

# Region 11: Guadalupe Regional Flood Planning Executive Committee Meeting

Tuesday, March 30, 2021 2:00pm

### 1. Attendance

Agenda Item 1
Call to Order

# Agenda Item 2 Welcome

Agenda Item 3
Public General
Comments

Public Comments limited to 3 minutes per speaker

Agenda Item 4
Approval of
Meeting Minutes

Approval of meeting minutes from January 25, 2021 Executive Committee meeting

### **Meeting Minutes**

### Region 11 Guadalupe Flood Planning Group Executive Committee Meeting January 25, 2021 1:00 PM

# Guadalupe-Blanco River Authority River Annex (905 Nolan Street, Seguin, TX 78155) or

### **GoToWebinar Virtual Meeting**

### **Roll Call:**

Executive Committee	<u>Position</u>	Present (x) / Absent () / Alternate Present (*)
Doug Miller	Chair	X
John Johnston	Vice Chair	X
R. Brian Perkins	Secretary	X
Kimberly Meitzen	At-Large	X
Ronald Fieseler	At-Large	Х

Non-voting Member	Agency	Present(x)/Absent()/ Alternate Present (*)
Sue Reilly	Texas Parks and Wildlife Department	
Natalie Johnson	Texas Division of Emergency Management	
Jami McCool	Texas Department of Agriculture	
Allen Nash	Texas State Soil and Water Conservation	
	Board	
Kris Robles	General Land Office	
Morgan White	Texas Water Development Board (TWDB)	Х
Joel Klumpp	Texas Commission on Environmental	
Brittney Wortham-Teakell*	Quality	
Vacant	Public	

### Quorum:

Quorum: Yes

Number of voting members or alternates representing voting members present: 5

Number required for quorum per current voting positions of 5: 3

### **Other Meeting Attendees:**

Lauren Willis, GBRA (Meeting Facilitator) Ramiro Mendoza, GBRA (IT)

### **Other Meeting Attendees: \*\***

James Bronikowski	Don Durden
Ray Buck	Sara Eatman
Kyle Burow	Ben Eldredge
Robert Christmas	Daryl Fowler
Adam Conner, Freese and Nichols	Alam Gebreil

Ken Gill
Lauren Gonzales
Cecilia Green
Paula Jo Lemonds, HDR
Jonathan Letz
Michael Morrison

Melissa Reynolds Lon Shell Andrew Amith Matt Nelson Nicholas Panyard

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

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

Doug Miller called the meeting to order at 1:08 PM. Lauren Willis called roll of the Executive Committee members to record attendance.

### **AGENDA ITEM NO. 2: Welcome**

Doug Miller welcomed members to the meeting.

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

Doug Miller provided instructions for public comments. No public comments were given.

### **AGENDA ITEM NO. 4: Discuss Interview Process**

Doug Miller opened discussion on conducting the interviews. Lauren Willis provided the interview schedule and indicated that the same two questions would be asked of all nominees and additional questions would come from the Executive Committee.

### a. Conduct interviews with nominees for voting and non-voting vacation positions.

Name	Interest Category
Ray Buck	River Authorities
Lon Shell	Counties
Daryl Fowler	Counties
Mike Morrison	Counties
Jonathan Letz	Counties
Bobby Christmas	Electric Generating
Kyle Burow	Municipalities
Ken Gill	Municipalities
Melissa Reynolds	Municipalities
Ben Eldridge	Public
Don Durden	Public

<sup>\*\*</sup>Meeting attendee names were gathered from those who entered information for joining the GoToWebinar meeting.

AGENDA ITEM NO. 5: Consideration of a recommendation to the Full RFPG for the appointment to fill the vacant Voting positions of River Authorities, Municipalities, Counties, and Electric Generating Utilities.

a. Discussion, nomination and consideration of individuals to fill the River Authorities interest category position.

Doug Miller opened the floor for discussion. Brian Perkins moved that the Executive Committee recommend Ray Buck to fill the open position in the River Authorities interest category group. The motion was seconded by John Johnston. The vote passed by consensus.

b. Discussion, nomination and consideration of individuals to fill the Municipalities interest category position.

Doug Miller opened the floor for discussion. Ronald Fieseler moved that the Executive Committee recommend Ken Gill to fill the open position in the Municipalities interest category group. The motion was seconded by John Johnston. The vote passed by consensus.

c. Discussion, nomination and consideration of individuals to fill the Counties interest category position.

Doug Miller opened the floor for discussion. Kimberly Meitzen moved that the Executive Committee recommend Lon Shell to fill the open position in the Counties interest category group. The motion was seconded by Ronald Fieseler. The vote passed by consensus.

d. Discussion, nomination and consideration of individuals to fill the Electric Generating Utilities interest category position.

Doug Miller opened the floor for discussion. Ronald Fieseler moved that the Executive Committee recommend Bobby Christmas to fill the open position in the Electric Generating Utilities interest category group. The motion was seconded by Brian Perkins. The vote passed by consensus.

AGENDA ITEM NO. 6: Consideration of a recommendation to the Full RFPG for the appointment to fill the vacant Non-Voting member position in the Public Interest group.

a. Discussion, nomination and consideration of individuals to fill the Public interest category position.

Doug Miller opened the floor for discussion. Brian moved that the Executive Committee recommend Don Durden to fill the open position in the Public interest category group. The motion was seconded by John Johnston. The vote passed by consensus.

No public comments were given.
AGENDA ITEM NO. 8: Adjourn
Brian Perkins made a motion to adjourn. The motion was seconded by Ronald Fieseler. The motion passed by unanimous consent.
The meeting adjourned at 4:57 PM by Doug Miller.
Approved by the Region 11 Guadalupe Executive Committee at a meeting held on March 30, 2021.
Brian Perkins, SECRETARY
Doug Miller, CHAIR

AGENDA ITEM NO. 7: Public General comments (Public comments limited to 3 minutes per speaker)

# Agenda Item 5

Discussion, evaluation and action concerning the technical consultant procurement for Region 11 Guadalupe Regional Flood Planning Group

- a. Potential presentations by technical consulting firms
- Discussion and evaluation of Statement of Qualifications in response to the RFQ
- c. Consideration of a recommendation to the full RFPG for a selection of a technical consultant to provide services for the development of a regional flood plan for Region 11 Guadalupe RFPG

### **OUR LOCAL EXPERIENCE GIVES YOU A TEAM READY TO START ON DAY 1**



Task 1: Area Assessment

Task 2A, 2B: Existing and **Future Condition Flood** Risk Analysis

Task 3A, 3B: Floodplain **Management Practices** and Goals

Mitigation Analysis 4B: Potential FMEs. FMSs, and FMPs 4C: Technical Memo (01/2022)

Task 4A: Flood

Task 5: FMEs, FMSs & FMPs

6A: Plan Impacts

6B: Impacts on Water Plan

7: Flood Response

8: Regulatory Recommendations

9: Financing Analysis





Task 10: Public Participation and Plan Adoption

The graphic flowchart above outlines AECOM's proposed Workplan for the Region 11 RFP aligned with the Attachment B Scope of Work and TWDB Tasks 1-10. Our understanding of the TWDB planning process and the Guadalupe Basin gives your project a head start.

Our workplan for the Guadalupe Basin RFP is based on the uniqueness of the region. The region is characterized by urbanization upstream in Hays, Comal, and Guadalupe Counties with expansive agricultural land in the downstream areas, such as those in Gonzales and Dewitt Counties. The current population of the study areas is expected to grow by 30% by 2025, increasing future development and stormwater runoff potential. Understanding the region's diversity of socioeconomic, hydrologic, climatic, and natural characteristics will be key to the development of the region's comprehensive flood plan.

### PROVEN COMMUNITY ENGAGEMENT AND OUTREACH





Our approach to communications will be strategic, targeted, measurable, and centered on the issues, opportunities, and milestones important to the RFPG and GBRA.

Public Stakeholder Coordination. Our team offers a unique hybrid approach for conducting public meetings and outreach activities. We will work closely with the RFPG members during the development of the stakeholder outreach plan for the study. It's important for stakeholders to see a tangible benefit for their participation.

Engaging community leadership and key stakeholders is a critical step in assessing flood vulnerability and underlying causes, as well as collecting important data.

AECOM values public comment and participation and will initiate the outreach as soon as the RFPG authorizes.



### **AECOM's interactive web-based tool**

lets you engage and consult stakeholders from their computer and mobile devices. By providing a hybrid approach to community engagement, this tool specially developed by AECOM allows clients to engage with a broader audience who cannot attend inperson meetings.

### THE NO RISK SOLUTION FOR THE GUADALUPE **REGIONAL FLOOD PLANNING GROUP**



AECOM received a rating of 10/10 in schedule adherence, budget adherence, quality, and overall team satisfaction from the TWDB on 12/7/20 for CTP Program Assistance 2018-2019.

"[AECOM] completed all work on time or ahead of schedule... followed up on all of the questions arising at the table discussions at the open house in coordination with the Region."

FEMA survey regarding Hays County Project

We understand that while the primary flood challenges are located along the Guadalupe River and Dam maintenance, smaller communities also face unaddressed challenges. Small tributaries and the San Marcos River are a frequent source of damages.



**KERR COUNTY** 2002 Quinlan Creek Flood in Kerrville



KENDALL COUNTY 1998 Comal and Dry Comal Creek Flooding



**DEWITT COUNTY VICTORIA** Gohlke Creek and the City of Cuero



COUNTY tributary flood damage to Whispering Creek and Spring Creek

### **AECOM OFFERS A TEAM WITH EXTENSIVE TROPICAL STORM EXPERIENCE** HAVING LED THE FLOODING STUDIES OF THE ENTIRE TEXAS COASTLINE

☑ Successful Track Record of Collaborating Together:

- AECOM, K Friese, and Torres are partners on a TWDB Flood Planning Project
- AECOM and Michael Baker collaborated for 10+ years on FEMA projects including those in the Guadalupe Region

☑ State Leaders in Flood Planning Experience (TWDB and Guadalupe Region)

☑ Knowledge of Dam Calibration on the Guadalupe, Karst Hydrology, Split Flows on the San Marcos River, Overflows of flooding from one basin to another, joint coastal/riverine near Victoria and Water Resources in Guadalupe Region

### PROVEN GUADALUPE REGION WATER PLANNING/MODELING EXPERIENCE

### **WATERSHED PLANNING STUDIES**

AECOM successfully served as San Marcos's consultant for a large flood mitigation project and identified a low-cost solution to mitigate nuisance flooding through a combined surface flooding and storm water network analysis.

AECOM's subconsultant K Friese + Associates brings unique experience and understanding to flood planning and policy at the local level. They specialize in exclusively serving the public sector providing city engineering, stormwater design development reviews, and floodplain administration services for such entities as New Braunfels, Woodcreek, Kyle, Bastrop, Hays County, and Travis County.

FEMA: Texas and Nationwide Production and Technical Support (Compass). AECOM led the FEMA coastal study and GLO coastal resiliency including all of the Guadalupe coastal watershed. AECOM lead TWDB and FEMA Base Level Engineering covering the majority of watershed (Dan Zell led the San Marcos, Blanco, and Guadalupe River Revisions)

TWDB Statewide Flood Planning and Guidance Development.
AECOM led development of guidance for regional flood planning groups.



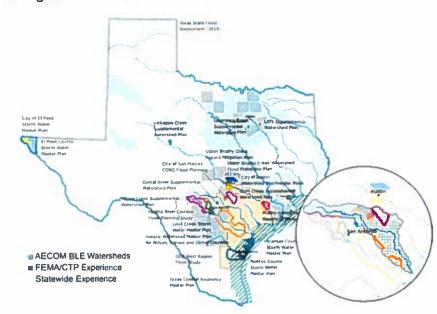
San Marcos Infrastructure Feasibility Study. Dan Zell's proposed flood mitigation solution was unanimously approved by council.

Texas GLO West Region Flood Studies. AECOM leads the West Region studies (including most of the Guadalupe Basin). We will seek synergies between the two projects.

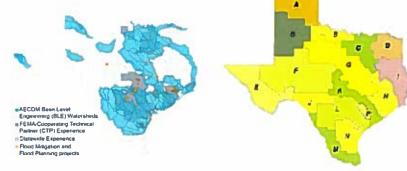
Upper Brushy Creek Flood Protection Plan. Identified creek flooding concerns throughout the watershed, prioritized them, and developed mitigation alternatives. Developed consensus among stakeholders to prioritize projects for implementation. Ruth Haberman led this project.

### PROVEN STATEWIDE WATER PLANNING/MODELING EXPERIENCE

**AECOM is a proven leader in Flood Risk Planning.** Having studied watersheds statewide, we provide unparalleled experience in providing thoughtful consensus-based solutions.



The AECOM Team leverages our experience developing FEMA flood risk products. The areas shown are where AECOM led activities (current/future risk and mitigation opportunities). The AECOM team modeled all 6,500 stream miles of the Guadalupe Basin and the entire coastline.



Texas Experience in Base Level Engineering (BLE), FEMA, Cooperating Technical Partners (CTPs) such as San Antonio River Authority, and State-wide identifying risks and developing plans to mitigate those risks.

AECOM has a wealth of knowledge on how Regional Water Planning works in Texas and understands that the regional flood planning has been modeled after the regional water planning process.

Since regional water planning began in Texas in 1998, the AECOM team has been a lead consultant for 4 of the 16 regional water planning groups in the state: Region H - San Jacinto, Lower Trinity and Brazos Basins; Region K - Lower Colorado River Basin; Region P- Lavaca/Navidad River Basins; Region M - Lower Rio Grande.

# THE AECOM TEAM: THOUGHTFULLY ASSEMBLED FOR REGION 11'S UNIQUE NEEDS



Elizabeth Levitz, PE, PMP, CFM

Principal in Charge (AECOM)
Study Expertise in existing and

future conditions analysis of riverine flood hazards. Led Lower Guadalupe FEMA Base Level Engineering Study. PM for General Land Office Basin Project West Region, \$25M, that includes the Guadalupe Basin.



Dan Zell, PE, PMP, PGMP, CFM, D.WRE

Project Manager (AECOM)
Led 5 Large projects in the

Guadalupe Basin: 1) San Marcos Infrastructure Feasibility Study for Flood Reduction 2) FEMA Guadalupe Basin Base Level Engineering (entire basin) 3) FEMA Guadalupe River 4) FEMA Post Flood updates to San Marcos and Blanco Rivers 5) FEMA Updates to Hays, Caldwell, Gonzales, and Guadalupe Counties. Deputy PM for General Land Office Basin Project.



Monica Wedo, PE
Assistant PM/
Project Planner (AECOM)
An expert in hydrology and

hydraulics and dams with experience in emergency action plans, dam adequacy analysis, flood control analysis and planning, and final design. Experience in TWDB's state flood plan. Experience in the Upper Brushy Creek WCID and for the San Antonio River Authority on Leon and Medio Creeks that have similar hydrology characteristics to the Guadalupe River.



Ruth Haberman, PE, CFM

Regional Flood Planning (K Friese + Associates)

Expertise in stormwater management. Project manager for a major Watershed Study, Flood Protection Plan, and Risk MAP Flood Study. Her role included TWDB grant management, consultant procurement, stakeholder coordination, analysis, consensus building, project evaluation, and FEMA coordination for one of the fastest growing regions in the nation.



Susan Roth, PE, PMP
Public Outreach and
Participation (Susan Roth)
Leading the TWDB Regional

Drainage Master Plan for Nueces, Jim Wells and Kleberg Counties. Extensive TWDB water planning expertise including Grant Funding. Outreach to marginalized and smaller flood-prone communities. Prior experience as Lower Colorado River Authority senior engineer.



Abe Salinas, PE, CFM Water Districts
(K Friese + Associates)

Experience in serving municipalities, counties and cities within the Guadalupe Basin watershed for stormwater master planning, flood studies, dams, policy guidance, and city engineering services. Serves on the Edwards Aquifer Authority Board of Directors. TFMA board-elect for secretary and has served such communities as New Braunfels, Kerrville, Kyle, San Marcos, Uhland and Woodcreek.



Jacob Torres, PE, CFM
Existing Flood Hazards (Torres &
Associates) Known in the technical

community for his professional work in hydraulics and as a part-time professor at Texas A&M. Dr. Torres is a sought after subject-matter expert for hydraulic modeling, and is an expert in storm water management and regional infrastructure planning. Expertise in flood damage modeling and sediment transport. Subject Matter Expert for Dam Improvement Projects including 1 and 2 dimensional models and flood frequency analysis.



Mohamed Amin Bagha, PE, PMP, CFM

Floodplain Regulations/
Watershed Master Planning

(Michael Baker) Partnered with AECOM to support FEMA in flood mitigation focused outreach and risk analysis. Knowledge of effective regulatory measures and watershed master planning. Experience in Guadalupe, Caldwell, Gonzales and Fayette Counties. Developed flood risk mitigation projects along Town Branch in Caldwell County. Outreach work to advocate for sound floodplain management as the Region 8 Director.

# THE FNITE AM?

Region 11 Guadalupe Regional Flood Planning Group

Regional Flood Plan for Region 11 Flood Planning Afea



# **Committing Resources**

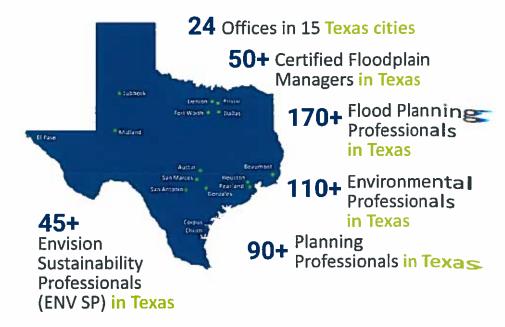
Dedicated, Local Leadership • Right-Sized Team • Planning Resources Available

### · · · · Guadalupe Regional Flood Planning Group

QUALITY PROGRAM MANAGER PROJECT MANAGER PRINCIPAL-IN-CHARGE Krista Bethune Melnar, PE, CFM, PMP<sup>1</sup> Jay Scanlon, PE, CFM, ENV SP1 Drew Hardin, PE1 ASSISTANT PROJECT **MANAGER** Adam Conner, CFM, PMP<sup>1</sup> Task Leaders are identified in **bold**. DATA COLLECTION **FLOOD RISK ANALYSIS &** POLICY AND REGULATIONS MITIGATION STRATEGIES Kim Patak, PE, CFM, ENV SP<sup>1</sup> Eric Scheibe, PE, CFM<sup>4</sup> (Flood Data) Daniel Harris, PE, CFM<sup>4</sup> Colin Slagle, PE, GFM<sup>2</sup> (H&H) Tom Hegemier, PE, CFM, D.WRE<sup>2</sup> Chance Sparks, AICP, CNU-A<sup>1</sup> Gecilia Green<sup>3</sup> (Environmental) Tina McMartin, PE<sup>1</sup> (Structures) Land Use) Brian King, GISP, RPA, CFM1 (GIS) Mark Evans<sup>1</sup> (Funding) Heather Ferrara, MCP<sup>5</sup> (HMP) Velma Danielson<sup>3</sup> (Edwards Aquifer) **OUTREACH** SENIOR ADVISORS **FUNDING/GRANT ADMINISTRATION** Velma Danielson<sup>3</sup> Duke Altman, PE, CFM<sup>2</sup> Jo Ann Howard, JD, MA⁵ Mark Evans<sup>1</sup> (State) Laura Atlas<sup>5</sup> Elizabeth Russell, CSPO5 Heidi Watson, MS5 (Grant Admin)

GUIDE TO FIRMS: 1-Freese and Nichols, Inc.; 2-Doucet and Associates, Inc.; 3-Blanton & Associates, Inc.; 4-Scheibe Consulting, LLC; 5-H20 Partners, Inc.

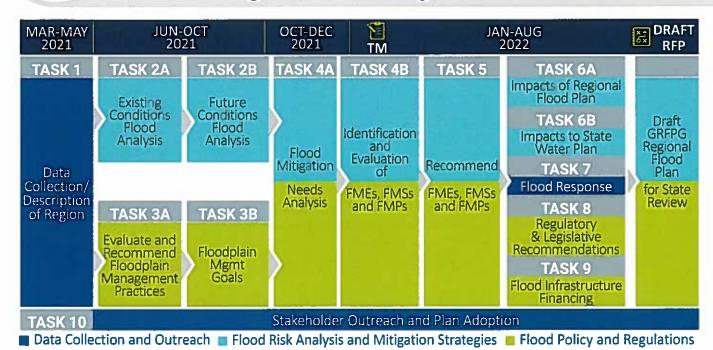
### Our Texas-based FNI team has:





# **Driving the Schedule**

End Game in Mind • Increasing Efficiencies • Proven Regional Planning Success





# **Managing Expectations**

Document/Outreach Understanding • Building a Foundation • Forward Thinking



- Update baseline flood risk
- Continue to improve policies
- Move to next tier of projects
- With each planning cycle, actions are implemented the total flood risk in the basin decreases
- RFPG improves data and executes additional FMEs, FMSs, and FMPs. Funding is expanded



- Utilize improved data
- Refine baseline flood risk
- Enhance policies
- Identify new regional FMSs & FMPs
- TWDB prepares BLE Data
- Execute FMEs, FMSs, FMPs
- Integrate with Water Plan



- Collect data
  - Establish baseline flood risk
  - Focus on policy & known projects

# Dedicating — ur Leadership



### Jay Scanlo

### E. CFM, ENV SP | Project Manager

structural and nonstructural solutions

- ≥ 29 years of e× erience
- Technical Project Manager with career focused on planning, design and implementation of flood mitigation projects
- including both
- understands 👄 🗀 and mitigation
- aging large-scale and local flood planning and mitigation,
- and-users' needs of the data for flood education, planning



### Adam Commerce, CFM, PMP | Assistant Project Manager

- ✓ 12 years of e perience
- ✓ Ample exper = ence with TWDB Regional Water Planning protocols, having served as As istant Project Manager for the Panhandle Water Planning Group (Region A)
- √ Significa nt 

  ✓ ater planning in Texas
- ✓ Strong Know Ledge of capital improvements planning process



### Daniel Harri S, PE, CFM Task Lead: Flood Risk Analysis & Mitigation Strategies

- √ 16 years of 

  ×perience
- ✓ Extensi∨e re sion-wide experience having served as the PM for the GBRA Flood Prote Ction Planning Study of the entire basin
- ✓ In-depth ba kground knowledge of numerous flood protection planning projects already evaluated basin-wide by GBRA and the TWDB
- Has a long orking relationship with numerous conservation districts and drain a ge di stricts within the region, including the Plum Creek Conservation and Reclamation District



### Velma Dan Eelson Task Lead: Outreach

- √ 30 years of experience
- Experience in management of environmental assessment projects and project tea strong foundation for the Senior Advisor, Plan n ing project role
- ✓ Experience working with entities managing groundwater in the Guadalupe River Basin who are key players in this region
- → Based in Sa 

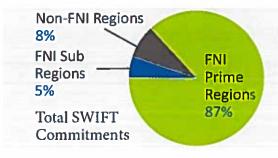
  → Antonio and familiar with the environmental challenges of, and issues inique to, the Guadalupe River Basin Region

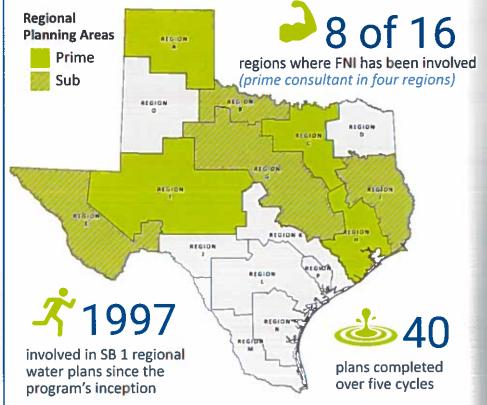
# **Leveraging Experience**

### **Connecting Projects to Funding**

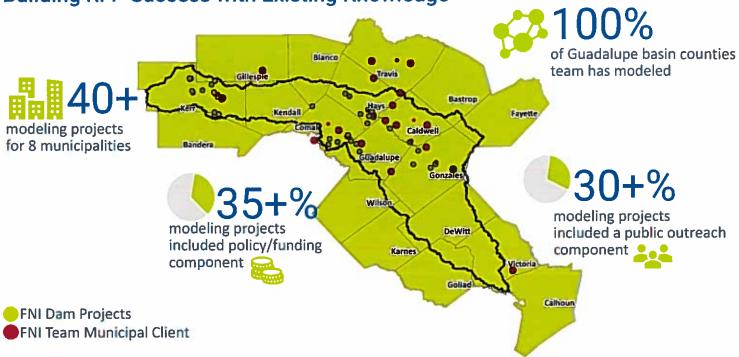
### Leveraging the best of regional water planning:

- Engage the planning group. Utilize subcommittees and empower members to promote the process.
- Engage the stakeholders. Hold inperson meetings with the major stakeholders.
- Engage the public. Work with the GRFPG to setup a website to disseminate information and collect input.
- Regular coordination. Work together with the GRFPG chair and the political subdivision to stay on schedule and address upcoming meetings.





### **Building RFP Success with Existing Knowledge**



This document contains FNI confidential and proprietary information, as well specific project data. We ask that before posting our documents publicly to wait until after all 15 regional flood plan groups have been awarded. For questions, please reach out to the FNI contact listed on the SOQ cover letter.









# THE HALFF+HDR TEAM



### JOSH LOGAN, PE, CFM

### **Project Manager**

- 20+ years experience
- Flood analysis, planning, design
- 8 local MDP in last 4 years
- FEMA, TWDB, GBRA experience



### MIKE MOYA, PE, CFM

### Principal-in-Charge

- 35+ years experience
- Flood analysis, planning, design
- 20 TWDB FPP Studies
- 6 FEMA CTP Programs
- Project Principal on GBRA IFS Study



PAULA JO LEMONDS, PE, PG

### Asst. Project Manager

- Guadalupe Basin native
- 20+ years experience
- Water planning and design
- Region 0 and Region L
   Water Plans
- Water Conservation Expertise



JILL TREVINO, PE, CFM

### FMP Task Lead

- Guadalupe Basin native, based in Victoria
- 15+ years experience
- Flood mitigation
- Unique understanding of Victoria and Lower-Basin communities







# BENEFITS OF THE HALFF+HDR TEAM



Unmatched Flood Planning Knowledge of the Guadalupe River Basin



**TWDB Processes and Funding** 



Specific Experience for Key Issues of the Guadalupe Basin









# UNMATCHED FLOOD PLANNING KNOWLEDGE

# **GBRA IFS STUDIES**

### PHASE 1

- Mainstems: Blanco, San Marcos and Guadalupe Rivers
- Tributaries: Luling & Woodcreek

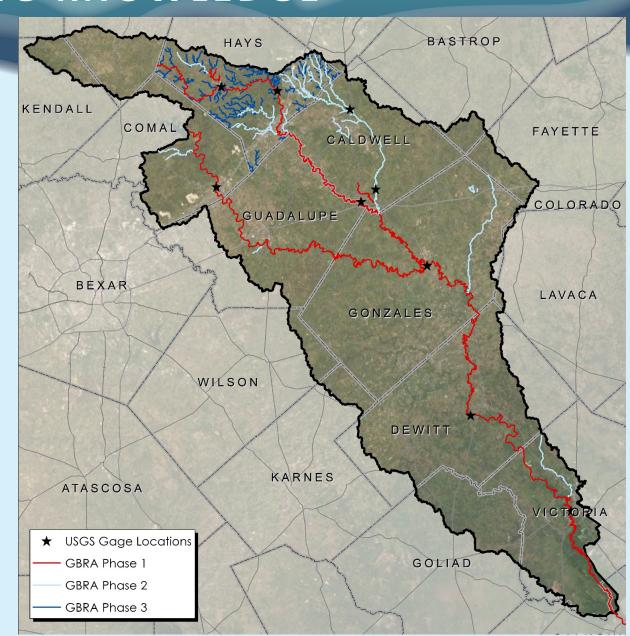
### PHASE 2

- Mainstem: Blanco River and San Marcos confluence added detail
- **Tributaries:** San Marcos, Kyle, Lockhart, Seguin, and Victoria
- Dams: York Creek, Upper San Marcos River, and Plum Creek watersheds

### PHASE 3

Tributaries: Hays County

THIS FLOOD PLANNING & FLOOD RISK KNOWLEDGE WILL BE VITAL TO MEETING THIS CHALLENGING SCHEDULE.



# UNMATCHED FLOOD PLANNING KNOWLEDGE

SUBSEQUENT STUDIES

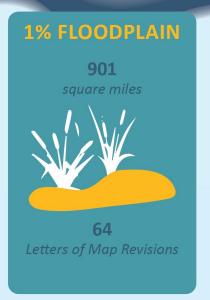
- 1. INFRM
- 2. SAN MARCOS
- 3. HAYS COUNTY
- 4. KYLE
- 5. TWDB CTP
- 6. FEMA



# UNMATCHED GUADALUPE BASIN KNOWLEDGE









**6,564** policies



**2,943** total claims \$135.7 million total value of claims

### **STREAM MILES**

**903** miles of detailed study streams

**5,531** CNMS Stream Miles



**1,085**undocumented miles

### **DAMS**



**116** regulated dams

**99** unregulated or unknown dams

### AVERAGE AGE OF FIRMS



**03/13/2011** average date of previous FIRMs

# TWDB PROCESSES & FUNDING

# HALFF+HDR UNDERSTANDING OF TWDB PROCESSES

- TWDB State Flood Assessment
- TWDB CTP
- 30 Flood Prevention Planning (FPP) projects for local communities
- 1st to use CWSRF for Drainage Improvements
- Regional Water Planning (Including Region L)
- SWIFT Funding (including GBRA)

# GUADALUPE-BLANCO RIVER AUTHORITY

Carrizo Groundwater Supply Project

GBRA approved for up to \$212,955,000 in SWIFT funding for planning, design, land acquisition, and construction



# HALFF'S EXPERIENCE WITH FLOOD MITIGATION FUNDING

# **FLOODING MITIGATION FUNDING ALTERNATIVES**

	1	NON-DISASTER FUNDING			DIS	ASTER FUNDI	NG
Funding source	PDM/BRIC <sup>1</sup>	FMA	CWSRF	FIF <sup>3</sup>	CDBG-MIT	CDBG-DR	нмдр
Funding agency	FEMA	FEMA	EPA	TEXAS	HUD	HUD	FEMA
Administered by	TDEM	TWDB	TWDB	TWDB	GLO	GLO & TDA	TDEM
	ELIGIBL	E PLANNIN	G ACTIVITIES				
Hazard mitigation planning	√²	1	~	1	V		1
Planning (H&H studies, alt. analysis, BCA)			✓	1	✓	<b>√</b>	<b>√</b>
Engineering design	V	1	<b>V</b>	~	✓	✓	
	ELIGIBLE	MITIGATIO	N ACTIVITIES	;	9/15		
Levees, flood walls or related infrastructure	1		1	1	1		1
Regional detention and/or retention basins	<b>✓</b>	✓	✓	1	✓	<b>V</b>	1
Local detention and/or retention basins	1	V	V	1	✓	<b>V</b>	1
Local drainage improvements	<b>✓</b>	✓	✓	1	✓	<b>V</b>	1
Local channel conveyance improvements	1	1	V	1	✓	<b>V</b>	1
Roadway bridges, culverts and pipes	✓	✓	<b>✓</b>	1	✓	<b>V</b>	1
Floodplain development ordinances				1	✓		1
Property buyouts or relocations	<b>✓</b>	✓	✓	1	✓	<b>V</b>	1
Property elevation	1	V	V	1	✓	1	
Reconstruction of noncompliant structures			✓				
Flood-proofing and/or flood retrofits	✓	✓	V		✓	1	~
Flood awareness training and/or education	✓		<b>✓</b>	V	✓		<b>V</b>
Flood warning system	1		/	1	/		/

# TWDB PROCESSES & FUNDING

# REGION L WATER PLANNING

### **SOUTH-CENTRAL TEXAS REGIONAL WATER PLAN**

- 2001 (first ever)
- 2006
- 2011
- 2016

FLOOD PLANNING		WATER PLANNING
Watersheds		Political Boundaries
Risk-Based		Need-Based
Urbanization	vs.	Population Growth
Resilience		Conservation
Funded by Disaster Recovery		Funded by Revenue- Producing Projects

TWDB FLOOD PLANS	TWDB WATER PLANS
Define Planning Area	<b>∛</b> Define Planning Area
Flood Risk Analyses Current and Future	Population and Demands Current and Future
Floodplain Management Practices Evaluation, Recommendations and Goals	✓ Water Conservation Practices  Evaluation, Recommendations and Goals
Needs Analyses (Flood Mitigation)	<b> ▼Needs Analysis</b> (Water Requirements)
Identify Potentially Feasible Strategies Flood Management, Projects and Flood Management Evaluations	Identify Potentially Feasible Strategies Water Management
Technical Memo (Mid-cycle)	<b>√Technical Memo</b> (Mid-cycle)
Recommendation of Flood Management Evaluation, Strategies, and Projects	Evaluations of Water Management Strategies and Projects
Impacts (Regional Flood Plan)	<b>∛Impacts</b> (Regional Water Plan)
Contributions to Water Supply Development and State Water Plan	<b>♥</b> Consistency with Protection of State Resources
Flood Response Information and Activities	✓ Drought Response Information and Activities
Regulatory/Legislative Recommendations	<b>⋘</b> Regulatory∕Legislative Recommendations
Infrastructure Financing Analysis Flood Plan	<b>VInfrastructure Financing Analysis</b> Regional Water Supply Plan
Nublic Participation and Plan Adoption	✓ Public Participation and Plan Adoption

# SPECIFIC BENEFITS

# FLOOD RISK ANALYSIS AT MULTIPLE SCALES

# **Basin-Wide Studies Of Major River Systems In Texas**

- Lower Guadalupe
- San Antonio
- Lower Colorado
- Trinity
- Lower Brazos
- San Bernard

### **Halff Is A FEMA Region VI Contractor**

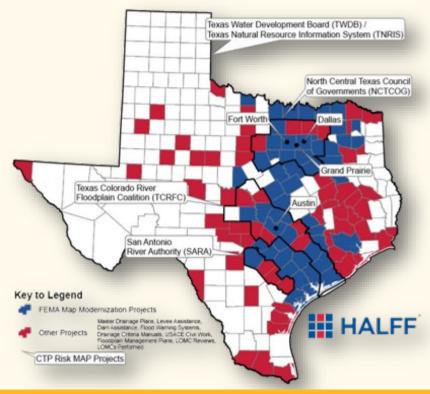
- 1D BLE
- 2D BLE
- Limited Detail Studies
- Detailed H&H Studies
- FEMA MapMod
- RiskMAP

### **Studies**

- 30 FPPs
- 200+ Local/Regional Master Drainage Plans
- EVERY CTP in the State of Texas

### Clients

- FEMA
- USACE
- TWDB
- GLO
- TDEM
- TPW
- Counties
- Cities
- Private Development



Halff has studied more than 50 major basins in Texas, encompassing approximately 70% of the State's population

# SPECIFIC BENEFITS

- New Braunfels
- San Marcos
- Lockhart
- Kyle
- Buda
- Mountain City
- Niederwald
- Uhland

- Wimberley
- Woodcreek
- Seguin
- Luling
- Gonzales
- Cuero
- Victoria
- ...and many more



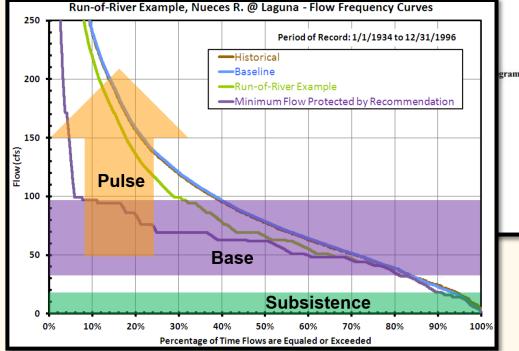
# SPECIFIC BENEFITS

# **ENVIRONMENTAL PLANNING**

- Environmental Effects Of Regional Water Plan Implementation
- Environmental Flow Standards For Guadalupe San Antonio River Basin And Guadalupe Estuary Pursuant To SB3
- Edwards Aquifer Habitat Conservation Plan
- Cumulative Effects Assessment Tool

Evaluation of Water Management Programs and
Alternatives for Springflow Protection of
Endangered Species at
Comal and San Marcos Springs





# WHY THE HALFF+HDR TEAM



Halff has been studying this basin for 10+ years and HDR has worked on the water planning side with the same communities. THIS HEADSTART/INSTITUTIONAL KNOWLEDGE WILL BE VITAL TO MEETING THIS CHALLENGING SCHEDULE.

# DRAFT SCHEDULE

# 1<sup>ST</sup> DELIVERABLE: TECH MEMO

- Chapters 1&2: Kelsey Cayeros, PE, CFM
- Chapter 3: Jill Trevino, PE, CFM
- Chapter 4: Scot Laun, PE, CFM

# 2<sup>nd</sup> DELIVERABLE: REGIONAL FLOOD PLANNING DOC

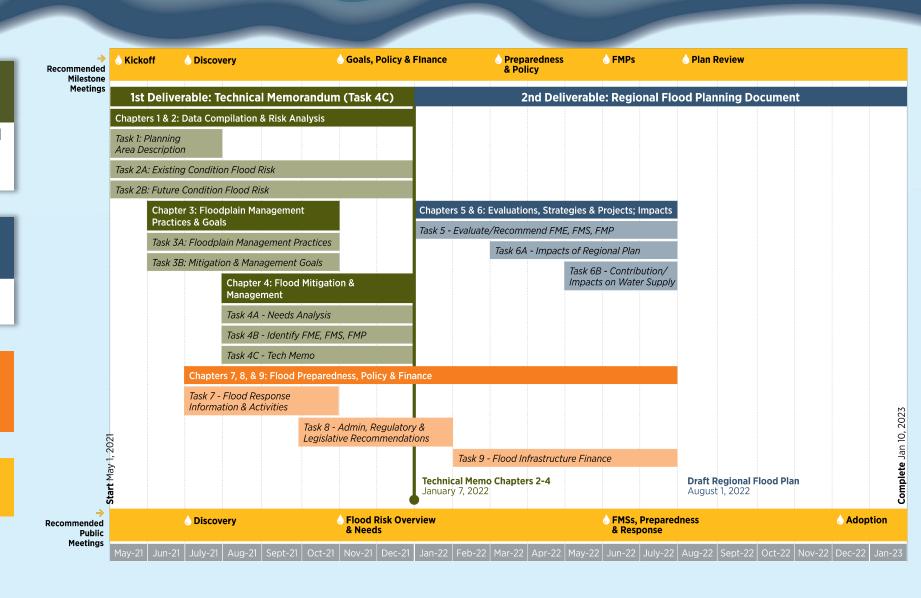
- Chapter 5: Scot Laun, PE, CFM
- Chapter 6: Zach Stein, PE, CFM

### **INDEPENDENT CHAPTERS**

Josh Logan, PE, CFM Paula Jo Lemonds, PE, PG

COMMUNICATIONS

Jim Carrillo, FAICP, PLA



# ORGANIZATIONAL CHART

# EXPERIENCED LEADERSHIP

KEY TASK / CHAPTER LEADS WITH MULTIPLE, STRATEGIC ROLES

1st Deliverable: Technical Memorandum (Task 4C)

"Where are we right now?"

**2nd Deliverable: Regional Flood Planning Document** 

"Where are we going?"

### **UNIQUE/INDEPENDENT CHAPTERS**

Developed concurrently

DEDICATED OUTREACH TEAM WORKING THROUGHOUT THE PROCESS



1st Deliverable: Technical Memorandum (Task 4C)

# CHAPTERS 1 & 2: DATA COLLECTION AND FLOOD RISK ANALYSIS

Kelsey Cayeros, PE, CFM <sup>1</sup>

Task 1: Planning Area Description

Brian McNamara, GISP 1, Patricia Burros, CFM 1

Task 2A: Existing Conditions

Katie Lewis, PE, CFM<sup>1</sup>

Task 2B: Future Conditions

Sunit Deo, PE, CFM<sup>2</sup>, Nathan Clements<sup>2</sup>

# CHAPTER 3: FLOODPLAIN MGMT PRACTICES & GOALS

Jill Trevino, PE, CFM<sup>3</sup>

Task 3A: Practices

Jill Trevino, PE, CFM<sup>3</sup>

Task 3B: Goals

Matt Bucchin, AICP, LEED GA 1

# CHAPTER 4: FLOOD MITIGATION NEEDS ANALYSIS

Scot Laun, PE, CFM<sup>1</sup>

Task 4A: Needs (Gap Analysis) Kelsey Cayeros, PE, CFM<sup>1</sup>

Task 4B: ID and Eval. of Potential FMEs, FMS. & FMPs

Bryan Martin, PE, CFM<sup>1</sup>, Alan Stanton, PE<sup>1</sup> Derek Whitman, PE, CFM<sup>1</sup>



2nd Deliverable: Regional Flood Planning Document

CHAPTER 5: RECOMMENDATIONS
Scot Laun, PE, CFM<sup>1</sup>

Task 5A: FMEs

Kelsey Cayeros, PE, CFM<sup>1</sup>

Task 5C: FMPs

Alan Stanton, PE<sup>1</sup> Ron Branyon, PE, CFM<sup>2</sup> Task 5B: FMSs

Troy Dorman, PhD, PE, CFM, ENV SP<sup>1</sup>

Eric Stewart, PE, CFM <sup>2</sup>

### CHAPTER 6: POTENTIAL IMPACTS Zach Stein, PE<sup>2</sup>

Task 6A: Benefits

Jill Trevino, PE, CFM<sup>3</sup>

Task 6B: Synergy with Water Plan

Sam Vaugh, PE<sup>2</sup> Mike Personett<sup>1</sup>

### **INDEPENDENT CHAPTERS**

Josh Logan, PE, CFM<sup>1</sup>, Paula Jo Lemonds, PE, PG<sup>2</sup>

### Task 7: Flood Response Information & Activities

Kimberly Miller, AICP <sup>1</sup> Jenna Rao, PE, PG <sup>2</sup>

Task 8: Admin., Reg., and Legis. Recommendations

Mike Personett<sup>1</sup> Sam Vaugh, PE<sup>2</sup>

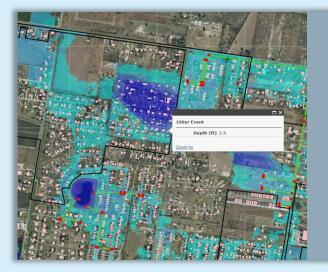
### Task 9: Flood Infrastructure Financing Analysis

Peter Newell, PE<sup>2</sup>
Bryan Martin, PE, CFM<sup>2</sup>
Mike Moya, PE, CFM<sup>1</sup>

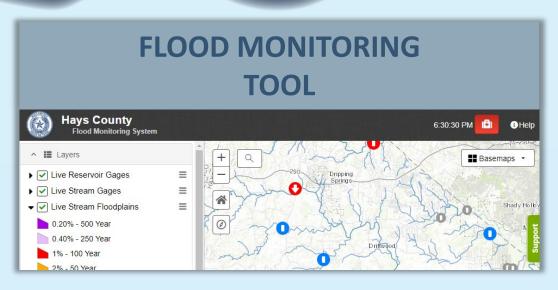


# HALFF'S TOOLS & MODELS





STORM
EVENT
SIMULATION
TOOL



VIRTUAL REALITY FLOOD SIMULATOR



# INNOVATIVE PUBLIC INVOLVEMENT

- Potential Key Milestone Meetings
- **Startup (Educate/Inform):** Tell the story; Website/newsletters, targeted content
- **Discovery (Gather Info):** Targeted to key stakeholders, agencies, communities, but with public input too
- Flood Risk Overview & Needs (Educate/Inform): Public-centered content
- Recommendations, Preparedness and Policy (Inform, Receive Input): Targeted to policy stakeholders
- Final Plan Review & Adoption (Inform, Receive Input): Public-centered, seeking buy-off

### HIGH-TECH AND GRASS ROOTS OUTREACH

- Web Content
- Social Media
- Media
- Mobile-friendly
- Bilingual
- E-Newsletters

- Open Houses
- In person
- Virtual
- Hybrid
- Local "Office Hours"
- Electronic / Paper surveys



### Virtual Open House

Explore each station to the right. Learn about the project at Station 1 and complete the activities at Stations 2-6.

















# SWIFT FUNDING SUCCESSES

# LAKE PALO PINTO STORAGE RESTORATION

Turkey Peak Dam Project

HDR secured TWDB funding, including SWIFT funds

- New on-channel dam and reservoir to restore permitted and provide additional water supply
- TWDB financing is supporting the District through the planning, permitting, design, land acquisition, and construction phases of the project.



## GUADALUPE-BLANCO RIVER AUTHORITY

Carrizo Groundwater Supply Project

GBRA approved for up to \$212,955,000 in SWIFT funding for planning, design, land acquisition, and construction

- Project develops 15,000 acft/yr of firm groundwater supply from Carrizo Aquifer
- Treated and delivered to GBRA customers using facilities shared with Alliance Regional Water Authority (ARWA)
- Regional integration of GBRA and ARWA projects saved \$10M+



### REGIONAL FLOOD PLAN FOR GUADALUPE RIVER BASIN FLOOD PLANNING AREA





### JOSH LOGAN, PE, CFM Project Manac

Josh has worked in the Guadalupe Basin for nearly 20 years & experience in flood analysis, planning, and design. He has compl Local Master Drainage Plans in the last 4 years and has FEMA, GBRA experience.



WILSON

KARNES

GONZALES

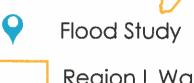
**GOLIAD** 

**REFUGIO** 



### MIKE MOYA, PE, CFM Project Princip

Mike has spent his entire career at Halff, accumulating more th years of experience in flood planning and design. He has conduc TWDB Flood Protection Planning Studies, 6 FEMA CTP program Project Principal for the GBRA Interim Feasibility Study.



REAL

Region L Water Plan

GBRA IFS

FEMA Map Mod



### PAULA JO LEMONDS, PE, PG Asst. PM

Paula Jo has lived in the Guadalupe Basin for most of her life, br her a unique interest to the importance of this plan. She has 20 ye planning experience, including Region O and Region L Regional Planning, and has water conservation expertise.



### JILL TREVINO, PE, CFM FMP Task Leac

Jill has lived in the Guadalupe Basin her entire life, with a majorit in Victoria, allowing her to provide specialized lower-basin know and interests. A small business owner/engineer, Jill has flood miti experience and specialized understanding of the smaller commun





**Understanding of TWDB Processes & Funding** 

CALHOUN

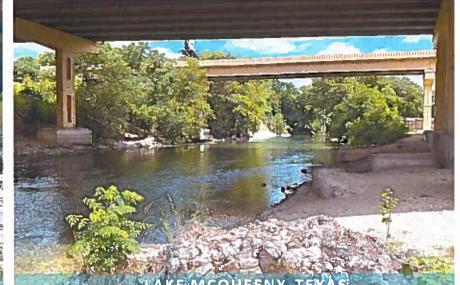
LAVACA











△ Goals, Policy & Finance Preparedness FMPs ♠ Plan Review **Cickoff** Discovery & Policy 1st Deliverable: Technical Memorandum (Task 4C) 2nd Deliverable: Regional Flood Planning Document apters 1 & 2: Data Compilation & Risk Analysis sk 1: Planning ea Description sk 2A: Existing Condition Flood Risk sk 2B: Future Condition Flood Risk Chapter 3: Floodplain Management Chapters 5 & 6: Evaluations, Strategies & Projects; Impacts Practices & Goals Task 5 - Evaluate/Recommend FME, FMS, FMP Task 3A: Floodplain Management Practices

The Halff+HDR Team consists of senior staff with decades of experience across the Guadalupe Basin, Texas, and the nation.

Task 6A - Impacts of Regional Plan

Task 6B - Contribution/ Impacts on Water Supply

Chapter 4: Flood Mitigation & Management

Task 4A - Needs Analysis

Task 48 - Identify FME, FMS, FMP

Task 4C - Tech Memo

Chapters 7, 8, & 9: Flood Preparedness, Policy & Finance

Task 7 - Flood Response Information & Activities

Task 3B: Mitigation & Management Goals

Task 8 - Admin, Regulatory & Legislative Recommendations

Task 9 - Flood Infrastructure Finance

Technical Memo Chapters 2-4 lanuary 7, 2022

**Draft Regional Flood Plan** August 1, 2022

Fiood Risk Overview Discovery & Needs

FMSs, Preparedness & Response

Adoption

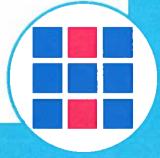
y-21 Jun-21 July-21 Aug-21 Sept-21 Oct-21 Nov-21 Dec-21 Jan-22 Feb-22 Mar-22 Apr-22 Jun-22 July-22 Aug-22 Sept-22 Oct-22 Nov-22 Dec-22 Jan-23

### CONTACT

Josh Logan, PE, CFM Project Manager and Water Resources Team Leader (210) 704-1339 jlogan@halff.com

### **OFFICE INFORMATION**

100 NE Loop 410 Suite 200 San Antonio, Texas 78216 (210) 798-1895 Info-SanAntonio@Halff.com







Agenda Item 6
Public General
Comments

Public Comments limited to 3 minutes per speaker

Adjourn

Agenda Item 7