



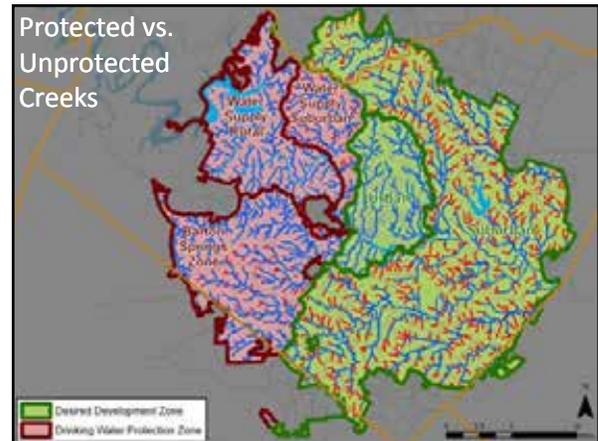
Council Resolution

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

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

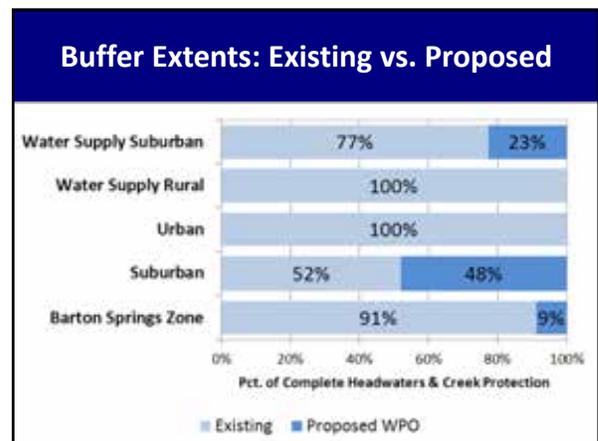
Board, Commission & Stakeholder Comments and Concerns

- Stream buffer extents: existing vs. proposed
- Impacts of Gross Site vs. Net Site Area
- Quarry redevelopment incentives
- Subsurface pond inspections
- 5,000 sq. ft. impervious cover threshold for water quality controls
- BSZ Redevelopment Exception:
 - Applicability limits
 - Increased use concerns; Council initiation
- 5,000 sq. ft. roadway exemption from water quality & impervious cover requirements
- Boundary street deduction
- Managed turf & ballfields in buffers
- Trails in stream buffers (location, runoff controls)



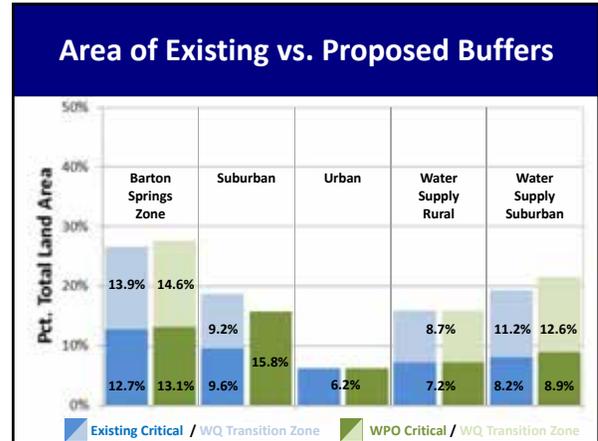
Buffer Extents: Existing vs. Proposed

Watershed Class	Buffer Length (miles)			Pct. Increase
	Existing	Proposed	Net New	
Barton Springs Zone	215	235	21	10%
Suburban	393	755	362	92%
Urban	94	94	0	0%
Water Supply Rural	118	118	0	0%
Water Supply Suburban	59	76	17	29%
Totals	878	1,278	400	46%



Total Buffer Area (CWQZ + WQTZ): Existing vs. Proposed				
Watershed Class	Buffer Pct. of Total Area			
	Existing		Proposed	
	HW*	Total	HW*	Total
Barton Springs Zone	4.3%	26.7%	5.3%	27.7%
Suburban	0%	18.8%	3.5%	15.8%
Urban	NA	6.6%		
Water Supply Rural	5.0%	15.9%		
Water Supply Suburban	2.4%	19.4%	4.6%	21.6%
Totals	2.8%	18.6%		

* HW = Headwaters buffer (64-320 acre drainage area streams)



Watershed Protection Ordinance: Impact Analysis

- Council resolution*: "...minimize the impact of any changes on individual and collective abilities to develop land."
- WPD conducted analysis of properties to evaluate effect of ordinance proposals on:
 - Creek buffer geometry
 - Developable area
 - Allowable impervious cover
- Planning-level estimate; actual impacts will vary site-to-site based on type of development proposal

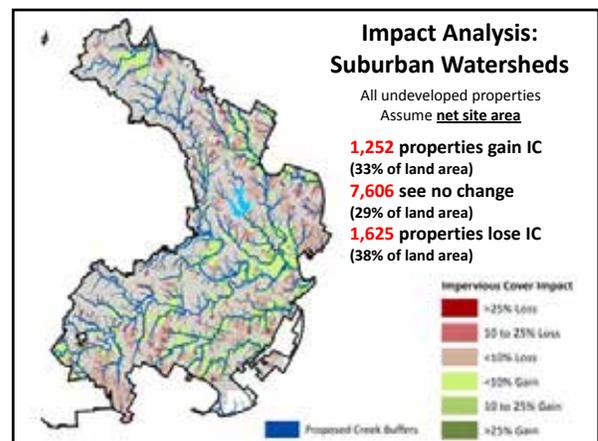
* See [Council Resolution 20110113-038](#)

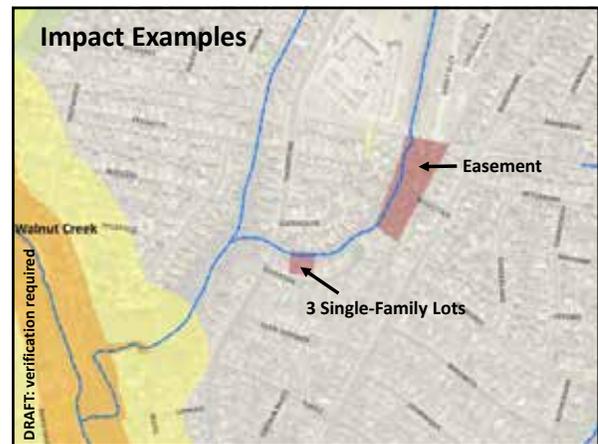
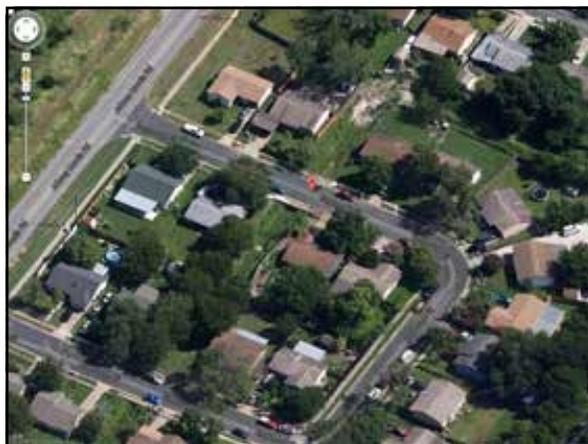
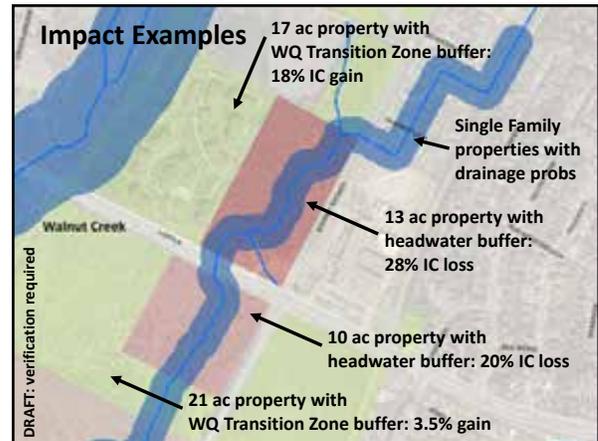
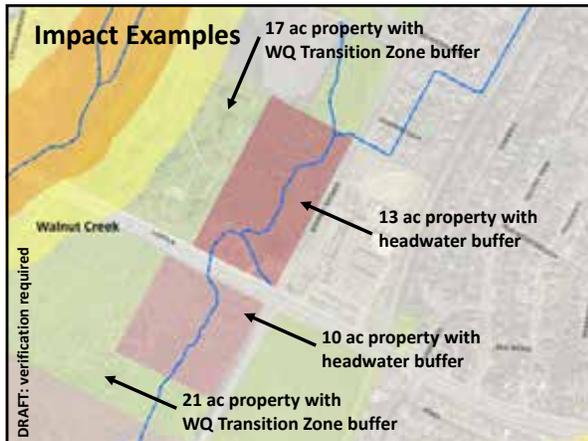
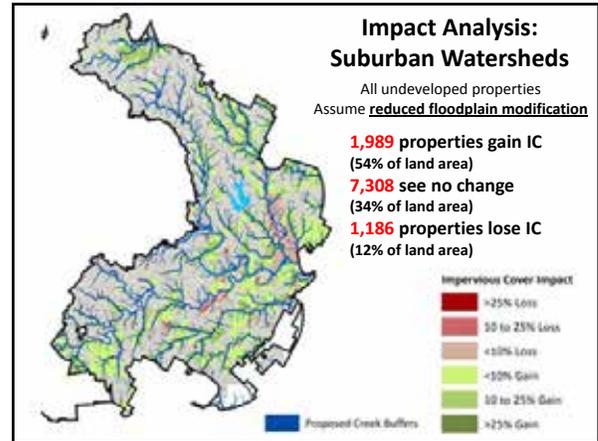
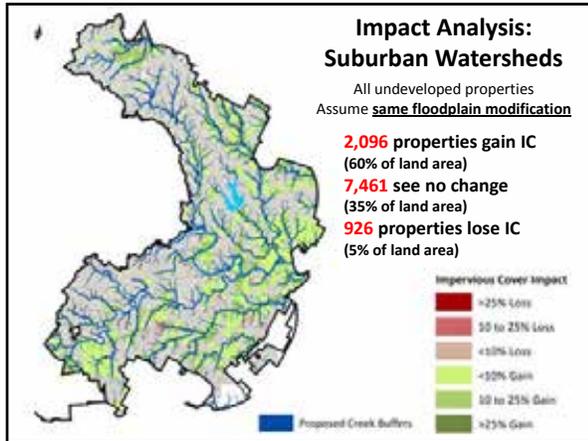
Impact Analysis: Suburban Watersheds

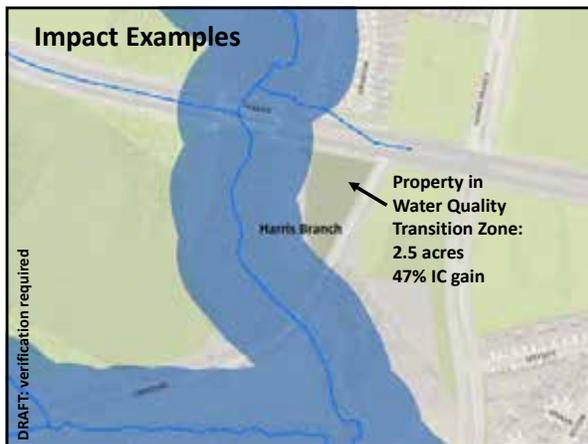
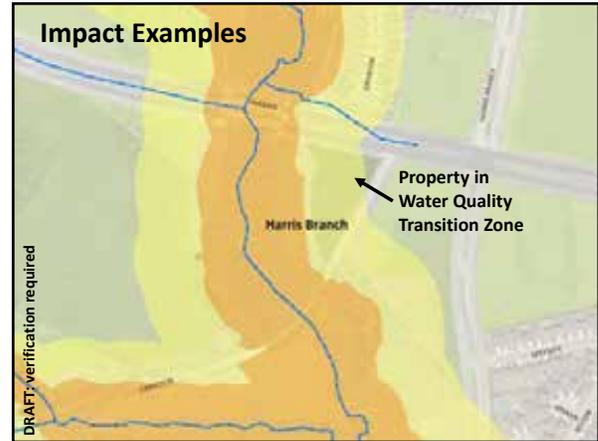
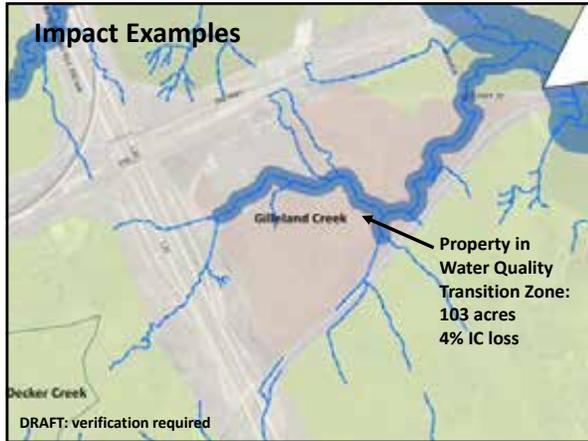
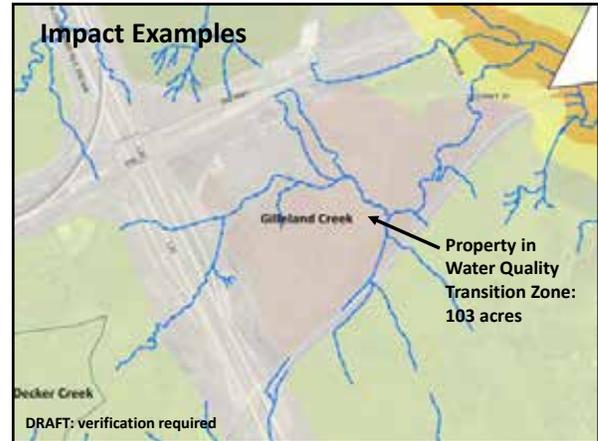
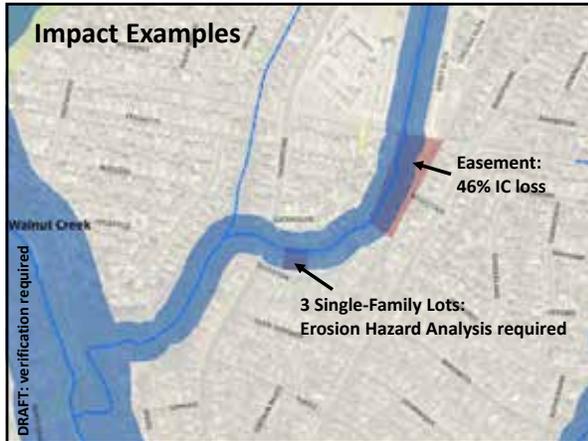
- Analysis completed for all undeveloped parcels within the Suburban Watersheds
- Examined current buffers with net site area versus proposed buffers with gross site area
- Calculated impact on impervious cover on a tract-by-tract basis (for ~10,000 parcels)
 - assumed maximum allowed impervious cover, area for landscaping and ponds, and limited floodplain modification
 - does not account for critical environmental features, protected trees, or zoning setbacks

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







Impact Analysis: Water Supply Suburban & Barton Springs Zone Watersheds

- Analysis completed for all undeveloped parcels within:
 - Water Supply Suburban watersheds
 - Barton Springs Zone portions of Williamson and Slaughter
- Examined extending current minor buffers from 128 acres of drainage to 64 acres
- Retained net site area calculation for impervious cover
- Calculated impact on impervious cover on a tract-by-tract basis (for ~1,700 parcels)

Impact Analysis: Water Supply Suburban & Barton Springs Zone Watersheds

- Majority of land in these watersheds is already developed or protected as open space
- Analysis for undeveloped properties shows:
 - Minor loss (-0.6%) of average impervious cover
 - Majority of properties (93%) are not affected
 - Site-specific factors will affect each site differently

Impact Analysis: WS Suburban & BSZ

All undeveloped properties
Assume net site area

- 0** properties gain IC (0% of land area)
- 1,575** see no change (83% of land area)
- 115** properties lose IC (17% of land area)

BSZ Redevelopment Exception

- Council resolution asked staff to evaluate impact of expanding the exception
- Memo to Mayor & Council noted staff recommendations would be incorporated in WPO
- SOS Ordinance called for the retrofitting water quality controls for existing development
- Applies to less than 3 percent of the Barton Spring Zone and Water Supply
 - Represents a disproportionate amount of pollutants within these watersheds

Case Study: IC Above 40% Oak Hill Plaza

- 16.8 acres
- 83% IC
- Flood control only (no WQ controls)

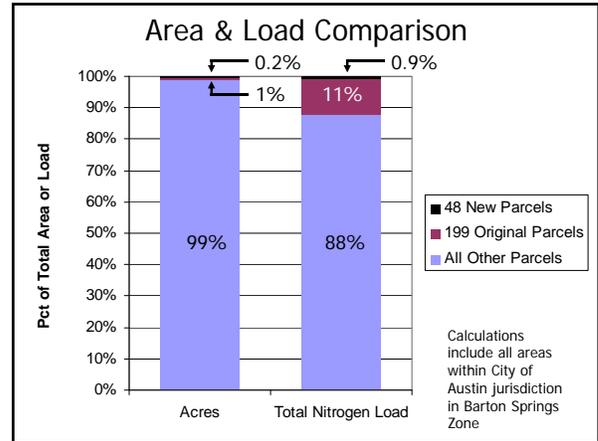
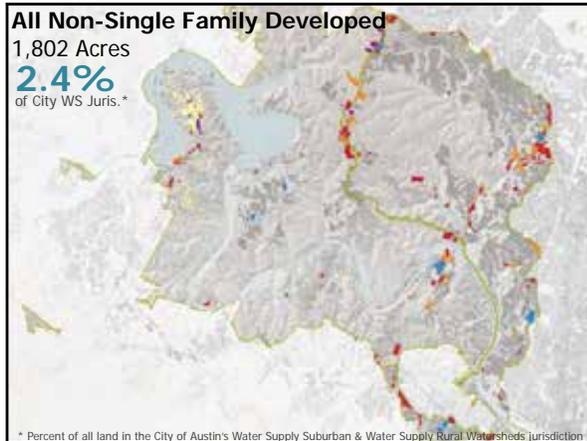
Case Study: IC Above 40% (Oak Hill Plaza)

16.8 Acres, 83% IC + 55.8 Acres, 0% IC = 72.6 Acres Combined, 20% IC

All Non-Single Family Developed

1,885 Acres
2.8% of City BSZ Juris.*

* Percent of all land in the City of Austin's Barton Springs Zone Watersheds Jurisdiction



Boundary Street Deduction

- **Complicated, affects only a small amount of impervious cover, and can affect otherwise equivalent properties unevenly**
- **Development will continue to meet impervious cover limits and provide water quality controls**
- **Adding §25-8-65 Commercial Impervious Cover provision to ensure new roads included in impervious cover limits**

5,000 sq. ft. Roadway Exemption

- **Would be used for turn lanes, bike lanes, etc.**
- **Compliance is difficult and disproportionately expensive for these small projects**
- **Environmental benefits – reduced idling, improved air quality, alternative transportation**
- **Scale of projects will cause minimal impacts to downstream waterways**
- **Project will still meet construction-phase erosion & sedimentation control requirements**

Encourage Quarry Redevelopment

- **No direct code changes in WPO**
- **Actions identified in Colorado River Corridor Plan**
 - Travis County and City of Austin, with LCRA and Bosse & Associates
 - Coordinate regional and local planning to facilitate the preservation and enhancement of the many valuable environmental, economic, recreational, and cultural resources of this region
 - Address the transition of land use from mining to post mining uses

Encourage Quarry Redevelopment

- **Colorado River Corridor Plan**
 - **Implementation Strategies**
 - Advocate the clean-up, reclamation, and re-use of legacy mines for beneficial uses
 - Encourage site planning and construction techniques that reduce pollution such as concurrent reclamation of mining lands
 - Develop a restoration plan for the corridor addressing disturbed riparian areas with the objective of maximizing ecological, hydrological, public use and water quality functions in the study area through a public private partnership

**Managed Turf & Sports Fields
in Critical Zone Buffers**

- Currently allowed outside of the Barton Springs Zone and Water Supply Rural watersheds
 - Must have program of fertilizer, pesticide, and herbicide use approved by WPD
- Inconsistent with the objectives of stream buffers
 - especially in areas closest to the creeks and in areas that have existing, high value environmental features
- Potential to allow in outer half of Urban and Suburban buffers



Subsurface Pond Inspections

- Requirement for third-party inspections
 - Engineer or qualified professional?
- Only a small number of these controls exist around the City (~110 out of 7,000 total)
- Complicated systems – need someone qualified to evaluate the functionality and structural integrity
 - If not engineer, what would be the qualification?

Threshold for Water Quality Controls

- 5,000 square foot impervious cover vs. 8,000 vs. 20% impervious cover
- Already the standard for Urban Watersheds
- Aligns with TCEQ Edwards Aquifer Rules
- Nationwide benchmarking indicated a square foot threshold was standard for other environmentally progressive jurisdictions

Threshold for Water Quality Controls

- **Nationwide benchmarking**
 - Federal Projects – 5,000 sq ft of impervious cover (IC)
 - Portland – 500 sq ft of IC
 - Seattle – 2,000 sq ft of IC
 - San Francisco – 5,000 sq ft of IC
 - Maryland – 5,000 sq ft of disturbance
 - Washington D.C. – 5,000 sq ft of disturbance
 - Philadelphia – 5,000 – 15,000 sq ft of disturbance
 - Chicago – 7,500 sq ft of IC
- **D.C. study indicated a relatively easy transition to lower threshold among other jurisdictions – only Portland (500 sq ft) experienced problems (difficult to implement)**

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: WPO Presentation	June 19
Environmental Board: Special Meeting	July 11
Planning Commission: Codes & Ordinances (Action)	July 16
Environmental Board: Action	July 17
Planning Commission	July 23
City Council	August 29
Travis County Commissioner's Court (Title 30)	Fall

Contact/Additional Information

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