Little Walnut Creek Flood Risk Reduction Project: Metric to Rutland

Presentation to Land, Facilities, and Programs Committee Parks and Recreation Board





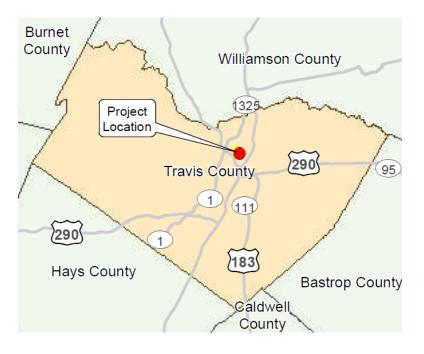
AUSTIN WATER

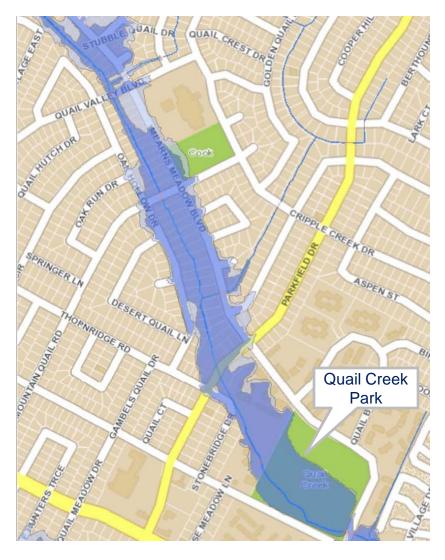


BGE, INC

Project Location

- Project located along Little Walnut Creek in north Austin.
- High Priority Creek Flood Risk Reduction Project.





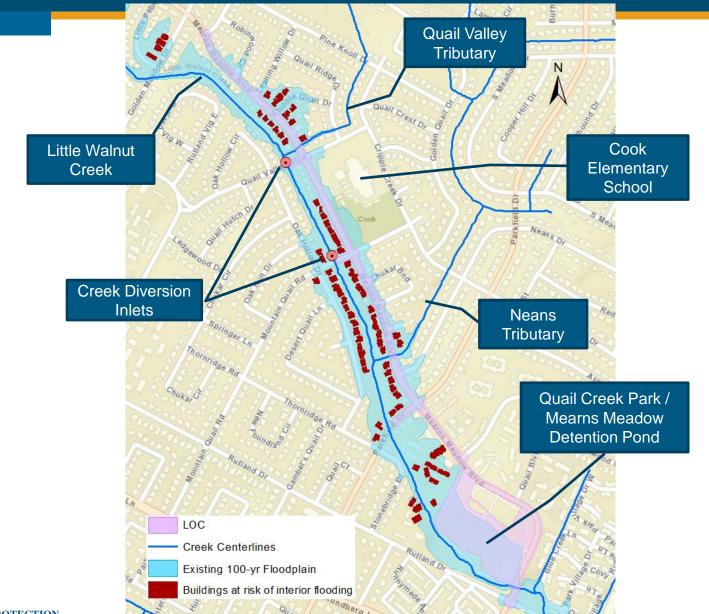
WATERSHED PROTECTION

AUSTIN WATER

Project Goals

- Reduce flood risk to **75 homes** and along Mearns Meadow Boulevard.
- Reduce floodplain footprint.
- Upgrade water and wastewater lines.
- Repave Mearns Meadow Boulevard in project area.
- Shared use path on Mearns Meadow Boulevard.
- Pond expansion **required** to prevent flooding impacts downstream.
- Improvements to Quail Creek Park.
 - New grass.
 - · ADA path.
 - · Limestone block benches.
 - Additional 4300+ft² flat field area.
 - · Preservation and relocation of exercise equipment.

Project Elements



WATERSHED PROTECTION

BGE, INC.

Downstream Impacts – Mitigation Required

Downstream Impacts

- Diversion takes water downstream faster.
- Changes in flow rate and maximum water surface elevations downstream of the project.
- Mitigation is required to prevent adverse flooding impacts.

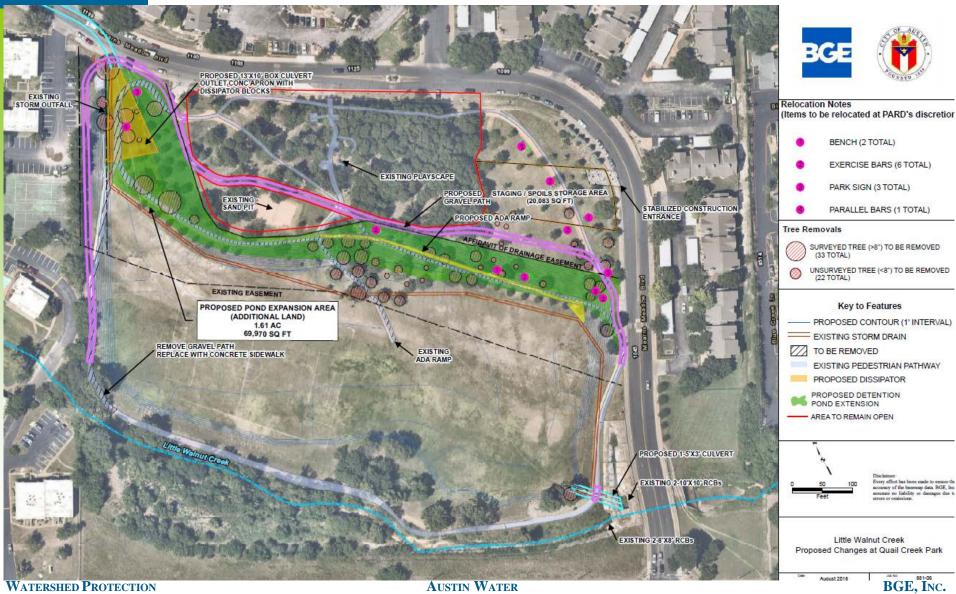
Mitigation Measures

- Mearns Meadow Detention Pond expansion. Additional 37 acre-feet of storage during the 100-yr storm.
- Low flow outlet modified.
- Primary pond outfall culverts and spillways unaffected.

Request

- Expand the existing drainage easement located within Quail Creek Park by an additional 69,970 ft² for the proposed detention pond expansion.
- Use additional 20,083 ft² of parkland for staging/spoils storage.
- The total proposed work area is 10.18 acres (including existing easement, additional easement and staging/spoils areas).

Quail Creek Park



Quail Creek Park closures

- The Mearns Meadow Detention Pond area will be closed for 3-6 months (weather dependent).
- The staging/spoils storage area will be closed for the duration of the project (approximately 3 years).
- A section of the park including the playground area to be fenced and will remain open through the duration of the project.

Quail Creek Park Improvements

Trails

- New granite gravel and concrete trail to reconnect the looped trail around the pond.
- Add ADA compliant trail.

• Play Fields

• Increase of flat, open mowed area (4300+ft²).

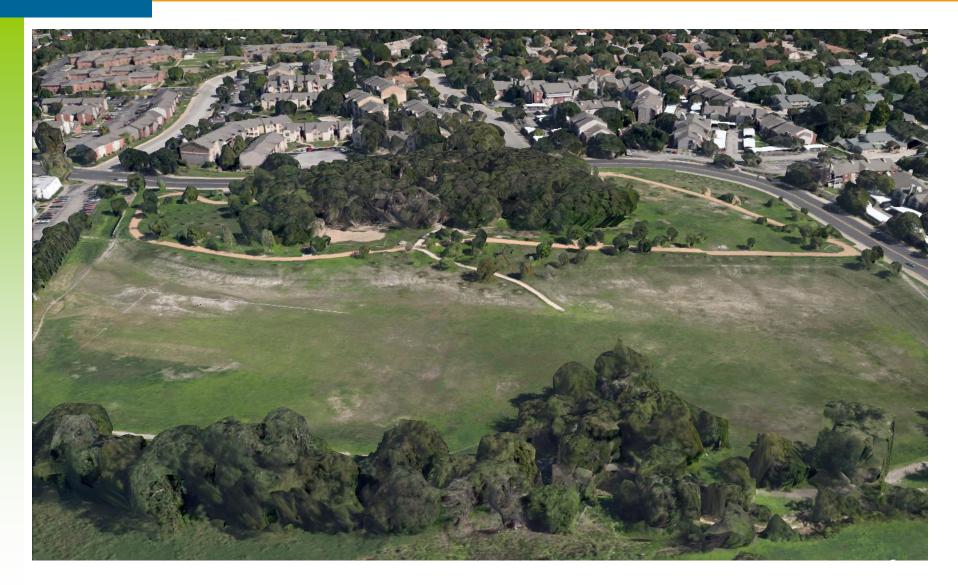
Park Exercise Equipment

• Park equipment to be relocated, preserved where possible, and replaced if needed.

• Trees

 Removed trees will be replaced – with as many planted on site as possible.

Quail Creek Park – Existing



Quail Creek Park – Proposed



Project Timeline – Next Steps

Next Steps

- Final Design & Permitting: Now Spring 2019.
- Bid: Spring Fall 2019.
- Construction: ~3 years (Fall 2019 Fall 2022).
 - · Phasing Plan.
 - · Neighborhood Access.
 - · Temporary Park Closure.

Thank you

Project Sponsors

- David Trujillo, P.E. (Watershed Protection)
 - (512) 974-3496
 - David.Trujillo@austintexas.gov
- Michael Russ, P.E. (Austin Water)
- Mueen Chowdhury, P.E. (Austin Water)

Project Manager

- Thuan Nguyen, P.E. (Public Works)
 - (512) 974-3513
 - Thuan.Nguyen@austintexas.gov
- Project Engineer
 - Francisco Arce, P.E. (BGE, Inc.)

http://austintexas.gov/littlewalnuttunnel