

Parks and Recreation Board January 22, 2024



Introductions



Project Sponsor Team:

Marie Lancaster, E.I.T.

Henry Price, P.E.



Project Manager: Minda Sarmiento, P.E.

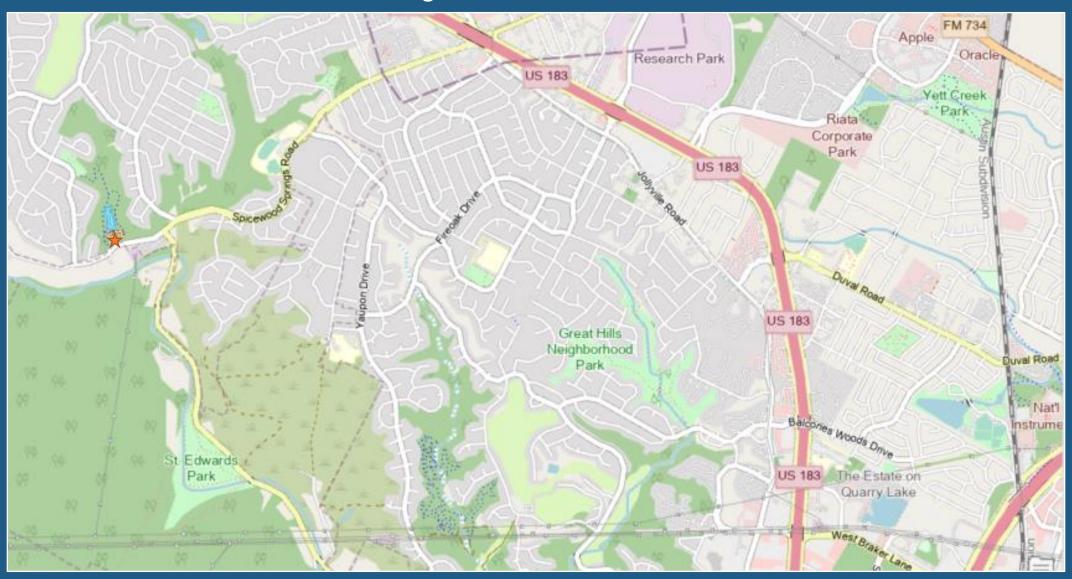


Project Consultant: Kim Patak, P.E.

"Watershed Protection protects lives, property and the environment of our community by reducing the impact of flood, erosion and water pollution."

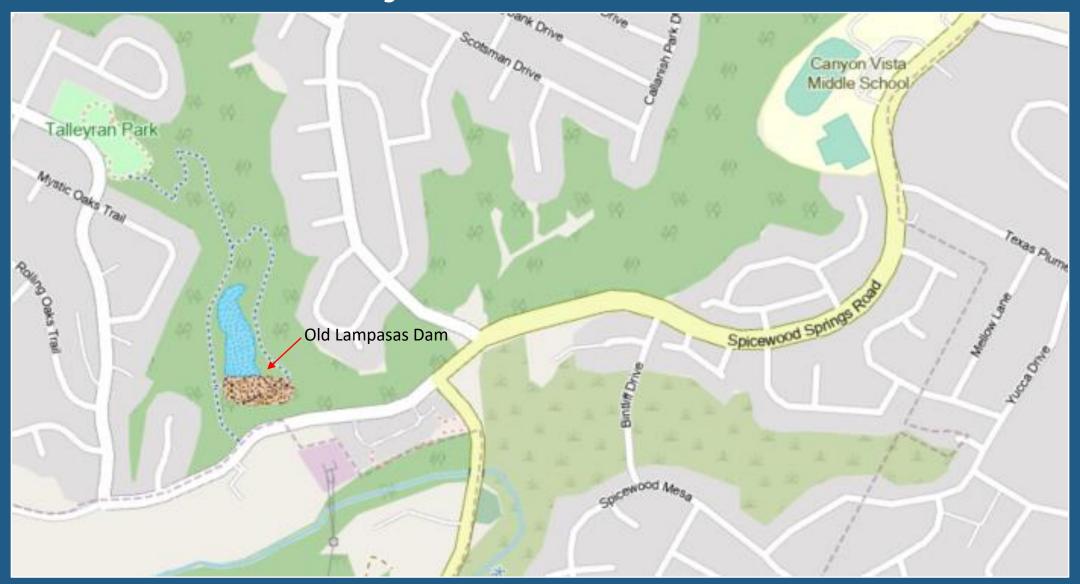


Project Location



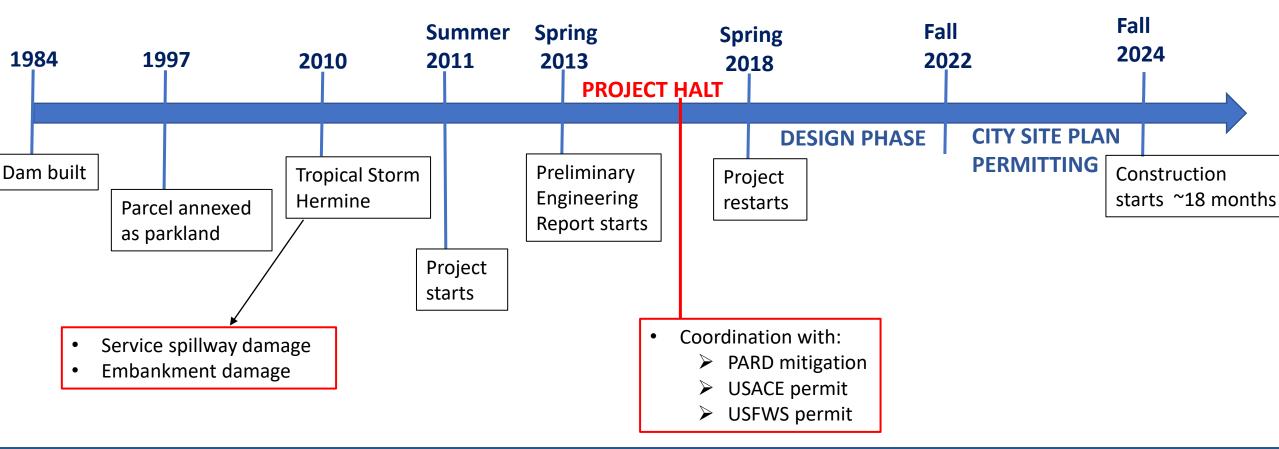


Project Location





Project History

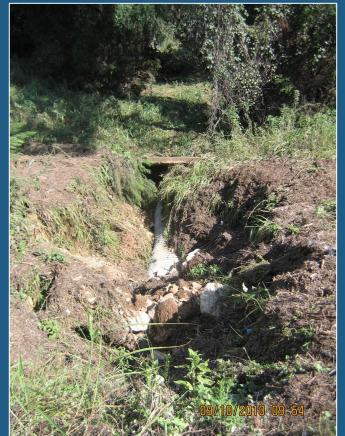


TCEQ Dam Safety Program

Texas Administrative Code Title 30, Part 1, Chapter 299: Dams and Reservoirs

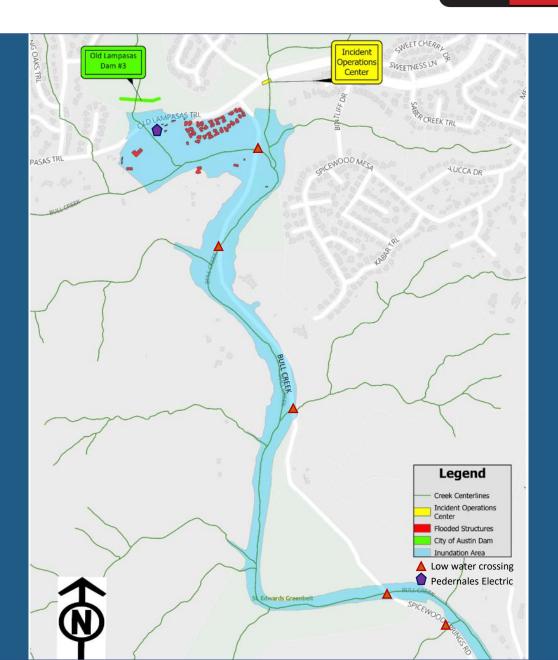
➤ Old Lampasas is a high hazard dam in poor conditions











Inundation Map

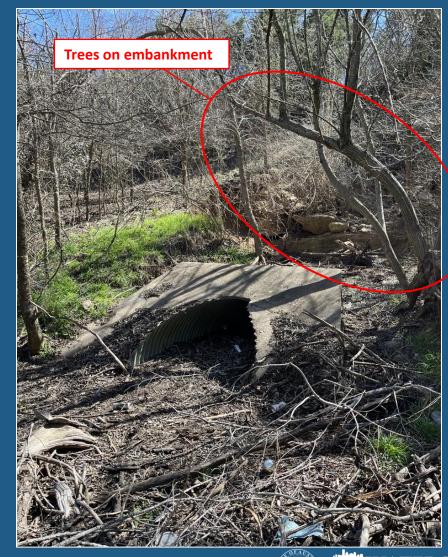
- ➤ Over 30 downstream structures at risk of flooding
- ▶2 roads at risk of flooding
- ▶6 low water crossings at risk of flooding
- Pedernales Electric substation







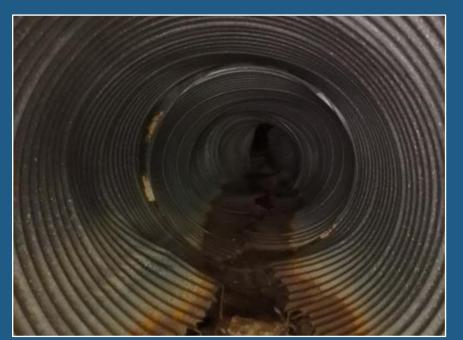






Project Scope

- Replace damaged, existing principal spillway with new 42-inch diameter pipe
- Replacement of the existing wastewater line through the embankment of the dam
- Removal of existing trees and boulders on dam footprint
- Installation of a new Flood Early Warning System instrumentation







Project Scope

- Armoring of the existing plunge pool to reduce future erosion impacts
- Construction of a new auxiliary spillway
- New maintenance drive to give the City access to maintain the dam
- Raise and reinforce dam structure to contain the worst case scenario flood and meet City and State Dam Safety criteria





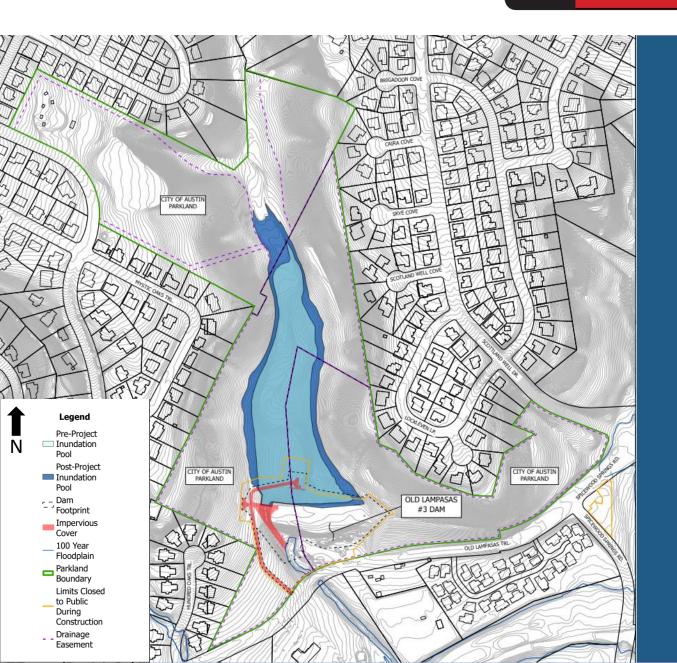




Project Scope

- Propose new outflow structure that provides extended detention for additional water quality benefits
- Improve habitat for Jollyville Plateau Salamander
- Estimated construction cost \$12.8M





Possible Construction Impacts and Benefits to Parkland

>Impacts:

- Trail closures (detours)
- Truck staging and traffic (no closure)
- Boulder and tree removal
- Material and equipment staging areas

➤ Benefits:

- Reuse of tree material and boulders for City parks
- Improvements to the dam to meet City and State criteria (safer park and trails)
- Modernization and rehabilitation of City infrastructure on parkland



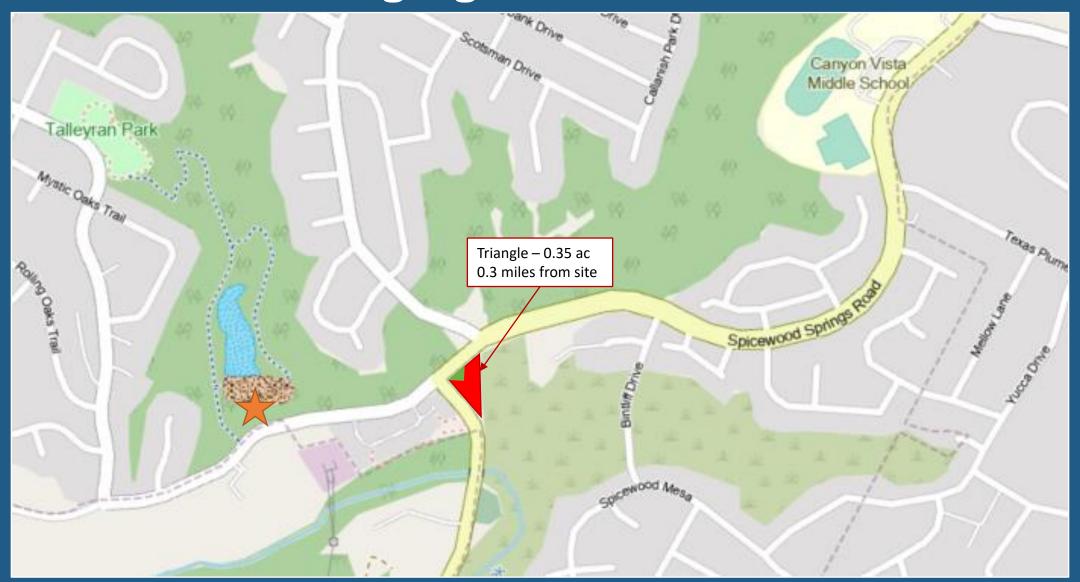
WPD Request

- ➤ Make a recommendation to City Council for approval of Temporary Use of parkland located at 8020 Spicewood Springs Rd – The Triangle not to exceed 540 Days.
- ➤ Total Mitigation is \$70,652 will be covered through:
 - > Improvement of parkland
 - Reuse of materials (trees, boulders)





Staging Area Location





Staging Area



- ➤ This land and the project site are PARD properties
- ➤ Closest to project site
- ➤ Will be used for ~18 months
- ➤ Will be used to store equipment and materials



Request & Project Recap

- > Use of the Triangle property for staging area
- ➤ Closest parcel to the project:
 - reducing potential traffic impact
 - reducing construction time
- ➤ Reuse of materials for parks under the City Connecting Children to Nature (CCCN) program
- Address severe deterioration of Old Lampasas Dam
- ➤ Meet City and State Dam safety criteria
- Provide additional water quality
- ➤ Enhance threatened and endangered species habitat



