Antonio, TX (SAN)
7. Charlotte, NC (CHA)

These communities were selected based on one or more of the following criteria: similar stormwater infrastructure responsibilities, similar funding model, similar community size, regional proximity, and/or nationally recognized stormwater program.

This Peer Community Review provided ideas and helped inform the evaluation of current and future City policies and strategies.

CITY STAFF ENGAGEMENT

STORMWATER MANAGEMENT VISIONING SESSIONS	STORMWATER STAFF MAJOR ISSUES WORK SESSIONS AND INDIVIDUAL SECTION MEETING VISIONING SESSIONS	COORDINATION MEETINGS WITH OTHER CITY STAFF/ DEPARTMENTS
	Field Operations Program Development Business Support GIS Floodplain Management Development Services Capital Delivery	Planning and Development Water Emergency Management Parks Streets Environmental Management

REVIEW OF RELEVANT CITY PLANS AND INITIATIVES

The following documents and plans were reviewed to identify initiatives that could influence the strategic direction of the Stormwater Management Program. This review will help ensure that the Stormwater Management Program Master Plan is consistent with the current City direction and avoids unnecessary contradictions in planning objectives. This review also helps with the identification of potential opportunities where the Stormwater Management Program may be able to partner with other City efforts to implement future policies and strategies.

Future Stakeholder/Public Feedback Placeholder

INTRODUCTION

WHAT IS THE STORMWATER MANAGEMENT PROGRAM MASTER PLAN?

This update to the Stormwater Management Program Master Plan is a comprehensive and living document that helps ensure alignment of the policies and strategies of the Stormwater Program with the current and future City of Fort Worth directives established by City management and documented in the City's Comprehensive Plan.

The Master Plan will define the priorities, policies, and strategies that will direct the use of program resources to best meet the stormwater related needs of the City of Fort Worth over the next ten years.

The Stormwater Management Division will review and update this Master Plan as new initiatives, major events, and budget revisions, are encountered. These ongoing revisions will keep it pertinent and up-to-date with the inevitable changes that will occur over the next ten years.

WHAT IS INCLUDED IN THIS MASTER PLAN UPDATE?

A significant element of this update to the Master Plan is the refinement of policies and strategies for Stormwater resources. This refinement includes a deliberate pivot from the build-up and data towards prioritization and implementation of stormwater management initiatives. This master plan update includes:

1. Consolidate and pivot off of lessons learned to date
2. Optimize use of existing resources to meet community needs
3. Develop and refine policies to address recurring issues
4. Clearly define, prioritize and scope

The updated Master Plan describes and refines the options for mitigating flooding in Fort Worth by considering the appropriate use of property buy-outs and flood warning in-leak-increasingly opportunistic about public-public and public-private partnerships, and ensuring the needs of the community.

10



Website

- Slides & audio from stakeholder mtgs.
- Stakeholder meeting notes
- List of frequently asked questions
- Schedule
- Comment form

Stormwater Management Program Master Plan Update

Purpose and Objectives

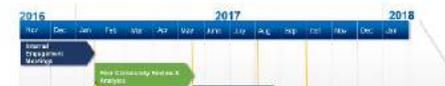
This update to the Stormwater Management Program Master Plan will assess the progress and lessons learned from the first 10 years of the program.

Opportunities for efficiencies and improvements will be objectively evaluated to ensure the City of Fort Worth is in line with representative communities. Strategies, priorities, and policies will be refined to optimize the use of resources to best meet the stormwater related needs of the City of Fort Worth community over the next 10 years. This initiative will include significant stakeholder engagement and input with the updated Master Plan ultimately being submitted for adoption by City Council.



This video is a modified version of the May 16, 2017, stakeholder meeting presentation, which provides an overview of the peer review communities and a focused discussion on four specific that we wanted feedback on: non-FEMA local floodplains, private property channel erosion, voluntary buyout, and development oversight.

Schedule Overview



About the Update

Expected Completion
End of 2017

Goal
Update the Stormwater Management Program's Strategic Master Plan to gather feedback, refine policies and optimize resource distribution.

Calendar

Stormwater Master Plan Stakeholder Meeting
6 p.m. Aug. 3, 2017
Hazel Harvey Peace Center For Neighborhood
808 Missouri Ave.
Stakeholder meetings are open to the public.

Contact

Jennifer Dyke
Senior Planner
Transportation & Public Works
817-392-2714

<http://fortworthtexas.gov/stormwaterMasterPlanUpdate/>



Environmental Master Plan

- Environmental Management Division
- 20 year horizon covering many environmental topics
 - Water quality chapter
- Fall kick-off
- Spring targeted completion
- Water Quality Survey



<https://www.surveymonkey.com/r/Q52XVW3>





Flood Warning System

- Existing High Water Warning System (HWWS) consists of road side flashers triggered by rising water levels at 52 low-water crossings
- HWWS goal is to alert drivers and emergency responders to flooding
- New Flood Warning System (FWS) to make HWWS more reliable
- FWS will expand the weather gaging network
- FWS will make data available to the public
- First public meeting held in March, [2nd Public meeting on Nov. 1st](#) ★

For more information please visit: www.fortworthtexas.gov/floodwarning



Thank you for your
feedback & participation!

Open for Public Comments



**Stormwater Master Plan Update
Summary of Stakeholder Feedback
Meeting 4 – October 19, 2017**

Meeting Purpose: Review the stormwater program challenges and strategies identified in the Master Plan report. Discuss the implementation plan, flexibility of the program, future stakeholder engagement and updates of the report.

Stakeholders in Attendance

Gary Havener	Aric Head	David Motheral
Rick Kubes	Monica Hamilton	Rafael McPonrell
Joe Schneider	Bo Cung	
Si Rowlett	William Schur	

City of Fort Worth Staff, Master Plan Consultant, and Halff Associates. Public- sign in sheets available.

Questions/Comments brought up by stakeholders during the presentation and discussed at the meeting:

1. The funding gap on the mitigation and hazards – we have \$300–400 million backlog with a \$10 million annual budget - is this making a dent or are we losing ground/gaining ground?
2. We never talked about the role of educating the community on why there are problems. There is always an opportunity to do better.
3. What do we mean by \$400 million dollars of critical CIP needs? It sounds kind of scary. Are all of these needs critical?
4. If you have about \$10 million per year in capital funds and about \$300 million in CIP needs, are we going to completely address all the critical needs in 30 years?
5. How likely are stormwater projects to be included in the general obligation bond program? We need at least one project in the bond program.
6. We need to be responsive to what people know is a priority but also be responsible in addressing some of the problems that people are unaware of.
7. It is unfortunate that some stormwater problems will not be fixed until someone drowns and there is a news story.
8. What's the cost on the North Service Center and where did that money come from?
9. When new development occurs, you have surveys and you know where the FEMA floodplains are located. We need to get the local floodplain maps out to the people as they are purchasing property. It's more difficult for residential properties that do not always thoroughly research the flood risk.
10. Are we really asking the question of whether we should show maps with the local floodplains?

11. It sounds like we are not wanting to change the development code, but we know many of the causes of flooding is development.
12. The 1 acre development review threshold is primarily an infill development issue. Greenfield development is already being regulated heavily.
13. We all agree that enforcement of stormwater regulations and prevention of unpermitted changes (such as filling in a designed drainage swale) is an issue that needs to be addressed.
14. Properties threatened by erosion is a bad thing. It appears we are going straight towards a buffer zone policy and I'm concerned about the number of streams in the City and the impacts this could have on development. In other communities, it takes out developable property and negatively impacts the cohesiveness of the property. All for preservation, but this may take it too far.
15. I have a question about the real problem. Who is managing the The Trinity River and the levees? Is that USACE responsible?

Implementation

16. Where are we in terms of indexing and inventorying the public channels? Is there a chance that channels become a higher priority? What if we find the issues are much bigger?

Questions/Comments brought up by public during the presentation and discussed at the meeting:

17. It sounds to me like you have a lot of really good ideas and strategies, but the big challenge is finding financing. That is the biggest. I think it might be good to use some resources that you do have to investigate alternative financing. Also, as we've learned from the Houston tragedy, development has a huge impact on drainage problems. Until the city accepts that and understand that, the challenge will be balancing a rush to expand the tax base. If you start hindering development, you'll run into some political problems to get them to accept that development is creating a lot of these problems. We certainly learned it firsthand. It's incremental development that's occurred over a long period of time.
18. I live in Riverbend Estates which is in east Fort Worth off of Randol Mill Road. You talk a lot in this plan about making the community aware. When I moved into this neighborhood, I didn't realize that our HOA is responsible for the drainage. I don't know if that's a common agreement with developers, but this was a 1989 agreement before we were ever developed. Our HOA maintains all the drainage for our neighborhood and roughly 2,000 acres, so all the properties east of us which would include Woodhaven. There's a new charter school in that area and there was another charter school that was going to be built, and our HOA is responsible for maintaining all that drainage and the cost. As you know, we don't get any of the funds back from the utility fees. I did hear you mention the special tax drainage district and I would like to know how we can get assistance. When we need to turn the electricity on our pumps to pump the stormwater it costs our HOA \$10,000 just with the electricity spike. And should one of those pumps fail and we have to replace one, it could cost us \$250,000. Being a little HOA, where would we come up with those funds? This is a very old agreement and the stormwater program wasn't even in existence at the time it was made. What we would like to do is talk to someone and see what can be done to educate our neighborhood on what we can do and how we can get assistance on the drainage control in our neighborhood and for the 2,000 acres we're responsible for.

Comment Cards from Stakeholders and Public:

19. Asset management and maintenance is something that the program is starting to explore more deeply. Land development activity constructs more storm drain infrastructure than the city. However, there is a misalignment of design criteria for public and “privately” funded storm drain. For example: stormwater prefers geotextile erosion control however the drainage manual requires rock rip rap. Our allowable manhole spacing and reinforced concrete box dimensions exceed what operation and maintenance staff can service.
20. I live in Riverbend Estates and long after moving in I learned HOA is responsible for the drainage and flood control for the neighborhood and roughly 2000 acres upstream from us pursuant to a 1989 Drainage Facilities Maintenance Agreement between the developer and the city. If there were to be a flooding event I am concerned about the HOA’s financial ability to run the pumps to maintain the drainage. What can the HOA do to get financial assistance with this? Is there a way to apply for funds to be allocated to us to assist with the drainage maintenance?
21. Interesting in attending future meetings and learning about our engagement process.
22. The single biggest issue is lack of required funds to make a truly impactful statement on the problems stormwater faces. The staff has done a great job on many levels in addressing and resolving as much as possible with the limited funds they have.
23. I’m satisfied with the process city staff conducted. I thought stakeholder’s participation level was great. I’m confident the final product (master plan) will be a very comprehensive and very well thought out document. Staff has done a great job!



MEETING SIGN-IN

PUBLIC

Stormwater Master Plan - Final Stakeholder Meeting #4 - Thursday, Oct. 19, 2017 - Hazel Harvey Peace for Neighborhoods

Name	Address	City/ZIP	Phone	Email
Richard Green	5717 Danciger Dr. 76112	76112	972-255-7650	rgtth@hotmail.com
Teresa Moss	8713 Brushy Creek Tr 3	76118	817-261-1568	tmoss1961@gmail.com
Chris Trimbler				
CHRIS TRIMBLER	5816 RIVER MEADOWS PL	76112	817-919-6740	CATRIMBLER@SBCGLOBAL.NET
RACQUEL VAUGHN	" " "	" "		R_VAUGHN@ATT.NET
Betty Brown	5848 River Meadows PL	76112	817-247-8908	bl.grown@verizon.net
Eilene Theilig	4721 Highgrove Dr.	76132	817-370-0530	etheilig10@gmail.com
Stephanie Coffman	7012 Welch Ct Ft Worth TX	76133	251-554-1047	stephanie.coffman@stater.com
* Cheryl Sheppard	4927 Birkeman Ave Ft Worth	76107	817-240-8433	Seraphim1950@gmail.com
Blenda Helmer	4900 BIRKEMAN	76107	817-271-5800	
Christina Patoski		76107		
Juan	"neighborhood near here"	76111	817-841-9295	

* would like to volunteer to be a stakeholder
former County Compliance Program

For more information about capital projects,
visit FortWorthTexas.Gov

52



MEETING SIGN-IN

STAFF & CONTRACTORS

Stormwater Master Plan – Final Stakeholder Meeting #4 -Thursday, Oct. 19, 2017 – Hazel Harvey Peace for Neighborhoods

Name	Address	City/ZIP	Phone	Email
LYNN LOVELL	4000 Fossil Creek Blvd	Fort Worth (76137)		llovel@half.com
Linda Sterne	CFW SWM		Xf. 2690	Linda.Sterne@FortWorthTexas.gov
Greg Simmons	CFW SWM			Greg.Simmons
Chris Johnson	CFW SWM			ChristopherJohnson
Jennifer Dyke	CFW SWM			Jennifer.Dyke
Karzon ?	consultant to HALFF			
BEN RYLAND	HALFF	Fort Worth		
Clair Davis	CFW SWM	?		
Lisa Bogg	CFW SWM			
MIKEL WICKINS	URBAN ECOPLAN			mikel@urbanecoplan.com
CODY WHITTENBURG	CFW - ENVIRONMENTAL			
Brandi Kelp	CFW - ENV. / KFWB			



MEETING SIGN-IN

STAFF & CONTRACTORS

Stormwater Master Plan - Final Stakeholder Meeting #4 - Thursday, Oct. 19, 2017 - Hazel Harvey Peace for Neighborhoods

Name	Address	City/ZIP	Phone	Email
Ranjan Muttiah	CFW SWM			
Kelly Dillard	# FNI			
Robin Stevens	CFW SDS			
Mike Bennett	CFW SWM			
Naren Katharaj	CFM			
Monica Hamilton	City Hall (also a stakeholder)		817-392-6214	
Stephen Nichols	CFW			
CHRIS BROOKS	R/N Group		817-876-9695	CBROOKS@RNMAIL.COM



MEETING SIGN-IN

Stormwater Master Plan – Final Stakeholder Meeting #4 -Thursday, Oct. 19, 2017 – Hazel Harvey Peace for Neighborhoods

Name	Address	City/ZIP	Phone	Email
GARY HAVENER	PO Box 121969 FW TX 76121		817-239-1717	gary@havener.com
Rick Kubas				
JOE SANDERSON			817 224 6000	Joe.Sanderson@havener.com
SI Rowlett				
Aric Head				
Monica Hamilton	121969			
BO CUNG	8033 SUNSCAPE			bo.cung@fwta.org
William Schur	912 N Bailey Ave			wmschur@subell.net
DAVID MOTHERS	3950 Summercrest Dr	76109	817-832-2980	
Rafael McPinnell				

For more information about capital projects, visit FortWorthTexas.Gov

Stormwater Master Plan

COMMENT CARD

Name: Stephen Nichols Date: 10/19/17

Email Address: stephen.g.nichols@gmail.com

Organization: CFW

Address: 7950 MILLIE AVE

City, State, ZIP: FORT WORTH TX 76123

Telephone #: 817 422 8265
(include area code)

Check One:

- Yes, I would like to speak with a city representative on this issue.
- No, I do not need to speak with a representative, but I would like city staff to see my comments:

Comment: Asset management + maintenance is something that the program is starting to explore more deeply. Land development activity constructs more S.D. infrastructure than the city. However there is a misalignment of design criteria for public + "privately" funded S.D. For example: SW prefers geotextile erosion control however manual requires rock riprap, OR allowable MH spacing + RCB dimensions exceeds what operation + maintenance staff can service.

PLEASE RETURN TO CITY STAFF

Stormwater Master Plan

COMMENT CARD

Name: Betty Brown Date: 10/19/17

Email Address: bl.brown@verizon.net

Organization: _____

Address: 5848 River Meadows Pl

City, State, ZIP: Fort Worth, Texas 76112

Telephone #: 817 247-8908
(include area code)

Check One:

- Yes, I would like to speak with a city representative on this issue.
- No, I do not need to speak with a representative, but I would like city staff to see my comments:

Comment: I live in Riverbend Estates and long after moving in I learned our HOA is responsible for the drainage and flood control for our neighborhood and roughly 2000 acres upstream from US pursuant to a 1989 Drainage Facilities Maintenance Agreement between the developer and the city. If there were to be a flooding event I am concerned about the HOA's financial ability to run the pumps to maintain the drainage. What can our HOA do to get financial assistance with this? Is there a way to apply for funds to be allocated to us to assist with the drainage maintenance?

PLEASE RETURN TO CITY STAFF

Stormwater Master Plan

COMMENT CARD

Name: Teresa Moss Date: _____

Email Address: tjmoss1961@gmail.com

Organization: _____

Address: _____

City, State, ZIP: _____

Telephone #: _____

(include area code)

Check One:

- Yes, I would like to speak with a city representative on this issue.
- No, I do not need to speak with a representative, but I would like city staff to see my comments:

Comment: interested in ^{attending future} mtgs. + learning about our engagement process

PLEASE RETURN TO CITY STAFF

Stormwater Master Plan

COMMENT CARD

Name: Rick Kubas Date: 10-19-17
Email Address: RICKKUBAS22@GMAIL.COM
Organization: BSI, Kubas Family Management
Address: 6801 RIVER PARK Circle
City, State, ZIP: Ft Worth, Tx, 76116
Telephone #: 817-726-9695
(include area code)

Check One:

- Yes, I would like to speak with a city representative on this issue.
- No, I do not need to speak with a representative, but I would like city staff to see my comments:

Comment: THE SINGLE BIGGEST ISSUE IS LACK
OF REQUIRED FUNDS TO MAKE A TRULY
IMPACTIVE STATEMENT ON THE PROBLEMS
STORMWATER FACES.
THE STAFF HAS DONE A GREAT JOB ON MANY
LEVELS IN ADDRESSING AND RESOLVING
AS MUCH AS POSSIBLE WITH THE LIMITED
FUNDS THEY HAVE.

PLEASE RETURN TO CITY STAFF

Stormwater Master Plan

COMMENT CARD

Name: BO CUNG Date: 10/19/2017
Email Address: bo.cung@fwta.org
Organization: DISTRICT 6 REP
Address: 8033 SUNSCAPE LN
City, State, ZIP: FORT WORTH, TX 76123
Telephone #: 817-215-8782
(include area code)

Check One:

- Yes, I would like to speak with a city representative on this issue.
- No, I do not need to speak with a representative, but I would like city staff to see my comments:

Comment: I'm SATISFIED WITH THE PROCESS CITY STAFF CONDUCTED, I THOUGHT STAKEHOLDER'S PARTICIPATION ^{LEVEL} WAS GREAT. I'M CONFIDENT THE FINAL PRODUCT (MASTER PLAN) WILL BE A VERY COMPREHENSIVE AND VERY WELL THOUGHT-OUT DOCUMENT. STAFF HAS DONE A GREAT JOB!

PLEASE RETURN TO CITY STAFF

EXTERNAL STAKEHOLDER ENGAGEMENT

STORMWATER MANAGEMENT PROGRAM MASTER PLAN



- February 28, 2018 – Public Hearing at the Plan Commission

I, the undersigned authority do hereby certify that this Notice of Meeting was posted on the City of Fort Worth official website and official bulletin board, places convenient and readily accessible to the general public at all times and said Notice was posted on the following date and time **Friday, February 23, 2018 at 5:00 p.m.** and remained so posted continuously for at least 72 hours preceding the scheduled time of said meeting.

Mary J. Kayser



CITY PLAN COMMISSION

FEBRUARY AGENDA

Wednesday, February 28, 2018

Work Session 11:00 A.M.

City Council Conference Room 290

Public Hearing 1:30 PM

City Council Chambers

200 Texas St.

2nd Floor – City Hall

Fort Worth, Texas 76102

For More Docket Information Visit

<http://fortworthtexas.gov/planninganddevelopment/platting/>

Commissioners:

Vicky Schoch, CD 1
Jennifer Trevino, CD 2
Jim Tidwell, CD 3
Mark Brast, CD 4
Ben Robertson, CD 5

Armard Anderson, CD 6
Edward Deegan, CD 7
Don Boren, Chair CD 8
Melissa Konur, CD 9
Bob Kelly, Alternate
Rich Hyde, Alternate

I. WORK SESSION: 11:00 A.M. City Council Conference Room 290

- | | |
|---|---------------------------|
| A. Correspondence & Comments | Staff & Chair |
| B. Lunch | |
| C. Review of Cases on Today's Agenda | Staff |
| D. Trinity River Strategic Plan | Streams and Valleys, Inc. |
| E. Access Management and Collector Guidelines | Staff |
| F. Economic Development Strategic Plan | Staff |

II. PUBLIC HEARING: 1:30 P.M. Council Chambers

- A. Approval of Previous Month's Minutes
- B. Approval of Previously Recorded Final Plats

C. Consent Cases (6)

1. **MT-18-001 Burleson Retta Road. ETJ-Tarrant County**

- a. Being the removal of an approximate 4,300 foot portion of the proposed alignment of proposed Burleson Retta Road from the 3700 Block of existing Burleson Retta Road to Rendon Road and to realign this proposed Neighborhood Connector to the existing alignment.
- b. General Location: North and east of Burleson Retta Road and west of Rendon Road.
- c. Applicant: Rosa Ratterree
- d. Applicant Requests: Approval of a recommendation to City Council.
- e. DRC Recommends: Approval of a recommendation to City Council for adoption of this Master Thoroughfare Plan amendment.

2. **FS-18-014 Lots 11RA, 11Rb and 11RC, Shady Oaks Addition (Increase in Lot Yield): ETJ, Johnson County.**

- a. Being a revision of a portion of Lot 11, Shady Oaks Addition, an addition out of the V. Anderson Survey, Abstract No. 1, in Johnson County, Texas, according to the plat recorded in Volume 505, Page 491, Deed Records, Johnson County, Texas.
- b. General Location: Southeast Corner of County Road 605 and County Road 605B
- c. Applicant: Steven Ray Maddux
- d. Applicant Requests: Approval of the increase in lot yield.
- e. DRC Recommends: Approval of the increase in lot yield which is in compliance with the Subdivision Ordinance.

3. **FS-18-025 Rivercrest Addition (Increase in Lot Yield): Council District 7.**

- a. Being a replat of a portion of Block 8, Rivercrest Addition, an addition to the City of Fort Worth, Tarrant County, Texas, according to the plat recorded in Volume 310, Page 92 PRTCT.
- b. Location: 5109 and 5115 Slate Street
- c. Applicant: Fort Growth Partners LP

- d. Applicant Requests: Approval of the increase in lot yield.
- e. DRC Recommends: Approval of the increase in lot yield which is in compliance with the Subdivision Ordinance.

4. **VA-18-002** **Vacation of a Portion of Old Denton Road: Council District 4.**

- a. Part of the Milly Gilbert Survey, Abstract Number 565, and Heirs of W.W. Thompson, Abstract Number 1498, City of Fort Worth, Tarrant County, Texas.
- b. General Location: East of Sandshell Boulevard, south of Basswood Boulevard, west of Cascade Court, north of Genevieve Drive.
- c. Applicant: All Storage Sandshell LLC
- d. Applicant Requests: Approval of a recommendation to City Council.
- e. DRC Recommends: Approval of the recommendation to City Council for the vacation of this portion of Old Denton Road.

5. **PP-17-075** **Chisholm Trail Ranch, Section 3 (Brewer Boulevard Right-of-Way): Council District 6.**

- a. Being 4.02 acres in the Juan Jose Albirado Survey, Abstract Number 4, City of Fort Worth, Tarrant County, Texas.
- b. General Location: South of McPherson Boulevard, west of Chisholm Trail Parkway and North of Stewart Feltz Road.
- c. Applicant: Walton
- d. Applicant Requests: Approval of the preliminary plat.
- e. DRC Recommends: Approval of the preliminary plat which is in compliance with the Subdivision Ordinance.

6. **PP-18-003** **Watercress Drive Right-of-Way, Lake Worth Leases Addition: Council District 7.**

- a. Being approximately 10.603 acres in the M.E. De La Garza Survey, Abstract Number 616; the A.M. Clear Survey, Abstract Number 360; and the Jacob Wilcox Survey, Abstract Numbers 1715, 1716, and 33, City of Fort Worth, Tarrant County, Texas.
- b. General Location: Segments of Watercress Drive between Silver Creek Road and Island View Drive
- c. Applicant: City of Fort Worth
- d. Applicant Requests: Approval of the preliminary plat.

- e. DRC Recommends: Approval of the preliminary plat which is in compliance with the Subdivision Ordinance.

D. Continued Cases (1)

7. **PP-17-046** **Vann Addition: 575 Single-Family Detached Lots, 1 Multi-Family Lot, and 12 Private Open Space Lots. Council District 7.**

- a. Being approximately 186.547 in the Henry Robertson Survey, Abstract No. 1259, City of Fort Worth, Tarrant County, Texas.
- b. General Location: Northeast of SH 287, west of BNSF Railway, south of Blue Mound, and east of future Wagley Robertson Road.
- c. Applicant: Hanover Property Company
- d. Applicant Requests: Approval of the preliminary plat and approval of the requested waivers.
- e. DRC Recommends: Approval of the Preliminary Plat and

Approval of the following waivers:

- 1. To allow the following four blocks that exceed the maximum length allowed: Block 1, Lots 1X-25; Block 4, Lots 1-22; Block 13, Lots 1-29; and Block 13, Lots 30-74 and
- 2. To allow an emergency access connection at Gray Dove Road rather than the required extension of a public street connection.

Denial of the following waivers:

- 1. To allow 575 dwelling units on a single access which exceeds the maximum number of dwelling units by 545 units and
- 2. To allow 656 multifamily units on a single access which exceeds the maximum number of units allowed by 557 units.

E. New Cases (6)

8. **VA-18-001** **Vacation of a Portion of Beckham Place: Council District 9.**

- a. Being a portion of Beckham Place, as dedicated by Fort Worth Original Town, an unrecorded addition and a portion per deed recorded in Volume 3418, Page 633, DRTCT, located in the City of Fort Worth, Tarrant County, Texas.
- b. General Location: South of Akers Avenue, north of Belknap Street, west of Sylvania Avenue and east of Oakhurst Scenic Drive.
- c. Applicant: Saigebrook Development
- d. Applicant Requests: Approval of the recommendation to City Council for the vacation of this portion of Beckham Place.

- e. DRC Recommends: Approval of a 30-day continuance, since this is the companion case for Mistletoe Station Addition (PP-17-081).

9. **PP-17-081** **Mistletoe Station Addition, Block A, Lots 1 and 2: 2 Multi-Family Lots.**
Council District 9.

- a. Being a replat of Lots C & D, Block B, Mistletoe Heights, as recorded in Volume 388, Page 5, PRTCT and Lot 1-R, Frisco Addition, as recorded in Document Number D212125731, PRTCT, located in the City of Fort Worth, Tarrant County, Texas.
- b. General Location: North of Mistletoe Boulevard, south of W. Rosedale Street, west of 12th Avenue and east of Jerome Street.
- c. Applicant: Saigebrook Development
- d. Applicant Requests: Approval of the preliminary plat and Subdivision Ordinance waivers.
- e. DRC Recommends: Denial of the preliminary plat, but supports a 30-day continuance.

10. **PP-17-068** **Bunge Edible Oil: 8 Commercial Lots. Council District 2.**

- a. Being a replat of a portion of Lot 1, Block 1, Bunge Edible Oil Addition, an addition to the City of Fort Worth, Tarrant County, Texas as recorded Volume 388-218, Page 9, PRTCT and unplatted land in the Isaac Thomas Survey, Abstract Number 1526 and the Edmund Little Survey, Abstract Number 954, City of Fort Worth, Tarrant County, Texas.
- b. General Location: Northeast corner of the intersection of Stockyards Boulevard and Exchange Avenue.
- c. Applicant: Niles City Resort LTD
- d. Applicant Requests: A continuance of this case.
- e. DRC Recommends: Denial of the Preliminary Plat due to significant deviations from the Stockyards Form-Based Code, but supports a continuance.

11. **PP-17-077** **Quarter Horse Estates: 198 Residential Lots and 2 Private Open Space Lots. Council District 7.**

- a. Being 31.328 acres out of the I. & G.N.R.Y. Company Survey, Abstract Number 834, City of Fort Worth, Tarrant County, Texas.
- b. General Location: South of Bailey Boswell Road, north of W.J. Boaz Road and west of Old Decatur Road.
- c. Applicant: Lan-Cal-Ltd.
- d. Applicant Requests: Approval of the preliminary plat and approval of one Subdivision Ordinance waiver.
- e. DRC Recommends: Approval of the preliminary plat and approval of the Subdivision Ordinance waiver to allow one block that exceeds the maximum length allowed, which runs along Block 6 and extends to Phase 1, Quarter Horse Estates.

12. **PP-18-001** **Rivercrest Addition: 4 Single-Family Attached Lots and 1 Single-Family Detached Lot. Council District 7.**

- a. Being a replat of Lots 7A-3R and 7A-4R, Block 7, Rivercrest Addition, Second Filing, Fort Worth, Tarrant County, Texas as recorded in Volume 388-0, Page 73 PRTCT.
- b. General Location: Northwest corner of the intersection of Slate Street and Athenia Drive.
- c. Applicant: Fort Growth Partners LP
- d. Applicant Requests: Approval of the increase in lot yield, the preliminary plat and the requested waiver.
- e. DRC Recommends: Approval of the increase in lot yield, the preliminary plat and a waiver to allow four lots less than 50-feet in width to be served by rear entry garages from a shared driveway easement rather than an alley.

13. **PP-18-005 Sunset Ridge Addition: Eight Single-Family Attached Lots. Council District 7.**

- a. Being a replat of Lots 8 and 31, Sunset Ridge Addition, Fort Worth, Tarrant County, Texas as recorded in Volume 1861, Page 527 PRTCT.
- b. General Location: Southeast corner of the intersection of Athenia Drive and Sunset Lane.
- c. Applicant: Fort Growth Partners LP
- d. Applicant Requests: Approval of the increase in lot yield, the preliminary plat and the requested waiver.
- e. DRC Recommends: Approval of the increase in lot yield, the preliminary plat and a waiver to allow eight lots less than 50-feet in width to be served by rear entry garages from a shared driveway easement rather than an alley.

E. Other Matters of Business (6)

14. **FP-16-014 The Ranch at Eagle Mountain (Extension Request): 79 Single-Family Detached Lots, 6 Private Open Space Lots, and 1 City Water Department Lot. Council District 7.**

- a. Being Lots 45 through 88, Block N and Lots 8 through 51, Block BB, 17.97 acres situated in the G. Rail Survey, Abstract Number 1985, and the T. Freeman Survey, Abstract Number 546, City of Fort Worth, Tarrant County, Texas.
- b. General Location: North of Robertson and south of Big Wichita Drive and Sierra Madre Drive between Salt Fork Drive and the extension of Lake Country Drive.
- c. Applicant: BKR Land, LP.
- d. Applicant Requests: Approval of the request to extend the final plat for one year.
- e. DRC Recommends: Approval of the request to extend the final plat for one year.

15. **PP-15-072 Isaac Foster's Addition (Extension Request): Four Multi-family Lots. Council District 9.**

- a. Being a replat of a portion of Lots 2-7, Block K; all of Lots 5-11, Block G; all of Lots 1-9, Block F; all of Lots 1-8 Block C; all of Lots 1-6 Block B; all of Lots 1 and 2 and a portion of Lots 3-8 Block E; all of Lots 1 and 5-8, Block D; and all of Lot 1 and a portion of Lot 2, Block A, Isaac Foster's Addition, an addition to the City of Fort Worth, Tarrant County, Texas, as recorded in Volume 106, Page 1, PRTCT. And being a replat of a portion of Lots 1 and 5, Block 159, Original Townsite of the City of Fort Worth (an unrecorded addition) along with a portion of Garvey Street closed by ordinance number 529; a portion of Johnson Street close by ordinance 2960; and all of the 10 foot alleys in Blocks F, C and B vacated by City of Fort Worth Ordinance recorded in Volume 4116, Page 865, DRTCT.
- b. General Location: North of Pharr Street and south of Cold Springs Road between the Burlington Northern Santa Fe railroad lines.
- c. Applicant: 701 Hampton, LLC
- d. Applicant Requests: Approval of the request to extend the preliminary plat for one year.
- e. DRC Recommends: Approval of the request to extend the preliminary plat for one year.

16. **2018 Comprehensive Plan. All Council Districts.**

DRC Recommends: Approval of a recommendation to City Council for adoption of the 2018 Comprehensive Plan.

17. **Stormwater Management Program Master Plan. All Council Districts.**

DRC Recommends: Approval of a recommendation to City Council for adoption of the Stormwater Management Program Master Plan, March 2018 and incorporation by reference into the City's Comprehensive Plan.

18. **TA-18-001 Subdivision Ordinance Text Amendment. All Council Districts.**

DRC Recommends: Approval of a recommendation to City Council for a text amendment to the Subdivision Ordinance addressing process improvements related to agenda items that are considered by the City Plan Commission.

19. **Revisions to City Plan Commission's Rules of Procedure. All Council Districts.**

DRC Recommends: Approval of the revisions to the City Plan Commission's Rules of Procedure.

Adjournment: _____

ACCESSIBILITY STATEMENT

Fort Worth Council Chamber is wheelchair accessible. Persons with disabilities who plan to attend this meeting and who may need accommodations, auxiliary aids, or services such as interpreters, readers, or large print are requested to contact the City's ADA Coordinator at (817) 392-8552 or e-mail ADA@FortWorthTexas.gov at least 48 hours prior to the meeting so that appropriate arrangements can be made. If the City does not receive notification at least 48 hours prior to the meeting, the City will make a reasonable attempt to provide the necessary accommodations.

DECLARACIÓN DE ACCESIBILIDAD

Cámara del Concilio de Fort Worth es accesible con silla de ruedas. Se solicita a las personas con discapacidades que planean asistir a esta reunión y que necesitan acomodaciones, ayudas auxiliares o servicios tales como intérpretes, lectores o impresiones con letra grande, que se comuniquen con el Coordinador de la Asociación Americana de Discapacitados (ADA) de la Ciudad llamando al teléfono (817) 392-8552 o por correo electrónico a ADA@FortWorthTexas.gov por lo menos 48 horas antes de la reunión, de modo que puedan hacerse los arreglos adecuados. Si la Municipalidad no recibe una notificación por lo menos 48 horas antes de la reunión, ésta hará un intento razonable para proporcionar las acomodaciones necesarias.

EXECUTIVE SESSION

A closed Executive Session may be held with respect to any posted agenda item to enable the Commission to receive advice from legal counsel, pursuant to Texas Government Code, Section 551.071.

STORMWATER MANAGEMENT PROGRAM MASTER PLAN, MARCH 2018

Consideration of a recommendation to the City Council for the adoption of the Stormwater Management Program Master Plan, March 2018 and incorporation by reference into the City's Comprehensive Plan

The purpose of this report is to provide the City Plan Commission with information regarding the process used to update the Stormwater Program master plan and the key resulting strategic direction outlined within it. This summarizes the information presented to Plan Commission on September 27, 2017 and January 24, 2018.

The update to the Stormwater Program master plan has been developed after an extensive year-long planning process, which consisted of stakeholder, public, and City staff involvement to help shape the Stormwater Program's strategic direction for the next ten years. Peer community data and prioritization tools were also used to define program direction. The Master Plan identifies the City's commitment to effective stormwater management and meeting community needs through achievement of the strategic direction identified in the plan.

The key goals of the master plan update initiative were to: consolidate information gathered and lessons learned from the first 11 years of the Stormwater Program; define and prioritize service gaps; optimize the use of resources to meet community needs; develop direction for policy decisions on key issues with significant implications on the general public; and create an implementation plan for the next 10 years.

A Stakeholder Group was established to ensure that the master plan update was adequately informed by the community. The group had significant diversity, both demographically and in terms of perspectives on stormwater issues. They were very engaged and their input helped shape the direction of the plan and process. Overall, the stakeholder group endorsed the planning process and the direction identified in the plan. The process also saw good participation and input from the public at large.

In addition to stakeholder and public feedback, the master plan update was significantly influenced by input from a group of peer review communities. This information provided deeper insight into the policies, practices, and program goals of others and was used to inform the planning process.

The master plan update was also influenced by a set of prioritization tools, which the Stormwater Program has been developing since its inception. These tools were used to inform program priorities and strategic direction.

The major outcomes of the master plan update are clearly identified strategic directions for the Program's next ten years regarding system maintenance, hazard mitigation, flood warning, and overseeing development. Strategic direction is also provided on key policy issues related to: voluntary buyouts of flood prone or high erosion risk properties, designation/ communication/regulation of local (non-FEMA) floodplains, severe erosion in privately owned creeks and channels, and the level of oversight of private development. A separate, future stakeholder engagement process will be launched to develop and vet policies in each of these areas based on the strategies identified in the master plan.

The master plan outlines an implementation strategy that consists of prioritized initiatives, ongoing stakeholder engagement to understand evolving community needs and an annual business plan to document progress on strategy implementation.

After the Commission recommends adoption of the plan, the plan will be provided to City Council recommending adoption of the plan and incorporation by reference into the City's Comprehensive Plan on March 27, 2018.

To view the current draft Stormwater Management Program Master Plan, please visit:

<http://fortworthtexas.gov/stormwatermasterplanupdate/>

Development Review Committee Recommends: Approval of a recommendation to the City Council for adoption of the Stormwater Management Program Master Plan, March 2018 and incorporation by reference into the City's Comprehensive Plan.



- 15. PP-15-072 Isaac Foster's Addition (Extension Request): Four Multi-family Lots. Council District 9.
- 16. 2018 Comprehensive Plan. All Council Districts. DRC Recommends: Approval of a recommendation to City Council for adoption of the 2018 Comprehensive Plan.
- 17. Stormwater Management Program Master Plan. All Council Districts. DRC Recommends: Approval of a recommendation to City Council for adoption of the Stormwater Management Program Master Plan, March 2018 and incorporation by reference into the City's
- 18. TA-18-001 Subdivision Ordinance Text Amendment. All Council Districts. DRC Recommends: Approval of a recommendation to City Council for a text amendment to the Subdivision Ordinance addressing process improvements related to agenda items that are con
- 19. Revisions to City Plan Commission's Rules of Procedure. All Council Districts. DRC Recommends: Approval of the revisions to the City Plan Commission's Rules of Procedure.

- e. DRC Recommends: Approval of the request to extend the final plat for one year.
- 15. [PP-15-072 Isaac Foster's Addition \(Extension Request\): Four Multi-family Lots. Council District 9.](#)
 - a. Being a replat of a portion of Lots 2-7, Block K; all of Lots 5-11, Block G; all of Lots 1-9, Block F; all of Lots 1-8 Block C; all of Lots 1-6 Block B; all of Lots 1 and 2 and a portion of Lots 3-8 Block E; all of Lots 1 and 5-8, Block D; and all of Lot 1 and a portion of Lot 2, Block A, Isaac Foster's Addition, an addition to the City of Fort Worth, Tarrant County, Texas, as recorded in Volume 106, Page 1, PRTCT. And being a replat of a portion of Lots 1 and 5, Block 159, Original Townsite of the City of Fort Worth (an unrecorded addition) along with a portion of Garvey Street closed by ordinance number 529; a portion of Johnson Street close by ordinance 2960; and all of the 10 foot alleys in Blocks F, C and B vacated by City of Fort Worth Ordinance recorded in Volume 4116, Page 865, DRTCT.
 - b. General Location: North of Pharr Street and south of Cold Springs Road between the Burlington Northern Santa Fe railroad lines.
 - c. Applicant: 701 Hampton, LLC
 - d. Applicant Requests: Approval of the request to extend the preliminary plat for one year.
 - e. DRC Recommends: Approval of the request to extend the preliminary plat for one year.
- 16. [2018 Comprehensive Plan. All Council Districts. DRC Recommends: Approval of a recommendation to City Council for adoption of the 2018 Comprehensive Plan.](#)
- 17. [Stormwater Management Program Master Plan. All Council Districts. DRC Recommends: Approval of a recommendation to City Council for adoption of the Stormwater Management Program Master Plan, March 2018 and incorporation by reference into the City's Comprehensive Plan.](#)
- 18. [TA-18-001 Subdivision Ordinance Text Amendment. All Council Districts. DRC Recommends: Approval of a recommendation to City Council for a text amendment to the Subdivision Ordinance addressing process improvements related to agenda items that are considered by the City Plan Commission.](#)
- 19. [Revisions to City Plan Commission's Rules of Procedure. All Council Districts. DRC Recommends: Approval of the revisions to the City Plan Commission's Rules of Procedure.](#)
- 6. [PP-18-003 Watercress Drive Right-of-Way, Lake Worth Leases Addition: Council District 7.](#)

ADJOURNMENT: _____

ASSISTANCE AT THE PUBLIC MEETINGS:
 Fort Worth City Hall is wheelchair accessible. Persons with disabilities who plan to attend this meeting and who may need accommodations, auxiliary aids, or services such as interpreters, readers, or large print are requested to contact the City's ADA Coordinator at (817) 392-8552 or e-mail ADA@FortWorthTexas.gov at least 48 hours prior to the meeting so that appropriate arrangements can be made. If the City does not receive notification at least 48 hours prior to the meeting, the City will make a reasonable attempt to provide the necessary accommodations.

El City Hall de la Ciudad de Fort Worth es accesible para silla de ruedas. Se solicita a las personas con discapacidades que planean asistir a esta reunion y que necesitan acomodaciones, ayudas auxiliares o servicios tales como interpretes, lectores o impresiones con letra grande, que se comuniquen con el Coordinador de la Asociacion Americana de Discapacitados (ADA) de la Ciudad llamando al telefono (817) 392-8552 o por correo electronico a ADA@FortWorthTexas.gov por lo menos 48 horas antes de la reunion, de modo que puedan hacerse los arreglos adecuados. Si la Municipalidad no recibe una notificacion por lo menos 48 horas antes de la reunion, esta hara un intento razonable para proporcionar las acomodaciones necesarias.

Executive Session
 A closed executive session may be held with respect to any posted agenda item to enable the Commission to receive advice from legal counsel, pursuant to Texas Government Code, Section 551.071.



 Map

Neighborhood

 Recommendations New

 For Sale & Free

 Events

 Real Estate

 Crime & Safety

 Lost & Found

 Documents

 General

Interests

 All Interests

Directories

This update is from a public agency. The only posts they can see are their own. [Learn more.](#)



Community Engagement Liaison Tabitha Butler, Fort Worth Communit... 

CFW: Stormwater Master Plan Public Hearing scheduled for Feb. 28

A public hearing will be held at an upcoming City of Fort Worth Plan Commission meeting, regarding the draft strategic Stormwater Management Program Master Plan report. Stormwater staff will recommend that the Plan Commission consider a recommendation to the City Council, for the adoption of the Master Plan and incorporation by reference into the City's Comprehensive Plan.

Attend the public hearing at the Plan Commission meeting:

February 28, 2018

1:30 PM

City Hall, Council Chamber

200 Texas Street

Fort Worth, Texas 76102

Review the draft report at <http://fortworthtexas.gov/stormwatermasterplanupdate/>.

26 Feb · Subscribers of Fort Worth Community Engagement Office



Thank



Reply 

14 Thanks

EXTERNAL STAKEHOLDER ENGAGEMENT

STORMWATER MANAGEMENT PROGRAM MASTER PLAN



- April 17, 2018 – Council Work Session Briefing

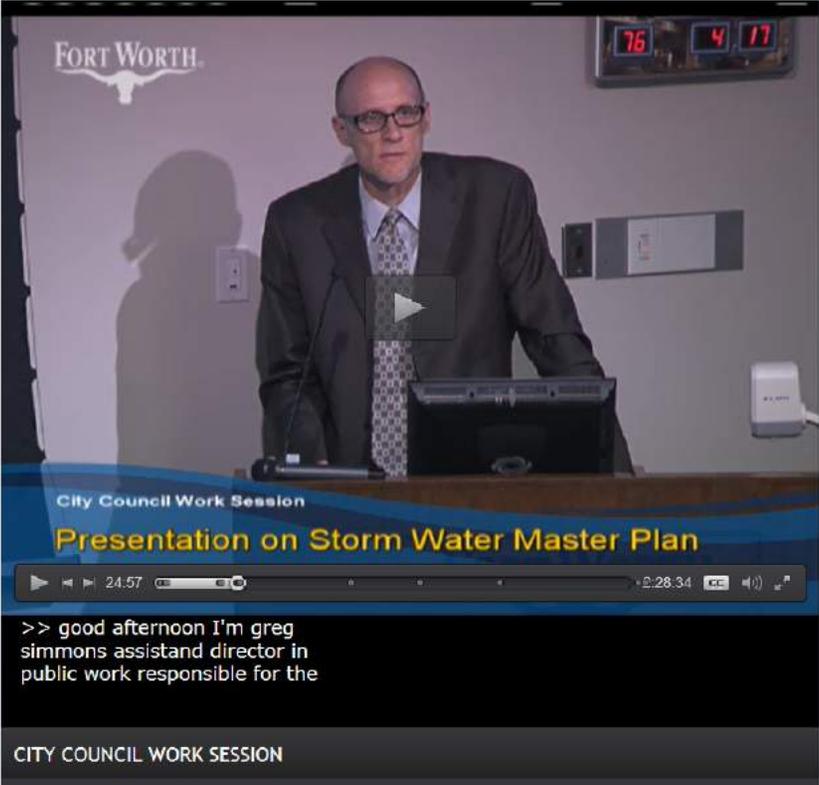
http://fortworthgov.granicus.com/MediaPlayer.php?view_id=5&clip_id=2955#

File Edit View Favorites Tools Help

Zoning Viewer Weather Viverae Google SDS Viewer Google Maps GIS License Mgr. CFW Municode Library CFW Buzzsaw

Minutes Agenda Default Document

FORT WORTH Municipal Channel



City Council Work Session

Presentation on Storm Water Master Plan

>> good afternoon I'm greg simmons assistand director in public work responsible for the

CITY COUNCIL WORK SESSION

- a. [M&C G-19157 - \(COUNCIL DISTRICTS 3 - Brian Byrd, 8- Kelly Allen Gray and 9 - Ann Zadeh\) - Conduct Public Hearing, Adopt Resolution to Terminate the Berry/University, Magnolia Village and Trinity Park Neighborhood Empowerment Zones \(COUNCIL DISTRICTS 3, 8 and 9\) \(Continued from March 20, 2018 by Council Member Zadeh\)](#)
- b. [ZC-17-205 - \(COUNCIL DISTRICT 8 - Kelly Allen Gray\) - Joyce Heredia, 2525 & 2529 Wilkinson Avenue; From: "B" Two-Family To: "PD/B" Planned Development for all uses in "B" Two-Family plus barbershop on one side only to be developed to "ER" Neighborhood Commercial Restricted standards with waivers to signage and setbacks; site plan included 0.49 acres Recommended for Denial by the Zoning Commission\) \(Continued from April 10, 2018 by Council Member Allen Gray\)](#)

4. [Presentation on Storm Water Master Plan - Greg Simmons and Jennifer Dyke, Transportation and Public Works](#)
[CFW Storm Water Master Plan Presentation](#)
5. [Truancy Update - Teresa Ewing, Municipal Court](#)
[CFW Truancy Update Presentation](#)
6. [Update on the Opioid Crisis - Deputy Chief Robert Alldredge, Police](#)
[CFW Opioid Crisis Update Presentation](#)
7. [Presentation on Proposed Repeal and Restatement of Wrecker Ordinance - Chief Joel Fitzgerald, Police](#)
[CFW Proposed Wrecker Ordinance](#)
8. [City Council Requests for Future Agenda Items and/or Reports](#)
9. [Executive Session \(CITY COUNCIL CONFERENCE ROOM, CITY HALL, ROOM 290\) - SEE ATTACHMENT A](#)
[Executive Session Attachment A](#)

http://fortworthgov.granicus.com/MediaPlayer.php?view_id=5&clip_id=2955

CITY COUNCIL WORK SESSION
TUESDAY, APRIL 17, 2018
3:00 P.M.
CITY COUNCIL CONFERENCE ROOM, CITY HALL, ROOM 290
200 TEXAS STREET, FORT WORTH, TEXAS

1. Report of the City Manager - **David Cooke, City Manager**
 - a. Changes to the City Council Agenda
 - b. Upcoming and Recent Events
 - c. Organizational Updates and Employee Recognition(s)
 - d. Informal Reports
 - [IR 10130](#): February 2018 - Sales Tax Update
 - [IR 10131](#): Monthly Development Activity Report
 - [IR 10132](#): Budget and Property Tax Calendar and Schedule of Meetings
2. Current Agenda Items - **City Council Members**
3. Responses to Items Continued from a Previous Week
 - a. [M&C G-19157](#) - (COUNCIL DISTRICTS 3 - Brian Byrd, 8- Kelly Allen Gray and 9 - Ann Zadeh) - Conduct Public Hearing, Adopt Resolution to Terminate the Berry/University, Magnolia Village and Trinity Park Neighborhood Empowerment Zones (COUNCIL DISTRICTS 3, 8 and 9) **(Continued from March 20, 2018 by Council Member Zadeh)**
 - b. [ZC-17-205](#) - (COUNCIL DISTRICT 8 - Kelly Allen Gray) - Joyce Heredia, 2525 & 2529 Wilkinson Avenue; From: "B" Two-Family To: "PD/B" Planned Development for all uses in "B" Two-Family plus barbershop on one side only to be developed to "ER" Neighborhood Commercial Restricted standards with waivers to signage and setbacks; site plan included 0.49 acres Recommended for Denial by the Zoning Commission) **(Continued from April 10, 2018 by Council Member Allen Gray)**
4. **Presentation on Storm Water Master Plan - Greg Simmons and Jennifer Dyke, Transportation and Public Works**
5. Truancy Update - **Teresa Ewing, Municipal Court**
6. Update on the Opioid Crisis - **Deputy Chief Robert Alldredge, Police**
7. Presentation on Proposed Repeal and Restatement of Wrecker Ordinance - **Chief Joel Fitzgerald, Police**
8. City Council Requests for Future Agenda Items and/or Reports

9. Executive Session (CITY COUNCIL CONFERENCE ROOM, CITY HALL, ROOM 290) -

SEE ATTACHMENT A

Attachment(s):

[Executive Session A.pdf](#)

CITY COUNCIL CONFERENCE ROOM, CITY HALL, ROOM 290, is wheelchair accessible. Persons with disabilities who plan to attend this meeting and who may need accommodations, auxiliary aids, or services such as interpreters, readers, or large print are requested to contact the City's ADA Coordinator at (817) 392-8552 or e-mail ADA@FortWorthTexas.gov at least 48 hours prior to the meeting so that appropriate arrangements can be made. If the City does not receive notification at least 48 hours prior to the meeting, the City will make a reasonable attempt to provide the necessary accommodations.

EXTERNAL STAKEHOLDER ENGAGEMENT

STORMWATER MANAGEMENT PROGRAM MASTER PLAN



- May 1, 2018 – Plan Adoption

City News Daily for May 2, 2018 - Message (HTML)

FILE MESSAGE ADOBE PDF

Ignore Delete Reply Reply All Forward Meeting IM More

SW Assorted Team Email Reply & Delete To Manager Done Create New

Rules OneNote Actions

Assign Mark Categorize Follow Translate Find Related Select Zoom

Policy Unread Tags Up Editing Zoom

Wed 5/2/2018 6:01 PM

 City of Fort Worth, Texas <CityofFortWorth@public.govdelivery.com>
City News Daily for May 2, 2018

To:  Dyke, Jennifer M

Retention Policy 90 day Retention - Entire Mailbox (90 days) Expires 7/31/2018

i Follow up. Start by Tuesday, June 05, 2018. Due by Tuesday, June 05, 2018.
Click here to download pictures. To help protect your privacy, Outlook prevented automatic download of some pictures in this message.

[Report Phish](#) [Bing Maps](#)



City News

[Master plan creates strategic direction for stormwater program](#)

The City Council has adopted the Stormwater Management Program Master Plan, which resulted from an effort to compile and understand lessons learned during the first 10 years of the program and to develop a strategic direction.

[Race and Culture Task Force presents interim report, receives more time to complete work](#)

The City Council on May 1 approved an interim report from the Task Force on Race and Culture and agreed to extend the deadline for the group. Next up: draft recommendations will be compiled and presented at community feedback

i See more about City of Fort Worth, Texas. 



Master plan creates strategic direction for stormwater program

Posted May 2, 2018

The City Council has adopted the Stormwater Management Program Master Plan, which resulted from an intensive, yearlong effort to compile and understand lessons learned during the first 10 years of the program and to develop a strategic direction that is realistic, well-prioritized and responsive to community needs.

The overarching goal of this effort was to help ensure the optimal use of program resources to advance the city's strategic goals and respond to community needs in four primary program elements:

- System maintenance.
- Flood and erosion mitigation.
- Flood and erosion warning.
- Private development review.

Stakeholder and peer engagement

A key element in developing the plan was a robust, multi-faceted stakeholder and peer engagement effort.

Stormwater staff conducted detailed discussions with partner city departments and divisions as well as with seven peer communities. These were highly beneficial in ensuring that plan development was fully informed by the needs and perspectives of other city programs, as well as by the experience of comparable municipal stormwater programs.

The heart of the engagement process was a series of meetings, open to the public, with a 17-member community stakeholder group comprised of members appointed

by the mayor and City Council as well as ad hoc appointees. The interaction leading up to and during the meetings with this group allowed staff to assess community needs and priorities based on diverse perspectives that well represented the city as a whole.

The stakeholder group ultimately expressed support for the overall program direction reflected in the plan.

Major outcomes

A strategic focus for each of the four primary program elements resulted from the assessment of the current state of the program and the input of stakeholders and peers. Major outcomes were:

System maintenance. Increased emphasis on rehabilitating deteriorating pipes.

Flood and erosion mitigation. Focus on smaller projects and seek partnerships or project phasing for larger projects.

Flood and erosion warning. Increase the amount, accessibility and reliability of real-time information alerting the community about flood and erosion hazards.

Private development review. Consider increasing the stringency of review and/or standards in flood-prone areas.

Also confirmed was the need for formal policy guidance in these areas:

- Identification and regulation of local floodplains.
- Use of voluntary property buyouts as a flood and erosion mitigation tool.
- Level of city engagement relative to severe erosion in private creeks and channels.
- Regulations specific to development in flood-prone areas and that account for the cumulative impact of development on flood risk.

The plan did not establish any policies, but identified key considerations to be used in future processes to evaluate each of these and make recommendations to the appropriate decision-makers.

The plan identified and prioritized a total of 13 strategic initiatives that will be undertaken in the coming months and years to ensure that the program is best meeting community needs. Stormwater staff are now planning the implementation of these initiatives and developing a program business plan that is driven by the outcome of the plan. As work on various initiatives evolves, there will be other

efforts to seek community input so that the efforts of the stormwater program remain informed by and responsive to community priorities.

Get articles like this in your inbox weekly. Subscribe to City News

©2018 City of Fort Worth, Texas
All rights reserved
200 Texas St.
Fort Worth, TX 76102



EXTERNAL STAKEHOLDER ENGAGEMENT

STORMWATER MANAGEMENT PROGRAM MASTER PLAN



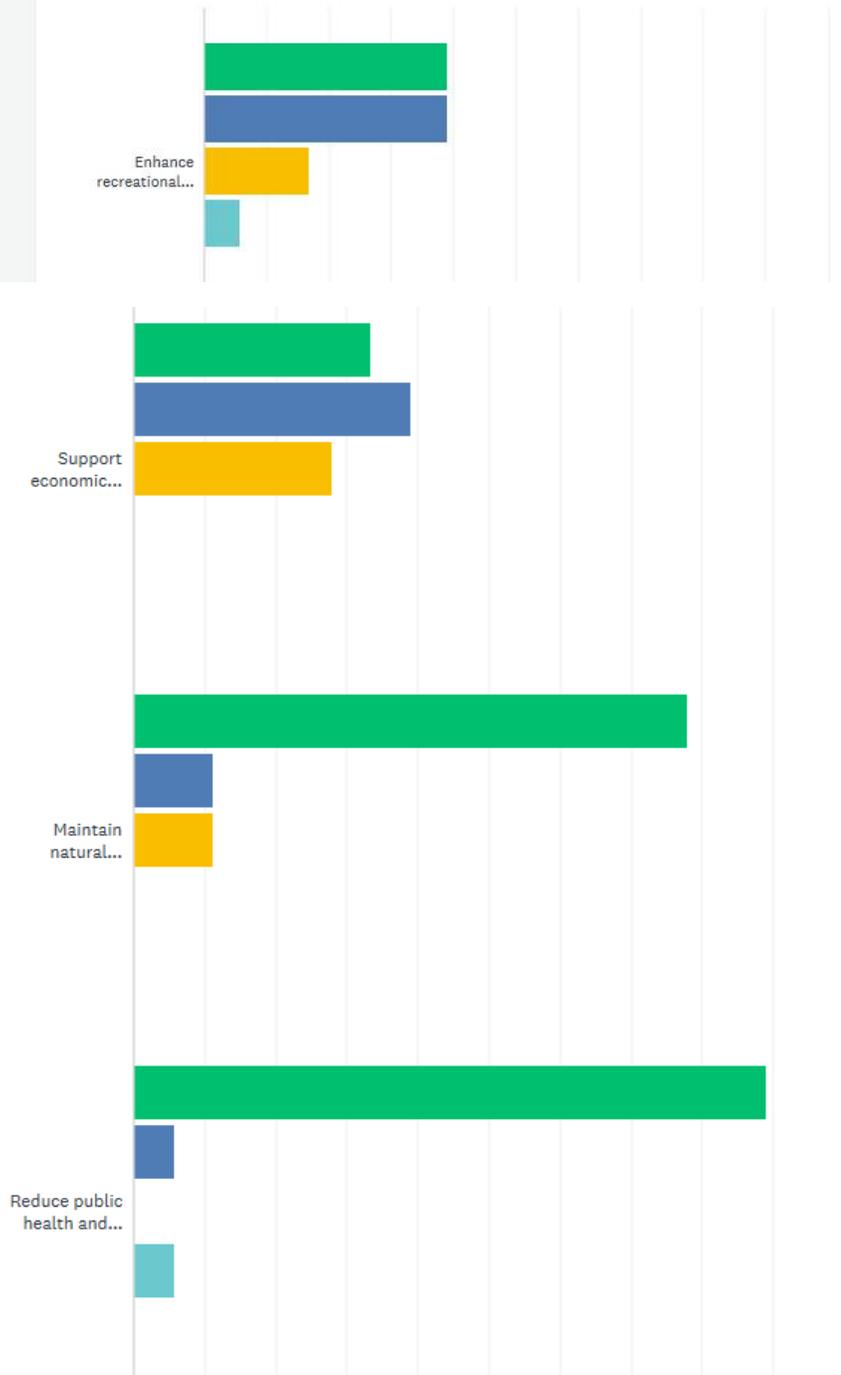
- Water Quality Survey Questions and Responses

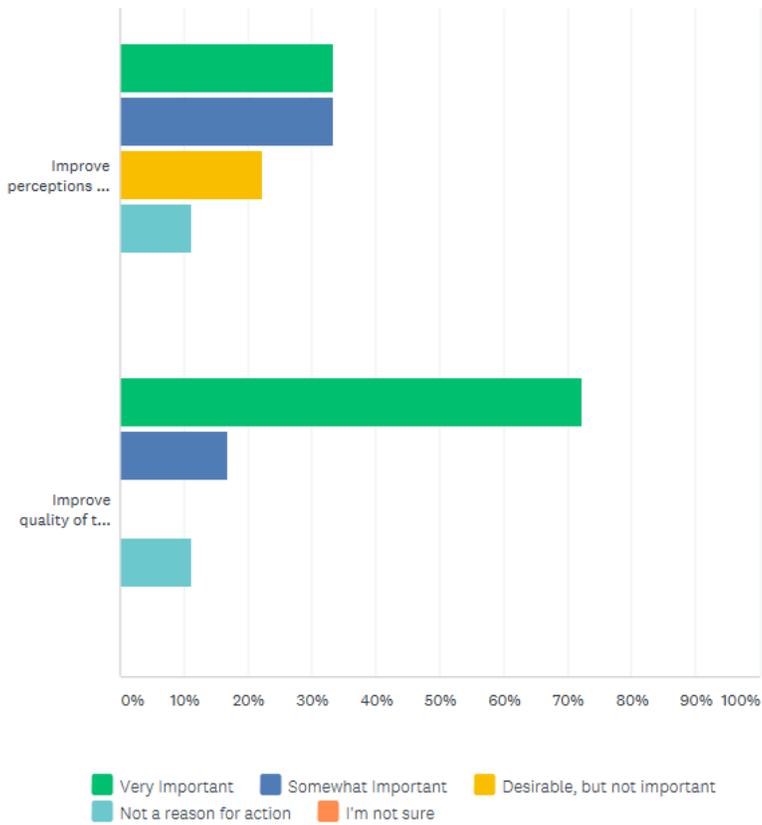
Fort Worth Stormwater Management Program - Water Quality

Q1

The list below shows some reasons the Fort Worth community might choose to address the water quality in its creeks, rivers and streams. How important is each of these reasons to you?

Answered: 18 Skipped: 0



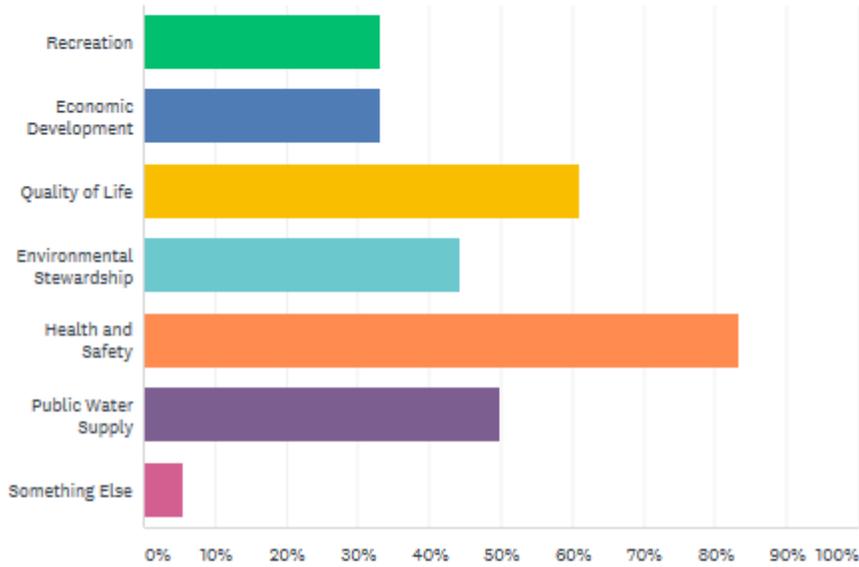


	VERY IMPORTANT	SOMEWHAT IMPORTANT	DESIRABLE, BUT NOT IMPORTANT	NOT A REASON FOR ACTION	I'M NOT SURE	TOTAL
Enhance recreational opportunities	38.89% 7	38.89% 7	16.67% 3	5.56% 1	0.00% 0	18
Support economic development	33.33% 6	38.89% 7	27.78% 5	0.00% 0	0.00% 0	18
Maintain natural environment	77.78% 14	11.11% 2	11.11% 2	0.00% 0	0.00% 0	18
Reduce public health and safety risks	88.89% 16	5.56% 1	0.00% 0	5.56% 1	0.00% 0	18
Improve perceptions of nearby neighborhoods' desirability	33.33% 6	33.33% 6	22.22% 4	11.11% 2	0.00% 0	18
Improve quality of the public water supply	72.22% 13	16.67% 3	0.00% 0	11.11% 2	0.00% 0	18

Q2

What are the most important factors in setting priorities for water quality? Please select your top three below.

Answered: 18 Skipped: 0

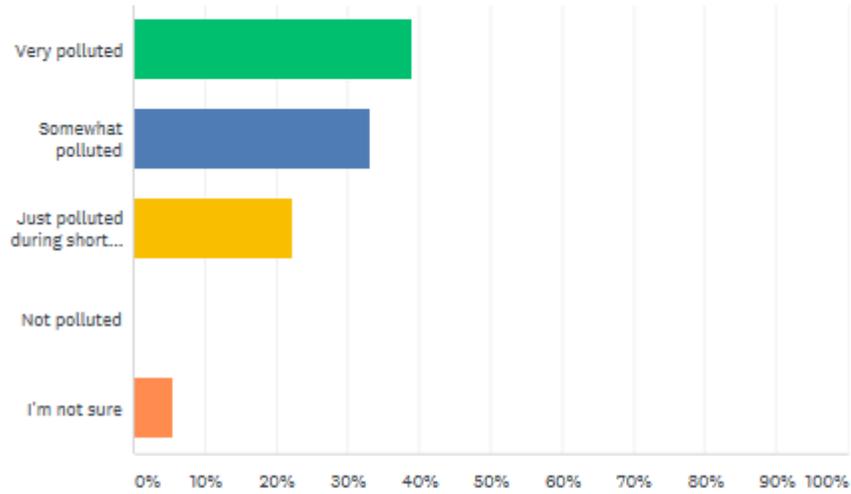


ANSWER CHOICES	RESPONSES
Recreation	33.33% 6
Economic Development	33.33% 6
Quality of Life	61.11% 11
Environmental Stewardship	44.44% 8
Health and Safety	83.33% 15
Public Water Supply	50.00% 9
Something Else	5.56% 1
Total Respondents: 18	

Q3

How polluted do you perceive the Trinity River to be?

Answered: 18 Skipped: 0

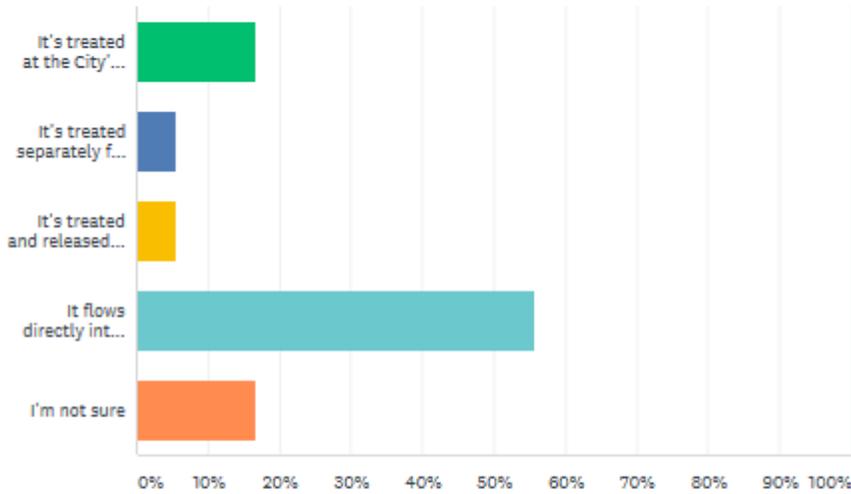


ANSWER CHOICES	RESPONSES	
Very polluted	38.89%	7
Somewhat polluted	33.33%	6
Just polluted during short incidents	22.22%	4
Not polluted	0.00%	0
I'm not sure	5.56%	1
TOTAL		18

Q4

What do you think most Fort Worth residents believe about stormwater treatment?

Answered: 18 Skipped: 0



ANSWER CHOICES	RESPONSES	
It's treated at the City's sewage treatment plant and reused	16.67%	3
It's treated separately from sewage and reused	5.56%	1
It's treated and released to local streams and ponds	5.56%	1
It flows directly into local streams and ponds without treatment	55.56%	10
I'm not sure	16.67%	3
TOTAL		18

Q5

Do you have other comments about water quality in Fort Worth?

Answered: 11 Skipped: 7

Keeping rivers, streams, and drinking water clean has historically been a task requiring active management by local government. Water-borne disease required cities to develop sanitary sewer and water treatment facilities, but pollution remains a blight on our City. Whether it's Marine Creek in the Stockyards Area or the many areas along the Trinity Trails, or in various locations where stormwater empties out, pollution visibly observable in the form of trash and chemical pollution suspected of entering the waterways reduces the quality of life in our city and our neighborhoods. Stormwater flushes all kinds of noxious materials into our water. Our City should proactive work with other local government agencies upstream and downstream to reduce pollution rather than simply trying to maintain the status quo. Clean air and clean water are essential to the physical and mental health of our residents.

11/1/2017 1:48 PM [View respondent's answers](#)

Water quality issues need to worked in conjunction with other groups and organizations - a regional task force in order to have any hopes of making a lasting impact. TRWD, Upper Trinity, Sycamore Creek watershed, parks and recreation depts and planning and development all have to become stakeholders

9/27/2017 6:56 PM [View respondent's answers](#)

WE must to take care and maintain all of the existing stormwater assets. That means budgeting more funds for rehabilitation of existing stormwater systems.

8/24/2017 11:46 AM [View respondent's answers](#)

I believe that few Fort Worth citizens have any meaningful awareness about the importance of stormwater. Over this weekend, I was walking along the Mission Trail in San Antonio. At one spot where it was possible to reach the river, a sign stated in rather vigorous terms that wading and swimming were not permitted. The reason stated was not the danger of high water, but the flow of polluted stormwater from the city into the San Antonio River and the bodies of water flowing into it. I have never seen such a sign on the Trinity so clearly explaining the relationship between stormwater runoff (urban, suburban, or agricultural) and I believe that the vast majority of citizens and leaders remain blissfully ignorant of the importance of stormwater management. I view pollution -- not just in urban neighborhoods but in such areas as the dead zone in the Gulf of Mexico -- to be a major threat to the public welfare.

8/23/2017 5:07 PM [View respondent's answers](#)

It might be helpful to find or develop a methodology for calculating return on public investment related to the multiple benefits of stormwater management.

8/23/2017 3:24 PM [View respondent's answers](#)

Creating awareness among residents of the resource value of water bodies will greatly aid water quality in Fort Worth.

8/23/2017 2:12 PM [View respondent's answers](#)

Recently, in the River Oaks area there were complaints that the faucet water of some citizens was brown, and it was reported that it was safe to consume. Would it be considered safe to drink brown faucet water?

8/22/2017 3:36 PM [View respondent's answers](#)

Let's not over react.

8/21/2017 10:26 AM [View respondent's answers](#)

<https://www.surveymonkey.com/r/Q52XVW3>

Many water quality issues can be addressed by public education such as the private use of fertilizers, pesticides, etc. See Texas Watershed Steward program by Texas Agrilife Extension. <http://tw.s.tamu.edu/about/> SWPPPs - BMP maintenance and inspection as required by new development are also important tools in maintaining water quality. Mitigation measures such as water quality ponds as required in Austin or stream buffers for the sake of water quality are unnecessary for our region.

8/21/2017 10:15 AM [View respondent's answers](#)

in question 2, my "Something Else" is Regulatory Requirements

8/21/2017 9:06 AM [View respondent's answers](#)

Safety from flash floods and erosion control are most important to me.

8/21/2017 9:02 AM [View respondent's answers](#)

EXTERNAL STAKEHOLDER ENGAGEMENT

STORMWATER MANAGEMENT PROGRAM MASTER PLAN



- Additional Comments

Stormwater Master Plan Update
Summary of Additional Comments

<u>Date</u>	<u>Name</u>	<u>Topic</u>	<u>Comment</u>
5/15/2017	Bill Schur	Budget	<p>1) As I understand it, paying off current bonded indebtedness is an annual drag on the Stormwater Management budget. What are the rates of those bonds and is it theoretically possible to pay them off before their due date.</p> <p>2) In my past corporate life, we used to refer to baseline spending and discretionary spending. That is, there were certain things that each department of our company had to do and a baseline budget was set for those activities. Each part of the company would submit its estimates of baseline needs and these would be reviewed by Finance and other organizations which would then advise each department that its baseline budget would be \$X. Finance would then estimate anticipate revenues and other financing methods and determine where discretionary spending would be in order. In the City, numerous departments are surely competing for funds in some manner, and surely the City as a whole has choices to make as to whether to invest, say, in stormwater management or other projects. So my question is, by what process does Stormwater Management attempt to get the City to invest in its projects beyond PAYGO?</p> <p>3) Setting aside the possibility of getting discretionary funds, how much of the Stormwater Management budget is already accounted for in debt service, required operations, and identified "must do" projects?</p>
10/12/2017	Bill Schur	Report	<p>Graphics for Stormwater Program Operation. Question: Does the Program Development Section itself actually address the "Warning" Operations as shown or is this assigned to one of the other three operations groups shown?</p>
10/11/2017	Howard Ratcliff	Report	<p>Stormwater Management Program Elements Lead in sentence. In the city of Fort Worth the city's stormwater management activities are organized as operating division under the Transportation and Public Works Dept.</p>
10/11/2017	Howard Ratcliff	Report	<p>How does the Stormwater Management Program Operate? 1. Program Development 2. Capital Project Delivery 3. Field Operations 4. Development Services</p>
10/11/2017	Howard Ratcliff	Report	<p>Stormwater Management Program Operation Improve this diagram. Show organizational connection dashlines to T/PW. Large text fonts. Use numbers are each of the 4 areas of program operations. Depict SWMP as the border around these key areas to create the boundary of this top-level management plan.</p>
10/11/2017	Howard Ratcliff	Report	<p>What About Water Quality? Improving water quality.</p>
10/11/2017	Howard Ratcliff	Report	<p>What About Water Quality? Area of opportunity and growth over the next 10-20 years. Lots more needs to be done and run-off is a big source. Designate this as stretch goal. Improving water quality initiates and incentive program by having developers adopt certain standards - especially those that are feeding directly into the Trinity. Recognition program to recognized the ones that do an excellent job.</p>
10/12/2017	Bill Schur	Report	<p>Review of Relevant City Plans and Initiatives Should the Review of Relevant City Plans include the 2017 plan rather than the 2016 plan? Any others that might need updating?</p>
10/12/2017	Bill Schur	Report	<p>Peer Community Review Topics In the blue circle there is a typo: "Nuissance" should be "Nuisance".</p>
10/12/2017	Bill Schur	Report	<p>Historical Context As a reader, I did not connect the dots between the fire and the building of Lake Worth. Was the problem with the fire that there was not enough water available to support the fire department and volunteer firefighters?</p>
10/12/2017	Bill Schur	Report	<p>Historical Context 1975 - "With no subsequent enforcement, most of these swales were almost immediately filled in by homebuilders or homeowners." This is still happening and there are no remedies other than private suits because there is no city ordinance prohibiting the filling in of swales. This is a problem in many inner city neighborhoods. There is no other mention of this in the plan.</p>

10/12/2017	Bill Schur	Report	Historical Context Pre-2006 - If only 5% of the City was the subject of the "limited studies," which ones were these? To be clear, I am wondering whether the studies were conducted primarily for affluent and white areas or whether the selection of study sites affected by wealth and race? I am not saying this should be addressed but if there are areas of town which, due to historical factors were ignored and not given adequate infrastructure, remedial steps should be taken.
10/12/2017	Bill Schur	Report	Initial Stormwater Management Program Objectives and Funding Desired section - Is the goal to have 100% of the City covered?
10/12/2017	Bill Schur	Report	Stormwater Management Program Activities/Accomplishments Since 2006 As I read this, I was wondering what % of total Stormwater Budget was spent on debt service and also what % of ratepayer charges (stormwater fees) was spent on debt service. As a ratepayer, I am interested in the comparison between debt service and annual stormwater fees collected - a figure which is different from and greater than the %age of total Stormwater Department expenditures, assuming that the Stormwater Department collects some revenues from other sources. I will address this in later comments.
10/12/2017	Bill Schur	Report	Channel Maintenance There is a statement what is maintained. My question is whether there are channels that are not maintained and, if so, whether they do or don't need maintenance. Dam inspections - How many; which ones; how often? What dams are inspected? Private as well as public? Water quality devices - 17 devices now in place; any more needed? Flood warning system - 53 gauges and flashers since 2006; what about signs without flashers such as the one in my neighborhood on Rockwood Park Dr. as you enter from White Settlement Road. Does TPW deal with those signs?
10/12/2017	Bill Schur	Report	Public Communications Neighborhood Email Blasts - Is this done through the Community Engagement Office?
10/12/2017	Bill Schur	Report	Financial A budget includes both revenues and expenditure. There is no pie chart reflecting revenues and the percentages attributable to various revenue sources although there is a discussion of bond money and partnerships in the plan. Some of these sources are, of course, unpredictable, but is there a projection? It is probably on this page that there should be a statistic showing the ratio between debt service expenditures and stormwater fee collections.
10/11/2017	Howard Ratcliff	Report	Funding Gap Substitute the words (moderately or reasonably). Do some risk analysis and come up with probability confidence level eg 80% probability.
10/12/2017	Bill Schur	Report	Funding Gap The 8.4 million is allocated from the Stormwater Departments annual budget, not the City's. I would change the statement "annual budget" to "annual Stormwater Department budget." Yes, it is probably self-evident and not necessary but I believe it will make things clearer to some readers. Actually, if there is a funding gap, how does the total Stormwater Budget compare to the total City Budget? Assessing Relative Priorities - This plan is limited to an assessment of the Stormwater Department's priorities given its present funding and does not address the relative priority of Stormwater priorities to other City priorities. I know that is a sensitive political subject. I would say "This plan does not address Stormwater Priorities vs. other City Priorities."
10/11/2017	Howard Ratcliff	Report	Balancing Short Term and Long Term Focus Consider goal alignment of a series of short term goals and incentives that can reap recurring long term benefits. Encouraging the use of permeable parking surfaces in certain neighborhoods within a local flood plan rather than concrete and asphalt surfacing, use of retaining ponds/temporary catchment systems and designated Stormwater Protective native areas are all things that have low investment and recurring benefits to reduce the amount of runoff and therefore lessens the drainage pipe infrastructure needed as development increases and improving water quality.
10/11/2017	Howard Ratcliff	Report	Assessing Relative Priorities Priority on human life risk. Ask city risk and insurance to assess legal exposure of city.
10/19/2017	Gary Havener	Report	Voluntary Buyout The City has been approached by property owners in some flood prone <u>and erosion</u> areas requesting a voluntary purchase. The City needs a defined policy <u>containing a cost/benefit analysis</u> to determine the conditions under which voluntary buyouts should be a flood/erosion mitigation tool.
10/11/2017	Howard Ratcliff	Report	Level of Oversight for Private Development Add developer incentives to encourage adaptation of key ideas to reduce stormwater run off and improve water quality. Let the developers do your work and it will have a multiplier effect. Few needs on pipes to carry off stormwater from areas already at high risk for local flooding.

10/12/2017	Bill Schur	Report	Level of Oversight for Private Development Bullet one - "The cumulative impacts of development, especially infill development, could aggravate and often have in the past significantly aggravated drainage problems even though individual projects by themselves may have no apparent impact."
10/19/2017	Gary Havener	Report	Level of Oversight for Private Development While this level of oversight <u>of new developments</u> is believed to be sufficient for most areas of the City, areas of known flood hazards <u>or erosion</u> present the following challenges: <u>Prior to 1998 no oversight existed and therefore provided no protection in known flooding or erosion areas. Following that the</u> general level of regulation/oversight may not be have been sufficient to provide protection in known flooding <u>and erosion</u> areas
10/11/2017	Howard Ratcliff	Report	Texas Water Development Board Take advantage of this CWSRF or make it available to developers in Fort Worth to fund projects that improve water quality and improve stormwater protection?
10/11/2017	Howard Ratcliff	Report	Public-Public Partnerships Focus on matching grants as well. A grant writing and management software package app could be used to accelerate the process and track the grants and help report on status to the grant provider - typically annual reporting required.
10/11/2017	Howard Ratcliff	Report	Rate Structure Refinement Yearly review and assessment recommendations to City Manager.
10/11/2017	Howard Ratcliff	Report	Stormwater Revenue Bonds Recommended consider increase from 30% to 50% to fund more projects sooner rather than the 2033 date. That date is unrealistic given the need to currently fund projects.
10/12/2017	Bill Schur	Report	Rate Structure Refinement Pay-go based on stormwater fees may not be sustainable or desirable. The issue of rate structure is not simply one of increasing or adjusting who pays stormwater fees. It also potentially includes additional contributions from the City's general revenues.
10/12/2017	Bill Schur	Report	Prioritization Citywide Erosion Potential includes not only identification of potential erosion locations but identification of those that threaten either public infrastructure and downstream property owners.
10/11/2017	Howard Ratcliff	Report	Potential Implications of New Policies And right of way signage as a stormwater designated area.
10/19/2017	Gary Havener	Report	Program Element Strategies - Maintain Based on information gained through limited <u>closed-circuit-closed-circuit</u> television (CCTV) inspection of parts of the storm drain pipe system, though, Stormwater staff have concluded that a significant increase in pipe rehabilitation is needed. Potential Implications of New Policies <u>Voluntary</u> Buyout <u>or Dedication</u> Policy – <u>Voluntary Property ownership obtained through</u> buyouts or dedications will result in additional maintenance responsibilities for the <u>purchased those</u> properties. Maintenance will typically focus on mowing.
10/11/2017	Howard Ratcliff	Report	Potential Policy Implications Include signage of stormwater protected area.
10/11/2017	Howard Ratcliff	Report	Oversee Development Consider adding new goal to improve water quality.
10/11/2017	Howard Ratcliff	Report	Potential Policy Implications Urban surface runoff through nature-based solutions/demonstration site for developer to use/especially for areas already experiencing flooding risk. City incentives per urban lot.
10/11/2017	Howard Ratcliff	Report	Local Floodplains Challenge #1
10/11/2017	Howard Ratcliff	Report	Local Floodplains Consider adding neighborhood public signage in those boundary areas designate as LOCAL FLOOD PLAIN. See SWMP. Signs would be managed by Stormwater & Public Works.
10/11/2017	Howard Ratcliff	Report	Initiatives: IN LOCAL FLOOD PLAIN AREAS, DEVELOP AGGRESSIVE AND PROGRESSIVE POLICIES THAT REDUCE RUNOFF/MITIGATE FLOOD RISKS AS INCREMENTAL DEVELOPMENT CONTINUES - urban surface runoff through nature-based solutions/demonstration site for developers to use/especially for areas already experiencing flooding risk. City incentives per urban lot.

10/12/2017	Bill Schur	Report	Potential Policy Implications Item 2 Local Floodplains - At this point, I was thinking that somewhere in the plan there needs to be a statement that additional local floodplains will be identified as flooding incidents occur outside presently mapped local floodplains.
10/19/2017	Gary Havener	Report	Initiatives Communicate existing local floodplain information externally and internally. <u>Specifically, this should be made available to property purchasers at time of purchase in some manner similar to the identification of FEMA flood areas required on ALTA surveys.</u>
10/11/2017	Howard Ratcliff	Report	Private Property Channel Erosion Policy Challenge #2
10/12/2017	Bill Schur	Report	Private Property Erosion Issues Maybe items 2 and 3 should be a single item. Mitigation prioritization is based in part on the public benefits identified in 3 as well as threats to private property owners currently affected and who will be affected in the future if action is not taken.
10/11/2017	Howard Ratcliff	Report	Voluntary Buyout Program Challenge #3
10/11/2017	Howard Ratcliff	Report	Future Property Uses In concert with Parks and Recreation and Neighborhoods and residents.
10/11/2017	Howard Ratcliff	Report	Level of Oversight for Private Development Challenge #4
10/11/2017	Howard Ratcliff	Report	Strategic Direction: And improve water quality
10/11/2017	Howard Ratcliff	Report	Initiatives: To reduce water run-off, reduce flooding risks and improve water quality.
10/19/2017	Gary Havener	Report	Policy Development Considerations Buyout Options – Develop conditions under which a buyout would be considered in lieu of structural <u>mitigation.</u>
10/19/2017	Gary Havener	Report	Voluntary Buyout Program - Initiatives <u>4. Require cost/benefit analysis</u> Level of Oversight for Private Development Strategic Direction: Investigate and refine policies that <u>prevent mitigate</u> the adverse impacts of flooding as a result of development in flood prone areas, incentivize development to help reduce flood risk, and properly account for the cumulative impacts of development.

Arlington Heights Neighborhood Association
POSITION STATEMENT
January 10, 2017

After much deliberation and thorough research on how other cities are dealing with their storm water drainage problems, the Executive Board of Arlington Heights Neighborhood Association joins many of its members in opposing the proposal by the City of Fort Worth to buy and tear down houses in our neighborhood as a flood solution, even on a voluntary basis.

Our neighborhood association is committed to helping our neighbors on Western and Carleton Avenues who experience flooding in their yards, garages, and some even inside their homes. However, we do not believe tear downs are the best solution at this point. Tearing down flood-prone houses is the most destructive option and not even a guaranteed 100% solution, according to city staff. More importantly, tear downs do nothing to address the root of the problem which is inadequately-sized water pipes and poorly regulated upstream and downstream development.

No homes on Western and Carleton appear to be in disrepair, nor have they been condemned by the City. We believe there are other affordable options to help these neighbors. Tear downs should be used only as a last resort and only after all other means have been exhausted.

FEMA funding requires bought out properties be cleared of homes, never be developed again, in perpetuity. They will forever be empty lots in the middle of our neighborhood. Many residents are afraid of what this will do to their property value, and if this would invite crime. Therefore, we support flood-proofing opportunities that are less drastic, such as elevating the existing flood-prone homes and their accessory structures and utilities. FEMA provides funding for these measures, as well as rebates for flood proofing homes with flood insurance.

Our neighborhood organization is mandated to look at the big picture and support what we believe is best for the entire community, for the greater good. Monies used for buyouts and tear downs on Western and Carleton do nothing to address the flooding that occurs in the two other watersheds in our neighborhood.

Owning a flood prone home doesn't mean you won't be able to sell that property. Recent home sales show there are buyers willing to purchase properties in Arlington Heights that have flood histories. Many neighbors have taken private measures within their own individual properties to successfully mitigate their drainage problems.

How can the City suggest tearing down one neighborhood, but allow the upstream and downstream neighborhoods to continue contributing to the drainage problem? If the City is considering destroying homes in our neighborhood, they must also concurrently take measures to more rigorously regulate unsustainable development upstream and downstream, especially the unabated proliferation of impervious surfaces.

We believe it is past time for the City of Fort Worth to develop a strategy for financing the long term 100% fix of replacing the undersized pipes in our watersheds. The Arlington Heights pipes are already more than 90 years old and will inevitably require replacement. If not now, when? If the City can't afford to pay for it, then alternative funding strategies should be developed and implemented immediately. We can't afford to keep kicking this problem down the road.

In the interim, we petition the City to initiate less destructive efforts to address the problem, such as rebates, incentives, and assistance for flood proofing homes, pass ordinances to address the addition of impervious surfaces to our watersheds, creating medians and public rights of way that drain, and so on, as many other American cities have already implemented with great success.



Brenda Helmer, President
Arlington Heights Neighborhood Association

EXTERNAL STAKEHOLDER ENGAGEMENT

STORMWATER MANAGEMENT PROGRAM MASTER PLAN



- Meeting Advertisements



CFW: Make plans to attend the Stormwater Master Plan Stakeholder Meeting - this Thursday, Jan. 26th @ 6 pm!



Community Engagement Manager Catherine...

Fort Worth Community Engagement Office

The first Stormwater Master Plan stakeholder group meeting will be held this week and is open to the public:

Thursday, January 26

6:00 – 8:00 pm

Hazel Harvey Peace Center, Room 201

818 Missouri Ave., Fort Worth

Much of our first meeting will be spent bringing everyone up to speed on what the Stormwater Utility does and what we have been working on since we were created in 2006. Based on where we have been and with current needs in mind, we will then be asking for your feedback about our future.

Posted 1d ago to all areas in Fort Worth
Community Engagement Office

★ THANK ↩ REPLY

17 THANKS



Home



Inbox



Notifications



Neighbors



More

Flood Warning System for City of Fort Worth Public Meeting 3/23/2017

Excerpt of Stormwater Management Program
Master Plan Slides



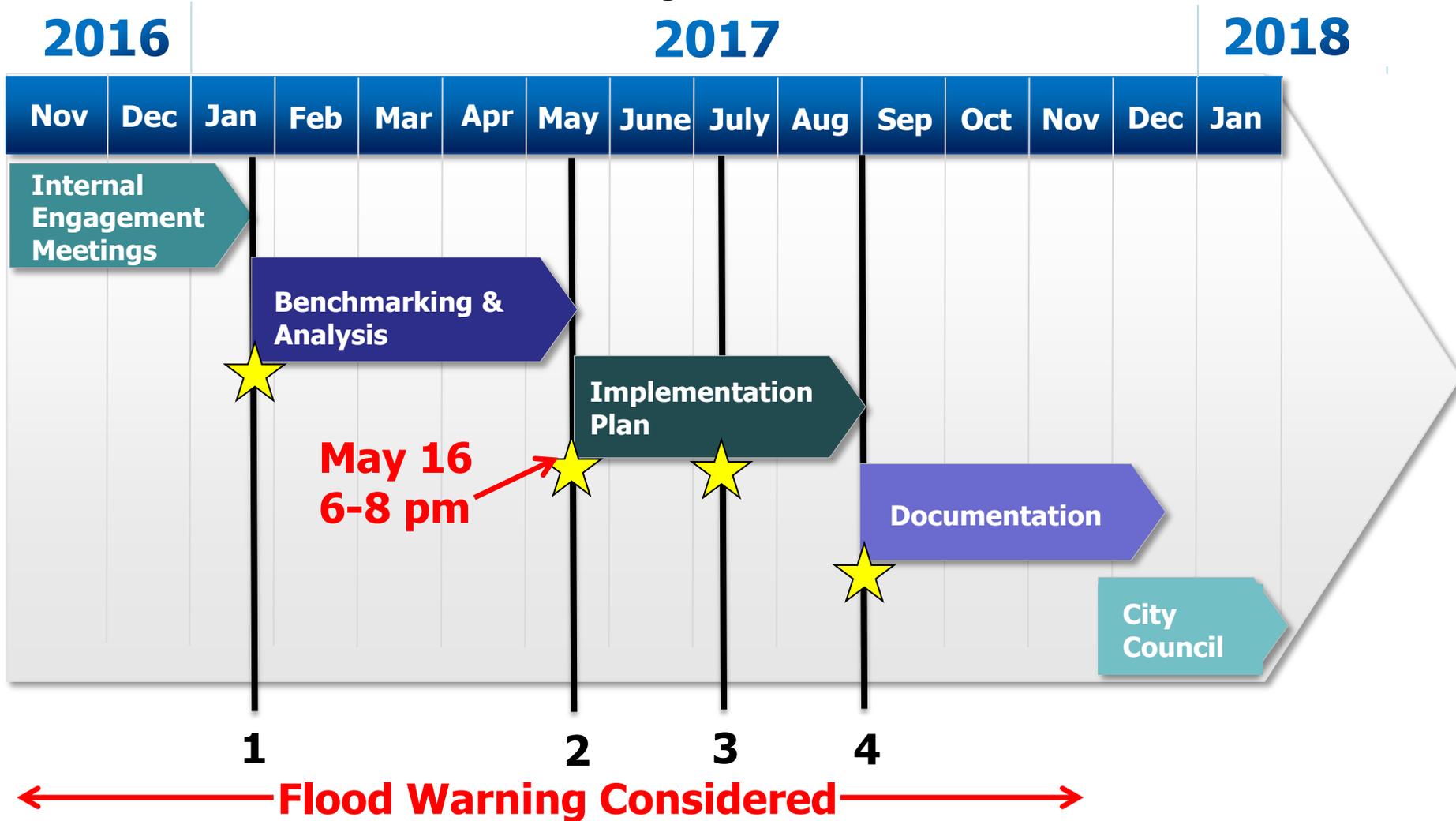
Ranjan S. Muttiah
Senior Professional Engineer
Stormwater Management
Transportation & Public Works
3/23/2017

Stormwater Master Plan Update Goals

- Assess progress and lessons learned
- Evaluate opportunities and efficiencies
- Engage and align with stakeholders
- Refine strategies, policies and priorities
- Determine future resource allocations
- Develop implementation plan
- Stakeholder endorsement
- Council adopted plan

<http://fortworthtexas.gov/stormwaterMasterPlanUpdate/>

Mater Plan Update Schedule



Approximate Stakeholder Engagement Meetings ★
Stakeholder meetings are open to the public

City to update stormwater master plan

Posted May 2, 2017



Archived Content

Information and links provided may no longer be accurate.

Updated Aug. 17, 2017: The [Peer Community Results](#) from the Stormwater Management Program Master Plan meeting on Aug. 14, 2017 are now available.

The city is conducting a meeting with the Stormwater Management Program stakeholders group to gather feedback for updating the stormwater strategic master plan. The meeting is open to all Fort Worth residents, and it is scheduled for **6 p.m. May 16** at the Hazel Harvey Peace Center for Neighborhoods, 818 Missouri Ave., in Room 201.

The update to the Stormwater Management Program Master Plan will assess the progress and lessons learned from the first 10 years of the city's stormwater program.

Opportunities for efficiencies and improvements will be objectively evaluated to ensure the city is in line with representative communities. Strategies, priorities and policies will be refined to optimize the use of resources to best meet the stormwater-related needs of the community over the next 10 years.

Make plans to attend and let your voice be heard.

To learn more, contact Senior Planner [Jennifer Dyke](#) at 817-392-2714.

Get articles like this in your inbox weekly. [Subscribe to City News](#)

City News

- [Become a lifeguard this summer](#)
- [Trail connections in Riverside, Gateway parks opening soon](#)
- [Construction coming to northside neighborhoods](#)
- [Volunteers needed for Jan. 25 homeless count](#)
- [How to dispose of live Christmas trees](#)
- [More News »](#)

Calendar

Dallas Fort Worth International Airport Board of Directors: 8:30 a.m. Jan. 4, 2018; Dallas Fort Worth International Airport Headquarters Building, 2400 Aviation Drive.

[View the agenda »](#) 

Library Advisory Board: 6:30 p.m. Jan. 4, 2018; eSkills Library & Job Center, 2800 Stark Street.

[View the agenda »](#) 

Fort Worth Professional Fire Fighters Association Collective Bargaining Negotiations: 9 a.m. Jan. 5, 2018; IAFF Local 440 Office, 3855 Tulsa Way.

[View the agenda »](#) 

West Meadowbrook Water & Sewer Line Replacement Project Meeting: 6:30 p.m. Jan. 8, 2018; Sycamore Community Center, 2525 East Rosedale Street.

[View the full city calendar.](#)

Bike to Work Day



Leave the car at home and join Mayor Price on a bike ride to work.

[Learn more](#)

Coming Up

May 10, 2017

6:15 p.m.

Community Development Council

City Council Conference Room 290, Second Floor, City Hall, 200 Texas St.

May 16, 2017

6 p.m.

Stormwater Master Plan Meeting

Hazel Harvey Peace Center For Neighborhoods, 818 Missouri Ave., Room 201

LAKE WORTH REGIONAL COORDINATION COMMITTEE

Lake Worth Multi-Purpose Center, 7005 Charbonneau Road, Lake Worth, TX
Thursday, June 22, 2017 2:00-4:00 p.m.

AGENDA

1. Welcome
Councilmember Dennis Shingleton, Chair
2. Sustainable Stormwater Management
(20 minutes)
Dr. Fouad Jaber
Texas A&M AgriLife Extension
3. Stormwater Management Program
Master Plan Update
(15 minutes)
Jennifer Dyke
Fort Worth Transportation and Public Works,
Stormwater Division
4. Dam Maintenance and Private Dredging
(15 minutes)
Juan Reyes, Stacy Walters, and Chris Harder
Fort Worth Water Department
5. Cahoba Drive Easement
(10 minutes)
Lester England
Fort Worth Property Management Department
6. Lake Worth Trail Project
(15 minutes)
Naoto Kumazawa
Fort Worth Park and Recreation Dept
7. Cities/Counties/Neighborhoods Updates
(15 minutes)
City/County Staffs & Neighborhood Leaders
8. Public Comments
(5 minutes)
All

Lake Worth Regional Coordination Committee

The Lake Worth Regional Coordination Committee (LWRCC) provides advice as requested to the City Council and other decision-making bodies regarding growth and development in the Lake Worth watershed. The committee includes representatives from the City of Fort Worth, surrounding jurisdictions, watershed neighborhood leaders, major property owners and nonprofit stakeholders. The committee meets quarterly or on an ad hoc basis.

Lake Worth Vision Plan

Learn more about Lake Worth

Membership

Local Government

- Dennis Shingleton, Council Member, City of Fort Worth, Chairman
- Stephen Barrett, City Plan Commissioner, City of Fort Worth
- Brett McGuire, City Manager, City of Lake Worth
- Norman Craven, Town Administrator, Town of Lakeside
- J.D. Johnson, Commissioner, Tarrant County
- George Conley, Commissioner, Parker County

Lakeshore Neighborhood Leaders

- Joe Waller, President, Lake Worth Alliance
- Patricia Hyer President, East Lake Worth Neighborhood Association
- Marianne Armstrong and Mark McCauley, Co-Chairs, Neighborhood Association on South Lake Worth

Agendas & Updates

- [Agenda: June 22, 2017](#) 
- [Agenda: March 23, 2017](#) 
- [Agenda: June 9, 2016](#) 
- [Agenda: Dec. 17, 2015](#) 
- [Agenda: March 19, 2015](#) 
- [Agenda: Sept. 18, 2014](#) 
- [Agenda: June 6, 2014](#) 
- [Agenda: Dec. 18, 2014](#) 
- [Agenda: April 24, 2014](#)

Presentations

- [Lake Worth Dam Maintenance \(June 22, 2017\)](#) 
- [Lake Worth Trail Project Update \(June 22, 2017\)](#) 
- [Stormwater Green Infrastructure: Evaluation, Performing and Modeling \(June 22, 2017\)](#) 
- [Stormwater Management Program Master Plan Update \(June 22, 2017\)](#) 
- [Lakeside Area Annexation \(March 2017\)](#) 
- [Lake Worth Land Purchase/Lease Options \(March 2017\)](#) 

Lake Worth Regional Coordination Committee

The Lake Worth Regional Coordination Committee (LWRCC) provides advice as requested to the City Council and other decision-making bodies regarding growth and development in the Lake Worth watershed. The committee includes representatives from the City of Fort Worth, surrounding jurisdictions, watershed neighborhood leaders, major property owners and nonprofit stakeholders. The committee meets quarterly or on an ad hoc basis.

Lake Worth Vision Plan

Learn more about Lake Worth

Membership

Local Government

- Dennis Shingleton, Council Member, City of Fort Worth, Chairman
- Stephen Barrett, City Plan Commissioner, City of Fort Worth
- Brett McGuire, City Manager, City of Lake Worth
- Norman Craven, Town Administrator, Town of Lakeside
- J.D. Johnson, Commissioner, Tarrant County
- George Conley, Commissioner, Parker County

Lakeshore Neighborhood Leaders

- Joe Waller, President, Lake Worth Alliance
- Patricia Hyer President, East Lake Worth Neighborhood Association
- Marianne Armstrong and Mark McCauley, Co-Chairs, Neighborhood Association on South Lake Worth
- Michael Barnard, President, North Lake Worth Neighborhood Association

Agendas & Updates

- [Agenda: June 22, 2017](#)
- [Agenda: March 23, 2017](#)
- [Agenda: June 9, 2016](#)
- [Agenda: Dec. 17, 2015](#)
- [Agenda: March 19, 2015](#)
- [Agenda: Sept. 18, 2014](#)
- [Agenda: June 6, 2014](#)
- [Agenda: Dec. 18, 2014](#)
- [Agenda: April 24, 2014](#)

Presentations

- [Lake Worth Dam Maintenance \(June 22, 2017\)](#)
- [Lake Worth Trail Project Update \(June 22, 2017\)](#)
- [Stormwater Green Infrastructure: Evaluation, Performing and Modeling \(June 22, 2017\)](#)
- [Stormwater Management Program Master Plan Update \(June 22, 2017\)](#)
- [Lakeside Area Annexation \(March 2017\)](#)
- [Lake Worth Land Purchase/Lease Options \(March 2017\)](#)
- [Silver Creek Road Improvements](#)

Stormwater Management Program Master Plan Update

***Lake Worth Regional Coordination Committee Mtg.
June 22, 2017***

Presented by:

Jennifer Dyke – Transportation & Public Works Dpt. /Stormwater, Senior Planner

Agenda

- Stormwater Management Division
- Purpose of the Update
- Schedule & Public Involvement
- Topics Covered to Date
- How to Learn More & Be Involved



Stormwater Management Division



Fort Worth Strategic Goals

- Be the Nation's Safest City
- Improve Mobility and Air Quality
- Create and Maintain a Clean & Attractive City
- Strengthen Economic Base, Develop Workforce, Create Quality Jobs
- Promote Orderly and Sustainable Development



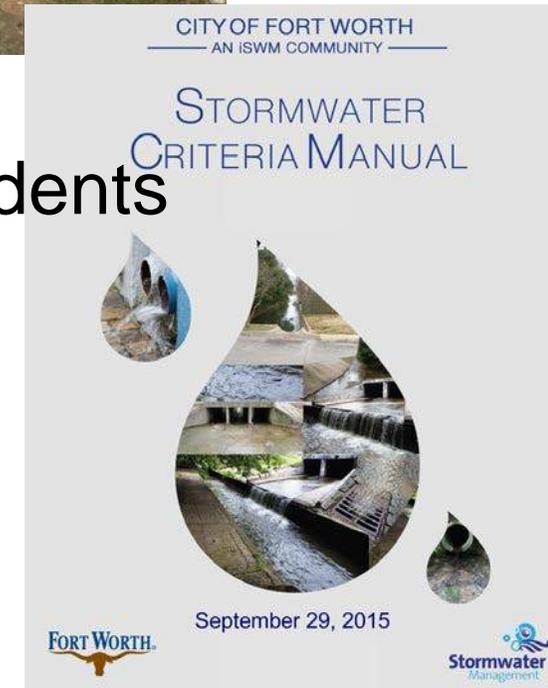
Stormwater Mission

Protect people and property from harmful stormwater runoff



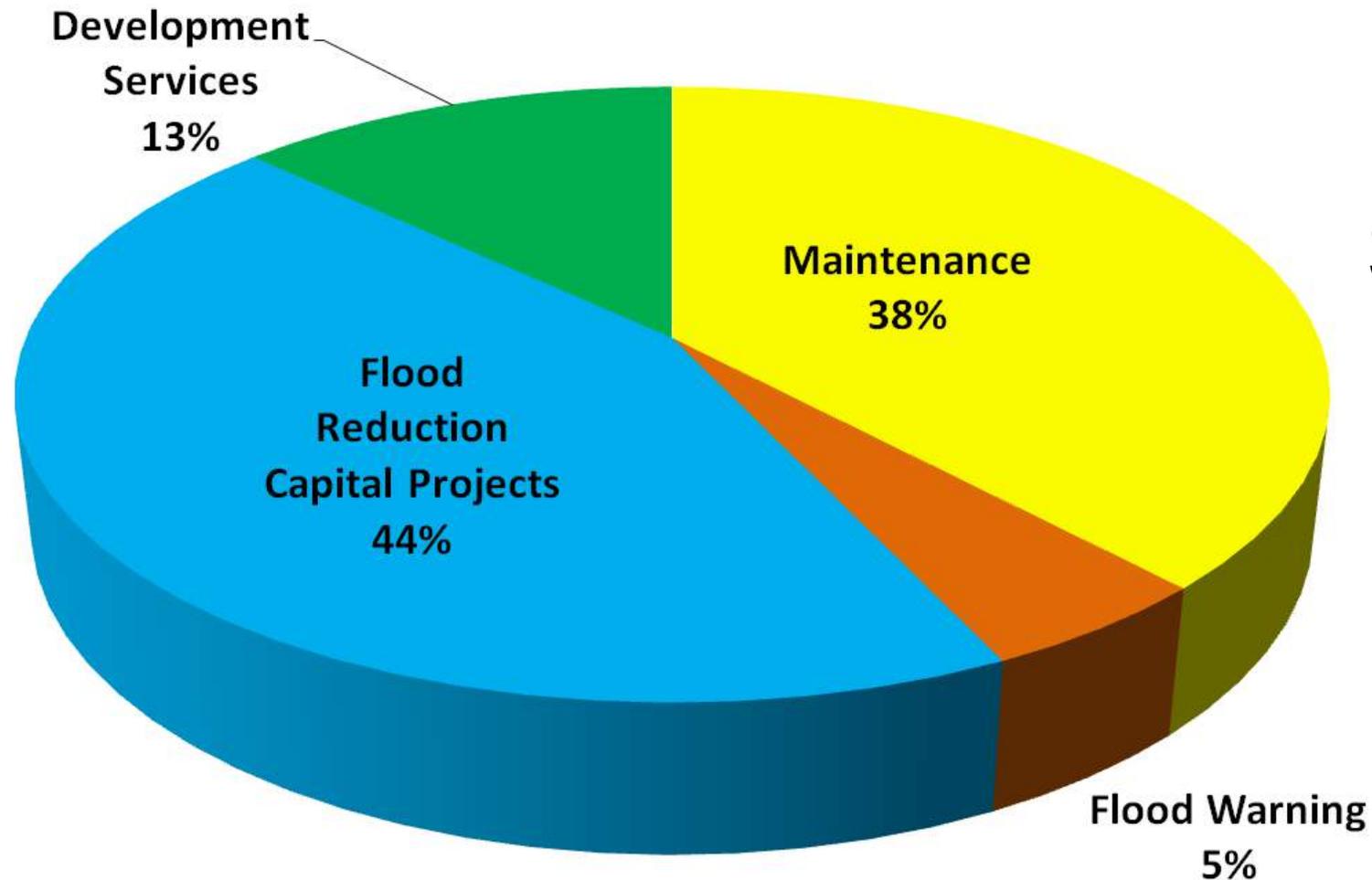
Overview – What We Do

- Maintain our stormwater infrastructure
- Warn residents about flooded roadways
- Build projects to mitigate flooding
- Oversee development to protect current & future residents



Budget- What We Do

**FY17
Budget
\$38.1 M**



Why Update our Master Plan?



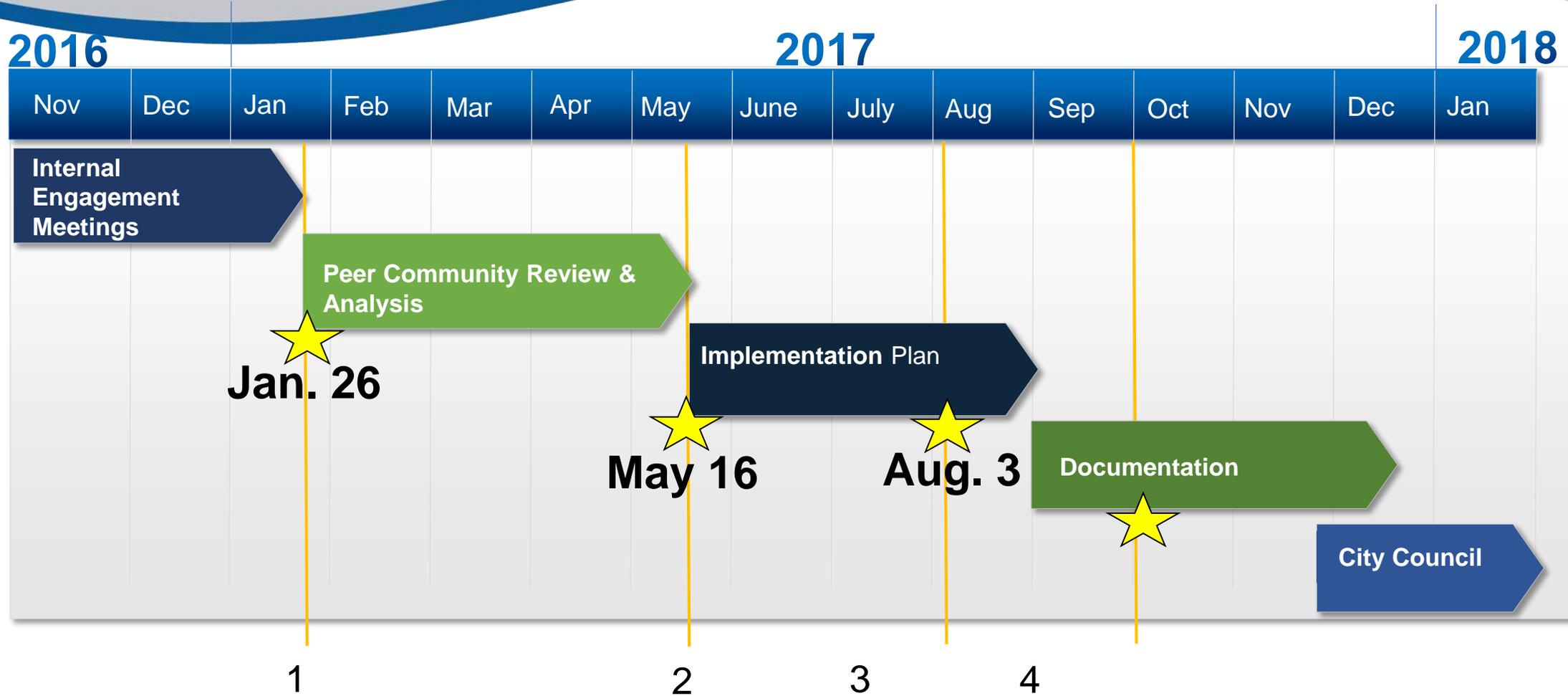
Why Are We Doing This Update?

- Optimize use of existing resources
- Refine strategies, policies and priorities
- Identify and prioritize gaps and/or needs
- Create a living implementation plan for next 10 years

***Council adopted & stakeholder endorsed program master plan*

Schedule & Public Involvement



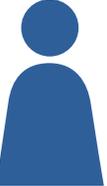


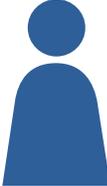
Approximate Stakeholder Engagement Meetings ★

Stakeholder Group

 **Monica Hamilton**
Mayor's office

 **Roxanne Martinez**
Council
District 2

 **Gary Havener**
Council
District 3

 **Aric Head**
Council
District 4

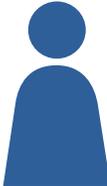
 **Rafael McDonnell**
Council
District 5

 **Patrick Clay**
Council
District 6

 **Si Rowlett**
Council
District 7

 **Howard Rattliff**
Council
District 8

 **David Motheral**
Council
District 9

 **Art Cavazos**
Fort Worth
ISD

 **Rusty Fuller**
North FW
Alliance

 **La Wayne Hauser**
Resident

 **Lairy Johnson**
Large
Commercial
Miller Coors

 **Rick Kubes**
Resident
Small
Commercial

 **Lee Nicol**
Streams &
Valleys

 **Joe Schneider**
Hillwood
Development

 **Bill Schur**
Resident

Topics Covered to Date



Stakeholder Meeting #1

- Why the Stormwater Program was created
- How we receive our funding
- Current program in more detail
- Current program gaps/needs



Audio available at:

<http://fortworthtexas.gov/stormwaterMasterPlanUpdate/>

Stakeholder Meeting #2

- Key peer community review findings
- Focused discussion on how to address 4 key topics in the future:
 - Non-FEMA “Local” Floodplains
 - Private Property Channel Erosion Policy
 - Voluntary Buyout Program
 - Development Oversight



How to Learn More & Be Involved



Website

- Slides/audio from 1st stakeholder mtg.
 - *Audio from 2nd currently being developed*
- Stakeholder mtg. notes & comments
- List of frequently asked questions
- Future meeting dates
- Comment form

<http://fortworthtexas.gov/stormwaterMasterPlanUpdate/>

Stormwater Management Program Master Plan Update

Purpose and Objectives

This update to the Stormwater Management Program Master Plan will assess the progress and lessons learned from the first 10 years of the program.

Opportunities for efficiencies and improvements will be objectively evaluated to ensure the City of Fort Worth is in line with representative communities. Strategies, priorities, and policies will be refined to optimize the use of resources to best meet the stormwater related needs of the City of Fort Worth community over the next 10 years. This initiative will include significant stakeholder engagement and input with the updated Master Plan ultimately being submitted for adoption by City Council.

About the Update

Expected Completion
End of 2017

Goal
Update the Stormwater Management Program's Strategic Master Plan to gather feedback, refine policies and optimize resource distribution.

Calendar

Stormwater Master Plan Stakeholder Meeting

6 p.m. May 16, 2017
Hazel Harvey Peace Center for Neighborhoods
818 Missouri Ave, Room 201.
Stakeholder group meetings are open to the public and will provide an opportunity to gather feedback for updating the stormwater strategic master plan.

Contact

Jennifer Dyke
Senior Planner
Transportation & Public Works
817-392-2714

Stormwater Management Master Plan (January 2017 Stakeholder Pr... Overview - How We Got Here

Stormwater Program Spectrum	Annual Cost Per Acre	Annual Budget
"Incidental"	\$25	\$5 million
City of Fort Worth program before 2006 - Limited improvements; mostly reactive maintenance	\$38	\$7.6 million
"Minimal"	\$50	\$10 million
"Moderate"	\$75	\$15 million
"Aggressive"	\$150	\$30 million
City of Fort Worth - Desired Program - "Aggressive" master planning, inventory, drainage reviews, maintenance; "Moderate" CIP	\$160	\$32 million by year 5
"Exceptional"	\$250	\$50 million

This video is a modified version of the January 2017 stakeholder meeting presentation, which provides an overview of the stormwater program and progress over the past decade.

Schedule Overview



Questions?

Jennifer Dyke- Transportation & Public Works Dpt. /Stormwater, Senior Planner

Jennifer.Dyke@FortWorthTexas.gov

817-392-2714

<http://fortworthtexas.gov/stormwaterMasterPlanUpdate/>



Stormwater Management Program Master Plan Update

Purpose and Objectives

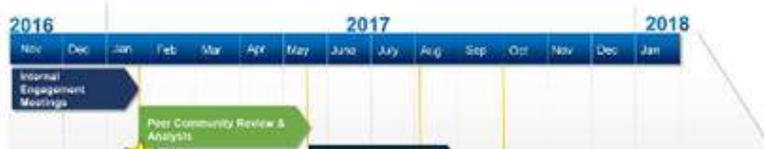
This update to the Stormwater Management Program Master Plan will assess the progress and lessons learned from the first 10 years of the program.

Opportunities for efficiencies and improvements will be objectively evaluated to ensure the City of Fort Worth is in line with representative communities. Strategies, priorities, and policies will be refined to optimize the use of resources to best meet the stormwater related needs of the City of Fort Worth community over the next 10 years. This initiative will include significant stakeholder engagement and input with the updated Master Plan ultimately being submitted for adoption by City Council.



This video is a modified version of the May 16, 2017, stakeholder meeting presentation, which provides an overview of the peer review communities and a focused discussion on four specific that we wanted feedback on: non-FEMA local floodplains, private property channel erosion, voluntary buyout, and development oversight.

Schedule Overview



About the Update

Expected Completion
End of 2017

Goal
Update the Stormwater Management Program's Strategic Master Plan to gather feedback, refine policies and optimize resource distribution.

Calendar

Stormwater Master Plan Stakeholder Meeting

6 p.m. Aug. 3, 2017
Hazel Harvey Peace Center For Neighborhood
818 Missouri Ave.
Stakeholder meetings are open to the public.

Contact

Jennifer Dyke
Senior Planner
Transportation & Public Works
817-392-2714

Event or Presentation Date 9/12/2017

Community Engagement Staff **Tabitha Butler**

Council District and/or School District: District 3

Event, Meeting or Presentation Name **Westcliff NA & Westcliff West NA**

Event or Meeting Type Neighborhood Quarterly Association Meeting

ACTION ITEMS REQUIRING ATTENTION: NONE

Other Topics & Issues Discussed (the following do not require a response from our office)

•Westcliff NA and Westcliff West NA meet together •Presentation by CFW Stormwater (Jennifer Dyke); reminder to report any flooding to 817-392-8100; hope to replace storm drains at W. Seminary between Surrey St and Harwen Terrace, at Cherokee Trail between Standish Road and Surrey Street and Suffolk Drive between Stadium Drive and Granbury Road in the Fall of 2018 with the 2018 budget (if approved); also presented an idea of detentions being put in at McLean Middle School; the work at Arundel Avenue should be completed in October 2017; Stormwater will be hosting a Public Meeting to report on the Flood Warning System in Oct-Nov; October 19 is a Stormwater Program Master Plan Meeting; residents asked if the city’s drainage plan took in to account the “stealth” dorms being built in the neighborhood; another resident asked if the Stormwater fee could increase to help with the budget •Zoning Update: the NAs worked to get petitions to change all B/C zoning to A, and they were unable to get the required signatures; Councilmember Byrd has begun the process for council initiated rezoning; should take about three months to complete the process •New NPO, Officer McClellen: new NPO to the Westcliff; reminded residents to call 911 for any loud or out of hand parties; be sure to leave your name and contact information; he has been working with TCU and visiting students homes the past two weeks; will pilot having 4 patrol officers in the TCU area on Thursday, Friday, Saturday from 7pm-1am; several residents thanked him for all of his hard work and greatly appreciate everything he is doing especially the extra patrol •COPS Update: Barbara the Westcliff area COPS Captain encouraged residents to join •Tabitha (CE): reminded residents about the Bond Election Meetings, upcoming workshop and discussed welcome bags for TCU students •National Night Out is October 3rd and the event will be held in the Westcliff Shopping Center •December 12 Meeting: elections and discuss changing meeting day for 2018

Additional CFW Staff in Attendance **Robert McClellen (Police)
Jennifer Dyke (Transportation Public Works)
Linda Young (Code Compliance)**

Collateral Given Out

Product	Quantity
SW Recycle These/Not These Flier	14
NED I Heart FW Bags (plastic)	14
ENV ECC Brochure	14
SW Drop-Off Stations flyer	14
EMG Severe Weather Nixle signup	14
SW Top 10 Answers to Recycling Questions	16

SW Recycled Water Bottle Pens	16
AC Barking Dogs Card-English	14
CMO Frequently Called Numbers 2017	14
LIB Location and Hours 2017	14
CC Fort Worth Code Rangers Card 2017	16
CMO Brown Paper Sacks	16
MUN Municipal Court Online Tools	14
SW Litter Stomp Card 2017	16
CMO City Times Flyer-September 2017	16

Audience

Language	Audience	Attendees
English	Adults	30

Contact Name

Marc Meadows (Westcliff West); Loren Baxter (Westcliff)

Email:

marc@meadowsanalysis.com; info@westcliffneighbors.com



September 21, 2017

Community Engagement Weekly Bulletin

Citywide Headlines

- [Additional budget and tax rate hearings have been scheduled Sept 22 & 26](#)
- [Hwy 183 Corridor Plan Community Meeting Sept 21](#)
- [Register for Master Composter classes happening Sept 21-23](#)
- [Residents with special needs should look into registering for SNAP](#)
- [Community Town Hall will focus on race & culture, Oct 2](#)
- [Stormwater Management Program Master Plan Update meeting Oct 19](#)

Workshop Highlight

Join the Community Engagement team and learn best practices for completing the Neighborhood Awards Application. Workshop Dates slated for **Sept 21**, **Sept 23**, and **Sept 26**. [Click here](#) to register, or [click here](#) to view and print the flier.

Neighborhood News

- Dist 4 - [Caffeinated Town Hall scheduled for this Saturday, Sept 23](#)
- Dist 4 - [Learn about sewer improvements in the Fossil Creek area Sept 27](#)
- Dist 4 & 7 - [Ray White intersection closure notice](#)
- Dist 5 - [East Fort Worth infrastructure improvements meeting Sept 21](#)
- Dist 7 - [Second phase of construction coming to Timberland Blvd. meeting Oct 3](#)
- Dist 8 - [Edgecliff Village Wastewater Meter Station meeting Sept 27](#)

Community Engagement Office

The Community Engagement Office connects neighbors, educators, and community leaders with city services and each other. We provide educational programs for students and adults regarding city services and training programs for community building. For more information, find your Liaison or contact us at the office:

Phone – 817-392-6201

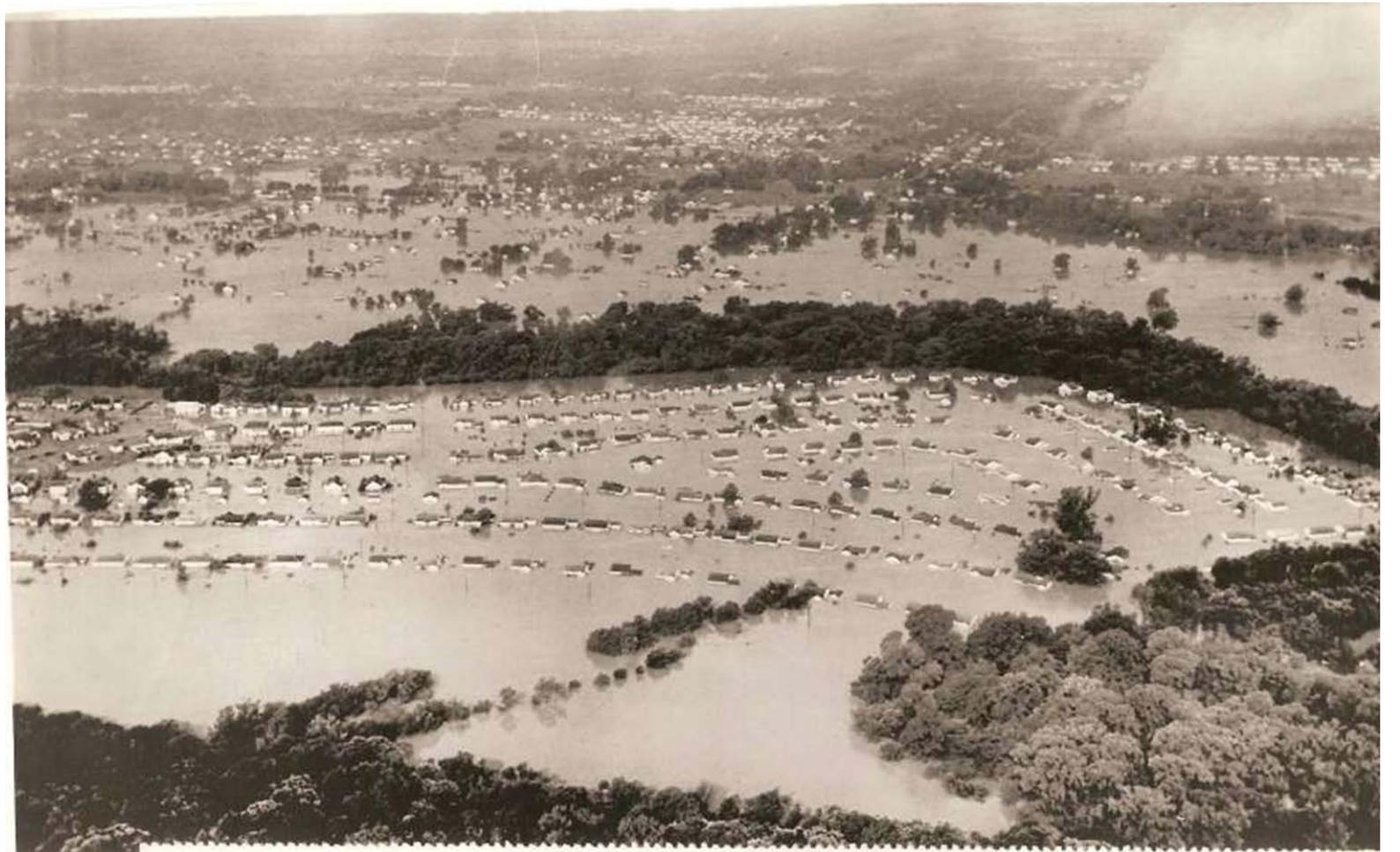
Email – Engagement@FortWorthTexas.gov

Liaison – [View Map](#)

Floodplain Management Plan

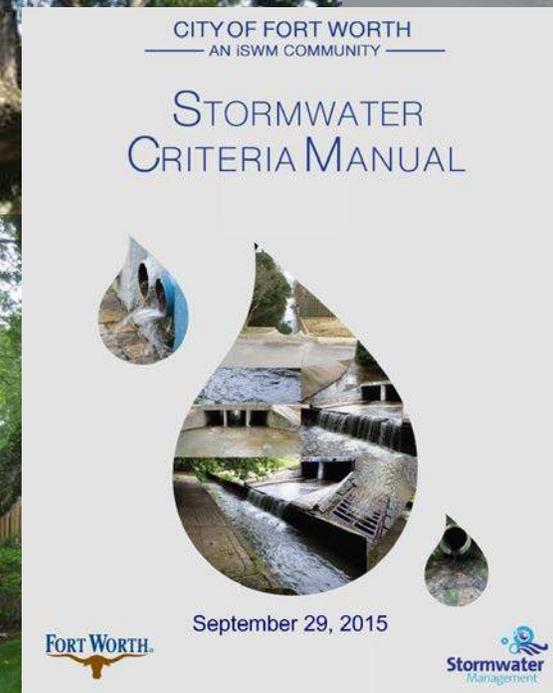
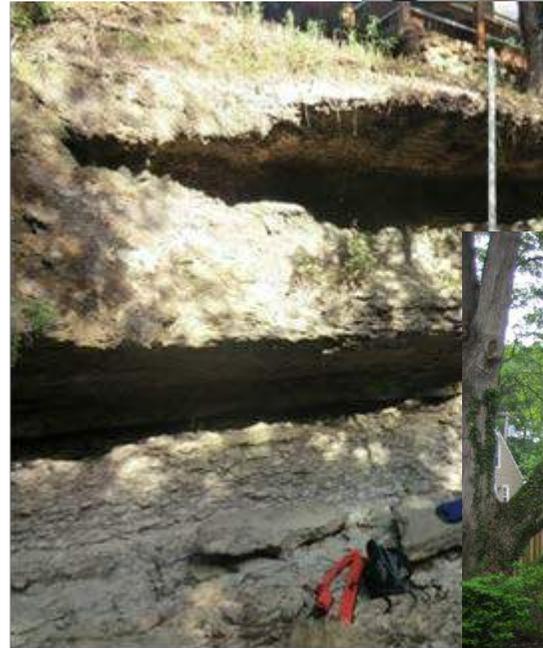
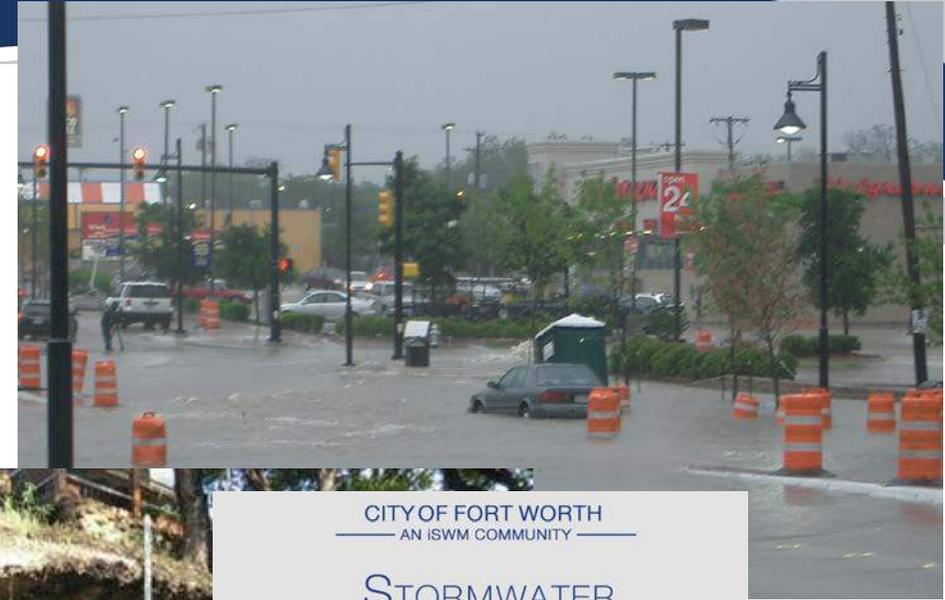
2017 Stakeholder
Update Meeting

September 21, 2017



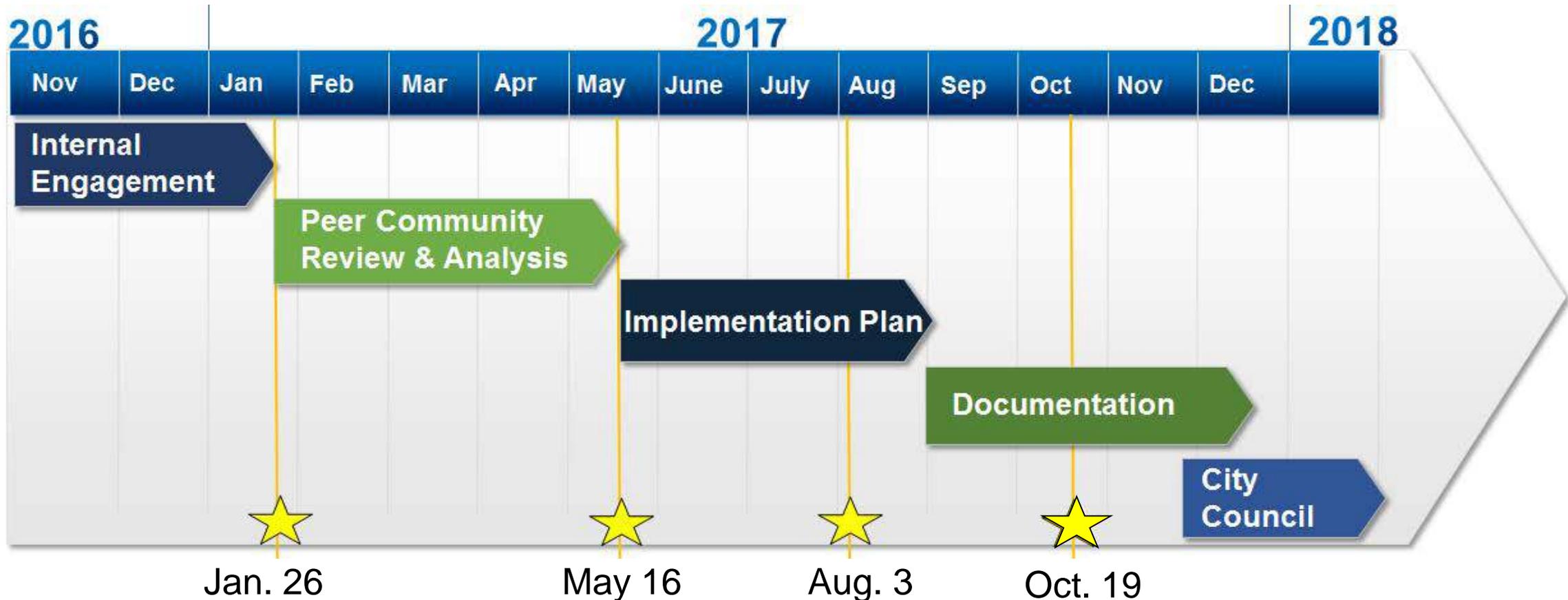
Major Policy Discussions

- Local Floodplains
- Private Property Channel Erosion Policy
- Voluntary Buyout Program
- Level of Oversight for Private Development



Next Stakeholder Meeting:

Thursday, Oct. 19, 2017- Hazel Harvey Peace Center, 818 Missouri Ave - Room 201 6:00-8:00 pm





Attend the final stakeholder meeting for the Stormwater Management Program Master Plan Update

Posted Oct. 3, 2017

An update to Fort Worth's Stormwater Management Program Master Plan will assess the progress and lessons learned from the first 10 years of the program. Stakeholders are encouraged to attend a public meeting at **6 p.m. Oct. 19** at the Hazel Harvey Peace Center for Neighborhoods, 818 Missouri Ave.

The goal is to update the master plan to gather feedback, refine policies and optimize resource distribution. The updated plan will be submitted for adoption by the City Council toward the end of this year.

To learn more, to make inquiries or to leave comments, visit the Stormwater Management Program Master Plan page.

Get articles like this in your inbox weekly. Subscribe to City News

©2017 City of Fort Worth, Texas
All rights reserved
200 Texas St.
Fort Worth, TX 76102



Stormwater Management Program Master Plan Update

Purpose and Objectives

The update to the Stormwater Management Program Master Plan will assess the progress and lessons learned from the first 10 years of the program.

6 p.m. Oct. 19, 2017

Stormwater Master Plan Stakeholder Meeting

Hazel Harvey Peace Center for Neighborhood

818 Missouri Ave.

Opportunities for efficiencies and improvements will be objectively evaluated to ensure the City of Fort Worth is in line with representative communities. Strategies, priorities, and policies will be refined to optimize the use of resources to best meet the stormwater related needs of the City of Fort Worth community over the next 10 years. This initiative will include significant stakeholder engagement and input with the updated Master Plan ultimately being submitted for adoption by City Council.

Expected Completion

End of 2017

Goal

Update the Stormwater Management Program's Strategic Master Plan to gather feedback, refine policies and optimize resource distribution.

FAQ and Comments

To learn more about the Stormwater Master Plan Update, to make inquiries or comments, please visit <http://fortworthtexas.gov/stormwatermasterplanupdate/>

Get Connected. Stay Informed.



[Attend the final stakeholder meeting for the Stormwater Management Program Master Plan Update](#)

An update to Fort Worth's Stormwater Management Program Master Plan will assess the progress and lessons learned from the first 10 years of the program. Stakeholders are encouraged to attend a public meeting at 6 p.m. Oct. 19.

[Allen Avenue to be restriped](#)

The city has scheduled an open house to update residents about restriping Allen Avenue from Evans Avenue to Lipscomb Street. The event will be from 5:30-6:30 p.m. Oct. 18.

[Turn up the volume! Fort Worth is the first Music Friendly Community](#)

Fort Worth has been designated the first Music Friendly Community in Texas by the Texas Music Office. The new statewide program fosters growth of the music industry.

Get Connected. Stay Informed.



Copyright © 2017 City of Fort Worth. All rights reserved.
You are receiving this email because you or a person in your news organization requested updates from the City of Fort Worth.

SUBSCRIBER SERVICES:
[Manage Subscriptions](#) | [Unsubscribe All](#) | [Help](#)



CFW REMINDER: Make Plans to Attend the Stormwater Master Plan Stakeholder Meeting - Thurs. Oct. 19 at 6 pm!



Community Engagement Manager Catherine Huckaby from Fort Worth Community Engagement Office ·

Just now

This update to the Stormwater Management Program Master Plan will assess the progress and lessons learned from the first 10 years of the program.

Opportunities for efficiencies and improvements will be objectively evaluated to ensure the City of Fort Worth is in line with representative communities. Strategies, priorities, and policies will be refined to optimize the use of resources to best meet the stormwater related needs of the City of Fort Worth community over the next 10 years. This initiative will include significant stakeholder engagement and input with the updated Master Plan ultimately being submitted for adoption by City Council.

Stormwater Master Plan Stakeholder Meeting

Oct. 19, 2017 at 6 p.m.

Hazel Harvey Peace Center for Neighborhood

818 Missouri Ave.

Stakeholder meetings are open to the public. To learn more about the Stormwater Master Plan Update, to make inquiries or comments, please visit

<http://fortworthtexas.gov/stormwatermast...>

Just now · Subscribers of Fort Worth Community Engagement Office in General



City of Fort Worth
 Transportation and Public Works
 Stormwater Division
 200 Texas Street
 Fort Worth, TX 76102

PRESORTED
 STANDARD
 US POSTAGE
 PAID
 FORT WORTH TX
 PERMIT NO. 2070



Visit us online at:
www.FortWorthTexas.gov/stormwater
 En español, la visita www.fortworthtexas.gov/escorrentia-en-la-mira O para solicitar una copia en español, llame al 817-392-2782

Flood Safety

Turn Around, Don't Drown

- > Learn the safest route from your home or business to higher, safer ground, but stay tuned to reports of changing flood conditions.
- > If emergency officials tell you to evacuate or leave your home, go immediately to a safe shelter, hotel or relative's house.
- > Turn off all utilities, gas and electricity at the main switch. Stay away from power lines and electrical lines. Be alert for gas leaks.
- > Do not walk through flowing water. Drowning is the number one cause of flood related deaths. Currents can be deceptive; just a few inches of moving water can knock you off your feet!
- > Do not drive through a flooded area. More people drown in their cars than in any other location. Vehicles also push water into homes and cause additional property damage.



Important Useful Websites

www.fema.gov www.noaa.gov www.floods.org
www.usgs.gov www.nws.noaa.gov www.weather.gov
www.floodsmart.gov www.FortWorthTexas.gov/stormwater
 En español, la visita www.fortworthtexas.gov/escorrentia-en-la-mira O para solicitar una copia en español, llame al 817-392-2782

Flood Warning System

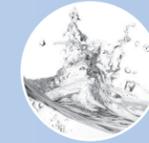
The Emergency Alert System will notify City of Fort Worth residents via local radio and TV, if flooding is imminent and if evacuation of the City is advised.

Fort Worth has partnered with Nixle, a community information service dedicated to providing you important notifications from your local police department, your children's schools, and your local community agencies and organizations. Information is immediately available over your cell phone by text message, by email, and over the web. To sign up, visit <http://local.nixle.com/register/>.

Additionally, the NOAA Weather Radio broadcasts weather information including warnings, watches, forecasts, and other hazard information at 162.550 MHz 24 hours a day, 7 days a week from the National Weather Service Office in North Central Texas. The local contact number is 817-429-2631. Please call in reference to evacuation notices, procedures and shelters.

Real time river gauge information can be obtained through the following website:
www.usgs.gov.

inside:



Flood Insurance



Property Protection



Improvement Requirements



runoff Rundown



FORT WORTH STORMWATER MANAGEMENT DIVISION

The mission of the City of Fort Worth's Stormwater Management Division is to protect people and property from harmful stormwater runoff. Education and prevention are valuable and proven tools that help communities become resistant to these natural disasters.

The City of Fort Worth recognizes that its entire community can be susceptible to flooding, not just those structures located within Special Flood Hazard Areas (SFHA's). The following information is being provided to all property owners within the City of Fort Worth, not just those located within the SFHA.

Flood Information

The City of Fort Worth's Transportation and Public Works Department, Stormwater Management Division provides residents flood information related to Flood Insurance Rate Maps (FIRMs) including flood zones, base flood elevations (BFEs) and the possible presence of floodways. Where applicable, residents may be advised of historical flooding, flood hazards not shown on the FIRMs, and natural floodplain functions. The Storm Water Management Division is located at City Hall and can be contacted by phone (817-392-7947) or email (FloodPlain@fortworthtexas.gov).

Elevation certificates of some properties located in the Special Flood Hazard Areas (SFHA's) are on file in the Engineering Vault of the Transportation and Public Works Department located in City Hall.

Stormwater Management is updating its Master Plan to better meet community needs for the next ten years and beyond. The update will identify policies to address recurring issues and prioritize service gaps. Stakeholder and public feedback are helping to shape the direction of the update. The next stakeholder meeting, which is open to the public, is 6:00 p.m., October 19, 2017 at Hazel Harvey Peace Center for Neighborhoods, 818 Missouri Ave. For more information visit <http://fortworthtexas.gov/stormwatermasterplanupdate/>

Flood Insurance

The purchase of federal flood insurance is highly recommended. Basic homeowner's insurance policies don't cover damage from floods. The City of Fort Worth participates in the National Flood Insurance Program (NFIP), which means that federally subsidized flood insurance is available to everyone in the City. Keep in mind that there is a 30-day waiting period before a policy becomes effective. Some people have purchased flood insurance because it was required by the bank or loan company when they obtained a mortgage or home improvement loan. Usually these policies just cover the building's structure and not the contents. Remember that a flood insurance policy must be renewed each year.

Mandatory Purchase Requirement: The mandatory purchase requirement applies to all forms of federal or federally related financial assistance for buildings located in a Special Flood Hazard Area (SFHA). This requirement affects loans and grants for the purchase, construction, repair or improvement of any publicly or privately owned buildings in a SFHA, including machinery, equipment, fixtures and furnishings contained in such buildings. If a building is located in a SFHA, the agency or lender is required by law to require the recipient to purchase a flood insurance policy on the building.



Community Rating System

The City of Fort Worth participates in the National Flood Insurance Program's (NFIP) Community Rating System (CRS). CRS recognizes community efforts beyond NFIP minimum standards by reducing flood insurance premiums for property owners. City floodplain administrators work diligently to implement systems to maximize Fort Worth's CRS rating and the resulting benefits to its citizens. As a result, property owners currently receive a 10% discount on premiums within the special flood hazard area (SFHA) and 5% for those outside of the SFHA.

Updated Floodplains Coming Soon!

FEMA is preparing to issue revised floodplains for many of the flooding sources affecting Fort Worth. As Fort Worth continues to grow it becomes necessary to reflect that growth and its impact on the watersheds and floodplains. Additionally, advancements in technology and methodologies allow for refinement in floodplain analysis and mapping. The revised floodplains and associated materials are considered preliminary while they undergo legal due process and FEMA prepares for final release. The current schedule for release is slated for the third quarter of 2018. To view the preliminary materials, go to <https://www.fema.gov/preliminaryfloodhazarddata>

Flood insurance facts

- > Affordable federal flood insurance is available to anyone living in Fort Worth who wants it, whether they are in a floodplain or not.
- > Homeowner's insurance rarely, if ever, covers damage from floods.
- > Typical flood insurance policies in Fort Worth for homes outside the floodplain run \$300 to \$400 per year.
- > If you want to know if your home or business is in a floodplain, call (817) 392-7947 or email FloodPlain@fortworthtexas.gov

For more information about flood insurance contact:

- > Your insurance agent.
- > www.FortWorthTexas.gov
- > www.fema.gov/nfip
- > Customer Service for the City of Fort Worth's Stormwater Management Division at 817-392-6261.

Flood Protection Assistance

Concerned residents and the general public can obtain information on flood protection assistance from the City of Fort Worth's Transportation and Public Works Department Stormwater Management Division by calling 817-392-6261. Flood protection assistance, flood related data, data on historical flooding in neighborhoods and other information provided by the City of Fort Worth is site specific, so inquirers can relate the flood threat to their problems.

List of Services Provided:

- Make site visits to review flooding and drainage and problems and provide one-on-one advice to property owners.
- Provide assistance with floodplain development permits, determination of Base Flood Elevations (BFE) and general information on all flood insurance and floodplain mapping procedures and forms.
- Provide advice and assistance on retrofitting techniques, such as elevating buildings above flood levels or the Base Flood Elevation, dry flood proofing and wet flood proofing.

Property Protection

Rather than wait for a flood to occur, you can act now to protect your property from flood damage. Various alternatives are available to help minimize flooding. If the floor level of your property or structure is lower than the Base Flood Elevation (BFE) located on the City's Flood Insurance Rate Map (FIRM), consider ways to prevent flooding from occurring, such as retrofitting your building. "Retrofitting" means altering your building to eliminate or reduce flood damage. Retrofitting measures include:

- > Elevating the building so that flood waters do not enter or reach any damageable portion of it,
- > Constructing barriers out of fill or concrete between the building and flood waters,
- > "Dry flood proofing" to make the building walls and floor watertight so water does not enter,
- > "Wet flood proofing" to modify the structure and locate the contents so that when flood waters enter the building there is little or no damage, and
- > Preventing basement flooding from sewer backup or sump pump failure.

Natural and Beneficial Functions

The City of Fort Worth is a beautiful place to live, work and play. The floodplains and adjacent waters are important assets that form complex physical and biological systems. When floodplains are preserved in their natural state, they provide open space areas for parks, bike paths and wildlife conservation.

Floodplains also reduce the severity of floods by conveying stormwater runoff, providing flood storage and conveyance, reducing flood velocities, flood peaks and minimizing sedimentation. The natural vegetation in the floodplain improves the water quality of the lakes and rivers of Fort Worth by slowing down stormwater runoff, which allows sediments and other impurities to settle out.

Floodplain Development Permit Requirements

All development within the City of Fort Worth requires local and state permits. Contact the City of Fort Worth's Planning and Development Department at 817-392-2222 for advice before you build, fill, place a manufactured home or otherwise develop. The zoning ordinance, Floodplain Provisions Ordinance and the International Building Codes have special provisions regulating construction and other developments within floodplains. Without these provisions, affordable flood insurance through the National Flood Insurance Program (NFIP) would not be available to property owners in the City of Fort Worth. Any development in the floodplain without a permit is illegal. Such activity can be reported to the Stormwater Management Division's Customer Service at 817-392-6261.

Substantial Improvement Requirements

What is substantial improvement? The NFIP requires that if the cost of any reconstruction, rehabilitation, addition or other improvement to a structure exceeds 50% of the market value of the structure before the start of the construction, the improvements must conform to or meet the same construction requirements as a new building and satisfy minimum finish floor requirements specified in the Floodplain Provisions Ordinance.

What is substantial damage? Substantial damage means damage of any origin sustained by a building or structure when the cost of restoring the building to its pre-damaged condition would equal or exceed 50% of the market value of the building before the damage occurred. Substantial damage is determined regardless of the actual repair work performed.

The City of Fort Worth requires by ordinance that any substantial improvement or substantial damage improvement must have a building permit. Building permits can be obtained at the Planning and Development Department located at City Hall or by calling 817-392-2222.



Drainage System Maintenance

The City of Fort Worth's Stormwater Management Field Operations crews work hard to maintain the drainage systems throughout the city. It is illegal in the City of Fort Worth to dump any type of debris into a stream, river or drainage ditch. This debris can become entangled in culverts, shallow streambeds, or drainage ditches and impede drainage causing the flow of water to back up. Residents of Fort Worth should also keep drainage ditches on their property free of debris, foliage and vegetation that would impede the flow of water. Debris dumping should be reported to the City of Fort Worth's Code Compliance Department by calling 817-392-1234.



Flood Hazard

The City of Fort Worth is located in Tarrant, Denton, Parker, Johnson, and Wise Counties. Downtown Fort Worth is situated near the confluence of the two largest rivers in the area, the Clear Fork Trinity River and the West Fork Trinity River. Other major streams in Fort Worth include Mary's Creek, Marine Creek, Sycamore Creek, Village Creek, Dry Branch Creek, Little Fossil Creek, Big Fossil Creek, and White's Branch.

Flooding in Fort Worth is typically produced by heavy rainfall from frontal type storms that occur during the spring and fall months. Flash floods are the most common type of flooding in Fort Worth. A flash flood is a rapid rise of water along a stream or low lying area as a result of an intense amount rainfall in a short period of time. Fort Worth has also experienced a number of major flood events since its settlement in 1849. Historical information indicates that significant floods occurred in Fort Worth in May 1866, May 1908, April 1922, February 1938, June 1941, April 1942, May 1949, May 1957, August 1974, July 1975, November 1981, May 1989, and May 1990.



Search Nextdoor



Map

Neighborhood



Recommendations

New



For Sale & Free



Events



Real Estate



Crime & Safety



Lost & Found



Documents



General

Interests



All Interests

Directories

This update is from a public agency. The only posts they can see are their own. [Learn more.](#)



Community Engagement Liaison Tabitha Butler, Fort Worth Communit...



CFW: Stormwater Master Plan Public Hearing scheduled for Feb. 28

A public hearing will be held at an upcoming City of Fort Worth Plan Commission meeting, regarding the draft strategic Stormwater Management Program Master Plan report. Stormwater staff will recommend that the Plan Commission consider a recommendation to the City Council, for the adoption of the Master Plan and incorporation by reference into the City's Comprehensive Plan.

Attend the public hearing at the Plan Commission meeting:

February 28, 2018

1:30 PM

City Hall, Council Chamber

200 Texas Street

Fort Worth, Texas 76102

Review the draft report at <http://fortworthtexas.gov/stormwatermasterplanupdate/>.

26 Feb · Subscribers of Fort Worth Community Engagement Office



Thank



Reply



14 Thanks



Stormwater Management Program Master Plan Update

Purpose and Objectives

This update to the Stormwater Management Program Master Plan will assess the progress and lessons learned from the first 10 years of the program.

Opportunities for efficiencies and improvements will be objectively evaluated to ensure the City of Fort Worth is in line with representative communities. Strategies, priorities, and policies will be refined to optimize the use of resources to best meet the stormwater related needs of the City of Fort Worth community over the next 10 years. This initiative will include significant stakeholder engagement and input with the updated Master Plan ultimately being submitted for adoption by City Council.



This video is a modified version of the May 16, 2017, stakeholder meeting presentation, which provides an overview of the peer review communities and a focused discussion on four specific that we wanted feedback on: non-FEMA local floodplains, private property channel erosion, voluntary buyout, and development oversight.

[View the draft strategic Stormwater Management Program Master Plan report](#)

About the Update

Expected Completion

End of 2017

Goal

Update the Stormwater Management Program's Strategic Master Plan to gather feedback, refine policies and optimize resource distribution.

Calendar

Stormwater Master Plan Stakeholder Meeting

6 p.m. Oct. 19, 2017
Hazel Harvey Peace Center for Neighborhoods
818 Missouri Ave.

Stakeholder meetings are open to the public.

Public Hearing at the Plan Commission Meeting

1:30 p.m. Feb. 28, 2018
Council Chamber at City Hall
200 Texas St.

OneAddress

[Find data about your home address.](#) Including if your address falls within a floodplain or in a potential high water location.

Contact

Jennifer Dyke

Senior Planner
Transportation & Public Works
[817-392-2714](tel:817-392-2714)