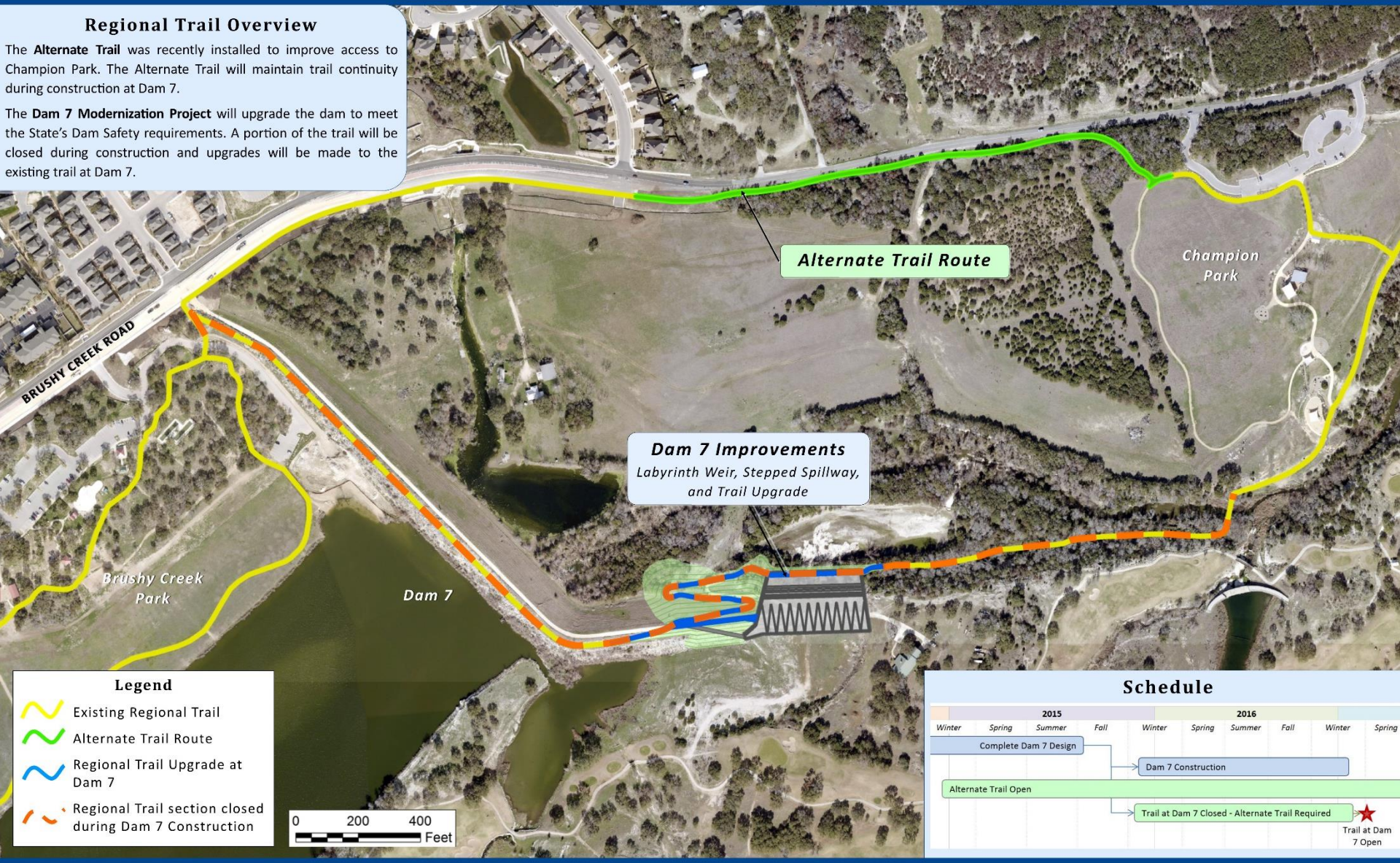
Regional Trail and Dam 7 Improvements

Regional Trail Overview

The **Alternate Trail** was recently installed to improve access to Champion Park. The Alternate Trail will maintain trail continuity during construction at Dam 7.

The **Dam 7 Modernization Project** will upgrade the dam to meet the State's Dam Safety requirements. A portion of the trail will be closed during construction and upgrades will be made to the existing trail at Dam 7.



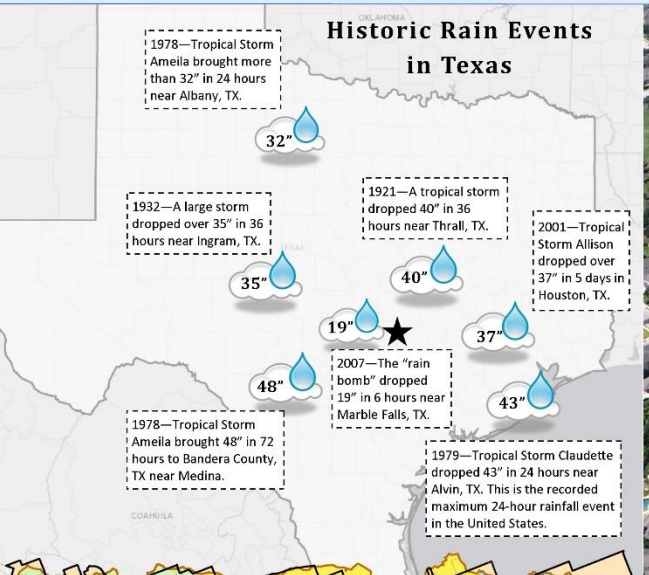
Schedule

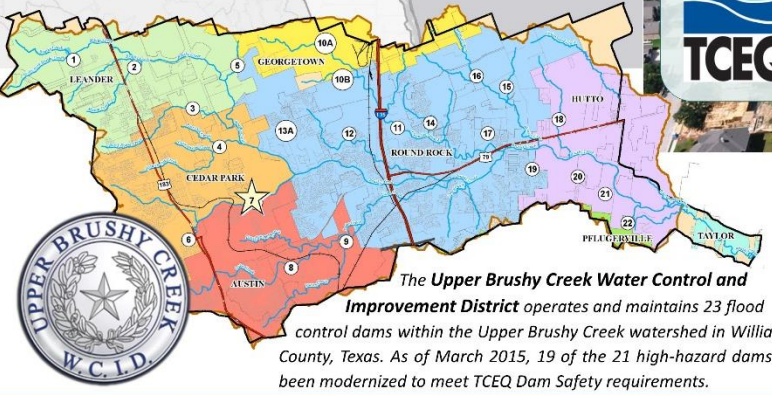
Dam Safety in Texas

What is the Probable Maximum Flood?

The PMF is the flood that may be expected from the most severe combination of critical meteorological and hydrologic conditions that are reasonably possible in a given drainage area. Scientist and engineers have studied the feasible limits of how much rain could occur in a given location, and how much of that rain could make its way from the land into a river or stream. ***The PMF is simply the largest flood that one could expect based on known limits of weather and watershed characteristics.***

Historic Rain Events in Texas





*The **Upper Brushy Creek Water Control and Improvement District** operates and maintains 23 flood control dams within the Upper Brushy Creek watershed in Williamson County, Texas. As of March 2015, 19 of the 21 high-hazard dams have been modernized to meet TCEQ Dam Safety requirements.*

Parmer Lane after Tropical Storm Hermine

September 2010—Tropical Storm Hermine dropped nearly 11 inches in 24 hours in the Upper Brushy Creek Dam 7 watershed, and over 2 feet of water flowed over the auxiliary spillway.

Dam Safety Regulations in Texas

There are over 7,200 dams in Texas. Dam safety in Texas is regulated by the Texas Commission on Environmental Quality (TCEQ). Dams are classified based on their size and hazard potential. All dams must be able to endure a "design storm", which is a percent of the PMF as determined by their classification.

Dam 7 auxiliary spillway after Tropical Storm Hermine

Why is Dam Safety Important?

Dam safety regulations are in place to preserve public safety. Dam safety programs help realize the benefits of dams while minimizing the risk of dam failures. Failure of a dam can cause property damage, personal injury, and loss of life downstream of the dam. It is important to inspect, maintain, and repair dams to ensure they continue to function safely. Existing dams require regular maintenance and often need to be upgraded in response to aging infrastructure and development in the watershed. As rural areas develop into urban communities, like the Upper Brushy Creek Watershed, the safety of existing dams in the area becomes a focus to protect the public living near the dams.

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KEEPING DAM 7 SAFE

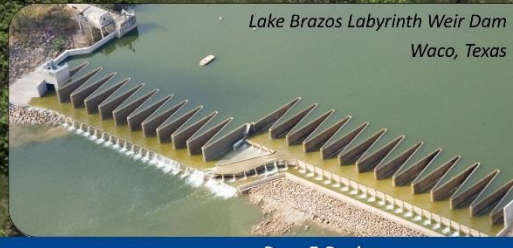
Labyrinth Weir to be Constructed in Existing Auxiliary Spillway

- Safely passes the required flow and prevents overtopping of the embankment during flood events, thereby improving the safety of the dam and the public downstream
- Reduces upstream water surface elevations during large flood events including at Parmer Lane
- Fits within area of the existing spillway (300 feet wide) thus minimizing changes to the embankment
- Minimizes visibility to Brushy Creek Lake Park users due to excavation

Flow from Reservoir during Flood Events

Regional Trail to be Upgraded at Spillway

- Longer ADA-compliant switchback to the top of dam
- Trail crosses the spillway at the same location and consists of the same material as the existing trail
- Trail at spillway designed to mimic the existing natural feel

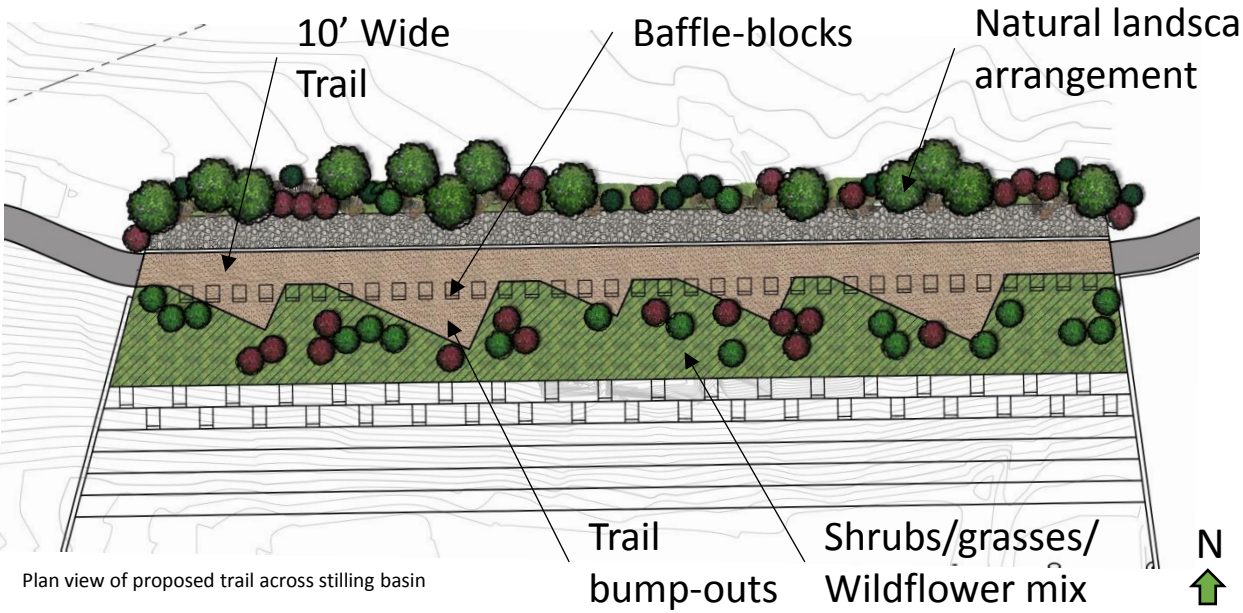


Lake Brazos Labyrinth Weir Dam
Waco, Texas

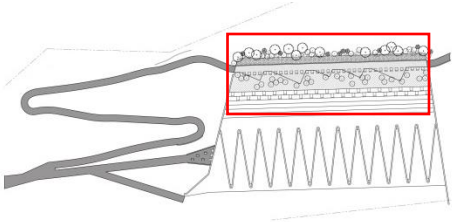
UPPER BRUSHY CREEK W.C.I.D.

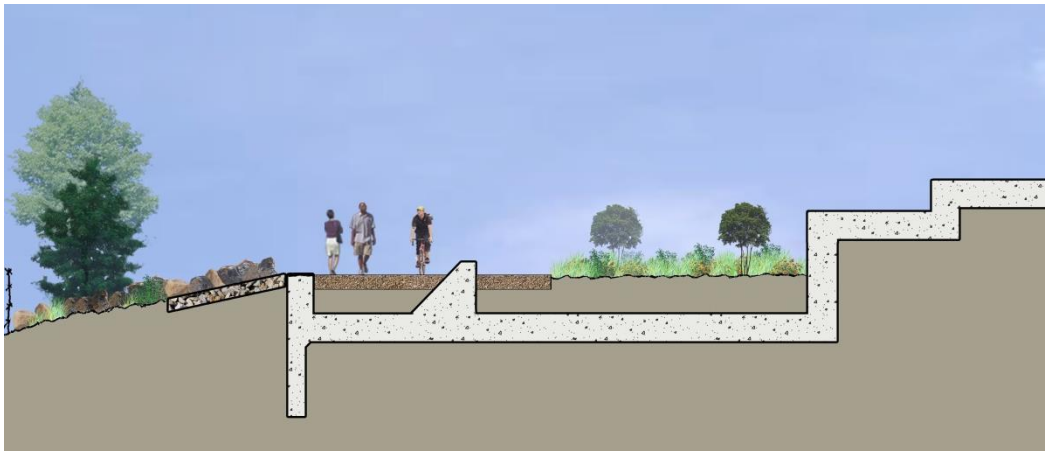
Dam 7 Design:
FREESE AND NICHOLS

Trail Across Stilling Basin



Plan view of proposed trail across stilling basin





Section of Proposed Spillway Trail Looking East

Proposed Trail features:

- 10’ wide stabilized decomposed granite path.
- Stylistic decomposed granite bump-outs.
- Naturalistic planting scheme along sides of the pathway.
- Spillway baffle-blocks for seating.