

Appendix 5-15: Nutrient Budgets for the Flow-Ways and Treatment Cells in the STAs

Michael Chimney

Table 1. Annual soluble reactive phosphorus budgets for flow-ways and treatment cells in the Everglades Protection Area Stormwater Treatment Areas (STAs).^a

	Inflows ^b			Outflows ^b			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-1E, Cell 3</u>								
WY2006	0.250	-	0.250	1.199	-	1.199	-0.949	-379.6%
TOTAL	0.250	-	0.250	1.199	-	1.199	-0.949	-379.6%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1E, Cell 4N</u>								
WY2006	1.199	-	1.199	0.005	-	0.005	1.194	99.6%
TOTAL	1.199	-	1.199	0.005	-	0.005	1.194	99.6%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1E, Cell 4S</u>								
WY2006	0.192	-	0.192	0.401	-	0.401	-0.209	-108.9%
TOTAL	0.192	-	0.192	0.401	-	0.401	-0.209	-108.9%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 1</u>								
WY2001	3.920	0.021	3.941	2.491	0.220	2.711	1.230	31.2%
WY2002	11.317	0.031	11.348	6.599	0.356	6.955	4.393	38.7%
WY2003	25.611	0.025	25.636	16.281	0.385	16.666	8.969	35.0%
WY2004	13.410	0.020	13.430	13.863	0.326	14.189	-0.759	-5.7%
WY2005	25.071	0.025	25.096	36.906	0.331	37.237	-12.141	-48.4%
WY2006	14.682	0.026	14.708	11.017	0.038	11.055	3.653	24.8%
TOTAL	94.011	0.147	94.158	87.157	1.656	88.813	5.345	5.7%
<i>% in</i>	99.8%	0.2%	<i>% out</i>	98.1%	1.9%			
<u>STA-1W, Cell 2</u>								
WY2001	1.651	0.015	1.666	1.070	0.000	1.070	0.596	35.8%
WY2002	4.146	0.022	4.168	2.122	0.000	2.122	2.046	49.1%
WY2003	10.494	0.018	10.512	8.001	0.000	8.001	2.511	23.9%
WY2004	5.021	0.014	5.035	5.743	0.000	5.743	-0.708	-14.1%
WY2005	15.505	0.018	15.523	5.838	0.000	5.838	9.685	62.4%
WY2006	-	-	-	-	-	-	-	-
TOTAL	36.817	0.087	36.904	22.774	0.000	22.774	14.130	38.3%
<i>% in</i>	99.8%	0.2%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 3</u>								
WY2001	0.939	0.014	0.953	0.632	0.066	0.698	0.255	26.7%
WY2002	2.911	0.022	2.933	1.345	0.092	1.437	1.495	51.0%
WY2003	7.896	0.017	7.913	4.031	0.140	4.171	3.742	47.3%
WY2004	9.504	0.014	9.518	4.216	0.195	4.411	5.107	53.7%
WY2005	22.508	0.017	22.525	13.073	0.223	13.296	9.229	41.0%
WY2006	11.017	0.018	11.035	9.237	0.025	9.262	1.773	16.1%
TOTAL	54.775	0.103	54.878	32.534	0.742	33.276	21.602	39.4%
<i>% in</i>	99.8%	0.2%	<i>% out</i>	97.8%	2.2%			

Table 1. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-1W, Cell 4</u>								
WY2001	1.070	0.005	1.075	0.187	0.000	0.187	0.888	82.6%
WY2002	2.122	0.008	2.130	0.789	0.000	0.789	1.341	63.0%
WY2003	8.001	0.006	8.007	7.081	0.000	7.081	0.926	11.6%
WY2004	5.743	0.005	5.748	4.399	0.000	4.399	1.349	23.5%
WY2005	5.838	0.006	5.844	7.905	0.000	7.905	-2.061	-35.3%
WY2006	-	-	-	-	-	-	-	-
TOTAL	22.774	0.031	22.805	20.361	0.000	20.361	2.444	10.7%
<i>% in</i>	99.9%	0.1%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 5</u>								
WY2001	10.189	0.044	10.233	1.340	0.000	1.340	8.893	86.9%
WY2002	52.484	0.066	52.550	11.422	0.000	11.422	41.128	78.3%
WY2003	30.161	0.053	30.214	23.108	0.000	23.108	7.106	23.5%
WY2004	8.436	0.043	8.479	3.080	0.000	3.080	5.399	63.7%
WY2005	20.781	0.052	20.833	12.185	0.000	12.185	8.648	41.5%
WY2006	6.624	0.055	6.679	0.277	0.000	0.277	6.402	95.9%
TOTAL	128.675	0.312	128.987	51.412	0.000	51.412	77.575	60.1%
<i>% in</i>	99.8%	0.2%	<i>% out</i>	100.0%	0.0%			
<u>STA-2, Cell 1</u>								
WY2002	0.548	0.049	0.597	0.159	0.000	0.159	0.438	73.3%
WY2003	1.723	0.041	1.764	0.181	0.000	0.181	1.583	89.7%
WY2004	5.031	0.037	5.068	0.409	0.000	0.409	4.659	91.9%
WY2005	5.187	0.036	5.223	0.431	0.000	0.431	4.792	91.7%
WY2006	4.176	0.042	4.218	0.426	0.000	0.426	3.792	89.9%
TOTAL	16.665	0.205	16.870	1.606	0.000	1.606	15.264	90.5%
<i>% in</i>	98.8%	1.2%	<i>% out</i>	100.0%	0.0%			
<u>STA-2, Cell 2</u>								
WY2002	1.117	0.054	1.171	0.442	0.001	0.443	0.728	62.1%
WY2003	7.012	0.046	7.058	0.902	0.001	0.903	6.155	87.2%
WY2004	7.884	0.042	7.926	0.882	0.003	0.885	7.041	88.8%
WY2005	16.406	0.040	16.446	5.145	0.001	5.146	11.300	68.7%
WY2006	10.431	0.046	10.477	1.703	0.061	1.764	8.714	83.2%
TOTAL	42.850	0.228	43.078	9.074	0.067	9.141	33.937	78.8%
<i>% in</i>	99.5%	0.5%	<i>% out</i>	99.3%	0.7%			
<u>STA-2, Cell 3</u>								
WY2002	7.466	0.054	7.520	0.459	0.447	0.906	6.614	87.9%
WY2003	6.459	0.046	6.505	0.744	0.265	1.009	5.496	84.5%
WY2004	8.648	0.042	8.690	0.749	0.326	1.075	7.615	87.6%
WY2005	15.104	0.040	15.144	1.178	0.332	1.510	13.634	90.0%
WY2006	9.247	0.046	9.293	0.683	0.222	0.905	8.388	90.3%
TOTAL	46.924	0.228	47.152	3.813	1.593	5.406	41.747	88.5%
<i>% in</i>	99.5%	0.5%	<i>% out</i>	70.5%	29.5%			

Table 1. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-3/4, Cell 1A</u>								
WY2005	9.008	-	9.008	3.240	-	3.240	5.768	64.0%
WY2006	20.991	-	20.991	9.809	-	9.809	11.182	53.3%
TOTAL	29.999	-	29.999	13.049	-	13.049	16.950	56.5%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 1B</u>								
WY2005	3.240	-	3.240	1.268	-	1.268	1.972	60.9%
WY2006	9.807	-	9.807	3.684	-	3.684	6.123	62.4%
TOTAL	13.047	-	13.047	4.952	-	4.952	8.095	62.0%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 2A</u>								
WY2005	6.712	-	6.712	3.703	-	3.703	3.009	44.8%
WY2006	17.745	-	17.745	8.262	-	8.262	9.483	53.4%
TOTAL	24.457	-	24.457	11.965	-	11.965	12.492	51.1%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 2B</u>								
WY2005	5.286	-	5.286	0.322	-	0.322	4.964	93.9%
WY2006	11.683	-	11.683	1.560	-	1.560	10.123	86.6%
TOTAL	16.969	-	16.969	1.882	-	1.882	15.087	88.9%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 3</u>								
WY2006	4.057	-	4.057	0.640	-	0.640	3.417	84.2%
TOTAL	4.057	-	4.057	0.640	-	0.640	3.417	84.2%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-5, North Flow-way</u>								
WY2001	1.890	0.033	1.923	0.251	0.248	0.499	1.424	74.1%
WY2002	14.614	0.030	14.644	4.702	0.972	5.674	8.970	61.3%
WY2003	10.875	0.040	10.915	13.288	1.130	14.418	-3.502	-32.1%
WY2004	10.098	0.039	10.137	5.166	0.721	5.887	4.250	41.9%
WY2005	8.490	0.032	8.522	3.774	0.315	4.089	4.433	52.0%
WY2006	13.209	0.034	13.243	11.179	0.819	11.998	1.245	9.4%
TOTAL	59.176	0.207	59.383	38.360	4.204	42.564	16.819	28.3%
<i>% in</i>	99.7%	0.3%	<i>% out</i>	90.1%	9.9%			
<u>STA-5, South Flow-way</u>								
WY2001	5.735	0.033	5.768	0.873	2.195	3.068	2.700	46.8%
WY2002	16.310	0.030	16.340	3.226	3.568	6.794	9.546	58.4%
WY2003	14.082	0.040	14.122	6.863	4.713	11.576	2.546	18.0%
WY2004	15.725	0.039	15.764	8.191	7.677	15.868	-0.105	-0.7%
WY2005	7.239	0.032	7.271	5.095	4.326	9.421	-2.150	-29.6%
WY2006	11.730	0.034	11.764	11.504	2.859	14.363	-2.599	-22.1%
TOTAL	70.821	0.207	71.028	35.752	25.338	61.090	9.938	14.0%
<i>% in</i>	99.7%	0.3%	<i>% out</i>	58.5%	41.5%			

Table 1. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-6, Cell 3</u>								
WY2001	0.088	0.005	0.093	0.188	0.074	0.262	-0.169	-181.3%
WY2002	0.123	0.005	0.128	0.136	0.042	0.178	-0.050	-38.9%
WY2003	0.154	0.005	0.159	0.252	0.034	0.286	-0.127	-80.2%
WY2004	0.248	0.005	0.253	0.096	0.040	0.136	0.117	46.3%
WY2005	0.450	0.005	0.455	0.112	0.098	0.210	0.245	53.8%
WY2006	0.120	0.004	0.124	0.230	0.022	0.252	-0.128	-102.9%
TOTAL	1.183	0.029	1.212	1.014	0.310	1.324	-0.112	-9.2%
<i>% in</i>	97.6%	2.4%	<i>% out</i>	76.6%	23.4%			
<u>STA-6, Cell 5</u>								
WY2001	0.192	0.013	0.205	0.119	0.064	0.183	0.022	10.9%
WY2002	0.264	0.012	0.276	0.099	0.072	0.171	0.105	38.0%
WY2003	0.239	0.012	0.251	0.165	0.094	0.259	-0.008	-3.1%
WY2004	0.279	0.013	0.292	0.103	0.088	0.191	0.101	34.5%
WY2005	0.582	0.013	0.595	0.081	0.061	0.142	0.453	76.2%
WY2006	0.163	0.011	0.174	0.065	0.046	0.111	0.063	36.1%
TOTAL	1.719	0.074	1.793	0.632	0.425	1.057	0.736	41.1%
<i>% in</i>	95.9%	4.1%	<i>% out</i>	59.8%	40.2%			

^a All budget terms expressed as metric tonnes of phosphorus.

^b I_s = surface water inflow; P = precipitation; O_s = surface water outflow; O_g = groundwater outflow; Retained = Σinflow – Σoutflow; %Ret = (retained/Σinflow)*100.

Table 2. Annual particulate phosphorus budgets for flow-ways and treatment cells in the Everglades Protection Area STAs.^a

	Inflows ^b			Outflows ^b			Retained	% Ret
	I _s	P	Σinflow	O _s	O _q	Σoutflow		
<u>STA-1E, Cell 3</u>								
WY2006	1.368	-	1.368	1.256	-	1.256	0.112	8.2%
TOTAL	1.368	-	1.368	1.256	-	1.256	0.112	8.2%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1E, Cell 4N</u>								
WY2006	1.256	-	1.256	0.415	-	0.415	0.841	67.0%
TOTAL	1.256	-	1.256	0.415	-	0.415	0.841	67.0%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1E, Cell 4S</u>								
WY2006	0.546	-	0.546	1.540	-	1.540	-0.994	-182.1%
TOTAL	0.546	-	0.546	1.540	-	1.540	-0.994	-182.1%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 1</u>								
WY2001	7.936	-	7.936	2.514	0.314	2.828	5.108	64.4%
WY2002	3.901	-	3.901	2.236	0.122	2.358	1.543	39.6%
WY2003	19.419	-	19.419	13.532	0.306	13.838	5.581	28.7%
WY2004	8.863	-	8.863	7.225	0.192	7.417	1.446	16.3%
WY2005	17.319	-	17.319	24.321	0.223	24.544	-7.225	-41.7%
WY2006	12.624	-	12.624	14.175	0.040	14.215	-1.591	-12.6%
TOTAL	70.062	-	70.062	64.003	1.197	65.200	4.862	6.9%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	98.2%	1.8%			
<u>STA-1W, Cell 2</u>								
WY2001	1.954	-	1.954	1.838	0.000	1.838	0.116	5.9%
WY2002	2.145	-	2.145	0.970	0.000	0.970	1.175	54.8%
WY2003	11.773	-	11.773	11.469	0.000	11.469	0.304	2.6%
WY2004	5.140	-	5.140	11.705	0.000	11.705	-6.565	-127.7%
WY2005	13.320	-	13.320	8.360	0.000	8.360	4.960	37.2%
WY2006	-	-	-	-	-	-	-	-
TOTAL	34.332	-	34.332	34.342	0.000	34.342	-0.010	<0.1%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 3</u>								
WY2001	0.890	-	0.890	1.050	0.083	1.133	-0.243	-27.3%
WY2002	0.315	-	0.315	1.174	0.028	1.202	-0.887	-281.7%
WY2003	3.239	-	3.239	2.883	0.076	2.959	0.280	8.7%
WY2004	3.411	-	3.411	1.525	0.070	1.595	1.816	53.2%
WY2005	12.136	-	12.136	3.630	0.086	3.716	8.420	69.4%
WY2006	14.175	-	14.175	3.702	0.018	3.720	10.455	73.8%
TOTAL	34.166	-	34.166	13.964	0.362	14.326	19.840	58.1%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	97.5%	2.5%			

Table 2. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-1W, Cell 4</u>								
WY2001	1.838	-	1.838	0.423	0.000	0.423	1.415	77.0%
WY2002	0.970	-	0.970	0.763	0.000	0.763	0.207	21.3%
WY2003	11.469	-	11.469	4.646	0.000	4.646	6.823	59.5%
WY2004	11.705	-	11.705	3.939	0.000	3.939	7.766	66.3%
WY2005	8.360	-	8.360	4.339	0.000	4.339	4.021	48.1%
WY2006	-	-	-	-	-	-	-	-
TOTAL	34.342	-	34.342	14.110	0.000	14.110	20.232	58.9%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 5</u>								
WY2001	12.173	-	12.173	1.068	0.000	1.068	11.105	91.2%
WY2002	31.151	-	31.151	2.798	0.000	2.798	28.353	91.0%
WY2003	27.840	-	27.840	4.358	0.000	4.358	23.482	84.3%
WY2004	5.219	-	5.219	1.573	0.000	1.573	3.646	69.9%
WY2005	16.177	-	16.177	11.753	0.000	11.753	4.424	27.3%
WY2006	3.095	-	3.095	4.259	0.000	4.259	-1.164	-37.6%
TOTAL	95.655	-	95.655	25.809	0.000	25.809	69.846	73.0%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-2, Cell 1</u>								
WY2002	0.931	-	0.931	0.040	0.000	0.040	0.891	95.7%
WY2003	1.010	-	1.010	0.210	0.000	0.210	0.800	79.2%
WY2004	0.168	-	0.168	0.344	0.000	0.344	-0.176	-104.8%
WY2005	1.332	-	1.332	0.248	0.000	0.248	1.084	81.4%
WY2006	2.429	-	2.429	0.629	0.000	0.629	1.800	74.1%
TOTAL	5.870	-	5.870	1.471	0.000	1.471	4.399	74.9%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-2, Cell 2</u>								
WY2002	0.670	-	0.670	0.638	0.001	0.639	0.031	4.6%
WY2003	2.389	-	2.389	0.911	0.001	0.912	1.477	61.8%
WY2004	1.471	-	1.471	0.596	0.001	0.597	0.874	59.4%
WY2005	3.470	-	3.470	0.471	0.000	0.471	2.999	86.4%
WY2006	5.518	-	5.518	0.595	0.026	0.621	4.897	88.7%
TOTAL	13.518	-	13.518	3.211	0.029	3.240	10.278	76.0%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	99.1%	0.9%			
<u>STA-2, Cell 3</u>								
WY2002	- ^c	-	-	0.556	-	0.556	-	-
WY2003	2.054	-	2.054	1.039	0.177	1.216	0.838	40.8%
WY2004	2.228	-	2.228	0.724	0.163	0.887	1.341	60.2%
WY2005	3.162	-	3.162	1.310	0.160	1.470	1.692	53.5%
WY2006	2.281	-	2.281	1.127	0.142	1.269	1.012	44.4%
TOTAL	9.725	-	9.725	4.756	0.641	5.397	4.884	50.2%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	88.1%	11.9%			

Table 2. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-3/4, Cell 1A</u>								
WY2005	3.820	-	3.820	4.050	-	4.050	-0.230	-6.0%
WY2006	20.449	-	20.449	15.294	-	15.294	5.155	25.2%
TOTAL	24.269	-	24.269	19.344	-	19.344	4.925	20.3%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 1B</u>								
WY2005	4.050	-	4.050	1.362	-	1.362	2.688	66.4%
WY2006	15.284	-	15.284	3.950	-	3.950	11.334	74.2%
TOTAL	19.334	-	19.334	5.312	-	5.312	14.022	72.5%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 2A</u>								
WY2005	1.895	-	1.895	2.164	-	2.164	-0.269	-14.2%
WY2006	17.925	-	17.925	6.492	-	6.492	11.433	63.8%
TOTAL	19.820	-	19.820	8.656	-	8.656	11.164	56.3%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 2B</u>								
WY2005	2.597	-	2.597	0.761	-	0.761	1.836	70.7%
WY2006	7.560	-	7.560	5.062	-	5.062	2.498	33.0%
TOTAL	10.157	-	10.157	5.823	-	5.823	4.334	42.7%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 3</u>								
WY2006	4.066	-	4.066	1.502	-	1.502	2.564	63.1%
TOTAL	4.066	-	4.066	1.502	-	1.502	2.564	63.1%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-5, North Flow-way</u>								
WY2001	3.424	-	3.424	2.933	1.140	4.073	-0.649	-18.9%
WY2002	7.492	-	7.492	2.772	0.535	3.307	4.185	55.9%
WY2003	10.939	-	10.939	2.844	0.524	3.368	7.571	69.2%
WY2004	9.433	-	9.433	1.947	0.428	2.375	7.058	74.8%
WY2005	4.525	-	4.525	1.141	0.126	1.267	3.258	72.0%
WY2006	12.688	-	12.688	0.458	0.162	0.620	12.068	95.1%
TOTAL	48.501	-	48.501	12.095	2.915	15.010	33.491	69.1%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	80.6%	19.4%			
<u>STA-5, South Flow-way</u>								
WY2001	4.551	-	4.551	0.116	0.713	0.829	3.722	81.8%
WY2002	8.355	-	8.355	0.684	1.176	1.860	6.495	77.7%
WY2003	19.644	-	19.644	0.741	1.829	2.570	17.074	86.9%
WY2004	11.738	-	11.738	- ^c	-	-	-	-
WY2005	3.403	-	3.403	1.118	1.389	2.507	0.896	26.3%
WY2006	11.820	-	11.820	-	-	-	-	-
TOTAL	59.511	-	59.511	2.659	5.107	7.766	28.187	47.4%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	34.2%	65.8%			

Table 2. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-6, Cell 3</u>								
WY2001	0.422	-	0.422	0.278	0.198	0.476	-0.054	-12.8%
WY2002	0.591	-	0.591	0.012	0.027	0.039	0.552	93.4%
WY2003	0.664	-	0.664	0.254	0.071	0.325	0.339	51.1%
WY2004	0.425	-	0.425	0.130	0.061	0.191	0.234	55.2%
WY2005	1.112	-	1.112	0.059	0.112	0.171	0.941	84.6%
WY2006	1.121	-	1.121	0.124	0.049	0.173	0.948	84.5%
TOTAL	4.335	-	4.335	0.857	0.518	1.375	2.960	68.3%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	62.3%	37.7%			
<u>STA-6, Cell 5</u>								
WY2001	0.632	-	0.632	0.281	0.179	0.460	0.172	27.3%
WY2002	0.867	-	0.867	0.098	0.130	0.228	0.639	73.7%
WY2003	0.744	-	0.744	0.441	0.270	0.711	0.033	4.4%
WY2004	0.460	-	0.460	0.140	0.132	0.272	0.188	40.9%
WY2005	0.655	-	0.655	0.127	0.081	0.208	0.447	68.3%
WY2006	0.875	-	0.875	0.133	0.153	0.286	0.589	67.4%
TOTAL	4.233	-	4.233	1.220	0.944	2.164	2.069	48.9%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	56.4%	43.6%			

^a All budget terms expressed as metric tonnes of phosphorus. Note that total dissolved phosphorus was not measured in precipitation and therefore, the concentration of particulate phosphorus could not be calculated.

^b I_s = surface water inflow; P = precipitation; O_s = surface water outflow; O_g = groundwater outflow; Retained = Σinflow – Σoutflow; %Ret = (retained/Σinflow)*100.

^c Calculation of particulate phosphorus load resulted in a negative value, which was not analyzed further.

Table 3. Annual dissolved organic phosphorus budgets for flow-ways and treatment cells in the Everglades Protection Area STAs.^a

	Inflows ^b			Outflows ^b			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-1E, Cell 3</u>								
WY2006	0.329	-	0.329	0.515	-	0.515	-0.186	-56.5%
TOTAL	0.329	-	0.329	0.515	-	0.515	-0.186	-56.5%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1E, Cell 4N</u>								
WY2006	0.515	-	0.515	0.056	-	0.056	0.459	89.1%
TOTAL	0.515	-	0.515	0.056	-	0.056	0.459	89.1%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1E, Cell 4S</u>								
WY2006	0.145	-	0.145	0.394	-	0.394	-0.249	-171.7%
TOTAL	0.145	-	0.145	0.394	-	0.394	-0.249	-171.7%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 1</u>								
WY2001	1.585	-	1.585	1.275	0.100	1.375	0.210	13.2%
WY2002	1.315	-	1.315	0.654	0.038	0.692	0.623	47.4%
WY2003	2.323	-	2.323	2.156	0.042	2.198	0.125	5.4%
WY2004	1.136	-	1.136	1.371	0.030	1.401	-0.265	-23.3%
WY2005	1.591	-	1.591	2.928	0.023	2.951	-1.360	-85.5%
WY2006	2.099	-	2.099	1.493	0.005	1.498	0.601	28.6%
TOTAL	10.049	-	10.049	9.877	0.239	10.116	-0.067	-0.7%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	97.6%	2.4%			
<u>STA-1W, Cell 2</u>								
WY2001	0.729	-	0.729	0.770	0.000	0.770	-0.041	-5.6%
WY2002	0.025	-	0.025	0.510	0.000	0.510	-0.485	-
WY2003	0.999	-	0.999	1.263	0.000	1.263	-0.264	-26.4%
WY2004	0.445	-	0.445	1.492	0.000	1.492	-1.047	-235.3%
WY2005	1.528	-	1.528	0.533	0.000	0.533	0.995	65.1%
WY2006	-	-	-	-	-	-	-	-
TOTAL	3.726	-	3.726	4.568	0.000	4.568	-0.842	-22.6%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 3</u>								
WY2001	0.907	-	0.907	0.460	0.056	0.516	0.391	43.1%
WY2002	1.046	-	1.046	0.686	0.040	0.726	0.320	30.6%
WY2003	1.793	-	1.793	1.291	0.038	1.329	0.464	25.9%
WY2004	1.225	-	1.225	0.589	0.026	0.615	0.610	49.8%
WY2005	1.614	-	1.614	1.125	0.018	1.143	0.471	29.2%
WY2006	1.493	-	1.493	1.189	0.003	1.192	0.301	20.1%
TOTAL	8.078	-	8.078	5.340	0.180	5.520	2.558	31.7%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	96.7%	3.3%			

Table 3. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _q	Σoutflow		
<u>STA-1W, Cell 4</u>								
WY2001	0.770	-	0.770	0.418	0.000	0.418	0.352	45.7%
WY2002	0.510	-	0.510	0.637	0.000	0.637	-0.127	-24.9%
WY2003	1.263	-	1.263	1.627	0.000	1.627	-0.364	-28.8%
WY2004	1.492	-	1.492	1.015	0.000	1.015	0.477	32.0%
WY2005	0.533	-	0.533	0.722	0.000	0.722	-0.189	-35.5%
WY2006	-	-	-	-	-	-	-	-
TOTAL	4.568	-	4.568	4.419	0.000	4.419	0.149	3.3%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 5</u>								
WY2001	2.233	-	2.233	0.489	0.000	0.489	1.744	78.1%
WY2002	4.049	-	4.049	2.638	0.000	2.638	1.411	34.8%
WY2003	3.312	-	3.312	5.902	0.000	5.902	-2.590	-78.2%
WY2004	0.527	-	0.527	0.728	0.000	0.728	-0.201	-38.1%
WY2005	1.526	-	1.526	1.626	0.000	1.626	-0.100	-6.6%
WY2006	0.610	-	0.610	0.528	0.000	0.528	0.082	13.4%
TOTAL	12.257	-	12.257	11.911	0.000	11.911	0.346	2.8%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-2, Cell 1</u>								
WY2002	0.219	-	0.219	0.226	0.000	0.226	-0.007	-3.2%
WY2003	0.253	-	0.253	0.132	0.000	0.132	0.121	47.8%
WY2004	1.596	-	1.596	0.078	0.000	0.078	1.518	95.1%
WY2005	0.180	-	0.180	0.037	0.000	0.037	0.143	79.4%
WY2006	0.644	-	0.644	0.140	0.000	0.140	0.504	78.3%
TOTAL	2.892	-	2.892	0.613	0.000	0.613	2.279	78.8%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-2, Cell 2</u>								
WY2002	0.264	-	0.264	0.662	0.001	0.663	-0.399	-151.1%
WY2003	0.934	-	0.934	0.681	0.000	0.681	0.253	27.0%
WY2004	0.923	-	0.923	0.272	0.001	0.273	0.650	70.5%
WY2005	0.402	-	0.402	0.780	0.000	0.780	-0.378	-94.0%
WY2006	1.442	-	1.442	1.149	0.019	1.168	0.274	19.0%
TOTAL	3.965	-	3.965	3.544	0.020	3.564	0.401	10.1%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	99.4%	0.6%			
<u>STA-2, Cell 3</u>								
WY2002	0.689	-	0.689	0.804	0.180	0.984	-0.295	-42.8%
WY2003	1.014	-	1.014	0.496	0.086	0.582	0.432	42.6%
WY2004	0.492	-	0.492	0.270	0.047	0.317	0.175	35.6%
WY2005	0.607	-	0.607	0.265	0.032	0.297	0.310	51.1%
WY2006	1.268	-	1.268	0.577	0.076	0.653	0.615	48.5%
TOTAL	4.070	-	4.070	2.412	0.420	2.832	1.238	30.4%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	85.2%	14.8%			

Table 3. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-3/4, Cell 1A</u>								
WY2005	0.622	-	0.622	3.332	-	3.332	-2.710	-435.7%
WY2006	3.107	-	3.107	8.653	-	8.653	-5.546	-178.5%
TOTAL	3.729	-	3.729	11.985	-	11.985	-8.256	-221.4%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 1B</u>								
WY2005	3.332	-	3.332	0.849	-	0.849	2.483	74.5%
WY2006	8.648	-	8.648	3.601	-	3.601	5.047	58.4%
TOTAL	11.980	-	11.980	4.450	-	4.450	7.530	62.9%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 2A</u>								
WY2005	0.290	-	0.290	1.616	-	1.616	-1.326	-457.2%
WY2006	2.992	-	2.992	4.511	-	4.511	-1.519	-50.8%
TOTAL	3.282	-	3.282	6.127	-	6.127	-2.845	-86.7%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 2B</u>								
WY2005	2.154	-	2.154	0.280	-	0.280	1.874	87.0%
WY2006	5.988	-	5.988	1.985	-	1.985	4.003	66.9%
TOTAL	8.142	-	8.142	2.265	-	2.265	5.877	72.2%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 3</u>								
WY2006	1.027	-	1.027	0.832	-	0.832	0.195	19.0%
TOTAL	1.027	-	1.027	0.832	-	0.832	0.195	19.0%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-5, North Flow-way</u>								
WY2001	0.294	-	0.294	0.414	0.125	0.539	-0.245	-83.5%
WY2002	1.643	-	1.643	1.288	0.171	1.459	0.184	11.2%
WY2003	1.618	-	1.618	1.833	0.162	1.995	-0.377	-23.3%
WY2004	1.484	-	1.484	1.293	0.138	1.431	0.053	3.6%
WY2005	2.022	-	2.022	0.748	0.068	0.816	1.206	59.6%
WY2006	2.798	-	2.798	0.806	0.101	0.907	1.891	67.6%
TOTAL	9.859	-	9.859	6.382	0.766	7.148	2.711	27.5%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	89.3%	10.7%			
<u>STA-5, South Flow-way</u>								
WY2001	0.597	-	0.597	0.299	0.414	0.713	-0.116	-19.5%
WY2002	1.501	-	1.501	0.423	0.392	0.815	0.686	45.7%
WY2003	1.565	-	1.565	0.887	0.565	1.452	0.113	7.2%
WY2004	1.092	-	1.092	0.488	0.494	0.982	0.110	10.1%
WY2005	0.347	-	0.347	0.345	0.246	0.591	-0.244	-70.5%
WY2006	1.854	-	1.854	1.298	0.382	1.680	0.174	9.4%
TOTAL	6.956	-	6.956	3.740	2.493	6.233	0.723	10.4%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	60.0%	40.0%			

Table 3. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-6, Cell 3</u>								
WY2001	0.106	0.000	0.106	0.046	0.040	0.086	0.020	18.5%
WY2002	0.148	0.000	0.148	0.137	0.046	0.183	-0.035	-23.5%
WY2003	0.156	0.000	0.156	- ^c	-	-	-	-
WY2004	0.129	0.000	0.129	0.050	0.021	0.071	0.058	45.2%
WY2005	0.205	0.000	0.205	0.068	0.052	0.120	0.085	41.7%
WY2006	0.286	0.000	0.286	0.168	0.160	0.328	-0.042	-14.7%
TOTAL	1.030	0.000	1.030	0.469	0.318	0.787	0.087	8.4%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	59.6%	40.4%			
<u>STA-6, Cell 5</u>								
WY2001	0.082	-	0.082	0.077	0.034	0.111	-0.029	-35.0%
WY2002	0.113	-	0.113	0.133	0.055	0.188	-0.075	-66.2%
WY2003	0.125	-	0.125	0.038	0.033	0.071	0.054	43.6%
WY2004	0.157	-	0.157	0.041	0.042	0.083	0.074	47.4%
WY2005	0.185	-	0.185	0.067	0.031	0.098	0.087	47.0%
WY2006	0.227	-	0.227	0.127	0.076	0.203	0.024	10.6%
TOTAL	0.889	-	0.889	0.483	0.270	0.753	0.136	15.3%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	64.2%	35.8%			

^a All budget terms expressed as metric tonnes of phosphorus. Note that total dissolved phosphorus was not measured in precipitation and therefore, the concentration of dissolved organic phosphorus could not be calculated.

^b I_s = surface water inflow; P = precipitation; O_s = surface water outflow; O_g = groundwater outflow; Retained = Σinflow – Σoutflow; %Ret = (retained/Σinflow)*100.

^c Calculation of dissolved organic phosphorus load resulted in a negative value, which was not analyzed further.

Table 4. Annual total nitrogen budgets for flow-ways and treatment cells in the Everglades Protection Area STAs.^a

	Inflows ^b			Outflows ^b			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-1E, Cell 3</u>								
WY2006	29.4	-	29.4	0.3	-	0.3	29.1	99.0%
TOTAL	29.4	-	29.4	0.3	-	0.3	29.1	99.0%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1E, Cell 4N</u>								
WY2006	0.3	-	0.3	0.1	-	0.1	0.2	66.7%
TOTAL	0.3	-	0.3	0.1	-	0.1	0.2	66.7%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1E, Cell 4S</u>								
WY2006	1.7	-	1.7	3.1	-	3.1	-1.4	-82.4%
TOTAL	1.7	-	1.7	3.1	-	3.1	-1.4	-82.4%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 1</u>								
WY2001	360.0	2.0	362.0	199.1	18.8	217.9	144.1	39.8%
WY2002	418.4	3.1	421.5	331.2	15.3	346.5	74.9	17.8%
WY2003	827.8	2.5	830.3	711.0	14.5	725.5	104.8	12.6%
WY2004	776.2	2.0	778.2	649.9	17.0	666.9	111.3	14.3%
WY2005	803.9	2.4	806.3	991.6	9.7	1,001.3	-195.0	-24.2%
WY2006	606.5	2.6	609.1	520.4	1.7	522.1	87.0	14.3%
TOTAL	3,792.8	14.6	3,807.4	3,403.2	77.0	3,480.2	327.1	8.6%
<i>% in</i>	99.6%	0.4%	<i>% out</i>	97.8%	2.2%			
<u>STA-1W, Cell 2</u>								
WY2001	127.2	1.5	128.7	82.4	0.0	82.4	46.3	36.0%
WY2002	219.1	2.2	221.3	109.4	0.0	109.4	111.9	50.6%
WY2003	461.6	1.8	463.4	306.1	0.0	306.1	157.3	33.9%
WY2004	298.2	1.4	299.6	477.2	0.0	477.2	-177.6	-59.3%
WY2005	462.4	1.7	464.1	180.6	0.0	180.6	283.5	61.1%
WY2006	-	-	-	-	-	-	-	-
TOTAL	1,568.5	8.6	1,577.1	1,155.7	0.0	1,155.7	421.4	26.7%
<i>% in</i>	99.5%	0.5%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 3</u>								
WY2001	112.4	1.4	113.8	172.8	12.0	184.8	-71.0	-62.4%
WY2002	176.9	2.1	179.0	182.9	8.4	191.3	-12.3	-6.8%
WY2003	368.6	1.7	370.3	311.3	8.4	319.7	50.6	13.7%
WY2004	466.0	1.4	467.4	303.2	11.6	314.8	152.6	32.7%
WY2005	586.6	1.7	588.3	310.7	5.6	316.3	272.0	46.2%
WY2006	519.9	1.8	521.7	301.9	1.0	302.9	218.8	41.9%
TOTAL	2,230.4	10.1	2,240.5	1,582.8	46.9	1,629.7	610.8	27.3%
<i>% in</i>	99.5%	0.5%	<i>% out</i>	97.1%	2.9%			

Table 4. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _q	Σoutflow		
<u>STA-1W, Cell 4</u>								
WY2001	82.4	0.5	82.9	47.3	0.0	47.3	35.6	43.0%
WY2002	109.4	0.8	110.2	108.4	0.0	108.4	1.8	1.6%
WY2003	306.1	0.6	306.7	310.8	0.0	310.8	-4.1	-1.3%
WY2004	477.2	0.5	477.7	368.6	0.0	368.6	109.1	22.8%
WY2005	180.6	0.6	181.2	262.9	0.0	262.9	-81.7	-45.1%
WY2006	-	-	-	-	-	-	-	-
TOTAL	1,155.7	3.0	1,158.7	1,098.0	0.0	1,098.0	60.7	5.2%
<i>% in</i>	99.7%	0.3%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 5</u>								
WY2001	442.2	4.3	446.5	45.5	0.0	45.5	401.0	89.8%
WY2002	1,299.9	6.5	1,306.4	292.0	0.0	292.0	1,014.4	77.6%
WY2003	884.8	5.2	890.0	642.9	0.0	642.9	247.1	27.8%
WY2004	373.4	4.2	377.6	293.8	0.0	293.8	83.8	22.2%
WY2005	727.9	5.2	733.1	454.5	0.0	454.5	278.6	38.0%
WY2006	226.0	5.4	231.4	99.9	0.0	99.9	131.5	56.8%
TOTAL	3,954.2	30.8	3,985.0	1,828.6	0.0	1,828.6	2,156.4	54.1%
<i>% in</i>	99.2%	0.8%	<i>% out</i>	100.0%	0.0%			
<u>STA-2, Cell 1</u>								
WY2002	116.6	4.8	121.4	57.1	0.0	57.1	64.3	53.0%
WY2003	167.1	4.1	171.2	72.8	0.0	72.8	98.4	57.5%
WY2004	281.9	3.7	285.6	138.0	0.0	138.0	147.6	51.7%
WY2005	263.3	3.5	266.8	149.1	0.0	149.1	117.7	44.1%
WY2006	271.7	4.1	275.8	139.9	0.0	139.9	135.9	49.3%
TOTAL	1,100.6	20.3	1,120.9	556.9	0.0	556.9	564.0	50.3%
<i>% in</i>	98.2%	1.8%	<i>% out</i>	100.0%	0.0%			
<u>STA-2, Cell 2</u>								
WY2002	180.6	5.4	186.0	229.3	0.4	229.7	-43.8	-23.5%
WY2003	383.5	4.6	388.1	239.8	0.2	240.0	148.1	38.2%
WY2004	426.1	4.1	430.2	265.9	0.3	266.2	164.0	38.1%
WY2005	713.5	3.9	717.4	445.0	0.1	445.1	272.4	38.0%
WY2006	615.0	4.6	619.6	327.1	6.5	333.6	286.0	46.2%
TOTAL	2,318.7	22.6	2,341.3	1,507.1	7.5	1,514.6	826.8	35.3%
<i>% in</i>	99.0%	1.0%	<i>% out</i>	99.5%	0.5%			
<u>STA-2, Cell 3</u>								
WY2002	291.7	5.4	297.1	229.8	62.5	292.3	4.7	1.6%
WY2003	448.9	4.6	453.5	281.0	43.0	324.0	129.5	28.6%
WY2004	542.0	4.1	546.1	310.9	52.6	363.5	182.6	33.4%
WY2005	676.6	3.9	680.5	432.3	42.5	474.8	205.7	30.2%
WY2006	502.4	4.6	507.0	376.7	38.5	415.2	91.8	18.1%
TOTAL	2,461.6	22.6	2,484.2	1,630.7	239.1	1,869.8	614.4	24.7%
<i>% in</i>	99.1%	0.9%	<i>% out</i>	87.2%	12.8%			

Table 4. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-3/4, Cell 1A</u>								
WY2005	263.1	-	263.1	402.2	-	402.2	-139.1	-52.9%
WY2006	988.8	-	988.8	1,279.3	-	1,279.3	-290.5	-29.4%
TOTAL	1,251.9	-	1,251.9	1,681.5	-	1,681.5	-429.6	-34.3%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 1B</u>								
WY2005	402.2	-	402.2	404.2	-	404.2	-2.0	-0.5%
WY2006	1,278.4	-	1,278.4	894.6	-	894.6	383.8	30.0%
TOTAL	1,680.6	-	1,680.6	1,298.8	-	1,298.8	381.8	22.7%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 2A</u>								
WY2005	294.0	-	294.0	209.9	-	209.9	84.1	28.6%
WY2006	1,090.8	-	1,090.8	709.1	-	709.1	381.7	35.0%
TOTAL	1,384.8	-	1,384.8	919.0	-	919.0	465.8	33.6%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 2B</u>								
WY2005	284.2	-	284.2	160.6	-	160.6	123.6	43.5%
WY2006	950.4	-	950.4	724.1	-	724.1	226.3	23.8%
TOTAL	1,234.6	-	1,234.6	884.7	-	884.7	349.9	28.3%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 3</u>								
WY2006	336.0	-	336.0	252.9	-	252.9	83.1	24.7%
TOTAL	336.0	-	336.0	252.9	-	252.9	83.1	24.7%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-5, North Flow-way</u>								
WY2001	81.0	3.2	84.2	42.8	21.2	64.0	20.2	24.0%
WY2002	221.3	3.0	224.3	154.5	21.7	176.2	48.1	21.4%
WY2003	220.8	4.0	224.8	207.5	20.1	227.6	-2.8	-1.3%
WY2004	230.5	3.8	234.3	163.5	19.4	182.9	51.4	22.0%
WY2005	196.7	3.2	199.9	118.3	8.5	126.8	73.1	36.6%
WY2006	270.7	3.4	274.1	171.8	14.5	186.3	87.7	32.0%
TOTAL	1,221.0	20.5	1,241.5	858.4	105.4	963.8	277.8	22.4%
<i>% in</i>	98.3%	1.7%	<i>% out</i>	89.1%	10.9%			
<u>STA-5, South Flow-way</u>								
WY2001	94.3	3.2	97.5	35.6	56.8	92.4	5.1	5.2%
WY2002	183.8	3.0	186.8	69.9	55.7	125.6	61.1	32.7%
WY2003	186.9	4.0	190.9	94.0	63.5	157.5	33.3	17.5%
WY2004	147.8	3.8	151.6	59.6	63.5	123.1	28.5	18.8%
WY2005	115.9	3.2	119.1	79.8	68.5	148.3	-29.2	-24.6%
WY2006	210.6	3.4	214.0	147.5	43.4	190.9	23.1	10.8%
TOTAL	939.3	20.5	959.8	486.4	351.5	837.9	121.9	12.7%
<i>% in</i>	97.9%	2.1%	<i>% out</i>	58.0%	42.0%			

Table 4. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-6, Cell 3</u>								
WY2001	32.2	0.5	32.7	13.1	11.9	25.0	7.7	23.7%
WY2002	45.1	0.5	45.6	20.3	9.7	30.0	15.6	34.1%
WY2003	56.1	0.5	56.6	26.1	6.6	32.7	23.9	42.2%
WY2004	49.2	0.5	49.7	30.4	10.0	40.4	9.3	18.8%
WY2005	40.6	0.5	41.1	18.1	11.8	29.9	11.2	27.2%
WY2006	39.0	0.4	39.4	22.0	3.9	25.9	13.5	34.3%
TOTAL	262.2	2.9	265.1	130.0	53.9	183.9	81.2	30.6%
<i>% in</i>	98.9%	1.1%	<i>% out</i>	70.7%	29.3%			
<u>STA-6, Cell 5</u>								
WY2001	9.9	1.3	11.2	0.6	1.0	1.6	9.6	85.5%
WY2002	13.6	1.2	14.8	0.4	1.0	1.4	13.4	90.3%
WY2003	10.0	1.2	11.2	0.8	1.3	2.1	9.1	80.9%
WY2004	11.2	1.3	12.5	0.4	1.1	1.5	11.0	88.0%
WY2005	2.7	1.3	4.0	0.4	0.3	0.7	3.3	82.6%
WY2006	2.1	1.1	3.2	0.5	0.5	1.0	2.2	69.7%
TOTAL	49.5	7.3	56.8	3.1	5.3	8.4	48.4	85.3%
<i>% in</i>	87.2%	12.8%	<i>% out</i>	37.1%	62.9%			

^a All budget terms expressed as metric tonnes of nitrogen.

^b I_s = surface water inflow; P = precipitation; O_s = surface water outflow; O_g = groundwater outflow; Retained = Σinflow – Σoutflow; %Ret = (retained/Σinflow)*100.

Table 5. Annual ammonia-nitrogen budgets for flow-ways and treatment cells in the Everglades Protection Area STAs.^a

	Inflows ^b			Outflows ^b			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-1E, Cell 3</u>								
WY2006	0.3	-	0.3	0.3	-	0.3	0.0	0.0%
TOTAL	0.3	-	0.3	0.3	-	0.3	0.0	0.0%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1E, Cell 4N</u>								
WY2006	0.3	-	0.3	0.1	-	0.1	0.2	66.7%
TOTAL	0.3	-	0.3	0.1	-	0.1	0.2	66.7%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1E, Cell 4S</u>								
WY2006	2.0	-	2.0	1.4	-	1.4	0.6	30.0%
TOTAL	2.0	-	2.0	1.4	-	1.4	0.6	30.0%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 1</u>								
WY2001	84.1	0.4	84.5	22.0	3.0	25.0	59.5	70.4%
WY2002	70.0	0.7	70.7	37.2	2.1	39.3	31.4	44.4%
WY2003	108.6	0.5	109.1	66.4	1.6	68.0	41.1	37.7%
WY2004	138.3	0.4	138.7	73.8	2.4	76.2	62.5	45.1%
WY2005	134.8	0.5	135.3	92.9	1.2	94.1	41.2	30.4%
WY2006	91.0	0.5	91.5	12.4	0.1	12.5	79.0	86.3%
TOTAL	626.8	3.1	629.9	304.7	10.5	315.2	314.7	50.0%
<i>% in</i>	99.5%	0.5%	<i>% out</i>	96.7%	3.3%			
<u>STA-1W, Cell 2</u>								
WY2001	15.1	0.3	15.4	3.2	0.0	3.2	12.2	79.2%
WY2002	26.0	0.5	26.5	4.0	0.0	4.0	22.5	84.9%
WY2003	52.5	0.4	52.9	10.8	0.0	10.8	42.1	79.6%
WY2004	39.5	0.3	39.8	18.7	0.0	18.7	21.1	53.0%
WY2005	66.1	0.4	66.5	8.3	0.0	8.3	58.2	87.5%
WY2006	-	-	-	-	-	-	-	-
TOTAL	199.2	1.8	201.0	45.0	0.0	45.0	156.0	77.6%
<i>% in</i>	99.1%	0.9%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 3</u>								
WY2001	7.8	0.3	8.1	1.7	0.3	2.0	6.1	75.1%
WY2002	12.5	0.5	13.0	3.4	0.3	3.7	9.3	71.4%
WY2003	16.2	0.4	16.6	6.7	0.3	7.0	9.6	58.0%
WY2004	37.1	0.3	37.4	12.4	0.7	13.1	24.3	65.1%
WY2005	28.4	0.4	28.8	12.9	0.2	13.1	15.6	54.3%
WY2006	12.4	0.4	12.8	10.7	0.0	10.7	2.1	16.1%
TOTAL	114.4	2.2	116.6	47.8	1.8	49.6	67.0	57.4%
<i>% in</i>	98.1%	1.9%	<i>% out</i>	96.3%	3.7%			

Table 5. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _q	Σoutflow		
<u>STA-1W, Cell 4</u>								
WY2001	3.2	0.1	3.3	0.9	0.0	0.9	2.4	72.8%
WY2002	4.0	0.2	4.2	2.1	0.0	2.1	2.1	49.6%
WY2003	10.8	0.1	10.9	6.8	0.0	6.8	4.1	37.8%
WY2004	18.7	0.1	18.8	10.3	0.0	10.3	8.5	45.2%
WY2005	8.3	0.1	8.4	8.5	0.0	8.5	-0.1	-0.8%
WY2006	-	-	-	-	-	-	-	-
TOTAL	45.0	0.6	45.6	28.6	0.0	28.6	17.0	37.3%
<i>% in</i>	98.6%	1.4%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 5</u>								
WY2001	41.5	0.9	42.4	4.5	0.0	4.5	37.9	89.4%
WY2002	121.1	1.4	122.5	22.5	0.0	22.5	100.0	81.6%
WY2003	80.0	1.1	81.1	40.6	0.0	40.6	40.5	49.9%
WY2004	57.7	0.9	58.6	12.6	0.0	12.6	46.0	78.5%
WY2005	108.1	1.1	109.2	11.4	0.0	11.4	97.8	89.6%
WY2006	39.2	1.2	40.4	1.7	0.0	1.7	38.7	95.8%
TOTAL	447.6	6.6	454.2	93.3	0.0	93.3	360.9	79.5%
<i>% in</i>	98.6%	1.4%	<i>% out</i>	100.0%	0.0%			
<u>STA-2, Cell 1</u>								
WY2002	11.6	1.0	12.6	0.3	0.0	0.3	12.3	97.6%
WY2003	14.7	0.9	15.6	0.7	0.0	0.7	14.9	95.5%
WY2004	36.4	0.8	37.2	2.6	0.0	2.6	34.6	93.0%
WY2005	30.5	0.8	31.3	2.5	0.0	2.5	28.8	92.0%
WY2006	32.8	0.9	33.7	1.0	0.0	1.0	32.7	97.0%
TOTAL	126.0	4.3	130.3	7.1	0.0	7.1	123.2	94.6%
<i>% in</i>	96.7%	3.3%	<i>% out</i>	100.0%	0.0%			
<u>STA-2, Cell 2</u>								
WY2002	14.6	1.1	15.7	1.0	0.0	1.0	14.7	93.6%
WY2003	33.7	1.0	34.7	2.2	0.0	2.2	32.5	93.6%
WY2004	46.3	0.9	47.2	5.5	0.0	5.5	41.7	88.3%
WY2005	76.5	0.8	77.3	9.2	0.0	9.2	68.1	88.1%
WY2006	77.7	1.0	78.7	6.4	0.3	6.7	72.0	91.5%
TOTAL	248.8	4.8	253.6	24.3	0.4	24.7	229.0	90.3%
<i>% in</i>	98.1%	1.9%	<i>% out</i>	98.6%	1.4%			
<u>STA-2, Cell 3</u>								
WY2002	20.0	1.1	21.1	2.4	1.7	4.1	17.1	80.7%
WY2003	31.8	1.0	32.8	3.1	1.2	4.3	28.5	86.9%
WY2004	47.7	0.9	48.6	4.5	1.9	6.4	42.2	86.9%
WY2005	70.5	0.8	71.3	12.3	2.3	14.6	56.7	79.5%
WY2006	71.2	1.0	72.2	6.5	1.9	8.4	63.8	88.4%
TOTAL	241.2	4.8	246.0	28.8	9.0	37.8	208.3	84.6%
<i>% in</i>	98.0%	2.0%	<i>% out</i>	76.2%	23.8%			

Table 5. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-3/4, Cell 1A</u>								
WY2005	16.4	-	16.4	21.3	-	21.3	-4.9	-29.9%
WY2006	56.0	-	56.0	56.4	-	56.4	-0.4	-0.7%
TOTAL	72.4	-	72.4	77.7	-	77.7	-5.3	-7.3%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 1B</u>								
WY2005	21.3	-	21.3	6.5	-	6.5	14.8	69.5%
WY2006	56.3	-	56.3	15.3	-	15.3	41.0	72.8%
TOTAL	77.6	-	77.6	21.8	-	21.8	55.8	71.9%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 2A</u>								
WY2005	6.1	-	6.1	15.2	-	15.2	-9.1	-149.2%
WY2006	27.5	-	27.5	39.4	-	39.4	-11.9	-43.3%
TOTAL	33.6	-	33.6	54.6	-	54.6	-21.0	-62.5%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 2B</u>								
WY2005	22.7	-	22.7	9.9	-	9.9	12.8	56.4%
WY2006	57.4	-	57.4	25.7	-	25.7	31.7	55.2%
TOTAL	80.1	-	80.1	35.6	-	35.6	44.5	55.6%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 3</u>								
WY2006	7.3	-	7.3	8.8	-	8.8	-1.5	-20.5%
TOTAL	7.3	-	7.3	8.8	-	8.8	-1.5	-20.5%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-5, North Flow-way</u>								
WY2001	20.6	0.7	21.3	0.5	1.2	1.7	19.6	92.2%
WY2002	31.9	0.6	32.5	2.2	1.0	3.2	29.4	90.2%
WY2003	31.3	0.9	32.2	25.3	2.6	27.9	4.2	13.1%
WY2004	27.0	0.8	27.8	5.7	1.2	6.9	20.9	75.1%
WY2005	19.4	0.7	20.1	1.9	0.3	2.2	17.8	88.9%
WY2006	23.6	0.7	24.3	4.5	0.7	5.2	19.1	78.6%
TOTAL	153.8	4.4	158.2	40.1	7.1	47.2	111.0	70.2%
<i>% in</i>	97.2%	2.8%	<i>% out</i>	85.0%	15.0%			
<u>STA-5, South Flow-way</u>								
WY2001	13.0	0.7	13.7	0.9	3.4	4.3	9.4	68.9%
WY2002	19.3	0.6	19.9	0.9	2.0	2.9	17.0	85.2%
WY2003	19.5	0.9	20.4	1.8	2.8	4.6	15.7	77.2%
WY2004	20.1	0.8	20.9	2.5	4.8	7.3	13.6	65.1%
WY2005	12.3	0.7	13.0	3.9	4.9	8.8	4.1	31.9%
WY2006	19.0	0.7	19.7	5.0	2.4	7.4	12.3	62.5%
TOTAL	103.2	4.4	107.6	15.0	20.4	35.4	72.2	67.1%
<i>% in</i>	95.9%	4.1%	<i>% out</i>	42.4%	57.6%			

Table 5. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-6, Cell 3</u>								
WY2001	3.0	0.1	3.1	0.1	0.3	0.4	2.7	86.6%
WY2002	4.2	0.1	4.3	0.2	0.3	0.5	3.8	88.5%
WY2003	5.6	0.1	5.7	0.2	0.2	0.4	5.3	93.3%
WY2004	3.1	0.1	3.2	0.3	0.2	0.5	2.7	82.9%
WY2005	1.9	0.1	2.0	0.2	0.3	0.5	1.5	76.6%
WY2006	2.8	0.1	2.9	0.9	0.2	1.1	1.8	61.6%
TOTAL	20.6	0.6	21.2	1.9	1.5	3.4	17.8	83.9%
<i>% in</i>	97.1%	2.9%	<i>% out</i>	55.5%	44.5%			
<u>STA-6, Cell 5</u>								
WY2001	7.6	0.3	7.9	0.3	0.6	0.9	6.9	88.1%
WY2002	10.5	0.3	10.8	1.0	1.4	2.4	8.3	77.2%
WY2003	10.1	0.3	10.4	0.8	1.3	2.1	8.2	79.3%
WY2004	3.6	0.3	3.9	1.0	1.0	2.0	1.9	48.7%
WY2005	2.6	0.3	2.9	1.2	0.5	1.7	1.2	41.0%
WY2006	3.4	0.2	3.6	0.5	0.6	1.1	2.5	70.1%
TOTAL	37.8	1.6	39.4	4.8	5.5	10.3	29.1	73.9%
<i>% in</i>	96.0%	4.0%	<i>% out</i>	46.6%	53.4%			

^a All budget terms expressed as metric tonnes of nitrogen.

^b I_s = surface water inflow; P = precipitation; O_s = surface water outflow; O_g = groundwater outflow; Retained = Σinflow – Σoutflow; %Ret = (retained/Σinflow)*100.

Table 6. Annual nitrite+nitrate-nitrogen budgets for flow-ways and treatment cells in the Everglades Protection Area STAs.^a

	Inflows ^b			Outflows ^b			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-1E, Cell 3</u>								
WY2006	0.4	-	0.4	0.3	-	0.3	0.1	25.0%
TOTAL	0.4	-	0.4	0.3	-	0.3	0.1	25.0%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1E, Cell 4N</u>								
WY2006	0.3	-	0.3	0.1	-	0.1	0.2	66.7%
TOTAL	0.3	-	0.3	0.1	-	0.1	0.2	66.7%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1E, Cell 4S</u>								
WY2006	0.8	-	0.8	0.7	-	0.7	0.1	12.5%
TOTAL	0.8	-	0.8	0.7	-	0.7	0.1	12.5%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 1</u>								
WY2001	42.9	0.8	43.7	32.9	2.6	35.5	8.2	18.7%
WY2002	66.9	1.2	68.1	56.6	2.5	59.1	9.0	13.2%
WY2003	154.2	1.0	155.2	125.2	2.6	127.8	27.4	17.6%
WY2004	137.2	0.8	138.0	97.2	2.8	100.0	38.0	27.6%
WY2005	159.8	1.0	160.8	188.4	1.9	190.3	-29.5	-18.3%
WY2006	112.2	1.0	113.2	65.6	0.3	65.9	47.4	41.8%
TOTAL	673.2	5.9	679.1	565.9	12.7	578.6	100.5	14.8%
<i>% in</i>	99.1%	0.9%	<i>% out</i>	97.8%	2.2%			
<u>STA-1W, Cell 2</u>								
WY2001	32.7	0.6	33.3	15.8	0.0	15.8	17.5	52.5%
WY2002	56.2	0.9	57.1	21.2	0.0	21.2	35.9	62.9%
WY2003	108.0	0.7	108.7	60.9	0.0	60.9	47.8	44.0%
WY2004	58.9	0.6	59.5	78.7	0.0	78.7	-19.2	-32.3%
WY2005	95.4	0.7	96.1	36.9	0.0	36.9	59.2	61.6%
WY2006	-	-	-	-	-	-	-	-
TOTAL	351.2	3.5	354.7	213.5	0.0	213.5	141.2	39.8%
<i>% in</i>	99.0%	1.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 3</u>								
WY2001	2.1	0.6	2.7	1.2	0.1	1.3	1.3	50.1%
WY2002	3.3	0.9	4.2	5.5	0.2	5.7	-1.5	-36.7%
WY2003	28.4	0.7	29.1	11.6	0.5	12.1	17.0	58.6%
WY2004	46.5	0.6	47.1	3.0	0.4	3.4	43.7	92.9%
WY2005	98.4	0.7	99.1	11.0	0.4	11.4	87.7	88.5%
WY2006	65.6	0.7	66.3	30.9	0.1	31.0	35.3	53.2%
TOTAL	244.3	4.1	248.4	63.2	1.7	64.9	183.5	73.9%
<i>% in</i>	98.3%	1.7%	<i>% out</i>	97.4%	2.6%			

Table 6. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-1W, Cell 4</u>								
WY2001	15.8	0.2	16.0	2.1	0.0	2.1	13.9	86.9%
WY2002	21.2	0.3	21.5	5.1	0.0	5.1	16.4	76.3%
WY2003	60.9	0.3	61.2	31.6	0.0	31.6	29.6	48.3%
WY2004	78.7	0.2	78.9	45.2	0.0	45.2	33.7	42.7%
WY2005	36.9	0.3	37.2	7.5	0.0	7.5	29.7	79.8%
WY2006	-	-	-	-	-	-	-	-
TOTAL	213.5	1.2	214.7	91.5	0.0	91.5	123.2	57.4%
<i>% in</i>	99.4%	0.6%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 5</u>								
WY2001	87.3	1.8	89.1	0.3	0.0	0.3	88.8	99.7%
WY2002	255.3	2.6	257.9	2.0	0.0	2.0	255.9	99.2%
WY2003	158.1	2.1	160.2	19.3	0.0	19.3	140.9	88.0%
WY2004	54.1	1.7	55.8	18.4	0.0	18.4	37.4	67.0%
WY2005	173.7	2.1	175.8	75.7	0.0	75.7	100.1	56.9%
WY2006	36.7	2.2	38.9	5.1	0.0	5.1	33.8	86.9%
TOTAL	765.2	12.5	777.7	120.8	0.0	120.8	656.9	84.5%
<i>% in</i>	98.4%	1.6%	<i>% out</i>	100.0%	0.0%			
<u>STA-2, Cell 1</u>								
WY2002	7.6	2.0	9.6	0.1	0.0	0.1	9.5	99.0%
WY2003	40.6	1.7	42.3	0.3	0.0	0.3	42.0	99.3%
WY2004	56.1	1.5	57.6	1.0	0.0	1.0	56.6	98.3%
WY2005	64.4	1.4	65.8	1.1	0.0	1.1	64.7	98.3%
WY2006	48.3	1.7	50.0	0.4	0.0	0.4	49.6	99.2%
TOTAL	217.0	8.2	225.2	2.9	0.0	2.9	222.3	98.7%
<i>% in</i>	96.3%	3.7%	<i>% out</i>	100.0%	0.0%			
<u>STA-2, Cell 2</u>								
WY2002	14.6	2.2	16.8	0.8	0.0	0.8	16.0	95.2%
WY2003	73.4	1.9	75.3	2.6	0.0	2.6	72.6	96.5%
WY2004	102.5	1.7	104.2	22.6	0.0	22.6	81.5	78.3%
WY2005	182.1	1.6	183.7	51.3	0.0	51.3	132.4	72.1%
WY2006	127.4	1.9	129.3	33.1	0.9	34.0	95.2	73.7%
TOTAL	500.0	9.2	509.2	110.4	1.0	111.4	397.8	78.1%
<i>% in</i>	98.2%	1.8%	<i>% out</i>	99.1%	0.9%			
<u>STA-2, Cell 3</u>								
WY2002	20.9	2.2	23.1	1.4	1.3	2.7	20.4	88.3%
WY2003	82.7	1.9	84.6	3.7	2.1	5.8	78.7	93.1%
WY2004	145.3	1.7	147.0	23.7	7.5	31.2	115.8	78.8%
WY2005	168.5	1.6	170.1	50.1	7.2	57.3	112.8	66.3%
WY2006	90.8	1.9	92.7	60.8	6.6	67.4	25.3	27.3%
TOTAL	508.2	9.2	517.4	139.7	24.7	164.4	352.9	68.2%
<i>% in</i>	98.2%	1.8%	<i>% out</i>	85.0%	15.0%			

Table 6. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-3/4, Cell 1A</u>								
WY2005	22.0	-	22.0	2.5	-	2.5	19.5	88.6%
WY2006	205.1	-	205.1	30.8	-	30.8	174.3	85.0%
TOTAL	227.1	-	227.1	33.3	-	33.3	193.8	85.3%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 1B</u>								
WY2005	2.5	-	2.5	6.6	-	6.6	-4.1	-164.0%
WY2006	30.8	-	30.8	20.4	-	20.4	10.4	33.8%
TOTAL	33.3	-	33.3	27.0	-	27.0	6.3	18.9%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 2A</u>								
WY2005	88.5	-	88.5	0.6	-	0.6	87.9	99.3%
WY2006	379.8	-	379.8	29.6	-	29.6	350.2	92.2%
TOTAL	468.3	-	468.3	30.2	-	30.2	438.1	93.6%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 2B</u>								
WY2005	0.9	-	0.9	25.0	-	25.0	-24.1	-2678%
WY2006	42.0	-	42.0	86.0	-	86.0	-44.0	-104.8%
TOTAL	42.9	-	42.9	111.0	-	111.0	-68.1	-158.7%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 3</u>								
WY2006	107.7	-	107.7	3.2	-	3.2	104.5	97.0%
TOTAL	107.7	-	107.7	3.2	-	3.2	104.5	97.0%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-5, North Flow-way</u>								
WY2001	3.4	1.3	4.7	0.2	0.3	0.5	4.2	89.5%
WY2002	6.0	1.2	7.2	1.3	0.3	1.6	5.6	77.4%
WY2003	8.1	1.6	9.7	2.9	0.5	3.4	6.4	65.5%
WY2004	17.3	1.6	18.9	1.2	0.5	1.7	17.2	91.2%
WY2005	7.8	1.3	9.1	1.1	0.2	1.3	7.8	86.1%
WY2006	13.2	1.4	14.6	3.6	0.5	4.1	10.5	72.1%
TOTAL	55.8	8.3	64.1	10.3	2.2	12.5	51.7	80.6%
<i>% in</i>	87.0%	13.0%	<i>% out</i>	82.7%	17.3%			
<u>STA-5, South Flow-way</u>								
WY2001	6.9	1.3	8.2	0.4	1.6	2.0	6.2	75.3%
WY2002	6.3	1.2	7.5	0.5	0.9	1.4	6.1	81.7%
WY2003	5.0	1.6	6.6	0.8	1.0	1.8	4.9	73.4%
WY2004	7.6	1.6	9.2	0.4	1.2	1.6	7.6	82.7%
WY2005	2.1	1.3	3.4	0.6	0.8	1.4	2.0	58.7%
WY2006	7.9	1.4	9.3	1.1	0.7	1.8	7.4	80.3%
TOTAL	35.8	8.3	44.1	3.8	6.2	10.0	34.2	77.4%
<i>% in</i>	81.1%	18.9%	<i>% out</i>	38.1%	61.9%			

Table 6. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-6, Cell 3</u>								
WY2001	3.2	0.2	3.4	0.0	0.0	0.0	3.4	100.0%
WY2002	4.5	0.2	4.7	0.1	0.2	0.3	4.4	93.3%
WY2003	5.1	0.2	5.3	0.1	0.1	0.2	5.1	95.8%
WY2004	9.6	0.2	9.8	0.2	0.4	0.6	9.2	94.3%
WY2005	1.4	0.2	1.6	0.1	0.2	0.3	1.3	83.6%
WY2006	0.8	0.2	1.0	0.2	0.1	0.3	0.7	73.9%
TOTAL	24.6	1.2	25.8	0.7	0.9	1.6	24.2	93.7%
<i>% in</i>	95.5%	4.5%	<i>% out</i>	43.4%	56.6%			
<u>STA-6, Cell 5</u>								
WY2001	9.0	0.5	9.5	0.1	0.4	0.5	9.0	94.7%
WY2002	12.3	0.5	12.8	0.1	0.5	0.6	12.2	95.3%
WY2003	8.9	0.5	9.4	0.1	0.4	0.5	8.8	94.2%
WY2004	10.3	0.5	10.8	0.1	0.5	0.6	10.2	94.2%
WY2005	1.3	0.5	1.8	0.1	0.1	0.2	1.6	88.9%
WY2006	0.9	0.4	1.3	0.1	0.1	0.2	1.1	82.4%
TOTAL	42.7	3.0	45.7	0.6	2.1	2.7	43.0	94.1%
<i>% in</i>	93.5%	6.5%	<i>% out</i>	22.2%	77.8%			

^a All budget terms expressed as metric tonnes of nitrogen.

^b I_s = surface water inflow; P = precipitation; O_s = surface water outflow; O_g = groundwater outflow; Retained = Σinflow – Σoutflow; %Ret = (retained/Σinflow)*100.

Table 7. Annual alkalinity budgets for flow-ways and treatment cells in the Everglades Protection Area STAs.^a

	Inflows ^b			Outflows ^b			Retained	% Ret
	I _s	P	Σinflow	O _s	O _q	Σoutflow		
<u>STA-1E, Cell 3</u>								
WY2006	4,209	-	4,209	7,020	-	7,020	-2,811	-66.8%
TOTAL	4,209	-	4,209	7,020	-	7,020	-2,811	-66.8%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1E, Cell 4N</u>								
WY2006	7,020	-	7,020	1,191	-	1,191	5,829	83.0%
TOTAL	7,020	-	7,020	1,191	-	1,191	5,829	83.0%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1E, Cell 4S</u>								
WY2006	3,693	-	3,693	3,589	-	3,589	104	2.8%
TOTAL	3,693	-	3,693	3,589	-	3,589	104	2.8%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 1</u>								
WY2001	39,083	5.2	39,088	26,017	2,245	28,262	10,827	27.7%
WY2002	40,400	7.8	40,408	40,652	1,668	42,320	-1,912	-4.7%
WY2003	63,066	6.2	63,072	67,143	1,228	68,371	-5,299	-8.4%
WY2004	57,601	5.0	57,606	56,957	1,371	58,328	-722	-1.3%
WY2005	50,941	6.2	50,947	62,809	615	63,424	-12,477	-24.5%
WY2006	42,764	6.5	42,770	40,262	123	40,385	2,385	5.6%
TOTAL	293,855	36.8	293,892	293,840	7,251	301,091	-7,199	-2.4%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	97.6%	2.4%			
<u>STA-1W, Cell 2</u>								
WY2001	11,244	3.7	11,248	12,665	0	12,665	-1,417	-12.6%
WY2002	17,777	5.5	17,783	15,763	0	15,763	2,020	11.4%
WY2003	32,389	4.4	32,393	31,311	0	31,311	1,082	3.3%
WY2004	22,774	3.6	22,778	41,237	0	41,237	-18,459	-81.0%
WY2005	22,461	4.4	22,465	12,393	0	12,393	10,072	44.8%
WY2006	-	-	-	-	-	-	-	-
TOTAL	106,645	21.6	106,667	113,369	0	113,369	-6,702	-6.3%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 3</u>								
WY2001	22,470	3.6	22,474	18,694	1,767	20,461	2,012	9.0%
WY2002	35,574	5.4	35,579	28,802	1,495	30,297	5,282	14.8%
WY2003	51,242	4.3	51,246	43,408	1,169	44,577	6,669	13.0%
WY2004	46,247	3.5	46,250	33,491	1,212	34,703	11,547	25.0%
WY2005	44,554	4.3	44,558	35,655	519	36,174	8,384	18.8%
WY2006	40,262	4.5	40,266	31,404	87	31,491	8,775	21.8%
TOTAL	240,349	25.6	240,375	191,454	6,250	197,704	42,670	17.8%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	96.8%	3.2%			

Table 7. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-1W, Cell 4</u>								
WY2001	12,665	1.3	12,666	9,073	0	9,073	3,593	28.4%
WY2002	15,763	2.0	15,765	21,565	0	21,565	-5,800	-36.8%
WY2003	31,311	1.6	31,313	54,737	0	54,737	-23,424	-74.8%
WY2004	41,237	1.3	41,238	41,290	0	41,290	-52	-0.1%
WY2005	12,393	1.6	12,395	26,162	0	26,162	-13,767	-111.1%
WY2006	-	-	-	-	-	-	-	-
TOTAL	113,369	7.6	113,377	152,827	0	152,827	-39,450	-34.8%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 5</u>								
WY2001	43,464	11	43,475	4,670	0	4,670	38,805	89.3%
WY2002	169,369	16	169,385	37,011	0	37,011	132,374	78.1%
WY2003	79,177	13	79,190	70,822	0	70,822	8,368	10.6%
WY2004	31,449	11	31,460	29,037	0	29,037	2,423	7.7%
WY2005	38,418	13	38,431	34,842	0	34,842	3,589	9.3%
WY2006	15,666	14	15,680	5,400	0	5,400	10,280	65.6%
TOTAL	377,543	78	377,621	181,782	0	181,782	195,839	51.9%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	100.0%	0.0%			
<u>STA-2, Cell 1</u>								
WY2002	16,464	12	16,476	5,399	0	5,399	11,077	67.2%
WY2003	17,725	10	17,735	10,050	0	10,050	7,685	43.3%
WY2004	28,232	9	28,241	18,540	0	18,540	9,701	34.4%
WY2005	22,970	9	22,979	20,283	0	20,283	2,696	11.7%
WY2006	27,501	10	27,511	22,360	0	22,360	5,151	18.7%
TOTAL	112,892	51	112,943	76,632	0	76,632	36,311	32.1%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	100.0%	0.0%			
<u>STA-2, Cell 2</u>								
WY2002	27,951	14	27,965	28,933	60	28,993	-1,028	-3.7%
WY2003	45,516	12	45,528	32,111	21	32,132	13,395	29.4%
WY2004	39,323	10	39,333	35,403	38	35,441	3,893	9.9%
WY2005	59,891	10	59,901	53,462	6	53,468	6,433	10.7%
WY2006	58,252	12	58,264	40,637	701	41,338	16,925	29.0%
TOTAL	230,933	57	230,990	190,546	825	191,371	39,619	17.2%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	99.6%	0.4%			
<u>STA-2, Cell 3</u>								
WY2002	45,485	14	45,499	27,829	8,594	36,423	9,075	19.9%
WY2003	56,340	12	56,352	34,118	5,303	39,421	16,930	30.0%
WY2004	47,675	10	47,685	36,978	5,380	42,358	5,328	11.2%
WY2005	58,191	10	58,201	44,582	4,006	48,588	9,612	16.5%
WY2006	48,030	12	48,042	36,017	3,681	39,698	8,344	17.4%
TOTAL	255,721	57	255,778	179,524	26,964	206,488	49,290	19.3%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	86.9%	13.1%			

Table 7. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-3/4, Cell 1A</u>								
WY2005	35,725	-	35,725	44,208	-	44,208	-8,483	-23.7%
WY2006	109,833	-	109,833	149,262	-	149,262	-39,429	-35.9%
TOTAL	145,558	-	145,558	193,470	-	193,470	-47,912	-32.9%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 1B</u>								
WY2005	44,208	-	44,208	61,270	-	61,270	-17,062	-38.6%
WY2006	149,165	-	149,165	120,019	-	120,019	29,146	19.5%
TOTAL	193,373	-	193,373	181,289	-	181,289	12,084	6.2%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 2A</u>								
WY2005	21,821	-	21,821	19,484	-	19,484	2,337	10.7%
WY2006	81,668	-	81,668	72,176	-	72,176	9,492	11.6%
TOTAL	103,489	-	103,489	91,660	-	91,660	11,829	11.4%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 2B</u>								
WY2005	26,325	-	26,325	18,326	-	18,326	7,999	30.4%
WY2006	96,135	-	96,135	66,283	-	66,283	29,852	31.1%
TOTAL	122,460	-	122,460	84,609	-	84,609	37,851	30.9%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 3</u>								
WY2006	26,291	-	26,291	30,049	-	30,049	-3,758	-14.3%
TOTAL	26,291	-	26,291	30,049	-	30,049	-3,758	-14.3%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-5, North Flow-way</u>								
WY2001	9,904	8	9,912	4,461	2,391	6,852	3,060	30.9%
WY2002	20,034	8	20,042	14,918	2,028	16,946	3,096	15.4%
WY2003	20,343	10	20,353	19,334	1,863	21,197	-844	-4.1%
WY2004	23,203	10	23,213	17,033	1,984	19,017	4,196	18.1%
WY2005	18,720	8	18,728	12,371	846	13,217	5,511	29.4%
WY2006	23,587	9	23,596	19,597	1,449	21,046	2,550	10.8%
TOTAL	115,791	52	115,843	87,714	10,561	98,275	17,567	15.2%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	89.3%	10.7%			
<u>STA-5, South Flow-way</u>								
WY2001	12,850	8	12,858	4,256	7,253	11,509	1,349	10.5%
WY2002	21,297	8	21,305	10,236	7,262	17,498	3,807	17.9%
WY2003	21,989	10	21,999	13,305	8,200	21,505	494	2.2%
WY2004	17,285	10	17,295	8,562	8,230	16,792	503	2.9%
WY2005	13,288	8	13,296	10,844	8,551	19,395	-6,099	-45.9%
WY2006	20,927	9	20,936	15,965	4,499	20,464	472	2.3%
TOTAL	107,636	52	107,688	63,168	43,995	107,163	525	0.5%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	58.9%	41.1%			

Table 7. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-6, Cell 3</u>								
WY2001	5,221	1.3	5,222	2,710	2,176	4,886	337	6.4%
WY2002	7,299	1.2	7,300	3,361	1,590	4,951	2,349	32.2%
WY2003	9,275	1.2	9,276	4,770	1,148	5,918	3,358	36.2%
WY2004	6,740	1.2	6,741	5,783	1,609	7,392	-651	-9.7%
WY2005	6,006	1.3	6,007	3,168	1,905	5,073	935	15.6%
WY2006	4,371	1.0	4,372	2,931	475	3,406	966	22.1%
TOTAL	38,912	7.2	38,919	22,723	8,902	31,625	7,294	18.7%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	71.9%	28.1%			
<u>STA-6, Cell 5</u>								
WY2001	8,302	3.4	8,305	4,090	2,470	6,560	1,745	21.0%
WY2002	11,376	3.0	11,379	5,407	3,507	8,914	2,465	21.7%
WY2003	10,539	3.0	10,542	5,975	3,742	9,717	825	7.8%
WY2004	6,832	3.2	6,835	6,264	3,393	9,657	-2,822	-41.3%
WY2005	5,296	3.2	5,299	3,231	1,155	4,386	913	17.2%
WY2006	3,361	2.7	3,364	2,788	1,369	4,157	-793	-23.6%
TOTAL	45,706	18.4	45,724	27,755	15,636	43,391	2,334	5.1%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	64.0%	36.0%			

^a All budget terms expressed as metric tonnes of CaCO₃.

^b I_s = surface water inflow; P = precipitation; O_s = surface water outflow; O_g = groundwater outflow; Retained = Σinflow – Σoutflow; %Ret = (retained/Σinflow)*100.

Table 8. Annual calcium budgets for flow-ways and treatment cells in the Everglades Protection Area STAs.^a

	Inflows ^b			Outflows ^b			Retained	% Ret
	I _s	P	Σinflow	O _s	O _q	Σoutflow		
<u>STA-1E, Cell 3</u>								
WY2006	1,628	-	1,628	2,613	-	2,613	-985	-60.5%
TOTAL	1,628	-	1,628	2,613	-	2,613	-985	-60.5%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1E, Cell 4N</u>								
WY2006	2,613	-	2,613	431	-	431	2,182	83.5%
TOTAL	2,613	0	2,613	431	0	431	2,182	83.5%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1E, Cell 4S</u>								
WY2006	1,322	-	1,322	1,352	-	1,352	-30	-2.3%
TOTAL	1,322	0	1,322	1,352	0	1,352	-30	-2.3%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 1</u>								
WY2001	11,557	1.1	11,558	7,624	661	8,285	3,273	28.3%
WY2002	14,103	1.6	14,105	13,570	569	14,139	-35	-0.2%
WY2003	21,882	1.3	21,883	23,078	424	23,502	-1,619	-7.4%
WY2004	19,966	1.0	19,967	19,488	472	19,960	7	0.0%
WY2005	17,833	1.3	17,834	22,295	217	22,512	-4,678	-26.2%
WY2006	14,739	1.3	14,740	13,766	42	13,808	932	6.3%
TOTAL	100,080	7.6	100,088	99,821	2,386	102,207	-2,119	-2.1%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	97.7%	2.3%			
<u>STA-1W, Cell 2</u>								
WY2001	3,262	0.8	3,263	3,853	0	3,853	-590	-18.1%
WY2002	6,046	1.1	6,047	5,243	0	5,243	804	13.3%
WY2003	11,158	0.9	11,159	10,907	0	10,907	252	2.3%
WY2004	7,871	0.7	7,872	14,117	0	14,117	-6,245	-79.3%
WY2005	8,247	0.9	8,248	4,293	0	4,293	3,955	48.0%
WY2006	-	-	-	-	-	-	-	-
TOTAL	36,584	4.5	36,588	38,413	0	38,413	-1,825	-5.0%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 3</u>								
WY2001	6,594	0.7	6,595	5,620	525	6,145	450	6.8%
WY2002	11,637	1.1	11,638	9,481	491	9,972	1,667	14.3%
WY2003	17,620	0.9	17,621	14,516	397	14,913	2,708	15.4%
WY2004	15,692	0.7	15,693	11,147	407	11,554	4,138	26.4%
WY2005	15,464	0.9	15,465	11,973	177	12,150	3,315	21.4%
WY2006	13,766	0.9	13,767	10,609	30	10,639	3,128	22.7%
TOTAL	80,773	5.3	80,778	63,346	2,026	65,372	15,406	19.1%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	96.9%	3.1%			

Table 8. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-1W, Cell 4</u>								
WY2001	3,853	0.3	3,853	2,568	0	2,568	1,285	33.4%
WY2002	5,243	0.4	5,243	6,277	0	6,277	-1,034	-19.7%
WY2003	10,907	0.3	10,907	15,003	0	15,003	-4,096	-37.5%
WY2004	14,117	0.3	14,117	11,186	0	11,186	2,931	20.8%
WY2005	4,293	0.3	4,293	6,781	0	6,781	-2,488	-57.9%
WY2006	-	-	-	-	-	-	-	-
TOTAL	38,413	1.6	38,415	41,815	0	41,815	-3,400	-8.9%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	100.0%	0.0%			
<u>STA-1W, Cell 5</u>								
WY2001	13,864	2.3	13,866	1,434	0	1,434	12,432	89.7%
WY2002	59,627	3.4	59,630	12,452	0	12,452	47,178	79.1%
WY2003	28,296	2.7	28,299	24,185	0	24,185	4,114	14.5%
WY2004	10,454	2.2	10,456	9,873	0	9,873	583	5.6%
WY2005	14,023	2.7	14,026	12,095	0	12,095	1,931	13.8%
WY2006	5,699	2.8	5,702	1,691	0	1,691	4,011	70.3%
TOTAL	131,963	16.1	131,979	61,730	0	61,730	70,249	53.2%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	100.0%	0.0%			
<u>STA-2, Cell 1</u>								
WY2002	4,744	2.5	4,747	1,371	0	1,371	3,376	71.1%
WY2003	5,209	2.1	5,211	2,755	0	2,755	2,456	47.1%
WY2004	8,633	1.9	8,635	5,240	0	5,240	3,395	39.3%
WY2005	6,983	1.8	6,985	6,105	0	6,105	880	12.6%
WY2006	8,400	2.2	8,402	5,778	0	5,778	2,624	31.2%
TOTAL	33,969	10.6	33,980	21,249	0	21,249	12,731	37.5%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	100.0%	0.0%			
<u>STA-2, Cell 2</u>								
WY2002	7,549	2.8	7,552	7,461	16	7,477	75	1.0%
WY2003	13,058	2.4	13,060	8,640	6	8,646	4,415	33.8%
WY2004	12,303	2.2	12,305	10,659	12	10,671	1,635	13.3%
WY2005	18,893	2.1	18,895	16,569	2	16,571	2,324	12.3%
WY2006	18,432	2.4	18,434	12,432	218	12,650	5,784	31.4%
TOTAL	70,235	11.8	70,247	55,761	253	56,014	14,233	20.3%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	99.5%	0.5%			
<u>STA-2, Cell 3</u>								
WY2002	11,787	2.8	11,790	6,108	2,050	8,158	3,632	30.8%
WY2003	15,503	2.4	15,505	8,035	1,350	9,385	6,120	39.5%
WY2004	14,719	2.2	14,721	10,749	1,612	12,361	2,361	16.0%
WY2005	17,663	2.1	17,665	12,952	1,190	14,142	3,523	19.9%
WY2006	15,304	2.4	15,306	10,105	1,100	11,205	4,101	26.8%
TOTAL	74,976	11.8	74,988	47,949	7,301	55,250	19,737	26.3%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	86.8%	13.2%			

Table 8. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _q	Σoutflow		
<u>STA-3/4, Cell 1A</u>								
WY2005	13,444	-	13,444	15,612	-	15,612	-2,168	-16.1%
WY2006	40,094	-	40,094	53,037	-	53,037	-12,943	-32.3%
TOTAL	53,538	-	53,538	68,649	-	68,649	-15,111.0	-28.2%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 1B</u>								
WY2005	15,612	-	15,612	14,797	-	14,797	815	5.2%
WY2006	53,004	-	53,004	43,168	-	43,168	9,836	18.6%
TOTAL	68,616	-	68,616	57,965	-	57,965	10,651	15.5%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 2A</u>								
WY2005	8,773	-	8,773	7,506	-	7,506	1,267	14.4%
WY2006	32,647	-	32,647	27,968	-	27,968	4,679	14.3%
TOTAL	41,420	-	41,420	35,474	-	35,474	5,946	14.4%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 2B</u>								
WY2005	10,170	-	10,170	5,264	-	5,264	4,906	48.2%
WY2006	37,298	-	37,298	26,353	-	26,353	10,945	29.3%
TOTAL	47,468	-	47,468	31,617	-	31,617	15,851	33.4%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-3/4, Cell 3</u>								
WY2006	10,747	-	10,747	11,518	-	11,518	-771	-7.2%
TOTAL	10,747	-	10,747	11,518	-	11,518	-771.0	-7.2%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%			
<u>STA-5, North Flow-way</u>								
WY2001	3,793	1.7	3,795	1,336	810	2,146	1,649	43.5%
WY2002	9,781	1.6	9,783	5,284	843	6,127	3,655	37.4%
WY2003	10,046	2.1	10,048	6,229	743	6,972	3,076	30.6%
WY2004	8,213	2.0	8,215	5,667	681	6,348	1,867	22.7%
WY2005	6,727	1.6	6,729	4,502	306	4,808	1,921	28.5%
WY2006	8,479	1.8	8,481	7,135	524	7,659	822	9.7%
TOTAL	47,039	10.7	47,050	30,153	3,907	34,060	12,989	27.6%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	88.5%	11.5%			
<u>STA-5, South Flow-way</u>								
WY2001	4,759	1.7	4,761	1,932	2,974	4,906	-145	-3.1%
WY2002	9,151	1.6	9,153	4,714	3,230	7,944	1,208	13.2%
WY2003	9,416	2.1	9,418	5,914	3,578	9,492	-74	-0.8%
WY2004	6,090	2.0	6,092	2,897	2,841	5,738	354	5.8%
WY2005	4,675	1.6	4,677	3,712	2,967	6,679	-2,003	-42.8%
WY2006	7,459	1.8	7,461	5,540	1,582	7,122	339	4.5%
TOTAL	41,550	10.7	41,561	24,709	17,173	41,882	-321	-0.8%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	59.0%	41.0%			

Table 8. Continued.

	Inflows			Outflows			Retained	% Ret
	I _s	P	Σinflow	O _s	O _g	Σoutflow		
<u>STA-6, Cell 3</u>								
WY2001	2,005	0.3	2,005	1,018	826	1,844	161	8.0%
WY2002	2,803	0.2	2,803	1,304	614	1,918	886	31.6%
WY2003	3,540	0.2	3,540	1,888	446	2,334	1,206	34.1%
WY2004	2,571	0.3	2,571	2,244	619	2,863	-292	-11.4%
WY2005	2,282	0.3	2,282	1,191	720	1,911	371	16.3%
WY2006	1,598	0.2	1,598	1,083	174	1,257	341	21.3%
TOTAL	14,799	1.5	14,800	8,728	3,400	12,128	2,673	18.1%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	72.0%	28.0%			
<u>STA-6, Cell 5</u>								
WY2001	3,133	0.7	3,134	1,616	954	2,570	564	18.0%
WY2002	4,293	0.6	4,294	2,113	1,347	3,460	834	19.4%
WY2003	3,989	0.6	3,990	2,405	1,461	3,866	124	3.1%
WY2004	2,600	0.7	2,601	2,424	1,302	3,726	-1,126	-43.3%
WY2005	1,999	0.7	2,000	1,185	430	1,615	385	19.3%
WY2006	1,229	0.6	1,230	1,021	501	1,522	-292	-23.8%
TOTAL	17,243	3.8	17,247	10,764	5,994	16,758	489	2.8%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	64.2%	35.8%			

^a All budget terms expressed as metric tonnes of calcium ion.

^b I_s = surface water inflow; P = precipitation; O_s = surface water outflow; O_g = groundwater outflow; Retained = Σinflow – Σoutflow; %Ret = (retained/Σinflow)*100.

Table 9. Annual chloride budgets for flow-ways and treatment cells in the Everglades Protection Area STAs.^a

	Inflows ^b			Outflows ^b			Retained	% Ret	ε
	I _s	P	Σinflow	O _s	O _g	Σoutflow			
<u>STA-1E, Cell 3</u>									
WY2006	1,686	-	1,686	2,721	-	2,721	-1,035	-61.4%	-47.0%
TOTAL	1,686	-	1,686	2,721	-	2,721	-1,035	-61.4%	-47.0%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%				
<u>STA-1E, Cell 4N</u>									
WY2006	2,721	-	2,721	503	-	503	2,218	81.5%	137.6%
TOTAL	2,721	-	2,721	503	-	503	2,218	81.5%	137.6%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%				
<u>STA-1E, Cell 4S</u>									
WY2006	1,643	-	1,643	5,433	-	5,433	-3,790	-230.7%	-107.1%
TOTAL	1,643	-	1,643	5,433	-	5,433	-3,790	-230.7%	-107.1%
<i>% in</i>	100.0%	0.0%	<i>% out</i>	100.0%	0.0%				
<u>STA-1W, Cell 1</u>									
WY2001	21,699	4.5	21,704	15,186	1,278	16,464	5,240	24.1%	27.5%
WY2002	20,309	6.8	20,316	22,767	885	23,652	-3,336	-16.4%	-15.2%
WY2003	36,778	5.5	36,783	39,792	722	40,514	-3,731	-10.1%	-9.7%
WY2004	31,869	4.4	31,873	32,101	766	32,867	-993	-3.1%	-3.1%
WY2005	23,649	5.4	23,654	28,476	282	28,758	-5,104	-21.6%	-19.5%
WY2006	22,738	5.7	22,744	21,706	66	21,772	972	4.3%	4.4%
TOTAL	157,042	32.4	157,074	160,028	3,999	164,027	-6,953	-4.4%	-4.3%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	97.6%	2.4%				
<u>STA-1W, Cell 2</u>									
WY2001	6,254	3.2	6,257	7,200	0	7,200	-943	-15.1%	-14.0%
WY2002	9,416	4.9	9,421	9,236	0	9,236	185	2.0%	2.0%
WY2003	18,654	3.9	18,658	19,417	0	19,417	-759	-4.1%	-4.0%
WY2004	12,583	3.2	12,586	24,108	0	24,108	-11,522	-91.5%	-62.8%
WY2005	9,419	3.9	9,423	5,943	0	5,943	3,480	36.9%	45.3%
WY2006	-	-	-	-	-	-	-	-	-
TOTAL	56,326	19.1	56,345	65,904	0	65,904	-9,559	-17.0%	-15.6%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	100.0%	0.0%				
<u>STA-1W, Cell 3</u>									
WY2001	14,185	3.2	14,188	11,333	1,093	12,426	1,762	12.4%	13.2%
WY2002	21,245	4.8	21,250	16,078	863	16,941	4,309	20.3%	22.6%
WY2003	31,802	3.8	31,806	24,930	698	25,628	6,178	19.4%	21.5%
WY2004	27,169	3.1	27,172	19,181	703	19,884	7,288	26.8%	31.0%
WY2005	21,433	3.8	21,437	18,359	258	18,617	2,820	13.2%	14.1%
WY2006	21,706	4.0	21,710	16,685	47	16,732	4,978	22.9%	25.9%
TOTAL	137,540	22.6	137,563	106,566	3,663	110,229	27,334	19.9%	22.1%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	96.7%	3.3%				

Table 9. Continued.

	Inflows			Outflows			Retained	% Ret	ε
	I _s	P	Σinflow	O _s	O _q	Σoutflow			
<u>STA-1W, Cell 4</u>									
WY2001	7,200	1.1	7,201	6,765	0	6,765	436	6.1%	6.2%
WY2002	9,236	1.7	9,238	17,537	0	17,537	-8,299	-89.8%	-62.0%
WY2003	19,417	1.4	19,418	51,867	0	51,867	-32,449	-167.1%	-91.0%
WY2004	24,108	1.1	24,109	39,146	0	39,146	-15,037	-62.4%	-47.5%
WY2005	5,943	1.4	5,944	26,333	0	26,333	-20,389	-343.0%	-126.3%
WY2006	-	-	-	-	-	-	-	-	-
TOTAL	65,904	6.7	65,911	141,648	0	141,648	-75,737	-114.9%	-73.0%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	100.0%	0.0%				
<u>STA-1W, Cell 5</u>									
WY2001	22,742	9.6	22,752	2,931	0	2,931	19,821	87.1%	154.4%
WY2002	86,547	14.4	86,561	21,266	0	21,266	65,295	75.4%	121.1%
WY2003	47,868	11.6	47,880	42,432	0	42,432	5,448	11.4%	12.1%
WY2004	18,683	9.4	18,692	18,101	0	18,101	591	3.2%	3.2%
WY2005	18,019	11.5	18,030	18,073	0	18,073	-43	-0.2%	-0.2%
WY2006	8,089	12.0	8,101	3,823	0	3,823	4,278	52.8%	71.8%
TOTAL	201,948	68.5	202,017	106,626	0	106,626	95,391	47.2%	61.8%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	100.0%	0.0%				
<u>STA-2, Cell 1</u>									
WY2002	9,210	10.7	9,221	3,777	0	3,777	5,444	59.0%	83.8%
WY2003	9,869	9.1	9,878	6,115	0	6,115	3,763	38.1%	47.1%
WY2004	14,522	8.2	14,530	10,602	0	10,602	3,928	27.0%	31.3%
WY2005	11,122	7.9	11,130	10,277	0	10,277	853	7.7%	8.0%
WY2006	12,675	9.2	12,684	14,079	0	14,079	-1,395	-11.0%	-10.4%
TOTAL	57,398	45.0	57,443	44,850	0	44,850	12,593	21.9%	24.6%
<i>% in</i>	99.9%	0.1%	<i>% out</i>	100.0%	0.0%				
<u>STA-2, Cell 2</u>									
WY2002	16,230	11.9	16,242	19,339	37	19,376	-3,134	-19.3%	-17.6%
WY2003	24,062	10.1	24,072	18,894	12	18,906	5,166	21.5%	24.0%
WY2004	17,568	9.2	17,577	18,035	18	18,053	-476	-2.7%	-2.7%
WY2005	27,811	8.8	27,820	25,320	3	25,323	2,497	9.0%	9.4%
WY2006	27,003	10.2	27,013	19,821	333	20,154	6,859	25.4%	29.1%
TOTAL	112,674	50.2	112,724	101,409	403	101,812	10,912	9.7%	10.2%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	99.6%	0.4%				
<u>STA-2, Cell 3</u>									
WY2002	26,679	11.9	26,691	22,372	5,902	28,274	-1,583	-5.9%	-5.8%
WY2003	30,516	10.1	30,526	26,804	3,459	30,263	263	0.9%	0.9%
WY2004	21,300	9.2	21,309	22,514	2,806	25,320	-4,011	-18.8%	-17.2%
WY2005	27,733	8.8	27,742	23,843	2,023	25,866	1,876	6.8%	7.0%
WY2006	22,605	10.2	22,615	21,807	1,965	23,772	-1,156	-5.1%	-5.0%
TOTAL	128,833	50.2	128,883	117,340	16,154	133,494	-4,611	-3.6%	-3.5%
<i>% in</i>	>99.9%	<0.1%	<i>% out</i>	87.9%	12.1%				

Table 9. Continued.

	Inflows			Outflows			Retained	% Ret	ε
	I _s	P	Σinflow	O _s	O _q	Σoutflow			
<u>STA-3/4, Cell 1A</u>									
WY2005	11,203	-	11,203	15,027	-	15,027	-3,824	-34.1%	-29.2%
WY2006	34,683	-	34,683	52,932	-	52,932	-18,249	-52.6%	-41.7%
TOTAL	45,886	-	45,886	67,959	-	67,959	-22,073	-48.1%	-38.8%
% in	100.0%	0.0%	% out	100.0%	0.0%				
<u>STA-3/4, Cell 1B</u>									
WY2005	15,027	-	15,027	20,768	-	20,768	-5,741	-38.2%	-32.1%
WY2006	52,893	-	52,893	38,947	-	38,947	13,946	26.4%	30.4%
TOTAL	67,920	-	67,920	59,715	-	59,715	8,205	12.1%	12.9%
% in	100.0%	0.0%	% out	100.0%	0.0%				
<u>STA-3/4, Cell 2A</u>									
WY2005	6,657	-	6,657	6,589	-	6,589	68	1.0%	1.0%
WY2006	27,639	-	27,639	25,948	-	25,948	1,691	6.1%	6.3%
TOTAL	34,296	-	34,296	32,537	-	32,537	1,759	5.1%	5.3%
% in	100.0%	0.0%	% out	100.0%	0.0%				
<u>STA-3/4, Cell 2B</u>									
WY2005	8,847	-	8,847	6,960	-	6,960	1,887	21.3%	23.9%
WY2006	34,460	-	34,460	25,211	-	25,211	9,249	26.8%	31.0%
TOTAL	43,307	-	43,307	32,171	-	32,171	11,136	25.7%	29.5%
% in	100.0%	0.0%	% out	100.0%	0.0%				
<u>STA-3/4, Cell 3</u>									
WY2006	8,798	-	8,798	9,428	-	9,428	-630	-7.2%	-6.9%
TOTAL	8,798	-	8,798	9,428	-	9,428	-630	-7.2%	-6.9%
% in	100.0%	0.0%	% out	100.0%	0.0%				
<u>STA-5, North Flow-way</u>									
WY2001	4,778	7.2	4,785	1,688	1,021	2,709	2,076	43.4%	55.4%
WY2002	7,311	6.6	7,318	4,764	692	5,456	1,861	25.4%	29.1%
WY2003	7,348	8.9	7,357	5,701	608	6,309	1,048	14.2%	15.3%
WY2004	7,713	8.5	7,721	6,219	691	6,910	811	10.5%	11.1%
WY2005	6,649	7.0	6,656	4,525	305	4,830	1,826	27.4%	31.8%
WY2006	6,579	7.5	6,586	4,415	363	4,778	1,808	27.5%	31.8%
TOTAL	40,378	45.6	40,424	27,312	3,681	30,993	9,430	23.3%	26.4%
% in	99.9%	0.1%	% out	88.1%	11.9%				
<u>STA-5, South Flow-way</u>									
WY2001	3,503	7.2	3,510	1,297	2,091	3,388	123	3.5%	3.6%
WY2002	5,368	6.6	5,375	2,368	1,754	4,122	1,253	23.3%	26.4%
WY2003	5,212	8.9	5,221	2,981	1,890	4,871	350	6.7%	6.9%
WY2004	3,969	8.5	3,977	1,925	1,870	3,795	183	4.6%	4.7%
WY2005	3,564	7.0	3,571	3,325	2,452	5,777	-2,206	-61.8%	-47.2%
WY2006	4,576	7.5	4,583	3,922	1,043	4,965	-381	-8.3%	-8.0%
TOTAL	26,192	45.6	26,238	15,818	11,099	26,917	-679	-2.6%	-2.6%
% in	99.8%	0.2%	% out	58.8%	41.2%				

Table 9. Continued.

	Inflows			Outflows			Retained	% Ret	ε
	I _s	P	Σinflow	O _s	O _g	Σoutflow			
<u>STA-6, Cell 3</u>									
WY2001	1,742	1.2	1,743	628	605	1,233	510	29.3%	34.3%
WY2002	2,436	1.0	2,437	947	488	1,435	1,003	41.1%	51.8%
WY2003	3,152	1.0	3,153	1,566	383	1,949	1,204	38.2%	47.2%
WY2004	2,075	1.1	2,076	1,673	480	2,153	-77	-3.7%	-3.6%
WY2005	1,886	1.1	1,887	971	591	1,562	325	17.2%	18.9%
WY2006	905	0.9	906	472	87	559	347	38.3%	47.4%
TOTAL	12,196	6.4	12,202	6,257	2,634	8,891	3,312	27.1%	31.4%
<i>% in</i>	99.9%	0.1%	<i>% out</i>	70.4%	29.6%				
<u>STA-6, Cell 5</u>									
WY2001	2,669	3.0	2,672	922	665	1,587	1,085	40.6%	51.0%
WY2002	3,657	2.7	3,660	1,665	1,103	2,768	891	24.4%	27.7%
WY2003	3,469	2.6	3,472	1,979	1,236	3,215	257	7.4%	7.7%
WY2004	2,061	2.8	2,064	1,929	1,034	2,963	-899	-43.6%	-35.8%
WY2005	1,654	2.8	1,657	984	356	1,340	317	19.1%	21.1%
WY2006	699	2.4	701	465	255	720	-19	-2.6%	-2.6%
TOTAL	14,209	16.2	14,225	7,944	4,649	12,593	1,632	11.5%	12.2%
<i>% in</i>	99.9%	0.1%	<i>% out</i>	63.1%	36.9%				

^a All budget terms expressed as metric tonnes of chloride ion.

^b I_s = surface water inflow; P = precipitation; O_s = surface water outflow; O_g = groundwater outflow; Retained = Σinflow – Σoutflow; %Ret = (retained/Σinflow)*100; ε = chloride budget error [= r ÷ {(Σinflow+Σoutflow) ÷ 2}].