

Flood Management Practices and Flood Mitigation Goals

Region 13 Subcommittee Meeting – July 30, 2025

Attendees

| Name | Organization | Email |
|----------------------------|--------------------------|----------------------------|
| John Benson | City of Beeville | john.benson@beevilletx.org |
| Pat Brawner | Medina County | pat.brawner@medinatx.gov |
| Kat Comeaux | Aransas County | kcomeaux@aransascounty.org |
| Rutilio "Rudy" Mora | City of Kingsville | rrodriguez@waterfx.org |
| Taylor Reilly | River Guide, Uvalde/Frio | taylor@reillytravels.com |
| Rogelio Rodriguez | Water Finance Exchange | rrodriguez@waterfx.org |
| Andy Rooke | Region 13 RFPG | andy@larosa-ranch.com |
| Britni Van Curan | Atascosa County | acrd@co.atascosa.tx.us |
| Gabriel Villasenor | Maverick County | planning@co.maverick.tx.us |
| Travis Pruski | Nueces River Authority | tpruski@nueces-ra.org |
| Kyle Jackson | HDR | kyle.jackson@hdrinc.com |
| Bryan Martin | HDR | bryan.martin@hdrinc.com |
| Kristi Shaw | HDR | kristi.shaw@hdrinc.com |
| Henry Ulrich | HDR | henry.ulrich@hdrinc.com |
| Ludivine Varga | HDR | ludivine.varga@hdrinc.com |
| Adam Harvey | Freese and Nichols | adam.harvey@freese.com |
| Sarah West | Freese and Nichols | Sarah.west@freese.com |

Subcommittee Members (Not in Attendance)

Ray Kallio- Frio County EMC
Richard Lara- City of Uvalde
Sandra Luna- City of Cotulla
Kerry McCulloch- City of Poteet
Juan Pimentel- Nueces County Public Works
Javier Ramirez- Nueces River Authority
Jennifer Reyna- Bee County
Priscilla Vargas- City of Premont
Dale Wells- City of Ingleside

Overview

- HDR sent out two packets of information
 - Floodplain Management Practices and Flood Protection Goal write-up from the 2023 Region 13 Plan (July 11, 2025)
 - TWDB guidance/approach and Summary Results from 2028 Nueces RFP Roadshows and Surveys (July 29, 2025)

- The Region 13 (Nueces) Regional Flood Planning Group (RFPG) is looking for forward-looking floodplain management practices and land use recommendations:
- Should Region 13 **Recommend** or **Adopt** flood management standards and practices? (i.e., increases to BFE requirements)
 - **Recommend:** Standards will be considered regional best practices, but their adoption will not be required to participate in the Plan or to receive funding
 - **Adopt:** Adoption of standards would be required for local communities who wish to participate in the Plan and be eligible for funding
 - This question received 25 responses during the Region 13 Flood Planning Survey, see *Fig. 1*
- Region 13 is divided into four subregions:
 - Upper Basin (Headwaters)
 - Upper-Mid Basin
 - Lower-Mid Basin
 - Lower Basin (Coastal)
- The Regional Flood Planning Group is tasked with preparing guidance, but does not have enforcement power
 - Ordinance and enforcement will be handled at the local level
- How will subcommittee and RFPG recommendations be put into action? How do the Region 13- floodplain management practices apply locally?
- How do we talk to communities?
 - Need to develop a strategy to convey the need for enforcement and provide system for communities to request support or further recommendations
 - Coordinate in workgroup sessions with communities to come together to solve flooding issues

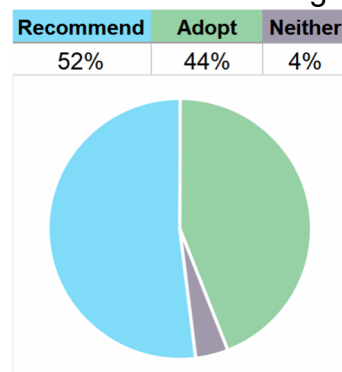


FIGURE 1: RECOMMEND VS ADOPT NEW STANDARDS

Floodplain Management Practices

Need to Prioritize High-Risk Areas

- We have been seeing trends toward less frequent precipitation, but a greater amount of rainfall in a given rain event.
 - Funding should go to those areas approaching larger or more critical flood issues
 - Can collectives of smaller communities come together to collaborate on critical issues that affect them all?
 - A single community can't solve the problem for a whole region
 - *"A community upstream may fix their flooding issue, but a community downstream still floods and needs support"*

- What paths or channels are in place to enable the region or individual communities to turn to the State to secure regional funding?
- Do any communities include design standards/criteria for 500-year flood events? The Region 13 counties that include 2+ ft freeboard standards, include: Refugio, San Patricio, Atascosa, Uvalde, Bandera, and Wilson County.
- The Nueces River Authority is working on a series of studies now that will assemble systems and solutions for the Nueces Basin (Region 13) at large including identifying and prioritizing action on high hazard low water crossings and dams, more accurate floodplain mapping and modeling, and developing framework for early flood warning systems.
 - In addition to providing more detailed mapping and data, these studies will help to identify which tools are available for communities to use for flood planning and mitigation

Combating Policy Barriers

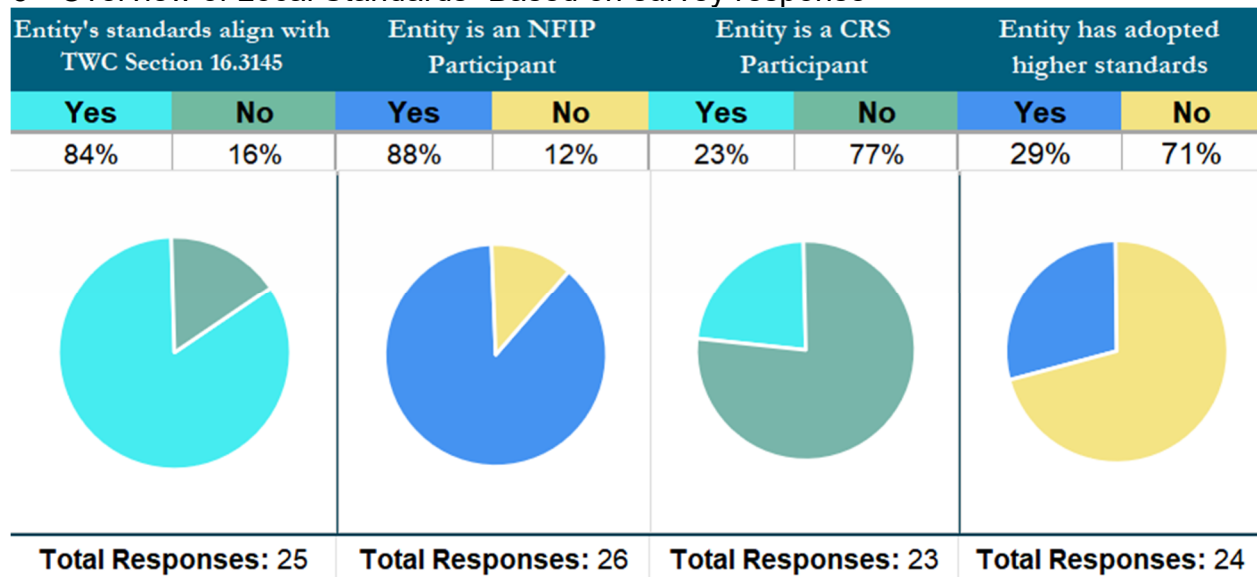
- The approach to flood planning is difficult due to the inability to discuss climate change as a factor and potential risk in the future (Kat Comeaux- Aransas County).
- Most of the emergency response funding available is allocated for post-disaster response, rather than pre-disaster mitigation

*To join the discussion on these issues and others like them, please consider joining the Region 13 **subcommittee for legislative recommendations***

Enforcement of Higher Standards

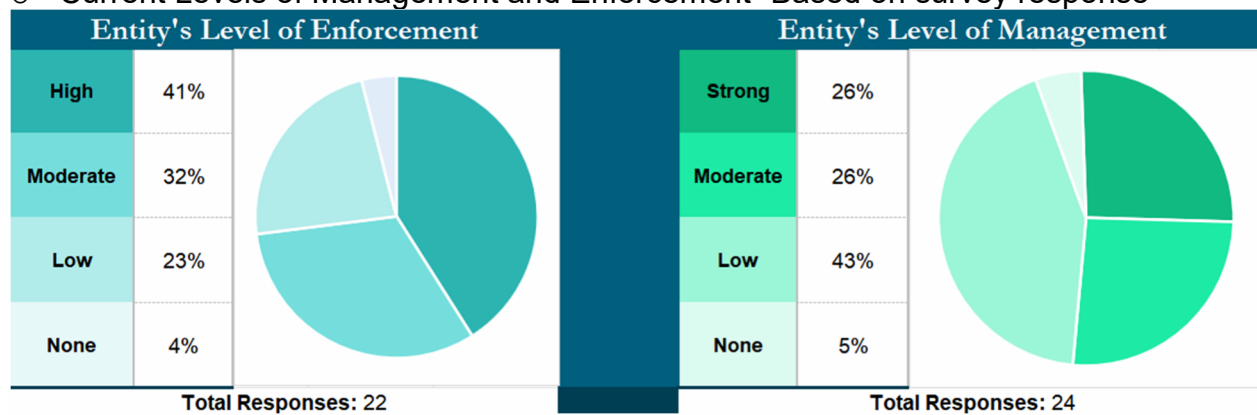
- While there are entities that enforce higher standards like 2-foot freeboard (2ft. above base flood elevation) and 500-year (0.2% flood risk) floodplains, enforcement of these standards does pose a challenge to some communities.
 - Will such standards affect the ability to sell property within a floodplain?
 - Are drainage easements an option? (Rudy Mora- Kingsville)

○ Overview of Local Standards- Based on survey response



Barriers to CRS participation- Financial and resources-limitations locally.

○ Current Levels of Management and Enforcement- Based on survey response



○ Current 2023 Plan includes recommendations of 1-foot above base flood elevation (BFE). Should the Subcommittee recommend higher level of standards for the 2028 Plan?

○ Responses during discussion:

- **Britni Van Curan:** "Atascosa County is 2 feet above BFE and we don't want to go down to 1 foot, if that's what's being proposed"
- **Andy Rooke:** Due to the recent flood events, community members are already thinking about flood risk mitigation. This may be a good time to act if Region 13 wants to encourage a higher standard. People will be less interested in more stringent regulations during a period of drought than now, following a major loss of life and property due to flooding

- **John Benson:** When communicating with communities, remember that higher standards (such as freeboard) result in greater reductions to flood insurance rates
- **Kat Comeaux:** For many counties, building criteria and floor elevations in new construction are often first caught during on-site sewage inspection.
 - Because many developers and builders know FEMA regulations (1-foot above BFE) and may be unaware of greater, local standards
 - Between the limited developer knowledge and how late infractions tend to get noticed, it can be difficult or impossible to effectively enforce standards at a county level.
- **Pat Brawner** When the county talks to the people in the community about elevating properties they get resistance. The community thinks that all the county wants us to do is spend more money. When they talk to them about loss of life, it changes their minds. But still, it's hard for counties to enforce. Need to work with the community.
- **Britni Van Curan:** "We have subdivisions, 911 addressing, and septic all in my department, so we catch this in all manner of ways, but my team is all trained to check the floodplain as part of every call we get so that we can have these conversations as early as possible."
- **Rogelio Rodriguez:** We need to get reality funding, meaning getting the state to acknowledge what's really happening in communities with flooding and regional projects and getting the state programs to fund them.
- **Taylor Reilly:** Lives in the headwaters of the Frio. A lot of development. Interim smaller scale alert programs should be incorporated in tourist hotspots. A public outreach campaign for the regional flood plans is needed. He is part of the education industry and river guide.

Recommendations

- Because of the high rate of tourism (e.g., RV, camping, etc.), there are some areas in the region that inherently pose a higher flooding risk
 - Tourists are often less attuned to weather and flood-prone areas than the locals and may be slower to respond
 - An early alert system connected to community alarms would serve as a major benefit to these communities
 - Many communities are held back by waiting for the State to implement state-wide solutions
 - An early alert system is scalable and modular – could be added to communities based on need and availability of funds
- A key aspect of any early warning system is a robust emergency action plan with defined trigger levels

- Identified thresholds or trigger levels with clear action items at each level will ensure that warning systems and other emergency response take effect at an appropriate and beneficial time.
- It may be beneficial to recommend that communities have flash flood-specific action plans
 - Most emergency managers have action plans that include all natural disasters (tornados, flooding, hurricanes, etc), but it may be helpful to issue a reminder to update or develop location specific alerts at key places related to flooding
 - Key places include areas with critical infrastructure or that may experience more rapid or severe effects during flood events
 - This is something that should be administrated at the local level, and should be communicated up and out to both larger governing bodies and nearby communities. For areas with lots of tourism, expand conversations on regional level.
- Solutions need to be identified and implemented at the local level, by the people that know the area and best understand its needs and behaviors.
 - There may need to be a widespread education effort to make warnings effective and encourage efforts toward mitigation

Flood Mitigation Goals

General Discussion

- Should the Region 13 Flood Planning Group prioritize certain goals, or are all of the goals equally important?
- Any goals that are missing? No response by subcommittee.
- Goals need to be trackable and attainable
- RFPG may want to consider prioritizing goals

During the four sub-regional road shows in Fall 2024, HDR received input from stakeholders on the goals. The highest priority goals included Goal 1- Improving Safety at Low Water Crossings; Goal 3- Improving regional coordination and implementation of flood warning systems; and Goal 4: Performing flood mapping evaluations and update floodplain maps and hazard data.

Roadshow Input

| Goal | # of tallies |
|------|--------------|
| 1 | 8 |
| 2 | 1 |
| 3 | 5 |
| 4 | 8 |
| 5 | 1 |
| 6 | 1 |
| 7 | 0 |
| 8 | 1 |
| 9 | 3 |
| 10 | 4 |

Survey Data Received

| | | Priority Ranking (Percentage) | | | | | | | | | | Floodplanning Goals: Ranked Results | |
|---------|----|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|----------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | |
| Goal ID | 1 | 46% | 15% | 12% | 8% | 0% | 8% | 4% | 4% | 4% | 0% | 1 | NBID: 1 |
| | 2 | 12% | 15% | 19% | 27% | 15% | 4% | 4% | 0% | 4% | 0% | 2 | NBID: 3 |
| | 3 | 15% | 15% | 12% | 19% | 19% | 8% | 8% | 4% | 0% | 0% | 3 | NBID: 4 |
| | 4 | 15% | 15% | 23% | 0% | 4% | 0% | 8% | 0% | 27% | 8% | 4 | NBID: 9 |
| | 5 | 0% | 8% | 12% | 15% | 4% | 23% | 15% | 12% | 12% | 0% | 5 | NBID: 6 |
| | 6 | 0% | 15% | 12% | 4% | 12% | 8% | 8% | 23% | 4% | 15% | 6 | NBID: 8 |
| | 7 | 0% | 0% | 8% | 4% | 23% | 8% | 8% | 27% | 19% | 4% | 7 | NBID: 5 |
| | 8 | 4% | 8% | 0% | 12% | 12% | 8% | 8% | 15% | 8% | 27% | 8 | NBID: 2 |
| | 9 | 4% | 4% | 0% | 4% | 8% | 15% | 23% | 12% | 23% | 8% | 9 | NBID: 7 |
| | 10 | 4% | 4% | 8% | 4% | 4% | 19% | 15% | 4% | 0% | 38% | 10 | NBID: 10 |

NBID 3

Improve regional coordination and implement flood warning systems

- Consider modifying/enhancing goal based on the recent flood events in Kerr County
 - In the short term – prioritize efforts and implementation toward those areas where flooding poses the highest risk to life
 - First priority locations should be those which are most rapidly at risk, such as places prone to sudden flash flooding during rain events, followed by those locations that experience flash flooding hours or days later.
 - Factors like tourism and travel (which increase at-risk population) and likelihood of flash flooding affect this risk level
- Emergency Action Plans specific to flooding for high-risk areas. Scalable options and early alert systems connected to alarms.
- Message-based alerts (e.g., SMS, push notifications) do not reach individuals who have not opted into alerts, especially non-locals
 - Updates for local trails, beaches, etc. often use this sort of alert system
- The National Incident Management System (NIMS) is scalable and may be a useful tool for incorporating a multi-jurisdictional disaster response.

NBID 4

Perform flood mapping evaluations and update floodplain maps and flood hazard data

- According to the Texas Water Development Board, there is new technology coming soon which will support a greater level of detail in mapping related to existing structures
- Not all floodplains are equal. Need to identify high risk flood zones.
 - Where one 1% chance flood risk (100-year) floodplain may experience sudden, major water rise during a flood event (upper basin), another may flood more slowly, even to the same depth (mid-lower basin)
- How can counties with differing needs collaborate to develop and implement similar solutions for regionally unique challenges
 - Coastal communities – storm surges
 - River communities – flash flooding

NBID 1

Improve Safety at Low Water Crossings through Structural or Warning Systems

- The definition of low water crossing should be expanded to explicitly include pedestrian and bike bridges in addition to roadways
 - The locations and statistics for these crossings may not be readily available in many jurisdictions
 - Following Hurricane Harvey, there was an effort in the coastal subregion to include walk/ hike/ bike paths in alert systems

Final Notes

- To share additional thoughts or recommendations with the subcommittee before the Region 13 committee meeting, please send an email to the group

There will not be another meeting of this subcommittee before the August 25th Region 13 committee meeting