

#54
6/9/2005

Barton Springs Zone (BSZ) Regional Plan		City of Austin (LDC, ECM) ¹	Potential Adjustment to SOS/ City of Austin Requirements
Water Quality Buffers			
Minimum Drainage Area for Buffer	Protects buffer areas for drainages as small as 32 acres.	Protects stream buffer areas for drainage areas as small as 64 acres.	Adopt 32 acre drainage minimum (USFWS & TCEQ enhanced measures use five (5) acres). ²
Buffer Consistency for Watersheds	Buffer areas same for all watersheds.	Slaughter and Williamson receive protection beginning at 128 acres, higher than others.	Set Slaughter & Williamson minimum drainage areas to be same as others.
Buffers & 100-Year Flood Plain	Extends buffer protection to 25 feet beyond a defined 100-yr flood plain.	Buffer protection may not incorporate the entire 100-yr flood plain.	Adopt the Plan's 100-yr flood plain plus 25 feet requirement.
One Buffer v. Two (Critical & Transitional)	Stream buffer development limits are similar to SOS; however, the limits are the same throughout the entire buffer.	Limits buffer development in critical and transition zones; limits are zone based, with more allowed in transition than in critical zone.	More study required to determine improvements associated with one vs. two buffers.
Impervious Cover			
Gross Site Area vs. Net Site Area IC Calculation	Limits calculated for gross site area; incorporates entire site.	Limits calculated on net site area, which excludes: water quality buffers, wastewater irrigation areas, and slopes (part or all) in excess of 15, 25 and 35%.	Adjust impervious cover limits if necessary to match Plan, where Plan provides more protection.
Use of Transfers of Development Rights (TDRs)	Limits based on geography, level of development, treatment and use of Transfers of Development Rights (TDRs).	No TDRs allowed.	More study required to assess pros/cons of a TDR/mitigation approach.
Variations in IC Limits by Region	10% IC goal in recharge; 15% in contributing zone. Limits vary from 5 to 45%, can be increased in certain areas with rainwater harvesting.	Limits vary by zone and watershed (15% in recharge; 20% IC in Barton contributing; 25% in Onion contributing).	More study required to assess pros/cons of uniform IC requirements and/or use of BMPs for higher IC.
Variations in IC by Preferred Development Areas	Establishes priority growth areas, enables higher local and lower overall impervious cover, reduces sprawl.	No priority growth areas (though higher IC permitted in contributing than recharge zone).	More study required to assess pros/cons of preferred growth areas.

¹ LDC = Land Development Code; ECM = Environmental Criteria Manual.

² Consistent with Watersheds Master Plan recommendation: provide "headwaters protection" through buffers for smaller drainage areas.

Stormwater Management				
<i>Stormwater Treatment for Golf Courses</i>	Requires stormwater treatment for managed landscapes, including golf courses.	LDC requires treatment of all developed areas, but "development" not clearly defined to include golf courses. For all other non-Urban (non-SOS) watersheds, LDC requires treatment of golf courses. ³	a) Improve definition of "development" to explicitly include golf courses and other managed landscapes. b) Require stormwater treatment of golf course and other managed landscape areas. ³	
<i>Stormwater Treatment for Wastewater Disposal Areas</i>	Requires stormwater treatment for areas receiving wastewater effluent spray irrigation.	ECM requires wastewater irrigation areas to meet SOS pollution reduction requirements, but is not clear whether pertains to stormwater runoff or wastewater effluent.	Clarify that wastewater irrigation areas must receive stormwater treatment.	
<i>Baseline Impervious Cover (IC) Assumptions</i>	For Water Quality Control design, Plan assumes 1% "background" (pre-developed) impervious cover, lower than SOS (5%).	SOS assumes higher "background" impervious cover than Plan, results in lower pollutant load removal requirement.	More study required on baseline IC assumptions.	

³ Areas subject to fertilizer, herbicide, & pesticide application, including lawns, landscaping, gardens, or golf courses.

City of Austin and Regional Plan Stream Buffer Comparison (feet)¹

City of Austin SWS Ordinances Buffer Requirements for the Barton Springs Zone						Regional Water Quality Plan Buffer Zone Requirements		
Drainage Area (acres) ²	Critical Water Quality Zone Buffer (feet)		Water Quality Transition Zone Buffer (feet)		Total Max. Buffer Width ³ (ft.)	Drainage Area (acres)	Buffer Width (feet)	
	Width	Total Width	Width	Total Width			Width	Total Width
64 to 320	50-100	100-200	100	200	300-400	32 to 120	100	200
320 to 640	100-200	200-400	200	400	600-800	120 to 300	150	300
More than 640	200-400	400-800	300	600	1,000-1,400	300 to 640	200	400
						More than 640	300	600

¹ Measured from stream centerline.

² Williamson/Slaughter minimum drainage area begins at 128 acres.

³ Barton Creek main stem minimum of 400 feet plus water quality transition zone buffers of 100, 200, or 300 feet.

Impervious Cover Plan Comparisons

Save Our Springs Ordinance				BSZ Regional Plan (Gross Site Area)				
Zone	Location	IC Net Site Area (NSA)	IC Gross Site Area (GSA)*	Location	Level of Treatment			
					Simplified	Standard Methods	Standard Methods & TDRs	
Recharge Zone	All Streams	45	10	Entire Zone	7.5	10	15	
Contributing Zone	Barton, Little Barton	20	13	Outside Preferred Growth Area	7.5	15	25	
	Onion, Bear, Little Bear, Williamson, Slaughter	25	17		Inside Preferred Growth Area	7.5	15	30
				Commercial and Multifamily	25			

Notes

* Approximated; varies by site due to setbacks and slopes.

** "No Limit" requires provision of rainwater harvesting on site.

**City of Austin and Regional Plan
Stormwater Quality Control Requirement Comparison**

	San Antonio Springs Ordinance	BSZ Regional Plan
Water Quality Standard	Non-degradation	Non-degradation
Capture Volume	2-year, 3-hour storm	2-year, 3-hour storm
Channel Erosion Protection	Released over 48 hours	Released over 24 hours
Treatment Areas	All developed areas, including lawns, landscaping, gardens, golf courses, and other maintained areas.	All developed areas, including areas receiving wastewater effluent spray irrigation, and lawns, landscaping, golf courses or playfields receiving pesticides herbicides or fertilizers.