TRINITY

REGION 3

REGIONAL FLOOD PLANNING GROUP

June 24, 2021

1. Call to order

2. Roll call

3. Approval of minutes

4. Acknowledgement of written comments received

5. TWDB update

6. Receive report – Nominating Committee

7. Consider filling Small Business seat

8. Consider filling Councils of Government seats

9. Consultant update

CONSULTANT UPDATE

- **Introduction and overview, Chapter 1**
- **Introduction and overview, Chapter 2**
  - Data collection tool and survey process demonstration
  - Interactive web map demonstration
- **Introduction and overview, Chapter 3**
  - Flood mitigation and floodplain management goals
- **Public outreach updates**
  - Public outreach overview
  - Website
- **Introduction and overview of Chapter 8**

Ch. 1 Introduction & Overview

Planning Area Description

Preparing the Technical Memo

May–July

Kick Off

Data Collection

Public Engagement

Begin Ch. 1, 2 & 3

Discuss Goal Setting

Sept.–Oct.
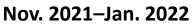
Finalize Ch. 1, 2 & 3

Prepare Ch. 4 & Tech Memo

Complete Data Collection

Establish Goals

Present Regional Flood Map

Prepare Ch. 1, 2 & 3

Begin Ch. 4

July–Aug.

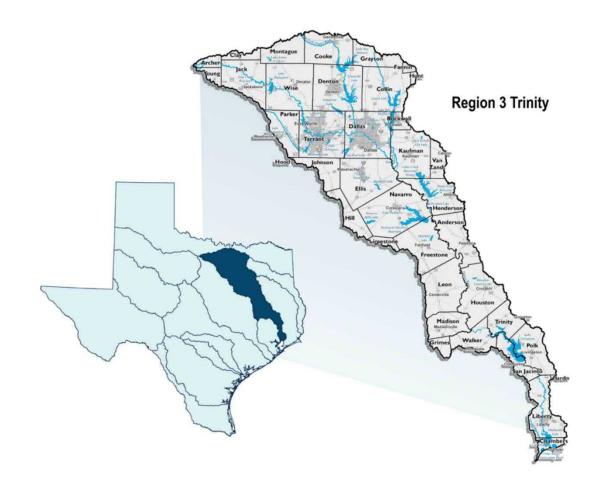Finalize Ch. 4 & Tech Memo

Submit Tech Memo to TWDB

Nov. 2021–Jan. 2022

TRINITY REGION, BY THE NUMBERS

- 38 COUNTIES

- 18,000 SQUARE MILES

- ~20% within the 1% annual chance flood event

Region 3 Trinity

Trinity Basin, Historical
Flood Events

FEMA FLOOD CLAIMS (1984 – JAN 2021)

584
Flood Claims

$517.8 M
Flood Claims Paid

ANTICIPATED POPULATION GROWTH

67%
forecasted increase in population between 2020 and 2050

AGRICULTURAL FLOOD LOSSES
Significant historical flood losses, most recently 2015 and 2016

FLOOD-RELATED PRESIDENTIAL DISASTER DECLARATIONS (1953 – MAR 2020)
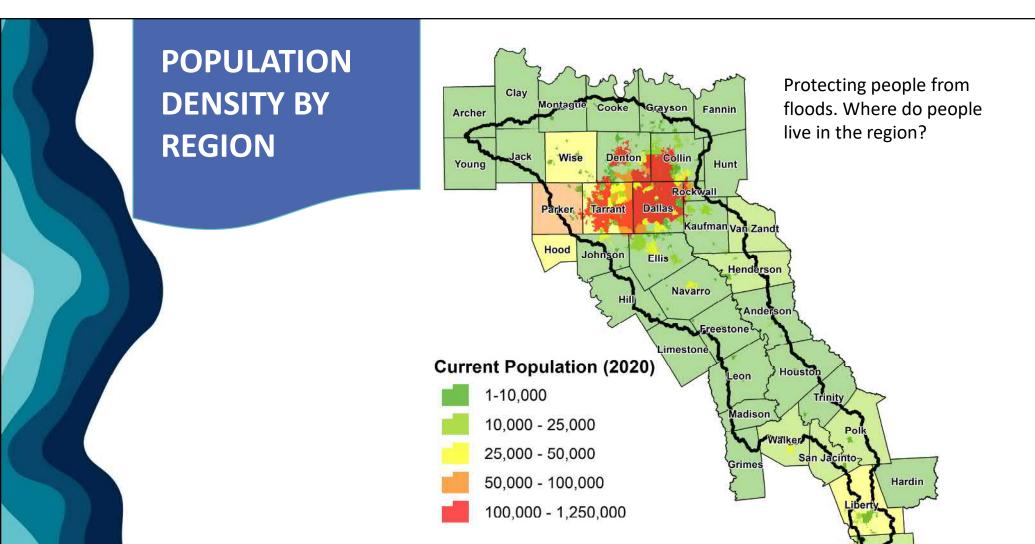
40
Major Disaster Declarations

5
Emergency Declarations

25% of Disaster Declarations and 40% of Emergency Declarations have occurred within the region since 2008
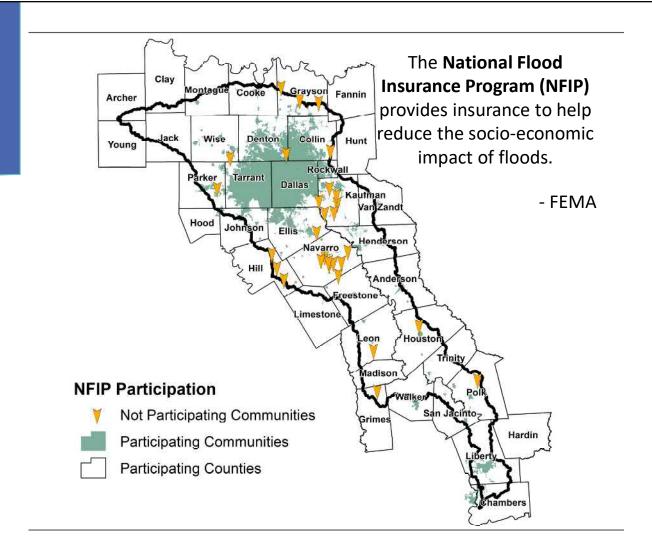
FLOOD EVENTS (1996-2019)
Over 150 major flood events have occurred in the last 20 years with significant losses to life and property.
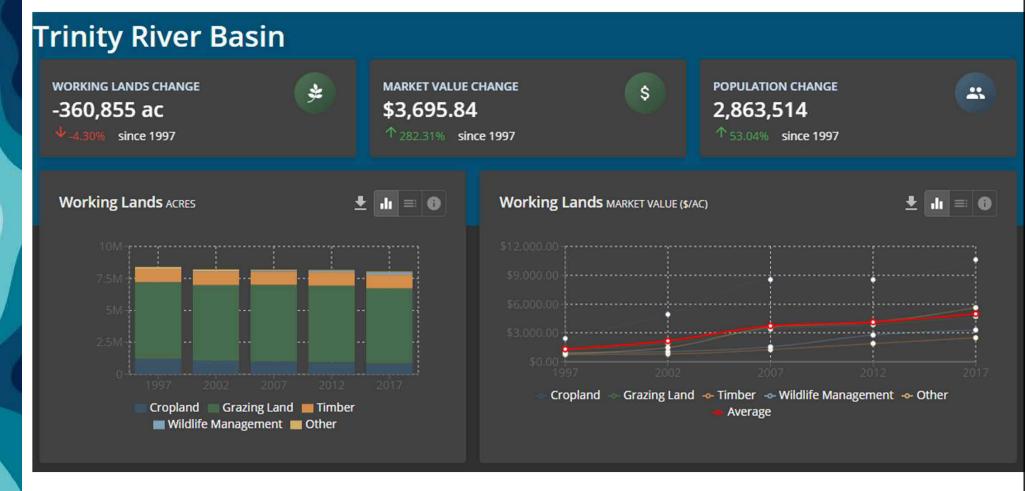
POPULATION DENSITY BY REGION

Protecting people from floods. Where do people live in the region?

Current Population (2020)
- 1-10,000
- 10,000 - 25,000
- 25,000 - 50,000
- 50,000 - 100,000
- 100,000 - 1,250,000

NFIP Participation

87%

# of Counties Participating in NFIP

The **National Flood Insurance Program (NFIP)** provides insurance to help reduce the socio-economic impact of floods.

- FEMA

NFIP Participation

- Not Participating Communities
- Participating Communities
- Participating Counties

AGRICULTURAL, RANCHING AND NATURAL AREAS MANAGEMENT

COLLECT DATA

Floodplain Ordinances

Building Standards

Design Standards

Development Standards

Zoning

Land Use

Protection Policies

National Flood Insurance Program Participation

Funding Mechanisms

Programmed O&M

Programmed Inspections

Asset Inventories & Condition Assessments

Entity	Floodplain management regulations	Adopted minimum regulations	NFIP Participant	Higher Standards Adopted	Floodplain Management Practices	Level of enforcement of practices	Existing Stormwater or Drainage Fee
County 1	Yes	Yes	Yes	No	Moderate	Moderate	Yes
City 1	No	No	No	No	Low	Low	No
Special Purpose District	Unknown	No	No	No	None	None	No

Template from TWDB – Exhibit C

Ch. 2 Introduction & Overview

Flood Risk Analysis

CHAPTER 2
Flood Risk Assessment

Task 2 - Purpose

- Flood Risk Mapping

- Flood Exposure Estimation

- Vulnerability Assessment

Task 2A – Existing Conditions Flood Risk Assessment
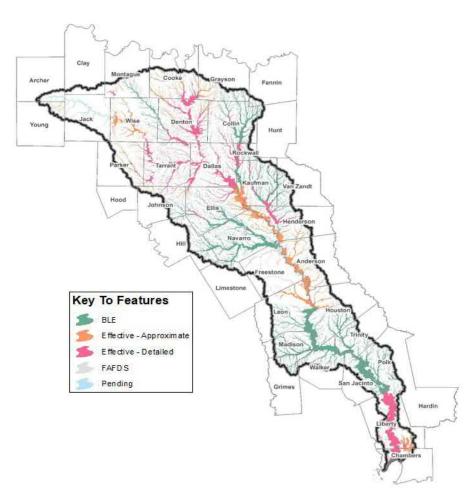
EXISTING FLOOD HAZARD

FLOOD TYPE
- Riverine
- Coastal
- Dams and Levee
- Possible Flood-prone Areas
- Pluvial including Urban flooding

FLOOD EVENT TYPES
- 100-Year
- 500-Year
- Other

DATA SOURCES
- TWDB Flood Quilt
- Community Data
- FATHOM

Key To Features
- BLE
- Effective - Approximate
- Effective - Detailed
- FAFDS
- Pending

Source - TWDB

Task 2A – Existing Conditions Flood Risk Assessment

EXPOSURE

INVENTORY

- Buildings 🏠
- Population 👪
- Critical Facilities 🏥
- Utilities 🗼
- Agriculture 🚜
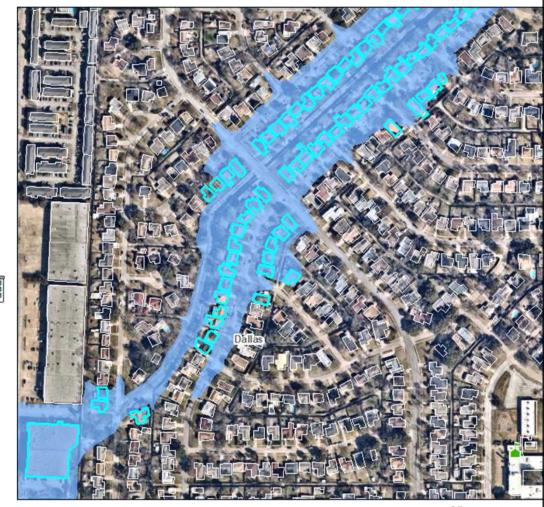
Task 2A – **Existing Conditions Flood Risk Assessment**

VULNERABILITY
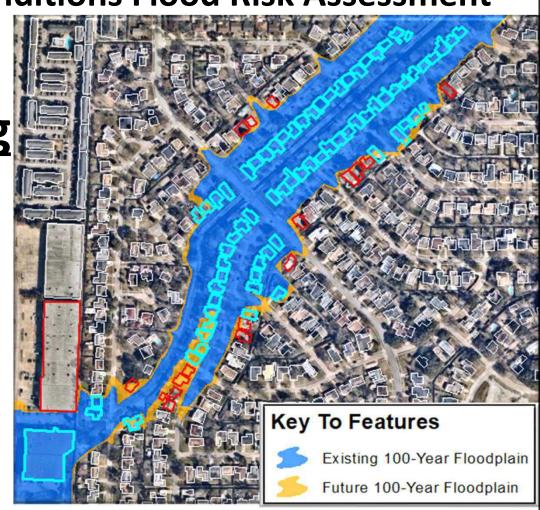
Social Impacts

Task 2B – Future Conditions Flood Risk Assessment

FUTURE FLOOD HAZARD

Future Mapping

- FEMA
- Community Data
- Machine Learning
- Regional Deltas
- TWDB Estimates

Key To Features

- Existing 100-Year Floodplain
- Future 100-Year Floodplain

DATA COLLECTION

Data Collection Website

LANDING PAGE

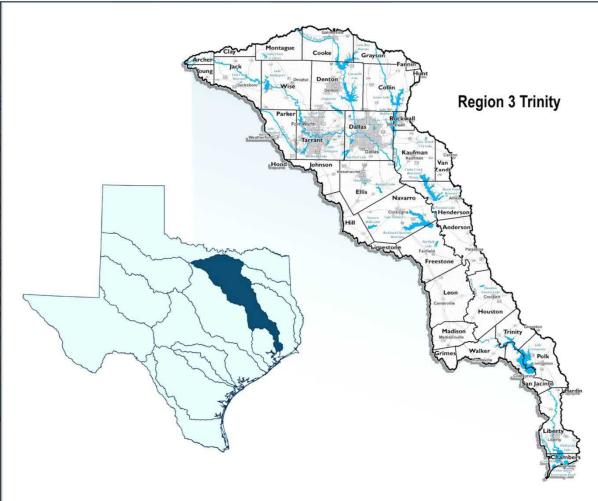## Communit...

Community Stake...
individuals with fl...
and Community of...
regional, and local...

By logging on with...
provided, you can...
knowledge of floo...
of flood risk data. T...
requesting commu...

- Provide infor...
  flood-related...
- Verify collect...
  specific back...
- Respond to ...
  regional floo...
- Verify and pr...
  and web map...

The RFPG appreci...
and provide with t...
to provide respons...

Entity Login

...blic?

...process include general public
...tions including non-profit and
...with an interest in providing
...nning efforts.

...and email address, you can
...ized knowledge of flood prone
...gation is needed. Your contact
...who is providing information in
...tions.

Region 3 Trinity

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Data Collection Website

Trinity.halff.com

Log in
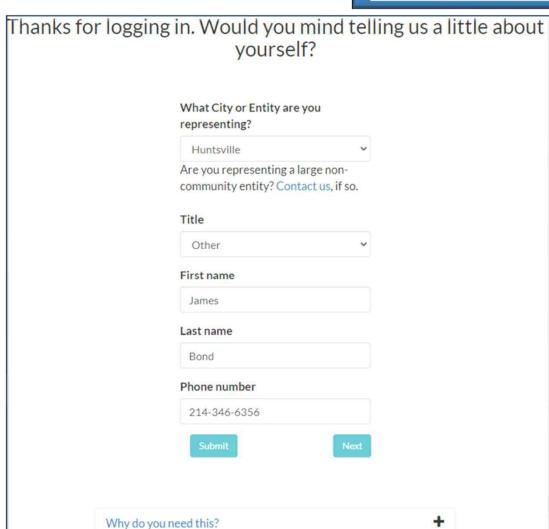
Regional Flood Plan Development

Log in - Trinity Basin

By logging on with your email address and the password provided, you can help provide the RFPGs with localized knowledge of flood planning resources and validate a wide array of flood risk data. Information such as condition and functionality of flood prone infrastructure, mitigation or strategic development plans, proposed flood control projects, areas of key population change or growth, etc. is needed.

Use your email address and the password provided during the webinar to log in.

Email: samoako-atta@halff.com

Password: ••••••••••••••••

Log in

No password?

Please email us and we'll help get things sorted out.

© 2021 - Halff Associates

Issues with this site or just have a question? Email us

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Data Collection Website

Your Info

Overall Progress   80%

- Welcome
- **Your Info**
- Backgrounder
- ▼ Community Questionnaire
  - Floodplain Management/Ordinances
  - Flood History
  - Floodplain Studies/Maps
  - Risk Reduction Alternatives
  - Flood Finance
  - Natural Resources & Condition Changes
  - Hazard Mitigation & Emergency Planning
- ▼ Existing Infrastructure
  - Levees/Dams
  - Storm Drainage Systems
  - Roadways
  - Coastal
  - Critical Infrastructure

Thanks for logging in. Would you mind telling us a little about yourself?

What City or Entity are you representing?

Huntsville

Are you representing a large non-community entity? Contact us, if so.

Title

Other

First name

James

Last name

Bond

Phone number

214-346-6356

Submit   Next

Why do you need this?   +

Data Collection Website

Trinity.halff.com

Backgrounder

Data Collection Website

Community Questionnaire

Welcome

Your Info

Backgrounder

▼ Community Questionnaire

  Floodplain Management/Ordinances

  Flood History

  Floodplain Studies/Maps

  Risk Reduction Alternatives

  Flood Finance

  Natural Resources & Condition Changes

  Hazard Mitigation & Emergency Planning

▼ Existing Infrastructure

  Levees/Dams

  Storm Drainage Systems

  Roadways

  Coastal

  Critical Infrastructure

Community Questionnaire for: Addison

Thank you for your willingness to participate in this online data collection effort as part of the first-ever State Flood Plan for Texas. We invite you to share information to advance the regional plan development. It is not necessary to complete the entire survey when you first sign in. The survey is developed to allow the user to provide input incrementally over time. Feel free to complete one section at a time or you also have the option of assigning a section of the survey to a colleague to assist you with the input. If you need have any trouble, technical issues or wish to coordinate directly with us, email us.
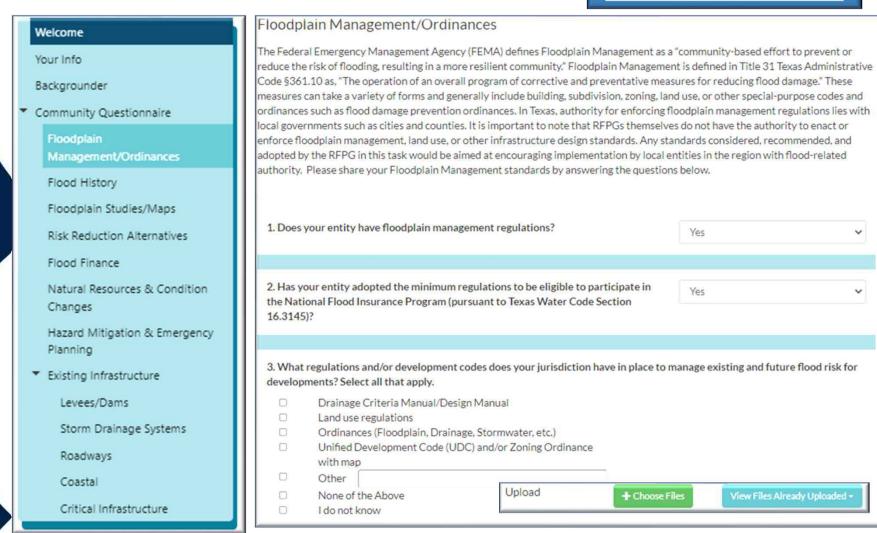
This survey has over 90 questions and could take about 30 minutes, however depending on how much data you upload and add to the interactive maps, it may take more time. As you navigate through this questionnaire, you will find various questions and data requests related to the topics listed in the navigation panel to the left. The navigation panel to the left may also be used to advance to different sections and go back to sections as needed.

The questionnaire is comprised of questions, data upload requests, and interactive maps as described below.

- **Questions:** The types of questions you encounter include selection of a single item from a drop-down list, selection of multiple items using check boxes, or text responses. For the text responses, you are able to enter as many items as appropriate up to 2000 characters.
- **Data Uploads:** Several sections have options to upload files such as regulations, reports, studies, shapefiles, geodatabases, land planning data, etc. In these locations, you may upload more than one file. Please note you will need to press the start button to submit each file in our system.
- **Interactive Maps:** There are nine interactive maps tied to the questionnaire regarding flood history, floodplain studies/maps, risk reduction alternatives, natural resources & condition changes, levees/dams, storm drainage systems, roadways, coastal, and critical infrastructure. Once you click the button to open a map, an interactive web map of the region will open in a separate tab in your browser. Additions and edits are saved automatically, so you are welcome to enter and exit the maps as needed.

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Data Collection Website

Community Questionnaire

Welcome

Your Info

Backgrounder

▼ Community Questionnaire

Floodplain Management/Ordinances

Flood History

Floodplain Studies/Maps

Risk Reduction Alternatives

Flood Finance

Natural Resources & Condition Changes

Hazard Mitigation & Emergency Planning

▼ Existing Infrastructure

Levees/Dams

Storm Drainage Systems

Roadways

Coastal

Critical Infrastructure

Community Questionnaire for: Addison

You may continue to edit and save your edits at the bottom of the page. If needed, use the navigation panel on the left to change categories.

Levees/Dams

As displayed in the map to the right, the region's database was populated with available information as identified below. Where overlap occurred, the data sources were reviewed and amended to only include a single inventory per location.

Available Data Sources:

- Dams: USACE National Inventory of Dams, TSSWCB Local Dams Listing, TCEQ Inventory of Texas Dams, TWDB Major Reservoirs, and NHD Lakes
- Levees: USACE National Levee Database and FEMA Levee Inventory

You may preview the populated datasets using the inset map on this page.

If you would like to add, remove, or edit these features, it would be best to provide input using a web mapping feature by clicking the link below. You are welcome to skip questions, but we greatly appreciate any information you are able to provide.

Find address or place

Addison

Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, USGS, E...   Powered by Esri

○ Update information on an existing Dam or Levee   ◆ Registered Dam
✕ Remove a Dam or Levee   ── Add a new Levee
◆ Add a new Dam   ── Known Levee

Go to map

Next »

Ch. 3 Introduction & Overview

Floodplain Management Practices & Flood Protection Goals

2018 State Flood Assessment

Key Takeaways

National Flood Insurance Program Claims 1976-2018

Claim Location

2018 State Flood Assessment

Key Takeaways

Question: Which of the following is used to define flood risk in your jurisdiction?

Flood Insurance Rate Maps

Locally created floodplain maps

Master drainage plan

Question: Which of the following accurately describes your community's flood risk maps?

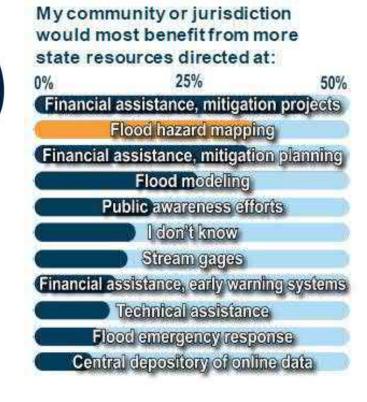| Riverine flooding only. No low-lying areas or streets	Lack studies needed to create better maps	Old, outdated maps	Recently updated our flood risk maps
30%	28%	25%	20%
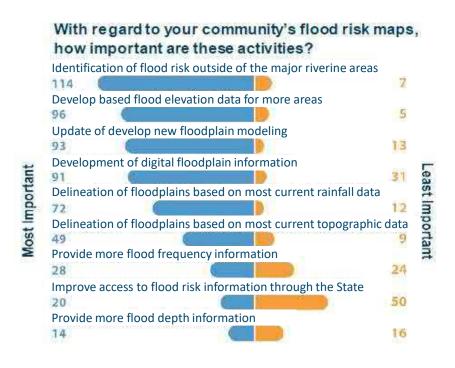
2018 State Flood Assessment

Key Takeaways

My community or jurisdiction would most benefit from more state resources directed at:

0% 25% 50%

- Financial assistance, mitigation projects
- Flood hazard mapping
- Financial assistance, mitigation planning
- Flood modeling
- Public awareness efforts
- I don't know
- Stream gages
- Financial assistance, early warning systems
- Technical assistance
- Flood emergency response
- Central depository of online data

With regard to your community's flood risk maps, how important are these activities?

Most Important — Least Important

Activity	Most Important	Least Important
Identification of flood risk outside of the major riverine areas	114	7
Develop based flood elevation data for more areas	96	5
Update of develop new floodplain modeling	93	13
Development of digital floodplain information	91	31
Delineation of floodplains based on most current rainfall data	72	12
Delineation of floodplains based on most current topographic data	49	9
Provide more flood frequency information	28	24
Improve access to flood risk information through the State	20	50
Provide more flood depth information	14	16

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Standards vs. Goals

Standards

Establish consistent protocols for floodplain management that can be universally applied

Examples:

- Water surface elevation – Streets
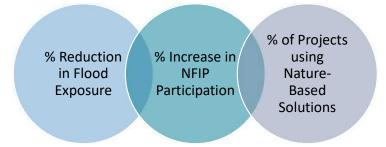- Structural Elevation relative to Floodplain
- Stormwater Peak Flow Capacity

Goals

Set specific timelines and goalposts to implement proven flood mitigation measures, reducing future risk for people and property.

Examples:

- % Reduction in Flood Exposure
- % Increase in NFIP Participation
- % of Projects using Nature-Based Solutions

Must be measurable and have a timeframe!

Standards: Recommend or Adopt?

Recommend means just that – all FMEs, FMSs and FMPs can be considered

Adopt means that if RFPG establishes a standard, then the jurisdiction must meet that standard BEFORE the FME, FMS or FMP can be considered for inclusion in the plan

Timeframe for Floodplain Management Standards

June - July

Collecting Standards in Survey

Summarize Common Themes in Standards

August
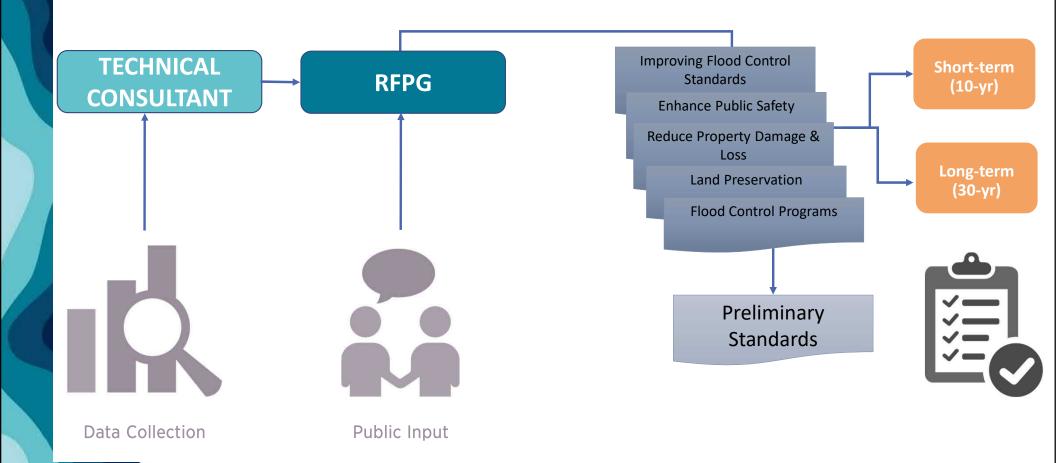
Bring These To RFPG For Discussion

Sept

RFPG - Consider Taking Action on Region-wide Standards

Goal Setting Process


```
TECHNICAL CONSULTANT → RFPG

Data Collection → TECHNICAL CONSULTANT
Public Input → RFPG

RFPG →
  Improving Flood Control Standards
  Enhance Public Safety
  Reduce Property Damage & Loss
  Land Preservation
  Flood Control Programs
  → Short-term (10-yr)
  → Long-term (30-yr)
  → Preliminary Standards
```

TWDB Guidance - The Givens

What does TWDB hope to achieve with this plan?

Protect Property

Improve Flood Risk Info

Protect people

Goals Must Be:

Specific & Achievable

Reduce Residual Risk

Recommended or Required

Short-term (10 years) &/or Long-Term (30 years)

Regionwide Or Subregional

POLL EVERYWHERE

We will be using remote audience engagement tool **Poll Everywhere** during today's meeting. Please participate using one of the following methods:

Please choose one word that describes your top priority for the Regional Flood Planning Effort.

Improving Flood Control Standards

A) Local Floodplain ordinance that meets the NFIP standards

B) Participation in NFIP Program

C) Standards greater than NFIP

D) Regulation to future flood conditions

Enhancing public safety

A) Improving Low Water Crossings

B) Installing Flood warning systems

C) Reducing the number of flood related injuries

D) Reducing the number of flood related deaths

Start the presentation to see live content. For screen share software, share the entire screen. Get help at **pollev.com/app**

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Reducing Property Damage and Loss

A) Avoiding new development in floodprone areas

B) Reducing flood risk to existing structures

C) Reducing flood risk to agricultural and ranching areas

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Land Protection

A) Protection of Natural Areas

B) Reducing flood-related loss of natural and cultural resources

C) Preservation of Floodplains

D) Use of nature based practices to promote flood control

Flood Control Programs

A) Increasing flood hazard data coverage (maps and models)

B) Continuous funding mechanism

C) Asset management plans

From the goal categories discussed, please rank the categories you believe will yield the highest value for this planning effort

A) Improving Flood Control Standards

B) Enhancing Public Safety

C) Reducing Property Damage & Loss

D) Flood Control Programs

E) Land Protection

Please share some of your thoughts and ideas!

Start the presentation to see live content. For screen share software, share the entire screen. Get help at **pollev.com/app**

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What will we do with your input?

At our August meeting, we will present you with draft goals for your approval that incorporate the feedback today, the results of our research and the TWDB's guidance for measurable plan goals

Example Goals				
Goal	Term of Goal	Target Year	Applicable to	Overarching Goal
50% of the region's population is part of a municipality that has a dedicated funding mechanism for drainage projects.	Short Term	2033	Entire Region	Protect against the loss of life and property
Consider and incorporate nature-based practices in flood risk reduction projects.	Short Term	2033	Entire Region	Protect against the loss of life and property
Enroll 50% of non-participating communities into the National Flood Insurance Program.	Short Term	2033	Entire Region	Protect against the loss of life and property

Public Outreach Update

Public Outreach: Completed/Underway

- Key stakeholders list
- "Coming soon" survey preview e-postcard
- "What to prepare" 2nd survey preview e-postcard
- Handouts for RFPG members' use in stakeholder outreach
- Postcard to survey participants
- Web domain name (www.trinityrfpg.org) and info@trinityrfpg.org email address
- Approved website sitemap and wireframe
- First phase of web programming; site launch prep

Public Outreach: Next Steps

- Website launch – initial phase, then full rollout (late June)
- Collection of "interested parties" through website "Subscribe" form (late June and beyond)
- Social media presence, focus on Twitter (July and beyond)
- PowerPoint slide deck for RFPG members' use (July)
- Periodic e-newsletter to inform and engage (Aug./Sept. launch, continuing throughout planning period)
- Editorial meetings with key media regionwide (Summer/Fall)

Public Outreach: Ongoing Efforts

- Branded e-alerts to stakeholders, media, interested parties
- Timely replies to inquiries submitted through website, email, mail
- Documentation of inbound queries, comments and responses
- Other printed/digital collateral materials as needed for public outreach (one-pagers, etc.)
- Updates to website FAQs, glossary, document library, resource links
- Public meetings: advance postings, e-alerts, logistics facilitation and public comment intake
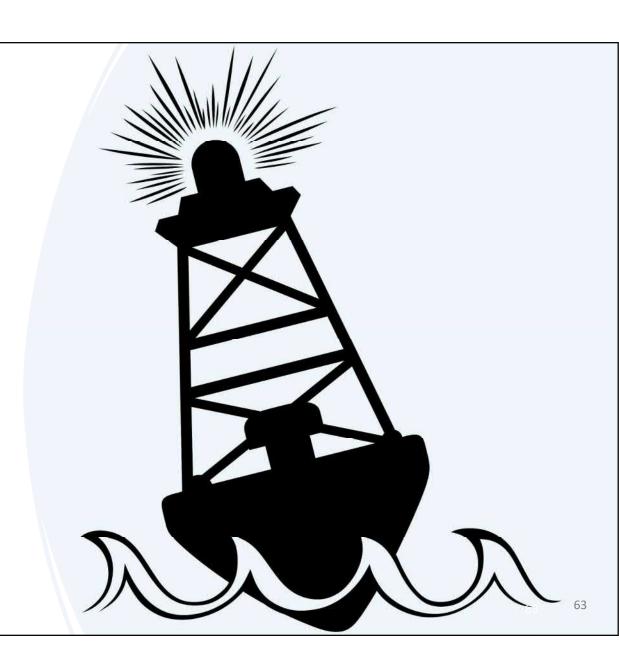
So public input is...

- Received
- Duly considered
- Incorporated appropriately in plan

Ch. 8 Introduction & Overview

Administration, Regulatory and Legislative Recommendations

Approach

- Present overview of TWDB task
- Collect ideas as we go
- Consider participant input
- Select recommendations

Task Overview

"Other"

Example Legislative Ideas

- Expand Local Government Code, Chapter 552 to allow counties to establish and collect drainage utility fees

- Allow waivers of plan amendments for small FMEs, FMSs or FMPs (based on Region C example)

Example Regulatory / Administrative Ideas

- Establish common criteria across the region/subregion
- Provide funding to develop floodplain maps
- Adjust the FIF scoring criteria to _____

Examples of Other Ideas

- Educate county leaders regarding authority to establish and enforce higher standards

- Provide for alternative funding sources

- Provide education to State policy makers related to _____

Please share some of your thoughts and ideas!

Start the presentation to see live content. For screen share software, share the entire screen. Get help at **pollev.com/app**

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WHAT NEXT?

LOOK-AHEAD

August
- Pre-Planning Meeting #2
- Preliminary survey & web map results
- Determine floodplain management and mitigation goals

September
- Map & Chapters 1, 2 & 3 approvals
- Process to identify FMEs, FMSs & FMPs (Chapter 4)

October
- No meeting

November
- Chapter 4 & Tech Memo approvals

December
- No meeting (unless needed to approve Tech Memo)

10. Updates from adjoining coastal regions

11. Updates from Planning Group Sponsor

12. Receive registered general public comments

Limit 3 minutes per person

13. Consider meeting date for next meeting

14. Consider agenda items for next meeting

15. Adjourn