
Appendix D

Inputs Summary

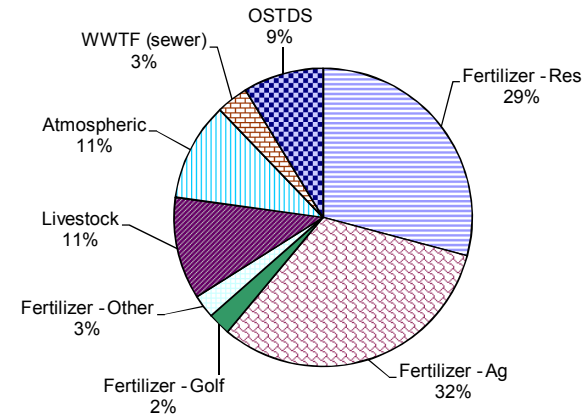
Wekiva River and Basin Nitrate Sourcing Study

APPENDIX D. INPUTS SUMMARY

Table 1. Inputs by Source Type

Fertilizer		
Source (by Land Use)	Land Use Description	Fertilizer kg/ha/year
Residential	Low, medium, high density residential	108
Other	Commercial and services	168
	Institutional, recreational, transportation	108
Agricultural	Cropland, pastureland, field crops	150
	Improved pasture, horse farms	63
	Unimproved pasture, woodland pasture	0
	Row crops	630
	Tree crops	240
	Feeding operations	0
	Sod farms, floriculture, specialty farms	200
Golf Course	Golf courses	175
Source (by Type)		
OSTDS		
	Loading Rate lb N/year	29
Livestock Waste		
	Pasture Cattle/acre	0.3
	Feedlots Cattle/acre	30
	Nitrate from Cattle kg/year	56
Atmospheric Deposition		
	Rural Loading Rate kg/ha/year	5.6
	Urban Loading Rate kg/ha/year	9
Domestic Wastewater		
	Loading Rate metric tons/year	339

Nitrogen Releases by Source*



* - same figure as Figure 3.1 in Section 3.1.

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APPENDIX D. INPUTS SUMMARY

Table 2. Inputs by Land Use and Source Type

Inputs by Land Use							Inputs by Source Type								Totals	
							Animal Waste		Atmospheric Deposition		OSTDS			WWTF ^(a)		
Land Use Type	Acres	Hectares	Fertilizer kg/ha/yr (from Table 1)	% Impervious	Fertilizer Subtotal (kg/ha/yr)	Fertilizer Total (kg/yr)	kg/ha/yr	kg/yr	kg/ha/yr	kg/yr	kg/ha/yr	kg/yr	# of Systems	kg/yr	Total Nitrogen (kg/ha/yr)	Total Nitrogen (MT/yr)
1100: Residential, low density - less than 2 dwelling units/acre	32,024	12,960	108	14.7%	92	1,193,892	0	0	5.6	72,574	7.72	100,111	7,610		105	1,367
1200: Residential, medium density - 2-5 dwelling units/acre	49,320	19,959	108	27.8%	78	1,556,324	0	0	9	179,631	28.27	564,244	42,894		115	2,300
1300: Residential, high density - 6 or more dwelling units/acre	8,929	3,613	108	67.0%	36	128,779	0	0	9	32,520	23.53	85,025	6,464		68	246
1400: Commercial and services	9,808	3,969	168	94.3%	10	38,341	0	0	9	35,721	5.72	22,698	1,725		24	97
1500: Industrial	3,231	1,307	0		0	0	0	0	9	11,766	3.31	4,323	329		12	16
1600: Extractive	2,211	895	0		0	0	0	0	5.6	5,011	0.41	364	28		6	5
1700: Institutional	3,593	1,454	108	91.0%	10	14,134	0	0	9	13,087	1.87	2,712	206		21	30
1800: Recreational	2,802	1,134	108	1.5%	106	120,630	0	0	9	10,206	0.81	919	70		116	132
1820: Golf courses	4,045	1,637	175	14.7%	149	244,362	0	0	5.6	9,167	0.95	1,554	118		156	255
1900: Open land	3,141	1,271	0	0.0%	0	0	0	0	5.6	7,118	4.08	5,183	394		10	12
2100: Cropland and pastureland	59	24	150	0.0%	150	3,600	0	0	5.6	134	0	0	0		156	4
2110: Improved pastures (monocult, planted forage crops)	28,217	11,419	63	0.0%	63	719,402	41	473,846	5.6	63,947	1.12	12,749	969		111	1,270
2120: Unimproved pastures	12,540	5,075	0	0.0%	0	0	41	210,587	5.6	28,419	0.38	1,921	146		47	241
2130: Woodland pastures	5,025	2,033	0	0.0%	0	0	41	84,377	5.6	11,387	0.65	1,318	100		48	97
2140: Row crops	821	332	630	0.0%	630	209,328	0	0	5.6	1,861	0.05	16	1		636	211
2150: Field crops	3,650	1,477	150	0.0%	150	221,536	0	0	5.6	8,271	0.60	881	67		156	231
2200: Tree crops	12,582	5,092	240	0.0%	240	1,222,011	0	0	5.6	28,514	0.81	4,116	313		246	1,255
2300: Feeding operations	162	66	0	0.0%	0	0	4,150	272,135	5.6	367	0.60	39	3		4,156	273
2400: Nurseries and vineyards	157	64	240	0.0%	240	15,247	0	0	5.6	356	2.47	157	12		248	16
2410: Tree nurseries	277	112	240	0.0%	240	26,905	0	0	5.6	628	1.01	113	9		247	28
2420: Sod farms	1,106	448	200	0.0%	200	89,544	0	0	5.6	2,507	0	0	0		206	92
2430: Ornamentals	5,704	2,308	240	0.0%	240	553,963	0	0	5.6	12,926	3.06	7,068	537		249	574
2450: Floriculture	21	9	200	0.0%	200	1,704	0	0	5.6	48	4.63	39	3		210	2
2500: Specialty farms	128	52	200	0.0%	200	10,386	0	0	5.6	291	1.50	78	6		207	11
2510: Horse farms	3,163	1,280	63	0.0%	63	80,650	41	53,121	5.6	7,169	1.63	2,093	159		112	143
2540: Aquaculture	29	12	0	0.0%	0	0	0	0	5.6	66	0.00	0	0		6	0
2600: Other open lands - rural	268	108	0	0.0%	0	0	0	0	5.6	607	0.26	28	2		6	1
3000: Upland Nonforested	21,237	8,594	0	0.0%	0	0	0	0	5.6	48,129	0.72	6,153	468		6	54
4000: Upland Forests (25% forested cover)	75,745	30,653	0	0.0%	0	0	0	0	5.6	171,657	0.60	18,506	1,407		6	190
5000: Water	34,676	14,033	0	0.0%	0	0	0	0	5.6	78,585	0.50	7,002	532		6	86
6000: Wetlands	72,795	29,459	0	0.0%	0	0	0	0	5.6	164,970	0.30	8,915	678		6	174
7000: Barren land	10,291	4,165	0	0.0%	0	0	0	0	5.6	23,323	0.05	219	17		6	24
8000: Transportation, Communication, and Utilitie	7,489	3,031	168	85.0%	25	76,377	0	0	9	27,277	0.58	1,744	133	339,000	147	444
TOTALS	415,247	168,044				6,527,114		1,094,066	6.3	1,058,239		860,288	65,399	339,000		9,879

Notes:
(a) - Calculated from data in Appendix E, Table 2.