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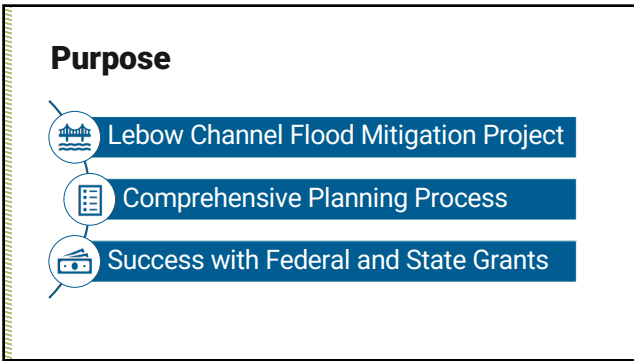
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## Lebow Creek

- Drains 3.5 square miles
- Industrial & residential area
- One of the worst flooding areas in Fort Worth
- Over 100 reported flooding-related incidents in last 15 years
  - 5 fatalities



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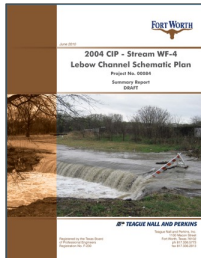
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## History



- 2010 Master Plan Recommendations
  - Buyouts
  - Low Water Crossing Closures
  - Rebuild Major Roads
  - Floodplain Restoration
  - Channel Improvements

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## Action Taken



Road Closure at Vera Cruz Street



Extensive Property Buyouts



Stream Restoration at 28th Street

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## Overall Strategies

Downstream Stream Restoration



Upstream Channelization



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## Upper Lebow Overview

- Mile-long unimproved channel
- Low-income area
- Masterplan vision
  - Improved Channel
  - Detention Pond
  - Environmental Permit



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## Upper Lebow

Undersized Culverts



Unimproved Channel



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## Upper Lebow

Fences and Accessory Structures



Downstream Concrete Channel



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## Flood Risk

~300 Structures in 100-year Floodplain  
>60 reported incidents since 2009



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## Flooding Reality



Blue Mound Road and Deridder Avenue  
March 2023



Lebow Channel at Beaumont Street  
July 2017



Lebow Street from House  
August 2022

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## Flooding Reality



Lebow Channel at NE 36th Street  
September 2010



Lebow Channel at NE 36th Street  
July 2017

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Renewed Focus

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## Renewed Focus

- 2023 - Shift in City focus
  - Resolve long-standing flooding problems
- Stormwater Utility Fee (SWU) Increase
- Upper Lebow Flood Mitigation



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## The Problems

 Limited Funding

 Stale Concept

 Not Comprehensive

**\$90M**  
Project Cost

**\$40M**  
Planned Funding by 2035

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## Comprehensive Approach



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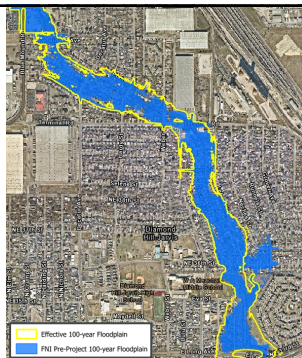
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## H&H Modeling Updates

- Bring models up to current standards
- 2-D modeling at complex flooding areas



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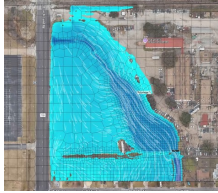
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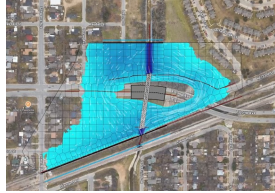
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## 2-D Modeling

Upstream Spillway



Downstream Culverts & Overtopping



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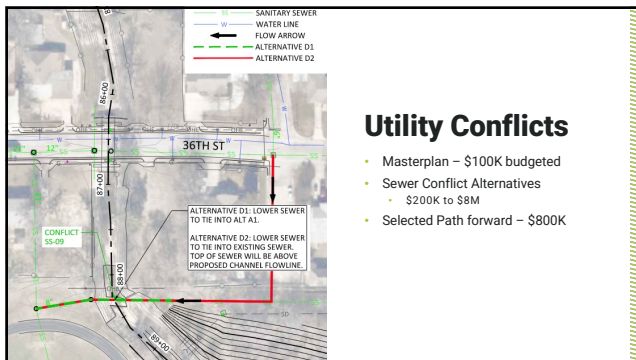
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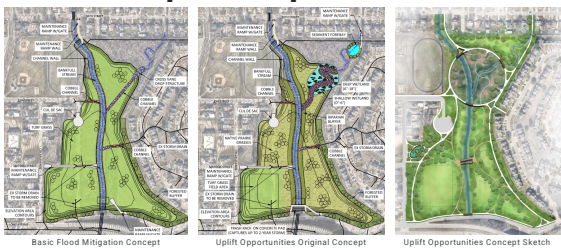
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## Pond Concept Development



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## Funding Opportunities - Grants



- Building Resilient Infrastructure and Communities (BRIC)
- Flood Mitigation Assistance (FMA)
- Flood Infrastructure Fund (FIF)

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## Grant Application Basics



### BRIC

- Projects that increase community resilience
- 75% cost share
  - Higher % available
- \$50M maximum



### FMA

- Protect NFIP-insured structures
- 75% cost share
  - Higher % available
- \$50M Maximum



### FIF

- FME, FMP, and FMS recommended in RFP
- Up to 100% cost share
- \$18.75M Maximum
- 0% Loan Available

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## Keys to Success

- Identify good candidates
- Review entire application early
- Understand evaluation/scoring criteria
- Develop plan for tackling application
- Coordinate with funding agencies



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## Challenges

- Application is lengthy and time-consuming
- Additional data collection
- BCA/Budget/Cost Estimate
- Difficult to identify all requirements



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## Lebow Channel Flood Mitigation

**\$50M**

### BRIC & FMA

- Selected for FMA
- Not Selected for BRIC
- Uncertainty in FEMA program

**\$90M**

### FIF

- #1 Ranked FMP Statewide
- Expecting invitation soon

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## Funding Impacts

- Expedites project delivery
- Cost savings to rate payer
- Holy grail of funding possible



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### Conclusions

- Set up for success with comprehensive planning
- Detailed planning is essential for grant applications
- Grant programs can be difficult to navigate
- Invest upfront to plan application

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### Thank you

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