



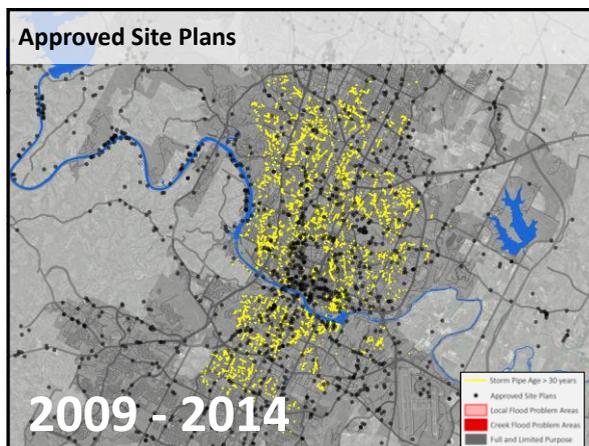
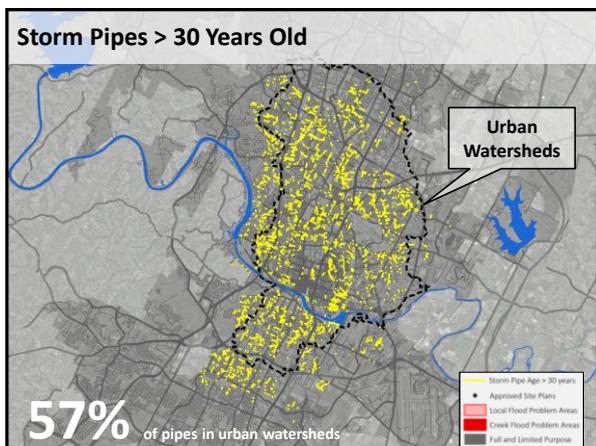
Agenda	
Arrivals & Introductions	2:00
Staff presentation	2:15
Introduction to problem	
Current code	
National models	
Case studies	
Small group discussion	3:15
Large group summary & recap	4:15

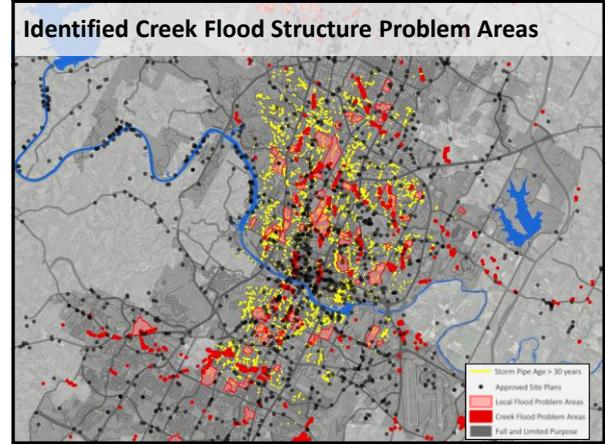
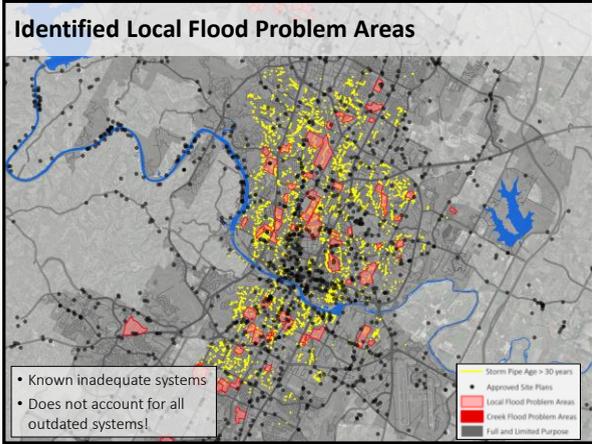
Note: There will be short breaks both before and after the small group discussion

The Problem

- Many localized and creek flooding problems in Austin's central core
- Very high price tag to fix: \$100s of millions
- Don't want sprawl either
 - Compact and connected
 - 750,000 new residents expected by 2040
 - Affordability concerns

➤ What are our options?



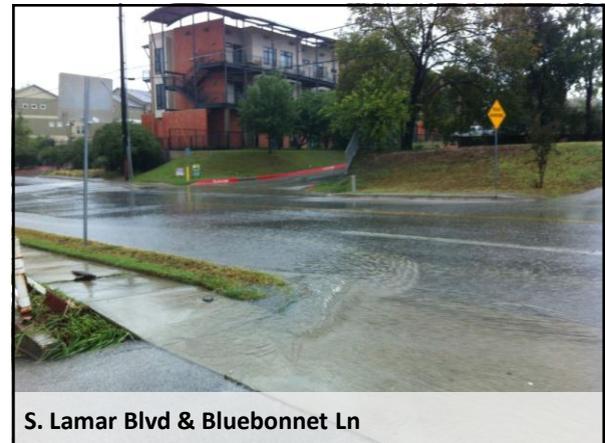


Council Resolution: South Lamar

(Resolution no. 20140501-042)

- City Manager directed to develop a Mitigation Plan to address flooding in S. Lamar Neighborhood
- Will explore opportunities within CodeNEXT to:
 - protect a neighborhood's character, infrastructure, and safety
 - develop mitigation requirements to better manage density and its associated impacts

[Link to resolution](#)



Current Flood Mitigation Code

Flood detention not required for redevelopment if impervious cover is not increased and drainage patterns are not changed.

§ 25-7-61(5a) - Criteria for Approval of Development Applications:
 "A development application may not be approved unless [it] will not result in **additional** adverse flooding impact on another property"

Current Water Quality Code

- Similar pattern of water quality controls: lacking in urban core
- Water quality controls required for all redevelopment (> 8,000 ft² impervious cover)
- Payment-in-lieu option (at City's discretion) for small sites in Urban watersheds
- Potential future subject of discussion

Potential Solutions: National Models

- Maryland (State Code)
- Virginia (State Code)
- Others? Staff will continue to research

National Models: Applicability

- When to apply? National criteria vary
- Examples:
- Development exceeding a certain square footage on a lot that contains existing buildings
 - e.g. > 5,000 ft² (Maryland)
 - If downstream localized flooding exists (Virginia & Maryland)

Note: Austin requires structural water quality controls on projects > 8,000 ft²

Maryland Requirements

- Must mitigate 2-yr and 10-yr storm where:
 - Flooding problems exist
 - Downstream conveyance is inadequate
- Exemptions for detached single-family residential
- Waivers possible for infill projects in a Priority Funding Area that satisfy certain requirements

Code of Maryland [26.17.02.05](#)

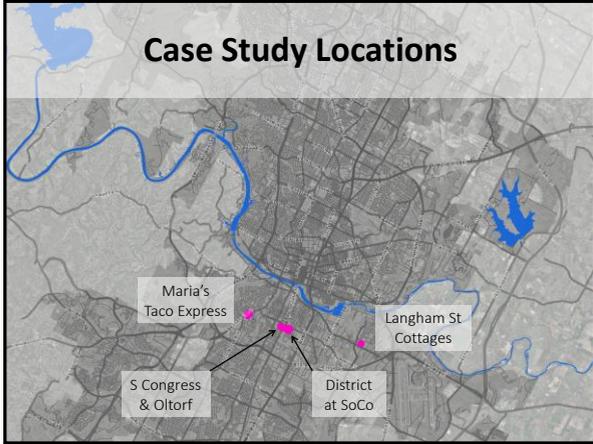
Virginia Requirements

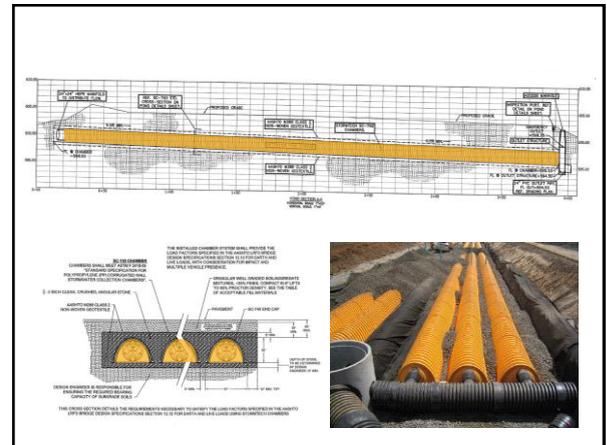
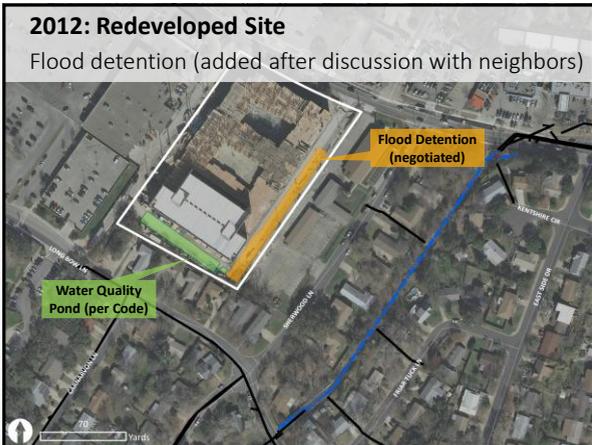
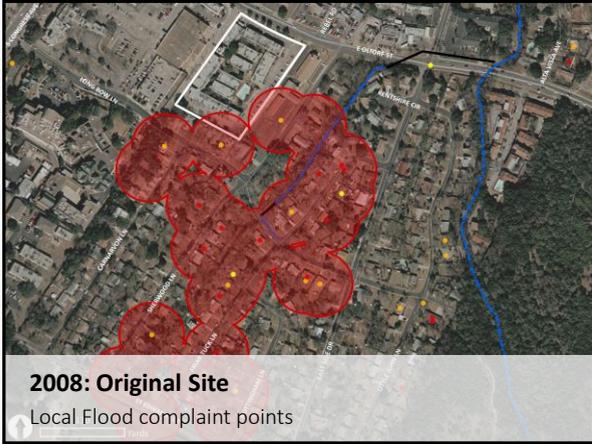
- If erosion or localized flooding exists, site is required to mitigate a share of runoff impacts
- Reduce peak flow rate from 1.5-yr, 2-yr, and 10-yr storms to less-than-or-equal-to peak flow rate from pre-developed conditions (assumes "good forested condition")
- 1% "rule of thumb" to determine extent of downstream impacts for study
 - Example presented later

Code of Virginia [62.1-44.15:28](#) & [62.1-44.15:33](#)

Austin Case Studies

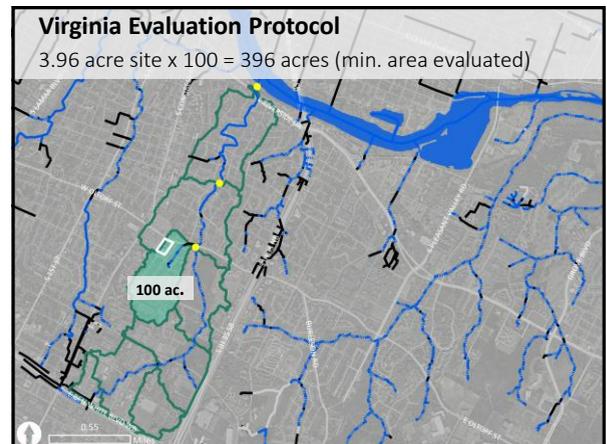
- Maria's Taco Express + Walgreens
- District at SoCo
- South Congress & Oltorf
- East Riverside Street Cottages

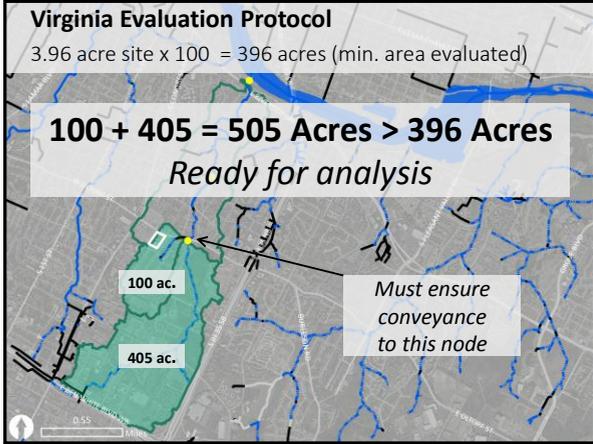


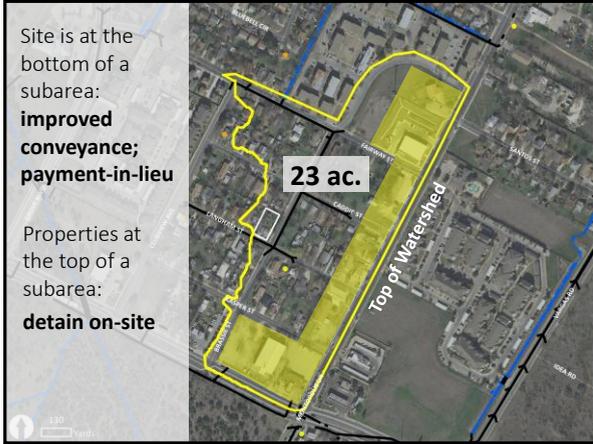


Virginia Evaluation Protocol

- “1% rule of thumb” mechanism for implementing VA’s detention requirement
- Must conduct analysis for adverse flood impacts for a drainage area $\geq 100x$ the site’s area
- HEC-HMS basins and nodes form basis of analysis
- Gives logical ending point for analysis







Small Group Discussion

- How might we achieve flood mitigation for redevelopment?
- If so, under what conditions?
 - Only in areas with existing downstream problems?
 - Only apply to larger projects? How large?
 - Mitigation to pre-development conditions? Other?
- What are the public & private cost implications?
- Other considerations?

Green Infrastructure Working Group Schedule

Kickoff	Jan. 30
Land Cover & Natural Function	Feb. 20
Integrate Nature into the City	Mar. 13
Beneficial Use of Stormwater	Apr. 10
Stormwater Options for Redevelopment & Infill	May 15
Integration of Green Elements	June 5

Contact Information

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Green Infrastructure Working Group:
<http://www.austintexas.gov/page/green-infrastructure-working-group>