

Appendix D

Aggregated Florida Land Use, Cover and Form Classification System Categories

URBAN LAND USE CATEGORIES

Coastal Land Use Code	FLUCCS Code
1 - Low Density Residential	1100
2 - Medium Density Residential	1200
3 - High Density Residential	1300
4 - Commercial	1400
5 - Industrial	1500
7 - Institutional, Transportation, Utilities	1700 8100 8200 8300

AGRICULTURAL LAND USE CATEGORIES

Coastal Land Use Code	FLUCCS Code
6 - Mining	1600
11 - Groves	2200 2210 2220 2230
12 - Feedlots	2300
13 - Nursery	2400
14 - Row and Field Crops	2100 2140 2150 2440

UPLAND FORESTED LAND USE CATEGORIES

Coastal Land Use Categories	FLUCCS Code
8 - Range Lands	1480 1800 1900 2420 2600 3100 3200 3300
9 - Barren Lands	7100 7200 7300 7400
10 - Pasture	2110 2120 2130
15 - Upland Forests	4100 4110 4120 4200 4300 4340 4400

WATER AND WETLANDS LAND USE CATEGORIES

Coastal Land Use Categories	FLUCCS Code
16 - Freshwater	2500 2540 2550 5100 5200 5210 5220 5230 5240 5300 5310 5320 5330 5340 5500 5600 6440 6450
17 - Saltwater	5400 9113 9116 9121
18 - Forested Freshwater Wetlands	6100 6110 6150 6200 6210 6240 6300
19 - Saltwater Wetlands	6120 6420
20 - Non-forested Freshwater Wetlands	6400, 6410, 6411, 6430 6530
21 - Tidal Flats	6500, 6510 6520

Appendix 3

Land Use Specific Water Quality Concentrations

Land Use-Specific Nonpoint Source Water Quality Concentrations

URBAN LAND USES						
Land Use Classification			Land Use-Specific Water Quality Concentrations			
Coastal Land Use Classification	Land Use Description	Reference	TN (mg/L)	TP (mg/L)	TSS (mg/L)	BOD (mg/L)
1 (LDR)	Low Density Single Family Residential (SFR)	(1)	2.31	0.40	33.0	-
		(1)	2.14	0.32	28.0	-
		(1)	0.605	0.073	7.2	-
		(1)	1.18	0.307	3.5	-
		(1)	3.0	0.45	-	-
		(1)	2.2	0.25	-	-
		(4)	1.87	0.39	-	-
		(8)	1.46	0.401	19.0	-
		(9)	1.56	0.27	20.8	-
		(10)	2.04	0.593	49.7	-
		(11)	2.88	0.72	56.8	-
		(13)	-	-	-	4.4
		min	0.605	0.073	3.5	-
		mean	1.93	0.380	27.3	4.4
		max	2.88	0.598	56.8	-
2 (MDR)	Medium Density (See notes)	mean	2.04	0.44	33.5	- 7.4 -
3 (HDR)	Multifamily Residential	(1)	1.61	0.33	53.0	-
		(1)	2.57	0.45	36.8	-
		(1)	4.68	0.72	95.6	-
		(1)	1.91	0.73	-	-
		(1)	1.02	0.033	67.6	-
		(1)	1.91	0.51	14.3	-
		(4)	1.65	0.33	-	-
		(8)	2.05	1.34	29.0	-
		(9)	2.04	0.282	10.7	-
		(10)	2.05	0.150	8.3	-
		(11)	2.00	0.56	41	-
		(13)	-	-	-	11.0
		min	1.02	0.033	8.3	-
		mean	2.14	0.49	39.6	11.0
		max	4.68	1.34	95.6	-

Coastal Land Use Classification	Land Use Description	Reference	TN (mg/L)	TP (mg/L)	TSS (mg/L)	BOD (mg/L)
4	Low Intensity Commercial	(1)	1.19	0.15	22.0	-
		(1)	1.10	0.10	45.0	-
	High Intensity Commercial	(1)	2.81	0.31	94.3	-
		(1)	3.53	0.82	-	-
		(1)	2.15	0.15	-	-
	Commercial (Office)	(8)	2.38	0.305	36.5	-
		(9)	1.08	0.495	50.6	-
		(10)	1.40	0.113	6.2	-
		(11)	1.05	0.145	13.8	-
	Commercial (Retail)	(8)	1.69	0.253	9.3	-
		(10)	1.28	0.177	14.5	-
		(11)	2.12	0.22	36.3	-
	Combined Commercial	min	1.05	0.100	6.2	-
		mean	1.82	0.270	32.9	17.2
		max	3.53	0.495	94.3	-
5	Industrial	(1)	1.42	0.19	71.8	-
		(1)	1.42	0.31	102.0	-
		(4)	1.18	0.15	-	-
		(8)	2.28	0.332	18.2	-
		(9)	1.77	0.465	28.3	-
		(10)	1.92	0.490	84.3	-
		(11)	3.00	0.503	70.0	-
		(13)	-	-	-	9.6
6	Mining	(4)	1.18	0.15	35 (e)	-
		(13)	-	-	-	9.6
7	Institutional	(4)	1.18	0.15	35 (e)	-
		(13)	-	-	-	8.2

AGRICULTURAL LAND USES						
Land Use Classification			Land Use-Specific Water Quality Concentrations			
Coastal Land Use Classification	Land Use Description	Reference	TN (mg/L)	TP (mg/L)	TSS (mg/L)	BOD (mg/L)
10	Pasture	(1)	2.37	0.697	-	-
		(1)	2.48	0.27	8.6	-
		(2)	2.0	0.3	-	-
		(3)	3.0	0.25	-	-
		(4)	1.02	0.16	-	-
		(5)	5.1	3.2	-	-
		(13)	-	-	-	5.1
11	Grove	(7)	2.31	0.10	-	-
		(13)	-	-	-	2.55
11,13	Grove, Nursery	(4)	0.92	0.41	-	-
		(13)	-	-	-	2.55
12	Feed Lot	(3)	29.3	5.1	-	-
		(3)	3.74	1.13	-	-
		(5)	26.0	5.1	-	-
		(13)	-	-	-	5.1
14	Field Crop	(2)	2.5	0.25	-	-
		(3)	2.5	2.5	-	-
		(4)	3.75	1.13	-	-
		(13)	-	-	-	5.1
Mixed Agricultural						
10,11	Citrus + Pasture	(1)	1.57	0.09	-	-
		(1)	1.33	0.09	4.6	-
		(1)	2.58	0.046	180	-
		(1)	2.68	0.562	-	-
		(1)	3.26	0.24	28.0	-
11,14	Citrus + Row Crops	(6)	1.78	0.3	5.6	-

(See following page for summarized agricultural water quality concentrations.)

WATER/WETLAND AND FOREST/UNDEVELOPED LAND USES						
Land Use Classification			Land Use-Specific Water Quality Concentrations			
Coastal Land Use Classification	Land Use Description	Reference	TN (mg/L)	TP (mg/L)	TSS (mg/L)	BOD (mg/L)
8	Open Space/ Non-forested	(1)	1.38	0.07	17.3	-
		(1)	0.90	0.02	4.8	-
		(1)	1.47	0.07	-	-
		(4)	1.02	0.16	-	-
		(13)	-	-	-	1.45
15	Upland Forest	(2)	0.1	0.007	-	-
		(3)	0.2	0.007	-	-
		(4)	1.02	0.16	-	-
		(13)	-	-	-	1.45
16,17	Open Water	(1)	0.79	0.17	-	-
		(1)	0.73	0.04	0.00	-
		(1)	2.22	-	6.2	-
		(13)	-	-	-	0.00
18,20	Freshwater Wetland	(1)	2.26	0.09	13.4	-
		(1)	1.02	0.16	-	-
		(1)	1.24	0.018	4.6	-
		(1)	1.88	0.33	12.7	-
		(4)	0.79	0.17	-	-
		(13)	-	-	-	4.63
17	Saltwater		NA	NA	NA	NA
19	Saltwater Wetlands		NA	NA	NA	NA
21	Tidal Flats		NA	NA	NA	NA

Notes:

- Concentrations for CLUCCS code 2 (MDR) are an average of CLUCCS codes 1 (LDR) and 3 (HDR).
- Concentrations for CLUCCS code 4 (Commercial) are an average of reported values for "low intensity" and "high intensity" commercial.
- Estimated (e) agricultural values were based on similar land uses data when no land use specific data were identified.
- Row crop data were often reported with other agricultural uses.
- Saltwater and salwater wetlands were assigned zero loads.

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- (7) Allhands, M. 1993. Water Quality Data for Gator Slough Groves. Agricultural Management Services. Punta Gorda, Florida.
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Appendix 4

Land Use Specific Seasonal Runoff Coefficients

Land Use-Specific Seasonal Runoff Coefficients

Coastal Land Use Classification and Land Use Type	Hydrologic Soil Group	Dry Season Runoff Coeff.	Wet Season Runoff Coeff.
1) Single Family Residential	A	0.15	0.25
	B	0.18	0.28
	C	0.21	0.31
	D	0.24	0.34
2) Medium Density Residential	A	0.25	0.35
	B	0.30	0.40
	C	0.35	0.45
	D	0.40	0.50
3) Multifamily Residential	A	0.35	0.50
	B	0.42	0.57
	C	0.50	0.65
	D	0.58	0.75
4) Commercial	A	0.70	0.79
	B	0.74	0.83
	C	0.78	0.97
	D	0.82	0.91
5) Industrial	A	0.65	0.75
	B	0.70	0.80
	C	0.75	0.85
	D	0.80	0.90

Land Use-Specific Seasonal Runoff Coefficients (cont)

Land Use	Hydrologic Soil Group	Dry Season Runoff Coeff.	Wet Season Runoff Coeff.
6) Mining	A	0.20	0.20
	B	0.30	0.30
	C	0.40	0.40
	D	0.50	0.50
7) Institutional, Transportation Utils.	A	0.40	0.50
	B	0.45	0.55
	C	0.50	0.60
	D	0.55	0.65
8) Range Lands	A	0.10	0.18
	B	0.14	0.22
	C	0.18	0.26
	D	0.22	0.30
9) Barren Lands	A	0.45	0.55
	B	0.50	0.60
	C	0.55	0.65
	D	0.60	0.70
10) Agricultural - Pasture	A	0.10	0.18
	B	0.14	0.22
	C	0.18	0.26
	D	0.22	0.30

Land Use-Specific Seasonal Runoff Coefficients (cont)

Land Use	Hydrologic Soil Group	Dry Season Runoff Coeff.	Wet Season Runoff Coeff.
11) Agricultural - Groves	A	0.20	0.26
	B	0.23	0.29
	C	0.26	0.32
	D	0.29	0.33
12) Agricultural - Feedlots	A	0.35	0.45
	B	0.40	0.50
	C	0.45	0.55
	D	0.50	0.60
13) Agricultural - Nursery	A	0.20	0.30
	B	0.25	0.35
	C	0.30	0.40
	D	0.35	0.45
14) Agricultural - Row and Field Crops	A	0.20	0.30
	B	0.25	0.35
	C	0.30	0.40
	D	0.35	0.45
15) Upland Forested	A	0.10	0.15
	B	0.13	0.18
	C	0.16	0.21
	D	0.19	0.24

Land Use-Specific Seasonal Runoff Coefficients (cont)

Land Use	Hydrologic Soil Group	Dry Season Runoff Coeff.	Wet Season Runoff Coeff.
16) Freshwater - Open Water	A	0.80	0.90
	B	0.80	0.90
	C	0.80	0.90
	D	0.80	0.90
17) Saltwater - Open Water	A	1.0	1.0
	B	1.0	1.0
	C	1.0	1.0
	D	1.0	1.0
18) Forested Freshwater Wetlands	A	0.50	.60
	B	0.55	0.65
	C	0.60	0.70
	D	0.65	0.75
19) Saltwater Wetlands	A	0.95	0.95
	B	0.95	0.95
	C	0.95	0.95
	D	0.95	0.95
20) Non-forested Freshwater Wetlands	A	0.45	0.55
	B	0.50	0.60
	C	0.55	0.65
	D	0.60	0.70
21) Tidal Flats	A	1.0	1.0
	B	1.0	1.0
	C	1.0	1.0
	D	1.0	1.0