

Appendix A: East Fork Clear Creek Impervious Cover Calculations

Table 1: East Fork Clear Creek Impervious Cover Calculation Spreadsheet

Current Impervious Cover Calculation							
Category	Description	Acreage	% Coefficient	Coefficient	IC acreage	% of Total Acreage	% of Total IC Acreage
AG	Agriculture	676.93	1.9	0.019	12.86	14.29%	0.92%
RR	Rural Residential	89.63	10.6	0.106	9.50	1.89%	0.68%
R	Residential District	80.19	14.3	0.143	11.47	1.69%	0.82%
R1	Urban Residential	100.59	21.2	0.212	21.33	2.12%	1.52%
R2	Urban Residential	831.97	27.8	0.278	231.29	17.56%	16.48%
R3	Urban Residential	774.39	30.0	0.300	232.32	16.35%	16.55%
R4	Urban Residential	435.81	32.6	0.326	142.07	9.20%	10.12%
RO	Residential/Office	42.68	44.4	0.444	18.95	0.90%	1.35%
B1	Neighborhood Business	132.60	72.2	0.722	95.74	2.80%	6.82%
UBI	Unbuilt Institutional	60.54	21.9	0.219	13.26	1.28%	0.94%
CH	Churches	23.87	39.9	0.399	9.52	0.50%	0.68%
SC	Schools	716.56	30.3	0.303	217.12	15.13%	15.47%
MU	Municipal	48.45	32.4	0.324	15.70	1.02%	1.12%
GO	Golf Courses	95.08	5.0	0.050	4.75	2.01%	0.34%
CM	Cemeteries	8.83	8.3	0.083	0.73	0.19%	0.05%
PK	Parks	81.05	12.5	0.125	10.13	1.71%	0.72%
HWY	Highway		70.0	0.700	0.00	0.00%	0.00%
B3	General Business	369.87	72.2	0.722	267.05	7.81%	19.03%
C1	General Industrial	35.47	53.4	0.534	18.94	0.75%	1.35%
L1	Light Industrial	132.31	53.4	0.534	70.66	2.79%	5.03%
Q1	Quarry (custom)	0.00	32.0	0.320	0.00	0.00%	0.00%
	Total Acreage	4736.84			1403.38	100.00%	100.00%
	%IC	29.63%					

Table 2: East Fork Clear Creek Future Impervious Cover Calculations Spreadsheet

Future Impervious Cover Calculation								
Category	Description	Acreage	% Coefficient	Coefficient	IC acreage	% of Total Acreage	% of Total IC Acreage	
AG	Agriculture	184.10	1.9	0.019	3.50	3.89%	0.25%	
RR	Rural Residential	48.60	10.6	0.106	5.15	1.03%	0.36%	
R	Residential District	65.92	14.3	0.143	9.43	1.39%	0.67%	
R1	Urban Residential	0.11	21.2	0.212	0.02	0.00%	0.00%	
R2	Urban Residential	1515.79	27.8	0.278	421.39	32.00%	29.85%	
R3	Urban Residential	296.33	30.0	0.300	88.90	6.26%	6.30%	
R4	Urban Residential	474.73	32.6	0.326	154.76	10.02%	10.96%	
RO	Residential/Office	43.01	44.4	0.444	19.09	0.91%	1.35%	
B1	Neighborhood Business	132.40	72.2	0.722	95.59	2.79%	6.77%	
B2	Institutional	405.73	21.9	0.219	88.86	8.56%	6.29%	
SC	School	716.56	30.3	0.303	217.12	15.13%	15.38%	
GO	Golf Course	2.25	5.0	0.050	0.11	0.05%	0.01%	
B3	General Business	304.51	72.2	0.722	219.85	6.43%	15.57%	
C1	General Industrial	1.06	53.4	0.534	0.56	0.02%	0.04%	
L1	Light Industrial	116.16	53.4	0.534	62.03	2.45%	4.39%	
PB	Pre-Existing Business*	23.85	72.2	0.722	17.22	0.50%	1.22%	
Q1	Quarry (same as current IC%)	0.99	32.0	0.320	0.32	0.02%	0.02%	
Q2	Quarry (same as current IC%)		81.0	0.810	0.00	0.00%	0.00%	
FL	Floodplain	405.33	1.9	0.019	7.70	8.56%	0.55%	
	Total Acreage	4737.41			1411.61	100.00%	100.00%	
	%IC	29.80%						
	*General Business coefficient used because PB was not present/calculated in current IC calculations.							

Table 3: Zoning (City and County) Translation to Impervious Cover Coefficients

FIC%	CIC%	Description (acres)	future land use	abr.	city zoning	abr.	COUNTY ZONING LAYER			
					(as is in layer)		county zoning	abr.	former fringe zoning	abr.
1.9	1.9	5 --> (for FR)	Agriculture	AG			Forest Reserve	FR		
10.6	10.6	2.5 -->	Rural Residential	RR			Agriculture/Rural Reserve, Conservation Residential	AG/RR, CR	Estate Residential (2.5)	RE2.5
14.3	14.3	1-2.49	Residential District	R	Estate Residential 1	RE1	Estate, Suburban, and Low Density Residential	ER, SR	Estate Residential (1)	RE1
21.2	21.2	0.5-0.99	Urban Residential	R1	Single Dwelling Residential	RS2	Low Density Residential	LR	Single Dwelling Residential	RS2
27.8	27.8	0.26-0.49	Urban Residential	R2			Medium Density Residential	MR	Single Dwelling Residential	RS4.5, RS3.5
30	30	0.14-0.25	Urban Residential	R3	Low Density Multi Dwelling Residential	RM7	High Density Residential	HR	Low Density Multi Dwelling Residential, Townhouse Residential	RT7, RM7
32.6	32.6	0.07-0.139	Urban Residential	R4	High Density Multi Dwelling Residential	RM15	Urban Residential	UR	High Density Multi Dwelling Residential	RM15
44.4	44.4	0.21 -->	Residential/Office	RO	Limited Commercial	CL	Limited Business	LB	Limited Commercial	CL
72.2	72.2		Neighborhood Business	B1	Downtown Commercial	CD				
			Institutional (see further divisions below)	B2	Institutional	I	Institutional/Public	IP	Institutional	I
21.9	NA		Unbuilt Institutional	UBI	Institutional	I	Institutional/Public	IP	Institutional	I
39.9	39.9		Churches	CH	Institutional	I	Institutional/Public	IP	Institutional	I
30.3	30.3		Schools	SC	Institutional	I	Institutional/Public	IP	Institutional	I

Appendix A – East Fork Clear Creek

35.4	35.4		Municipal	MU	Institutional	I	Institutional/Public	IP	Institutional	I
5	5		Golf Courses	GO	Institutional	I	Institutional/Public	IP	Institutional	I
8.3	8.3		Cemeteries	CM	Institutional	I	Institutional/Public	IP	Institutional	I
12.5	12.5		Parks	PK	Institutional	I	Institutional/Public	IP	Institutional	I
72.2	72.2		General Business	B3	Business Park, Arterial Commercial	BP, CA	General Business	GB	Arterial Commercial, General Commercial	CA, CG
53.4	53.4		General Industrial	C1	General Industrial, Heavy Industrial	IG, HI			General Industrial	
53.4	53.4		Light Industrial	L1	Limited Industrial	IL	Light Industrial	LI		
same as CIC%	custom		Quarry-all parcels should be calculated individually	Q	Quarry	Q	Mineral Extraction	ME	Quarry	Q
custom	custom								Airport Special District	AP
same as CIC%	custom*		Planned Unit Development	PUD	Planned Unit Dev.	PUD	Planned Unit Development	PUD	Planned Unit Dev.	PUD
custom	custom		Pre-Existing Business	PB	n/a		Pre-Existing Bus.	PB	n/a	
1.9	NA		Floodplain							
			*coefficient depends on type of PUD (residential, mixed use, etc.)							