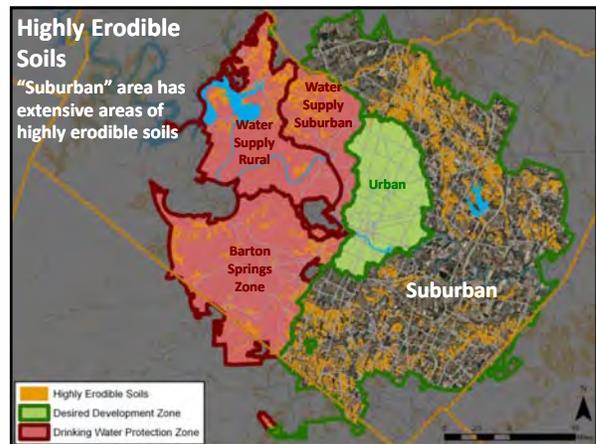
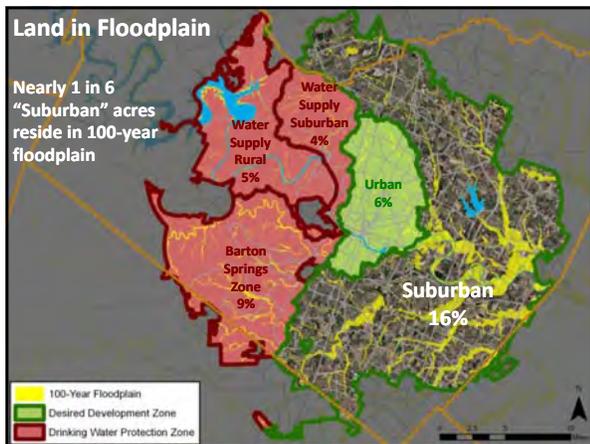
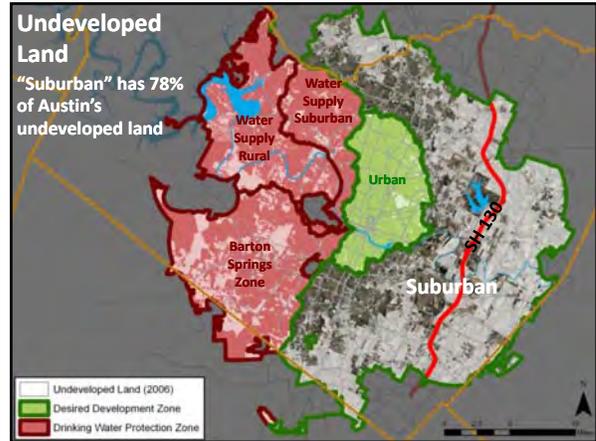
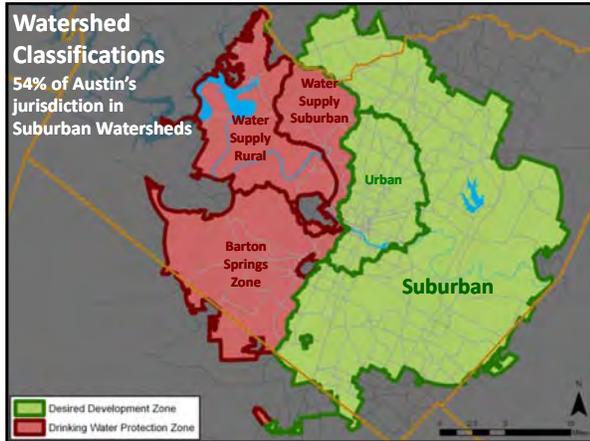




Presentation Overview

- Austin's Creeks & Watershed Concerns
- Council Directive for WPO
- WPO Highlights
- Coordination with Imagine Austin
- Schedule/Next Steps
- Questions

WPO = Watershed Protection Ordinance





Key Themes Inspiring Council Action

- Importance of protecting riparian areas & floodplains
- Lessons learned in Austin & beyond: need best science
- Prevention is affordable; repairs are not
- Simplicity and complexity
- A sustainable future: green infrastructure; compact development; connectivity; health; water
- Balance environmental protection & development opportunity

Council Resolution

1. Creek Protection
2. Floodplain Protection
3. Development Patterns & Greenways
4. Improved Stormwater Controls
5. Mitigation Options
6. Simplify Regulations & Maintain Opportunity
7. Coordinate with Regional Partners

[\(Resolution #20110113-038\)](#)

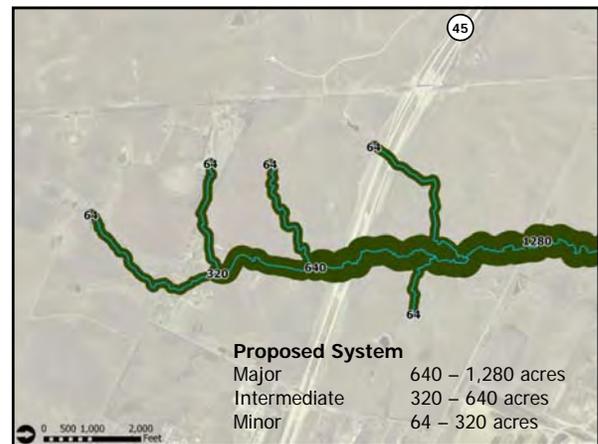
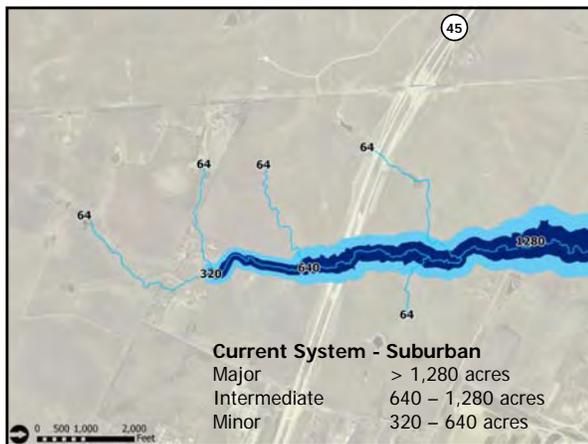
Creek Protection

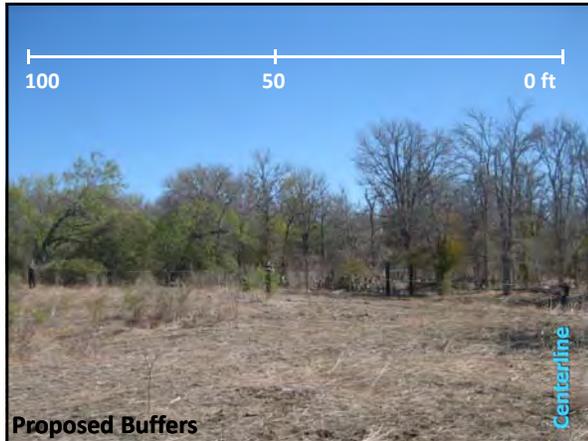
"Improve stream buffer requirements, including critical headwater areas, to protect water quality and reduce erosion, flooding, and long-range costs for infrastructure maintenance."



Creek Protection

- Extend minor **"headwaters"** stream buffers to 64 acres of drainage citywide
- Standardize drainage area thresholds citywide:
 - 64 acres for minor ("headwaters") waterways
 - 320 acres for intermediate waterways
 - 640 acres for major waterways
- Simplify buffer widths for Suburban watersheds:
 - 100 ft. for minor ("headwaters") waterways
 - 200 ft. for intermediate waterways
 - 300 ft. for major waterways





Creek Protection

- Clarify that irrevocably altered **roadside ditches** do not create a Critical Water Quality Zone (CWQZ)
- To **offset impacts in Suburban Watersheds**:
 - Eliminate **Water Quality Transition Zone (WQTZ)**
 - Use **Gross Site Area** basis for impervious cover (instead of net site area)
 - Allow **“buffer averaging”** to reduce the width of buffers by up to one-half if the overall amount of area protected remains the same

Creek Protection

- Revise **allowed uses** in the CWQZ under certain conditions (e.g., outside of EHZ):
 - Flexible roadway crossings for centers & corridors
 - Hard-surfaced trails
 - Sustainable urban agriculture / community gardens
 - Parallel utility lines (e.g., wastewater infrastructure)
 - Green water quality controls
- Revise **prohibited uses** in the CWQZ:
 - Small single-family lots (< 5,750 square feet)
 - Managed portion of golf courses

Creek Protection

- Require **Erosion Hazard Zone (EHZ)** protections
 - No improvements (including utility lines) are allowed within the erosion hazard zone unless **protective works** are provided
 - Development must not result in additional erosion impacts to other properties
- Add **Critical Environmental Feature (CEF)** protections
 - Expand definition to include faults, fractures & seeps
 - Require perimeter fencing & natural state for CEF buffers

Floodplain Protection

"Promote, encourage and/or require the preservation and restoration of floodplains and stream buffers as well as the beneficial re-purposing of mining quarries."

Floodplain Protection

- Prohibit **floodplain modifications in the CWQZ** unless:
 - Necessary to **protect public health and safety**
 - Provides a significant, demonstrable environmental benefit as determined by a **functional assessment of floodplain health**
 - Necessary for development permitted in the CWQZ (e.g., road crossings)
- In addition, allow floodplain modification **outside of the CWQZ** if a functional assessment determines the area to be in poor or fair condition

Floodplain Protection

- Require **restoration of floodplain health** on-site
- Provide off-site **mitigation options** where on-site restoration is infeasible
 - pay into Riparian Mitigation Fund
 - dedicate/restrict land off-site
- Ordinance will be accompanied by Floodplain Modification Criteria as an **emergency rule**

Development Patterns & Greenways

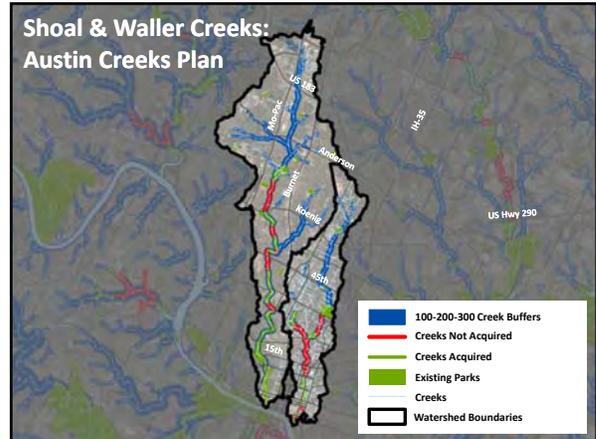
"Explore opportunities to encourage a development pattern that better protects public and private property, preserves floodplains, creeks and open spaces, and provides access and connectivity with greenways and trails."



Development Patterns & Greenways

- Improve and expand **PUD Tier 2 zoning elements** for "superior" environmental protection (10 → 23 options)
- Improve the existing **transfers of development rights** sections to allow for increased flexibility and protection of additional environmental resources (e.g., floodplains)
- Establish limits for **diversions of stormwater** between watersheds to protect natural drainage patterns
- Allow **community gardens** and hard-surface **multi-use (hard-surfaced) trails** in stream buffers

Shoal & Waller Creeks: Austin Creeks Plan



Development Patterns & Greenways

- Expand the **Redevelopment Exception**
 - Extend Barton Springs Zone (BSZ) redevelopment rules to Water Supply Rural and Water Supply Suburban watersheds
 - Extend to residential uses other than single-family residential or duplex in the BSZ and Water Supply watersheds
 - Prohibit additional non-compliance with required stream and CEF buffers
- Allow **small roadway projects (less than 5,000 square feet)** without water quality controls or impervious cover limits for intersection improvements, bike lanes, etc.

Improved Stormwater Controls

"Improve permanent stormwater controls to better moderate runoff and help reduce streambank erosion."



Improved Stormwater Controls

- Require **water quality controls** for development exceeding 5,000 square feet of impervious cover (rather than 20 percent of net site area)
- Allow potential for **combining (“stacking”)** water quality and flood controls
- Require all water quality controls be **accessible** for maintenance and inspection
- Require maintenance plan and annual reports by registered engineer for all **subsurface controls**

Improved Stormwater Controls

- Items to be considered in **Phase 2** of the Watershed Protection Ordinance include:
 - Limiting stormwater runoff volume (e.g., through requirement for infiltration or re-use on-site)
 - Rain gardens for single-family residential subdivisions
 - Alternatives for SOS compliance
 - Rainwater harvesting options
 - Porous pavement for non-pedestrian surfaces
 - Flood detention credit for water quality controls
 - Other related items as identified by stakeholders
- Stakeholders discussions will continue in **Fall 2013**

Mitigation Options

"Explore better ways to regulate the modification of floodplains, including options for off-site mitigation for developments in areas that are planned for higher density developments."

Mitigation Options

- New options for mitigation of **floodplain modifications**
- New options for mitigation of **redevelopment** in Water Supply watersheds
- May evaluate additional options for **centers and corridors** as part of the Imagine Austin Land Development Code revision process

Simplify Regulations

"Simplify development regulations where possible and minimize the impact of any changes on individual and collective abilities to develop land."

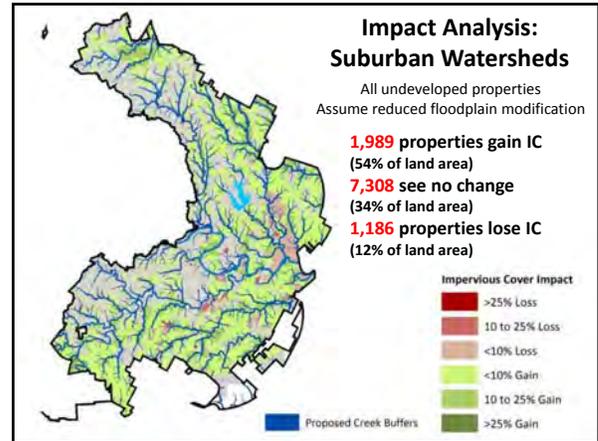
ELEMENT	DESIRED DEVELOPMENT ZONE			DRINKING WATER PROTECTION ZONE		
	Urban	Suburban City Limits	Suburban N. Edwards/ETJ	Water Supply Suburban	Water Supply Rural	Barton Springs Zone
Watershed Classification						
Minor	64 ac.	320 - 640 ac.	320 - 640 ac.	128 - 320 ac.	64 - 320 ac.	64/128 - 320 ac.
Intermediate	64 ac.	640 - 1280 ac.	640 - 1280 ac.	320 - 640 ac.	320 - 640 ac.	320 - 640 ac.
Major	64 ac.	over 1,280 ac.	over 1,280 ac.	over 640 ac.	over 640 ac.	over 640 ac.
Critical Water Quality Zone						
Minor	50 - 400 ft.	50 - 100 ft.	50 - 100 ft.	50 - 100 ft.	50 - 100 ft.	50 - 100 ft.
Intermediate	50 - 400 ft.	100 - 200 ft.	100 - 200 ft.	100 - 200 ft.	100 - 200 ft.	100 - 200 ft.
Major	50 - 400 ft.	200 - 400 ft.	200 - 400 ft.	200 - 400 ft.	200 - 400 ft.	200 - 400 ft.
Water Quality Transition Zone						
Minor	None	100 ft.	100 ft.	100 ft.	100 ft.	100 ft.
Intermediate	None	200 ft.	200 ft.	200 ft.	200 ft.	200 ft.
Major	None	300 ft.	300 ft.	300 ft.	300 ft.	300 ft.

Simplify Regulations

- Provisions were included to **minimize impacts** on the ability to develop, especially in Suburban watersheds
 - e.g., eliminating the WQTZ, gross site area, buffer averaging
- Eliminate the **Boundary Street Deduction**
- Numerous **clarifications & corrections** of existing code
- Will evaluate aligning **stream crossing** provisions with new **connectivity requirements** as part of Imagine Austin Land Development Code revision process

Impact Analysis: Suburban Watersheds

- Analysis for undeveloped properties shows:
 - Minor gain (**4-5%**) in average impervious cover
 - Majority of properties (**70%**) are not affected
 - Majority of affected sites (**80%**) are within a range of +/-25 percent for impervious cover impact
 - Site-specific factors will affect each site differently
- Affordability Impact Statement assessment



Coordinate with Regional Partners

"Work in coordination with Travis County and neighboring communities to develop the above changes."

- Coordinate regulations with new Travis County Water Quality Rules
- Input from Travis County and LCRA in Watershed Protection Ordinance

Stakeholder Input

15 Information Gathering Meetings
11 Ordinance Review Meetings

Draft Ordinances & Criteria

1. 25-8 Environment	116+ changes; 55 pg.
2. 25-7 Drainage	20+ changes; 14 pg.
3. 25-2 Zoning	PUD environmental; 6 pg.
4. LDC 25-1 General Requirements	1 pg.
5. Environmental Criteria Manual	
6. Drainage Criteria Manual	

Subdivision Ordinance
Transportation Criteria Manual
Imagine Austin Code Overhaul

} Separate, Coordinated Initiatives

Imagine Austin Priority Programs

1. Invest in Compact & Connected

8. Align Code

3. Workforce Development

5. Creative Economy

2. Sustainably Manage Water Resources

4. Green Infrastructure

6. Household Affordability

7. Healthy Austin

Imagine Austin Priority Programs

- Create a green infrastructure program to protect environmentally sensitive areas and integrate nature into the city.
 - Create a comprehensive network of parks, waterways, greenways, trails, green streets, natural areas, and other “green” features (e.g., a healthy urban forest) throughout Austin.
- Sustainably manage our water resources.
- Change Austin’s development regulations and processes to promote a compact & connected city.
 - “Phase 3” of Watershed Protection Ordinance

Population in the Imagine Austin planning area

Year	Population
1900	22,258
1970	775,488
2048 (projected)	1,723 million

Imagine Austin Growth Concept Map

- Protects existing open space and natural resources such as creeks, rivers, lakes, and floodplains.
- Promotes infill and redevelopment as opposed to typical low-density “greenfield” development.
- Focuses new development in mixed-use corridors and centers.
 - Environmental mitigation
 - Five centers located in the environmentally sensitive “Drinking Water Protection Zone.”

Phase 1 WPO Adoption Schedule

Council Resolution	January 2011
Stakeholder Meetings: Input	Sep. 2011 – April 2012
Staff develops Draft Ordinance	April – November
Stakeholder Meetings: Phase 1 Draft Ordinance	Dec. ‘12 – May ‘13
Stakeholder Meeting: Review Draft Ordinance	June 14
Planning Commission: Codes & Ordinances (Briefing)	June 18
Environmental Board	June 19
Planning Commission: Codes & Ordinances (Action)	July 16
Planning Commission	July 23
City Council	August 22
Travis County Commissioner’s Court (Title 30)	Fall

Contact/Additional Information

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www.austintexas.gov/page/watershed-protection-ordinance-0