

Blanco Riverine Flood Mitigation Project

Public Meeting

February 6, 2020

Introduction

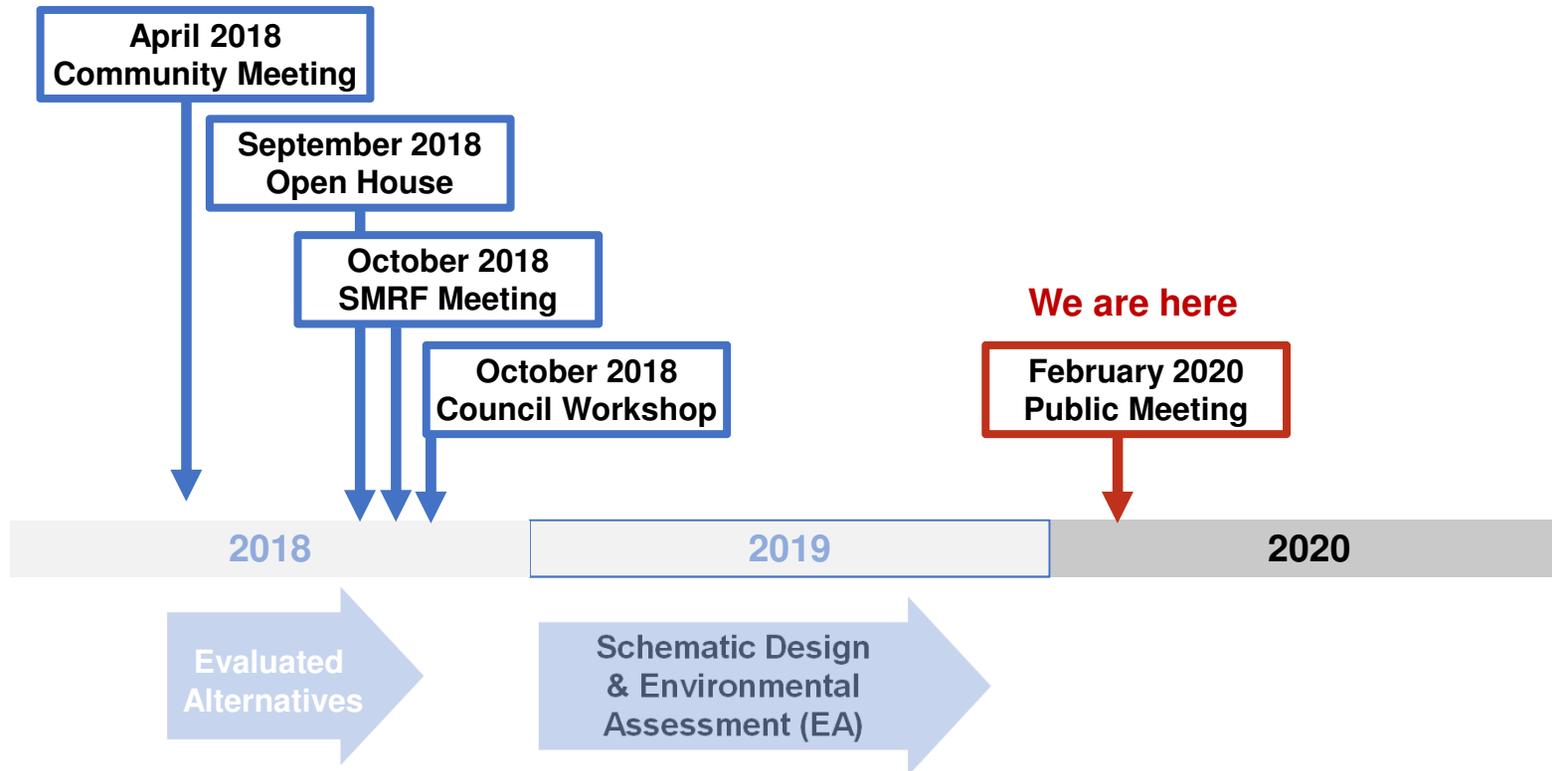
City of San Marcos staff

- Laurie Moyer, Director of Engineering & Capital Improvements
- Jacque Thomas, Senior Engineer
- Nancy Hyde, Administrative Assistant

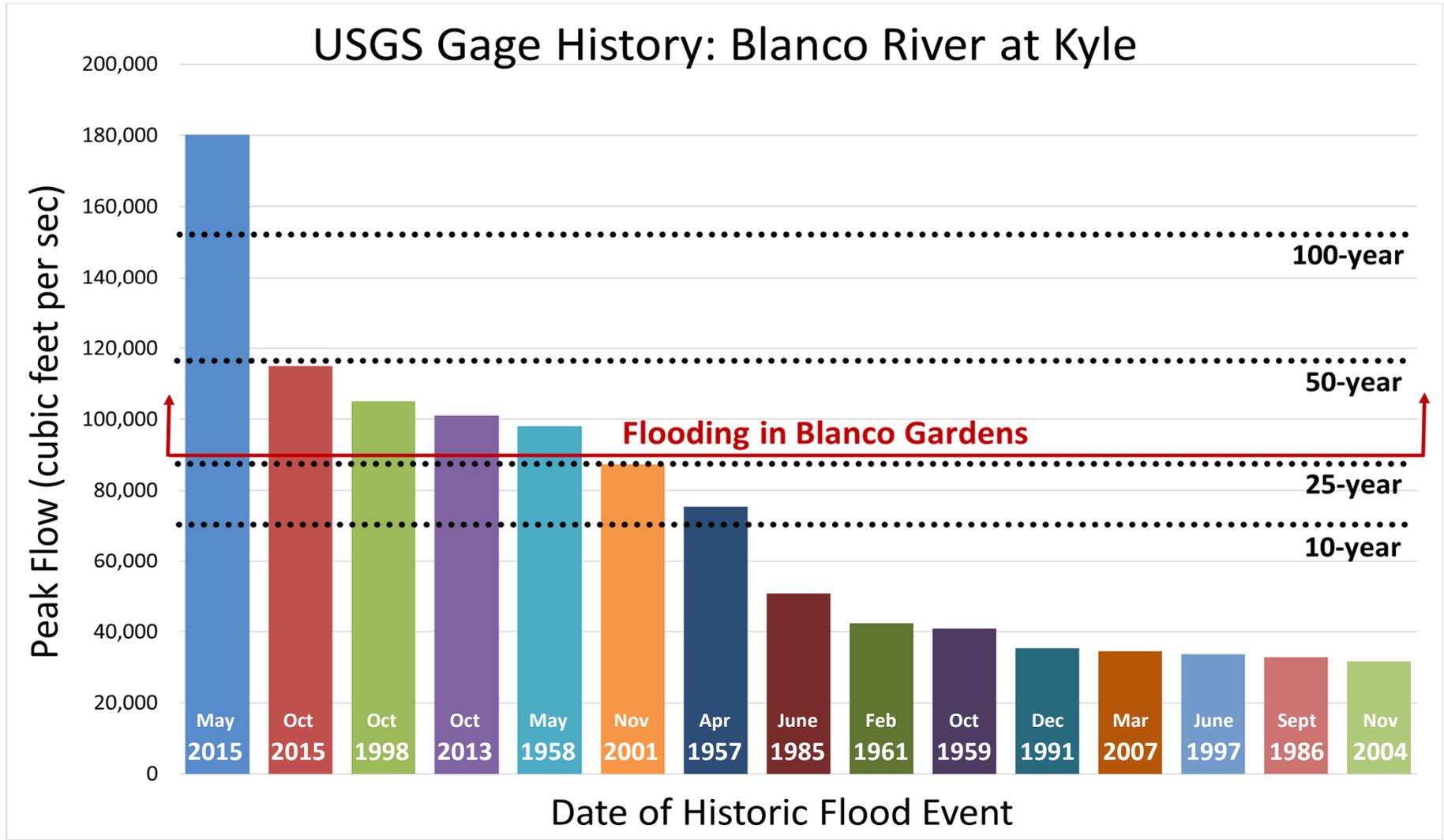
Consultant Team Staff

- Eric Ratzman, Halff Project Manager
- Brandyn Littleton, Halff Environmental Manager
- David Najvar, Halff Environmental Lead
- Mark Bunde, HRM Land Acquisition Solutions, ROW Agent

Previous Meetings



Blanco River Flood History



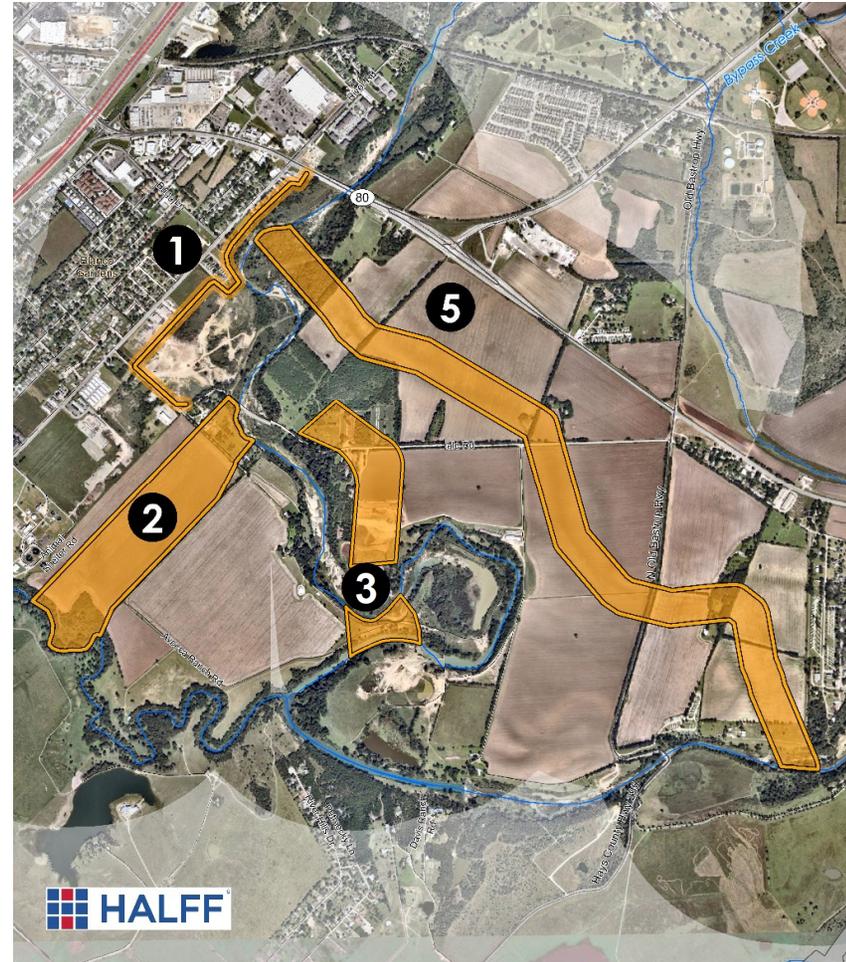
Blanco Gardens Existing Condition Flood Risk



Alternatives Evaluated

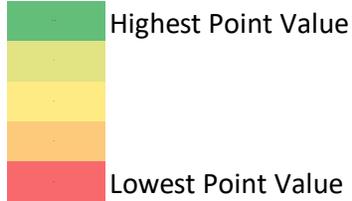
Near-Term Alternatives (50-year flood protection)

- Blanco Gardens Berm (1)
- Diversion 2 + Berm
- Diversion 3 + Berm
- Diversion 5 + Berm



Alternatives Ranking

Point Value

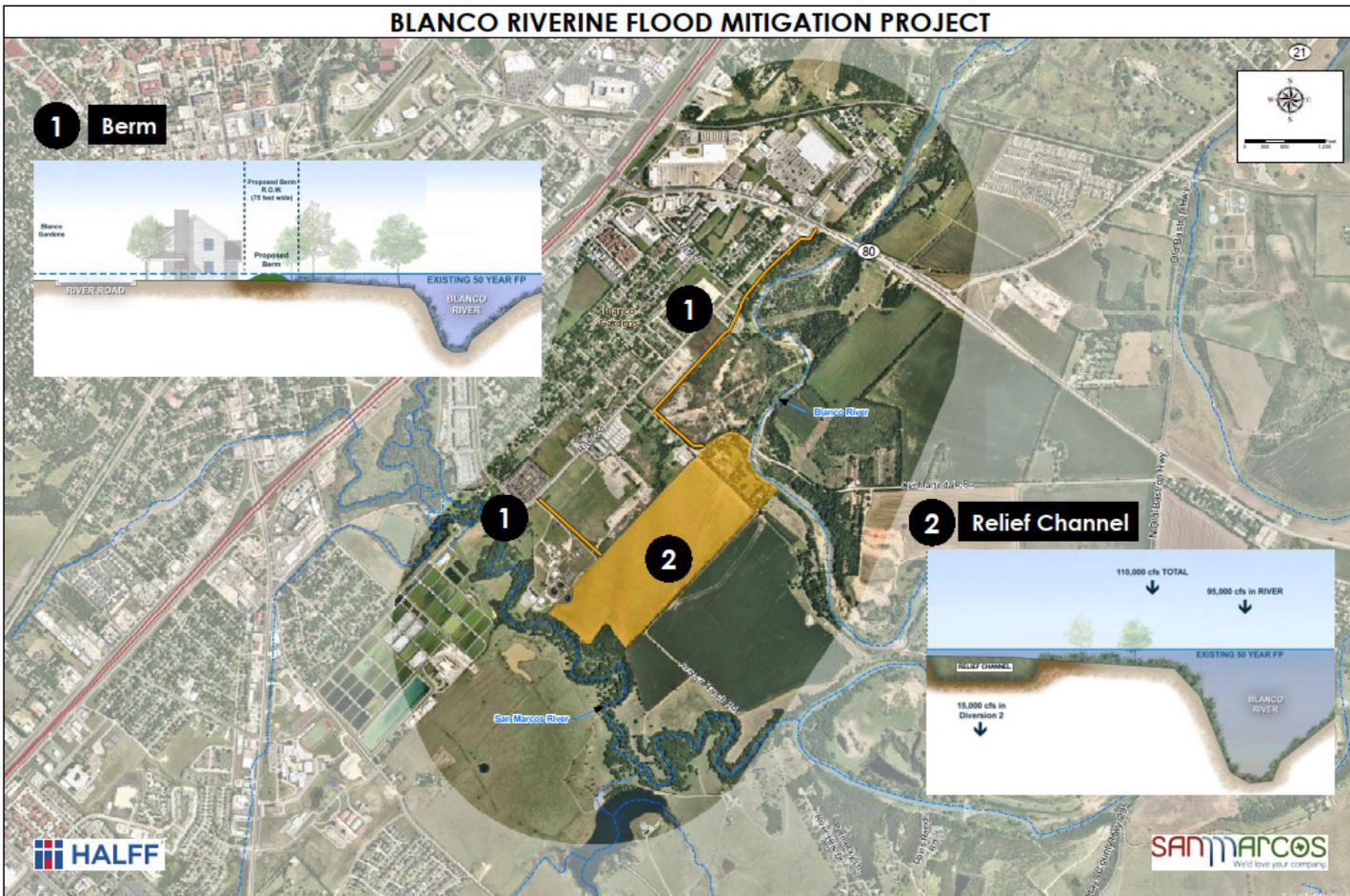


	% LMI Population Served	Flood Risk Reduction: Level of Service	Flood Risk Reduction: # Structures Benefitted	Cost per Benefitted Structure	ROW Acquisition	Leveraged Funding	Permitting / Schedule	Mobility Improvement	Phasing Considerations	Project Synergies	Environmental Impact	TOTAL SCORE (out of 100)	PROJECT RANKING
Berm + Diversion 2	16	4	5	7	5	7	7	3	5	5	3	67	1
Berm + Diversion 5	16	4	5	7	5	3	10	3	0	3	3	59	2
Berm + Diversion 3	16	4	3	7	7	3	10	3	0	0	3	56	3
Berm Only (1)	16	0	0	10	5	0	10	0	3	3	5	52	4



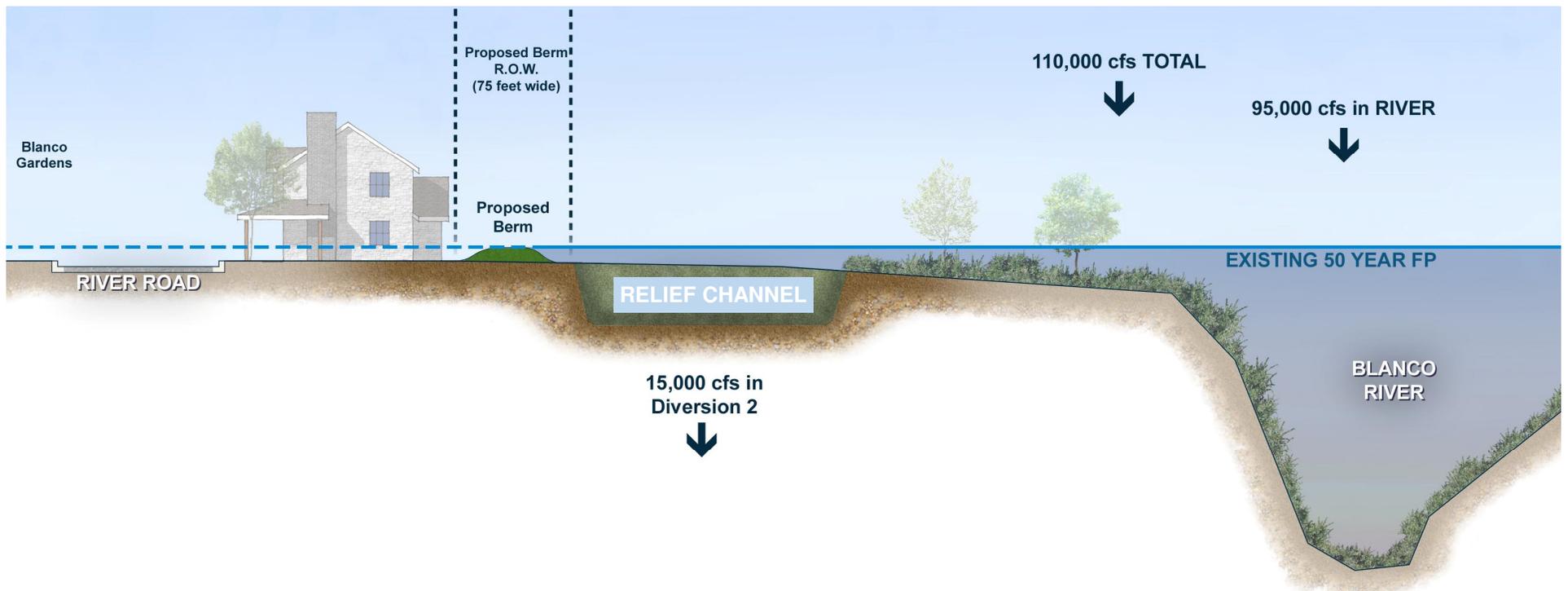
Blanco Riverine Flood Mitigation

- Berm + Relief Channel



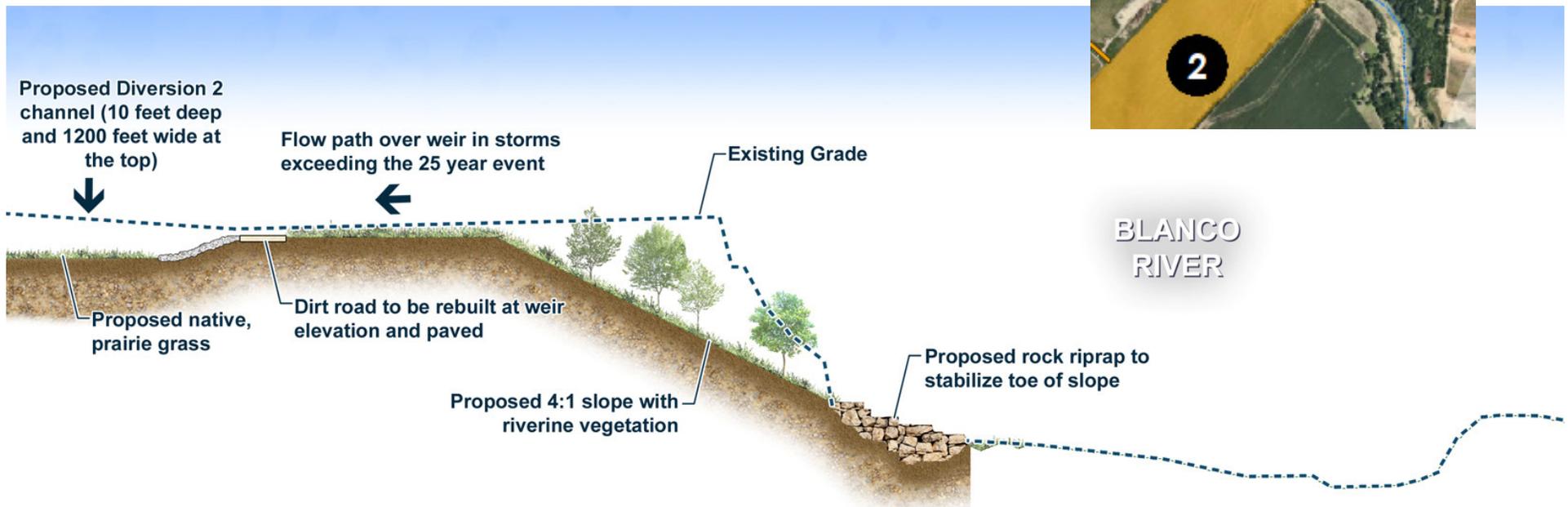
Blanco Riverine Flood Mitigation

- Berm + Relief Channel



Blanco Riverine Flood Mitigation

- Relief channel cross section
- Streambank stabilization



Simulation of Spill: Pre- and Post- Project

Existing Condition: 100-year



Post Project: 100-year



Environmental Assessment

- Projects funded through the CDBG-DR and CWSRF programs must comply with the National Environmental Policy Act (NEPA)
- An *Environmental Assessment (EA)* and *Environmental Information Document (EID)* were prepared to satisfy compliance with NEPA and other Federal and state environmental regulations
- The environmental review process ensures the proposed project does not negatively impact the surrounding environment



Jeff Hutchinson/USFWS

Environmental Assessment

Natural Resources

- Project coordinated with the U.S. Fish and Wildlife Service (USFWS) for potential impacts to species listed/candidates for listing under the Endangered Species Act:
 - Texas Pimpleback (*Quadrula petrina*)
 - Texas Fatmucket (*Lampsilis bracteata*)
 - Fountain Darter (*Etheostoma fonticola*)
 - Texas Wild-Rice (*Zizania texana*)
- USFWS issued concurrence that proposed project *May Affect, but Not Likely to Adversely Affect* protected species



Texas Wild-Rice (USFWS)



Fountain Darter (TPWD)

Environmental Assessment

Cultural Resources

- Assessment included archeological survey to document archeological sites and historic resources within the project area
- Determination by the Texas Historical Commission (THC) that no historic properties would be affected by the project
- Project monitoring by a qualified archeologist would be conducted during construction activities



Cox/McLain Environmental Consulting, Inc.

Environmental Assessment

Water Resources

- Project would occur within the 100-year floodplains of the Blanco and San Marcos Rivers
- Project activities would be authorized under a U.S. Army Corps of Engineers' (USACE) Nationwide Permit 13
- Construction activities within the Blanco River would be permitted by the Texas Parks and Wildlife Department (TPWD) to minimize impacts to aquatic resources
- No wetlands would be impacted by the project

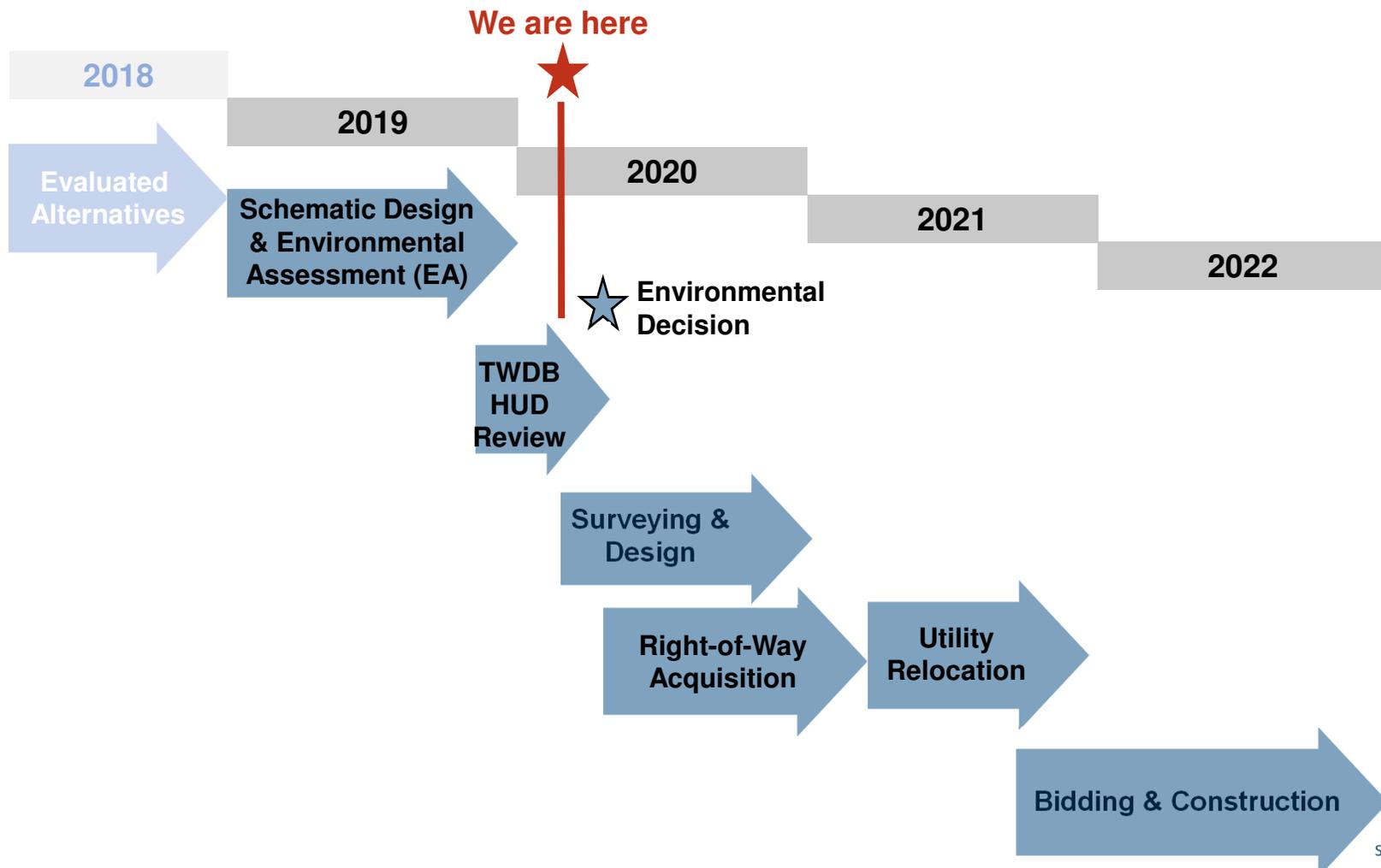


Environmental Assessment

Agency Coordination

- **Texas Historical Commission**
 - Archeological Survey → *Completed December 2019*
- **U.S. Fish and Wildlife Service**
 - Informal Consultation → *Completed January 2020*
- **U.S. Department of Housing and Urban Development**
 - Environmental Assessment → *Under Review*
- **Texas Water Development Board**
 - Environmental Information Document → *Under Review*
- **U.S. Army Corps of Engineers**
 - Section 404 Permitting → *Pending Final Design*
- **Texas Parks and Wildlife Department**
 - Sand/Gravel and Aquatic Resources Permitting → *Pending Final Design*

Schedule



Questions / Comments

- Comment cards

