



Region 11: Guadalupe Regional Flood Planning Group Meeting

Wednesday, February 3, 2021
2:00pm

Agenda Item 1

Call to Order

1. Attendance

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

1. Approval of meeting minutes from
January 6, 2021 Region 11 RFPG Meeting

Meeting Minutes
Region 11 Guadalupe Regional Flood Planning Group Meeting
January 6, 2021

2:00 PM

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

or

GoToWebinar Virtual Meeting

Roll Call:

<u>Voting Member</u>	<u>Interest Category</u>	<u>Present (x) / Absent () / Alternate Present (*)</u>
Doug Miller	<i>Agricultural interests</i>	X
John Johnston	<i>Counties</i>	X
Vacant	<i>Counties</i>	
Vacant	<i>Electric Generating Utilities</i>	
Annalisa Peace Vanessa Puig-Williams*	<i>Environmental interests</i>	X
Beth Parker Doug Sethness*	<i>Flood districts</i>	*
Kevin Stone	<i>Industries</i>	
Joseph Pantalion Laurie Moyer*	<i>Municipalities</i>	X
Vacant	<i>Municipalities</i>	
Kimberly Meitzen	<i>Public</i>	X
R. Brian Perkins	<i>River authorities</i>	X
Vacant	<i>River authorities</i>	
Gian Villarreal	<i>Small business</i>	X
Ronald Fieseler	<i>Water districts</i>	X
Joseph McDaniel	<i>Water utilities</i>	

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

Quorum:

Quorum: **Yes**

Number of voting members or alternates representing voting members present: **9**

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

Other Meeting Attendees:

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

Other Meeting Attendees: **

Anna-Maria Clardy
Tami Norton
Charlie Flatten
Michael Personett
Jim Carrillo
Darrell Nichols
Mohamed Bagha
Tina Hendon
Michael Cornelius
Bryan Saucedo
Thomas Hill
James Bronikowski
Elizabeth Levitz
Anita Machiavello
Matt Nelson
Ryke Moore
Ronnie Tyler
Celeste Menchaca
Josh Logan

Stephanie Griffin
Adam Conner, Freese and Nichols
Matt Hiland
Vanessa Puig-Williams
Troy Dorman
Helena Mosser
Natalie Johnson
Jill Trevino
Max Strickler - USACE
Bryan Martin
Reem Zoun
Hayley Gillespie
Stephanie Castillo
Sam Vaughn (HDR)
Eric Stewart (HDR)
Paula Jo Lemonds, HDR
Vince DeCapio
Pratibha Sapkota

**Meeting attendee names were gathered from those who entered information for joining the GoToWebinar meeting.

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 2:00 PM. Lauren Willis called roll of the planning group members to record attendance and a quorum was established.

AGENDA ITEM NO. 2: Welcome

Doug Miller welcomed members to the meeting and reminded RFPG members to submit their Open Meetings Act and Public Information Act training certificates. Lauren Willis provided meeting facilitation information and instructions.

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: Approval of Minutes from the December 2, 2020 Region 11 RFPG Meeting

Doug Miller opened discussion on approving the minutes from the December 2, 2020 Region 11 RFPG Meeting.

Three comments were brought forth: (1) the incorrect spelling of Ronald Fieseler's name, (2) the nomination of Doug Miller as chair and (3) the Public vacancy being a non-voting member during open discussion.

A motion was made by Joe Pantalio to approve the December 2, 2020 Region 11 RFPG Meeting minutes amended that Ronald Fieseler's name be spelled correctly. The motion was seconded by Brian Perkins. The meeting minutes were approved by consensus.

AGENDA ITEM NO. 5: TWDB Update/Presentation

Morgan White presented: RFPG Responsibilities: Scope of Work Overview

AGENDA ITEM NO. 6: Other Presentation

Helena Mosser, P.E. Lead Hydraulic Engineer, U.S. Army Corps of Engineers and Max Strickler, CFM Lead Hydrologist, U.S. Army Corps of Engineers presented: The InFRM Watershed Hydrology Assessment for the Guadalupe River Basin

The list of topics provided by RFPG members was reviewed.

AGENDA ITEM NO. 7: Consider nominating and electing Guadalupe RFPG members to be non-voting liaisons to Regions 10 & 12

Doug Miller opened the floor to nominations. Brian Perkins made a nomination of Ronald Fieseler to be the liaison for Region 10 and Annalisa Peace to be the liaison for Region 12.

The vote to select Ronald Fieseler as Region 10 liaison and the vote to select Annalisa Peace as Region 12 liaison passed by a vote of 9 Ayes to 0 Nays.

AGENDA ITEM NO. 8: Consider approving the proposed Request for Qualifications for the Regional Sponsor (GBRA) to initiate procurement for a technical consultant.

Lauren Willis described the process and layout of the draft Request for Qualifications (RFQ). Doug Miller opened the floor for discussion. Six comments were brought fourth:

- (1) providing the weighted percentages for the five scoring criteria: scoring criteria #1 = 10%, scoring criteria #2 = 25%, scoring criteria #3 = 25%, scoring criteria #4 = 15%, and scoring criteria #5 = 25%,
- (2) the interview process,
- (3) increasing the length from 12 pages to 15 pages with a 12-point font size,
- (4) ensuring verbiage of length recommendations is the same in Additional Information and Basis of Selection sections,
- (5) Historically Underutilized Business contract verbiage and scoring, and
- (6) rewording criteria #4 of the scoring criteria to evaluation of and possible discussion with references.

A motion was made by Doug Sethness to approve the RFQ with the following changes (1) Increasing the length from 12 pages to 15 pages with a 12-point font size, (2) providing the weighted percentages for the five scoring criteria, (3) Rewording criteria #4 of the scoring criteria to evaluation of and possible discussion with references. The motion was seconded by Brian Perkins. The vote passed by a vote of 9 Ayes to 0 Nays.

AGENDA ITEM NO. 9: Update from RFPG Sponsor (GBRA) regarding status of

- a. Open solicitation for vacant RFPG member positions: river authorities, municipalities, counties, electric generating utilities, public**

Lauren Willis reviewed applications received. Nominations close on Monday, January 11, 2021 at 5pm.

- b. Regional Flood Planning Grant contract with the TWDB**

Lauren Willis discussed the status of application for Regional Flood Planning Grant Funds. The TWDB draft budget was reviewed and the funds GBRA will be requesting for the administration of the RFPG (website, IT support, travel, posting, salary).

c. Public website: www.guadalupeRFPG.org

Lauren Willis reviewed the website and took recommendations for additional information to be added.

AGENDA ITEM NO. 10: Public General comments (Public comments limited to 3 minutes per speaker)

RFPG member Annalisa Peace asked how the RFPG could receive reports, it was decided to post additional website links and reports to the guadalupeRFPG.org website. No public comments were given.

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

Doug Miller opened discussion to consider the date and agenda items for the next meeting.

RFPG discussed continuing the hybrid in-person and virtual meetings.

The two topics for additional presentations provided by John Johnston and Joseph McDaniel will be presented at the February 3, 2021 meeting.

AGENDA ITEM NO. 14: Adjourn

Doug Sethness made a motion to adjourn. The motion was seconded by Ronald Fieseler. The motion passed by unanimous consent.

The meeting adjourned at 4:30 PM by Doug Miller.

Approved by the Region 11 Guadalupe RFPG at a meeting held on 02/03/2021.

Brian Perkins, SECRETARY

Doug Miller, CHAIR

Texas Water Development Board Update

Agenda Item 5

Agenda Item 6

Other

Presentations

Flood Fighting Resources: First Responders, Planners, Public Information

John A. Johnston, P.E.
CFM, County of Victoria

Early Flood Warning System: Kerr County

Jonathan Letz, County Commissioner Pct 3
Charlie Hastings, P.E., CFM, Kerr County Engineer

Flood Fighting Resources

First Responders / Planners / Public Information

John A. Johnston, PE, CFM

County of Victoria

County Engineer/Floodplain Administrator

Online Resources

- USGS National Water Information System
- NWS West Gulf River Forecast Center
- NWS Advance Hydrologic Prediction Service (AHPS)

USGS National Water Information System

USGS Current Water Data for Texas

[Click to hide state-specific text](#)

Explore Real-time Water Data Using New Products from USGS TXWSC

View over 750 USGS real-time stream, lake, reservoir, precipitation, and groundwater stations in context with current weather

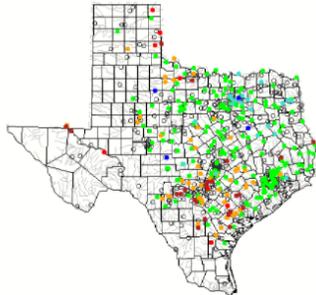


Follow [@USGS_TexasFlood](#) and [@USGS_TexasRain](#) on Twitter to get current water level and precipitation data during flooding

Predefined displays
Introduction go

Daily Streamflow Conditions

Select a site to retrieve data and station information.
Thursday, January 21, 2021 11:30ET



Explanation

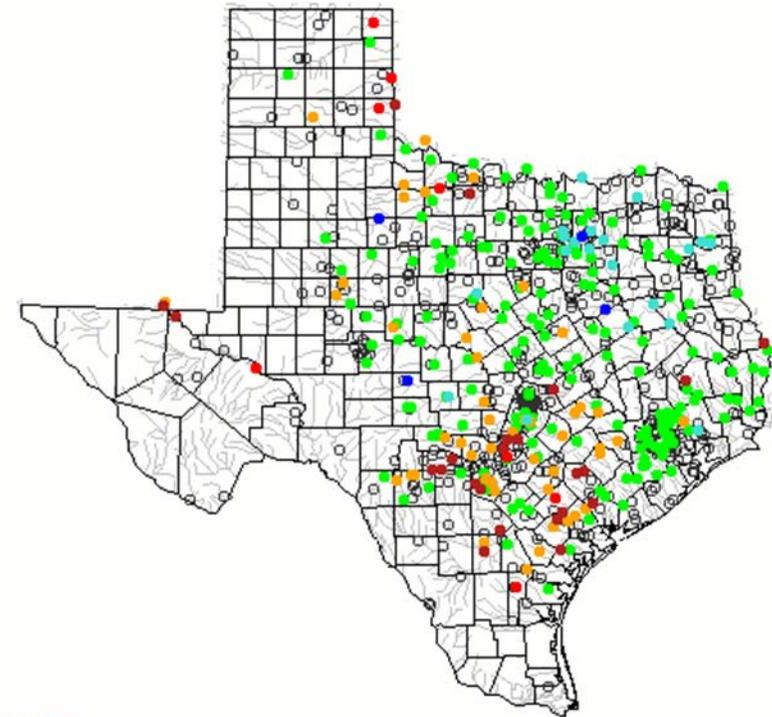
- High
- > 90th percentile
- 76th - 90th percentile
- 25th - 75th percentile
- 10th - 24th percentile
- < 10th percentile
- Low
- Not ranked

The colored dots on this map depict streamflow conditions as a **percentile**, which is computed from the period of record for the current day of the year. Only stations with at least 30 years of record are used. The **gray circles** indicate other stations that were not ranked in percentiles either because they have fewer than 30 years of record or because they report parameters other than streamflow. Some stations, for example, measure stage only.

Daily Streamflow Conditions

Select a site to retrieve data and station information.

Thursday, January 21, 2021 11:30ET



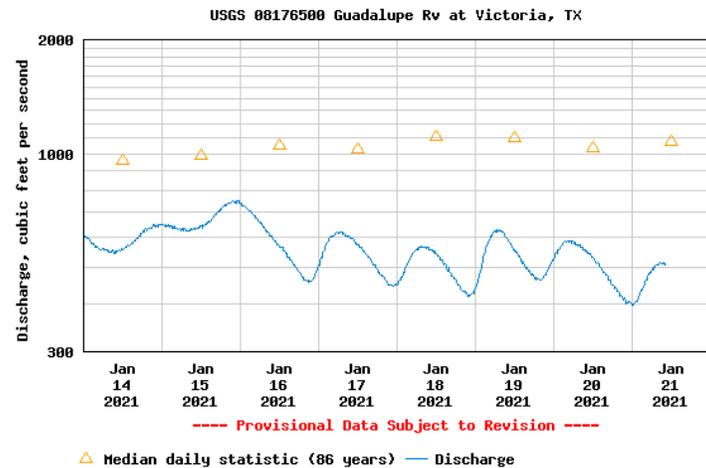
USGS National Water Information System

■ Guadalupe River Basin						
08165300	N Fk Guadalupe Rv nr Hunt, TX	01/21 10:30 CST	1.82	16.9	21.0	
08165500	Guadalupe Rv at Hunt, TX [5-Minute Update]	01/21 10:35 CST	7.88	38.1	49.0	
08166000	Johnson Ck nr Ingram, TX [5-Minute Update]	01/21 10:30 CST	0.31	16.4	17.0	
08166140	Guadalupe Rv abv Bear Ck at Kerrville, TX	01/21 10:35 CST	2.90	45.9	73.0	
08166200	Guadalupe Rv at Kerrville, TX	01/21 10:45 CST	1.76	58.5	92.0	
08166250	Guadalupe Rv nr Center Point, TX	01/21 09:45 CST	3.80	61.7	57.0	
08167000	Guadalupe Rv at Comfort, TX	01/21 09:45 CST	3.51	55.3	119	
08167200	Guadalupe Rv at FM 474 nr Bergheim, TX [Primary Sensor 15-Min. Updates]	01/21 10:30 CST	--	62.9	136	
	[Secondary Sen. 15-Min. Updates]	01/21 10:30 CST	4.66	--	---	
		01/21 10:30 CST	12.99	--	---	
08167500	Guadalupe Rv nr Spring Branch, TX	01/21 10:00 CST	2.16	55.0	157	
08167800	Guadalupe Rv at Sattler, TX	01/21 10:00 CST	4.17	58.8	187	
08167870	Bear Ck at FM 2722 nr Sattler, TX [Primary Sensor 15-Min. Updates]	01/21 10:30 CST	1.75	--	---	
	[Secondary Sen. 15-Min. Updates]	01/21 10:30 CST	7.40	--	---	
08167900	Guadalupe Rv at Third Crossing nr Sattler, TX [15-Minute Updates]	01/21 10:30 CST	3.49	--	---	
08168000	Hueco Spgs nr New Braunfels, TX	01/21 10:15 CST	6.78	8.22	27.0	
08168500	Guadalupe Rv abv Comal Rv at New Braunfels, TX [15-Minute Updates]	01/21 10:30 CST	1.68	--	---	
	[15-Minute Updates]	01/21 10:30 CST	--	55.2	258	
08168770	WFK Dry Comal Ck at Schuetz Dam, New Braunfels, TX [Primary Sensor]	01/21 10:30 CST	9.47	--	---	
	[Secondary Sensor]	01/21 10:30 CST	18.30	--	---	
08168797	Dry Comal Ck at Loop 337 nr New Braunfels, TX	01/21 10:00 CST	5.24	0.04	.67	
08168913	Comal Rv (oc) nr Landa Lk, New Braunfels, TX	01/21 10:30 CST	1.97	67.5	62.0	
08168932	Comal Rv (nc) nr Landa Lk, New Braunfels, TX	01/21 10:15 CST	0.89	163	253	
08169000	Comal Rv at New Braunfels, TX [Backup Sensor]	01/21 09:45 CST	--	277	318	
		01/21 09:45 CST	4.08	--	---	
08169500	Guadalupe Rv at New Braunfels, TX	01/21 10:00 CST	9.57	--	---	
08169740	Guadalupe Rv at Hwy 123-BR at Seguin, TX [Primary Sensor]	01/21 10:15 CST	-0.86	--	---	
	[Secondary Sensor]	01/21 10:15 CST	16.22	--	---	
08169780	Geronimo Ck nr Seguin, TX [Primary Sensor]	01/21 10:00 CST	3.97	--	---	
08169792	Guadalupe Rv at FM 1117 nr Seguin, TX	01/21 10:15 CST	12.01	503	508	
08169845	Guadalupe Rv at CR 143 nr Gonzales, TX [Primary Sensor]	01/21 10:30 CST	--	395	677	
	[Secondary Sensor]	01/21 10:30 CST	7.16	--	---	
		01/21 10:30 CST	30.14	--	---	

USGS National Water Information System

Discharge, cubic feet per second

Most recent instantaneous value: 507 01-21-2021 10:15 CST



Create [presentation-quality](#) / [stand-alone](#) graph. Subscribe to [WaterAlert](#)

See this graph on the [Beta Monitoring Location Pages](#)

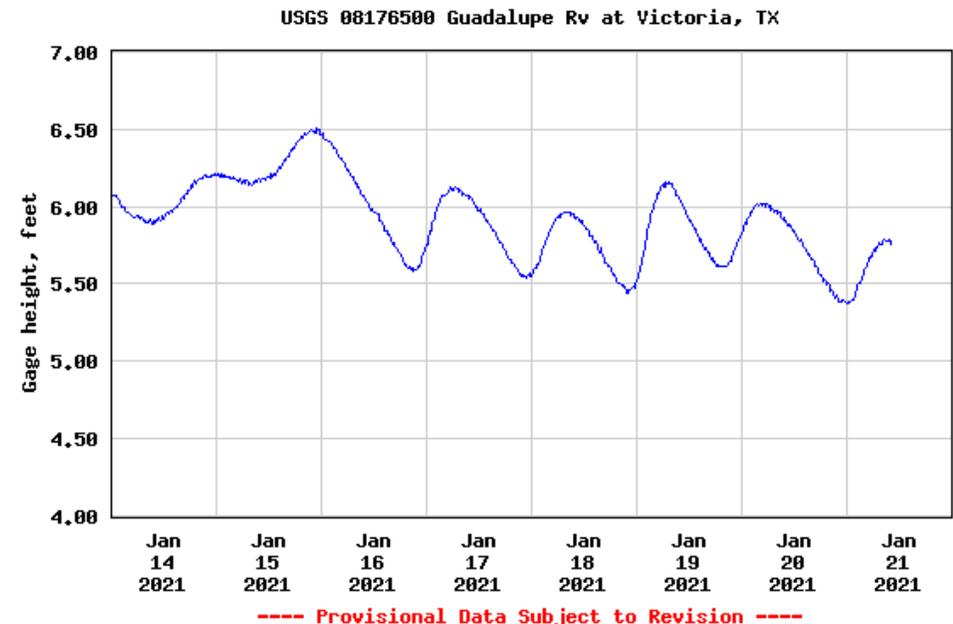
[Share this graph](#) | [f](#) [t](#) [g+](#) [e](#) [m](#)

Daily discharge, cubic feet per second -- statistics for Jan 21
based on 86 water years of record [more](#)

Min (1957)	Most Recent Instantaneous Value Jan 21	25th percentile	Median	Mean	75th percentile	Max (1968)
105	507	626	1080	1960	2170	11000

Gage height, feet

Most recent instantaneous value: 5.76 01-21-2021 10:15 CST



Create [presentation-quality](#) / [stand-alone](#) graph. Subscribe to [WaterAlert](#)

See this graph on the [Beta Monitoring Location Pages](#)

[Share this graph](#) | [f](#) [t](#) [g+](#) [e](#) [m](#)

NWS West Gulf River Forecast Center

Watch/Warning Terminology

- **Urban and Small Stream Advisory** — issued when flooding of small streams, streets and low-lying areas, such as railroad underpasses and urban storm drains, is occurring or is imminent. Advisories are issued when such events warrant notification of the public in a product less urgent than a warning.
- **Flood Watch** — issued when flooding is possible — typically within a 6 to 48 hour time frame before the event.
- **Flood Warning** — issued when flooding conditions are actually occurring or are imminent.
- **Flash Flood Watch** — issued when flash flooding is possible. Flash Flood Watches are generally issued for flooding that is expected to occur within 6 hours of the event, which could be heavy rainfall or a dam or levee failure.
- **Flash Flood Warning** — issued when flash flooding is actually occurring or imminent. Flash flood warnings tend to be fairly localized areas such as a county or small group of counties, and the specific locations threatened within those areas are often highlighted. Flash Flood Warnings are issued for short-term events, which require immediate action to protect lives and property, such as dangerous small stream flooding or urban flooding and dam or levee failures.
- **Flash Flood Emergency** — issued for a flash flood situation that presents a clear threat to human life due to extremely dangerous flooding conditions. This product signifies an area that is witnessing record flash flooding and focus is solely on saving lives.

Meet Our Hydrologist in Charge

Mark Null



Our Mission:

The National Weather Service (NWS) provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas, for the protection of life and

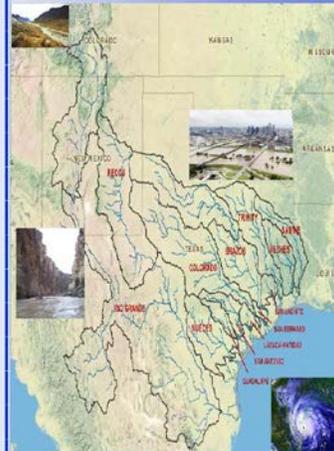
West Gulf/West Gulf

3401 Northern Cross Blvd
Fors Worth, TX 76137
Fax: 817.881.2025

www.srh.noaa.gov/wgrfc



West Gulf River Forecast Center



www.srh.noaa.gov/wgrfc

River Forecast Center Operations

Step 1. Precipitation Forecasting

The process of forecasting rivers begins with being able to forecast the rainfall expected over a period of time. Operationally, the rivers for the WGRFC area are forecasted with 12 hours of forecasted rainfall included in the model. However, staff meteorologists prepare a full 5 day precipitation forecast to monitor developing systems.

Step 2. Precipitation Analysis

Every hour staff meteorologists analyze several radar products with the localized gage network to determine the best estimate of actual rainfall over the area. This estimate is done over a 4 km (~2.5 mile) grid resolution and sent over to our river forecast model. This estimated rainfall is combined with the 12 hour forecasted rainfall to give the hydrologists an estimate on how much water can be expected to reach a river.

Step 3. Headwater River Modeling

Heavy rainfall will impact any portion of the river, but the most sensitive areas during or immediately following rainfall are the small streams, tributaries, and headwaters that flow into the mainstem rivers. These watersheds react very quickly and cause hazardous flash flooding situations, however these waterways can recede just as fast as they rise creating short term flooding conditions.

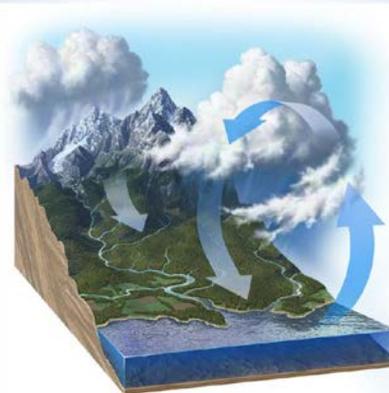
Step 4. Decision Support Services

Decision Support Service, DSS, begins when the forecast ends. DSS helps explain the moving parts of the forecast process and answers any questions to ensure the customer can make the most informed decision. DSS does not necessarily mean deployment. Special graphics, contingency forecasts, and other non-routine products can help decision makers process the data and take the appropriate actions. At times, DSS is simply translators explaining the science in less technical /National Weather Service terms so the customer can prepare accordingly.



Step 5. Supplementary Products and Services

Aside from daily forecasting responsibilities, there are other products that are produced for various purposes. Some examples include making water supply forecasts, monthly/longterm statistical forecasts for each site, and weekly floatability forecasts for recreational activities. During flood events, ensemble precipitation forecasts are analyzed to better understand the varying probabilities a rainfall event may have on the rivers.



Step 6. Forecast Dissemination and Messaging

The next collaboration is with the local weather forecast office whom receives the river forecast. The local office takes the forecast and creates a flood warning with the appropriate impacts described. This warning goes out to the public, and our official forecast is updated to the website www.srh.noaa.gov/wgrfc. Flood warning alerts go through the mobile device messaging service which activates on cellular devices.

Step 7. Mainstem River Forecasting

Modeling river flow involves many pieces that must work together to create an accurate forecast. The soil moisture at several levels is modeled to estimate how much of the rainfall will actually become runoff opposed to remaining in the soil. This 'local' runoff then takes time to reach the point being forecasted (Stream Gauge 1 below). This water then is modeled to the next point with careful calibration of how much and how long it takes to arrive. This combines with the local runoff between Stream Gauge 1 and 2 to create the forecast at site 2. This process continues all the way downstream.



Step 8. Partner Coordination

A key aspect to forecasting is collaboration. Along all rivers are reservoirs with various functions and designs that are operated during flood and non flooding events. These release operations from Corps of Engineers and River Authorities are coordinated and incorporated into all river forecasts. Additionally, the USGS provides accurate flow and stage observations during flood events for use with our forecasts.

<https://www.weather.gov/wgrfc/>

NWS Advance Hydrologic Prediction Service

NATIONAL WEATHER SERVICE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

HOME FORECAST PAST WEATHER SAFETY INFORMATION EDUCATION NEWS SEARCH ABOUT

Local forecast by "City, ST" or ZIP code
 [Location Help](#)

Southern U.S. Heavy Rain; Lake Effect Snow Redevelops
 Locally heavy rain may bring a threat of flash, urban, and small stream flooding across the lower Mississippi Valley Thursday and Friday. A clipper crossing southern Canada will bring lake effect snow to the Great Lakes and light snow to the Northeast Thursday into Saturday morning. [Read More >](#)

West Gulf River Forecast Center West Gulf RFC
River Forecast Center

River Observations and Forecasts Weather Observations and Forecasts Water Supply Climate and History Seasonal Interest Additional Info

Minor Flooding Occurring or Forecasted X

WGRFC River Flood Summary: Minor: 3 (1%) Moderate: 0 (0%) Major: 0 (0%)
 Use the map below to view forecast locations experiencing flooding and link to detailed forecast information.

Auto Refresh: OFF

Maximum Forecast Flood Category Through: 01/30/2021 17:14:55 UTC

Day 1 2 3 4 5 6 7 8 9

All Locations

Click on the map or select one of the data views below:

- United States
- NWS Weather Forecast Offices
- West Gulf River Forecast Center
- Water Resources Regions
- Probability and forecasts available
- Forecasts available

336 total gauges
 Show all locations in flood (3)

- 0 Gauges: Major Flooding
- 0 Gauges: Moderate Flooding
- 3 Gauges: Minor Flooding
- 1 Gauge: Near Flood Stage
- 47 Gauges: No Flooding
- 0 Flood Category Not Defined
- 1 At or Below Low Water Threshold
- 284 Gauges: Forecasts Are Not Current
- 0 Gauges: No Forecast within selected timeframe
- 0 Gauges: Out of Service

Show all locations

Last map update:
 01/21/2021 at 12:12:48 pm EST
 01/21/2021 at 17:12:48 UTC

What is UTC time?

USGS

1/21/2021 National Weather Service Advanced Hydrologic Prediction Service

National Weather Service
Advanced Hydrologic Prediction Service

Home News Organization Search for: NWS All NOAA

Local weather forecast by "City, ST"

National Observations WFO Observations Hydrograph

Weather Forecast Office Corpus Christi, TX West Gulf River Forecast Center

National Conditions: Rivers, Satellite, Climate, Observed Precip
 Hydrograph River at a Glance Download Transition Mapping Probability Information
 Auto Refresh: OFF

Local Conditions: Warnings, Weather, Forecast, Radar

AHPS Documentation: User Guide, User Brochure

What is AHPS? Facts, Our Partners, Feedback/Questions, Provide Feedback, Ask Questions

GUADALUPE RIVER AT VICTORIA
 Universal Time (UTC)

Jan 16 17 18 19 20 21 22 23 24 25 26

Flow (cfs) 4077.0, 3682.0, 2939.0, 2818.0, 2331.0, 1872.0, 1426.0, 959.0, 579.0, 98.0

Stage (ft) 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4

Site Time (CST) Jan 16 17 18 19 20 21 22 23 24 25 26

Graph Created (4:17PM Jan 21, 2021) Observed Forecast (issued 3:09AM Jan 21)

VICTZ(plotting HGR/G) "Gage 0" Datum: 29.15'

Observations courtesy of US Geological Survey

NOTE: Forecasts for the Guadalupe River at Victoria are issued routinely year-round.

Default Hydrograph

Upstream Gauge Downstream Gauge

https://water.weather.gov/ahps2/hydrograph.php?wfo=crp&gpage=vict2

1/5

NWS Advance Hydrologic Prediction Service

1/21/2021 Advanced Hydrologic Prediction Service: Guadalupe River at Victoria

National Weather Service
Advanced Hydrologic Prediction Service

Home News Organization Search for: NWS AIBINDAA

Guadalupe River at Victoria, TX (VIC T2) National Observation Inundation Locations View Inundation Site

Weather Forecast Office Corpus Christi, TX West Of River Forecast Center

Data Type: Inundation Levels Flood Categories Current Forecast

Hydrograph River at a Glance Download Inundation Mapping Probability Information

Print this map Find address or location

Inundation Levels: Record Crest: 34.04 ft

62.9	34.0
61.9	33.0
60.9	32.0
59.9	31.0
58.9	30.0

Major Flooding Begins: 57.9 20.0, 56.9 20.0

Moderate Flooding Begins: 55.0 27.0, 54.9 26.0, 53.9 25.0, 52.9 24.0, 51.9 23.0, 50.9 22.0

Minor Flooding Begins: 49.9 21.0, 49.0 20.0, 47.9 19.0, 46.0 18.0, 45.9 17.0, 44.9 16.0, 43.9 15.0, 42.9 14.0, 41.9 13.0

Near Flooding Begins: 40.9 12.0

Below Flooding Begins: ** Extended rating

Inundation Feedback: Click on mapped inundation to see water depth values for that location, or hold shift and drag to zoom to area.

Gauge Stage: 5.7 ft at 01/21/2021 21:15:00 UTC **Selected Inundation:** NAVD83: 59.9 ft **Mouse Location:** Depth: No Data **Lat:** 28.022613 **Lon:** -96.978274

Latitude/Longitude Disclaimer: The gauge location shown in the above map is the approximate location based on the latitude/longitude coordinates provided to the NWS by the gauge owner.

<https://water.weather.gov/ahps2/inundation/index.php?gauge=vict2>

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1/21/2021 Advanced Hydrologic Prediction Service: Guadalupe River at Victoria

National Weather Service
Advanced Hydrologic Prediction Service

Home News Organization Search for: NWS AIBINDAA

Guadalupe River at Victoria, TX (VIC T2) National Observation Inundation Locations View Inundation Site

Weather Forecast Office Corpus Christi, TX West Of River Forecast Center

Data Type: Inundation Levels Flood Categories Current Forecast

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Inundation Feedback: Click on mapped inundation to see water depth values for that location, or hold shift and drag to zoom to area.

Gauge Stage: 5.7 ft at 01/21/2021 21:15:00 UTC **Selected Inundation:** NAVD83: 59.9 ft **Mouse Location:** Depth: No Data **Lat:** 28.792217 **Lon:** -96.601134

Latitude/Longitude Disclaimer: The gauge location shown in the above map is the approximate location based on the latitude/longitude coordinates provided to the NWS by the gauge owner.

<https://water.weather.gov/ahps2/inundation/index.php?gauge=vict2>

1/4

County of Victoria Tools

- Data Sheets – Impacted Areas vs River Gauge at Victoria
 - First Responders and Planners
 - Public Information
- Victoria County/City Flood Fighting Readiness Levels
- Guadalupe River at Victoria Historic River Crests
 - Year
 - Month
- Flood Wave Travel Times
- Guadalupe River Hydrograph
 - Average Daily Flow July 1998 – July 1999
- Google Earth - County Wide Inundation Maps

Data Sheets

Impacted Areas vs River Gauge at Victoria



Guadalupe River at Victoria
Rising River Impact Areas vs. River Gauge Readings
 These elevations can and do vary during each flood event.
 The data is provided for general flood warning awareness and guidance.

River Gauge Reading	Location	Normal Conditions (up to 12') Minor Flooding (21'-27')	Near Flood Stage (12'-21') Moderate/Major Flooding (27'+)
First Responders and Planners			
34.04		#1 Flood of Record on 10/20/1998 (466,000 cfs)	
34.0	Flood of Record	<ul style="list-style-type: none"> The flood of record (34.04 feet) occurred on October 20 1998, resulting in disastrous flooding. Over 600 homes in the west and southwest part of the City of Victoria and over 300 homes in the County of Victoria are affected. The power plant located on Bottom Road may be affected and impact electricity supply to the south side of town. 	
500 year		0.2% Chance Frequency Flood (347,000 cfs) established by USGS in October 2006	
100 year		1% Chance Frequency Flood (192,000 cfs) established by USGS in October 2006	
30 - 31	Old Town Area	<ul style="list-style-type: none"> The areas west of Moody Street between Water St and Constitution St flood, including homes located near Club Westerner Access to these areas may be limited 	
30 - 31	Greens Addition	The river generally floods 40 square blocks of Greens Addition Subdivision	
30 - 31	Guadalupe & San Antonio River Confluence	Much of the floodplain near and below the confluence of the Guadalupe/San Antonio Rivers is flooded for several miles wide	
10 year		10% Chance Frequency Flood (65,700 cfs) established by USGS in October 2006	
30 - 30.5	Moody St at Wolfram St	Water on the inside lane of Moody Street (US BUS 59) at Wolfram Street	
29.5 - 30	Old Town Area	Water may flood houses at the west end of Convent Street near Victoria Street	
29 - 30	Riverside Park Texas Zoo	<ul style="list-style-type: none"> Major lowland flooding occurs. Flooding in Riverside Park, much of the Riverside Golf Course including the golf cart sheds and the Texas Zoo. 	
29 - 30	Greens Addition	<ul style="list-style-type: none"> Water begins to flow over the river bank in the Greens Addition at the end of Gunther Street. Water begins to encroach into the Greens Addition roadway ditches. The homes in the Greens Addition Subdivision may be impacted by shallow flooding. 	
29.6	Texas Zoo	Water may enter the Texas Zoo if entrance gates are not closed off with flood gates and sandbags.	
28.5 - 29	Old Town Area	<ul style="list-style-type: none"> Water flowing over Stayton Ave & Memorial Dr and starts flowing from the West Outfall toward Constitution and Craig Streets Water over Constitution and Craig - Areas west of Moody Street (US Business 59) between Water and Constitution Street 	
28.5 - 29	Riverside Park	Water flowing over McCright flowing into Golf Course	
28.0-28.5	Red River at Bluff St	Water flows over road at Red River and Bluff Street Intersection	
28 - 28.5	Old Town Area	<ul style="list-style-type: none"> Water may be flowing over Craig and Constitution Intersection. Access to homes near Club Westerner may be affected Areas west of Moody Street (US Business 59) between Water and Constitution Street may have affected by floodwaters 	
28 - 28.5	Parisfal Road	Water covers the road between US Business 59 and Fordyce Road	
28 - 28.5	Spring Creek Dr	Water at road edge at Spring Creek Drive at Railroad Underpass	
27.5 - 28	Saxet Lakes Fordyce Rd US Bus 59	<ul style="list-style-type: none"> Water flowing into the Saxet Lake Park and will begin to cover Fordyce Road. Water is crossing Fordyce Road at the large culvert between the lakes and the main portion of Saxet Lake Park and water covering some of the picnic areas and roads. Water may be flowing under the US Bus 59, East and West Relief Bridges. Portions of Saxet Lake Park may be inaccessible 	
27.5 - 28	Riverside Park	<ul style="list-style-type: none"> Water on John F. Lee Drive in Riverside Park Water is near the first parking lot on McCright Drive and in the field across from the Texas Zoo. Parts of McCright Dr near Baseball fields and Riverside Stadium are inaccessible 	
27 - 27.5	Old Town Area	Murray St. at Victoria St. in Old Town Area begins to flood	



Guadalupe River at Victoria
Rising River Impact Areas vs. River Gauge Readings
 These elevations can and do vary during each flood event.
 The data is provided for general flood warning awareness and guidance.

River Gauge Reading	Normal Conditions (up to 12') Minor Flooding (21'-27')	Near Flood Stage (12'-21') Moderate/Major Flooding (27'+)
Public Information		
34.04	#1 Flood of Record on 10/20/1998 (466,000 cfs)	
34.0	<ul style="list-style-type: none"> Over 600 homes in the west and southwest part of the City of Victoria and over 300 homes in the County of Victoria are affected. The power plant located on Bottom Road may be affected and impact electricity supply to the south side of town. 	
30.0	<ul style="list-style-type: none"> Floodwaters threatens areas west of Moody Street between Water St and Constitution St flood, including homes and structures located near Club Westerner Floodwaters threaten 40 square blocks of Greens Addition Subdivision Much of the low lying areas near and below the confluence of the Guadalupe and San Antonio Rivers the flooded area spreads several miles wide Floodwater covers the inside lane of Moody Street (US BUS 59) at Wolfram Street blocking access to the Greens Addition 	
29.5	Floodwater may threaten homes and structures at the west end of Convent Street near Victoria Street	
29.0	<ul style="list-style-type: none"> Major lowland flooding is widespread throughout the County Flooding threatens Riverside Park affecting Riverside Golf Course including the golf cart sheds and the Texas Zoo. Floodwater threatens the Greens Addition Subdivision at the end of Gunther Street at the Guadalupe River. Floodwater begins to encroach into the roadway ditches of the Greens Addition Subdivision. The homes and structures in the Greens Addition Subdivision may be impacted by shallow flooding. 	
28.5	<ul style="list-style-type: none"> Floodwaters threatens the intersection of Stayton Ave and Memorial Dr (located at the south entrance of Riverside Park near the Pump House Restaurant). Floodwaters flowing out of the channel bank of the West Outfall flow toward Constitution and Craig Streets Floodwater threatens the intersection of Constitution Street and Craig Street. (located in the area west of Moody Street (US Business 59) between Water Street and Constitution Street) Floodwater may cover McCright Drive in Riverside Park threatening Riverside Golf Course 	
28.0	<ul style="list-style-type: none"> Floodwater threatens closure of the entrance to Riverside Park at the Red River Drive and Bluff Street intersection Floodwater may threaten closure of Craig Street and Constitution Street intersection. Access to homes and structures near Club Westerner may be affected by Floodwaters. Areas west of Moody Street (US Business 59) between Water Street and Constitution Street may be affected by Floodwaters Floodwater covers the Fordyce Road south of US Business 59 Floodwater threatens closure of Spring Creek Drive at Railroad Underpass west of Victoria Country Club 	
27.5	<ul style="list-style-type: none"> Floodwater affecting Saxet Lake Park and threatens closure of Fordyce Road. Floodwater flowing over Fordyce Road at the large culvert between the lakes and the main portion of Saxet Lake Park and flooding some of the picnic areas and park roads. Floodwater may be flowing under the US Bus 59 at the East and West Relief Bridges. Portions of Saxet Lake Park may be inaccessible Floodwater threatens John F. Lee Drive in Riverside Park Floodwater is near the first parking lot on McCright Drive and flowing in the field across from the Texas Zoo in Riverside Park. Portions of McCright Drive near the baseball fields and Riverside Stadium are inaccessible in Riverside Park. 	
27.0	<ul style="list-style-type: none"> Murray Street at Victoria Street in the Old Town Area begins to be affected by Floodwater. Moderate lowland flooding occurs in Riverside Park, Floodwater approaching low areas outside of the Texas Zoo and Riverside Golf Course. Floodwater is backing up in ditch along Memorial Drive in front of Volleyball Courts and Special Events Area of Riverside Park. Floodwater flowing between park gate at Grover's Bend (F.B. Lowery Drive) and McCright Drive in Riverside Park. Floodwater flows into Riverside Golf Course next to the Duck Pond, threatening McCright Drive, in Riverside Park. Floodwater threatens Bluff Street closure between Stayton and Red River Drive. 	

Readiness Levels



Victoria Emergency Management



- Monitor West Gulf River Forecast Center (WGRFC) predictions.
- Communicate WGRFC predictions with Policy Group, Command Staff, and various City and County departments.



- Monitor West Gulf River Forecast Center (WGRFC) predictions.
- Communicate WGRFC predictions and road closures with Policy Group, Command Staff, and various City and County departments.
- Develop and coordinate emergency messages with public information representatives and local media.



- Begin preparations for possible evacuations of Green's Addition
- Monitor West Gulf River Forecast Center (WGRFC) predictions.
- Communicate WGRFC predictions and road closures with City and County departments and Command Staff.
- Develop and coordinate emergency messages with public information representatives and local media.



- Evacuate Green's Addition when flooded (~30 ft)
- Monitor West Gulf River Forecast Center (WGRFC) predictions.
- Communicate WGRFC predictions and road closures with City and County departments and Command Staff.
- Develop and coordinate emergency messages with public information representatives and local media.

Readiness Levels



Readiness Level IV



- Identify employee(s) who will serve on the EOC staff and are qualified to represent the department in the event of an activation



- Begin staging of barricades and road closure signage in the event that river predictions exceed 21 feet.
- Identify employee(s) who will serve on the EOC staff and are qualified to represent the department in the event of an activation.
- Make crews aware of possible river impacts to county roads and have them provide impact reports back to Commissioners and Victoria Emergency Management.
- Monitor West Gulf River Forecast Center (WGRFC) predictions and communicate with Victoria Emergency Management.



- Monitor West Gulf River Forecast Center (WGRFC) predictions.
- Communicate WGRFC predictions with Policy Group, Command Staff, and various City and County departments



Readiness Level IV



- Monitor river flood gages and close when necessary
- Order water pumps and stage for deployment
- Pre-position barricades on trailers to prepare for deployment
- Monitor West Gulf River Forecast Center (WGRFC) predictions and communicate with Victoria Emergency Management
- Identify employee(s) who will serve on the EOC staff and are qualified to represent the department in the event of an activation



- Monitor Riverside Boat Ramp and close when necessary
- Communicate any closures with Victoria Emergency Management
- Begin staging of barricades and road closure signage
- Monitor West Gulf River Forecast Center (WGRFC) predictions and communicate with Victoria Emergency Management.
- Identify employee(s) who will serve on the EOC staff and are qualified to represent the department in the event of an activation.



- Identify employee(s) who will serve on the EOC staff and are qualified to represent the department in the event of an activation



- Identify employee(s) who will serve on the EOC staff and are qualified to represent the department in the event of an activation

Readiness Levels



Readiness Level III



- Communicate with patrol officers of possible river impacts to county roads and have officers provide impact reports back to supervisors and Victoria Emergency Management.
- Identify any flooded county roads and share information with Victoria County Road and Bridge and Victoria Emergency Management.
- Monitor West Gulf River Forecast Center (WGRFC) predictions and communicate with Victoria Emergency Management.



- Close River Rd. when flooded (~23 ft)
- Close Fordyce Rd., Parsifal Rd., and Old River Rd. when flooded (~25 ft)
- Close Fox Rd. when flooded (~26 ft)
- Close Smith Rd. and Pozzi Rd. when flooded (~26 ft)
- Close River Rd. and FM 1485 when flooded (~26 ft)
- Close River Rd. @ Tibbitts Rd when flooded (~26 ft)
- Make crews aware of possible river impacts to other county roads and have them provide road closure and impact reports back to Commissioners and Victoria Emergency Management.
- Monitor West Gulf River Forecast Center (WGRFC) predictions and communicate with Victoria Emergency Management.



- Monitor West Gulf River Forecast Center (WGRFC) predictions.
- Communicate WGRFC predictions and road closures with Policy Group, Command Staff, and various City and County departments.
- Develop and coordinate emergency messages with public information representatives and local media.



Readiness Level III



- Monitor river flood gates and close when necessary.
- Begin staging of water pumps and equipment in the event of street flooding.
- Monitor West Gulf River Forecast Center (WGRFC) predictions and communicate with Victoria Emergency Management.



- Close Fox's Bend and Boal Ramp Parking when flooded (~21 ft)
- Close Grover's Bend and McCright Dr. when flooded (~ 26 ft)
- Communicate any closures with Victoria Emergency Management
- Monitor West Gulf River Forecast Center (WGRFC) predictions and communicate with Victoria Emergency Management.



- Communicate with patrol officers of possible river impacts to city streets and have officers provide impact reports back to supervisors and Victoria Emergency Management.
- Monitor West Gulf River Forecast Center (WGRFC) predictions and communicate with Victoria Emergency Management.



- Monitor West Gulf River Forecast Center (WGRFC) predictions and communicate with Victoria Emergency Management.
- Assess status of equipment and personnel readiness levels for possible swift water response.

Readiness Levels



Readiness Level II



- Assist with alert and warning information to those residents who may be threatened by flood waters.
- Communicate with patrol officers of possible river impacts to county roads and have officers provide impact reports back to supervisors and Victoria Emergency Management.
- Identify any flooded county roads and share information with Victoria County Road and Bridge and Victoria Emergency Management.
- Monitor West Gulf River Forecast Center (WGRFC) predictions and communicate with Victoria Emergency Management.



- Close Fordyce Road in Saxel Lake Park when flooded (~27.5 ft)
- Close Parafal Road between Business 59 and Fordyce Road when flooded (~28 ft)
- Make crews aware of possible river impacts to other county roads and have personnel provide road closure and impact reports back to Commissioners and Victoria Emergency Management.
- Monitor West Gulf River Forecast Center (WGRFC) predictions and communicate with Victoria Emergency Management.



- Begin preparations for possible evacuations of Green's Addition
- Monitor West Gulf River Forecast Center (WGRFC) predictions.
- Communicate WGRFC predictions and road closures with City and County departments and Command Staff.
- Develop and coordinate emergency messages with public information representatives and local media.



Readiness Level II



- Close Murray St. at Victoria St. in Old Town when flooded (~27 ft)
- Close Spring Creek Drive at the railroad underpass when flooded (~28 ft)
- Close Red River @ Bluff St. when flooded (~28 ft)
- Close sections of Stayton Ave and Memorial Dr. when flooded (~28.5 ft)
- Close sections of Constitution St and Craig St. when flooded (~28.5 ft)
- Communicate any closures with Victoria Emergency Management.
- Monitor West Gulf River Forecast Center (WGRFC) predictions and communicate with Victoria Emergency Management.
- Provide damage assessment reports to Victoria Emergency Management.



- Monitor/ close Riverside Golf Course, Memorial Drive, and Bluff St between Stayton and Red River when flooded (~27 ft)
- Close John F Lee Dr. and McCligh Dr. when flooded (~27.5 ft)
- Communicate any closures with Victoria Emergency Management.
- Monitor West Gulf River Forecast Center (WGRFC) predictions and communicate with Victoria Emergency Management.
- Provide damage assessment reports to Victoria Emergency Management.



- Assist with alert and warning information to those residents who may be threatened by flood waters.
- Begin preparations for possible evacuations of Green's Addition
- Communicate with patrol officers of possible river impacts to city streets and have officers provide impact reports back to supervisors and Victoria Emergency Management.
- Monitor West Gulf River Forecast Center (WGRFC) predictions and communicate with Victoria Emergency Management.



- Assist with alert and warning information to those residents who may be threatened by flood waters.
- Begin preparations for possible evacuations of Green's Addition
- Communicate with crews of possible river impacts to city streets and have personnel provide impact reports back to supervisors and Victoria Emergency Management.
- Monitor West Gulf River Forecast Center (WGRFC) predictions and communicate with Victoria Emergency Management.

Readiness Levels



Readiness Level I



- Assist in the evacuation of county residents in homes to the west of the Guadalupe River
- Communicate with patrol officers of possible river impacts to county roads and have officers provide impact reports back to supervisors and Victoria Emergency Management.
- Identify any flooded county roads and share information with Victoria County Road and Bridge and Victoria Emergency Management.
- Monitor West Gulf River Forecast Center (WGRFC) predictions and communicate with Victoria Emergency Management.



- Close other county roads as necessary
- Make crews aware of extensive river impacts to county roads and have personnel provide road closure and impact reports back to Commissioners and Victoria Emergency Management.
- Monitor West Gulf River Forecast Center (WGRFC) predictions and communicate with Victoria Emergency Management.



- Evacuate Green's Addition when flooded (~30 ft)
- Monitor West Gulf River Forecast Center (WGRFC) predictions.
- Communicate WGRFC predictions and road closures with City and County departments and Command Staff.
- Develop and coordinate emergency messages with public information representatives and local media.



Readiness Level I



- Close section of Gunther St. when flooded (~29ft)
- Close Convent St near Victoria St when flooded (~29.5ft)
- Observe inside lane of Moody St at Wallram for possible flooding and make appropriate closure if necessary (~30 ft)
- Observe areas west of Moody Street between Water St and Constitution St for flooding and close when necessary (~30 ft)
- Observe areas near Club Westerner and restrict access when flooded (~30 ft)
- Communicate any closures with Victoria Emergency Management.
- Monitor West Gulf River Forecast Center (WGRFC) predictions and communicate with Victoria Emergency Management
- Provide damage assessment reports to Victoria Emergency Management.



- Close Texas Zoo when necessary (~29ft)
- Close Riverside Park when flooded (~29 ft)
- Golf Cart sheds may begin to flood (~29ft)
- Communicate any closures with Victoria Emergency Management
- Monitor West Gulf River Forecast Center (WGRFC) predictions and communicate with Victoria Emergency Management.
- Provide damage assessment reports to Victoria Emergency Management.



- Assist in the evacuation of Green's Addition when flooded (~30 ft)
- Communicate with patrol officers of possible river impacts to city streets and have officers provide impact reports back to supervisors and Victoria Emergency Management.
- Monitor West Gulf River Forecast Center (WGRFC) predictions and communicate with Victoria Emergency Management.

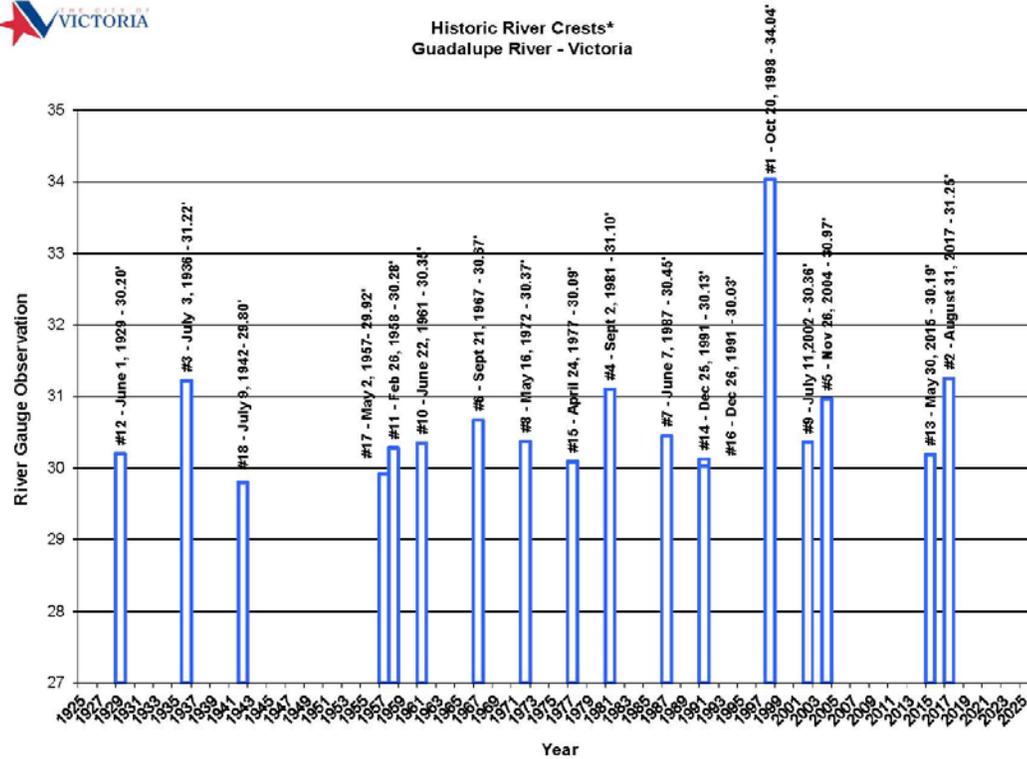


- Assist in the evacuation of Green's Addition when flooded (~30 ft)
- Communicate with crews of possible river impacts to city streets and have personnel provide impact reports back to supervisors and Victoria Emergency Management.
- Monitor West Gulf River Forecast Center (WGRFC) predictions and communicate with Victoria Emergency Management.

Guadalupe River at Victoria Historic River Crests



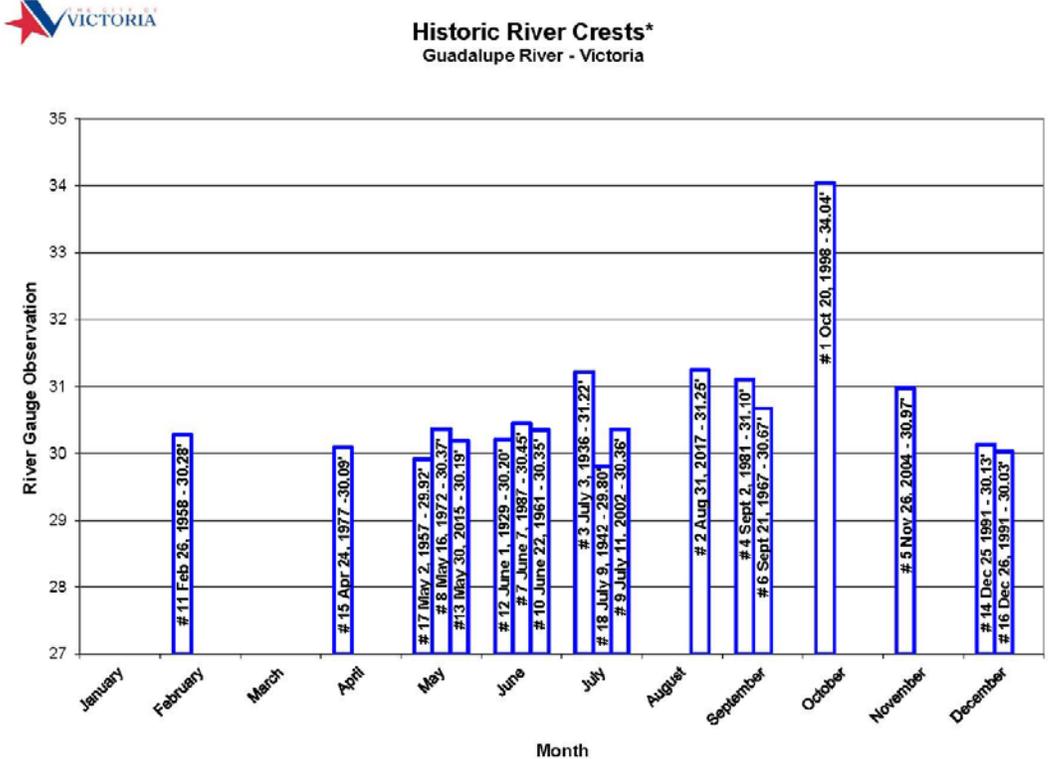
Historic River Crests*
Guadalupe River - Victoria



* Source National Weather Service

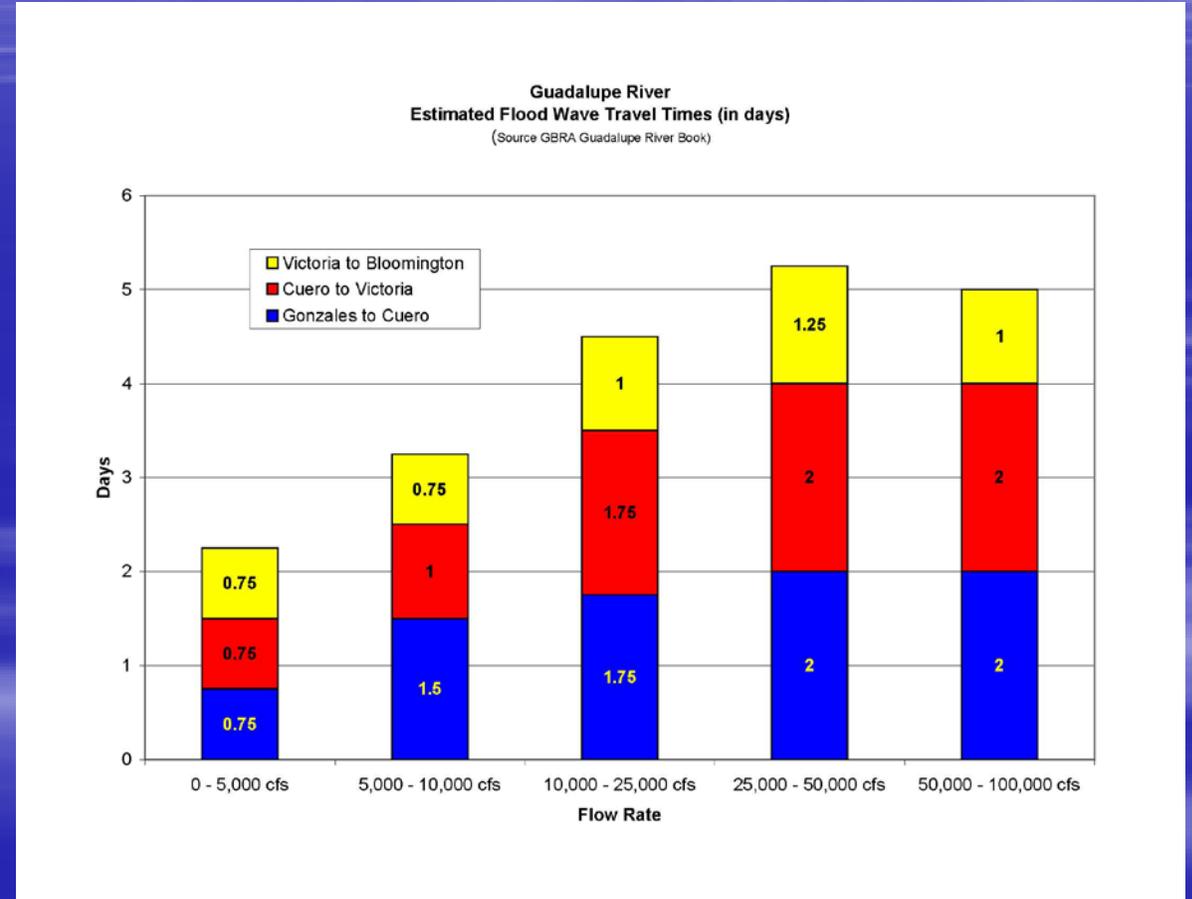
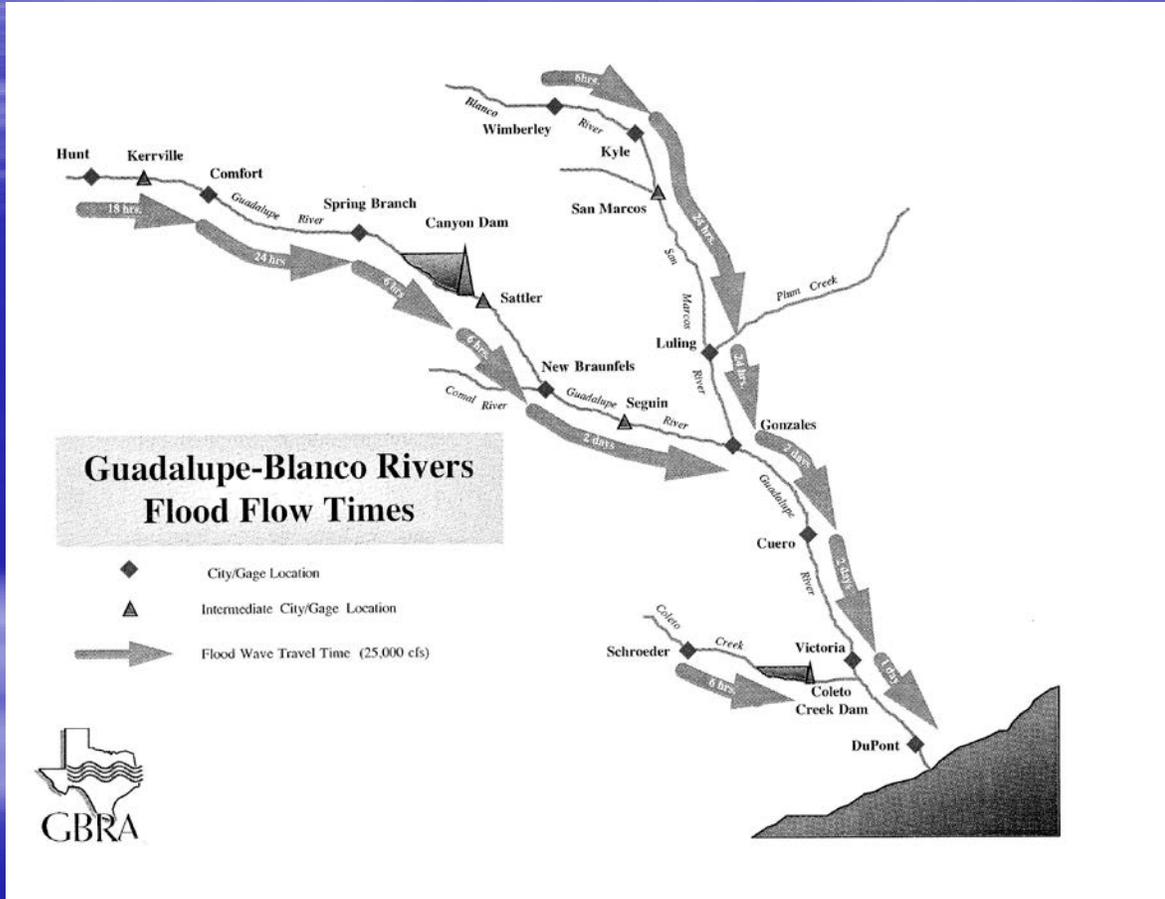


Historic River Crests*
Guadalupe River - Victoria



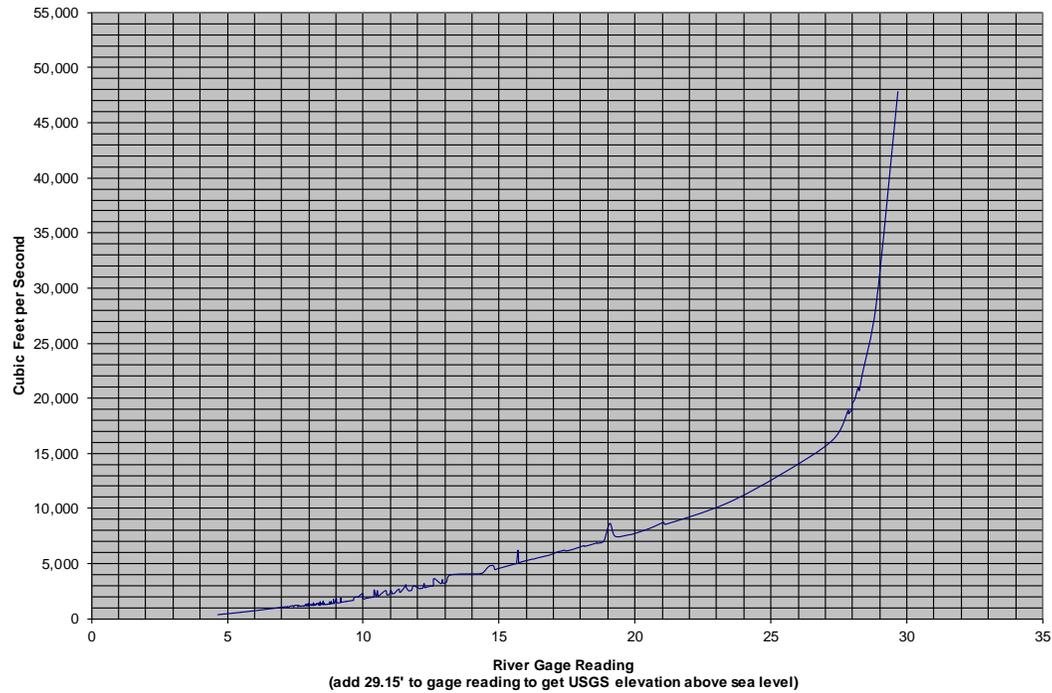
*Source National Weather Service

Flood Wave Travel Times

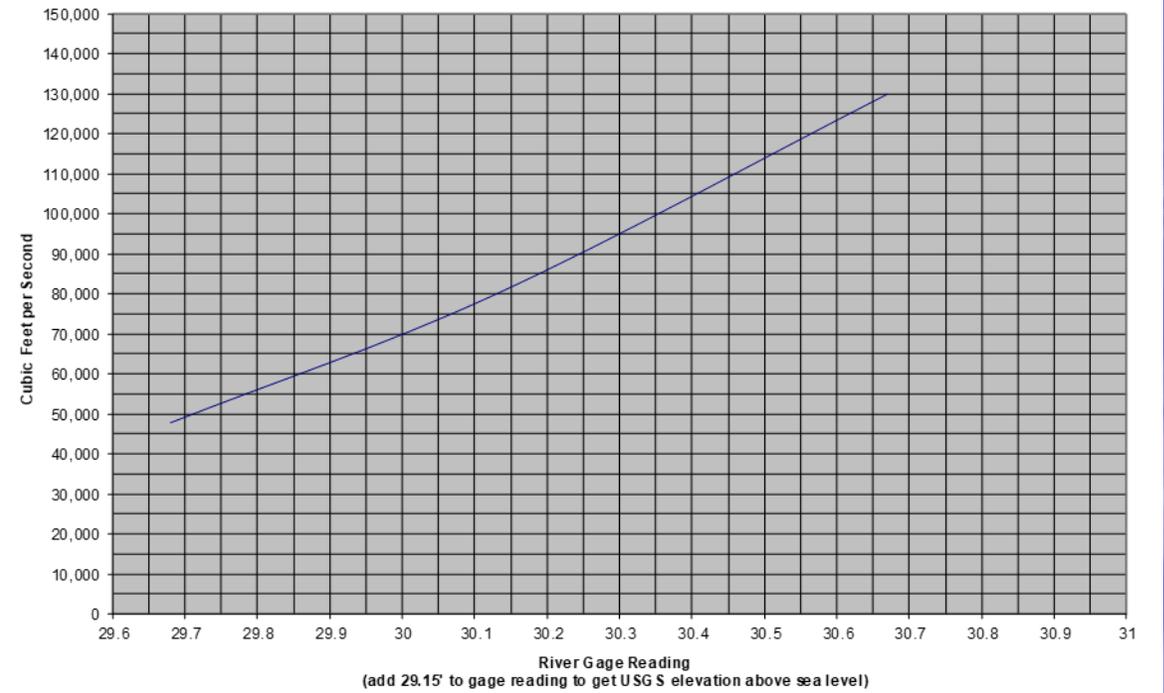


Guadalupe River Hydrograph

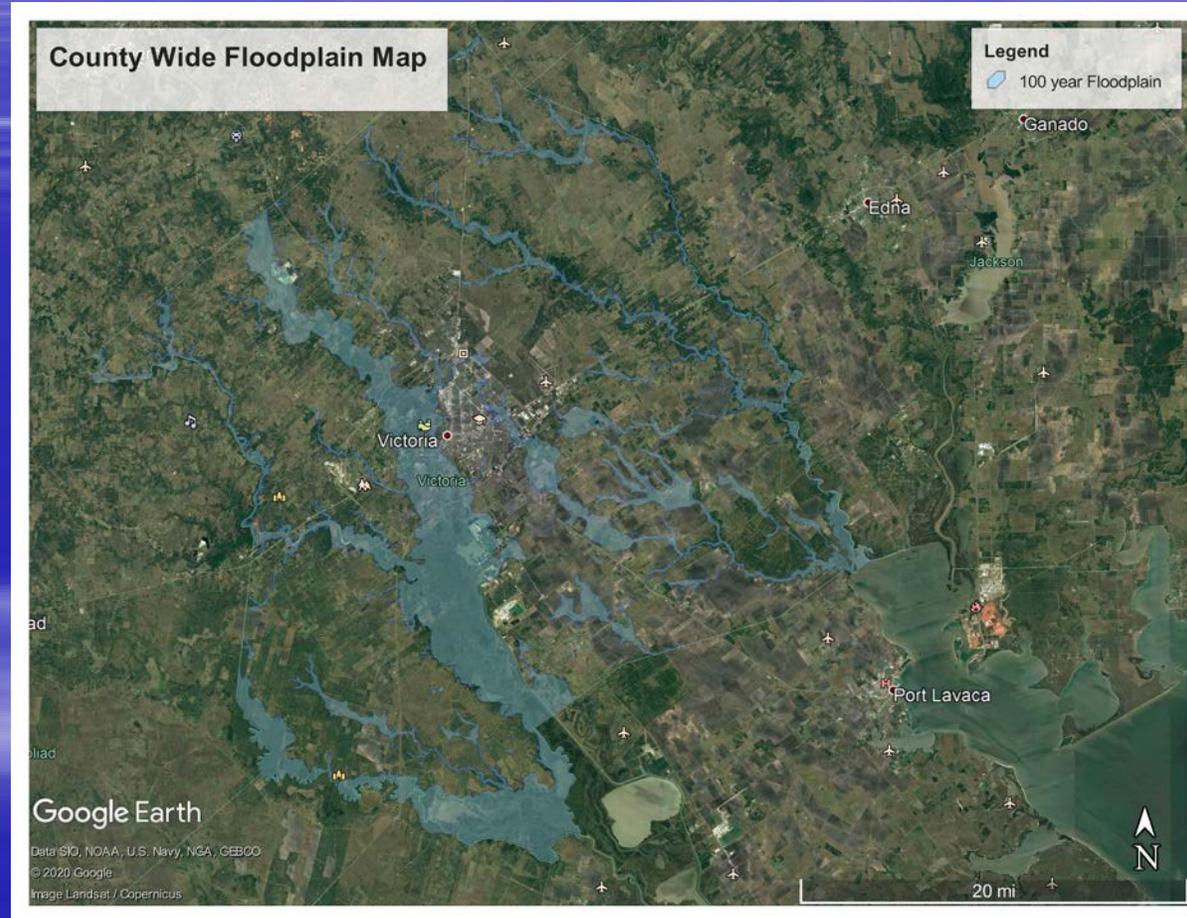
Guadalupe River Data
USGS River Gage at Moody Street Bridge
Based on Average Daily Readings from July 2, 1998 to July 1, 1999



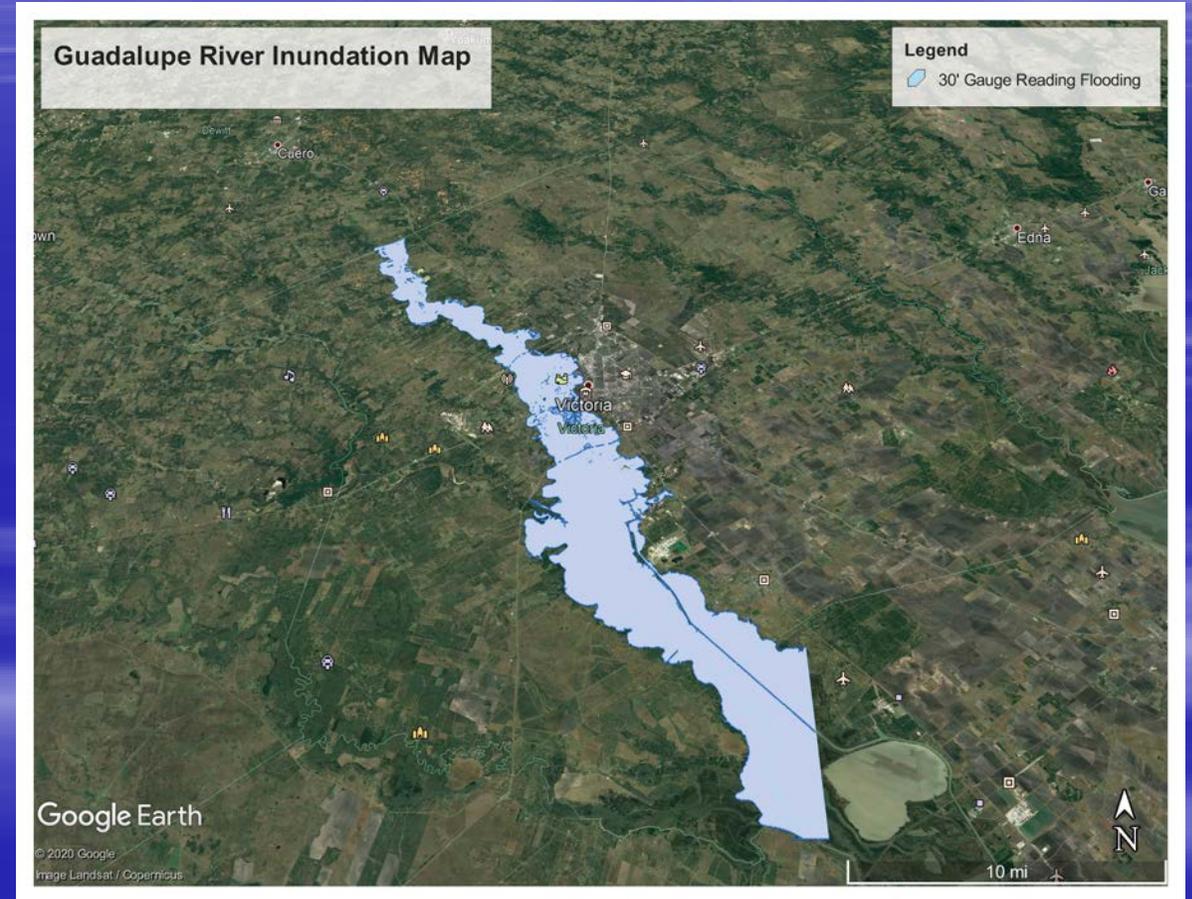
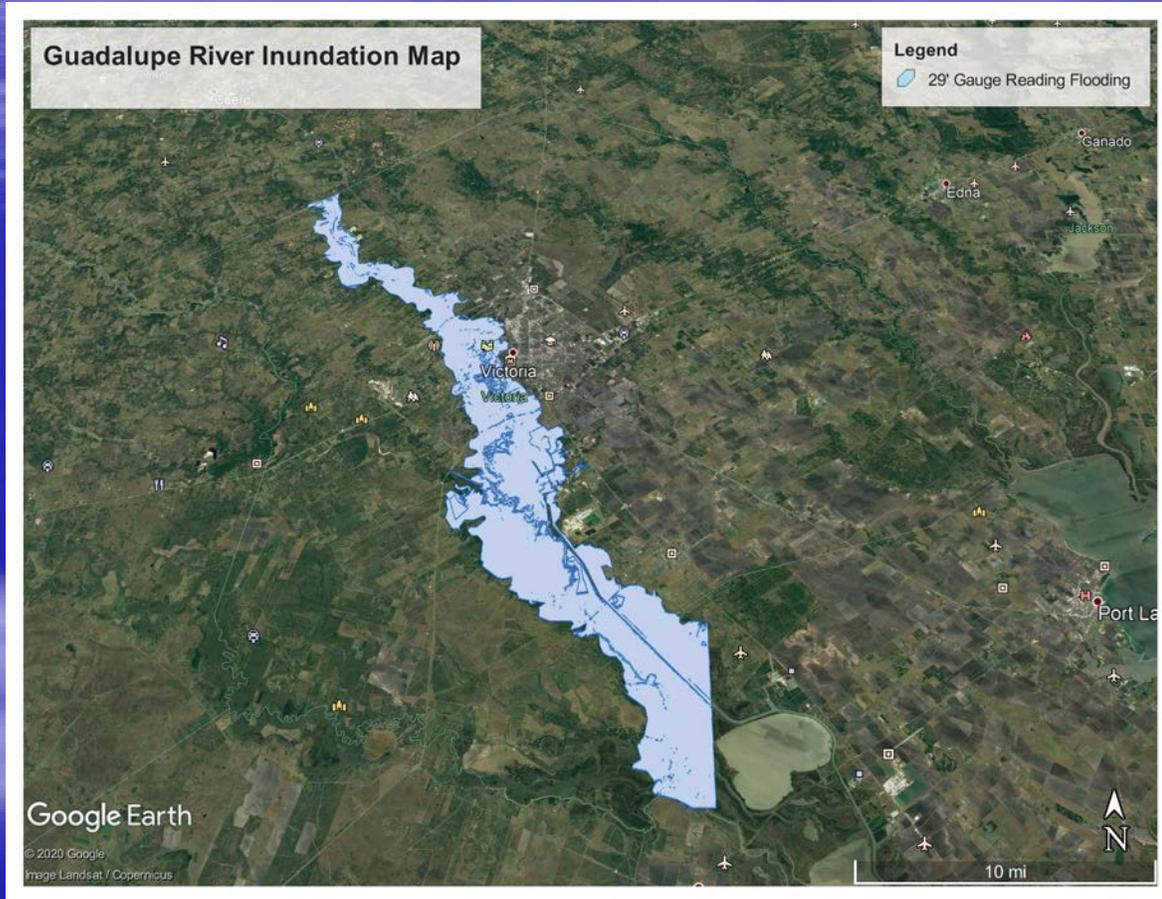
Gualalupe River Data
USGS River Gage at Moody Street Bridge
Based on Average Daily Readings from July 2, 1998 to July 1, 1999



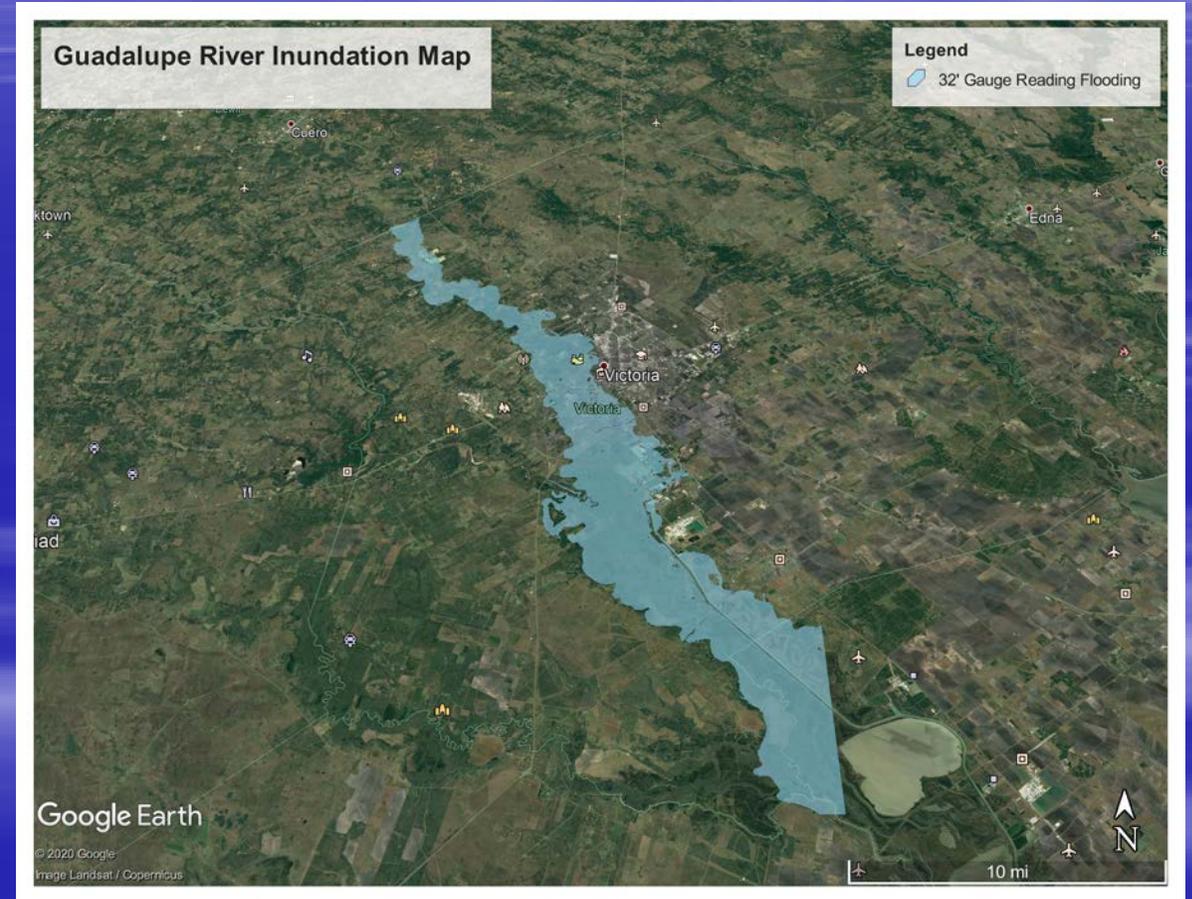
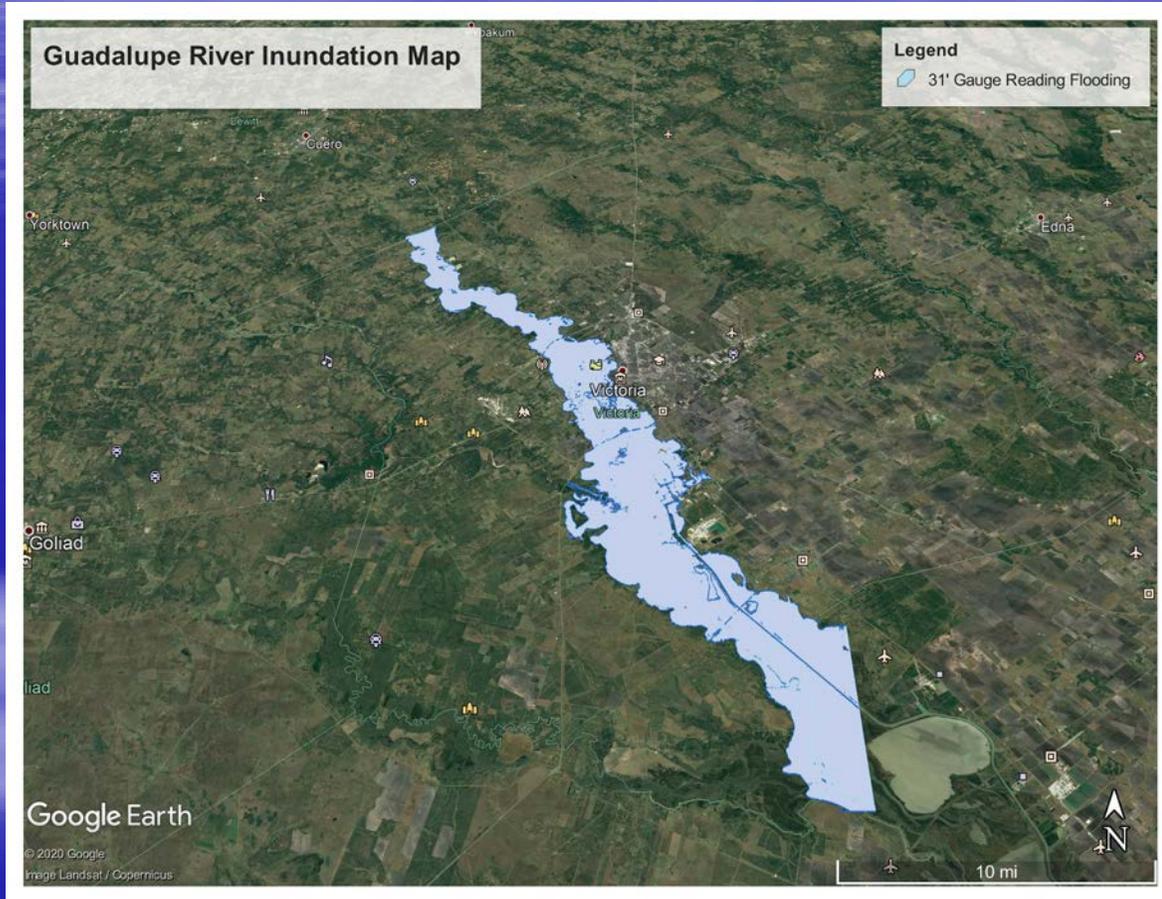
Google Earth County Wide Flood Inundation Maps



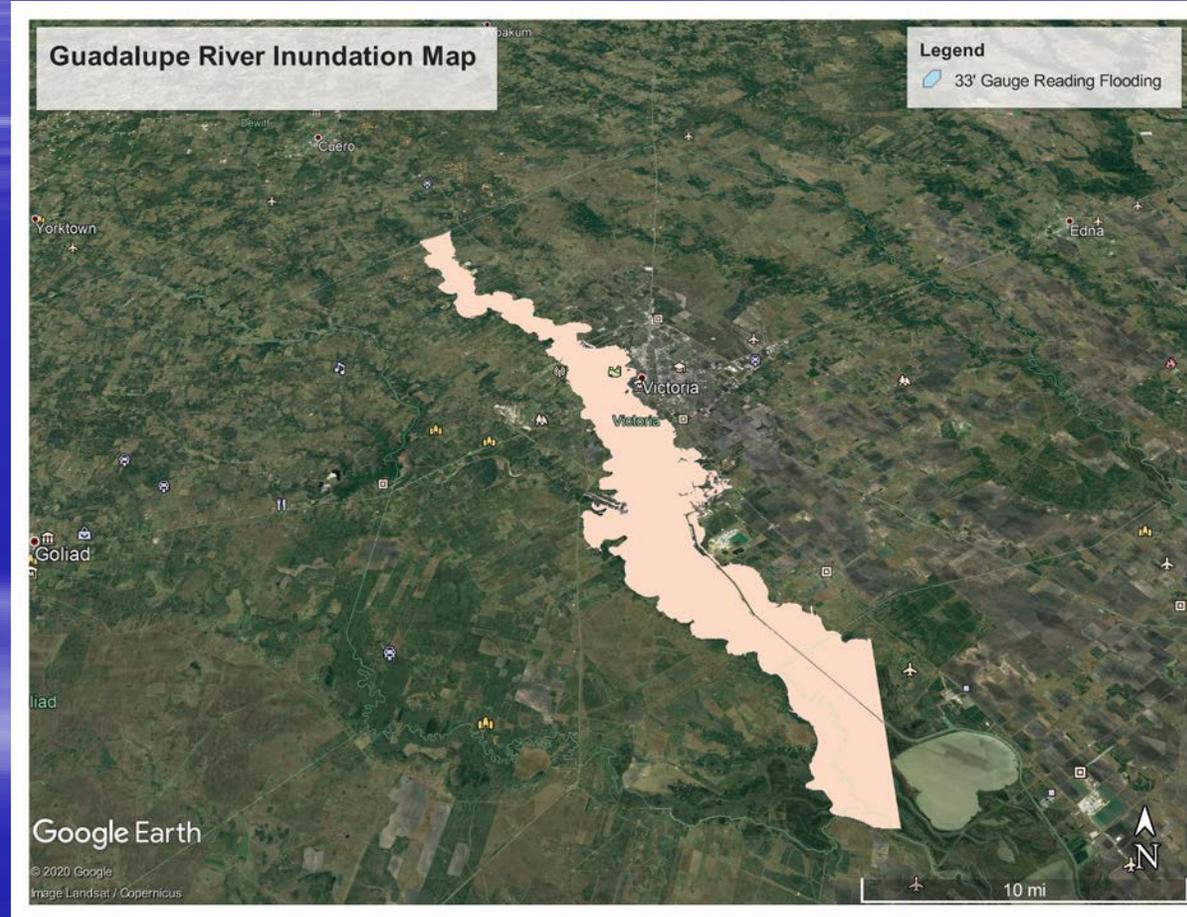
Google Earth County Wide Flood Inundation Maps



Google Earth County Wide Flood Inundation Maps



Google Earth County Wide Flood Inundation Maps

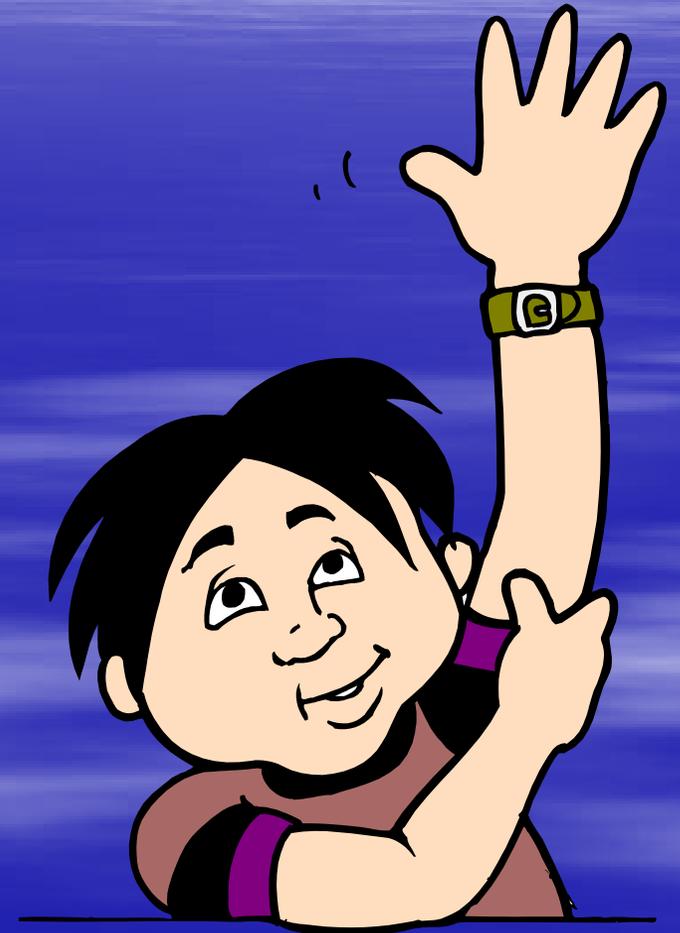


Questions?

Flood Fighting Resources

First Responders / Planners / Public Information

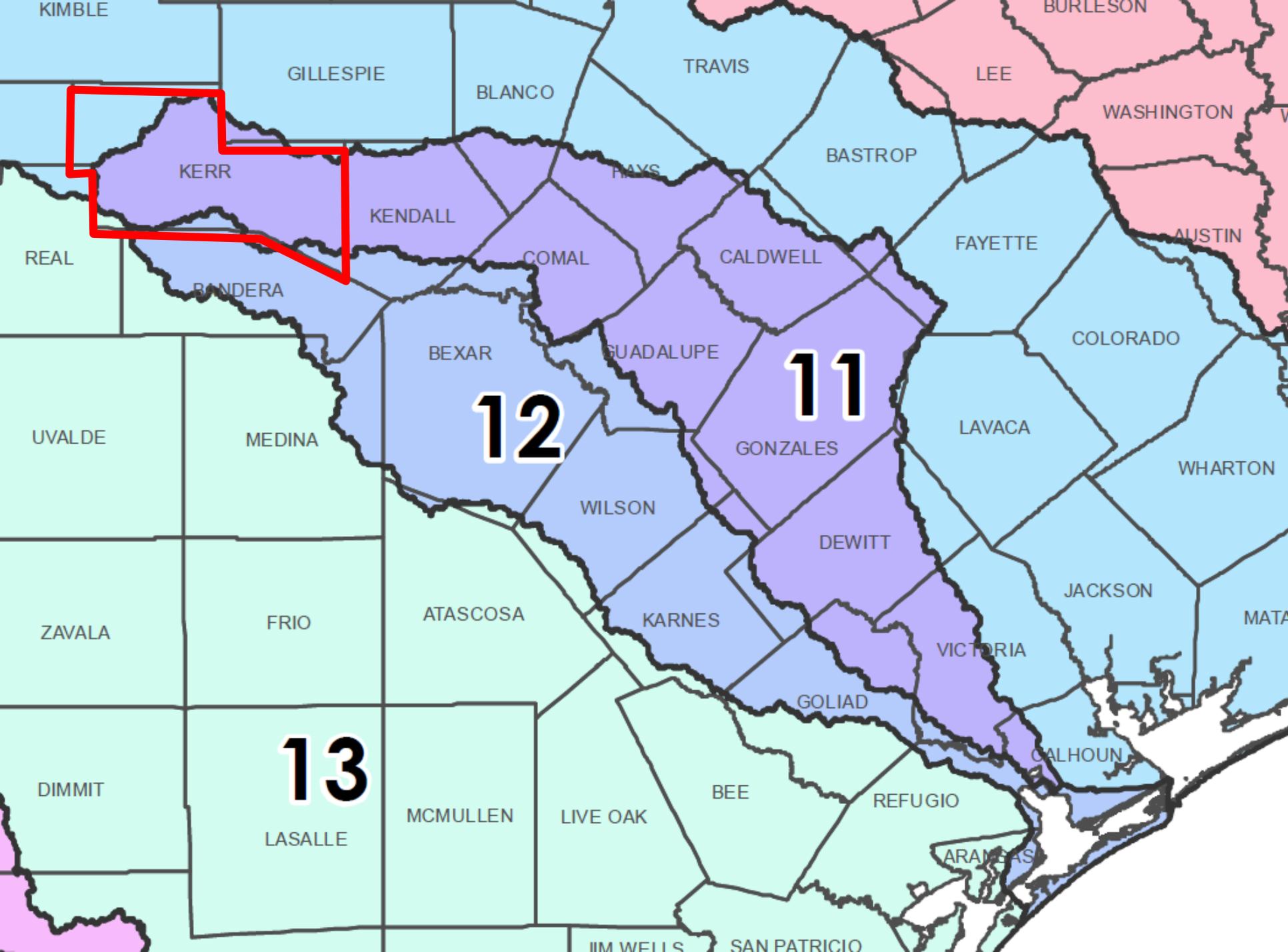
John A. Johnston, PE, CFM
County of Victoria
County Engineer/Floodplain Administrator
361-578-0752
jjohnston@vctx.org



Kerr County Early Flood Warning System

Jonathan Letz, Commissioner Pct 3

Charlie Hastings, P.E., County Engineer

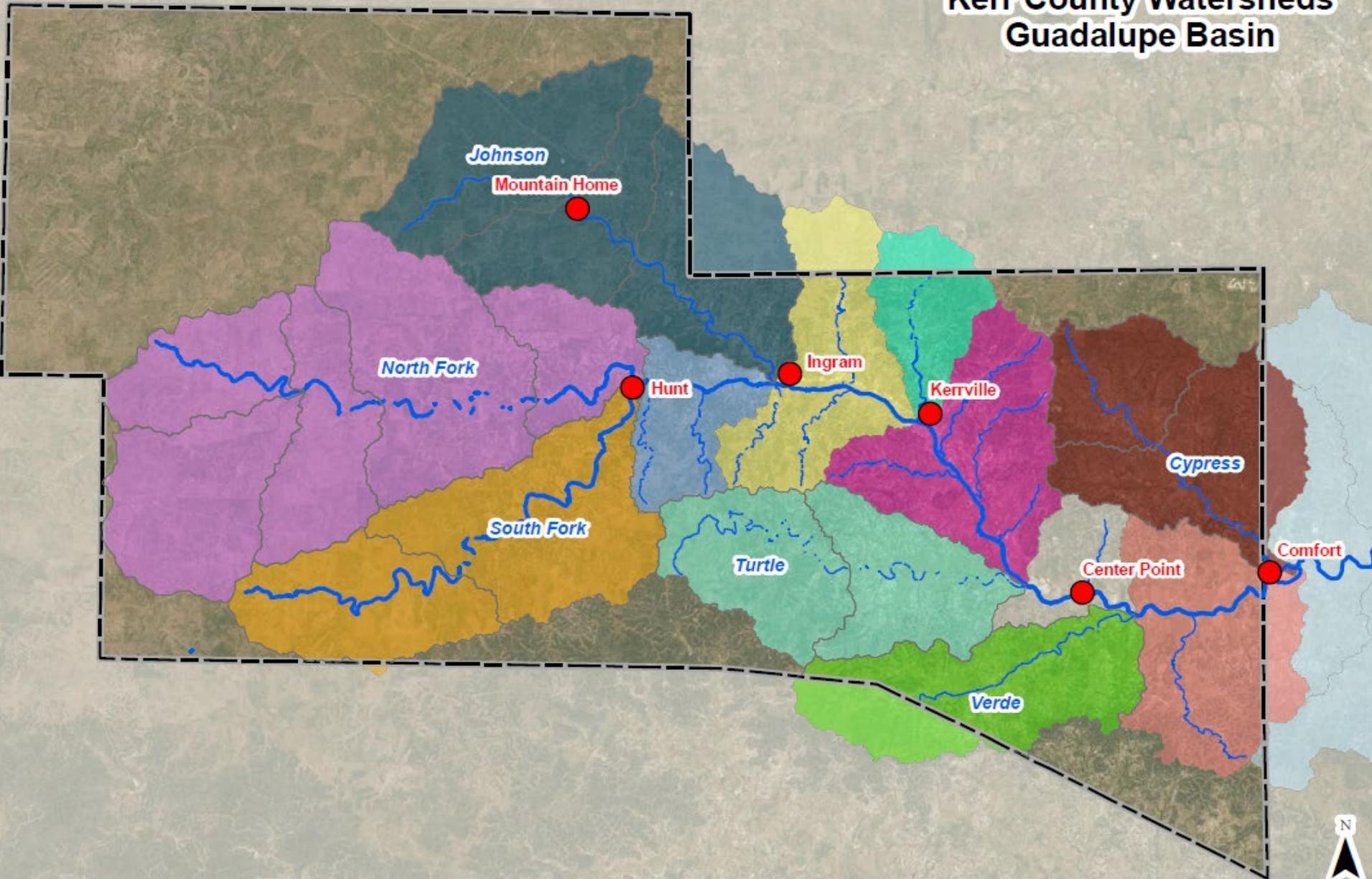


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12

13

Kerr County Watersheds Guadalupe Basin



Engineering Dept
Kerr County, TX

This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only approximate relative locations.

The Upper Guadalupe River

A Deadly History

- Topography/Flash flood
- History
 - Since 1900, over 100 floods (ranging from minor to major) have occurred in Kerr and Kendall Counties
 - Since 1932, approximately 32 lives have been lost in major floods (mostly vehicles at low water crossings)
- Mountain Home, Hunt, Ingram, Kerrville, Center Point, Comfort (each situated along the river)
- Growth

Kerr County Flood Warning System



Preliminary Engineering Study

December 30, 2016



Hewitt Engineering, Inc.

Consulting Engineering Services

Early Flood Warning System Preliminary Engineering

- 2016 – Interlocal Agreement
 - UGRA, City of Kerrville, and Kerr County
 - Preliminary Engineering Study Conducted
- Data Collection and Local Agency Meetings
 - City of Kerrville
 - Kerr County
 - TxDOT
 - UGRA
 - GBRA

Early Flood Warning System Project Specifications

- Existing Remote Operating System (ROS)
 - Installed in 1988
 - 20 water level monitors (TxDOT and GBRA)
 - Automatic notification sent to city, county, and state
 - 22 rain and water level gauges
- Proposed expansion of ROS
 - Evaluated 69 low water crossing sites countywide
 - Strategically selected 10-20 low water crossing sites for project expansion
 - Western and Central Kerr (FM 1340, SH 39, SH 27)
 - Central and Eastern Kerr (SH 27, Lower Turtle Creek Road, Upper Turtle Creek Road)

**KERR COUNTY FLOOD WARNING SYSTEM
RECOMMENDED HIGH WATER DETECTION SYSTEM (HWDS) AND GAUGE CROSSINGS**

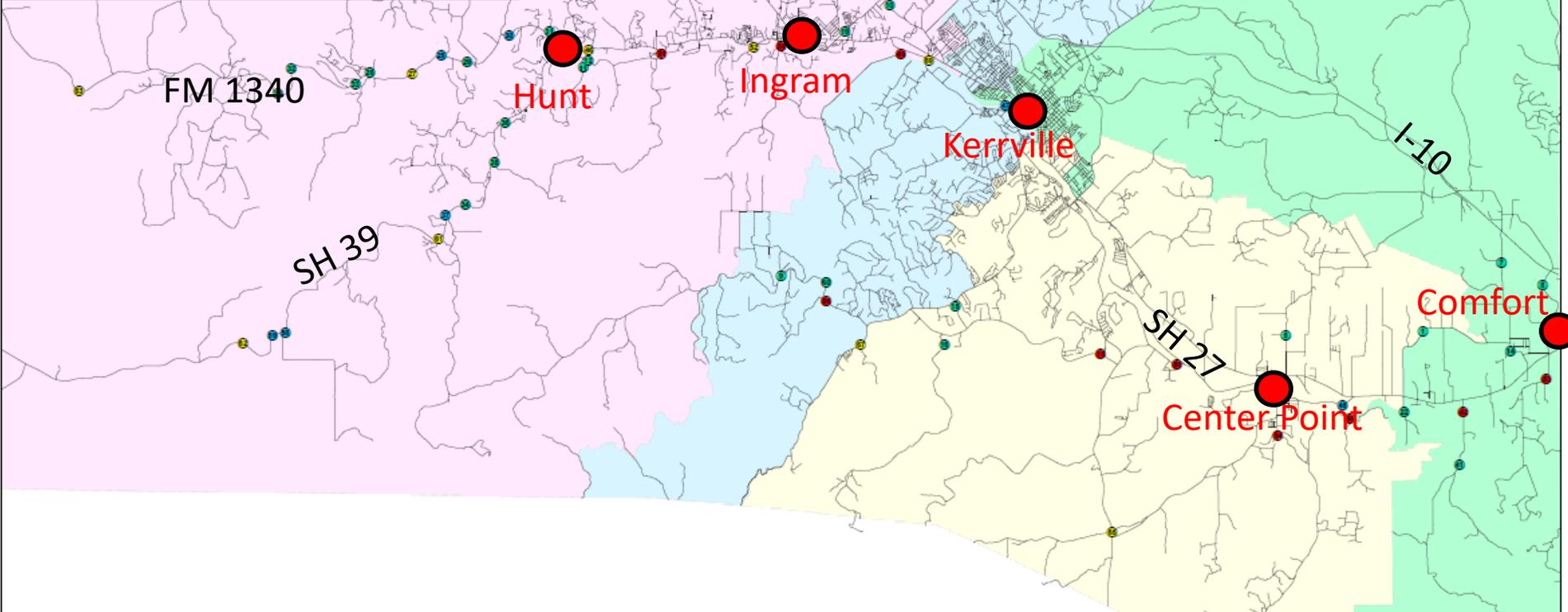
No.	Project	Crossing Name	Stream/River	No.	Project	Crossing Name	Stream/River
Recommended Kerr County HWDS Crossings							
18	2	Lower Turtle Creek Road near Hwy 177	Turtle Creek	1	3	White Creek Road	Hemmed Tybarns
19	4	Indian Creek near Ingram	Chadabbe River	2	4	Elphick	West Dry Branch
42	3	Lane Valley 3	Chadabbe River	4	4	Ingram Tide	Hemmed Branch
48	4	Star Creek near Atkade Loop	Chadabbe River	5	2	Stonokah	Star Creek
50	2	Brick Crossing	Chadabbe River	7	3	Star Creek	Cypress Creek
51	4	Waldrop Crossing	Chadabbe River	8	3	Shake Start	Cypress Creek
53	3	Bermane Soss	Chadabbe River	9	1	Upper Turtle Creek 3	Turtle Creek
54	2	Jim Pass at FM 480	Vardo Creek	10	4	FM 1330	Star Creek
55	2	Clayton Pines Station	Vardo Creek	11	4	Traylor	Taggart Creek
66	1	Upper Turtle Creek No. 1 (Pine Station)	Turtle Creek	12	4	Cubert	Taggart Creek
GBRA Monitored Crossings							
27	4	Waldemar	North Fork Goad	13	2	West Creek	West Creek
40	4	Schroeder Crossing	Chadabbe River	16	2	Fad Creek	Turtle Creek
52	4	Ingram Dam Crossing-Cook	Chadabbe River	19	4	Star Creek Cut Off	Nichols Creek
61	4	Star Inn	South Fork Goad	20	4	Hemmed Branch Road	Hemmed Tybarns
62	4	South Fork	South Fork Goad	21	4	Dwelling	Johnson Creek
63	4	North Fork-Kerr Wildlife	North Fork Goad	22	3	Hemmed	Chadabbe River
64	4	Talabaca	Johnson Creek	24	4	Star Storage Road	Johnson Creek
65	2	Camp Verde 177	Vardo Creek	26	4	Trudick (Queen)	North Fork Goad
67	2	Turtle Creek/SH116	Turtle Creek	28	4	Bermane	North Fork Goad
68	2	Center Point at FM 480	Chadabbe River	29	4	Lower Star (River Head)	North Fork Goad
69	4	OKRA Dam at Thompson Dr	Chadabbe River	31	4	Star River Road	North Fork Goad
TxDOT Monitored Crossings							
17	4	FM 1330 at Richard	Star Creek	32	4	Wagon Wheel	North Fork Goad
25	4	Hove Crossing	North Fork Goad	33	4	Starline	North Fork Goad
30	4	Merighi (Starbucke)	North Fork Goad	34	4	Musick	South Fork Goad
32	4	Parlier Creek	South Fork Goad	35	4	Seago Crossing	South Fork Goad
37	4	Star Crossing	South Fork Goad	36	4	Camp Fleming Arrow	South Fork Goad
43	4	Star Crossing	Chadabbe River	41	3	Lane Valley 2	Cherry Creek
45	4	Cherrywood Crossing at FM 1330	Chadabbe River	44	3	Center Point Park Crossing	Chadabbe River
47	1	Lanes Crossing	Chadabbe River	60	1	Upper Turtle Creek No. 2	Turtle Creek
48	4	SH 39 South 1	South Fork Goad				
50	4	SH 39 South 2	South Fork Goad				

Legend

- Recommended Kerr County HWDS Crossings
- Recommended Water Level Gauge Crossings
- TxDOT Monitored Crossings
- GBRA Monitored Crossings

Commissioner Precincts

- 1
- 2
- 3
- 4



KERR COUNTY - LOW WATER CROSSING LOCATIONS

Early Flood Warning System Summary

- Expand existing system
- Integrate sites with each other and internet
- Share data with public and government agencies in usable format
- Inform entities on Guadalupe River downstream
- Model flooding with rainfall forecast



BEXAR flood

providing current flood information and emergency road closures



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Map

Satellite

Enter a location

Zoom Extents



ALERTS

TWITTER FEED

Road Closures

TURN AROUND, DON'T DROWN!

If you see water over the road, please turn around and find a different route.

It is illegal to drive around barricades at low water crossings

Closed Locations: 1 of 198

Abbott @ Saltrillo Creek

Map Legend

- Closed
- Open
- Inactive
- Caution
- Subscribed



Agenda Item 7

Consider Executive Committee's recommendation of nominations and approval for the vacant non-voting positions of Public interest group

- Consider Executive Committee's recommendation, discussion and consider taking action to fill the Public interest category position

To view nomination forms submitted please go to guadalupeRFPG.org → Meetings Tab → Executive Committee Meeting Materials (January 25, 2021) or

<http://guadalupeRFPG.org/documents/meetings/materials/20210125.pdf>

Agenda Item 8

To view nomination forms submitted please go to guadalupeRFPG.org → Meetings Tab → Executive Committee Meeting Materials (January 25, 2021) or

<http://guadalupeRFPG.org/documents/meetings/materials/20210125.pdf>

Consider Executive Committee's recommendation of nominations and approval for the vacant voting positions of River Authorities, Municipalities, Counties and Electric Generating Utilities interest groups.

- Consider Executive Committee's recommendation, discussion and consider taking action to fill the River Authority interest category position
- Consider Executive Committee's recommendation, discussion and consider taking action to fill the Municipalities interest category position
- Consider Executive Committee's recommendation, discussion and consider taking action to fill the Counties interest category position
- Consider Executive Committee's recommendation, discussion and consider taking action to fill the Electric Generating Utilities interest category position

Agenda Item 9

Update from RFPG
Sponsor (GBRA)
regarding status of

1. Regional Flood Planning Grant contract with the TWDB
2. Request for Qualifications to initiate procurement for a technical consultant

ATTACHMENT 1

**GUADALUPE-BLANCO RIVER AUTHORITY (RFPG PLANNING GROUP SPONSOR)
EXPENSE BUDGET**

CATEGORY	TOTAL AMOUNT
Other Expenses ¹	\$37,866
Subcontract Services	\$923,434
Voting Planning Member Travel	\$0
Total Study Cost	\$961,300

¹ Planning Group Sponsor's personnel costs for staff hours to be directly spent providing, preparing for, and posting public notice for RFPG meetings, and direct expenses for support of and attendance at RFPG meetings.

Annual Budget

Staff Time (10 Hr/Month)

Salary per yr	\$ 5,400.00
Fringe (40.5%)	\$ 2,187.00
Indirect (10%)	\$ 1,905.00
TOTAL	\$ 9,492.00

Website

Annual Fee for domain and website hosting service	\$ 130.00
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Transportation

Cost to offsite mtgs (4/yr) Avg. 200 miles/trip	\$ 500.00
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Public Posting	\$ 2,000.00
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Printing Costs	\$ 500.00
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TOTAL ANNUAL COSTS	\$ 12,622.00
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Agenda Item 10

Public General Comments

Public Comments limited to 3 minutes per speaker

Agenda Item 11

Consider date and agenda items for next meeting

DATE	TOPIC	PRESENTER
January 2, 2021	The InFRM Watershed Hydrology Assessment for the Guadalupe River Basin	Helena Mosser, P.E. Lead Hydraulic Engineer, U.S. Army Corps of Engineers and Max Strickler, CFM Lead Hydrologist, U.S. Army Corps of Engineers
February 3, 2021	Information provided to Emergency Management and First Responders during forecasted flood events	John Jonston
February 3, 2021	Early flood warning system that has been worked on by Kerr County and UGRA. The preliminary study has been completed and this project is basically ready to request funding.	Commissioner Letz, County Engineer Charlie Hastings & Engineer John Hewitt
March 3, 2021	Development of FEMAs limited detail model (base level engineering) that spans the Guadalupe river basin that can be used to evaluate projects	FEMA/consultant

Presentation Ideas Date TBD

TOPIC	PRESENTER
Introduce the TWDB Region 11 Flood Planning Group to the GLO Combined River Basins project including discussion of project goals, phase budgets and associated timelines, river basins planning regions, introduction of the West Region vendor team and our region-specific goals, study methodology, outreach coordination, available funding streams, and provide region-specific timelines for future activities on the project.	Shonda Mace, GLO and Elizabeth Levitz, AECOM
Base Level Engineering (Plum Creek)	Halff & TWDB
Site specific modeling for the San Antonio River Basin	SARA technicians
Expanding the use of floodplain models. Updated the floodplain model for the Guadalupe River and created Countywide inundation maps correlated to the forecasted river gauge in Victoria	John Johnston
City of San Marcos flood protection efforts: City regulatory changes to prevent future flooding, Projects completed or underway to mitigate flood drainage, Outstanding needs and potential future projects	Laurie Moyer, P.E. - City of San Marcos
Kerr County in working with TXDOT has done preliminary work on a drainage / flood control project for the community of Center Point. Preliminary engineering of drainage area complete. TXDOT has completed the drainage work along Highway 27. Drainage easements and engineering need to be done.	Commissioner Letz, County Engineer Charlie Hastings & Engineer John Hewitt
Kerr County has identified several areas between Center Point and Comfort where the drainage across Highway 27 needs to be improved for safety considerations, Several accidents have occurred in these areas. This would be a joint TXDOT and Kerr County	Commissioner Letz, County Engineer Charlie Hastings & Engineer John Hewitt
Kerr County and Kendall County have done preliminary work regarding the flooding in Comfort. While Comfort is mostly in Kendall County, most of the flooding is caused by drainage basins in Kerr County. Kerr County and Kendall County have had numerous discussions regarding this issue and need funding for engineering and construction.	Kerr & Kendall County
Texas Living Waters Project: Nonstructural solutions to flooding, including natural and nature-based flood mitigation strategies (30 min)	Texas Living Waters Project

Agenda Item 12

Adjourn