

Outer Buffer Width Determination

DRAFT

Note: Buffers apply to losing stream and other sensitive features that directly recharge the Cave Springs aquifer. Most losing streams are included in Zone 1; however, there may be losing stream segments and other sensitive features in Zones 2 and 3. Determination of reductions to outer buffer zone should be based on the section(s) of land that are directly affected by the considered reduction(s), rather than applied to the entire area of development. One or more of the reduction considerations can be applied to different areas of the development. Each side of the channel should be considered separately.

Buffer Condition	Zone 1 – Extremely High Vulnerability	Zone 2 – High Vulnerability	Zone 3 – Moderate Vulnerability
Maximum outer buffer width both sides of centerline of channel	300'	200'	100'
Minimum inner buffer width both sides of centerline of channel	100'	50'	50'
Eligible outer buffer width adjustment both sides of centerline of channel	200'	150'	50'

Describe the portion and side of channel being considered (banks identified left to right looking downstream)	Ex. Clear Creek, Right Bank Buffer, 2000 feet through Green Acres Development (see attached map).
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Adjustment Factors	Buffer Adjustment (feet)	Place "X" if applicable	Buffer Adjustment (feet)	Place "X" if applicable	Buffer Adjustment (feet)	Place "X" if applicable
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1 – Land Use						
1a – Parks and open space	-50	X	-40		-30	
1b – Large lot residential (>0.5 acre) or low-density (<2 units/acre)	-25		-20	X	-15	X
1c – Residential high-density (>2 units/acre)	0		0		0	
1d – Office land use	0		0		0	
1e – Commercial land use	Not allowed per zoning without variance process		Not allowed per zoning without variance process		0	
1f – Industrial land use	Not allowed per zoning without variance process		Not allowed per zoning without variance process		0	
1g – Agricultural land use	0		0		0	
Total Land Use Width Adjustment (feet)	-50		-20		-15	

2 – Average Ground Slope within 50 feet of edge of inner buffer (choose one)						
2a – 0-3% toward waterway	-10	X	-10		-10	
2b – Greater than 3% toward waterway	0		0	X	0	X
Total Ground Slope Width Adjustment (feet)	-10		0		0	

3 – Outer Buffer Zone Vegetation Characteristics within 50 ft of inner buffer (choose one)						
3a – Good dense, healthy vegetative cover (>80%)	-25		-20	X	-15	
3b – Existing fair cover (30-70%) to be restored to good (>80%)	-35		-30		-20	X
3c – Existing poor cover (<30%) to be restored to good (>80%)	-50	X	-40		-30	
Total Filtration Characteristics Width Adjustment (feet)	-50		-20		-20	

4 – Implementing Best Management practices (BMPs)						
4a – No below-surface disturbance within inner buffer	-20		-15		-10	X
4b – No direct overland or piped discharge to inner buffer or losing stream	-25		-20		-15	
4c – Minimize directly connected impervious surfaces (minimum ratio of 1:1 Disconnected Area: Receiving Pervious Area)	-20		-15		-10	X
4d – Stormwater pond (detention & water quality or Full Spectrum Detention) designed in accordance with Karst Provisions of City Drainage Manual with additional media filtration layer	-100	X	-75		-50	X
4e – Other stormwater quality BMPs from City Drainage Manual that provide the WQCV and media filtration of runoff (raingardens, media filters, extended detention modified for media filtration and similar)	-100		-75	X	-50	
Total Best Management Practices Adjustment (feet)	-100		-75		-70	

5 – Wastewater Disposal Quantities & Quality						
5a – City Gravity Sewer System	0	X	-25		-25	
5b – Pumped Effluent Sewer System	0		0	X	-25	X
5c – Septic Tank & Leaching Fields	Not allowed without variance process		Not allowed without variance process		Not allowed without variance process	
5d – Utility trenches constructed with cutoffs in trench to minimize preferential flow through trench bedding	-25	X	-20	X	-15	
Total Wastewater Disposal Width Adjustment (feet)	-25		-20		-25	

TOTALS						
Outer Buffer Adjustment Total (feet)	-200		-135		-50	
Eligible Outer Buffer Width Adjustment from Centerline of Channel	200		150		50	
Adjusted Outer Buffer	0		15		0	
Adjusted Outer Buffer plus minimum required inner buffer	100		65		50	
If property is within floodway, enter floodway width from centerline (no development allowed within floodway)	N/A		N/A		N/A	

Total Buffer Width required From Centerline of Channel after adjustments) (feet) Note: Total can not be less than the Minimum Inner Buffer	100		65		50	
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