



# Region 11: Guadalupe Regional Flood Planning Group Meeting

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Tuesday, May 10, 2022  
2:00pm

# Agenda Item 1

## Call to Order

1. Attendance
2. Individuals attending in-person, please sign-in

# Agenda Item 2

Welcome

## Agenda Item 3

### Approval of Meeting Minutes

1. Approval of meeting minutes from  
March 30, 2022 Region 11 RFPG  
Meeting

**Meeting Minutes**  
**Region 11 Guadalupe Regional Flood Planning Group Meeting**  
**March 30, 2022 at 2:00 PM**  
**Guadalupe-Blanco River Authority River Annex (905 Nolan Street, Seguin, TX 78155)**

**Roll Call:**

<u>Voting Member</u>	<u>Interest Category</u>	<u>Present (x) / Absent ( ) / Alternate Present (*)</u>
Doug Miller Melissa Reynolds*	<i>Agricultural</i>	X
John Johnston	<i>Counties</i>	
Lon Shell	<i>Counties</i>	X
Bobby Christmas	<i>Electric Generating Utilities</i>	X
Annalisa Peace Vanessa Puig-Williams*	<i>Environmental</i>	X
Vacant	<i>Flood districts</i>	
Kevin Stone	<i>Industries</i>	
Joseph Pantalion John Espinoza**	<i>Municipalities</i>	X
Ken Gill	<i>Municipalities</i>	X
Dr. Kimberly Meitzen	<i>Public</i>	X
R. Brian Perkins Charlie Hickman*	<i>River Authorities</i>	X
Ray Buck Jonathan Letz*	<i>River Authorities</i>	X
Gian Villarreal Tami Norton*	<i>Small Business</i>	X
Ronald (Ron) Fieseler	<i>Water Districts</i>	X
Steven Fonville	<i>Water Utilities</i>	X

<u>Non-voting Member</u>	<u>Agency</u>	<u>Present(x)/Absent( )/ Alternate Present (*)</u>
Sue Reilly Beth Bendik*	Texas Parks and Wildlife Department	
Jim Guin Natalie Johnson*	Texas Division of Emergency Management	
Jami McCool Kristin Lambrecht*	Texas Department of Agriculture	X
Allen Nash	Texas State Soil and Water Conservation Board	X
Kris Robles Teresa Williams*	General Land Office	X
Morgan White Ryke Moore*	Texas Water Development Board (TWDB)	X
Joel Klumpp	Texas Commission on Environmental Quality	
Don Durden	Public	X
Suzanne Scott	Region 12 Liaison	
Patrick Brzozowski	Region 10 Liaison	

Scott Hartl*		
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**Quorum:**

Quorum: **Yes**

Number of voting members or alternates representing voting members present: **12**

Number required for quorum per current voting positions of 15: **8**

**Other Meeting Attendees:**

Lauren Willis, GBRA (Facilitator)

Ram Mendoza, GBRA (IT)

Jay Scanlon, Freese & Nichols, Inc.

Adam Conner, Freese & Nichols, Inc.

Vanessa Escobar, Blanton & Associates

Ben Eldridge, Cibolo Center for Conservation

Tom Hegemier, Doucet

Daniel Harris, Scheibe Consulting

Lisa McCracken Mairs, USACE

Troy Dorman, Halff

Jennifer Urban, Dewitt County Drainage District

Bill Barker, Great Springs Project

Ray Don Tilley, WVWA/Tilley Interests

John Wilson

Karen Brennan

*All meeting materials are available for the public at: <http://www.quadalupeRFPG.org>*

**AGENDA ITEM NO. 1: Call to Order**

Chairman Doug Miller called the meeting to order at 2:02 PM.

**AGENDA ITEM NO. 2: Welcome**

Chairman Miller welcomed members to the meeting.

**AGENDA ITEM NO. 3: Approval of Minutes from the February 9, 2022 Region 11 RFPG Meeting**

Chairman Miller opened discussion on approving the minutes from the February 9, 2022 Region 11 RFPG Meeting.

A motion was made by Ron Fieseler to approve the February 9, 2022 Region 11 RFPG Meeting minutes. Bobby Christmas seconded the motion. The vote passed by a vote of 12 Ayes, 0 Nays.

**AGENDA ITEM NO. 4: Presentation: Region 12 RFPG – Nature Based Solutions and Floodplain Management Toolbox, Dr. Troy Dorman, PhD, PE, CFM**

Dr. Troy Dorman with Halff & Associates presented on Nature Based Solutions and Floodplain Management Toolbox for the San Antonio River Basin RFPG.

**AGENDA ITEM NO. 5: Region 11 Guadalupe RFPG Chair Updates**

Lauren Willis called roll of the planning group members to record attendance and a quorum was established. Chairman Miller provided updates from the Chairs conference call hosted by TWDB on March 2, 2022.

**AGENDA ITEM NO. 6: Texas Water Development Board (TWDB) Updates**

Morgan White reviewed the following items:

- Technical Memo #2 was considered administratively complete. TWDB are reviewing both Technical Memo #1 and #2 to provide more depth informal feedback by late Spring (April or May) to incorporate in the draft submission.
- The Contract Amendment No.1 has been executed between TWDB and GBRA. Amendment No. 1 will now need to be executed between GBRA and FNI.
- The draft regional flood plan is due this August to TWDB. The TWDB sent out a newsletter in March with future requirements for public comments to the draft plan.
- A media toolkit was put together to assist the regional flood planning groups
- Reviewed requirements for voting on FME, FMS, FMP (FMXs)

It was suggested by Brian Perkins that the TWDB post each regions Technical Memo's on their website.

#### **AGENDA ITEM NO. 7: Guadalupe Region 11 RFPG Sponsor Guadalupe-Blanco River Authority (GBRA) Updates**

Lauren Willis reviewed the following items:

- Draft Amendment No. 1 is being routed through FNI
- Technical Memo #2 was considered administratively complete on March 22, 2022
- Reviewed updates to the [guadalupeRFPG.org](http://guadalupeRFPG.org) website and social media. The Technical Memo's and Draft Chapters have been added to the website under the tab 'Documents for Public View'

#### **AGENDA ITEM NO. 8: Update from Region 10 (Lower Colorado-Lavaca) and Region 12 (San Antonio) Liaisons**

Ron Fieseler updated that Region 10 is on the same schedule as Region 11 and are having hybrid meetings. Annalisa updated that Region 12 had a meeting presentation from David Skuodas with the Mile High Flood District and recommended this to the group.

#### **AGENDA ITEM NO. 9: Consider Executive Committee's recommendation, discussion and consider taking action to fill the Flood Districts interest category position.**

Lauren Willis reviewed the two applications received from Doug Sethness and Ed Dobbs.

Doug Miller opened discussion of nominating Doug Sethness for the flood districts interest category. A motion was made by Brian Perkins to nominate Doug Sethness to fill the open position in the Flood Districts interest category group. Kimberly Meitzen seconded the motion. The vote passed by a vote of 12 Ayes, 0 Nays.

#### **AGENDA ITEM NO. 10: Discussion and potential action regarding Region 11 RFPG Technical Consultants work and schedule.**

Jay Scanlon overviewed the agenda and provided items that are being tracked by FNI within the region. Vanessa Escobar, Blanton & Associates updated the RFPG on public participation & outreach and reviewed the summary of data/information received to date by the technical consultants. It was mentioned that Ray Buck with UGRA submitted a letter to request an evaluation of water and sediment

control facilities as a flood mitigation strategy, a copy of this letter will be provided in the meeting materials for next month. Daniel Harris, Scheibe Consulting provided a high-level overview of Chapter 1. A discussion occurred about the karst features map. Adam Conner, FNI reviewed Task 4 – Assessment and identification of Needs/FM actions, Task 7 – Flood Response Information and Activities and Task 9 – Flood Infrastructure Financing Analysis. Jay Scanlon, FNI reviewed Task 5 – Recommended Flood Mitigation Actions and the format that these will be presented to the RFPG in the future, Task 8 – Administrative, Regulatory, Legislative Recommendations and reviewed the Region 11 dashboard.

**AGENDA ITEM NO.11: Consider date and agenda items for next meeting**

A doodle poll will be sent out to the RFPG members to get a date in May on the calendar along with an additional meeting in June or July. The next meeting will be held in-person.

**AGENDA ITEM NO. 12: Public General comments (Public comments limited to 3 minutes per speaker)**

Doug Miller provided instructions for public comments. One public comment was received.

1. Mr. Ben Eldredge with the Cibolo Center for Conservation spoke about the importance of natural infrastructure, the riparian areas acting as an effective sponge. He would like the RFPG members to consider the value of natural infrastructure with regards to future recommendations being made.

**AGENDA ITEM NO. 13: Adjourn**

Brian Perkins made a motion to adjourn. The motion was seconded by Bobby Christmas. The motion passed by unanimous consent.

The meeting adjourned at 4:29 PM by Doug Miller.

*Approved by the Region 11 Guadalupe RFPG at a meeting held on May, XX, 2022.*

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Brian Perkins, SECRETARY

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Doug Miller, CHAIR

Region 11 Guadalupe RFPG Chair Updates

## Agenda Item 4

Texas Water Development Board Updates

## Agenda Item 5

# Agenda Item 6

Guadalupe Region 11 RFPG Sponsor – GBRA  
Updates

# Agenda Item 7

Discussion and potential action regarding administrative expenses to be submitted to the Texas Water Development Board for reimbursement

# Agenda Item 7

## Administrative Costs from Dec. 1, 2021 – Feb. 28, 2022

GBRA Salaries & Fringe	\$ 1,593.62
TOTAL	\$ 1,593.62

Approved Budget	Project Cost This Report	Cumulative Project Cost	Balance
\$37,866	\$1,593.62	\$9,540.53	\$28,325.47

# Agenda Item 8

Discussion and potential action regarding Region 11 RFPG Technical Consultants work and schedule.

A. Discussion and potential action approving Chapter 1 of the Guadalupe Regional Flood Plan

## Guadalupe Regional Flood Planning Group (RFPG) - Public Comment Tracking Matrix

For RFPG Public Meeting May 10, 2022

Comments received March 23, 2022 – May 2, 2022

Comments Received Via [comments@guadalupefpg.org](mailto:comments@guadalupefpg.org) or via [lwillis@gbra.org](mailto:lwillis@gbra.org)

Date Comment Received	Name/Affiliation of Commenter	Comment/Question	Respondent and Response Date
4/1/22	Karen Brennan Private Citizen	<p><b>From:</b> <a href="mailto:kbrennan@hhep.com">kbrennan@hhep.com</a>  <b>Sent:</b> Friday, April 1, 2022 2:38 PM  <b>To:</b> <a href="mailto:comments@guadalupefpg.org">comments@guadalupefpg.org</a></p> <p>Comment: City of New Braunfels - Notice of Public Hearing 740 &amp; 750 Rusk. SUP22-073 requested rezoning from R2 to SUP to allow 440 plus RV park and event center on Guadalupe waterfront approximately 50% is floodway and 50% is 100 year flood zone. Please join us in opposition to this SUP. Public Hearing before Planning Commission Tuesday April 5, 2022 @ 6 pm. This development would be in district 5 Jason Hurta, phone - (830) 221-4659 then press option 4 Email - <a href="mailto:jhurta@nbtexas.org">jhurta@nbtexas.org</a></p>	Respondent: Lauren Response Date: 4/1/2022
4/1/22 to 4/18/22	Voting Members, Non-Voting Members and Public	<p>The following individuals provided written comments to Draft Chapter 1:</p> <p><u>Voting Members</u></p> <ul style="list-style-type: none"> <li>• 4/17/22 Gian Villarreal – Seagull PME</li> <li>• 4/15/22 Brian Perkins – Guadalupe-Blanco River Authority</li> <li>• 4/14/22 Raymond Buck/ Tara Bushnoe – Upper Guadalupe River Authority</li> <li>• 4/14/22 Joe Pantalion/John Espinoza – City of San Marcos</li> <li>• 4/14/22 Steven Fonville – Martindale Water Supply Corporation</li> </ul> <p><u>Non-Voting Member</u></p> <ul style="list-style-type: none"> <li>• 4/15 Sue Reilly – Texas Parks and Wildlife Department</li> </ul> <p><u>Public</u></p> <ul style="list-style-type: none"> <li>• None</li> </ul>	Respondent: FNI Response Dates: 4/1/22 to 4/18/22



March 24, 2022

*Guadalupe Basin  
Natural  
Resources Center*

125 Lehmann Drive  
Ste. 100

Kerrville, Texas  
78028-5908

(830) 896-5445  
Fax (830) 257-2621

Doug Miller, Chair  
Region 11 Guadalupe Regional Flood Planning Group  
933 E. Court St.  
Seguin, TX 78155

Re: Request for evaluation of water and sediment control facilities as flood mitigation strategy

Dear Chairman Miller:

The Upper Guadalupe River Authority (UGRA) respectfully requests that the Region 11 Guadalupe Regional Flood Planning Group (GRFPG) consultant evaluate the cost effectiveness of water and sediment control facilities as a community-led action to mitigate flood risk. UGRA understands that the GRFPG has a unique opportunity during this first planning cycle to select studies it thinks have the most potential to reducing flood risk in the basin. These flood management evaluations (FME) would be further developed by the GRFPG's consultant under a soon to be executed contract amendment. An initial step is to ensure the concept of future water and sediment control facilities qualifies under Texas Water Development Board guidelines as an FME. To assist with evaluation, UGRA can provide the GRFPG consultant with summary of our experience with the installation of these facilities and our data collected to-date. The GRFPG will soon be considering which FMEs to further develop, and UGRA is requesting an evaluation of water and sediment to be included in that process.

UGRA's water and sediment control facilities consist of dams designed to safely pass a 100-year flood event and ponding areas to temporarily retain the captured runoff. These facilities are located on dry draws that are in the immediate watershed of the main tributaries to the Guadalupe River in western Kerr County. During rain events, they collect runoff from the watershed and slow down the initial flood pulse to prevent a surge of sediment and water from entering the tributary. This allows for not only the mitigation of flood flow, but since the ponding areas are not lined, they will slowly drain to enhance river flow over a longer period of time. By capturing the initial flood pulse, the facilities can also prevent erosion and reduce sedimentation of the river.

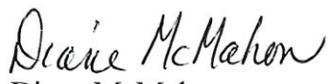
UGRA's first water and sediment control facility was completed in November 2012 on an unnamed tributary of the North Fork Guadalupe River. Since that time, UGRA has constructed eight additional structures throughout western Kerr County. Eight of the structures are equipped with rainfall and water level sensors that transmit data on 6-hour intervals with the option to increase the transmission frequency during rain events.

UGRA

In addition to water and sediment control facilities completed by UGRA, we would also like to acknowledge that several Kerr County private landowners have constructed similar structures as a land management strategy to control runoff and reduce sediment loads into Kerr County waterways.

UGRA believes our success with this flood mitigation strategy can potentially be applied basin-wide. To that end, UGRA offers to share its data and experience and requests that this flood mitigation strategy be considered for further evaluation and possible inclusion in the GRFPG regional plan.

Sincerely,

  
Diane McMahon  
President

DM/rlb

cc: UGRA Board of Directors  
Jay Scanlon, GRFPG Project Manager  
Adam Conner, GRFPG Assistant Project Manager

**Region 11 RFPG Comment Matrix**

Document: Draft Chapter 1 (August 2022)

Page Number	Line Number	Reviewer Name	Reviewer Comment	Response
1&2	N/A	Perkins	Check page numbers in Tables & Figures. For example, this says Figure 1.19 is on page 25, but it's on page 29	Revised
3	73	Perkins	The first assessment that TWDB did: wasn't that a result of legislative action? If so, what session/bill number was it? And in what year did TWDB finalize the assessment?	"As the state grappled with how to better manage flood risk and decrease the loss of life and property from future disasters, the 85th Texas Legislature directed the Texas Water Development Board (TWDB) to develop the state's first flood assessment. After extensive stakeholder involvement, TWDB published in 2019 the State Flood Assessment, which described Texas' flood risks, provided..."
3	82	Perkins	add in "to be" in front of 'led'	Revised
3	Starting on 84	Perkins	Suggested Edit: "A mandate required the TWDB to facilitate the creation of a regional flood planning groups for each of the State's 15 major river basins to develop a regional flood plans by January 10, 2023."	Revised
3	Starting on 87	Perkins	Suggested Edit: "The overarching intent of the plans is to document strategies and projects that protect against the loss of life and property to: 1. Identify and reduce the risk and impact to life and property that already exists, and 2. Avoid increasing or creating new flood risks by addressing future development within the areas known to have existing or future flood risks in order to protect against the loss of life and property."	Revised
4	124	Perkins	Replace "requirements" with "rules and guidance"	Revised
4	125 Figure	Perkins	At the very right, it should be "1st State Flood Plan due to Legislature"	Revised
5	144	Perkins	I don't think Lake Dunlap, Lake McQueeney, and Lake Gonzales are considered major impoundments. They do not provide any flood storage and are operated like a full bathtub, passing inflows most of the time. I would take them out.	Our criteria for major impoundment was 1000 acre-feet of storage or more. F64As stated, only some of the impoundments listed have flood storage. We also added Placid and Wood to this list since they are over 1000 AF of storage.
6	154	Perkins	GBRA has the authority to do flood control, but not a mandatory responsibility to do so. The word "responsibilities" is misleading regarding GBRA. I believe the same is for UGRA. Finally, I think there is only 1 drainage district.	Revised to say "authority" rather than responsibilities.
9	186	Perkins	Table 1.2 seems duplicative given we have Table 1.4	Removed table 1.2.
12	283	Perkins	Suggest better pics for Rural and Suburban. Rural looks like a city (Gonzales) and Suburban looks more rural.	Revised
14	Starting at 344	Perkins	Note: The blind salamander (T. rathbuni), which lives in the aquifer. Individual blind salamanders at the surface are fish bait as they are white and have no eyes. Sedimentation is more of an issue for the fountain darter, San Marcos salamander (E. nana), and Texas Wild Rice (Zizania texana). Nutrients could be an issue if it leads to excessive filamentous algae, which can smother wild rice and is likely not good for salamanders or fountain darters either	We revised the text to address sedimentation. We removed reference to blind salamander. We opted not to include discussion on nutrient issues because this is likely more of an issue after flood events or drought type events when water is stagnant and algal issues can develop.
14	364	Perkins	Include Kendall County and Caldwell County in this list (124% and 110%, respectively)	We added those two counties into the sentence.
16	388	Perkins	Why is there at Figure 1.9a and 1.9b? Why not continue the sequential numbering already established? Are these 2 figures tied together in some way?	Revised
17	389	Perkins	Move Table 1.6 closer to its reference in the text	Revised
19	413	Perkins	Ranching is found in the middle part of the basin as well, particularly Guadalupe, Gonzales, and DeWitt Counties. The Graham Cattle Company is a large operation in Gonzales County. The word "primarily" is misleading here, even though later you discuss Guadalupe, Gonzales, DeWitt, etc.	Revised the text to address comment.
29	728	Perkins	Table 1.9 needs a footnote. The Total line at the bottom is not a summation of the lines above it (nor should it be), but there needs to be some clarification of why it's not.	Added
36	861	Perkins	Some of the figures appear blurry. Figure 1.24 is a prime example.	Figures edited
37	882	Perkins	There are formatting issues. This is a good example where the sentence got chopped and then restarted on the next line.	Revised

41	993	Perkins	I'm confused how these counts are determined. For example, it states 6 lakes. If you include the GVHS, there's a least 8 (6 GVHS, Canyon, and Coletto). There's one up near the City of Blanco too. Springs Lake in San Marcos. The lake created by City of Gonzales hydropower. Lynn Lake. The Saltwater Barrier (maybe). This number could be higher. I guess I need to understand the definition/cut-off.	This count was intended to include lakes with storage greater than 1000 ac-ft. Meadow Lake was added and count changed to 7. The other lakes mentioned have less than 1000 AF of storage. Lynn Lake is a natural ox bow lake and is not included in the constructed infrastructure. It is likely represented in the wetlands count.
53	1276	Perkins	Figure 1.30 - it seems as if the question "What are the top 3...." should be in the figure title below the figure, right after "Survey Question: ". And where it says the question now, just say "Top Responses". The way it is now, it seems as if we can count.	Revised
53	1277	Perkins	Is there nothing more we can add here?	Added general explanation of ongoing structural and non-structural projects
54 & 55	N/A	Perkins	The URLs are clickable. I would indicate that by making them the standard blue with an underline.	Revised
General	N/A	Perkins	For readability: Pagination needs to be addressed. Overall try to limit empty/dead space. Try to keep figures and tables within the same page (or the following page) in which they are referenced in the text. A few issues with the bar graphic in the footer either too close to text or over text (pg 27, 31, 35, 47, etc.). Consider using sub-chapter numbering, at least to the first level (1.1, 1.2, etc.).	Subchapter numbering was added and a table of contents was made
37	911	Steven Fonville	Variance requests, based on a contracted engineering report, will trigger an automatic 2D hydraulic modeling study review by the county floodplain administrator before any floodway/plain ordinance variance is approved.	Revised
41	1047	Steven Fonville	Encourage neighborhood community subdivisions located adjacent or along stream channels to consider requesting annexation from a local municipality in order to achieve zoning status of "residential" to provide some land use protections and to also request "park" or "greenway" zoning designation for protection if those areas exist within the community or subdivision.	Revised
47	1183	Steven Fonville	Request public water providers within the planning area to provide the locations via mapping of any public water distribution system equipment, water mains, incorporated into or located in close proximity to low water crossings. Improperly installed water mains or equipment in or near low water crossings damaged by flood events can isolate or sever public drinking water connections to outlying communities or subdivisions.	Noted. This is a good opportunity for collaboration between the Regional Flood Planning Groups and Regional Water Planning Groups that could be discussed in Chapter 6B.
General		UGRA	Consider adding a table for acronyms. Some inconsistency in how acronyms are defined. i.e. page 5 does not define HUC 8, but is defined on page 14. page 24, line 602 - definition of FIRMS missing.	Acronym table created.
General		UGRA	Excellent discussion on flood categories. Pages 23-25	Noted.
1-2		UGRA	Several Table and Figure references list the incorrect page e.g. Table 1.18 is on page 52 not 46; Figure 1.18 is on Page 26 not Page 23;	Revised
Page 4	143	UGRA	"Major surface water impoundments" is referenced and lists several impoundments. Notably absent are the 4 impoundments in Kerr County. Perhaps they don't rise to the level of "major," but together, they do offer some mitigation to downstream flooding. Consider adding impoundments upstream of Canyon Lake.	Add a sentence recognizing the flood storage provided by the 4 upper basin impoundments.
Page 5	154	UGRA	UGRA is also legislatively authorized to prevent damage to persons and properties from flood waters. Please add to the text.	Revised
Page 12	333	UGRA	Excellent discussion on the environmental benefits of flooding. Might consider elaborating to include discussion on the benefits of recharging the alluvium which provides base flow to the river during low flow periods, the seasonal sediment and flow regimes that help maintain ecological biodiversity in the river and floodplain, and the necessary flushing of accumulated organic substances and vegetation in order to maintain and restore the ecological health of river.	Revised
Page 18	432	UGRA	Please add tourism and summer camps to the list of industries as they provide a strong economic base in the upper watershed in Kerr County.	Revised
Page 23	584	UGRA	Format comment: inconsistent use of "" when referring to floodplain "quilt" phrase.	Quotations removed
Page 25	664	UGRA	Legend in figure 1.17 is cut off.	Corrected
Page 26	672	UGRA	Figure 1.18 is missing label	Label added
Page 26	705	UGRA	The section title is "Key Historical Flood Events," yet only three lower basin flood events are listed with the rationale in Line 705 "Major recent events include..." May want to consider all the major flood events by date to remain consistent with the title heading. Choosing 2010 seems very arbitrary.	Removed the first line
Page 29	745	UGRA	Consider adding a section for the August 1978 Hill Country Flood. Details can be found in "Flash Floods in Texas" by Jonathan Burnett, TAMU Press, 2008	Added entry on 1978 flood
Page 30	763	UGRA	Consider adding total number of inches of rain to be consistent with other flood descriptions	Added
Page 34	840	UGRA	Refer to Table 1.10. Why limit losses to the 1996-2021 timeframe? The devastating loss of life in Kerr County was in 1987 and is not reflected in this table. Consider revising to include the 1987 flood event.	The source data used for these loss totals is only available from 1996 to present.
Page 38	923	UGRA	Consider adding a section for education. UGRA has produced a YouTube flood video that is on our website and is presented to local entities. UGRA is also promoting through education, low impact development (LID) strategies and is currently working to produce a LID Best Management Practices guide to reduce stormwater for the City of Kerrville to use.	Education was added as a potential strategy in the "Action - Proposed/Ongoing Flood Mitigation" section as a non-structural strategy.
Page 40	993	UGRA	Refer to Table 1.12. Consider adding water and sediment control facilities to the table. To-date, UGRA has constructed 9 of these facilities in western Kerr County in the Guadalupe River watershed	These facilities are included in the ponds > 1 acre count. They are also mentioned in the "Action - Proposed/Ongoing Flood Mitigation" section.

Page 40	997	UGRA	Public awareness and education could be another non structural method.	This section has been updated to list several non-structural strategies being implemented throughout the basin including education.
Page 42	1064	UGRA	Johnson Creek might be significant, too.	Added.
Page 44	1140	UGRA	Consider adding the following to this sentence, "and dams constructed by UGRA based on the NRCS model for regional flood control structures."	Revised
Page 45	1165	UGRA	Table label should be 1.16 not 16.	Revised
Page 47	1176	UGRA	Are you sure that City of Kerrville is a regulated Phase II MS4? I didn't think they were. Also, I thought Kyle and Schertz were Phase II MS4s.	Added Kyle and Schertz to MS4 list. Kerrville was confirmed as not being a regulated MS4
Page 51	1257	UGRA	Possibly some of the agency acronyms listed here have not been previously defined.	Acronym table created.
Page 51	1263	UGRA	Consider adding the sentence, "UGRA has constructed nine water and sediment control facilities in western Kerr County in the Guadalupe River watershed.	Added.
4	Fig 1.1	Gian V	This timeline is very helpful; however, it's hard to follow the dates because other than 1 date, the years are not shown. Please add years to the timeline where appropriate.	Revised
17	389 / Table 1.6	Gian V	I believe that this table corresponds to the HUC-8 watersheds shown in Fig. 1.10; however, this is not stated, and the watersheds in Figure 1.10 are not labeled. It would be helpful if this is clarified.	Revised
23	544 / Figure 1.1	Gian V	Should the bottom range of household income be 125,001 and above? I assume that there are some households that make above 150,000.	Revised
25	667	Gian V	The report states that "The City of New Braunfels in Comal County contains the densest and largest number of structures in the entire region." I assume that this means the largest number of structures in the 1% ACE floodplain consistent with the other adjacent statements. Please clarify.	Revised
38	907	Gian V	1) I assume that the X axis for Figure 1.25 shows the <u>percent</u> of municipalities that have adopted each of the standards. Please add a label for the X-axis to confirm.	Corrected
38	907	Gian V	2) If this references percent of municipalities that have adopted the standards, it appears that less than 90% of municipalities have adopted a Floodplain Ordinance. However, above, it states that 94% of these have adopted one. Please check the numbers.	94% is the actual number whereas the almost 90% is what the survey respondents indicated as being knowledgeable about
38	907	Gian V	3) I recommend including a short description of the figure in the writeup.	Added a small blurb
40	999	Gian V	Please provide a link or other information about how to access the TWDB Flood Data Hub.	Hyperlink was added to "Flood Data Hub" in line 1000
33	836	J Espinoza	Does property losses include damages to public facilities/infrastructure?	Yes
50	1239	J Espinoza	Should Hays County be listed as having ongoing flood mitigation projects derived from the Hazard Mitigation Action Plan?	Yes, additional counties were added to remove the confusion.
44	1083-1094	Sue Reilly, TPWD	An expanded summary of karst in the Edwards Aquifer Contributing and Recharge Zones may be beneficial here, as this system is a significant part of the hydrology of the Guadalupe Basin. The paper cited as the basis for this section, Zhou 2007 is a little-cited paper that may not be relevant to this region. Building collapse is certainly not a risk in the Edwards Aquifer that I'm aware of. A more Edwards Aquifer specific discussion of karst hydrology and flooding would be beneficial.	The section on karst features was beefed up and made to be reflective of issues of importance within the Guadalupe basin.
41	Table 1.12	Sue Reilly, TPWD	It would be helpful to know what criteria define "parks, preserves, natural areas" in this table, I'm not sure where the number 10 came from. Is that just state parks? More information would be helpful.	Clarification added to section 3.1.3. and mentioned after table 1.12



# **Region 11 Guadalupe**

Regional Flood Planning Group Meeting

May 10, 2022

Item 8



# Agenda

Stakeholder and Public Outreach Update

Tasks 1-10 Update and Outlook

Task 3 – Floodplain Management Practices  
and Goals

Look Ahead

# Stakeholder and Public Outreach Update

## Guadalupe Regional Flood Planning Group (RFPG) - Public Comment Tracking Matrix

For RFPG Public Meeting May 10, 2022

Comments received March 23, 2022 – May 2, 2022

Comments Received Via [comments@quadaluperfpg.org](mailto:comments@quadaluperfpg.org) or via [hwillis@qbra.org](mailto:hwillis@qbra.org)

Date Comment Received	Name/Affiliation of Commenter	Comment/Question	Respondent and Response Date
4/1/22	Karen Brennan Private Citizen	<p>From: <a href="mailto:kbrennan@hhep.com">kbrennan@hhep.com</a>            Sent: Friday, April 1, 2022 2:38 PM            To: <a href="mailto:comments@quadaluperfpg.org">comments@quadaluperfpg.org</a></p> <p>Comment: City of New Braunfels - Notice of Public Hearing 740 &amp; 750 Rusk. SUP22-073 requested rezoning from R2 to SUP to allow 440 plus RV park and event center on Guadalupe waterfront approximately 50% is floodway and 50% is <u>100 year</u> flood zone. Please join us in opposition to this SUP. Public Hearing before Planning Commission Tuesday April 5, 2022 @ 6 pm. This development would be in district 5 Jason Hurta, phone - (830) 221-4659 then press option 4 Email - <a href="mailto:jhurta@nbtexas.org">jhurta@nbtexas.org</a></p>	Respondent: Lauren Response Date: 4/1/2022
4/1/22 to 4/18/22	Voting Members, Non-Voting Members and Public	<p>The following individuals provided written comments to Draft Chapter 1:</p> <p><u>Voting Members</u></p> <ul style="list-style-type: none"> <li>4/17/22 Gian Villarreal – Seagull PME</li> <li>4/15/22 Brian Perkins – Guadalupe-Blanco River Authority</li> <li>4/14/22 Raymond Buck/ Tara Bushnoe – Upper Guadalupe River Authority</li> <li>4/14/22 Joe Pantalion/John Espinoza – City of San Marcos</li> <li>4/14/22 Steven Fonville – Martindale Water Supply Corporation</li> </ul> <p><u>Non-Voting Member</u></p> <ul style="list-style-type: none"> <li>4/15 Sue Reilly – Texas Parks and Wildlife Department</li> </ul> <p><u>Public</u></p> <ul style="list-style-type: none"> <li>None</li> </ul>	Respondent: FNI Response Dates: 4/1/22 to 4/18/22



# Tasks 1-10 Update and Outlook



## Task 1 – Planning Area Description

- Action Item in Agenda Item 9

## Task 2 – Existing and Future Condition Flood Risk Analysis

- Draft Chapter 2 internal review underway
- Draft Chapter 2 will be provided for comments in May

## Task 3 – Floodplain Management Practices and Flood Mitigation Goals

- Revisit goals today
- Draft Chapter 3 internal review underway
- Draft Chapter 3 will be provided for comments in May

## Task 4A – Flood Mitigation Needs Analysis

- Preliminary analysis of “gaps” complete, awaiting geospatial data on FMXs
- Draft Chapter 4 will be provided for comments in June



# Tasks 1-10 Update and Outlook



## Task 4B & 5 – Evaluation and Recommendation of Studies, Strategies, and Projects

- Task 4B Screening approaching completion (more discussion later)
- Task 5 Evaluation executed in May, June\*
- Draft Chapter 5 will be provided for comments in June

## Task 6 – Impacts of Regional Flood Plan and Contributions to and Impacts on Water Supply

- To be initiated upon substantial completion of Task 5
- Draft Chapter 6 will be provided for comments in June

## Task 7 – Flood Response Information and Activities

- Draft Chapter 7 internal review underway
- Draft Chapter 7 will be provided for comments in May



# Tasks 1-10 Update and Outlook



## Task 8 – Administrative, Regulatory and Legislative Recommendations

- Incorporating member feedback
- Draft Chapter 8 will be provided for comments in May

## Task 9 – Flood Infrastructure Financing Analysis

- Compiling results from sponsor questionnaire
- Draft Chapter 9 will be provided for comments in June

## Task 10 – Public Participation and Plan Adoption

- Summarization of public outreach activities
- Appendices with comments and responses to comments
- Draft Chapter 10 will be provided for comments in June/early July

# Task 4 – Assessment and Identification of Flood Mitigation Needs

## Task 4B Data Gathering and Analysis

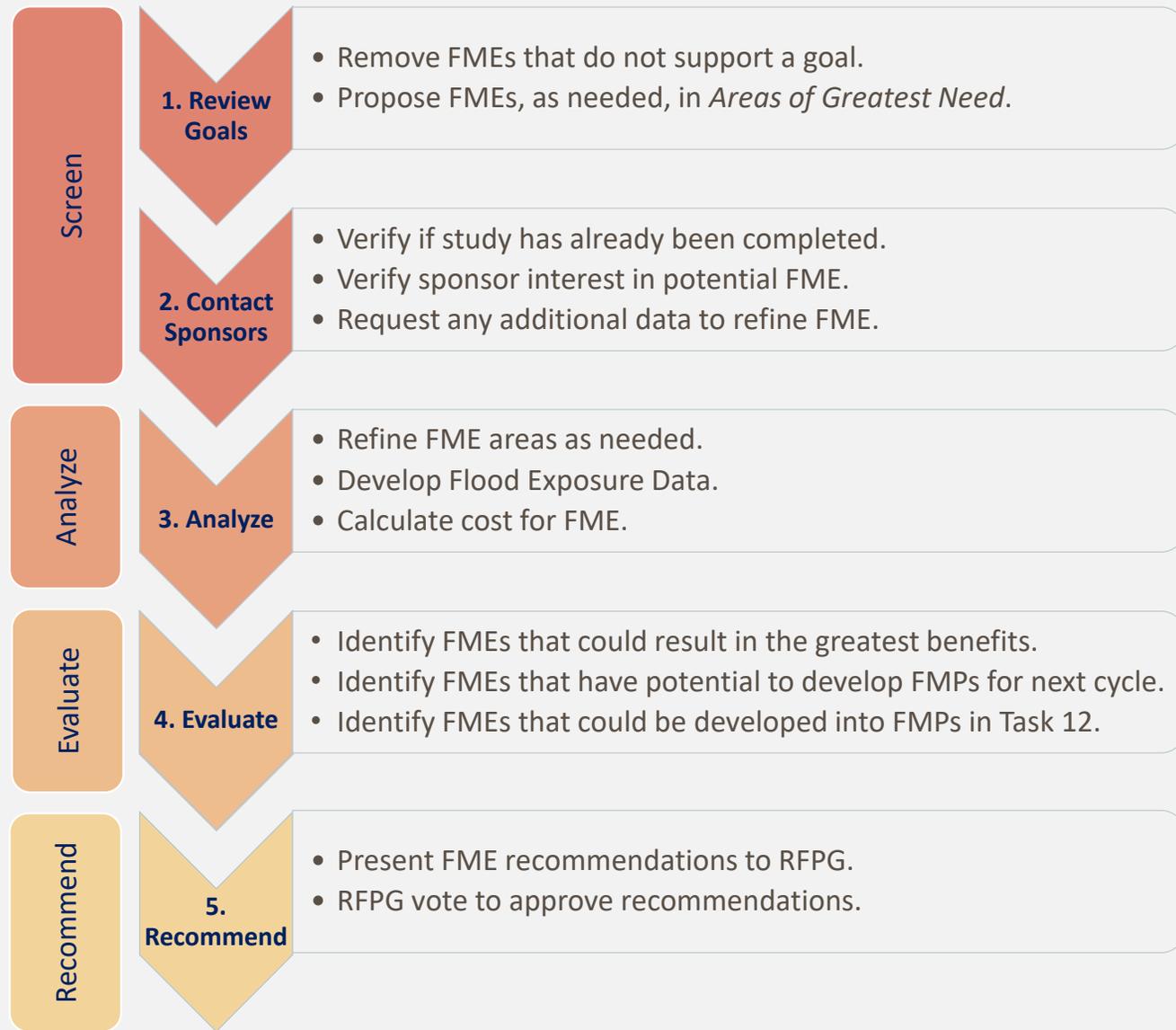
## Task 5 Decision-Making



### Final Recommendations Will:

- Align with TWDB requirements and regional goals
- Address *Areas of Greatest Need* (risk and/or knowledge gaps)
- Demonstrate potential for benefit
- Have sponsor support

# Process for Recommending FMEs

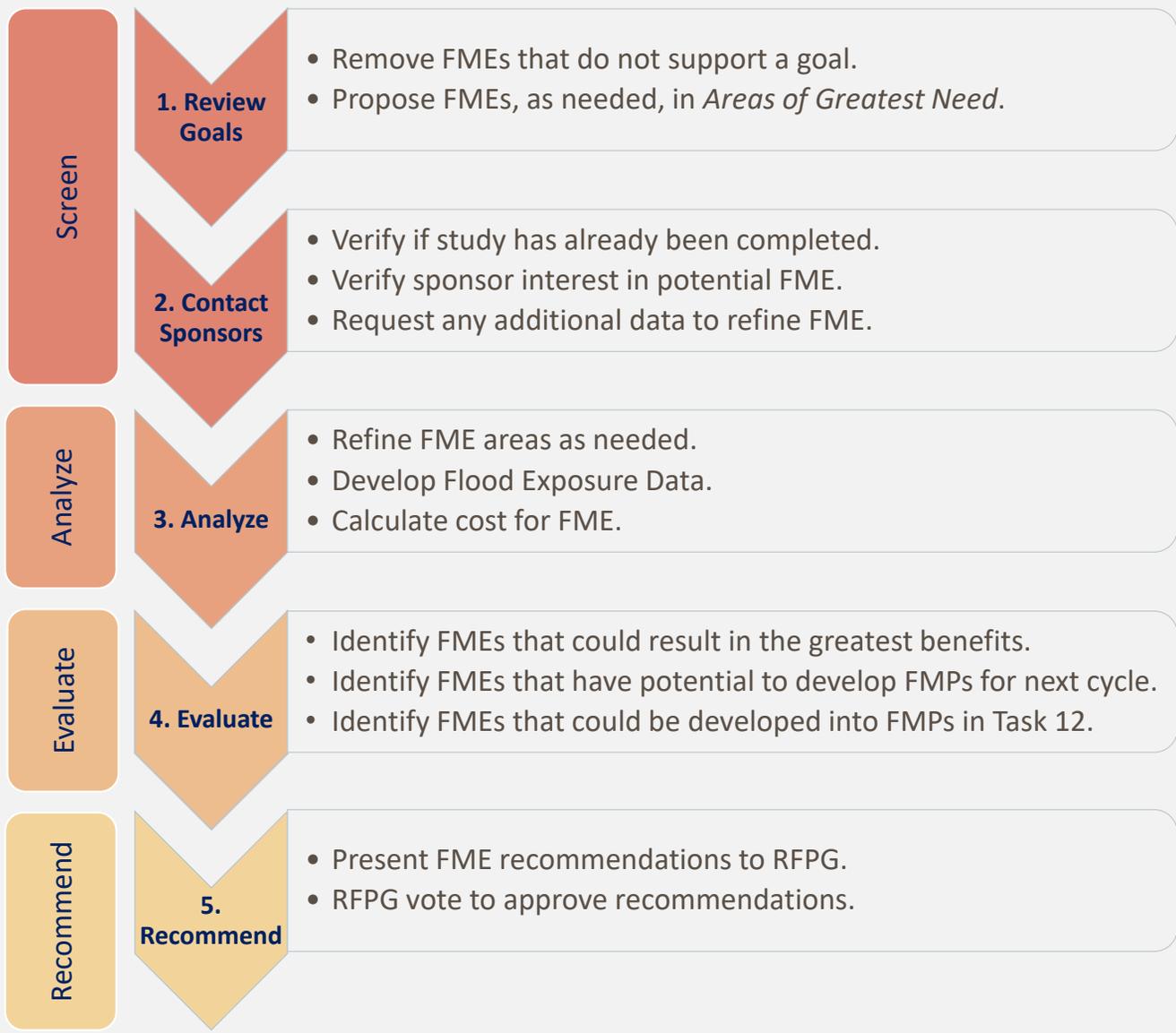


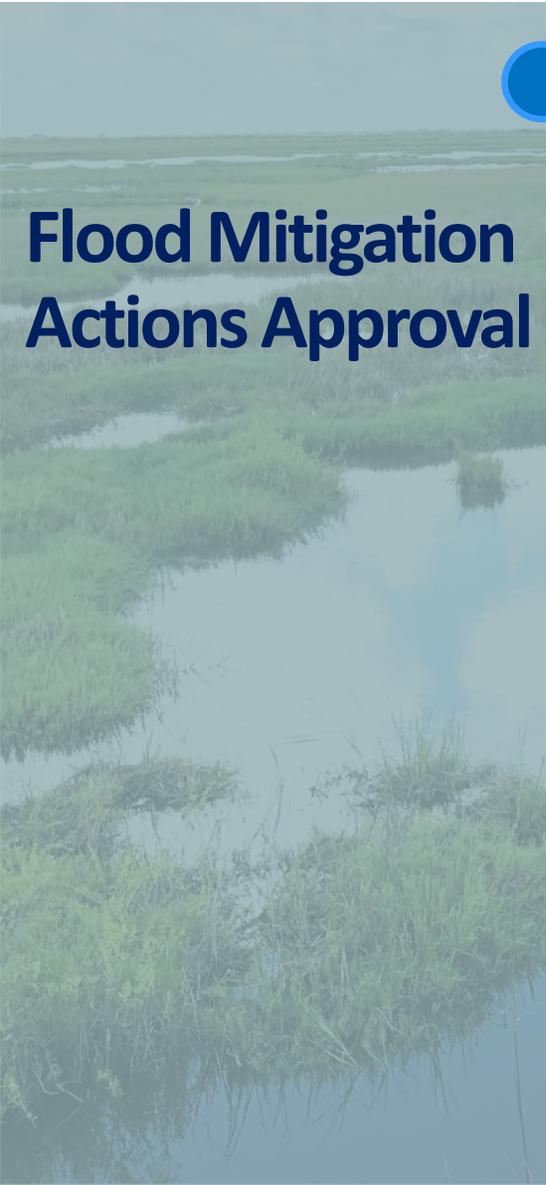
# Process for Recommending FMEs



## Task 12

- Identify FME/FMPs
- Determine how many can be evaluated
- Present results to RFPG
- RFPG decides which to develop





# Flood Mitigation Actions Approval

- FMX Information for review
  - Draft FME and FMS Tables and Summaries will be provided in batches (May, June, July)
  - Final FME/FMS Tables and Summaries will be provided in July
  - Final FMP Tables and Summaries will be provided in June, July
- Vote to approve in Groups
- Additional actions can still be added as part of amended plan

# Flood Mitigation Actions Approval



## Study Details

Study type	Watershed Planning		
Study description	Perform H&H modeling, develop conceptual alternatives and OPCC, and rank projects. Update existing drainage mater plan.		
New Hydrologic or Hydraulic model?	Yes	Emergency Need?	No
		Existing/Anticipated models in near term?	Yes
County	Potter, Randall	Watershed HUC# (if known)	110901050308, 110901050309, 110901050402, 111201030101,
Drainage area (Square miles, est.)	102	Goal(s)	01000001, 01000002, 01000005, 01000006

## 100-Year Flood Risk Summary

Population at risk	12,038
Flood risk type:	Riverine? Yes
Farm/Ranch land impacted (acres)	213
Number of low water crossings	6

## Estimated Cost and Funding Availability

Total Cost	\$1,000,000	Amount
Funding source	-	

## Strategy Details

Strategy type	Regulatory and Guidance		
Strategy description	Application to join NFIP or adopt equivalent standards		
Associated FME's	-	Associated FMP's	-
Associated FMS's	-	Drainage area (mi <sup>2</sup> , est.)	1
Watershed HUC# (if known)	110901050104, 110901020702	County	Hartley

## Existing 100-Year Flood Risk

Population at risk	0	# of structures	0	Critical facilities	0
Flood risk type:	Riverine? Yes	Coastal? No	Local? No		
Farm/Ranch land impacted (acres)	0	Roadway(s) impacted			
Number of low water crossings	0	Historical road closures			

## 100-Year Flood Risk Reduction

Population removed from 100-yr	0	# of structures removed from 100-yr	
Critical facilities removed from 100-yr	0	Farm/Ranch land removed from 100-yr (acres)	
Road removed from 100-yr (miles)	0	Low water crossings removed from 100-yr	
Other benefits	None	Reduction in # of road closures over 10 years	

## Impacts

Negative impacts?	No	Negative impacts description	N/A
Water supply contributions?	No	Water supply contribution description	-

## Estimated Cost

Strategy Cost	\$100,000	Amount of available funding	\$-
---------------	-----------	-----------------------------	-----

## Project Description

Construct a vegetated diversion channel with a narrow meandering pilot channel in the bottom in the area of the existing channel.

Watershed HUC# (if known)	111201020304	Emergency Need?	No
Associated FME's	-	Drainage area (mi <sup>2</sup> , est.)	1
Associated FMS's	-	County	Randall
Associated FMP's	-	Associated FMP's	-

## Existing 100-Year Flood Risk

Flood risk type:	Riverine? Yes	Coastal? No	Local? No	Playa? Yes	Other? No
Population at risk	976	# of structures	156	Critical facilities	0
Farm/Ranch land impacted (acres)	26	Roadway(s) impacted (length)	7		
Number of low water crossings	6	Historical road closures	6		

## 100-Year Flood Risk Reduction

Population removed from 100-yr	-999	# of structures removed from 100-yr	-999
Critical facilities removed from 100-yr	-999	Farm/Ranch land removed from 100-yr (acres)	-999
Road removed from 100-yr (miles)	-999	Low water crossings removed from 100-yr	-999
Other benefits	-999	Reduction in # of road closures over 10 years	-999

## Impacts

Negative impacts?	-999	Negative impacts description	-999
Water supply contributions?	No	Water supply contribution description	-

## Estimated Cost

Project Cost	-	% Nature-Based	-999	BCR	-999
Recurring costs	0	Issues	-999		

# Task 3 – Floodplain Management Practices and Goals

Goal	Short-Term (10-year)	Long-Term (30-year)	Measurement
Improve safety beyond minimal signage at low water crossings through automatic flood <b>warning</b> /gates and/or flood level passed	<b>50%</b> (410 of 815?)	<b>90%</b> (720 of 815)	Number of low water crossings with safety improvements
Consider and incorporate nature-based practices (LID, green infrastructure, natural channel design) in Flood Mitigation Projects and Strategies	30%	50%	Number of FMPs and FMSs implementing nature-based practices
Increase <del>NFIP participation</del> /adoption of higher standards in <b>communities in high growth Counties</b>	30%	60%	<del># of entities participating in NFIP (45/46)</del> ; # of <b>local governments entities</b> with higher <b>equivalent standards</b>
Increase high growth <b>local government community</b> CRS participation ( <del>&gt;10,000 by 2030</del> )	50% (increase from 4 to 23)	75% (increase from 4 to 35)	Number of high growth <b>local governments community</b> participating in CRS

# Task 3 – Floodplain Management Practices and Goals

Preliminary Goal	Short-Term (10-year)	Long-Term (30-year)	Measurement
Reduce number of vulnerable buildings/ structures/critical facilities within the 1% existing flood hazard layer	20% (5,400 of 27,069)	50% (13,530 of 27,069)	Number of structures removed from existing flood hazard layer
Increase percentage of communities with dedicated funding sources (clarify?) for O&M of storm drainage systems (add capital expenses?)	35% (16 of 46)	60% (27 of 46)	Number of entities with dedicated funding sources for stormwater operations and maintenance

# Look Ahead



Meeting	Milestone Goals
June	<b>Task 2</b> Draft; <b>Task 3</b> Draft; <b>Task 4</b> Draft; <b>Task 5</b> FMXs; <b>Task 6A/B</b> Draft; <b>Task 8</b> Draft; <b>Task 10</b> Draft; <b>Task 12</b> Discuss
July (early)	<b>Task 5</b> FMXs and Draft; <b>Preliminary Draft Regional Plan</b> Working/Draft
July (late)	<b>Draft Regional Flood Plan</b> Approval; <b>Task 12</b> Discuss
August	<b>August 1</b> Submittal; <b>Posting</b> 30-days; <b>August 31</b> Public Meeting
Thru January	<b>September 30</b> Close comments; <b>October</b> – FNI compile comments and responses; <b>November 2</b> Discuss; <b>December 7</b> – Approve to form; <b>January 7</b> – Submit 2023 RFP



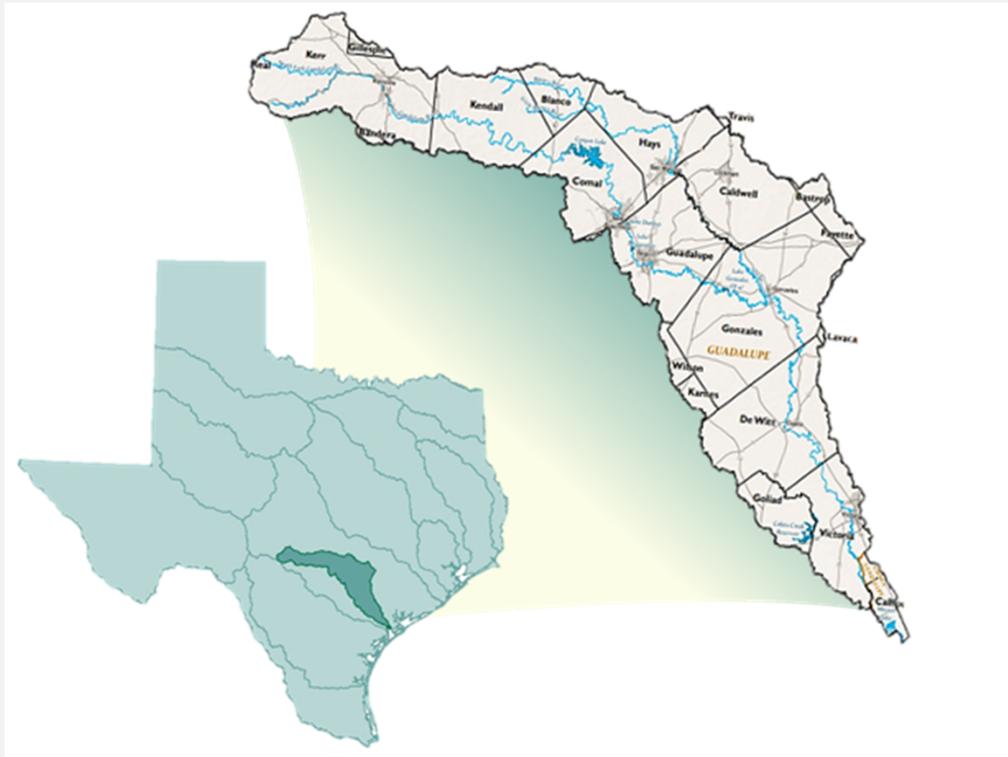
# **Region 11 Guadalupe**

Regional Flood Planning Group Meeting

May 10, 2022

Item 9

# Chapter 1 Overview – Planning Area Description



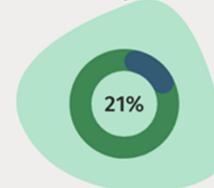
**618,874 People**

2020 Population of the region



**22 Counties**

22 counties, or portions of them, make up the basin



**38 Major Disaster Declarations**

38 major and 8 emergency declarations between 1953 and 2020, with 21% having occurred since 2000.



**42 Flood Events**

42 major flood events have occurred since 1913 with significant losses to life and property

**FEMA Flood Claims**

(1975-Present)

**6248 Flood Claims**

**\$261.7M Flood Claims Paid**

# Chapter 1

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- Submitted to GRFPG for comments
- Received 66 comments (4 voting members, 1 alternate, and 1 non-voting member)
- Incorporated all comments

Region 11 RFPFG Comment Matrix					
Document: Draft Chapter 1 (August 2023)					
Page Number	Line Number	Reviewer Name	Reviewer Comment	Response	
162	N/A	Perkins	Check page numbers in Tables & Figures. For example, this says Figure 1.19 is on page 25, but it's on page 29	Revised	
3	73	Perkins	The first assessment that TWDB did: wasn't that a result of legislative action? If so, what session/bill number was it? And in what year did TWDB finalize the assessment?	As the state grappled with how to better manage flood risk and decrease the loss of life and property from future disasters, the 85th Texas Legislature directed the Texas Water Development Board (TWDB) to develop the paper flood assessment. After extensive stakeholder involvement, TWDB published in 2019 the State Flood Assessment, which described Texas flood risks, provided...	
3	82	Perkins	add in "to be" in front of "let"	Revised	
3	Starting on 84	Perkins	Suggested Edit: "A mandate requires the TWDB to facilitate the creation of a regional flood planning group for each of the state's 15 major river basins to develop a regional flood plan by January 30, 2023."	Revised	
3	Starting on 87	Perkins	Suggested Edit: "The overarching intent of the plan is to document strategies and projects that protect against the loss of life and property." 1. Identify and reduce the risk and impact to life and property that already exists, and 2. Avoid increasing or creating new flood risks by addressing future development within the areas known to have existing or future flood risks in order to protect against the loss of life and property."	Revised	
4	124	Perkins	Replace "requirements" with "rules and guidance"	Revised	
4	135 Figure	Perkins	At the very least, it should be "1st State Flood Plan due to Legislature"	Revised	
5	144	Perkins	I don't think Lake Orling, Lake McQuay, and Lake Gonzalez are considered major impoundments. They do not provide any flood storage and are operated like a full bathtub, passing inflows most of the time. I would take them out.	Our criteria for major impoundment was 5000 acre-feet of storage or more. F64As stated, only some of the impoundments listed have flood storage. We also added flood and flood to this list since they are over 5000 ac-ft of storage.	
6	154	Perkins	GBRA has the authority to do flood control, but not a mandatory responsibility to do so. The word "responsibilities" is misleading regarding GBRA. I believe the same is for UGBA. Finally, there is only 2 drainage district.	Revised to say "authority" rather than responsibilities.	
9	186	Perkins	Table 1.2 seems duplicative given we have Table 1.4	Removed table 1.2.	
12	283	Perkins	Suggest better pics for Rural and Suburban. Rural looks like a city (Gonzales) and Suburban looks more rural.	Revised	
14	Starting at 344	Perkins	Note: The blind salamander ("rainbow"), which lives in the aquifer. Individual blind salamanders on the surface are fish pink as they are white and have no eyes. Sedimentation is more of an issue for the fountain darter, San Marcos salamander (S. nana), and Texas Hill Rice (Desmilla texana). Nutrients could be an issue. PFAs leads to excessive filamentous algae, which can smother wild rice and is likely not good for salamanders or fountain darters either.	We revised the text to address sedimentation. We removed reference to blind salamander. We opted not to include discussion on nutrient issues because this is likely more of an issue after flood events or drought type events when water is stagnant and algal issues can develop.	
14	364	Perkins	Include Kendall County and Caldwell County in this list (124th and 110th, respectively)	We added those two counties into the sentence.	
16	388	Perkins	Why is there an Figure 1.16 and 1.16? Why not continue the sequential numbering already established? Are these 2 figures just together in some way?	Revised	
17	389	Perkins	Move Table 1.6 closer to its reference in the text	Revised	
19	413	Perkins	Sanction is found in the middle part of the basin as well, particularly Guadalupe, Gonzales, and DeWitt Counties. The Graham Cattle Company is a large operation in Gonzales County. The word "primarily" is misleading here, even though later you discuss Guadalupe, Gonzales, DeWitt, etc.	Revised the text to address comments.	
29	728	Perkins	Table 1.9 needs a footnote. The Total line at the bottom is not a summation of the lines above it (nor should it be), but there needs to be some clarification of why it's not.	Added	
36	891	Perkins	Some of the figures appear blurry. Figure 1.24 is a prime example.	Figures edited	
37	892	Perkins	There are formatting issues. This is a good example where the sentence got chopped and then restarted on the next line.	Revised	

## Agenda Item 9

Consider date and agenda items for next meeting

# Agenda Item 10

## Public General Comments

Public Comments limited to 3 minutes per speaker

# Agenda Item 11

Adjourn