



Region 11: Guadalupe Regional Flood Planning Group Meeting

Wednesday, June 29, 2022
1:00pm

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
June 1, 2022 Region 11 RFPG Meeting

Meeting Minutes
Region 11 Guadalupe Regional Flood Planning Group Meeting
June 1, 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>	
John Johnston	<i>Counties</i>	X
Lon Shell	<i>Counties</i>	X
Bobby Christmas	<i>Electric Generating Utilities</i>	
Annalisa Peace Bill Barker*	<i>Environmental</i>	*
Doug Sethness Jennifer Urban*	<i>Flood districts</i>	X
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 (arrived at 2:09)
Ray Buck Tara Bushnoe*	<i>River Authorities</i>	*
Gian Villarreal Tami Norton*	<i>Small Business</i>	X
Ronald (Ron) Fieseler	<i>Water Districts</i>	X
Steven Fonville	<i>Water Utilities</i>	

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

Quorum:

Quorum: **Yes**

Number of voting members or alternates representing voting members present: **11**

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

Other Meeting Attendees:

Lauren Willis, GBRA (Facilitator)

Vanessa Escobar, Blanton & Associates

Ram Mendoza, GBRA (IT)

James Bronikowski, TWDB

Elizabeth Edgerton, GBRA

Jennifer Urban, DCDD1

Jay Scanlon, Freese & Nichols, Inc.

Adam Conner, Freese & Nichols, Inc.

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

AGENDA ITEM NO. 1: Call to Order

Vice Chairman John Johnston called the meeting to order at 2:01 PM. Lauren Willis called roll of the planning group members to record attendance and a quorum was established.

AGENDA ITEM NO. 2: Welcome

Vice Chairman Johnston welcomed members to the meeting.

AGENDA ITEM NO. 3: Approval of Minutes from the May 10, 2022 Region 11 RFPG Meeting

Vice Chairman Johnston opened discussion on approving the minutes from the May 10, 2022 Region 11 RFPG Meeting.

A motion was made by Ken Gill to approve the May 10, 2022 Region 11 RFPG Meeting minutes. Doug Sethness seconded the motion. The meeting minutes were approved by consensus.

AGENDA ITEM NO. 4: Region 11 Guadalupe RFPG Chair Updates

Vice Chairman Johnston did not have any updates for the group.

AGENDA ITEM NO. 5: Texas Water Development Board (TWDB) Updates

Ryke Moore reviewed the following items:

- Chairs & Technical Conference Call's at the end of May
- Technical Conference Call's will start on a monthly basis instead of quarterly basis
- The Contract Amendment No.1 has been executed between TWDB and GBRA. Amendment No. 1 between GBRA and the subcontractor (FNI) has been reviewed by TWDB.
- Informal comments have been sent to the RFPG and Technical Consultants.

James Bronikowski attended to provide any guidance on the Flood Mitigation Actions that the RFPG may have. He reviewed the rule references for voting on the Flood Mitigation Actions (Flood Mitigation Strategies, Studies, Projects).

AGENDA ITEM NO. 6: Guadalupe Region 11 RFPG Sponsor Guadalupe-Blanco River Authority (GBRA) Updates

Lauren Willis reviewed the following items:

- Draft Amendment No. 1 between GBRA and FNI has been sent to FNI
- Informal Comments from Tech Memo #1 and #2 were sent to RFPG in mid-March
- Reviewed updates to the guadalupeRFPG.org website
- Wednesday, September 7th has been moved to Kerrville at UGRA
- Working with John Johnston and Ken Gill to have a meeting in mid-September in Victoria

AGENDA ITEM NO. 7: Discussion and potential action regarding Region 11 RFPG Technical Consultants work and schedule.

Jay Scanlon overviewed the agenda and reviewed updates on Tasks 1-10. Vanessa Escobar, Blanton & Associates reviewed the comments matrix and provided updates and notice requirements for outreach of the Draft Flood Plan.

Jay Scanlon, FNI led the discussion on the Flood Mitigation Actions (Study, Strategy or Project).

- Don Durden asked about projects reaching over multiple counties/jurisdictions
- Tara Bushnoe asked about projects being sponsored by multiple entities
- Bill Barker made comments about the importance of this being a regional plan and the purpose is to enhance actions being done by individual entities

a. Discussion and potential action approving Flood Mitigation Actions of the Guadalupe Regional Flood Plan.

Vice Chairman Johnston opened the floor for discussion of approving Flood Mitigation Actions. Gian Villarreal asked for clarification about the Flood Mitigation Actions meeting TWDB's guidance and the benefits of the different projects. Brian Perkins suggested that all education and outreach activities be one Flood Mitigation Strategy for the entire basin. Infrastructure projects should remain individual distinct projects. James Bronikowski clarified how Flood Mitigation Actions can be sponsored. Comments on Flood Mitigation Actions should be sent to Adam Conner by June 15th.

A motion was made by Doug Sethness to table the action of this item for the next meeting on June 29th. Bill Barker seconded the motion. The vote passed by consensus.

Flood Mitigation Actions were not voted on at this time

AGENDA ITEM NO.8: Consider date and agenda items for next meeting

The next meeting will be held on Wednesday, June 29th at 1pm at the GBRA River Annex.

AGENDA ITEM NO. 9: Public General comments (Public comments limited to 3 minutes per speaker)

No public comments

AGENDA ITEM NO. 10: Adjourn

Doug Sethness made a motion to adjourn. The motion was seconded by Brian Perkins. The motion passed by unanimous consent.

The meeting adjourned at 3:08 PM by John Johnston.

Approved by the Region 11 Guadalupe RFGP at a meeting held on June 29, 2022.

Brian Perkins, SECRETARY

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

Update from Region 10 (Lower Colorado-Lavaca) and Region 12 (San Antonio)
Liaisons

Agenda Item 8

Discussion regarding Region 11 RFPG Technical Consultants work and schedule.

A. Discussion and potential action approving Flood Mitigation Actions of the Guadalupe Regional Flood Plan

B. Discussion and potential action approving Chapters 2, 3, 4, 5, 6B, 7, 8, 9 of the Guadalupe Regional Flood Plan.



Region 11 Guadalupe

Regional Flood Planning Group Meeting

June 29, 2022

Item 8



Agenda

Stakeholder and Public Outreach Update

Chapter 8 Recommendations – RFPG
Discussion

FMX Action Summaries

Look Ahead

Stakeholder and Public Outreach Update

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

For RFPG Public Meeting June 29, 2022

Comments received May 27, 2022 – June 22, 2022

Comments Received Via comments@quadaluperfpg.org or via willis@gbra.org



Date Comment Received	Name/Affiliation of Commenter	Comment/Question	Respondent and Response Date
6/8/2022	Frank Davis Hill Country Conservancy	<p>From: Frank Davis <frank@hillcountryconservancy.org> Sent: Wednesday, June 8, 2022 4:48 PM To: Lauren Willis <willis@gbra.org> Cc: Virginia Coodie <virginia@sanmarcosriver.org> <virginia@sanmarcosriver.org> Subject: Application for funding: Edwards Aquifer Recharge Conservation Easement</p> <p>Hello,</p> <p>Please accept this application for funding a critical conservation project in the Edwards Aquifer Recharge Zone, in San Marcos. Details follow. Project Sponsor: Hill Country Conservancy Project Name: Wootan Recharge Conservation Property Hays County CAD: R16076 Property Description: A0287 ISAAC LOWE SURVEY, TRACT 5, ACRES 84.49 Project Description: Funding to assist with the acquisition of a conservation easement on the Wootan property, which sits over the Edwards Aquifer Recharge Zone. This property is in downtown San Marcos and adjacent to a pending conservation project on 1,068 acres of critical recharge land, and in close proximity to numerous residential subdivisions which greatly jeopardize the health of the Aquifer and local watersheds. Protection of the Wootan property is imperative to intercept rainfall, and reduce erosive sheet flow runoff, thus mitigating future floods in San Marcos. The conservation easement would be drafted in accordance with strict limits on increased impervious cover to protect the area in perpetuity. Estimated Property Value: (30K/acre) \$2,534,700 Estimated Easement Value: (60% of Property Value) \$1,520,820 Estimated Project Cost: (50% of Easement Value plus transaction expenses) \$860,410 Flood Mitigation Benefits: Recharge to the Edwards Aquifer, Edwards Aquifer Water Supply Protection, Rainwater Infiltration, Wildlife Corridor Protection, Flood Mitigation.</p> <p>Thank you for your consideration, Frank</p>	Respondent: Lauren (GBRA) Response Date: 6/9/2022

Stakeholder and Public Outreach Update

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

For RFPG Public Meeting June 29, 2022

Comments received May 27, 2022 – June 22, 2022

Comments Received Via comments@guadaluperfpq.org or via willis@gbra.org

		<p>Frank H. Davis Chief Conservation Officer www.hillcountryconservancy.org Cell: 512-947-3920</p> <p><u>Mail:</u> PO Box 163125 Austin, TX 78716-3125</p>  	
5/31/22	Lyda Creus Molanphy Great Springs Project	<p>SEE ATTACHMENT</p> <p>From: Lyda Creus Molanphy <lyda@greatspringsproject.org> Sent: Tuesday, May 31, 2022 3:43 PM To: Lauren Willis <lwillis@gbra.org> Subject: Great Springs Project submission of FME for Region 11</p> <p>Good <u>afternoon</u> Lauren,</p> <p>Attached please find a Flood Management Evaluation (FME) proposal to the Region 11 Guadalupe Flood Planning Group. We understand proposals are due today but may be updated in the coming weeks should that be necessary.</p> <p>We appreciate consideration of this FME and look forward to next steps.</p> <p>Please advise if we need to provide any additional information.</p> <p>Thank you,</p> <p>Lyda</p>	Respondent: Lauren (GBRA) Response Date: 5/31/2022

Proposed Flood Management Evaluation (FME) of Great Springs Project

Submitted to: Guadalupe-Blanco River Authority
Attn: Lauren Willis
933 E. Court St.
Seguin, TX 78155
lwillis@gbra.org

Submitted by: Great Springs Project
Attn: Lyda Creus Molanphy
Chief Strategy & Operations Officer
Great Springs Project
(512) 751-1636
PO Box 12331
Austin, TX 78711
lyda@greatspringsproject.org

Submitted on: May 31, 2022

Purpose

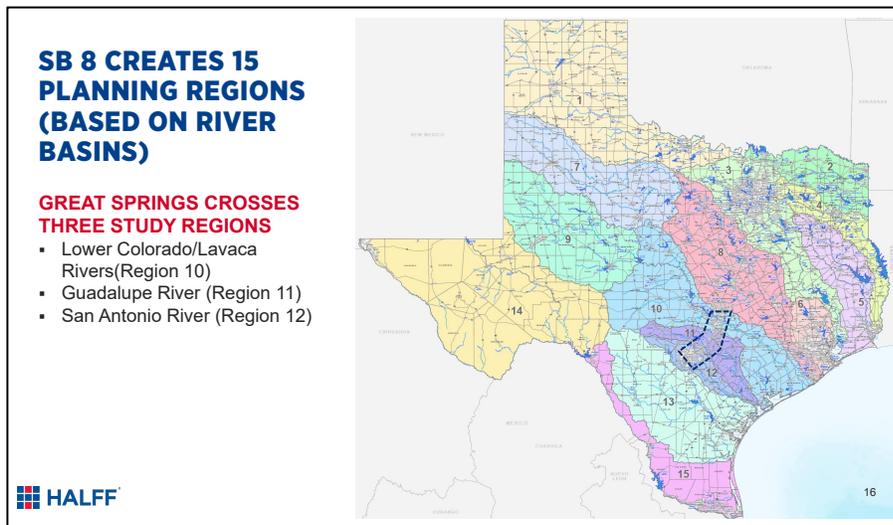
The purpose of this proposed Flood Management Evaluation (FME) is to:

1. Assess the flood mitigation potential of the Great Springs Project in the Region 11 Guadalupe Flood Planning Region,
2. Identify opportunities to enhance the flood mitigation features of the Great Springs Project,
3. Quantify the flood mitigation and other associated benefits of the Great Springs Project, and
4. Recommend subsequent Flood Management Strategies (FMSs) and Flood Management Projects (FMPs) to cost-effectively reduce flood risk in the Region 11 Guadalupe Flood Planning Region.

Background

Established as a 501(c)3 organization in 2018, the Great Springs Project (GSP) is conserving an additional 50,000 acres of sensitive land in the Austin-San Antonio corridor and building a spring-to-spring trail.¹ Much of the 50,000 acres will be aquifer recharge and contributing zone land in Hays and Comal Counties in the most densely populated area of the Region 11 flood planning area.

Figure 1. Overlap of Region 11 and GSP areas. Courtesy of Jim Carrillo, FAICP, Halff Associates.



Land conservation is generally recognized as contributing to flood mitigation² and has been identified as such in the draft of Chapter 1 of the Region 11 flood plan. In particular, land which

¹ See the GSP website for more information: <https://greatspringsproject.org/>

² Johnson, Kris A., et al. "A benefit–cost analysis of floodplain land acquisition for US flood damage reduction." *Nature Sustainability* 3.1 (2020): 56-62.

slows down stormwater runoff and enhances the infiltration of this water into the ground is desirable. Great Springs Project intends to acquire aquifer recharge and contributing land which is strategically valuable for flood mitigation purposes since this would simultaneously reduce flood risk while enhancing the recharge of the Edwards Aquifer.

In addition, the trail portion of GSP can reinforce and enhance the benefits of the land conservation by:

1. Incorporating swales and other features to facilitate the infiltration of stormwater,
2. Stabilizing creek and river banks,
3. Providing connected segments of conserved lands to enhance the value of the habitat for native species,
4. Potentially providing access to flood monitoring equipment and other facilities, and
5. Generally adding recreational, public health, transportation, carbon sequestration, economic development, and other benefits to flood mitigation efforts in the Region 11 flood planning area.

Scope of Work

Great Springs Project would recruit and manage consultants to conduct the following tasks as part of the FME:

1. Assemble relevant information about the land parcels that are, or may be, included in the GSP project and related trail development as well as adjacent, relevant flood planning FMEs, FMSs and FMPs,
2. Determine the flood risks involved in the affected area,
3. Assess and quantify the flood mitigation impacts of GSP land conservation and trail development as well as how GSP may contribute to adjacent flood mitigation efforts,
4. Identify possible and appropriate modifications to open space and trail features that would enhance the flood mitigation of GSP and adjacent flood mitigation efforts,
5. In cooperation with the affected local governments, develop appropriate proposals for FMS(s) and FMP(s) for inclusion in the Region 11 Regional Flood Plan, and
6. Submit a final report within one year of FME funding.

Note that, based on this FME, GSP would, in cooperation with relevant local governments, apply for funding of the resulting FMSs and/or FMPs.

Budget

The budget for this FME is estimated to be \$250,000 which includes administrative overhead by GSP.

Public Outreach and Involvement Update

July

- RFPG Meeting – 2:00 p.m., Wednesday, July 27th

August

- *No August RFPG Meeting*
- Draft RFP Public Comment Period Begins – Monday, August 8th

September

- **RFPG Meeting and Draft RFP Public Hearing** – 4:30 p.m., Wednesday, September 7th, UGRA Offices, Kerrville
- **RFPG Draft RFP 2nd Public Comment Meeting** – **__:30 p.m.**, Wednesday, September 21st, **_____**, Victoria

October

- RFPG Meeting – 2:00 p.m., Wednesday, October 5th
- Draft RFP Public Comment Period Closes – Friday, October 7th

November & December

- RFPG Meeting – 2:00 p.m., Wednesday, November 2nd
- RFPG Meeting – 2:00 p.m., Wednesday, December 7th

First Draft RFP Comment Period:

30-day Comment Period (August 8th – September 6th)

Second Draft RFP Comment Period:

30-day Comment Period (September 8th – October 7th)

Public Outreach and Involvement Update

<u>Tasks</u>	<u>Complete by</u>
Post Draft Plan on website prior to start of comment period. 30-day comment period starts on August 8th.	No later than August 5, 2022
Publish Legally Required Public Hearing Notice. TAC requires legal notice to be posted 30 days prior to the Sep. 7th meeting.	No later than August 5, 2022
Post hard copy of Draft Plan at three locations 30 days prior and 30 days following the Sep. 7th meeting.	No later than August 5, 2022
Issue Press Release #1. GBRA will issue press release. Media outlets will print in late July timeframe.	July 15 - Aug 8, 2022
1st Social Media Post - 1) describe draft plan available for public, 2) upcoming meeting on draft plan (Sep 7th), and 3) upcoming start of comment period. GBRA will post online. Planning members will share posts.	August 8, 2022
1st Eblast - same as social media messaging	August 8, 2022
Additional Outreach by Email: Adjacent RFPGs, COGs, RWPG L and RPWG J	August 8, 2022

Public Outreach and Involvement Update



<u>Tasks</u>	<u>Complete by</u>
Issue Press Release #2. GBRA will issue press release. Media outlets will print in late August timeframe.	Aug 15 - Sep 5, 2022
2nd Social Media Post - 1) describe draft plan available for public, 2) upcoming meeting on draft plan (Sep 7th), and 3) reminder about open comment period. GBRA will post online. Planning members will share posts.	August 24, 2022
2nd Eblast - same as social media messaging	August 24, 2022
Additional Outreach by Email: Adjacent RFPGs, COGs, RWPG L and RPWG J	August 24, 2022
3rd Social Media Post - 1) describe draft plan available for public, and 2) upcoming end of comment period ending. Planning members will share posts.	September 30, 2022
3rd Eblast - same as social media messaging	September 30, 2022
Additional Outreach by Email: Adjacent RFPGs, COGs, RWPG L and RPWG J	September 30, 2022

Public Outreach and Involvement Update

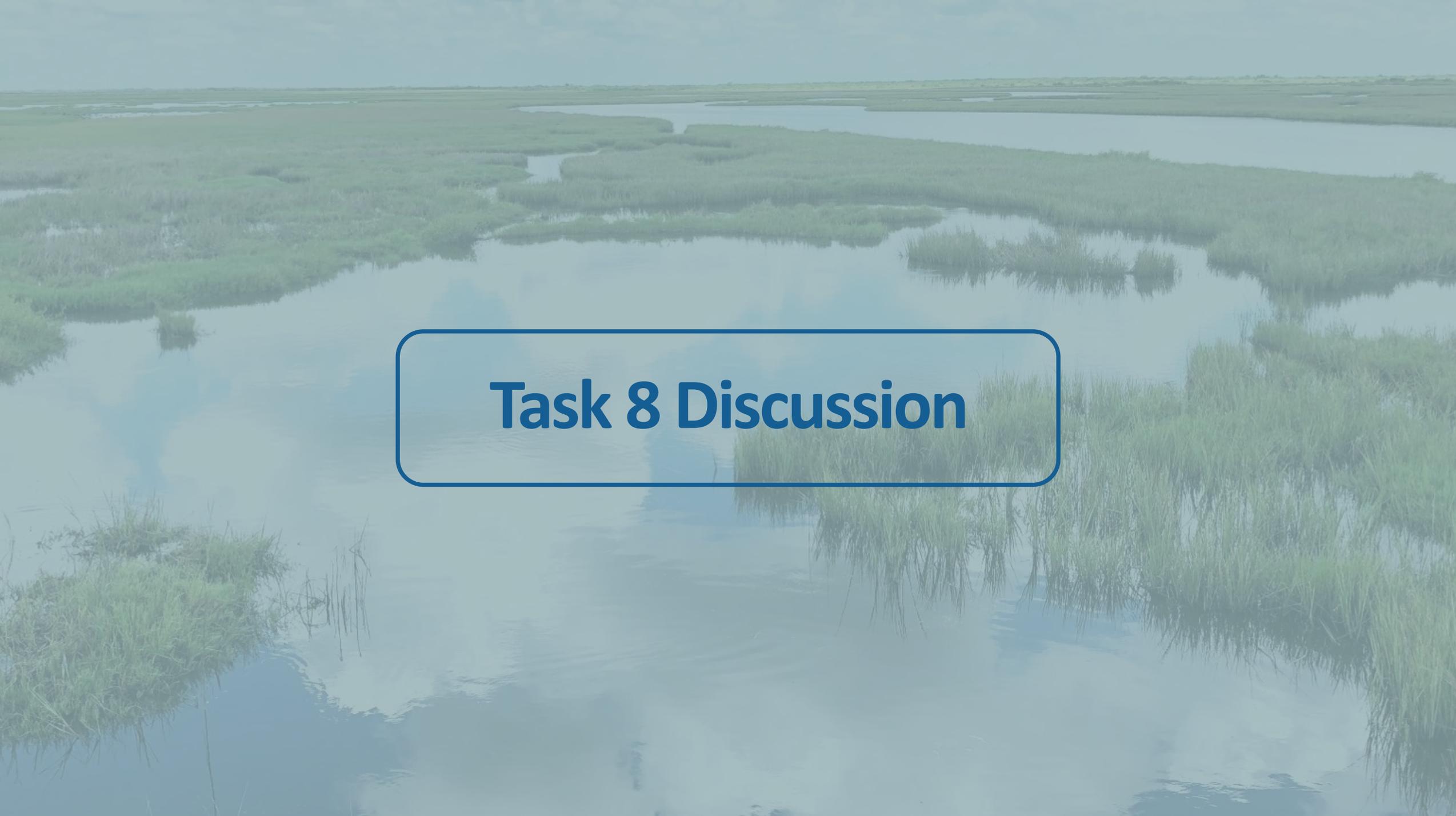
“On the Road” RFPG Meetings – September 7th (Kerrville) and September 21st (Victoria)

- **September 7th RFPG Meeting and Public Hearing Format:**

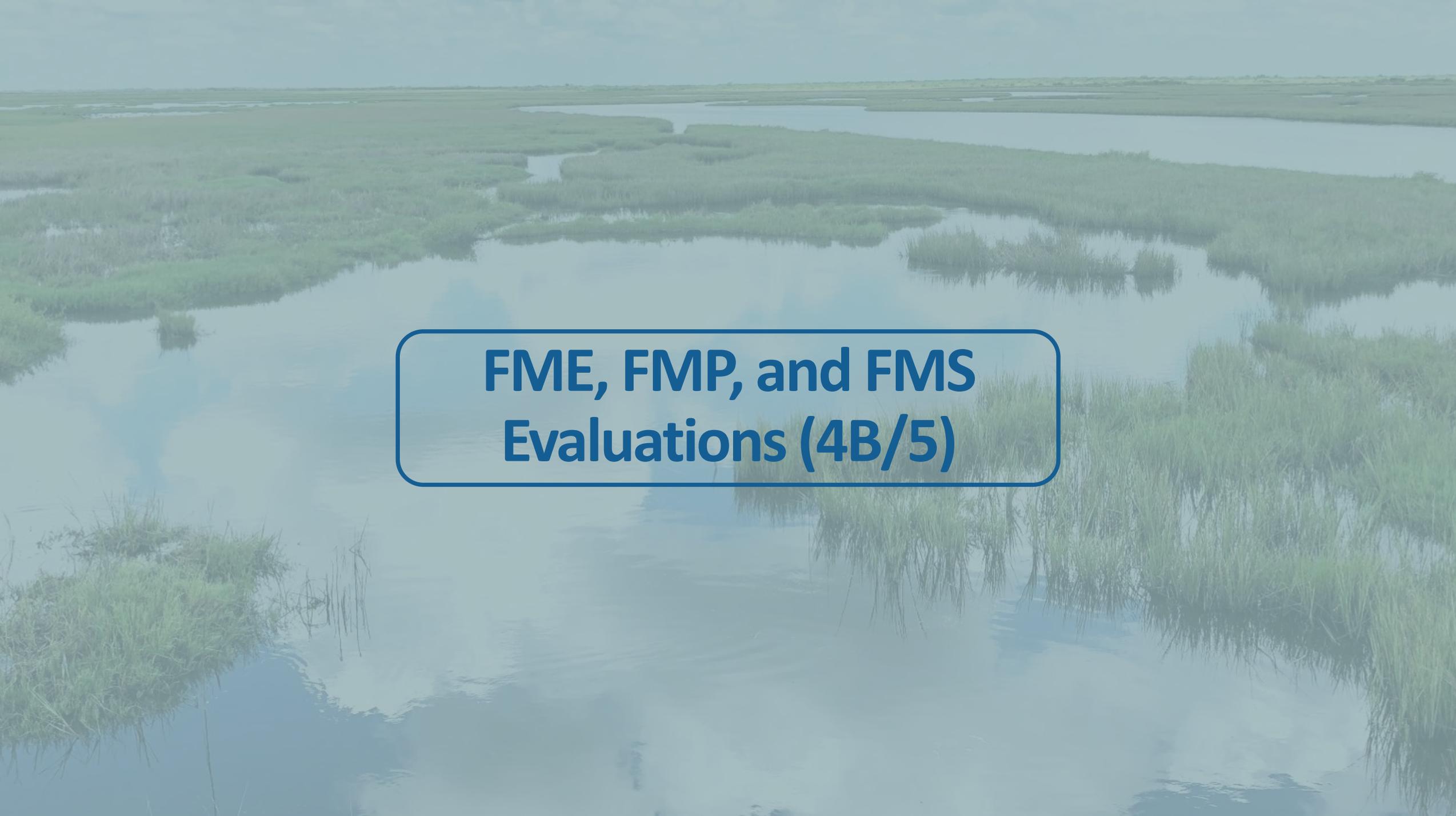
- Regular Business meeting starts at 4:30p
- Public Hearing starts at 5:30p
 - Present Overview of Flood Planning Process – *intent of flood planning process, role of RFPG, timeline for plan submission and administrative review of draft plan.*
 - Present Overview of Draft RFP
 - Receive verbal and written comments on Draft RFP

- **September 21st RFPG Meeting Format:**

- Informational Meeting starts at 5:30p
 - Present Overview of Flood Planning Process – *intent of flood planning process, role of RFPG, timeline for plan submission and administrative review of draft plan.*
 - Present Overview of Draft RFP
 - Receive verbal and written comments on Draft RFP

An aerial photograph of a vast wetland landscape. The terrain is a mosaic of green, grassy patches and winding, light-colored water channels. The water reflects the sky, which is filled with soft, white clouds. The overall scene is serene and natural, typical of a coastal or estuarine environment.

Task 8 Discussion

An aerial photograph of a vast wetland area. The landscape is a mosaic of green marshland and blue water channels. The water reflects the sky and the surrounding vegetation. The overall scene is serene and natural.

FME, FMP, and FMS Evaluations (4B/5)

Regional FMS Action Summary Sheets



Flood Management Strategy (FMS)

REGION GUADALUPE
REGIONAL FLOOD PLANNING GROUP

Title: Property Acquisitions and Structural Elevation
 ID#: 112000187 Sponsor: Guadalupe Regional Flood Planning Group
 RFPG recommend?: TBD Reason for Recommendation: Meets minimum TWDB requirements

Strategy Details
 Strategy type: Property Acquisition and Structural Elevation
 Strategy description: Develop and implement a voluntary buyout or structural elevation assistance programs to eliminate repetitive loss structures and implementing programs to purchase/preserve open space to protect riparian corridors.

County: Lavaca, Gonzales, Guadalupe, Bandera, Comal, Real, Caldwell, Kendall, Fayette, Kerr, Hays, Bastrop, Gillespie, Blanco, Travis, Refugio, Calhoun, Goliad, Victoria, Karnes, De Witt, Wilson
 Associated FMP's: -
 Associated FME's: -
 Associated FMS's: -

Watershed HUC# (if known): 12100204, 12100303 Drainage area (mi², est.): 6,010

Existing 100-Year Flood Risk

Population at risk 89,019 # of structures 27,069 Critical facilities 127
 Flood risk type: Riverine? Yes Coastal? Yes Local? No Playa? No
 Farm/Ranch land impacted (acres) 360,251 Roadway(s) impacted (miles) 935
 Number of low water crossings 661 Historical road closures -

100-Year Flood Risk Reduction
 Population removed from 100-yr - # of structures removed from 100-yr -
 Critical facilities removed from 100-yr - Farm/Ranch land removed from 100-yr (acres) -
 Road removed from 100-yr (miles) - Low water crossings removed from 100-yr -
 Other benefits: Flood risk reduction and nature based solutions 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 \$1,250,000 Amount of available funding - % Nature-Based 0



Flood Management Strategy (FMS)

REGION GUADALUPE
REGIONAL FLOOD PLANNING GROUP

Title: Flood Measurement and Warning
 ID#: 112000189 Sponsor: Guadalupe Regional Flood Planning Group
 RFPG recommend?: TBD Reason for Recommendation: Meets minimum TWDB requirements

Strategy Details
 Strategy type: Flood Measurement and Warning
 Strategy description: Develop or implement programs to increase flood warning including reverse 911 systems; evacuation/emergency management plans and personnel training; NOAA all-hazards radios, and programs to increase safety at low water crossings (signs, flashers, gates)

County: Lavaca, Gonzales, Guadalupe, Bandera, Comal, Real, Caldwell, Kendall, Fayette, Kerr, Hays, Bastrop, Gillespie, Blanco, Travis, Refugio, Calhoun, Goliad, Victoria, Karnes, De Witt, Wilson
 Associated FMP's: -
 Associated FME's: -
 Associated FMS's: -

Watershed HUC# (if known): 12100204, 12100303 Drainage area (mi², est.): 6,010

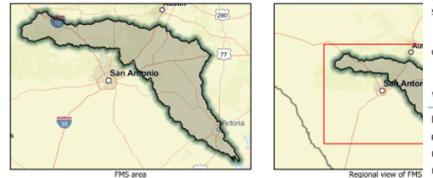
Existing 100-Year Flood Risk

Population at risk 89,019 # of structures 27,069 Critical facilities 127
 Flood risk type: Riverine? Yes Coastal? Yes Local? No Playa? No Other? No
 Farm/Ranch land impacted (acres) 360,251 Roadway(s) impacted (miles) 935
 Number of low water crossings 661 Historical road closures -

100-Year Flood Risk Reduction
 Population removed from 100-yr - # of structures removed from 100-yr -
 Critical facilities removed from 100-yr - Farm/Ranch land removed from 100-yr (acres) -
 Road removed from 100-yr (miles) - Low water crossings removed from 100-yr -
 Other benefits: Public safety 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 \$9,541,000 Amount of available funding - % Nature-Based 0



Flood Management Strategy (FMS)

REGION GUADALUPE
REGIONAL FLOOD PLANNING GROUP

Title: Regulatory and Guidance
 ID#: 112000188 Sponsor: Guadalupe Regional Flood Planning Group
 RFPG recommend?: TBD Reason for Recommendation: Meets minimum TWDB requirements

Strategy Details
 Strategy type: Regulatory and Guidance
 Strategy description: Regularly review and update floodplain ordinances, land use/zoning, development criteria, and enforcement. Develop and implement higher standards, green infrastructure program, and use best available data (eg. BUI) to manage floodplains

County: Lavaca, Gonzales, Guadalupe, Bandera, Comal, Real, Caldwell, Kendall, Fayette, Kerr, Hays, Bastrop, Gillespie, Blanco, Travis, Refugio, Calhoun, Goliad, Victoria, Karnes, De Witt, Wilson
 Associated FMP's: -
 Associated FME's: -
 Associated FMS's: -

Watershed HUC# (if known): 12100204, 12100303 Drainage area (mi², est.): 6,010

Existing 100-Year Flood Risk

Population at risk 89,019 # of structures 27,069 Critical facilities 127
 Flood risk type: Riverine? Yes Coastal? Yes Local? No Playa? No Other? No
 Farm/Ranch land impacted (acres) 360,251 Roadway(s) impacted (miles) 935
 Number of low water crossings 661 Historical road closures -

100-Year Flood Risk Reduction
 Population removed from 100-yr - # of structures removed from 100-yr -
 Critical facilities removed from 100-yr - Farm/Ranch land removed from 100-yr (acres) -
 Road removed from 100-yr (miles) - Low water crossings removed from 100-yr -
 Other benefits: Flood risk reduction and nature based solutions 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 \$93,000 Amount of available funding - % Nature-Based 0



Flood Management Strategy (FMS)

REGION GUADALUPE
REGIONAL FLOOD PLANNING GROUP

Title: Education and Outreach
 ID#: 112000186 Sponsor: Guadalupe Regional Flood Planning Group
 RFPG recommend?: TBD Reason for Recommendation: Meets minimum TWDB requirements

Strategy Details
 Strategy type: Education and Outreach
 Strategy description: Activities not limited to implementing/improving flood education and awareness programs for residents, elected officials, and real estate agents/developers; and flood insurance campaigns to reduce flood risk and increase NFIP participation.

County: Lavaca, Gonzales, Guadalupe, Bandera, Comal, Real, Caldwell, Kendall, Fayette, Kerr, Hays, Bastrop, Gillespie, Blanco, Travis, Refugio, Calhoun, Goliad, Victoria, Karnes, De Witt, Wilson
 Associated FMP's: -
 Associated FME's: -
 Associated FMS's: -

Watershed HUC# (if known): 12100204, 12100303 Drainage area (mi², est.): 6,010

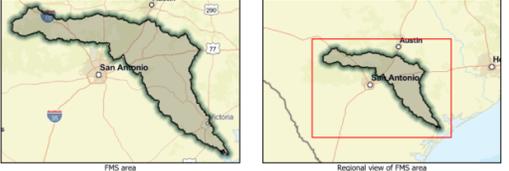
Existing 100-Year Flood Risk

Population at risk 89,019 # of structures 27,069 Critical facilities 127
 Flood risk type: Riverine? Yes Coastal? Yes Local? No Playa? No Other? No
 Farm/Ranch land impacted (acres) 360,251 Roadway(s) impacted (miles) 935
 Number of low water crossings 661 Historical road closures -

100-Year Flood Risk Reduction
 Population removed from 100-yr - # of structures removed from 100-yr -
 Critical facilities removed from 100-yr - Farm/Ranch land removed from 100-yr (acres) -
 Road removed from 100-yr (miles) - Low water crossings removed from 100-yr -
 Other benefits: Flood risk reduction, increased participation in the 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 \$978,000 Amount of available funding - % Nature-Based 0



Flood Management Strategy (FMS)

REGION GUADALUPE
REGIONAL FLOOD PLANNING GROUP

Title: Infrastructure Projects
 ID#: 112000190 Sponsor: Guadalupe Regional Flood Planning Group
 RFPG recommend?: TBD Reason for Recommendation: Meets minimum TWDB requirements

Strategy Details
 Strategy type: Infrastructure Projects
 Strategy description: Develop programs to preserve system functionality (storm drains, culverts, bridges); enhance riparian corridors & preserve floodplain capacity; and infrastructure improvements programs that identify and prioritize flood risk reduction projects

County: Lavaca, Gonzales, Guadalupe, Bandera, Comal, Real, Caldwell, Kendall, Fayette, Kerr, Hays, Bastrop, Gillespie, Blanco, Travis, Refugio, Calhoun, Goliad, Victoria, Karnes, De Witt, Wilson
 Associated FMP's: -
 Associated FME's: -
 Associated FMS's: -

Watershed HUC# (if known): 12100204, 12100303 Drainage area (mi², est.): 6,010

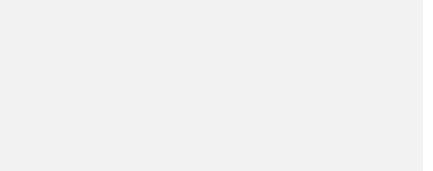
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100-Year Flood Risk Reduction
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 Critical facilities removed from 100-yr - Farm/Ranch land removed from 100-yr (acres) -
 Road removed from 100-yr (miles) - Low water crossings removed from 100-yr -
 Other benefits: Flood Risk Reduction and Public safety 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 \$21,611,000 Amount of available funding - % Nature-Based 0



Flood Management Strategy (FMS)

REGION GUADALUPE
REGIONAL FLOOD PLANNING GROUP

Title: Infrastructure Projects
 ID#: 112000190 Sponsor: Guadalupe Regional Flood Planning Group
 RFPG recommend?: TBD Reason for Recommendation: Meets minimum TWDB requirements

Strategy Details
 Strategy type: Infrastructure Projects
 Strategy description: Develop programs to preserve system functionality (storm drains, culverts, bridges); enhance riparian corridors & preserve floodplain capacity; and infrastructure improvements programs that identify and prioritize flood risk reduction projects

County: Lavaca, Gonzales, Guadalupe, Bandera, Comal, Real, Caldwell, Kendall, Fayette, Kerr, Hays, Bastrop, Gillespie, Blanco, Travis, Refugio, Calhoun, Goliad, Victoria, Karnes, De Witt, Wilson
 Associated FMP's: -
 Associated FME's: -
 Associated FMS's: -

Watershed HUC# (if known): 12100204, 12100303 Drainage area (mi², est.): 6,010

Existing 100-Year Flood Risk

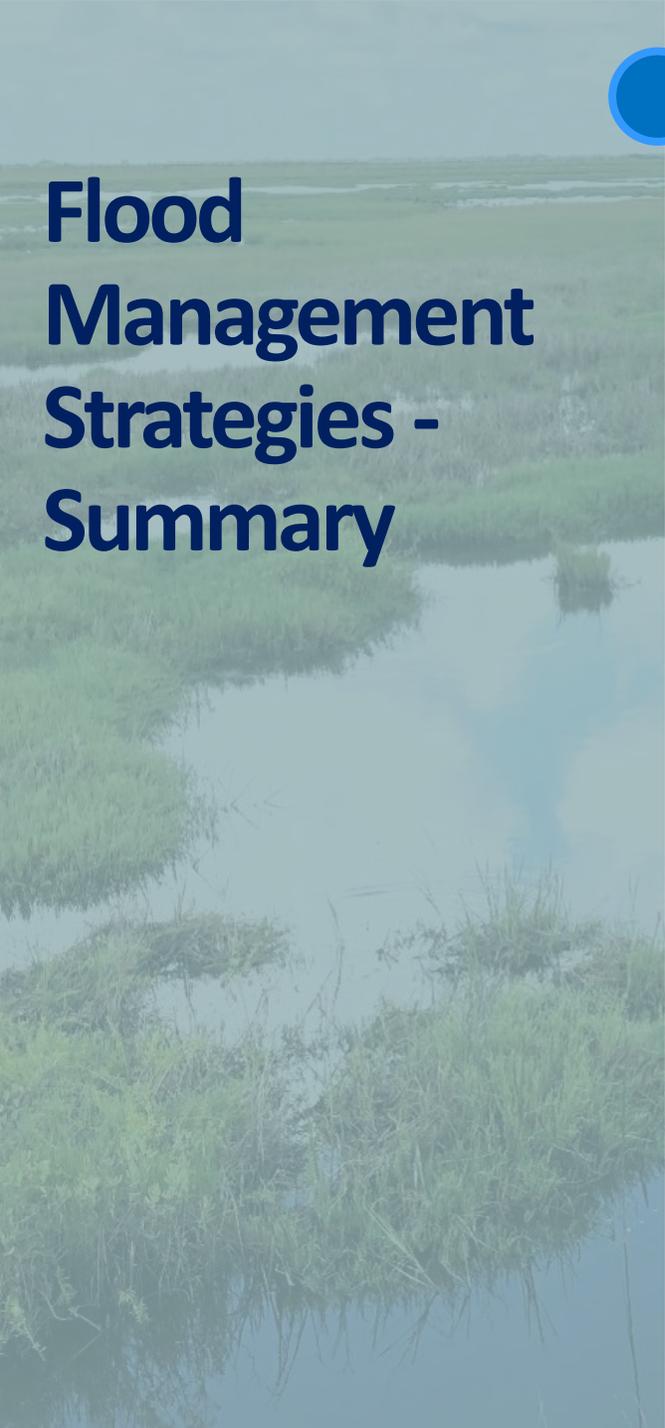
Population at risk 89,019 # of structures 27,069 Critical facilities 127
 Flood risk type: Riverine? Yes Coastal? Yes Local? No Playa? No Other? No
 Farm/Ranch land impacted (acres) 360,251 Roadway(s) impacted (miles) 935
 Number of low water crossings 661 Historical road closures -

100-Year Flood Risk Reduction
 Population removed from 100-yr - # of structures removed from 100-yr -
 Critical facilities removed from 100-yr - Farm/Ranch land removed from 100-yr (acres) -
 Road removed from 100-yr (miles) - Low water crossings removed from 100-yr -
 Other benefits: Flood Risk Reduction and Public safety 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 \$21,611,000 Amount of available funding - % Nature-Based 0





Flood Management Strategies - Summary

- **184 Potentially Feasible FMSs, consolidated into five Regional FMSs**
 - Make FMSs inclusive and accessible to all communities
 - Encourage collaboration between sponsors
 - 61 in Education and Outreach
 - 45 in Flood Measurement and Warning
 - 16 in Infrastructure Projects
 - 31 in Property Acquisition and Structural Elevation
 - 31 in Regulatory and Guidance
- **Cost estimates range from \$1,000 to \$12.0 M**
- **Total cost for evaluated FMSs is \$33.5 M**

FME Action Summary Sheets

Flood Management Evaluation (FME)

Title **City of Victoria Drainage Improvement Study**

ID# **111000069**

Sponsor (name of entity, not person) **Victoria (Municipality)**

RFPG recommend? **TBD** Reason for Recommendation **Meets minimum TWDB requirements**



Study Details

Study type **Watershed Planning**

Study description **Study of solutions to increase dimensions of drainage culverts in areas prone to flooding and/or drainage problems in various City locations.**

New Hydrologic or Hydraulic model? **-** Emergency Need? **-**

County **Victoria** Watershed HUC# (if known) **-**

Drainage area (Square miles, est.) **37** Goal(s) **110**

100-Year Flood Risk Summary

Population at risk **5,112** # of structures **1,13**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

Farm/Ranch land impacted (acres) **111** Roadway(s) impacted (length) **-**

Number of low water crossings **0** Historical road closures **-**

Estimated Cost and Funding Availability

Total Cost **\$1,000,000** Amount of Available Funding **TBD**

Funding source **TBD**



Flood Management Evaluation (FME)

Title **Caldwell County Bridge Improvements Project Planning**

ID# **111000003**

Sponsor (name of entity, not person) **Caldwell (County)**

RFPG recommend? **TBD** Reason for Recommendation **Meets minimum TWDB requirements**



Study Details

Study type **Project Planning**

Study description **Project planning for proposed project to replace antiquated bridges built before 1950. These bridges carry emergency vehicles. In addition, upgraded bridge infrastructure would reduce backwater flooding at up to 1000 acres.**

New Hydrologic or Hydraulic model? **-** Emergency Need? **No** Existing/Anticipated models in near term? **-**

County **Caldwell** Watershed HUC# (if known) **12100203, 12100202**

Drainage area (Square miles, est.) **545** Goal(s) **11000009, 11000010**

100-Year Flood Risk Summary

Population at risk **299** # of structures **167** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

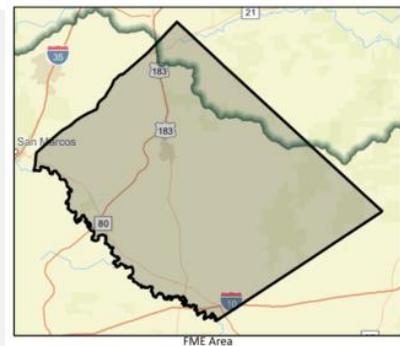
Farm/Ranch land impacted (acres) **4,092** Roadway(s) impacted (length) **14**

Number of low water crossings **30** Historical road closures **-**

Estimated Cost and Funding Availability

Total Cost **\$256,000** Amount of Available Funding **TBD** Federal funding availability **TBD**

Funding source **TBD**



Flood Management Evaluation (FME)

Title **City of Buda Dam Study**

ID# **111000012**

Sponsor (name of entity, not person) **Buda (Municipality)**

RFPG recommend? **TBD** Reason for Recommendation **Meets minimum TWDB requirements**



Study Details

Study type **Preparedness**

Study description **Study to evaluate dam failure risks, planning for structural and nonstructural measures to protect the integrity of the earthen fill dams.**

New Hydrologic or Hydraulic model? **-** Emergency Need? **No** Existing/Anticipated models in near term? **-**

County **Hays** Watershed HUC# (if known) **12100203**

Drainage area (Square miles, est.) **9** Goal(s) **11000009, 11000010**

100-Year Flood Risk Summary

Population at risk **4** # of structures **3** Critical facilities **0**

Flood risk type: Riverine? **Yes** Coastal? **No** Local? **No** Playa? **No** Other? **No**

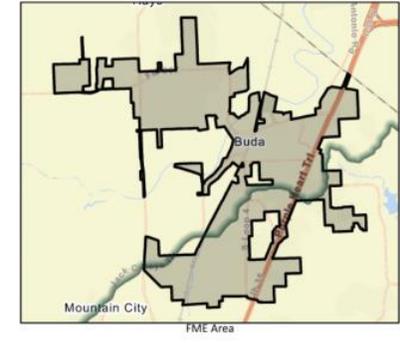
Farm/Ranch land impacted (acres) **8** Roadway(s) impacted (length) **1**

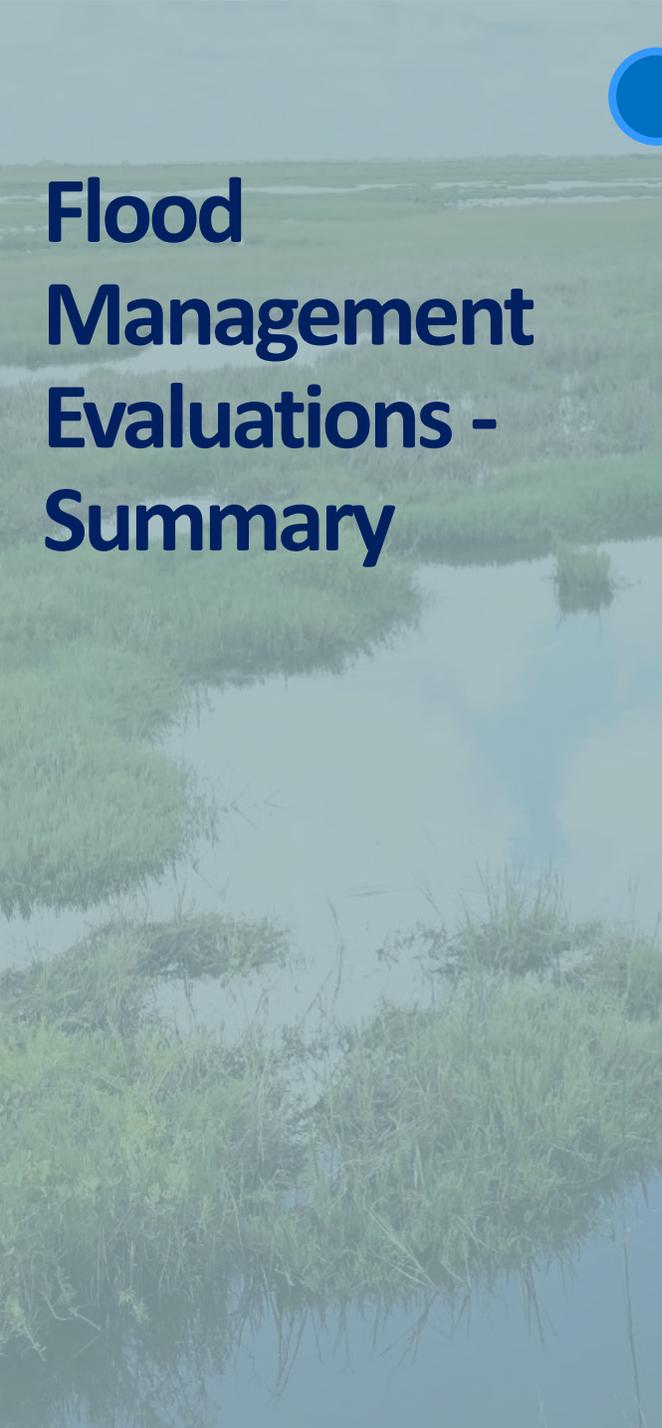
Number of low water crossings **1** Historical road closures **-**

Estimated Cost and Funding Availability

Total Cost **\$500,000** Amount of Available Funding **TBD** Federal funding availability **TBD**

Funding source **TBD**





Flood Management Evaluations - Summary

- **136 Potentially Feasible FMEs**
 - 38 Watershed Planning
 - 26 Drainage Master Plans, Other Community-Scale Plans
 - 10 H&H Modeling, Regional Watershed Studies
 - 2 Flood Mapping Updates
 - 92 Project Planning
 - 6 Preparedness
- **Cost estimates range from \$10,000 to \$8.0 M**
- **Total cost for evaluated FMEs is \$68.4 M**

FMP Action Summary Sheets



Flood Mitigation Project (FMP)



Title Lake Placid Spillgate Replacement and Dam Armoring

ID# 113000050 Sponsor Guadalupe-Blanco River Authority

RFPG recommend? TBD Reason for Recommendation Meets minimum TWDB requirements

Project Description

GBRA proposed to replace the two antiquated bear-trap style spillgates on the Lake Placid dam with new hydraulically-actuated steel crest gates. Replacement of the gates will include structural modifications to the existing spillway structure, upgrades to

Watershed HUC# (if known) 12100202 Emergency Need? No

Drainage area (mi² est.) 1

Associated FME's - County Guadalupe

Associated FMS's - Associated FMP's -

Existing 100-Year Flood Risk

Flood risk type: Riverine? Yes Coastal? No Local? No Playa? No Other? No

Population at risk 912 # of structures 417 Critical facilities 1

Farm/Ranch land impacted (acres) 40 Roadway(s) impacted (length) 7

Number of low water crossings 2 Historical road closures -

100-Year Flood Risk Reduction

Population removed from 100-yr 0 # of structures removed from 100-yr 0

Critical facilities removed from 100-yr 0 Farm/Ranch land removed from 100-yr (acres) 0

Road removed from 100-yr (miles) 0 Low water crossings removed from 100-yr 0

Other benefits - Reduction in # of road closures over 10 years 0

Impacts

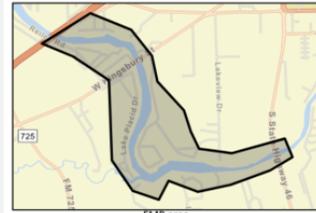
Negative impacts? No Negative impacts description -

Water supply contributions? - Water supply contribution description -

Estimated Cost

Project Cost \$40,000,000 % Nature-Based -

Recurring costs 0 Issues -



FMP area

Flood Mitigation Project (FMP)



Title Clay Street Drainage and Kroc Center Detention Pond Spillway Improvements

ID# 113000058 Sponsor Kerrville (Municipality)

RFPG recommend? TBD Reason for Recommendation Meets minimum TWDB requirements

Project Description

Proposed project to reconfigure and reconstruct the existing Kroc Center outlet structure and Clay Street drainage improvements. No adverse impacts have been identified downstream.

Watershed HUC# (if known) 12100201 Emergency Need? No

Drainage area (mi² est.) 0

Associated FME's - County Kerr

Associated FMS's - Associated FMP's -

Existing 100-Year Flood Risk

Flood risk type: Riverine? Yes Coastal? No Local? No Playa? No Other? No

Population at risk - # of structures - Critical facilities -

Farm/Ranch land impacted (acres) - Roadway(s) impacted (length) -

Number of low water crossings - Historical road closures -

100-Year Flood Risk Reduction

Population removed from 100-yr 0 # of structures removed from 100-yr 0

Critical facilities removed from 100-yr 0 Farm/Ranch land removed from 100-yr (acres) 0

Road removed from 100-yr (miles) 0 Low water crossings removed from 100-yr 0

Other benefits - Reduction in # of road closures over 10 years 0

Impacts

Negative impacts? No Negative impacts description -

Water supply contributions? - Water supply contribution description -

Estimated Cost

Project Cost \$9,000,000 % Nature-Based - BCR -

Recurring costs 30000 Issues -



FMP area



Regional view of FMP area

Flood Mitigation Project (FMP)



Title Purgatory Creek Channel Improvement

ID# 113000026 Sponsor San Marcos (Municipality)

RFPG recommend? TBD Reason for Recommendation Meets minimum TWDB requirements

Project Description

Purgatory Creek Channel Improvement Project Preliminary Engineering Report

Watershed HUC# (if known) 12100203 Emergency Need? No

Drainage area (mi² est.) 0

Associated FME's - County Hays

Associated FMS's - Associated FMP's -

Existing 100-Year Flood Risk

Flood risk type: Riverine? Yes Coastal? No Local? No Playa? No Other? No

Population at risk 433 # of structures 73 Critical facilities 0

Farm/Ranch land impacted (acres) - Roadway(s) impacted (length) 1

Number of low water crossings 1 Historical road closures -

100-Year Flood Risk Reduction

Population removed from 100-yr 56 # of structures removed from 100-yr 27

Critical facilities removed from 100-yr 0 Farm/Ranch land removed from 100-yr (acres) 0

Road removed from 100-yr (miles) 0 Low water crossings removed from 100-yr 5

Other benefits - Reduction in # of road closures over 10 years 0

Negative impacts? No Negative impacts description -

Water supply contributions? - Water supply contribution description -

Estimated Cost

Project Cost \$20,720,000 % Nature-Based 2 BCR -

Recurring costs 0 Issues Utility Relocation, Underground telecom



FMP area



Regional view of FMP area



Flood Mitigation Projects - Summary

- **37 Potentially Feasible FMPs**
 - 14 Stormwater Infrastructure Improvements
 - 6 Roadway Drainage Improvements
 - 10 Regional Detention Facilities
 - 1 Property Acquisition
 - 2 Flood Warning Systems
 - 4 Emergency Generators
- **Cost estimates range from \$31,000 to \$40.0 M**
- **Total cost for evaluated FMPs is \$268.2 M**

Look Ahead



Meeting	Milestone Goals
July (mid)	Submit Draft Regional Flood Plan to RFPG, including revised chapters and FMX action summaries incorporating RFPG comments, as well as Appendices (no later than July 22 nd)
July 27 th	Draft Regional Flood Plan Approval; Task 12 Discuss
August	August 1 Submittal; Posting 30-days; September 7 Public Meeting
Thru January	September 30 Close comments; October – FNI compile comments and responses; November 2 Discuss; December 7 – Approve to form; January 7 – Submit 2023 RFP

Agenda Item 9

Consider date and agenda items for next meeting

Wednesday, July 27th at 2pm – GBRA, Seguin

Wednesday, September 7th at 4:30pm – UGRA, Kerrville

Wednesday, September 21st at 4:30pm – UHV, Victoria

Wednesday, October 5th at 2pm – GBRA, Seguin

Wednesday, November 2nd at 2pm – GBRA, Seguin

Wednesday, December 7th at 2pm – GBRA, Seguin

Agenda Item 10

Public General Comments

Public Comments limited to 3 minutes per speaker

Agenda Item 11

Adjourn