

Oak Park and Oak Acres Drainage and Flooding

Neighborhood Meeting, August 30, 2012



Example of
localized
flooding in
Central Austin.

Introductions

Watershed Protection Department

- ❖ John Beachy, Lead Field Investigator, Field Operations
- ❖ Pam Kearfott, P.E., Engineer C, Creek Flood Hazard Mitigation
- ❖ Jorge Morales, P.E., Supervising Engineer, Localized Flood Hazard Mitigation

Two Types of Flooding

- ❖ **Creek Flooding:**
Occurs when a creek rises over its banks.
- ❖ **Localized Flooding:**
Occurs away from creeks.



Both types of flooding are occurring in this neighborhood.

200 100 0 200 Feet

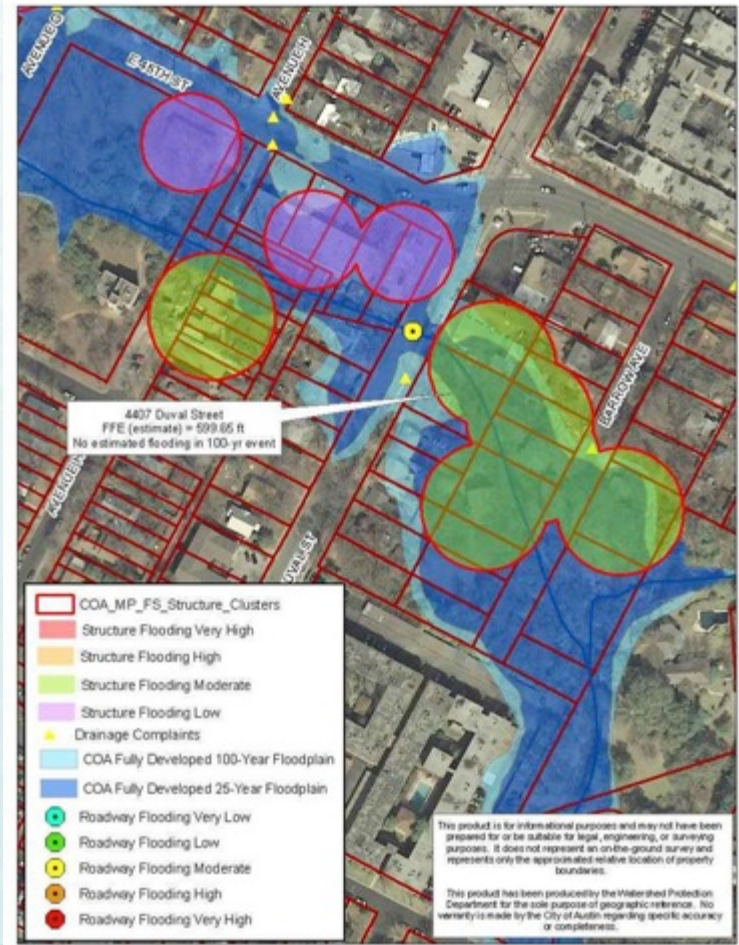
Created 8/29/2012
Using the City's 2009 Aerials
William Burdick WED WPD

Gaines Tributary Watershed Study

- ❖ Better understand drainage patterns
- ❖ Quantify flow in creeks
- ❖ Determine magnitude of flooding in large storm events
 - ❖ Out of bank conditions
 - ❖ Roadway overtopping
 - ❖ Structural flooding
- ❖ Model development is first step in identifying need for a creek flood control projects
- ❖ Prioritize problem areas for short-term and long-term project planning

Prioritization of Creek Flood Projects

- ❖ Extents and depth of floodplain
- ❖ Number of structures and roadways affected
- ❖ Velocity and depth of water over roadways
- ❖ Likelihood and depth of structure flooding
- ❖ Neighborhood access
- ❖ Flood Early Warning System

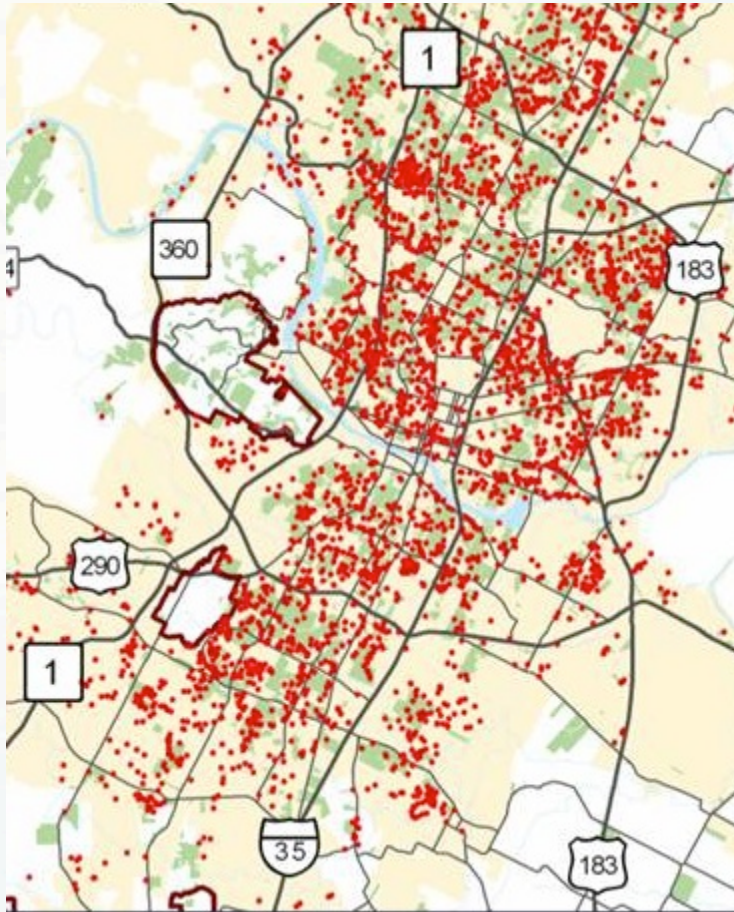


Localized Flooding in Oak Park & Oak Acres



- ❖ Storm drain system is undersized – mostly consists of ditches.
- ❖ Storm drain system is meant to drain water off the road and carry it safely to the creek.
- ❖ Standard City storm drain systems consist of pipes under the roadway.

Localized Flooding Citywide



Red dots represent reports of localized flooding or related complaints.

- *3,200 homes at risk of localized flooding.*
- *Neighborhoods built before the 1980s tend to have more drainage problems.*
- *No easy solution.*

Prioritization of Local Flood Projects

- ❖ Rely on 3-1-1 calls to help identify problem areas
- ❖ Computer models help evaluate the problems
- ❖ Assess the scope of the problem
 - *Is there safe access in and out of a neighborhood?*
 - *What is flooding? (Houses, garages, yards, etc.)*
 - *Is there a cost-effective solution?*

What You Can Do

- ❖ Purchase flood insurance.
- ❖ Report flooding and drainage concerns to 3-1-1.
- ❖ Avoid building in drainage easements.
- ❖ Consider flood proofing your home. Email jameson.courtney@austintexas.gov for more information.

Solutions



Watershed Protection has constructed the following types of projects:

- *Storm drain systems*
- *Detention ponds*
- *Floodwalls*
- *Bridge/roadways improvements*
- *Buyouts*

Questions?

Pam Kearfott

- *Pam.Kearfott@austintexas.gov*
- *512-974-3361*

Jorge Morales

- *Jorge.Morales@austintexas.gov*
- *512-974-3345*

www.austintexas.gov/watershed