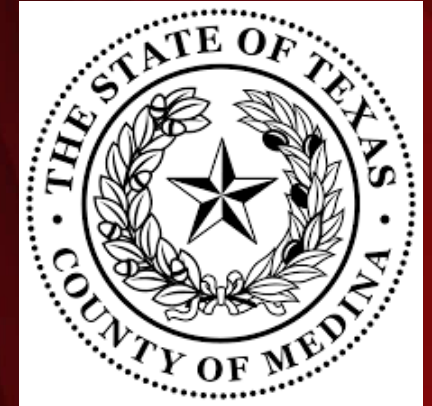


D'Hanis Community Flood Mitigation Project

Westwood



April 3rd, 2025 | D'Hanis, TX

Agenda

I. Introductions

- I. Keith Lutz (Medina County – Judge)
- II. David Lynch (Medina County – Precinct 3 Commissioner)
- III. Pat Brawner, CFM (Medina County – Floodplain Administrator)
- IV. Caleb Rodriguez (TWDB – Grant Administrator)
- V. J.W. Balch, PE, CFM (Westwood – Project Manager)

II. How bad is it: Flooding Risks

III. How we got here: Funding History

IV. How we plan to resolve:

- I. Natural channel design
- II. US 90 Bridges

V. How can you help?

- I. ROE
- II. Photos
- III. High Water Marks
 - I. We will go survey known high water marks
 - II. This helps us refine/calibrate models

IV. Channel improvements

VI. Questions / discussion

Flooding Source	Location	Drainage Area (Square Miles)	Peak Discharge (cfs)					
			10% Annual Chance	4% Annual Chance	2% Annual Chance	1% Annual Chance Existing	1% Annual Chance Future	0.2% Annual Chance
Seco Creek ⁷	U.S. Highway 90	178.9	36,100	*	68,200	91,000	*	150,000

Seco Creek	The flood of record on Seco Creek occurred in 1932 and produced a discharge of 230,000 cfs at the Rowe Ranch streamflow gaging station. The recurrence interval of this flood is estimated to be greater than 500 years. On June 22, 1997, Seco Creek flooded the town of D'Hanis causing damage to buildings within the town.
------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Excerpts from the FEMA Flood Insurance Study of Medina County

Westwood



D'Hanis, TX after 1935 Flood

Westwood



UPRR near US 90 and Seco Creek

Westwood



US 90 and Seco Creek

Westwood



Downtown Flooding, 2007

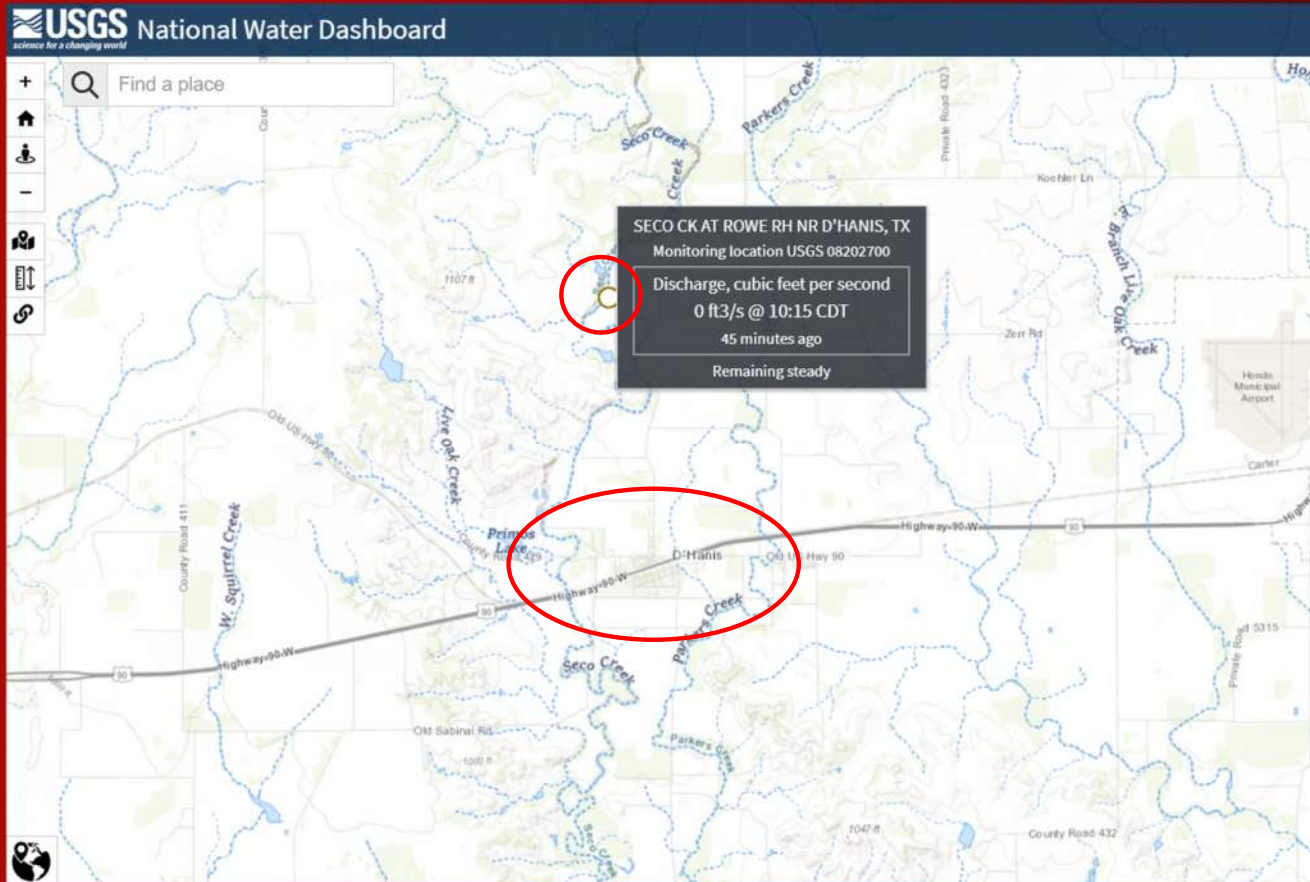
Westwood



Downtown Flooding, 2007

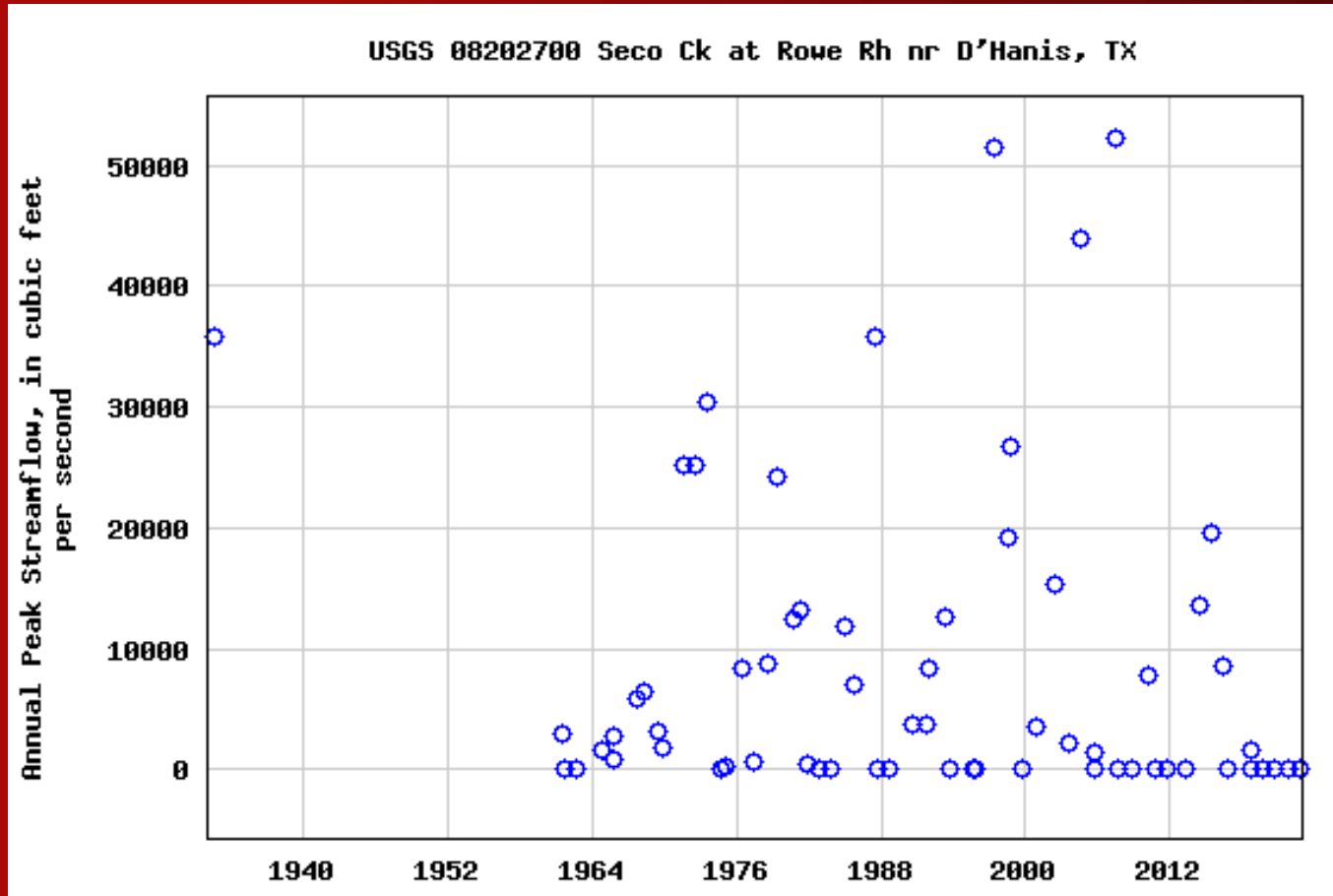
Westwood

Flooding Risks



- USGS Stream Gage data along Seco Creek @ Rowe-Smith Ranch
- Continually collecting data since 1960
- Provides valuable insight on frequency of flooding

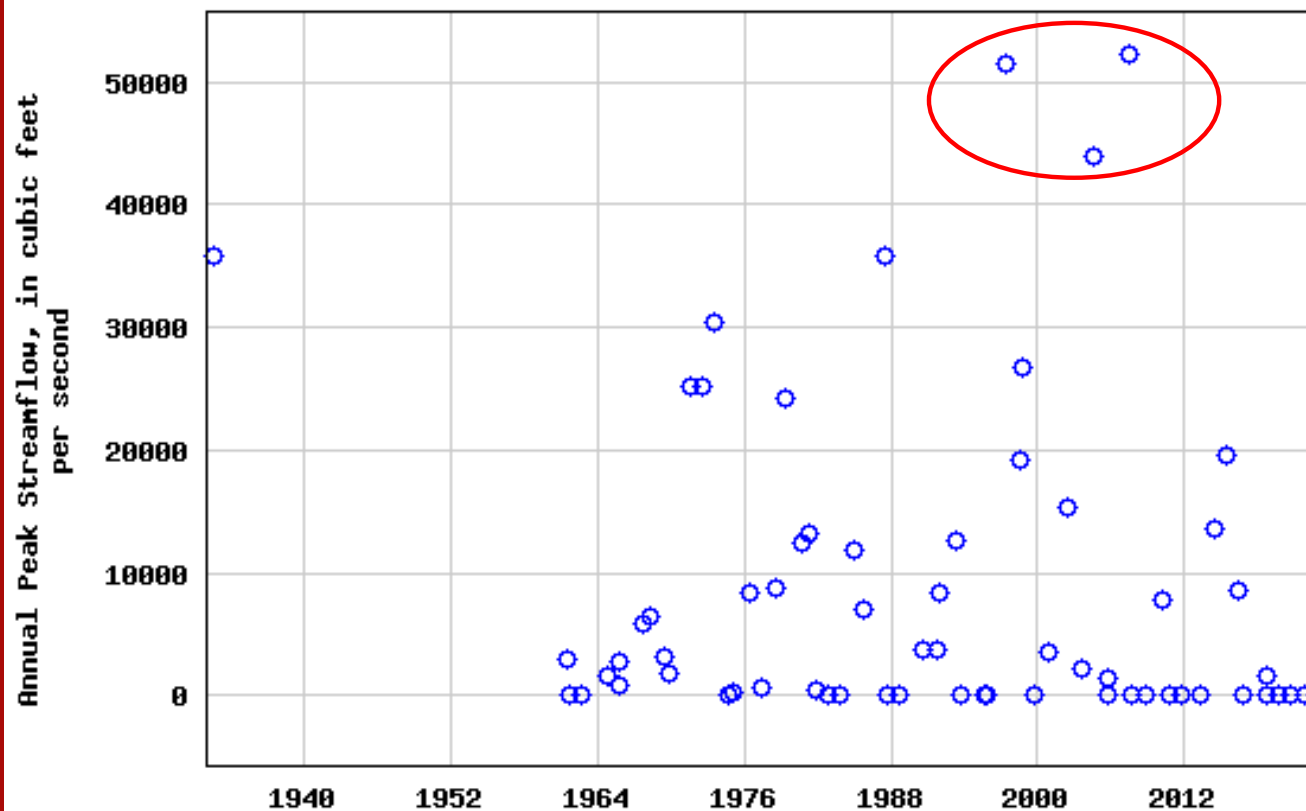
Flooding Risks



- USGS Stream Gage data along Seco Creek @ Rowe-Smith Ranch
- Continually collecting data since 1960
- Provides valuable insight on frequency of flooding

Flooding Risks

USGS 08202700 Seco Ck at Rowe Rh nr D'Hanis, TX



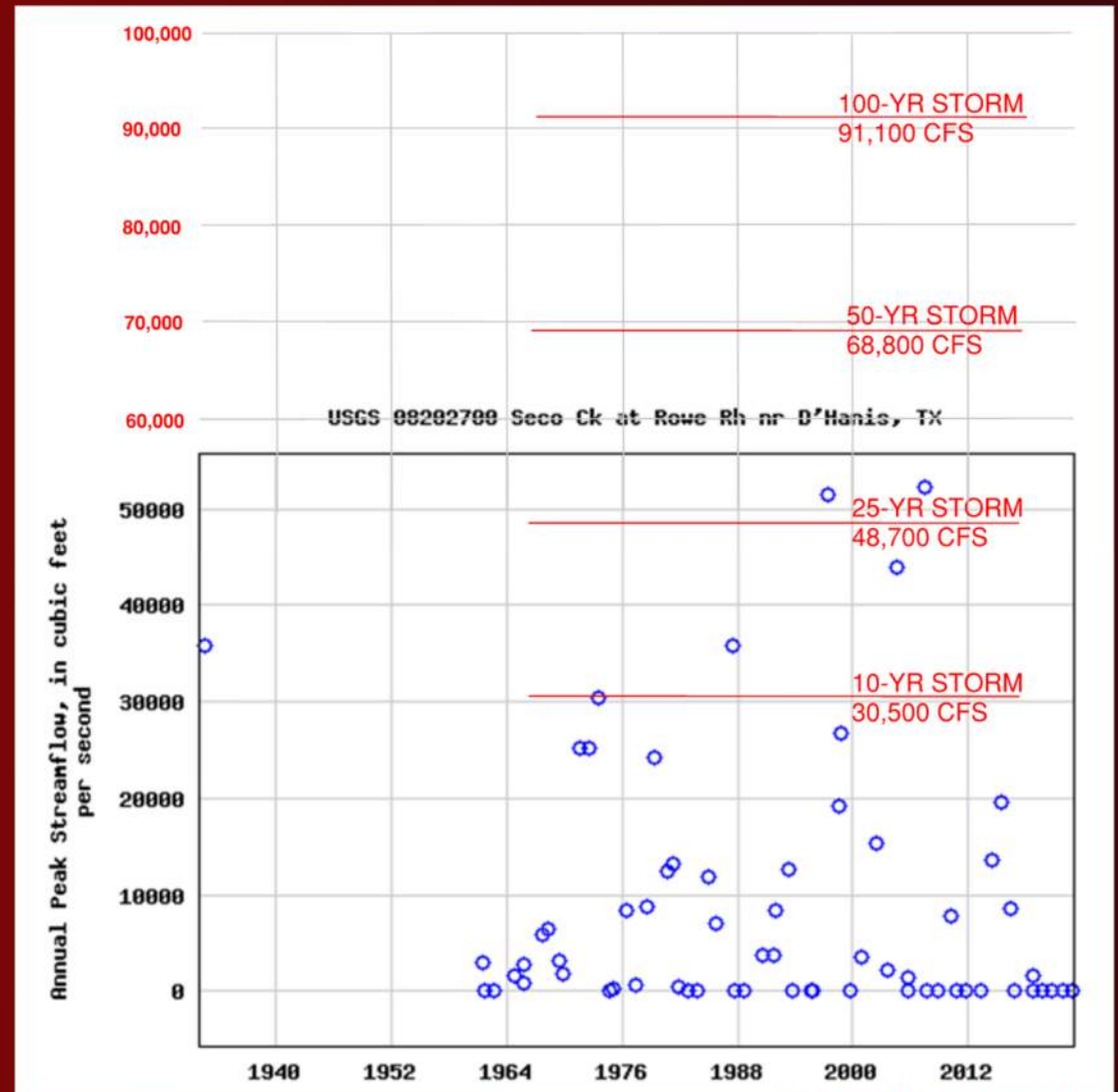
Top 10 Storm Events

#	Date	Discharge (CFS)
1	7/21/2007	52,200
2	6/22/1997	51,400
3	6/30/2004	43,900
4	7/2/1932	35,800
5	5/29/1987	35,800
6	7/15/1973	30,500
7	10/18/1998	26,800
8	8/13/1971	25,100
9	8/24/1972	25,100
10	6/3/1979	24,200

Westwood

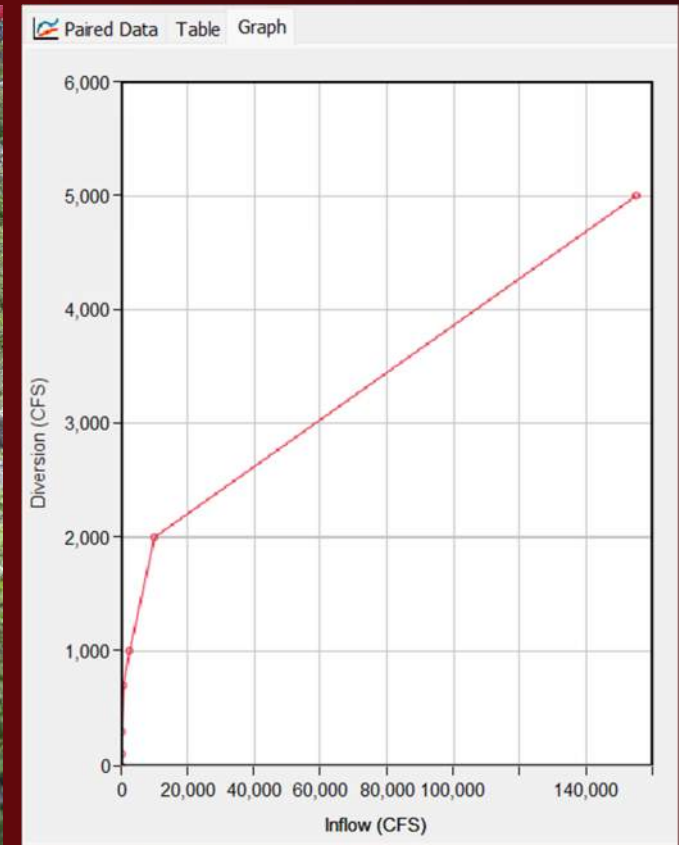
Flooding Risks

Top 10 Storm Events		
#	Date	Discharge (CFS)
1	7/21/2007	52,200
2	6/22/1997	51,400
3	6/30/2004	43,900
4	7/2/1932	35,800
5	5/29/1987	35,800
6	7/15/1973	30,500
7	10/18/1998	26,800
8	8/13/1971	25,100
9	8/24/1972	25,100
10	6/3/1979	24,200



Seco Creek Sinkhole

*Edwards Aquifer Authority (EAA) data
on Seco Creek Sinkhole infiltration*



Westwood

Parkers Creek Dam



- Parkers Creek Dam controls 10 sq-mi.
- 15 sq-mi drains to D'Hanis below the dam
- Built in 1974
- Provides 6,987 ac-ft of storage
- In acceptable condition as of last inspection 7/25/24

Funding History

- I. TWBD & Medina County funded a Flood Study completed in 2011
 - I. Evaluation of existing risk
 - II. Alternative analyses
- II. FEMA FMA Grant Application, 2022
 - I. The County applied for \$13 Million to address flooding in D'Hanis
 - II. Project to provide +\$17 Million in economic benefits
- III. FEMA awarded 90% federal funding in Feb. 2025
 - I. 10% local match



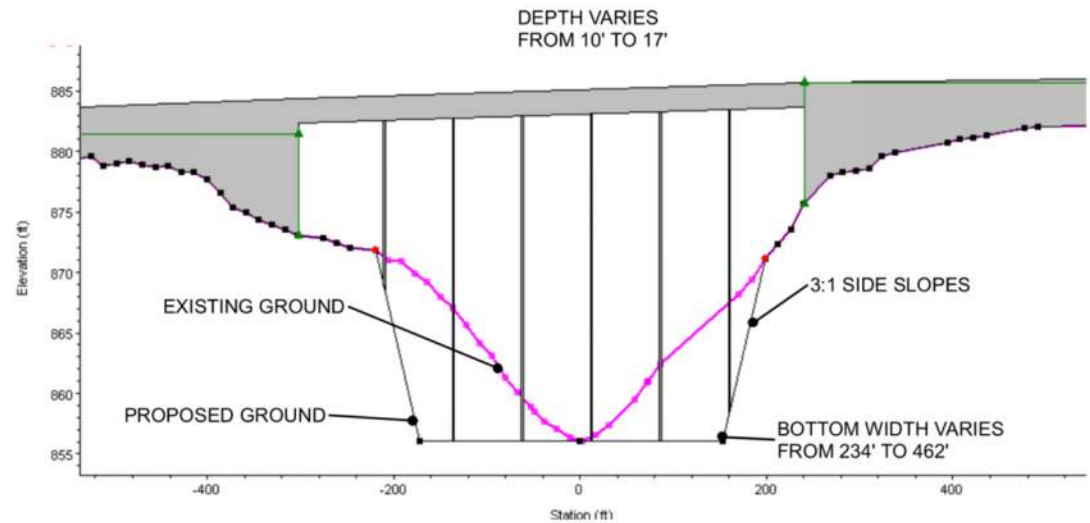
Design & Construction

- I. Survey of existing infrastructure
 - I. We need ROE to collect data
- II. Design of proposed improvements
 - I. Coordinate on easement acquisition
- III. Bid construction improvements
- IV. Construction to begin shortly after
- V. Revise Flood Insurance Maps after construction



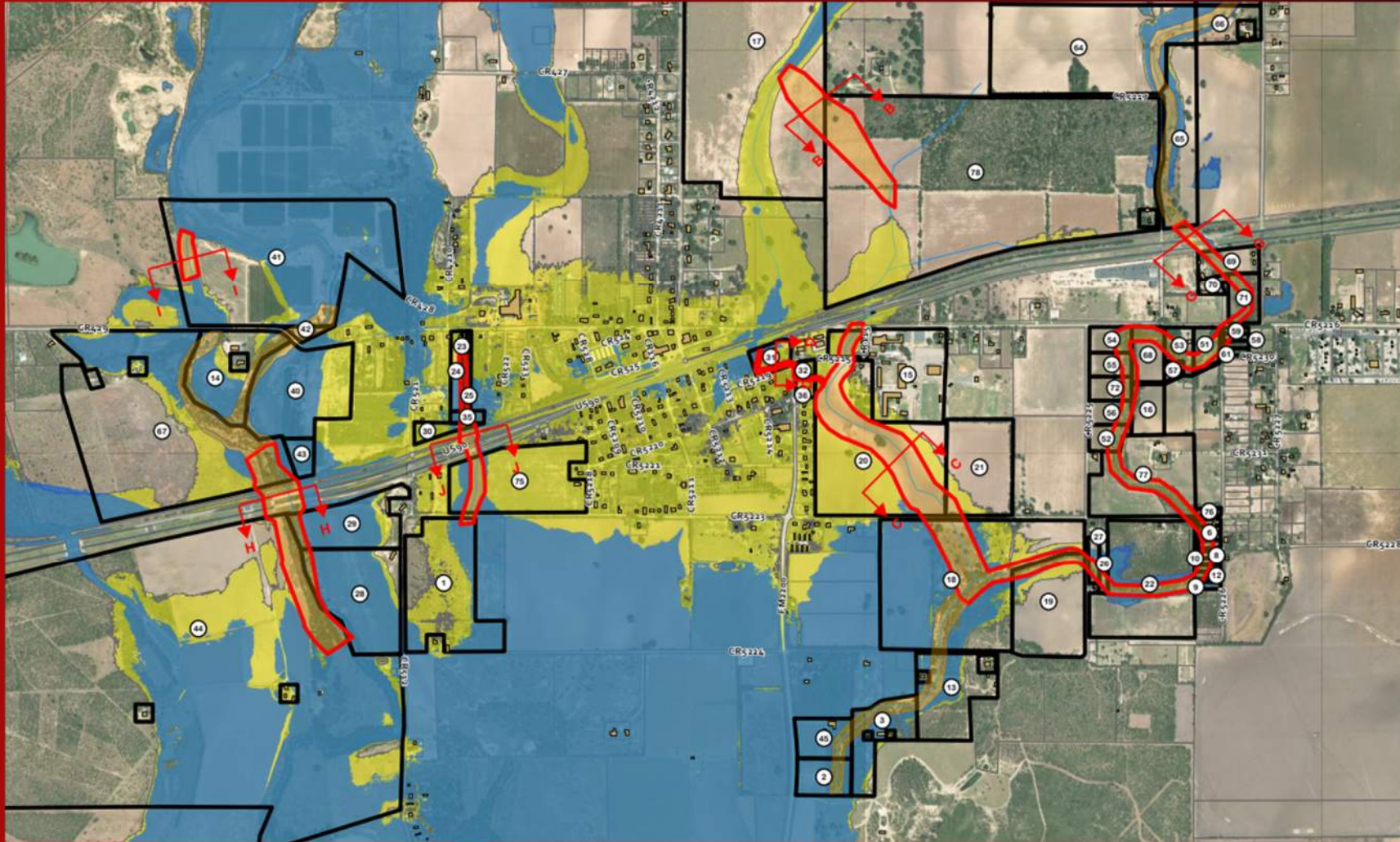
How we plan to resolve flooding?

- Channelization
- Lateral diversion channels
- Bridge improvements
- Cleaning channels



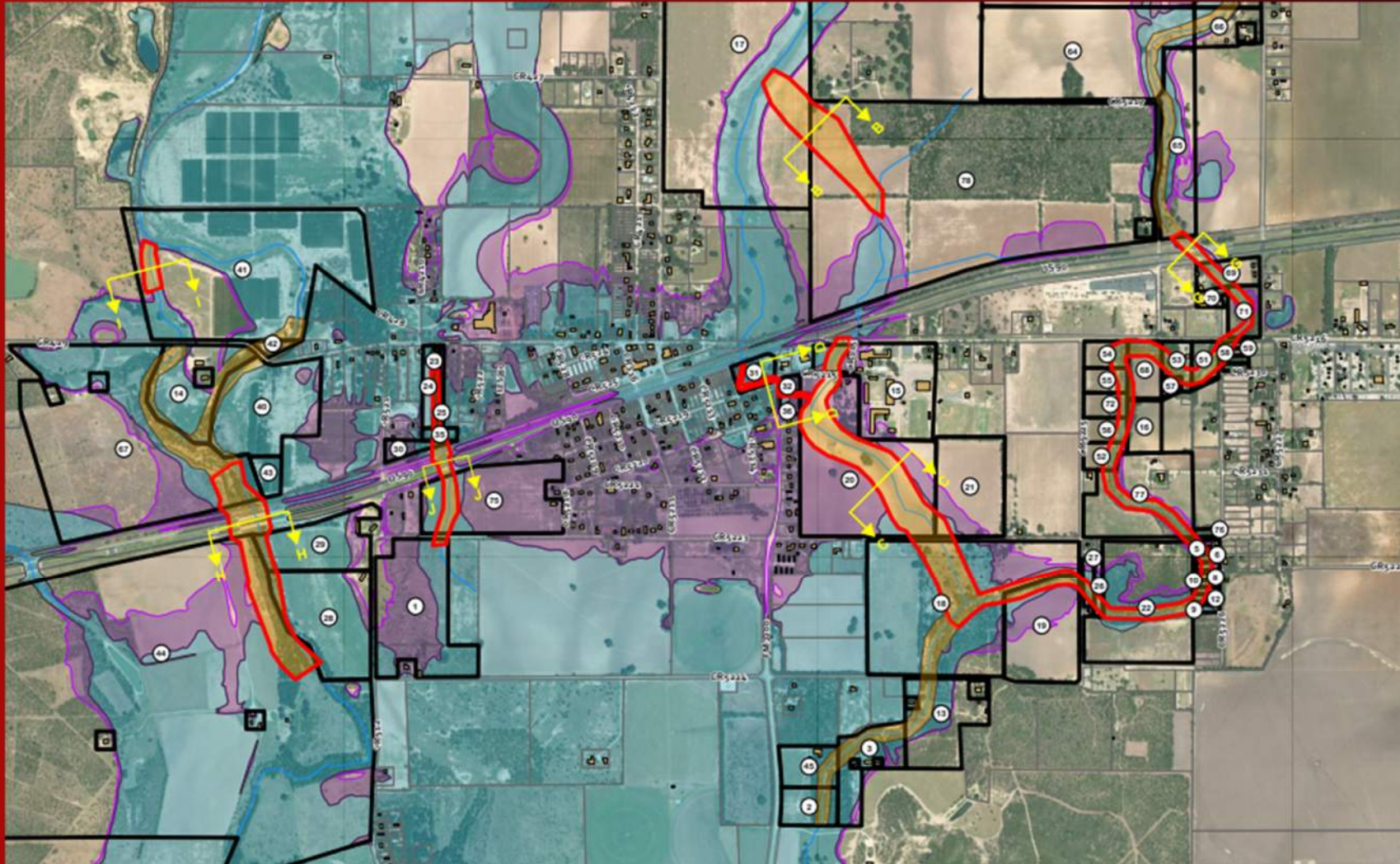
What we don't plan on doing

- We don't want to clear all vegetation
 - We want to protect large trees with high canopy (above floodplain)
 - Small young trees, scrub brush obstructing the floodplain to be removed
- We don't want to affect the normal use of your land
 - Farmers / ranchers need to be able to use their fields
 - Channels should be sloped gently to allow access to bottom
- We will not push flooding problems on to other properties
 - Our standard of work is to either improve the situation or cause no adverse impact



Current Flood Mitigation Plan (50-yr Storm Event)

Westwood



Current Flood Mitigation Plan (100-yr Storm Event)

Westwood

Benefits



- Decreased risks of flooding fatalities
- Decreased economic loss
- Decreased flood insurance premiums
- Either improved flood resiliency or no adverse impact

How you can help

- Right of Entry
 - This helps us with data collection
 - This is not permission to construct improvements
- Lets meet & discuss
 - What are your concerns
 - What areas should be avoided
 - Known utilities
 - Known environmental issues
- Send us photos & data of prior storm events
 - We can survey the high water marks, and calibrate our models
 - This will create more accurate design data

Thank You!

Contact Information

J.W. Balch – Project Manager, Westwood

John.balch@westwoodps.com

254-400-6063

Pat Brawner – Floodplain Administrator, Medina County

Pat.brawner@medinatx.org

830-741-6099

D'Hanis Community Flood Mitigation Project

April 3rd, 2025 | D'Hanis, TX

Westwood

