

Appendix 5-2: Water Budgets, Total Phosphorus Budgets and Treatment Performance in STA Treatment Cells and Flow-ways

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This report summarizes the Water Year 2012 (WY2012) (May 1, 2011–April 30, 2012) and period of record (POR) water and total phosphorus (TP) budgets for individual Stormwater Treatment Area (STA) treatment cells and flow-ways (see Appendix 5-1 of this volume). The most recent flow and water quality data is reflected in these budgets and a listing of flow records and water quality sites queried to develop these budgets are listed in **Table 1**. Seepage return volumes and loads are also included in the budgets. The District conducts the field sampling and laboratory analyses associated with this effort under the Everglades Construction Project Operations Monitoring Project. Water budgets were developed using the best available data at the time of this report, which may reflect revisions to data reported in previous South Florida Environmental Reports (SFERs). Future SFERs likewise may contain revisions to the data provided in this report.

Annual and POR water budgets were developed for all operational cells/flow-ways (**Tables 2 through 7**). Surface flow was calculated using a hydraulic equation developed for each water control structure. Rainfall volume was measured at rain gauges located within or near each STA. Evapotranspiration (ET) was estimated from first-order models with coefficients specific to different wetland vegetation communities. Groundwater outflow was estimated as seepage through the perimeter levees, and is based on head differences between the STA and outside area water levels, levee length, and a first-order seepage coefficient [cubic feet per second per mile per foot (cfs/mi/ft)] optimized for each STA. All water budget components were calculated on a daily basis and aggregated over longer periods. The Water Budget Application Tool provided inflow seepage (if calculated), outflow groundwater (if calculated), rainfall volume, ET, and change in storage volumes. Inflow seepage and outflow groundwater estimates were calculated for STA-2, STA-5, and STA-6, but have not been calculated for STA-1E, STA-1W, or STA-3/4. Residuals to the TP budgets were regarded as mass retained within the cell/flow-way. The water budget residual was calculated by adding the total outflow volume and change in storage then subtracting the total inflow volume. The water budget error was estimated by dividing the residual by the average of the total inflow and outflow volume.

TP concentrations were monitored at the inflow and outflow of each cell/flow-way using composited samples (from either flow- or time-proportional auto-samplers) or weekly grab samples when auto-sampler data is not available. Annual and POR TP budgets were developed for each cell/flow-way. The TP loads in surface water inflow and outflow were calculated using the web-based Nutrient Load Program. Data for both positive and negative (i.e., reverse) flows at water control structures were used in these calculations. The TP load in precipitation was based on annual rainfall volume multiplied by the median rainfall TP concentration [4 parts per billion (ppb)] monitored at STA-1W (Site ENR308) from May 1, 1999–April 30, 2012. The TP load in groundwater outflow was based on the annual groundwater outflow volume (where available)

multiplied by the annual outflow TP flow-weighted mean concentration (FWMC) for each cell/flow-way. The acreage assumed for each STA cell or flow-way was taken from the STA schematics. Because seepage and groundwater estimates are not available for all the STAs, the hydraulic and phosphorus loading rates are calculated using surface water volumes.

TP removal coefficients were calculated for the water year using a first-order model following Kadlec and Knight (1996)¹:

$$k = \ln[(C_{in}/C_{out}) * ((Q_{in} + Q_{out})/2)/A] \quad \text{Equation 5.1}$$

where k is the TP removal coefficient [meters/year (m/yr)], C_{in} is the inflow TP FWMC (ppb), C_{out} is the outflow TP FWMC (ppb), Q_{in} is the inflow water load in cubic meters (m³), Q_{out} is the outflow water load (m³), A is the cell/flow-way surface area [square meter (m²)]. Because k values were used only to assess the relative treatment performance of cells/flow-ways and not for design, **Equation 5.1** was determined to be sufficient for this purpose.

Budgets were prepared for the following cells and flow-ways:

STA-1E

Cells 3, 4N, 4S, 5, 6, and 7 budget calculations start in WY2007. Budgets were not prepared for Cells 1 and 2 because they remained under restricted operations in WY2012 due to the Periphyton Stormwater Treatment Area Demonstration Project. Budgets for the Central Flow-way were estimated by using the inflow volume and TP concentrations collected at the S-361 structure added to the inflows into Cell 3 and the outflow was estimated using the outflow volume and TP concentrations measured at the outflow of Cell 4S. The rainfall, ET, and change in storage components were estimated by summing the respective volumes for Cells 3, 4N, and 4S. Budgets for the Western Flow-way were estimated by using the inflow volume and TP concentrations collected at the inflows to Cells 5 and 7 and the outflow volume and TP concentrations measured at the outflow of Cell 6. The rainfall, ET, and change in storage components were estimated by summing up the respective volumes for Cells 5, 6, and 7.

STA-1W

Cells 1, 1A, 2, 3, 1B+3, and 4, and the Eastern, Western and Northern flow-ways budget calculations start in WY2001. Budgets were prepared for Cells 1, 2, 3, and 4 and the Northern Flow-way (Cells 5A and 5B) starting in WY2001. Budgets for the Eastern Flow-way were estimated by using the inflow volume and TP concentrations measured at the inflows to Cell 1 and the outflow volume and TP concentrations measured at the outflow of Cell 3. The rainfall, ET, and change in storage components were estimated by summing the respective volumes for Cells 1 and 3. In previous SFERs prior to 2012 SFER, the volume and TP loads collected at the G-255 structure (inflow to Cell 2) was considered to be part of the Cell 1 outflow term; in this report, the volume and TP loads from G-255 were subtracted from the Cell 1 and Cell 1A inflow term. Budgets for the Western Flow-way for WY2001–WY2004 were estimated by using the inflow volume and TP concentrations collected at the inflows to Cell 2 and the outflow volume and TP concentrations measured at the outflow of Cell 4. The rainfall, ET, and change in storage components were estimated as the sum of volumes for Cells 2 and 4. Starting in WY2009, the water budgets were estimated on the entire flow-way instead of individual treatment cells.

¹ Kadlec, R.H. and R.L. Knight. 1996. Treatment Wetlands. Lewis Publishers, Boca Raton, FL.

Flow monitoring was effectively discontinued at the G-253 levee separating Cells 1 and 3 in WY2006 and at the G-254 levee separating Cells 2 and 4 in WY2004. New levees were built that divided Cell 1 into Cells 1A and 1B (levee G-248) and divided Cell 2 into Cells 2A and 2B (levee G-249). The inflow culverts into Cell 2 (G-255) were replaced in 2005 and flow records for the new culverts started in calendar year 2008. Water budgets for the Eastern and Western flow-ways were not calculated during the period when construction and rehabilitation activities occurred in these flow-ways.

STA-2

Cell 1 budget calculations start in WY2003, Cells 2 and 3 budget calculations start in WY2002, and Cell 4 budget calculation starts in WY2009. For Cell 1 WY2003: June 2005 outflow concentrations were collected from structure G-330A; from June 2005–present, the outflow water quality sampling location was changed from G-330A to structure G-330D. WY2012 budget was not prepared for Cell 4 because the Cell was off-line during the water year.

STA-3/4

Cells 1A, 1B, 2A, 2B, and 3 budget calculations start in WY2006 and Cells 3A and 3B budget calculations start in WY2009. Cell 3 was divided into two cells (3A and 3B) by constructing levee G-384 in WY2005. In previous SFERs prior to the 2012 SFER, the outflow for Cell 2B did not include the STA-3/4 Periphyton Stormwater Treatment Area Implementation Project outflow station G-388; in this reporting, G-388 flows and TP loads are included. Budgets for the Eastern Flow-way was estimated by using the inflow volume and TP concentrations collected at the inflows to Cell 1A and the outflow volume and TP concentrations measured at the outflows of Cell 1B; budgets for the Central Flow-way were estimated by using the inflow volume and TP concentrations collected at the inflows to Cell 2A and the outflow volume and TP concentrations measured at the outflows of Cell 2B; and budgets for the Western Flow-way were estimated by using the inflow volume and TP concentrations collected at the inflows to Cell 3 and the outflow volume and TP concentrations measured at the outflows of Cell 3 until the divide levee was installed, then the inflows into Cell 3A and outflows from Cell 3B were used. The rainfall, ET, and change in storage components were estimated by adding the respective volumes for the treatment cells in each flow-way.

STA-5

The Northern and Central flow-ways budget calculations start in WY2001 and Cells 1A, 1B, 2A, 2B, 3A, and 3B budget calculations start in WY2009. Flow monitoring was initiated at the G-343 levee in WY2009, which enabled the calculation of separate budgets for Cells 1A, 1B, 2A, and 2B rather than combined budgets for the North and Center flow-ways as in previous years. Note that the cells that now comprise the Center Flow-way (Cells 2A and 2B) were referred to as the Southern Flow-way in SFERs published before Cells 3A and 3B were constructed. With the completion of Compartment C construction, the Northern Flow-way is now referred to as Flow-way 1, the Central Flow-way is referred to as Flow-way 2, and the Southern Flow-way is referred to as Flow-way 3.

From WY2009 to present, budgets for Flow-way 1 were estimated by using the inflow volume and TP concentrations collected at the water supply structure G-507 added to inflows to Cell 1A and the outflow volume and TP concentrations measured at the outflows of Cell 1B; budgets for Flow-way 2 were estimated by using the inflow volume and TP concentrations collected at the inflows to Cell 2A and the outflow volume and TP concentrations measured at the outflows of Cell 2B; and budgets for Flow-way 3 were estimated by using the inflow volume and TP concentrations collected at the inflows into Cell 3A and outflows from Cell 3B were used. Flows for newly constructed structures G-510, G-511, G-520, and G-521 have not yet been estimated and therefore are not included in the budgets calculated this year. The rainfall, ET, and change in storage components were estimated by summing the respective volumes for the treatment cells in each flow-way.

STA-6

Because the water quality data for Cells 3 and 5 begin in October 2002 (a partial water year), budget calculation begins for the full WY2004; Section 2 budget calculations start in WY2009. For Cells 3 and 5 from WY2004–WY2008, the inflow volumes and water quality collected from the weir structures G-601, G-602, and G-603; from WY2009 to present, flows and water quality collected from the improved inflow structures (G-353s) were used. In previous SFERs, the weir structures were used for inflow volumes for WY2009 and WY2010. The phosphorus budget for Section 2 was not calculated for WY2012 because the cell was offline.

Alterations to the STA budgets were necessitated by various infrastructure changes in the STAs and data updates (e.g., recalculated flow data) over the years. Details regarding the major operational events, such as construction activities or rehabilitation efforts, can be found in the sections of this and previous SFERs regarding STA performance and in the 2010 SFER – Volume I, Appendix 5-3.

Table 1. Flow records (referred to as DBKEY) and water quality sites used to estimate Stormwater Treatment Areas (STA) 1E, 1W, 2, 3/4, 5 and 6 cell-by-cell and flow-way water and total phosphorus (TP) budgets. [Note: Water Year (WY) is from May 1–April 30.]

STA	Treatment Cell	Region	Start Date	End Date	Flow Station	Prefered DBKEY	Source DBKEY	Source DBKEY	Water Quality Station	Region	Start Date	End Date	Flow Station	Prefered DBKEY	Source DBKEY	Source DBKEY	Water Quality Station	
STA-1E	Cell 3	Inflow	WY2007	Present	S366A	W3906	SD001		S366B	Outflow	WY2007	Present	S367A		TA349		S367B	
					S366B	W3907	SD002		S366B					TA350		S367B		
					S366C	W3908	SD007		S366D					TA312		S367C		
					S366D	W3909	SD003		S366D					TA352		S367E		
					S366E	W3910	SD008		S366D					TA351		S367D		
Cell 4N	Inflow	WY2007	Present	S367A			TA349		S367B	Outflow	WY2007	Present	S368A		SG581		S368B	
				S367B			TA350		S367B					S368B		SG583		S368B
				S367C			TA312		S367D					S368C		SG585		S368D
				S367D			TA351		S367D					S368D		SG591		S368D
				S367E			TA352		S367D					S368E		SG593		S368D
Cell 4S	Inflow	WY2007	Present	S368A			SG581		S368B	Outflow	WY2007	Present	S369A	W3911	TA355		S369B	
				S368B			SG583		S368B					S369B	W3912	TA356		S369B
				S368C			SG585		S368D					S369C	W3913	TA318		S369C
				S368D			SG591		S368D					S369D	W3914	TA357		S369C
				S368E			SG593		S368D									
Cell 5	Inflow	WY2007	Present	S370A	W3915	SG921		S370A	Outflow	WY2007	Present	S371A	87607	TA324		S371A		
				S370B	W3916	SG927		S370A					S371B		TA324		S371A	
				S370C	W3917	SG929		S370C					S371C	87599	TA324		S371C	
Cell 6	Inflow	WY2007	Present	S371A	87607	TA324		S371A	Outflow	WY2007	Present	S372A	W3918	TN560		S372B		
				S371B		TA324		S371A					S372B	W3916	TY236		S372B	
				S371C	87599	TA324		S371C					S372C	W3920	TA330		S372B	
				S374A		TB006		S374A					S372D	W3921	TN561		S372D	
				S374B		TA336		S374A					S372E	W3922	TY238		S372D	
Cell 7	Inflow	WY2007	Present	S373A	W3923	SG931		S373A	Outflow	WY2007	Present	S374A		TB006		S374A		
				S373B	W3924	SG937		S373B					S374B		TA336		S374A	
Central Flow-way	Inflow	WY2007	Present	Cell 3 Inflow						Outflow	WY2007	Present	Cell 4S outflow					
Western Flow-way	Inflow	WY2007	Present	Cell 5 + Cell 7 Inflows						Outflow	WY2007	Present	Cell 6 outflow					

Table 1. Continued.

STA	Treatment Cell	Region	Start Date	End Date	Flow Station	Prefered DBKEY	Source DBKEY	Source DBKEY	Water Quality Station	Region	Start Date	End Date	Flow Station	Prefered DBKEY	Source DBKEY	Source DBKEY	Water Quality Station
STA-1W	Cell 1	Inflow	WY2001	WY2006	G303	W3880	L9830		G303	Outflow	WY2001	WY2006	G255A		16731		G255
					G250s	W3883	JK278		ENR002				G255B		16732		G255
													G255C		16733		G255
													G255D		16734		G255
													G255E		16735		G255
													G255F		SC986		G255
													G255G		SC987		G255
													G253A		16237		G253C
													G253B		16238		G253C
													G253C		16208		G253C
													G253D		16209		G253C
													G253E		16247		G253C
													G253F		16248		G253G
					G253G		16210		G253G								
					G253H		16211		G253G								
					G253I		16249		G253G								
					G253J		16250		G253G								
Cell 1A		Inflow	WY2009	Present	G303	W3880	L9830		G303	Outflow	WY2009	Present	G255	WF797	VM838		G255
					G250s	W3883	JK278		ENR002				G248A		VW982		G248B
													G248B		VW983		G248B
													G248C		VW984		G248B
													G248D		VW985		G248B
Cell 1B+3		Inflow	WY2009	Present	G248A		VW982		G248B	Outflow	WY2009	Present	G251	JW222	15848		ENR012
					G248B		VW983		G248B				G259	W3884	SG917		G259
					G248C		VW984		G248B				G308	W3881	L9846		G308
					G248D		VW985		G248B								
Cell 2		Inflow	WY2001	WY2004	G255A		16731		G255	Outflow	WY2001	WY2004	G254A1		N8575		G254B
					G255B		16732		G255				G254A		16212		G254B
					G255C		16733		G255				G254B1		N8576		G254B
					G255D		16734		G255				G254B		16213		G254B
					G255E		16735		G255				G254C1		N8577		G254B
					G255F		SC986		G255				G254C		16251		G254D
					G255G		SC987		G255				G254D1		N8578		G254D
													G254D		16214		G254D
													G254E		16215		G254D

Table 1. Continued.

STA	Treatment Cell	Region	Start Date	End Date	Flow Station	Prefered DBKEY	Source DBKEY	Source	Water Quality Station	Region	Start Date	End Date	Flow Station	Prefered DBKEY	Source DBKEY	Source	Water Quality Station
STA-1W	Cell 3	Inflow	WY2001	WY2006	G253A		16237		G253C	Outflow	WY2001	WY2006	G251	JW222	15848		ENR012
					G253B		16238		G253C				G259	W3884	SG917		G259
					G253C		16208		G253C				G308	W3881	L9846		G308
					G253D		16209		G253C								
					G253E		16247		G253C								
					G253F		16248		G253G								
					G253G		16210		G253G								
					G253H		16211		G253G								
					G253I		16249		G253G								
					G253J		16250		G253G								
					G256A		16736		G256								
					G256B		16737		G256								
					G256C		16738		G256								
G256D		16739		G256													
G256E		16740		G256													
STA-1W	Cell 4	Inflow	WY2001	WY2004	G254A1		N8575		G254B	Outflow	WY2001	WY2004	G256A		16736		G256
					G254A		16212		G254B				G256B		16737		G256
					G254B1		N8576		G254B				G256C		16738		G256
					G254B		16213		G254B				G256D		16739		G256
					G254C1		N8577		G254B				G256E		16740		G256
					G254C		16251		G254D				G258		SG916		G309
					G254D1		N8578		G254D				G309	W3882	L9849		G309
					G254D		16214		G254D				G307		VM853		G307
					G254E		16215		G254D								

Table 1. Continued.

STA	Treatment Cell	Region	Start Date	End Date	Flow Station	Prefered DBKEY	Source DBKEY	Source DBKEY	Water Quality Station	Region	Start Date	End Date	Flow Station	Prefered DBKEY	Source DBKEY	Source DBKEY	Water Quality Station		
STA-1W	Northern Flow-way	Inflow	WY2001	Present	G304A	W3860	V2485	OB425	G302	Outflow	WY2001	Present	G306A	W3870	L9866		G306C		
					G304B	W3861	V2486	OU412	G302				G306B	W3871	L9867		G306C		
					G304C	W3862	V2487	OU413	G302				G306C	W3872	L9868		G306C		
					G304D	W3863	V2488	OU414	G302				G306D	W3873	L9869		G306C		
					G304E	W3864	VW951	OU415	G302				G306E	W3874	L9870		G306C		
					G304F	W3865	VW802	OU416	G302				G306F	W3875	L9871		G306G		
					G304G	W3866	VW952	OU417	G302				G306G	W3876	L9872		G306G		
					G304H	W3867	VW876	OU418	G302				G306H	W3877	L9873		G306G		
					G304I	W3868	VW872	OU419	G302				G306I	W3878	L9874		G306G		
					G304J	W3869	VW953	OB434	G302				G306J	W3879	L9875		G306G		
					G327B	TA441			G306C										
Eastern Flow-way					WY2001	WY2006	Cell 1 inflow		Outflow	WY2001	WY2006	Cell 3 outflow							
					WY2009	Present	Cell 1A inflow			WY2009	Present	Cell 1B+3 outflow							
Western FW					Inflow	WY2001	WY2004	Cell 2 inflow		Outflow	WY2001	WY2004	Cell 4 outflow						
					Inflow	WY2009	Present	G255	WF797	VM838		G255	Outflow	WY2009	Present	G258		SG916	G309
													G309	W3882	L9849		G309		
													G307		VM853		G307		

Table 1. Continued.

STA	Treatment Cell	Region	Start Date	End Date	Flow Station	Prefered DBKEY	Source DBKEY	Source DBKEY	Water Quality Station	Region	Start Date	End Date	Flow Station	Prefered DBKEY	Source DBKEY	Source DBKEY	Water Quality Station
STA-2	Cell 1	Inflow	WY2003	Present	G329A	W3926	N0748		G329B	Outflow	WY2003	Jun-05	G330A	W3930	LG706		G330A
					G329B	W3927	LG703		G329B				G330B	W3931	LG707		G330A
					G329C	W3928	LG704		G329B				G330C	W3932	LG708		G330A
					G329D	W3929	LG705		G329B				G330D	W3933	LG709		G330A
													G330E	W3934	LG710		G330A
													G330A	W3930	LG706		G330D
													G330B	W3931	LG707		G330D
													G330C	W3932	LG708		G330D
													G330D	W3933	LG709		G330D
													G330E	W3934	LG710		G330D
Cell 2		Inflow	WY2002	Present	G331A	W3935	LG711		G331D	Outflow	WY2002	Present	G332	W3942	LG719		G332
					G331B	W3936	LG712		G331D								
					G331C	W3937	LG713		G331D								
					G331D	W3938	LG714		G331D								
					G331E	W3939	LG715		G331D								
					G331F	W3940	LG716		G331D								
					G331G	W3941	LG718		G331D								
Cell 3		Inflow	WY2002	Present	G333A	W3943	LG720		G333C	Outflow	WY2002	Present	G334	W3948	LG725		G334
					G333B	W3944	LG721		G333C								
					G333C	W3945	LG722		G333C								
					G333D	W3946	LG723		G333C								
					G333E	W3947	LG724		G333C								
Cell 4		Inflow	WY2009	Present	G367A		W4349		G337A	Outflow	WY2009	Present	G368		VN385		G368
					G367B		VN382		G337A								
					G367C		VN383		G337A								
					G367D		W4350		G337A								
					G367E		VN384		G337A								
					G367F		VW834		G337A								

Table 1. Continued.

STA	Treatment Cell	Region	Start Date	End Date	Flow Station	Prefered DBKEY	Source DBKEY	Source DBKEY	Water Quality Station	Region	Start Date	End Date	Flow Station	Prefered DBKEY	Source DBKEY	Source DBKEY	Water Quality Station
STA-3/4	Cell 1A	Inflow	WY2006	Present	G374A	W3964	T8434		G374B	Outflow	WY2006	Present	G375A	T8440			G375B
					G374B	W3965	T8435		G374B				G375B	T8441		G375B	
					G374C	W3966	T8436		G374B				G375C	T8442		G375B	
					G374D	W3967	T8437		G374E				G375D	T8443		G375E	
					G374E	W3968	T8438		G374E				G375E	T8444		G375E	
					G374F	W3969	T8439		G374E				G375F	T8445		G375E	
					G382A	T9990		G378B	G382A				T9990		G375E		
					G385	VW873		G375B									
Cell 1B	Inflow	WY2006	Present	G375A				G375B	Outflow	WY2006	Present	G376ABC	TA445				G376B
				G375B				G375B				G376DEF	TA446		G376E		
				G375C				G375B									
				G375D				G375E									
				G375E				G375E									
				G375F				G375E									
				G385	VW873		G375B										
Cell 2A	Inflow	WY2006	Present	G377A	W3970	T9945		G377B	Outflow	WY2006	Present	G378A	87613	T9950			G378B
				G377B	W3971	T9946		G377B				G378B	87614	T9951		G378B	
				G377C	W3972	T9947		G377B				G378C	87615	T9952		G378B	
				G377D	W3973	T9948		G377D				G378D	87616	T9953		G378D	
				G377E	W3974	T9949		G377D				G378E	87617	T9954	UT729	G378D	
				G382A	T9990		G375E	G386				VW874			G378B		
				G382B	T9992		G381B	G382A				T9990		G378B			
					G382B	T9992		G378D									
Cell 2B	Inflow	WY2006	Present	G378A	87613	T9950		G378B	Outflow	WY2006	Present	G379ABC	TA449				G379B
				G378B	87614	T9951		G378B				G379DE	TA450		G379D		
				G378C	87615	T9952		G378B				G388	W3981	V2504	G388		
				G378D	87616	T9953		G378D									
				G378E	87617	T9954	UT729	G378D									
				G386		VW874		G378B									

Table 1. Continued.

STA	Treatment Cell	Region	Start Date	End Date	Flow Station	Prefered DBKEY	Source DBKEY	Source DBKEY	Water Quality Station	Region	Start Date	End Date	Flow Station	Prefered DBKEY	Source DBKEY	Source DBKEY	Water Quality Station
STA-3/4	Cell 3	Inflow	WY2006	WY2008	G380A	W3975	T9955		G380B	Outflow	WY2006	WY2008	G381A	TA296			G381B
					G380B	W3976	T9956		G380B				G381B	TA586	TA297		G381B
					G380C	W3977	T9957		G380B				G381C	TA298			G381B
					G380D	W3978	T9958		G380E				G381D	TA299			G381E
					G380E	W3979	T9959		G380E				G381E	TA587	TA300		G381E
					G380F	W3980	T9960		G380E				G381F	TA301			G381E
					G382B	T9992		G378D	G382B				T9992		G381B		
Cell 3A	Inflow	WY2009	Present	G380A	W3975	T9955		G380B	Outflow	WY2009	Present	G384A		W1927		G384B	
				G380B	W3976	T9956		G380B				G384B		W1928		G384B	
				G380C	W3977	T9957		G380B				G384C		VV483		G384B	
				G380D	W3978	T9958		G380E				G384D		W1929		G384E	
				G380E	W3979	T9959		G380E				G384E		W1930		G384E	
				G380F	W3980	T9960		G380E				G384F		W1931		G384E	
Cell 3B	Inflow	WY2009	Present	G384A	W1927			G384B	Outflow	WY2009	Present	G381A-B	TA447				G381B
				G384B	W1928			G384B				G381C-F	TA448			G381E	
				G384C	VV483			G384B				G382B	T9992			G381B	
				G384D	W1929			G384E									
				G384E	W1930			G384E									
				G384F	W1931			G384E									
				G387	VW875			G384B									
G382B	T9992		G378D														
Eastern Flow-way	Inflow	WY2006	Present	Cell 1A inflow					Outflow	WY2006	Present	Cell 1B outflow					
Central Flow-way	Inflow	WY2006	Present	Cell 2A inflow					Outflow	WY2006	Present	Cell 2B outflow					
Eastern Flow-wayW	Inflow	WY2006	WY2008	Cell 3 inflow					Outflow	WY2006	WY2008	Cell 3 outflow					
		WY2009	Present	Cell 3A inflow						WY2009	Present	Cell 3B outflow					

Table 1. Continued.

STA	Treatment Cell	Region	Start Date	End Date	Flow Station	Prefered DBKEY	Source DBKEY	Source DBKEY	Water Quality Station	Region	Start Date	End Date	Flow Station	Prefered DBKEY	Source DBKEY	Source DBKEY	Water Quality Station
STA-5	Cell 1A	Inflow	WY2009	Present	G342A	J6406	JJ111		G342A	Outflow	WY2009	Present	G343A		VG491		G343B
					G342B	J6398	JJ116		G342B				G343B	VV382		G343B	
					G349A	JJ838	JJ130		G349A				G343C	VV383		G343C	
													G343D	VV419		G343C	
Cell 1B	Inflow	WY2009	Present	G343A				G343B	Outflow	WY2009	Present	G344A	J0719	JJ117	JJ131	G344A	
				G343B	VV382			G343B				G344B	J0720	JJ118	JJ136	G344B	
				G343C	VV383			G343C				G345	P4547			G344B	
				G343D	VV419			G343C									
				G349C	VV392			G349C									
				G507	SJ382	SJ383		G507									
Cell 2A	Inflow	WY2009	Present	G342C	J6407	LS293		G342C	Outflow	WY2009	Present	G343E		VV420		G343F	
				G342D	J6405	JJ126		G342D				G343F		VV384		G343F	
												G343G		VV385		G343G	
												G343H		VV421		G343G	
Cell 2B	Inflow	WY2009	Present	G343E	VV420			G343F	Outflow	WY2009	Present	G344C	J0721	JJ119	JJ141	G344C	
				G343F	VV384	PT105		G343F				G344D	J0722	JJ120	JJ146	G344D	
				G343G	VV385	PT106		G343G				G345	P4547			G344C	
				G343H	VV421			G343G									
				G345	P4547			G344B									
Cell 3A	Inflow	WY2009	Present	G342E	WH024	VV399		G342E	Outflow	WY2009	Present	G343I		VW789		G343I	
				G342F	WH025	VV406		G342F				G343J		VW790		G343J	
Cell 3B	Inflow	WY2009	Present	G343I		VW789		G343I	Outflow	WY2009	Present	G344E	WH026	VW787		G344E	
				G343J		VW790		G343J				G344F	WH027	VW788		G344F	
				G350B	JA352	JJ850		G350B									

Table 1. Continued.

STA	Treatment Cell	Region	Start Date	End Date	Flow Station	Prefered DBKEY	Source DBKEY	Source DBKEY	Water Quality Station	Region	Start Date	End Date	Flow Station	Prefered DBKEY	Source DBKEY	Source DBKEY	Water Quality Station
STA-5	Flow-way 1	Inflow	WY2001	Present	G342A	J6406	JJ111		G342A	Outflow	WY2001	Present	G344A	J0719	JJ117		G344A
					G342B	J6398	JJ116		G342B				G344B	J0720	JJ118		G344B
					G349A	JJ838	JJ130		G349A				G345		P4547		G344B
					G349C		VV392		G349C								
					G507	SJ382	SJ383		G507								
Flow-way 2	Inflow	WY2001	Present	G342C	J6407	LS293		G342C	Outflow	WY2001	Present	G344C	J0721	JJ119		G344C	
				G342D	J6405	JJ126		G342D				G344D	J0722	JJ120		G344D	
				G350A	JJ839	JJ129		G350A									
				G345		P4547		G344B									
Flow-way 3	Inflow	WY2009	Present	Cell 3A Inflow					Outflow	WY2009	Present	II 3B Outflow					

Table 1. Continued.

STA	Treatment Cell	Region	Start Date	End Date	Flow Station	Prefered DBKEY	Source DBKEY	Source DBKEY	Water Quality Station	Region	Start Date	End Date	Flow Station	Prefered DBKEY	Source DBKEY	Source DBKEY	Water Quality Station
STA-6	Cell 3	Inflow	WY2004	WY2008	G603		J5568		G603	Outflow	WY2004	Present	G393ABC	MC959	J5569		G393B
			WY2009	Present	G353C	WN384	G353C										
Cell 5	Inflow	WY2004	WY2008	G601		J5566		G602	Outflow	WY2004	Present	G354ABC	MC958	J0939		G354C	
				G602		J5567		G602									
				WY2009	Present	G353AB	WN363	G353B									
Section 2	Inflow	WY2009	Present	G396ABC	WN361			G396B	Outflow	WY2009	Present	G352ABC	WN362			G352B	

Table 2. Annual and period-of-record water and TP budgets for treatment cells and flow-ways in STA-1E.

Location	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
STA-1E, Cell 3		589														
WY2007		Y	1.827	3.7	1.824	3.5	24,546	-	1,691	26,237	4.347	0.008	4.355	135	144	
WY2008		Y	6.574	14.1	6.570	13.8	97,393		2,177	99,570	15.660	0.011	15.671	128	130	
WY2009		Y	4.482	8.7	4.477	8.4	59,406		2,225	61,631	10.672	0.011	10.683	141	146	
WY2010		Y	3.000	3.7	2.993	3.3	23,186		3,079	26,265	7.135	0.015	7.150	221	249	
WY2011		Y	0.429	1.2	0.426	1.0	6,857		1,670	8,527	1.015	0.008	1.023	97	120	
WY2012		Y	3.152	8.0	3.148	7.7	54,384		1,796	56,180	7.505	0.009	7.513	108	112	
POR							265,773		12,638	278,411	46.333	0.062	46.395	135	141	
							95.5%	NC	4.5%		99.9%	0.1%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
STA-1E, Cell 3																
WY2007	32,946		32,946	2,545	35,491	-	9,253	30%	2.703		2.703	67	67	1.644	38%	11.45
WY2008	99,605		99,605	2,547	102,152	959	3,541	4%	12.615		12.615	103	103	3.045	19%	12.17
WY2009	74,403		74,403	2,511	76,914	(938)	14,345	21%	12.110		12.110	132	132	(1.438)	-13%	3.42
WY2010	22,015		22,015	2,402	24,417	1,127	(721)	-3%	4.421		4.421	163	163	2.714	38%	4.99
WY2011	6,101		6,101	2,669	8,770	(1,125)	(882)	-10%	0.542		0.542	72	72	0.473	46%	1.71
WY2012	49,539		49,539	2,622	52,161	342	(3,677)	-7%	2.529		2.529	41	41	4.975	66%	26.74
				15,296	299,904	365	21,858	8%	34.920		34.920	99	11.413	24.6%		
		94.9%	NC	5.1%					100.0%	NC						

Table 2. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
<u>STA-1E, Cell 4N</u>																
	645															
WY2007		Y	1.039	4.5	1.035	4.3	32,946		1,852	34,798	2.703	0.009	2.712	63	67	
WY2008		Y	4.837	13.2	4.833	12.9	99,605		2,384	101,989	12.615	0.012	12.627	100	103	
WY2009		Y	4.644	9.9	4.639	9.6	74,403		2,437	76,840	12.110	0.012	12.122	128	132	
WY2010		Y	1.700	3.3	1.694	2.9	22,015		3,372	25,387	4.421	0.017	4.437	142	163	
WY2011		Y	0.211	1.0	0.208	0.8	6,101		1,829	7,930	0.542	0.009	0.551	56	72	
WY2012		Y	0.973	6.7	0.969	6.4	49,539		1,967	51,506	2.529	0.010	2.539	40	41	
POR							284,608		13,841	298,449	34.920	0.068	34.988	95	99	
							95%	NC	5%		100%	0%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
<u>STA-1E, Cell 4N</u>																
WY2007	36,497		36,497	2,787	39,284	(110)	4,377	12%	1.322		1.322	29	29	1.381	51%	13.42
WY2008	107,134		107,134	2,789	109,923	607	8,542	8%	3.592		3.592	27	27	9.023	71%	64.92
WY2009	70,925		70,925	2,749	73,674	(969)	(4,135)	-5%	2.845		2.845	33	33	9.264	76%	48.09
WY2010	23,272		23,272	2,630	25,902	743	1,258	5%	3.136		3.136	109	109	1.285	29%	4.27
WY2011	6,419		6,419	2,923	9,342	59	1,471	17%	0.583		0.583	74	74	(0.041)	-7%	-0.06
WY2012	49,358		49,358	2,871	52,229	285	1,009	2%	1.410		1.410	23	23	1.120	44%	13.58
293,606				16,749	310,355	615	12,521	4%	12.888		12.888	36	36	22.032	63%	
95%		NC		5%					100%	NC						

Table 2. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
STA-1E, Cell 4S																
	752															
WY2007		Y	0.778	5.3	0.774	5.1	45,520		2,160.0	47,680	2.357	0.011	2.367	40	42	
WY2008		Y	1.615	13.8	1.610	13.5	121,664		2,779.0	124,443	4.901	0.014	4.915	32	33	
WY2009		Y	1.243	9.4	1.239	9.1	81,920		2,841.0	84,761	3.770	0.014	3.784	36	37	
WY2010		Y	1.343	4.0	1.336	3.6	32,029		3,931.0	35,960	4.067	0.019	4.086	92	103	
WY2011		Y	0.264	1.7	0.261	1.4	12,739		2,133.0	14,872	0.793	0.011	0.804	44	50	
WY2012		Y	0.531	6.4	0.527	6.2	55,443		2,293.0	57,736	1.604	0.011	1.615	23	23	
POR							349,314		16,137	365,451	17.491	0.080	17.571	39	41	
							96%	NC	4.4%		99.5%	0.5%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground-water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
STA-1E, Cell 4S																
WY2007	39,040		39,040	3,250	42,290	96.0	(5,294)	-12%	1.071		1.071	22	22	1.286	54%	10.89
WY2008	119,011		119,011	3,252	122,263	545.0	(1,635)	-1%	2.724		2.724	19	19	2.177	44%	27.57
WY2009	81,162		81,162	3,205	84,367	(376.0)	(769)	-1%	1.535		1.535	15	15	2.235	59%	29.38
WY2010	30,570		30,570	3,067	33,637	(356.0)	(2,678)	-8%	2.080		2.080	55	55	1.987	49%	7.91
WY2011	10,594		10,594	3,408	14,002	58.0	(812)	-6%	0.584		0.584	45	45	0.209	26%	0.58
WY2012	52,025		52,025	3,347	55,372	160.0	(2,204)	-4%	1.168		1.168	18	18	0.436	27%	5.52
	332,402			19,529	351,931	127	(13,393)	-4%	9.162		9.162	22	22	8.329	48%	
	94%	NC		5.5%					100%	NC						

Table 2. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
<u>STA-1E, Cell 5</u>		571														
WY2007		Y	8.909	5.6	8.905	5.4	36,756		1,640	38,396	20.578	0.008	20.586	435	454	
WY2008		Y	0.480	1.2	0.475	0.9	6,120		2,110	8,230	1.098	0.010	1.108	109	145	
WY2009		Y	4.501	6.6	4.496	6.2	42,649		2,157	44,806	10.390	0.011	10.400	188	197	
WY2010		N	2.475	3.3	2.469	2.9	19,650		2,985	22,635	5.705	0.015	5.720	205	235	
WY2011		N	0.055	0.4	0.051	0.2	1,318		1,619	2,937	0.119	0.008	0.127	35	73	
WY2012		Y	0.625	1.8	0.621	1.6	10,712		1,741	12,453	1.436	0.009	1.444	94	109	
POR							117,205		12,252	129,457	39.325	0.060	39.385	247	272	
							91%	NC	9%		100%	0%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
<u>STA-1E, Cell 5</u>																
WY2007	22,945		22,945	2,468	25,413	-	(12,983)	-41%	7.113		7.113	251	251	13.465	65%	5.86
WY2008	9,633		9,633	2,469	12,102	922	4,794	47%	1.572		1.572	132	132	(0.474)	-43%	0.40
WY2009	54,969		54,969	2,434	57,403	(705)	11,892	23%	19.282		19.282	284	284	(8.892)	-85%	-9.50
WY2010	23,590		23,590	2,329	25,919	(168)	3,115	13%	6.854		6.854	236	236	(1.149)	-20%	-0.01
WY2011	819		819	2,587	3,406	208	677	21%	0.273		0.273	270	270	(0.154)	-122%	-0.75
WY2012	9,622		9,622	2,542	12,164	(257)	(546)	-4%	0.273		0.273	23	23	1.163	81%	8.43
				14,829	136,407	-	6,950	5%	35.367		35.367	236	3.958	10%		
		121,578														
		89%	NC		11%				100%	NC						

Table 2. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
STA-1E, Cell 6		1049														
WY2007		Y	3.220	4.0	3.217	3.8	47,252		3,012	50,264	13.657	0.015	13.671	221	234	
WY2008		Y	0.519	1.5	0.515	1.2	14,461		3,877	18,338	2.186	0.019	2.205	97	123	
WY2009		Y	6.052	7.1	6.048	6.8	85,784		3,963	89,747	25.674	0.020	25.694	232	243	
WY2010		N	3.303	4.5	3.296	4.1	50,899		5,484	56,383	13.993	0.027	14.020	202	223	
WY2011		N	0.090	0.4	0.086	0.2	2,503		2,975	5,478	0.366	0.015	0.380	56	118	
WY2012		Y	0.445	2.3	0.441	2.0	25,675		3,199	28,874	1.873	0.016	1.889	53	59	
POR							226,574		22,510	249,084	57.749	0.111	57.860	188	207	
							91%	NC	9.0%		99.8%	0.2%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
STA-1E, Cell 6																
WY2007	52,570		52,570	4,533	57,103	(6)	6,834	13%	10.275		10.275	158	158	3.381	25%	2.71
WY2008	24,595		24,595	4,536	29,131	360	11,153	47%	1.510		1.510	50	50	0.676	31%	5.11
WY2009	77,748		77,748	4,471	82,219	(402)	(7,930)	-9%	4.545		4.545	47	47	21.129	82%	38.80
WY2010	45,539		45,539	4,278	49,817	(1,072)	(7,639)	-14%	9.996		9.996	178	178	3.997	29%	3.15
WY2011	27		27	4,753	4,780	1,086	388	8%	0.006		0.006	190	190	0.359	94%	-0.17
WY2012	20,520		20,520	4,669	25,189	(130)	(3,815)	-14%	0.956		0.956	38	38	0.916	49%	3.01
				27,240	248,239	(164)	(1,009)	0%	27.289		27.289	100	30.460	53%		
220,999				11.0%					100%	NC						
89%		NC														

Table 2. Continued.

Location			Inflow												
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)
STA-1E, Cell 7		418													
WY2007		Y	4.756	5.4	4.752	5.1	25,593		1,200	26,793	8.039	0.006	8.045	243	255
WY2008		Y	1.044	2.4	1.040	2.1	10,539		1,545	12,084	1.759	0.008	1.767	119	135
WY2009		Y	5.328	6.4	5.324	6.1	30,649		1,579	32,228	9.006	0.008	9.014	227	238
WY2010		N	4.424	5.5	4.418	5.0	25,190		2,185	27,375	7.473	0.011	7.484	222	241
WY2011		N	0.011	0.3	0.008	0.0	72		1,185	1,257	0.013	0.006	0.019	12	145
WY2012		Y	0.926	2.0	0.922	1.7	8,710		1,275	9,985	1.560	0.006	1.566	127	145
POR							100,753		8,969	109,722	27.850	0.044	27.894	206	224
							92%	NC	8%		100%	0%			

Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
STA-1E, Cell 7																
WY2007	16,326		16,326	1,806	18,132	(91)	(8,752)	-39%	3.989		3.989	198	198	4.050	50%	2.38
WY2008	3,303		3,303	1,808	5,111	205	(6,769)	-79%	0.398		0.398	98	98	1.361	77%	1.64
WY2009	20,642		20,642	1,782	22,424	(3)	(9,807)	-36%	4.117		4.117	162	162	4.889	54%	7.24
WY2010	18,181		18,181	1,705	19,886	69	(7,420)	-31%	3.944		3.944	176	176	3.528	47%	4.95
WY2011	1,125		1,125	1,894	3,019	15	1,777	83%	0.062		0.062	45	45	(0.050)	-265%	0.51
WY2012	10,612		10,612	1,861	12,473	(884)	1,604	14%	0.492		0.492	38	38	1.068	68%	9.52
70,188				10,856	81,044	(689)	(29,367)	-31%	13.003		13.003		150	14.846	53%	
87%			NC	13%					100%		NC					

Table 2. Continued.

Location			Inflow												
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)
STA-1E, Central Flow-way	1986														
WY2007		Y	0.673	1.7	0.670	1.4	33,569		5,703	39,272	5.381	0.028	5.410	112	130
WY2008		Y	2.116	5.0	2.111	4.7	111,922		7,340	119,262	16.969	0.036	17.005	116	123
WY2009		Y	1.447	3.3	1.443	3.0	70,401		7,503	77,904	11.596	0.037	11.633	121	134
WY2010		Y	1.010	1.8	1.004	1.3	31,943		10,382	42,325	8.066	0.051	8.117	155	205
WY2011		Y	0.156	0.8	0.152	0.6	13,177		5,632	18,809	1.226	0.028	1.253	54	75
WY2012		Y	0.962	2.8	0.958	2.5	60,469		6,056	66,525	7.699	0.030	7.728	94	103
POR							321,481		42,616	364,097	50.937	0.210	51.147	114	128
							88%	NC	11.7%		100%	0.4%			

Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
STA-1E, Central Flow-way																
WY2007	39,040		39,040	8,582	47,622	(14)	8,336	19%	1.071		1.071	22	22	4.311	80%	9.84
WY2008	119,011		119,011	8,588	127,599	2,111	10,448	8%	2.724		2.724	19	19	14.245	84%	33.50
WY2009	81,162		81,162	8,465	89,627	(2,283)	9,440	11%	1.535		1.535	15	15	10.061	86%	25.17
WY2010	30,570		30,570	8,099	38,669	1,514	(2,141)	-5%	2.080		2.080	55	55	5.985	74%	6.29
WY2011	10,594		10,594	9,000	19,594	(1,008)	(224)	-1%	0.584		0.584	45	45	0.642	51%	0.95
WY2012	52,025		52,025	8,840	60,865	787	(4,873)	-8%	1.168		1.168	18	18	6.531	85%	14.98
	332,402			51,574	383,976	1,107	20,986	6%	9.162		9.162		22	41.774	82%	
	87%	NC		13.4%					100%	NC						

Table 2. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
STA-1E, Western Flow-way		2038														
WY2007		Y	3.471	2.8	3.470	2.6	62,349		5,852	68,201	28.617	0.029	28.631	340	372	
WY2008		Y	0.349	1.0	0.346	0.7	16,659		7,532	24,191	2.857	0.037	2.875	96	139	
WY2009		Y	2.354	3.3	2.352	3.0	73,298		7,699	80,997	19.396	0.038	19.414	194	215	
WY2010		N	1.601	2.3	1.598	1.8	44,840		10,654	55,494	13.178	0.053	13.203	193	238	
WY2011		N	0.018	0.3	0.016	0.1	1,389		5,779	7,168	0.131	0.029	0.145	16	77	
WY2012		N	0.365	1.1	0.363	0.8	19,422		6,215	25,637	2.996	0.031	3.011	95	125	
POR							217,958		43,731	261,689	67.175	0.216	67.279	208	250	
							83%	NC	16.7%		99.8%	0.3%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground-water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
STA-1E, Western Flow-way																
WY2007	52,570		52,570	8,807	61,377	(97)	(6,921)	-11%	10.275		10.275	158	158	18.342	64%	7.34
WY2008	24,595		24,595	8,813	33,408	1,487	10,704	37%	1.510		1.510	50	50	1.347	47%	3.17
WY2009	77,748		77,748	8,687	86,435	(1,110)	4,328	5%	4.545		4.545	47	47	14.851	76%	17.06
WY2010	45,539		45,539	8,312	53,851	(1,171)	(2,814)	-5%	9.996		9.996	178	178	3.182	24%	1.97
WY2011	27		27	9,234	9,261	1,309	3,402	41%	0.006		0.006	190	190	0.125	86%	-0.10
WY2012	20,520		20,520	9,072	29,592	(1,271)	2,684	10%	0.956		0.956	38	38	2.039	68%	3.57
220,999				52,925	273,924	(853)	11,382	4%	27.289		27.289		100	39.886	59%	
81%				NC	19.3%				100%	NC						

Table 3. Annual and period-of-record water and TP budgets for treatment cells and flow-ways in STA-1W.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
STA-1W, Cell 1																
	1490															
WY2001		Y	1.753	4.7	1.750	4.5	80,211		4,351	84,562	10.551	0.021	10.572	101	107	
WY2002		Y	2.200	5.3	2.194	5.0	88,408		6,532	94,940	13.232	0.032	13.264	113	121	
WY2003		Y	5.654	10.2	5.650	10.0	177,548		5,252	182,800	34.070	0.026	34.096	151	156	
WY2004		Y	2.823	7.0	2.820	6.8	121,397		4,230	125,627	17.004	0.021	17.024	110	114	
WY2005		Y	3.485	6.5	3.481	6.2	111,003		5,200	116,203	20.990	0.026	21.016	147	153	
WY2006		Y	4.881	6.9	4.876	6.6	118,213		5,443	123,656	29.405	0.027	29.432	193	202	
POR							696,780		31,008	727,788	125.252	0.153	125.405	140	146	
							96%	NC	4%		100%	0%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
STA-1W, Cell 1																
WY2001	45,651		45,651	6,958	52,609	(1,946)	(33,899)	-49%	1.947		1.947	35	35	8.604	81%	14.50
WY2002	71,149		71,149	6,551	77,700	869	(16,371)	-19%	3.173		3.173	36	36	10.059	76%	19.76
WY2003	137,668		137,668	6,339	144,007	3,059	(35,734)	-22%	8.704		8.704	51	51	25.366	74%	35.80
WY2004	96,413		96,413	6,350	102,763	(3,265)	(26,129)	-23%	11.853		11.853	100	100	5.151	30%	2.91
WY2005	141,992		141,992	6,290	148,282	(86)	31,993	24%	33.801		33.801	193	193	(12.810)	-61%	-5.96
WY2006	110,990		110,990	6,422	117,412	705	(5,539)	-5%	26.685		26.685	195	195	2.720	9%	0.80
	603,863				642,773	(664)	(85,679)	-13%	86.163		86.163		116	39.089	31%	
	94%	NC		0%					100%	NC						

Table 3. Continued.

Location			Inflow																			
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water							
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)							
STA-1W, Cell 1A																						
	745																					
WY2009		Y	3.960	5.3	3.957	5.1	45,759		1,593	47,352	11.932	0.008	11.940	204	211							
WY2010		Y	4.270	5.7	4.267	5.5	49,383		1,799	51,182	12.866	0.009	12.875	204	211							
WY2011		Y	1.588	3.6	1.586	3.5	30,896		1,164	32,060	4.782	0.006	4.788	121	125							
WY2012		Y	1.475	3.2	1.473	3.1	27,485		1,344	28,829	4.440	0.007	4.447	125	131							
POR							153,522		5,900	159,422	34.020	0.029	34.049	173	180							
							96%	NC	3.7%		99.9%	0.1%										
Outflow																						
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water						
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)						
STA-1W, Cell 1A																						
WY2009	139,899		139,899	1,588	141,486	(1,085)	93,050	99%	62.227		62.227	361	361	(50.295)	-421%	-20.28						
WY2010	129,545		129,545	1,519	131,064	195	80,077	88%	17.374		17.374	109	109	(4.507)	-35%	24.31						
WY2011	68,802		68,802	1,688	70,490	37	38,467	75%	5.002		5.002	59	59	(0.220)	-5%	15.41						
WY2012	101,364		101,364	1,658	103,022	240	74,432	113%	7.421		7.421	59	59	(2.981)	-67%	20.86						
												439,609		446,062	(613)	286,027	94%	92.023	92.023	170	(58.003)	-170%
												99%	NC	0.0%		100%	NC					

Table 3. Continued.

Location			Inflow												
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)
<u>STA-1W, Cell 3</u>		1026													
WY2001		Y	0.662	6.3	0.659	6.0	73,920		2,996	76,916	2.735	0.015	2.750	29	30
WY2002		Y	1.034	9.8	1.029	9.5	116,332		4,498	120,830	4.272	0.022	4.294	29	30
WY2003		Y	3.127	17.3	3.123	17.0	208,689		3,617	212,306	12.968	0.018	12.985	50	50
WY2004		Y	3.421	11.1	3.417	10.8	133,166		2,913	136,079	14.190	0.014	14.204	85	86
WY2005		Y	8.736	13.3	8.732	13.0	159,576		3,581	163,157	36.258	0.018	36.276	180	184
WY2006		Y	6.431	9.3	6.427	9.0	110,990		3,748	114,738	26.685	0.018	26.704	189	195
POR							802,673		21,353	824,026	97.108	0.105	97.213	96	98
							97%	NC	2.6%		99.9%	0.1%			

Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
<u>STA-1W, Cell 3</u>																
WY2001	65,303		65,303	4,791	70,094	(689)	(7,511)	-10%	2.147		2.147	27	27	0.589	21%	2.45
WY2002	103,612		103,612	4,511	108,123	614	(12,093)	-11%	3.340		3.340	26	26	0.931	22%	4.25
WY2003	166,627		166,627	4,365	170,992	1,250	(40,064)	-21%	8.418		8.418	41	41	4.550	35%	11.54
WY2004	106,939		106,939	4,372	111,311	(1,613)	(26,381)	-21%	6.527		6.527	49	49	7.663	54%	19.87
WY2005	130,905		130,905	4,331	135,236	130	(27,792)	-19%	18.529		18.529	115	115	17.729	49%	20.42
WY2006	92,060		92,060	4,422	96,482	270	(17,986)	-17%	14.534		14.534	128	128	12.151	46%	12.69
	665,446			26,792	692,238	(38)	(131,827)	-17%	53.495		53.495	65	65	43.613	45%	
	96%	NC		3.9%					100%	NC						

Table 3. Continued.

Location			Inflow												
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)
<u>STA-1W, Cell 1B+3</u>		1771													
WY2009		Y	13.105	7.0	13.099	6.6	139,163		9,164	148,327	94	0.045	93.925	513	547
WY2010		Y	2.167	5.9	2.160	5.4	115,561		10,353	125,914	15	0.051	15.534	100	109
WY2011		Y	0.528	2.8	0.524	2.4	51,626		6,698	58,324	4	0.033	3.786	53	59
WY2012		Y	0.474	3.9	0.468	3.6	75,586		7,733	83,319	3	0.038	3.396	33	36
POR							381,936		33,948	415,883	116.474	0.167	116.642	227	247
							92%	NC	8%		100%	0%			

Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
<u>STA-1W, Cell 1B+3</u>																
WY2009	60,526		60,526	9,137	69,663	(2,595)	(81,259)	-75%	2.946		2.946	39	39	90.934	97%	45.18
WY2010	65,306		65,306	8,741	74,047	1,219	(50,647)	-51%	3.069		3.069	38	38	12.414	80%	16.31
WY2011	34,267		34,267	9,713	43,980	(62)	(14,406)	-28%	1.015		1.015	24	24	2.738	72%	6.63
WY2012	25,709		25,709	9,541	35,250	2,255	(45,815)	-77%	0.583		0.583	18	18	2.775	82%	5.86
185,808				37,132	222,940	817	(192,127)	-60%	7.614		7.614		33	108.860	93%	
83%		NC		17%					100%	NC						

Table 3. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
STA-1W, Cell 2		941														
WY2001		Y	1.104	2.9	1.100	2.7	30,447		2,748	33,195	4	0.014	4.204	103	112	
WY2002		Y	1.657	5.1	1.651	4.8	53,628		4,126	57,754	6	0.020	6.309	89	95	
WY2003		Y	6.112	10.8	6.107	10.6	118,921		3,317	122,238	23	0.016	23.274	154	159	
WY2004		N	2.785	5.6	2.782	5.4	60,687		2,672	63,359	11	0.013	10.607	136	142	
POR							263,683		12,863	276,546	44.331	0.063	44.394	136	136	
							95%	NC	5%		100%	0%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
STA-1W, Cell 2																
WY2001	38,220		38,220	4,394	42,614	(1,415)	8,004	21%	4		3.668	78	78	0.522	12%	4.01
WY2002	50,760		50,760	4,137	54,897	625	(2,232)	-4%	4		3.654	58	58	2.635	42%	8.25
WY2003	123,059		123,059	4,004	127,063	1,200	6,025	5%	21		20.805	137	137	2.453	11%	5.71
WY2004	109,663		109,663	4,010	113,673	(1,735)	48,579	55%	19		18.748	139	139	(8.154)	-77%	0.58
				16,545	338,247	(1,325)	60,376	20%	46.875		46.875	118	118	(2.544)	-6%	
		95%	NC	5%					100%	NC						

Table 3. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
<u>STA-1W, Cell 4</u>		358														
WY2001		Y	2.535	9.2	2.532	8.9	38,220		1,045	39,265	4	0.005	3.673	76	78	
WY2002		Y	2.527	12.2	2.522	11.8	50,760		1,570	52,330	4	0.008	3.662	57	58	
WY2003		Y	14.364	29.0	14.360	28.7	123,059		1,262	124,321	21	0.006	20.811	136	137	
WY2004		N	12.944	25.8	12.940	25.6	109,663		1,016	110,679	19	0.005	18.753	137	139	
POR							321,702		4,893	326,595	46.875	0.024	46.899	118	118	
							99%	NC	1.5%		99.9%	0.1%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
<u>STA-1W, Cell 4</u>																
WY2001	30,392		30,392	1,672	32,064	(372)	(7,573)	-21%	0.990		0.990	26	26	2.678	73%	31.56
WY2002	64,601		64,601	1,574	66,175	216	14,062	24%	2.059		2.059	26	26	1.595	44%	40.01
WY2003	157,416		157,416	1,523	158,939	248	34,866	25%	12.483		12.483	64	64	8.322	40%	90.39
WY2004	100,901		100,901	1,526	102,427	(588)	(8,840)	-8%	8.680		8.680	70	70	10.068	54%	61.56
	353,311			6,295	359,606	(496)	32,515	9%	24.212		24.212		56	22.663	48%	
	98%	NC		1.8%					100%	NC						

Table 3. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
<u>STA-1W, Eastern Flow-way</u>	2516															
WY2001		Y	1.038	2.9	1.036	2.7	80,211		7,347	87,558	10.551	0.021	10.572	101	107	
WY2002		Y	1.303	3.3	1.300	2.9	88,408		11,030	99,438	13.232	0.032	13.264	113	121	
WY2003		Y	3.349	6.2	3.346	5.9	177,548		8,869	186,417	34.070	0.026	34.096	151	156	
WY2004		Y	1.672	4.3	1.670	4.0	121,397		7,143	128,540	17.004	0.021	17.024	110	114	
WY2005		Y	2.064	4.0	2.061	3.7	111,003		8,781	119,784	20.990	0.026	21.016	147	153	
WY2006		Y	2.891	4.2	2.888	3.9	118,213		9,191	127,404	29.405	0.027	29.432	193	202	
WY2009		Y	1.173	1.9	1.172	1.5	45,759		10,756	56,515	11.932	0.053	11.940	171	211	
WY2010		Y	1.264	2.0	1.264	1.6	49,383		12,152	61,535	12.866	0.060	12.875	170	211	
WY2011		Y	0.470	1.3	0.470	1.0	30,896		7,862	38,758	4.782	0.039	4.788	100	125	
WY2012		Y	0.437	1.2	0.436	0.9	27,485		9,077	36,562	4.440	0.045	4.447	99	131	
POR							153,522		39,847	193,369	34.020	0.197	34.049	143	180	
							79%	NC	21%		100%	1%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
<u>STA-1W, Eastern Flow-way</u>																
WY2001	65,303		65,303	11,749	77,052	(2,635)	(13,142)	-16%	2.147		2.147	27	27	8.404	79%	12.22
WY2002	103,612		103,612	11,062	114,674	1,483	16,720	16%	3.340		3.340	26	26	9.892	75%	17.86
WY2003	166,627		166,627	10,704	177,331	4,309	(4,777)	-3%	8.418		8.418	41	41	25.652	75%	27.82
WY2004	106,939		106,939	10,722	117,661	(4,878)	(15,757)	-13%	6.527		6.527	49	49	10.476	62%	11.49
WY2005	130,905		130,905	10,621	141,526	44	21,786	17%	18.529		18.529	115	115	2.461	12%	4.24
WY2006	92,060		92,060	10,844	102,904	975	(23,525)	-20%	14.534		14.534	128	128	14.871	51%	5.79
WY2009	60,526		60,526	10,724	71,250	(3,679)	11,056	17%	2.946		2.946	39	39	8.986	75%	10.81
WY2010	65,306		65,306	10,260	75,566	1,414	15,445	23%	3.069		3.069	38	38	9.797	76%	11.90
WY2011	34,267		34,267	11,401	45,668	(25)	6,885	16%	1.015		1.015	24	24	3.767	79%	6.53
WY2012	25,709		25,709	11,199	36,908	2,494	2,840	8%	0.583		0.583	18	18	3.857	87%	6.33
	185,808		185,808	43,584	229,392	204	36,227	17%	7.614		7.614	33	33	26.407	78%	
	81%	NC		19%					100%	NC						

Table 3. Continued.

Location			Inflow												
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)
<u>STA-1W, Western Flow-way</u>		1299													
WY2001		Y	0.800	2.2	0.797	2.0	30,447		3,793	34,240	4.190	0.014	4.204	103	112
WY2002		Y	1.200	3.8	1.196	3.4	53,628		5,696	59,324	6.289	0.020	6.309	89	95
WY2003		Y	4.427	7.9	4.424	7.6	118,921		4,579	123,500	23.258	0.016	23.274	154	159
WY2004		N	2.018	4.1	2.015	3.9	60,687		3,688	64,375	10.594	0.013	10.607	136	142
WY2009		Y	2.860	4.1	2.854	3.8	58,838		5,553	64,391	15	0.027	15.033	189	207
WY2010		Y	3.498	5.0	3.492	4.6	71,262		6,274	77,536	18	0.031	18.390	192	209
WY2011		Y	1.138	2.4	1.134	2.1	32,590		4,059	36,649	6	0.020	5.981	132	148
WY2012		Y	0.875	2.4	0.871	2.1	31,964		4,686	36,650	5	0.023	4.602	102	116
POR							194,654		20,572	215,226	43.904	0.101	44.006	166	183
							90%	NC	9.6%		99.8%	0.2%			

Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
<u>STA-1W, Western Flow-way</u>																
WY2001	30,392		30,392	6,066	36,458	(1,787)	431	1%	0.990		0.990	26	26	3.200	76%	10.28
WY2002	64,601		64,601	5,711	70,312	841	11,829	18%	2.059		2.059	26	26	4.230	67%	18.07
WY2003	157,416		157,416	5,527	162,943	1,448	40,891	29%	12.483		12.483	64	64	10.775	46%	29.27
WY2004	100,901		100,901	5,536	106,437	(2,323)	39,739	47%	8.680		8.680	70	70	1.913	18%	13.41
WY2009	47,066		47,066	5,537	52,603	(1,180)	(12,968)	-22%	1.380		1.380	24	24	13.625	91%	26.87
WY2010	52,595		52,595	5,297	57,892	1,151	(18,493)	-27%	3.763		3.763	58	58	14.596	79%	18.62
WY2011	24,890		24,890	5,886	30,776	(398)	(6,271)	-19%	0.780		0.780	25	25	5.181	87%	11.90
WY2012	25,750		25,750	5,782	31,532	1,002	(4,116)	-12%	0.717		0.717	23	23	3.862	84%	11.09
				22,502	172,803	575	(41,848)	-22%	6.640		6.640	36	37.264	85%		
				87%	NC	13.0%			100%	NC						

Table 3. Continued.

Location	Inflow															
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
STA-1W, Northern Flow-way		2855														
WY2001		Y	0.534	1.5	0.530	1.2	42,556		8,856	51,412	6	0.044	6.167	97	117	
WY2002		Y	2.849	5.6	2.844	5.2	177,526		13,297	190,823	33	0.066	32.921	140	150	
WY2003		N	5.759	10.5	5.755	10.2	349,192		10,691	359,883	66	0.053	66.545	150	154	
WY2004		N	1.897	4.1	1.893	3.8	130,003		8,611	138,614	22	0.042	21.917	128	136	
WY2005		N	4.816	5.4	4.812	5.1	175,584		10,585	186,169	56	0.052	55.648	242	257	
WY2006		N	0.731	1.3	0.726	0.9	32,296		11,081	43,377	8	0.055	8.442	158	211	
WY2007		N	0.040	0.3	0.035	0.0	1,539		9,650	11,189	0	0.048	0.457	33	215	
WY2008		Y	0.790	1.6	0.785	1.2	41,193		11,824	53,017	9	0.058	9.132	140	179	
WY2009		Y	2.065	2.5	2.060	2.2	73,828		12,205	86,033	24	0.060	23.861	225	261	
WY2010		Y	2.315	3.2	2.309	2.8	94,039		13,790	107,829	27	0.068	26.745	201	230	
WY2011		Y	1.116	2.4	1.112	2.2	74,536		8,922	83,458	13	0.044	12.893	125	140	
WY2012		Y	0.699	1.7	0.695	1.4	48,992		10,299	59,291	8	0.051	8.081	110	133	
POR							1,192,292		119,512	1,311,804	264.137	0.589	264.726	164	180	
							91%	NC	9%		100%	0%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground-water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
STA-1W, Northern Flow-way																
WY2001	14,352		14,352	14,163	28,515	(4,417)	(27,314)	-68%	2		1,503	85	85	4,620	75%	0.97
WY2002	160,438		160,438	13,334	173,772	1,796	(15,255)	-8%	18		18,324	93	93	14,531	44%	8.71
WY2003	346,911		346,911	12,904	359,815	(536)	(604)	0%	34		34,027	80	80	32,465	49%	24.65
WY2004	105,426		105,426	12,926	118,352	1,358	(18,904)	-15%	6		5,871	45	45	16,004	73%	13.90
WY2005	188,371		188,371	12,803	201,174	(2,301)	12,704	7%	41		40,754	175	175	14,842	27%	7.40
WY2006	41,992		41,992	13,073	55,065	(1,914)	9,774	20%	11		11,440	221	221	(3,052)	-36%	-0.19
WY2007	28,780		28,780	13,107	41,887	510	31,209	118%	1		1,267	36	36	(0.858)	-188%	2.91
WY2008	96,232		96,232	13,116	109,348	2,959	59,289	73%	4		3,728	31	31	5,345	59%	12.75
WY2009	78,639		78,639	12,169	90,808	728	5,503	6%	2		2,147	22	22	21,654	91%	20.09
WY2010	106,653		106,653	11,643	118,296	557	11,023	10%	5		4,848	37	37	21,829	82%	19.62
WY2011	75,898		75,898	12,937	88,835	(330)	5,047	6%	2		1,920	21	21	10,929	85%	15.41
WY2012	50,276		50,276	12,708	62,984	640	4,333	7%	1		1,197	19	19	6,833	85%	10.22
			1,243,693		142,175	1,385,868	(1,590)	72,474	5%	125,828		125,828	82	138,309	52%	
			90%	NC	10%				100%	NC						

Table 4. Annual and period-of-record water and TP budgets for treatment cells and flow-ways in STA-2. [Note: Cell 4 was off-line for all of WY2012.]

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
STA-2, Cell 1		1798														
WY2003		Y	0.483	2.7	0.478	2.3	49,866	229	7,583	57,678	3.480	0.037	3.518	49	57	
WY2004		Y	0.843	3.3	0.839	3.0	64,563	3	6,375	70,941	6.104	0.031	6.135	70	77	
WY2005		Y	1.090	3.3	1.087	3.0	64,731	14	5,237	69,982	7.907	0.026	7.933	92	99	
WY2006		Y	0.984	3.3	0.980	3.0	63,884	21	6,811	70,716	7.130	0.034	7.163	82	90	
WY2007		Y	1.527	3.1	1.523	2.8	59,597	11	6,151	65,759	11.081	0.030	11.111	137	151	
WY2008		Y	1.129	3.9	1.123	3.5	76,267	38	8,170	84,475	8.173	0.040	8.214	79	87	
WY2009		Y	0.957	2.5	0.952	2.2	47,394	16	7,352	54,762	6.926	0.036	6.962	103	118	
WY2010		Y	1.181	3.1	1.175	2.7	58,750	21	8,187	66,958	8.553	0.040	8.594	104	118	
WY2011		Y	0.401	1.5	0.397	1.2	26,590	23	5,704	32,317	2.890	0.028	2.918	73	88	
WY2012		Y	0.778	3.0	0.773	2.7	57,632	2	7,821	65,455	5.624	0.039	5.662	70	79	
POR							569,275	378	69,391	639,044	67.869	0.342	68.211	87	97	
							89%	0.1%	10.9%		99.5%	0.5%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground-water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
STA-2, Cell 1																
WY2003	31,360	226	31,586	7,717	39,303	4,175	(14,200)	-29%	0.549	0.004	0.553	14	14	2.931	83%	9.52
WY2004	46,866	331	47,197	7,807	55,004	(1,567)	(17,504)	-28%	0.781	0.006	0.786	14	14	5.323	87%	16.40
WY2005	54,555	342	54,897	7,379	62,276	350	(7,356)	-11%	0.675	0.004	0.679	10	10	7.233	91%	23.16
WY2006	54,404	318	54,722	7,965	62,687	(160)	(8,189)	-12%	0.507	0.003	0.510	8	8	6.623	92%	24.90
WY2007	44,413	455	44,868	7,594	52,462	(1,883)	(15,180)	-26%	0.474	0.005	0.479	9	9	10.607	95%	25.20
WY2008	56,697	439	57,136	7,657	64,793	1,809	(17,873)	-24%	0.811	0.006	0.817	12	12	7.362	90%	22.70
WY2009	50,666	281	50,947	7,944	58,891	(2,680)	1,448	3%	0.612	0.003	0.615	10	10	6.314	91%	20.73
WY2010	66,938	406	67,344	8,001	75,345	4,131	12,518	18%	3.245	0.020	3.264	39	39	5.309	62%	11.72
WY2011	25,398	369	25,767	8,282	34,049	(1,820)	(88)	0%	0.376	0.005	0.381	12	12	2.515	86%	8.79
WY2012	45,169	406	45,575	8,093	53,668	349	(11,439)	-19%	0.496	0.004	0.501	9	9	5.127	91%	19.03
		476,465	3,573	78,439	558,477	2,704	(77,863)	-13%	8.524	0.061	8.584	15	15	59.345	87%	
		85%	0.6%	14.0%					99%	1%						

Table 4. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
STA-2, Cell 2																
	2270															
WY2002		Y	1.049	3.6	1.049	3.6	97,061	65.0	-	97,126	9.633	-	9.633	80	80	
WY2003		Y	1.134	4.9	1.129	4.5	123,190	293.0	9,574.0	133,057	10.371	0.047	10.418	63	68	
WY2004		Y	1.227	3.8	1.223	3.5	95,912	116.0	8,049.0	104,077	11.235	0.040	11.274	88	95	
WY2005		Y	2.215	5.6	2.211	5.3	144,615	108.0	6,611.0	151,334	20.316	0.033	20.349	109	114	
WY2006		Y	2.140	5.5	2.135	5.2	141,276	30.0	8,600.0	149,906	19.614	0.042	19.657	106	113	
WY2007		Y	3.069	4.9	3.065	4.6	126,265	45.0	7,765.0	134,075	28.155	0.038	28.193	170	181	
WY2008		Y	1.011	2.6	1.006	2.2	60,147	194.0	10,315.0	70,656	9.241	0.051	9.292	107	125	
WY2009		Y	1.717	4.1	1.712	3.8	102,523	290.0	9,282.0	112,095	15.731	0.046	15.777	114	124	
WY2010		Y	2.209	4.9	2.204	4.5	123,175	76.0	10,336.0	133,587	20.244	0.051	20.295	123	133	
WY2011		Y	0.894	2.7	0.890	2.4	65,696	23.0	7,202.0	72,921	8.176	0.036	8.211	91	101	
WY2012		Y	1.049	3.2	1.044	2.9	78,193	6.0	9,875.0	88,074	9.592	0.049	9.640	89	99	
POR							1,158,052	1,246	87,609	1,246,907	162.308	0.432	162.740	106	114	
							93%	0.1%	7%		100%	0.3%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
STA-2, Cell 2																
WY2002	89,344	328	89,672	9,980	99,652	1,348	3,875	4%	1.738	0.006	1.745	16	16	7.894	82%	20.39
WY2003	100,378	270	100,648	9,743	110,391	3,322	(19,345)	-16%	2.486	0.007	2.493	20	20	7.885	76%	18.36
WY2004	89,833	437	90,270	9,856	100,126	(1,693)	(5,644)	-6%	1.750	0.009	1.759	16	16	9.484	84%	22.37
WY2005	131,969	673	132,642	9,315	141,957	(1,413)	(10,790)	-7%	6.266	0.032	6.298	38	38	14.050	69%	20.14
WY2006	98,563	627	99,190	10,056	109,246	154	(40,506)	-31%	3.310	0.021	3.331	27	27	16.304	83%	22.85
WY2007	118,027	787	118,814	9,587	128,401	(1,730)	(7,404)	-6%	7.980	0.053	8.033	55	55	20.175	72%	19.57
WY2008	61,636	139	61,775	9,667	71,442	2,015	2,801	4%	2.746	0.006	2.752	36	36	6.495	70%	10.12
WY2009	111,899	352	112,251	10,030	122,281	(1,940)	8,246	7%	2.710	0.009	2.719	20	20	13.021	83%	26.58
WY2010	141,294	408	141,702	10,101	151,803	4,085	22,302	16%	10.789	0.031	10.820	62	62	9.456	47%	13.61
WY2011	68,712	778	69,490	10,457	79,947	(1,248)	5,778	8%	1.581	0.018	1.599	19	19	6.595	80%	15.23
WY2012	87,670	757	88,427	10,217	98,644	1,554	12,124	13%	1.583	0.014	1.597	15	15	8.009	83%	21.34
1,099,325		5,556		109,009	1,213,890	4,454	(28,563)	-2%	42.940	0.205	43.145		32	119.368	74%	
91%		0%		9%					100%	0%						

Table 4. Continued.

Location			Inflow																																															
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water																																			
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)																																			
STA-2, Cell 3		2270																																																
WY2002		Y	0.447	4.5	0.447	4.5	122,699		-	122,699	4.104	-	4.104	27	27																																			
WY2003		Y	1.092	5.9	1.087	5.5	150,632		9,574.0	160,206	9.987	0.047	10.034	51	54																																			
WY2004		Y	1.299	4.6	1.295	4.3	117,546		8,049.0	125,595	11.892	0.040	11.932	77	82																																			
WY2005		Y	2.117	5.5	2.114	5.3	143,865		6,611.0	150,476	19.420	0.033	19.453	105	109																																			
WY2006		Y	1.458	4.5	1.454	4.2	113,685		8,600.0	122,285	13.356	0.042	13.398	89	95																																			
WY2007		Y	1.179	2.8	1.175	2.5	67,574		7,765.0	75,339	10.796	0.038	10.834	117	130																																			
WY2008		Y	1.344	3.6	1.338	3.2	88,316		10,315.0	98,631	12.295	0.051	12.345	101	113																																			
WY2009		Y	1.548	2.8	1.543	2.4	66,527		9,282.0	75,809	14.177	0.046	14.223	152	173																																			
WY2010		Y	1.894	5.1	1.888	4.7	127,972		10,336.0	138,308	17.345	0.051	17.396	102	110																																			
WY2011		Y	0.801	2.9	0.798	2.7	72,493		7,202.0	79,695	7.327	0.036	7.362	75	82																																			
WY2012		Y	0.815	3.1	0.810	2.7	73,549		9,875.0	83,424	7.440	0.049	7.489	73	82																																			
POR							1,144,858		87,609	1,232,467	128.140	0.432	128.572	85	91																																			
							93%	NC	7.1%		99.7%	0.3%																																						
Outflow																																																		
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water																																		
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)																																		
STA-2, Cell 3																																																		
WY2002	88,577	12,931	101,508	9,980	111,488	2,094	(9,118)	-8%	1.723	0.251	1.974	16	16	2.381	58%	7.69																																		
WY2003	117,316	14,083	131,399	9,743	141,142	1,723	(17,340)	-12%	2.246	0.270	2.516	16	16	7.741	77%	22.34																																		
WY2004	104,826	11,584	116,410	9,856	126,266	(3,016)	(2,345)	-2%	1.701	0.188	1.889	13	13	10.192	85%	27.33																																		
WY2005	135,929	8,302	144,231	9,315	153,546	(364)	2,706	2%	2.704	0.165	2.869	16	16	16.716	86%	35.97																																		
WY2006	115,562	8,331	123,893	10,056	133,949	(617)	11,047	9%	2.517	0.181	2.699	18	18	10.839	81%	25.94																																		
WY2007	69,872	7,657	77,529	9,587	87,116	(59)	11,718	14%	2.203	0.241	2.444	26	26	8.593	79%	14.97																																		
WY2008	94,536	8,968	103,504	9,667	113,171	1,464	16,004	15%	1.969	0.187	2.155	17	17	10.326	84%	23.32																																		
WY2009	58,147	7,403	65,550	10,030	75,580	(806)	(1,035)	-1%	2.094	0.267	2.361	29	29	12.083	85%	14.88																																		
WY2010	124,505	7,443	131,948	10,101	142,049	2,775	6,516	5%	2.671	0.160	2.831	17	17	14.674	84%	31.24																																		
WY2011	72,552	8,195	80,747	10,457	91,204	(1,744)	9,765	11%	1.349	0.152	1.501	15	15	5.978	81%	16.49																																		
WY2012	92,167	7,428	99,595	10,217	109,812	1,708	28,096	29%	1.648	0.133	1.781	14	14	5.792	77%	19.28																																		
<table border="0" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;"></td> <td style="width:10%; text-align: right;">1,073,989</td> <td style="width:10%; text-align: right;">102,325</td> <td style="width:10%;"></td> <td style="width:10%; text-align: right;">109,009</td> <td style="width:10%; text-align: right;">1,285,323</td> <td style="width:10%; text-align: right;">3,158</td> <td style="width:10%; text-align: right;">56,014</td> <td style="width:10%; text-align: right;">4%</td> <td style="width:10%; text-align: right;">22.825</td> <td style="width:10%; text-align: right;">2.194</td> <td style="width:10%; text-align: right;">25.020</td> <td style="width:10%;"></td> <td style="width:10%; text-align: right;">17</td> <td style="width:10%; text-align: right;">105.314</td> <td style="width:10%; text-align: right;">82%</td> <td style="width:10%;"></td> </tr> <tr> <td></td> <td style="text-align: right;">84%</td> <td style="text-align: right;">8.0%</td> <td></td> <td style="text-align: right;">8.5%</td> <td></td> <td></td> <td></td> <td></td> <td style="text-align: right;">91%</td> <td style="text-align: right;">9%</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>																		1,073,989	102,325		109,009	1,285,323	3,158	56,014	4%	22.825	2.194	25.020		17	105.314	82%			84%	8.0%		8.5%					91%	9%						
	1,073,989	102,325		109,009	1,285,323	3,158	56,014	4%	22.825	2.194	25.020		17	105.314	82%																																			
	84%	8.0%		8.5%					91%	9%																																								

Table 4. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
<u>STA-2, Cell 4</u>			1902													
WY2009		Y	1.084	2.3	1.079	1.9	44,142	1,310	7,778	53,230	8	0.038	8.341	127	152	
WY2010		Y	1.078	3.1	1.073	2.7	61,686	498	8,660	70,844	8	0.043	8.298	95	108	
WY2011		N	0.011	0.9	0.007	0.0	1,039	14,225	6,034	21,298	0	0.030	0.084	3	43	
POR							106,868	16,033.0	22,472	145,373	16.613	0.111	16.724	126	126	
							74%	11%	15%		99%	1%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground-water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
<u>STA-2, Cell 4</u>																
WY2009	50,276	386	50,662	8,404	59,066	(1,578)	4,258	8%	1	0.009	1.246	20	20	7.066	85%	15.39
WY2010	58,908	708	59,616	8,464	68,080	957	(1,806)	-3%	2	0.022	1.863	25	25	6.415	77%	14.06
WY2011	12,070	-	12,070	8,761	20,831	(3,393)	(3,860)	-18%	1	-	0.514	35	35	(0.459)	-544%	0.22
				25,629	147,978	(4,014)	(1,408)	-1%	3.591	0.032	3.622		24	13.022	78%	
				82%	1%	17%			99%	1%						

Table 5. Annual and period-of-record water and TP budgets for treatment cells and flow-ways in STA-3/4.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
<u>STA-3/4, Cell 1A</u>		3039														
WY2006		Y	3.506	8.2	3.500	7.8	285,159		14,516	299,675	43.043	0.072	43.115	117	122	
WY2007		Y	2.348	5.0	2.343	4.7	171,127		11,857	182,984	28.818	0.058	28.877	128	137	
WY2008		Y	1.140	3.9	1.134	3.5	126,065		14,212	140,277	13.945	0.070	14.015	81	90	
WY2009		Y	1.363	5.3	1.359	5.0	182,054		10,788	192,842	16.712	0.053	16.766	70	74	
WY2010		Y	2.064	5.9	2.057	5.5	201,022		15,433	216,455	25.304	0.076	25.380	95	102	
WY2011		Y	0.796	2.8	0.792	2.6	93,579		9,246	102,825	9.742	0.046	9.787	77	84	
WY2012		Y	0.494	2.6	0.487	2.2	80,369		15,491	95,860	5.996	0.076	6.072	51	60	
POR							1,139,375		91,543	1,230,918	143.560	0.451	144.012	95	102	
							93%	NC	7%		100%	0%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
<u>STA-3/4, Cell 1A</u>																
WY2006	444,888		444,888	13,402	458,290	(6,946)	151,668	40%	33.198		33.198	60	60	9.846	23%	25.79
WY2007	26,410		26,410	13,289	39,699	(1,182)	(144,467)	-130%	1.355		1.355	42	42	27.463	95%	11.78
WY2008	181,219		181,219	13,450	194,669	3,936	58,328	35%	9.046		9.046	40	40	4.899	35%	12.26
WY2009	192,573		192,573	13,803	206,376	(3,070)	10,464	5%	4.024		4.024	17	17	12.689	76%	27.81
WY2010	335,060		335,060	13,523	348,583	2,784	134,912	48%	16.880		16.880	41	41	8.424	33%	24.62
WY2011	104,654		104,654	13,999	118,653	(4,869)	10,959	10%	3.829		3.829	30	30	5.913	60%	10.39
WY2012	6,536		6,536	13,679	20,215	4,720	(70,925)	-122%	3.164		3.164	392	392	2.832	47%	-8.15
				95,145	1,386,486	(4,627)	150,941	12%	71.496		71.496	45	45	72.065	50%	
				7%					100%	NC						

Table 5. Continued.

Location			Inflow												
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)
<u>STA-3/4, Cell 1B</u>		3488													
WY2006		Y	2.357	11.0	2.351	10.6	444,775		16,661	461,436	33.188	0.082	33.271	58	60
WY2007		Y	0.091	0.9	0.086	0.6	23,420		13,609	37,029	1.217	0.067	1.284	28	42
WY2008		Y	0.647	4.7	0.641	4.3	181,218		16,312	197,530	9.046	0.080	9.127	37	40
WY2009		Y	0.289	4.9	0.285	4.6	192,573		12,382	204,955	4.024	0.061	4.085	16	17
WY2010		Y	1.202	8.4	1.196	8.0	335,060		17,713	352,773	16.880	0.087	16.968	39	41
WY2011		Y	0.275	2.8	0.271	2.5	104,654		10,612	115,266	3.829	0.052	3.881	27	30
WY2012		Y	0.228	0.6	0.222	0.1	5,703		17,780	23,483	3.137	0.088	3.224	111	446
POR							1,287,404		105,069	1,392,473	71.321	0.518	71.840	42	45
							92%	NC	7.5%		99.3%	0.7%			

Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
<u>STA-3/4, Cell 1B</u>																
WY2006	378,733		378,733	15,382	394,115	(4,638)	(71,958)	-17%	10.609		10.609	23	23	22.580	68%	35.25
WY2007	153,720		153,720	15,253	168,973	(406)	131,537	128%	3.988		3.988	21	21	(2.771)	-216%	5.38
WY2008	128,637		128,637	15,438	144,075	2,990	(50,465)	-30%	3.064		3.064	19	19	5.982	66%	10.02
WY2009	200,245		200,245	15,843	216,088	(2,290)	8,843	4%	3.168		3.168	13	13	0.855	21%	4.77
WY2010	227,940		227,940	15,521	243,461	(122)	(109,434)	-37%	3.781		3.781	13	13	13.100	77%	27.33
WY2011	100,665		100,665	16,067	116,732	(517)	948	1%	1.996		1.996	16	16	1.833	47%	5.49
WY2012	87,784		87,784	15,700	103,484	3,026	83,028	131%	2.162		2.162	20	20	0.975	30%	12.69
POR																
1,277,724																
92%																
NC																
109,204																
1,386,928																
(1,957)																
(7,502)																
-1%																
28.767																
100%																
NC																
28.767																
18																
42.554																
60%																

Table 5. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
<u>STA-3/4, Cell 2A</u>																
	2542															
WY2006		Y	3.778	8.8	3.772	8.4	255,133		12,142	267,275	38.806	0.060	38.865	118	123	
WY2007		Y	1.367	3.9	1.363	3.6	109,509		9,918	119,427	14.017	0.049	14.066	95	104	
WY2008		Y	0.509	3.0	0.503	2.6	79,498		11,888	91,386	5.178	0.059	5.237	46	53	
WY2009		Y	1.065	4.3	1.061	4.0	120,768		9,024	129,792	10.913	0.045	10.957	68	73	
WY2010		Y	1.959	7.4	1.952	7.0	212,058		12,909	224,967	20.085	0.064	20.148	73	77	
WY2011		Y	0.615	3.4	0.611	3.2	97,230		7,734	104,964	6.287	0.038	6.325	49	52	
WY2012		Y	0.555	3.5	0.548	3.1	93,373		12,958	106,331	5.643	0.064	5.707	44	49	
POR							967,571		76,573	1,044,144	100.929	0.378	101.306	79	85	
							93%	NC	7.3%		99.6%	0.4%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground-water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
<u>STA-3/4, Cell 2A</u>																
WY2006	399,652		399,652	11,210	410,862	(3,874)	139,713	41%	34.797		34.797	71	71	4.008	10%	21.90
WY2007	149,574		149,574	11,116	160,690	(2,629)	38,634	28%	9.177		9.177	50	50	4.840	34%	11.42
WY2008	76,617		76,617	11,251	87,868	4,849	1,331	1%	2.600		2.600	28	28	2.578	49%	6.10
WY2009	122,586		122,586	11,546	134,132	(3,063)	1,277	1%	2.356		2.356	16	16	8.557	78%	22.59
WY2010	166,274		166,274	11,312	177,586	3,926	(43,455)	-22%	5.188		5.188	25	25	14.897	74%	25.19
WY2011	37,529		37,529	11,709	49,238	(3,366)	(59,092)	-77%	0.878		0.878	19	19	5.409	86%	8.21
WY2012	(53,462)		(53,462)	11,442	(42,020)	1,257	(147,094)	-457%	(0.887)		(0.887)	13	13	6.530	114%	3.09
				79,586	978,357	(2,900)	(68,687)	-7%	54.109		54.109	49	46.820	46%		
898,771		92%	NC	8.1%					100%	NC						

Table 5. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
<u>STA-3/4, Cell 2B</u>																
	2894															
WY2006		Y	2.961	11.8	2.955	11.4	394,278		13,824	408,102	34.614	0.068	34.682	69	71	
WY2007		Y	0.788	4.6	0.784	4.3	149,574		11,291	160,865	9.177	0.056	9.233	47	50	
WY2008		Y	0.228	2.6	0.222	2.2	76,615		13,534	90,149	2.600	0.067	2.667	24	28	
WY2009		Y	0.205	3.8	0.201	3.5	122,557		10,274	132,831	2.355	0.051	2.406	15	16	
WY2010		Y	0.449	5.2	0.443	4.8	166,270		14,697	180,967	5.187	0.072	5.260	24	25	
WY2011		Y	0.075	1.3	0.071	1.0	35,879		8,805	44,684	0.830	0.043	0.874	16	19	
WY2012		Y	-0.071	(1.2)	-0.078	(1.6)	(54,624)		14,752	(39,872)	(0.910)	0.073	(0.837)	17	14	
POR							890,548		87,177	977,725	53.854	0.430	54.284	45	49	
							91%	NC	9%		99%	1%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
<u>STA-3/4, Cell 2B</u>																
WY2006	262,269		262,269	12,763	275,032	(1,376)	(134,445)	-39%	8.253		8.253	26	26	26.361	76%	35.47
WY2007	121,971		121,971	12,655	134,626	(1,686)	(27,924)	-19%	3.325		3.325	22	22	5.852	63%	11.60
WY2008	81,421		81,421	12,809	94,230	3,306	7,387	8%	2.318		2.318	23	23	0.282	11%	1.46
WY2009	136,574		136,574	13,145	149,719	(1,584)	15,304	11%	2.280		2.280	14	14	0.075	3%	1.92
WY2010	207,274		207,274	12,878	220,152	529	39,714	20%	4.197		4.197	16	16	0.990	19%	8.50
WY2011	94,193		94,193	13,331	107,524	(987)	61,853	81%	2.384		2.384	21	21	(1.553)	-178%	-0.61
WY2012	94,231		94,231	13,026	107,257	1,972	149,102	443%	2.458		2.458	21	21	(3.368)	402%	-0.94
997,934				90,607	1,088,541	174	110,990	11%	25.215		25.215		20	28.639	53%	
92%				NC	8%				100%	NC						

Table 5. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
STA-3/4, Cell 3		4580														
WY2006		N	0.509	1.9	0.503	1.5	82,659		21,877	104,536	9.322	0.108	9.430	73	91	
WY2007		N	0.626	1.8	0.621	1.5	82,894		17,870	100,764	11.510	0.088	11.598	93	113	
WY2008		Y	0.462	2.6	0.456	2.2	122,433		21,419	143,852	8.449	0.106	8.554	48	56	
POR							287,987		61,166	349,153	29.281	0.302	29.583	82		
							82%	NC	17.5%		99.0%	1.0%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground-water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
STA-3/4, Cell 3																
WY2006	105,270		105,270	20,198	125,468	(2,998)	17,934	16%	2,690		2,690	21	21	6.632	70%	9.28
WY2007	85,630		85,630	20,028	105,658	(181)	4,712	5%	2,656		2,656	25	25	8.855	76%	8.41
WY2008	90,438		90,438	20,271	110,709	5,664	(27,480)	-22%	2,019		2,019	18	18	6.430	75%	7.99
				60,497	341,835	2,485	(4,834)	-1%	7,365		7,365	21	21.917	75%		
				17.7%					100%	NC						

Table 5. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
<u>STA-3/4, Cell 3A</u>		2153														
WY2009		Y	2.019	6.8	2.015	6.6	168,914		7,643	176,557	17.558	0.038	17.596	81	84	
WY2010		Y	2.169	8.9	2.163	8.5	219,526		10,934	230,460	18.846	0.054	18.900	66	70	
WY2011		Y	0.824	4.6	0.821	4.4	112,832		6,550	119,382	7.151	0.032	7.184	49	51	
WY2012		Y	0.620	5.2	0.614	4.8	123,600		10,975	134,575	5.349	0.054	5.403	33	35	
POR							624,871		36,102	660,973	48.905	0.178	49.083	60	63	
							95%	NC	5.5%		99.6%	0.4%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
<u>STA-3/4, Cell 3A</u>																
WY2009	166,177		166,177	9,779	175,956	(2,384)	(2,985)	-2%	4.164		4.164	20	20	13.395	76%	33.75
WY2010	358,603		358,603	9,581	368,184	3,875	141,599	47%	15.642		15.642	35	35	3.204	17%	27.71
WY2011	359,101		359,101	9,918	369,019	(3,673)	245,964	101%	9.309		9.309	21	21	(2.158)	-30%	29.87
WY2012	302,858		302,858	9,691	312,549	3,418	181,392	81%	7.793		7.793	21	21	(2.444)	-45%	15.69
				38,969	1,225,708	1,236	565,970	60%	36.907		36.907		25	11.997	25%	
		97%	NC	3.2%					100%	NC						

Table 5. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
STA-3/4, Cell 3B																
	2427															
WY2009		Y	0.428	6.0	0.424	5.7	166,189		8,616	174,805	4.164	0.042	4.206	20	20	
WY2010		Y	1.599	12.8	1.592	12.3	358,603		12,325	370,928	15.642	0.061	15.702	34	35	
WY2011		Y	0.956	12.7	0.953	12.4	360,747		7,384	368,131	9.356	0.036	9.393	21	21	
WY2012		Y	0.800	10.8	0.793	10.4	302,858		12,372	315,230	7.793	0.061	7.854	20	21	
POR							1,188,397		40,697	1,229,094	36.955	0.201	37.156	25	25	
							97%	NC	3%	99%	1%					
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground-water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
STA-3/4, Cell 3B																
WY2009	129,209		129,209	11,024	140,233	(1,725)	(36,298)	-23%	1.977		1.977	12	12	2.187	52%	9.15
WY2010	233,842		233,842	10,800	244,642	1,242	(125,043)	-41%	4.312		4.312	15	15	11.330	72%	32.03
WY2011	118,737		118,737	11,180	129,917	(1,909)	(240,123)	-96%	1.994		1.994	14	14	7.362	78%	13.08
WY2012	121,825		121,825	10,924	132,749	2,581	(179,900)	-80%	2.287		2.287	15	15	5.506	70%	8.41
				43,928	647,541	189	(581,364)	-62%	10.570		10.570	14	14	26.385	71%	
603,613				7%				100%	NC							
93%		NC														

Table 5. Continued.

Location	Inflow														
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)
<u>STA-3/4, Eastern Flow-way</u>	6527														
WY2006		Y	1.635	4.0	1.630	3.6	285,159		31,177	316,336	43.043	0.154	43.197	111	122
WY2007		Y	1.096	2.5	1.091	2.2	171,127		25,466	196,593	28.818	0.126	28.944	119	137
WY2008		Y	0.534	2.0	0.528	1.6	126,065		30,524	156,589	13.945	0.151	14.096	73	90
WY2009		Y	0.637	2.6	0.633	2.3	182,054		23,170	205,224	16.712	0.114	16.827	66	74
WY2010		Y	0.964	3.0	0.958	2.6	201,022		33,146	234,168	25.304	0.163	25.468	88	102
WY2011		Y	0.373	1.5	0.369	1.2	93,579		19,858	113,437	9.742	0.098	9.840	70	84
WY2012		Y	0.233	1.5	0.227	1.0	80,369		33,271	113,640	5.996	0.164	6.160	44	60
POR							1,139,375		196,612	1,335,987	143.560	0.970	144.530	88	102
							85%	NC	14.7%		99.3%	0.7%			

Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
<u>STA-3/4, Eastern Flow-way</u>																
WY2006	378,733		378,733	28,784	407,517	(11,584)	79,597	22%	10.609		10.609	23	23	32.435	75%	26.11
WY2007	153,720		153,720	28,542	182,262	(1,588)	(15,919)	-8%	3.988		3.988	21	21	24.830	86%	14.19
WY2008	128,637		128,637	28,888	157,525	6,926	7,862	5%	3.064		3.064	19	19	10.881	77%	9.13
WY2009	200,245		200,245	29,646	229,891	(5,360)	19,307	9%	3.168		3.168	13	13	13.544	80%	15.69
WY2010	227,940		227,940	29,044	256,984	2,662	25,478	10%	3.781		3.781	13	13	21.523	85%	20.30
WY2011	100,665		100,665	30,066	130,731	(5,386)	11,907	10%	1.996		1.996	16	16	7.745	79%	7.52
WY2012	87,784		87,784	29,379	117,163	7,746	11,270	10%	2.162		2.162	20	20	3.834	62%	4.35
	1,277,724			204,349	1,482,073	(6,584)	139,502	10%	28.767		28.767	18	18	114.793	80%	
	86%	NC		13.8%					100%	NC						

Table 5. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
STA-3/4, Central Flow-way																
	5436															
WY2006		Y	1.770	4.3	1.764	3.9	255,133	-	25,966	281,099	38.806	0.128	38.934	112	123	
WY2007		Y	0.642	2.0	0.637	1.7	109,509	-	21,209	130,718	14.017	0.105	14.122	88	104	
WY2008		Y	0.241	1.6	0.235	1.2	79,498	-	25,422	104,920	5.178	0.125	5.304	41	53	
WY2009		Y	0.500	2.2	0.496	1.9	120,768	-	19,298	140,066	10.913	0.095	11.008	64	73	
WY2010		Y	0.919	3.7	0.913	3.3	212,058	-	27,606	239,664	20.085	0.136	20.221	68	77	
WY2011		Y	0.289	1.7	0.286	1.5	97,230	-	16,539	113,769	6.287	0.082	6.369	45	52	
WY2012		Y	0.263	1.9	0.256	1.4	93,373	-	27,710	121,083	5.643	0.137	5.779	39	49	
POR							967,571		163,750	1,131,321	100.929	0.808	101.736	73	85	
							86%	NC	14%		99%	1%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
STA-3/4, Central Flow-way																
WY2006	262,269		262,269	23,973	286,242	(5,250)	(107)	0%	8.253		8.253	26	26	30.552	78%	22.85
WY2007	121,971		121,971	23,771	145,742	(4,315)	10,709	8%	3.325		3.325	22	22	10.693	76%	10.04
WY2008	81,421		81,421	24,060	105,481	8,155	8,715	8%	2.318		2.318	23	23	2.860	54%	3.73
WY2009	136,574		136,574	24,691	161,265	(4,647)	16,551	11%	2.280		2.280	14	14	8.633	78%	12.18
WY2010	207,274		207,274	24,190	231,464	4,455	(3,745)	-2%	4.197		4.197	16	16	15.887	79%	18.14
WY2011	94,193		94,193	25,040	119,233	(4,353)	1,111	1%	2.384		2.384	21	21	3.903	61%	5.03
WY2012	94,231		94,231	24,468	118,699	3,229	845	1%	2.458		2.458	21	21	3.185	55%	4.42
				170,193	1,168,127	(2,726)	34,080	3%	25.215		25.215	20	75.714	75%		
997,934		85%	NC						100%	NC						

Table 5. Continued.

Location			Inflow												
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)
STA-3/4, Western Flow-way	4,580														
WY2006		N	0.509	1.9	0.503	1.5	82,659	-	21,877	104,536	9.322	0.108	9.430	73	91
WY2007		N	0.626	1.8	0.621	1.5	82,894	-	17,870	100,764	11.510	0.088	11.598	93	113
WY2008		Y	0.462	2.6	0.456	2.2	122,433	-	21,419	143,852	8.449	0.106	8.554	48	56
WY2009		Y	0.949	3.4	0.947	3.1	168,914	-	16,259	185,173	17.558	0.080	17.596	77	84
WY2010		Y	1.020	4.4	1.017	4.0	219,526	-	23,259	242,785	18.846	0.115	18.900	63	70
WY2011		Y	0.388	2.3	0.386	2.1	112,832	-	13,934	126,766	7.151	0.069	7.184	46	51
WY2012		Y	0.292	2.7	0.289	2.3	123,600	-	23,347	146,947	5.349	0.115	5.403	30	35
POR							624,871		76,799	701,670	48.905	0.379	49.083	57	63
							89%	NC	11%		100%	1%			

Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
STA-3/4, Western Flow-way																
WY2006	105,270		105,270	20,198	125,468	(2,998)	17,934	16%	2,690		2,690	21	21	6.632	70%	9.28
WY2007	85,630		85,630	20,028	105,658	(181)	4,712	5%	2,656		2,656	25	25	8.855	76%	8.41
WY2008	90,438		90,438	20,271	110,709	5,664	(27,480)	-22%	2,019		2,019	18	18	6.430	75%	7.99
WY2009	129,209		129,209	20,803	150,012	(4,109)	(39,270)	-23%	1,977		1,977	12	12	15.581	89%	19.00
WY2010	233,842		233,842	20,381	254,223	5,117	16,556	7%	4,312		4,312	15	15	14.534	77%	23.20
WY2011	118,737		118,737	21,098	139,835	(5,582)	7,487	6%	1,994		1,994	14	14	5.157	72%	10.23
WY2012	121,825		121,825	20,615	142,440	5,999	1,492	1%	2,287		2,287	15	15	3.062	57%	6.82
	603,613			82,897	686,510	1,425	(13,736)	-2%	10,570		10,570		14	38.334	78%	
	88%	NC		12%					100%	NC						

Table 6. Annual and period-of-record water and TP budgets for treatment cells and flow-ways in STA-5.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
STA-5, Cell 1A		835														
WY2009		N	4.364	5.8	4.360	5.2	52,080	2,904	2,980	57,964	14.733	0.015	14.747	206	229	
WY2010		N	1.316	3.0	1.309	2.5	24,725	466	4,380	29,571	4.425	0.022	4.446	122	145	
WY2011		Y	0.910	2.1	0.906	1.9	18,772	-	2,712	21,484	3.060	0.013	3.074	116	132	
WY2012		Y	1.344	3.0	1.339	2.6	26,338	118	3,373	29,829	4.526	0.017	4.543	123	139	
POR							121,916	3,488	13,445	138,849	26.744	0.066	26.811	157	178	
							88%	3%	10%		100%	0%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
STA-5, Cell 1A																
WY2009	118,806	1,656	120,462	3,732	124,194	(176)	66,054	73%	25.129	0.350	25.479	171	171	(10.396)	-70%	9.07
WY2010	45,460	2,419	47,879	3,568	51,447	1,454	23,329	58%	9.024	0.480	9.504	161	161	(4.599)	-103%	-1.33
WY2011	18,044	3,728	21,772	3,778	25,550	(1,405)	2,661	11%	0.830	0.171	1.002	37	37	2.230	73%	8.50
WY2012	25,700	3,384	29,084	3,497	32,581	13	2,765	9%	3.887	0.512	4.399	123	123	0.639	14%	1.21
		208,010	11,187		14,575	233,772	(114)	94,809	51%	38.870	1.513	40.383	151	(12.126)	-45%	
		89%	5%		6%					96%	4%					

Table 6. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
STA-5, Cell 1B		1220														
WY2009		N	5.157	9.1	5.153	8.8	129,162		4,354	133,516	25.440	0.021	25.462	155	160	
WY2010		N	1.931	4.2	1.925	3.8	55,292		6,399	61,691	9.502	0.032	9.533	125	139	
WY2011		Y	0.256	2.5	0.252	2.2	32,694		3,962	36,656	1.242	0.020	1.262	28	31	
WY2012		Y	0.839	2.8	0.834	2.4	35,755		4,928	40,683	4.118	0.024	4.142	83	93	
POR							252,903		19,643	272,546	40.302	0.097	40.399	120	129	
							93%	NC	7.2%		99.8%	0.2%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
STA-5, Cell 1B																
WY2009	69,976	6,284	76,260	5,453	81,713	-	(51,802)	-48%	3.945		3.945	42	46	21.495	84%	31.12
WY2010	28,596	3,801	32,397	5,213	37,610	-	(24,081)	-49%	1.982		1.982	50	56	7.520	79%	9.51
WY2011	16,926	5,760	22,686	5,520	28,206	(641)	(9,092)	-28%	0.852		0.852	30	41	0.391	31%	-1.74
WY2012	22,643	5,444	28,087	5,110	33,197	245	(7,241)	-20%	0.997		0.997	29	36	3.121	75%	7.01
				21,296	180,726	(396)	(92,216)	-41%	7.776	-	7.776		46	32.526	81%	
		138,141	21,289													
		76%	11.8%						100%	0%						

Table 6. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
STA-5, Cell 2A		835														
WY2009		N	3.406	4.2	3.402	3.8	38,112	914	2,980	42,006	11.495	0.015	11.510	222	245	
WY2010		Y	4.474	7.2	4.467	6.8	67,714	65	4,380	72,159	15.096	0.022	15.118	170	181	
WY2011		Y	0.515	1.3	0.511	0.9	9,379	861	2,712	12,952	1.725	0.013	1.739	109	149	
WY2012		Y	1.484	2.9	1.479	2.5	24,515	1,564	3,373	29,452	4.998	0.017	5.015	138	165	
POR							139,720	3,404	13,445	156,569	33.315	0.066	33.382	173	193	
							89%	2.2%	8.6%		99.8%	0.2%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
STA-5, Cell 2A																
WY2009	51,793	2,412	54,205	3,732	57,937	(9)	15,923	32%	7.377	0.343	7.720	115	115	4.119	36%	12.31
WY2010	82,479	2,069	84,548	3,568	88,116	1,384	17,342	22%	8.973	0.225	9.198	88	88	6.123	41%	19.67
WY2011	10,843	739	11,582	3,778	15,360	(1,382)	1,025	7%	0.476	0.032	0.509	36	36	1.249	72%	5.29
WY2012	23,897	329	24,226	3,497	27,723	21	(1,709)	-6%	7.460	0.103	7.562	253	253	(2.462)	-49%	-3.76
				14,575	189,136	14	32,581	19%	24.286	0.703	24.989	116	116	9.029	27%	
				7.7%					97%	3%						

Table 6. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
STA-5, Cell 2B		1220														
WY2009		N	1.569	4.2	1.564	3.9	56,484	1,050	4,354	61,888	7.723	0.021	7.745	101	111	
WY2010		Y	1.873	6.4	1.867	5.9	86,612	268	6,399	93,279	9.218	0.032	9.250	80	86	
WY2011		Y	0.101	1.1	0.097	0.7	10,843	974	3,962	15,779	0.478	0.020	0.498	26	36	
WY2012		Y	1.516	2.0	1.511	1.6	23,897	349	4,928	29,174	7.459	0.024	7.484	208	253	
POR							177,835	2,641	19,643	200,119	24.879	0.097	24.976	101	113	
							89%	1%	10%		100%	0%				

Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
STA-5, Cell 2B																
WY2009	37,684	4,081	41,765	5,453	47,218	363	(14,307)	-26%	3.383	0.366	3.749	73	73	4.340	56%	4.95
WY2010	72,085	3,709	75,794	5,213	81,007	246	(12,026)	-14%	4.349	0.224	4.573	49	49	4.869	53%	11.25
WY2011	4,618	1,971	6,589	5,520	12,109	(845)	(4,514)	-32%	0.314	0.134	0.447	55	55	0.165	33%	-0.83
WY2012	19,133	3,463	22,596	5,110	27,706	708	(760)	-3%	0.665	0.120	0.785	28	28	6.795	91%	11.80
				21,296	168,039	472	(31,607)	-17%	8.711	0.844	9.554		53	16.169	65%	
		133,519	13,224													
		79%	8%		13%				91%	9%						

Table 6. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
STA-5, Cell 3A		1002														
WY2009		N	1.259	1.4	1.255	0.9	11,362	1,482	3,576	16,420	5.089	0.018	5.106	252	363	
WY2010		N	1.044	4.8	1.037	1.5	18,490	34,050	5,256	57,796	4.207	0.026	4.233	59	184	
WY2011		N	0.197	0.5	0.193	0.2	1,989	174	3,254	5,417	0.782	0.016	0.798	119	319	
WY2012		Y	0.010	0.3	0.005	0.0	147	-	4,047	4,194	0.022	0.020	0.041	8	119	
POR							31,988	35,706	16,133	83,827	10.099	0.080	10.178	98	256	
							38%	43%	19%		99%	1%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
STA-5, Cell 3A																
WY2009	5,559	5,358	10,917	4,479	15,396	(88)	(1,111)	-7%	0.949	0.914	1.863	138	138	4.140	81%	2.48
WY2010	16,229	1,485	17,714	4,281	21,995	-	(35,801)	-90%	1.418	0.130	1.548	71	71	2.788	66%	5.05
WY2011	9,734	12,228	21,962	4,533	26,495	86	21,163	133%	0.491	0.617	1.108	41	41	0.291	36%	3.66
WY2012	56	-	56	4,197	4,253	-	59	1%	0.001	-	0.001	21	21	0.020	48%	0.05
		31,578	19,071	17,490	68,139	(2)	(15,690)	-21%	2.860	1.661	4.520		73	7.239	72%	
		46%	28%	26%					63%	37%						

Table 6. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
STA-5, Cell 3B		983														
WY2009		N	0.243	0.9	0.239	0.5	5,591	2,032	3,508	11,131	0.950	0.017	0.967	70	138	
WY2010		N	0.363	3.0	0.357	1.4	16,238	13,649	5,156	35,043	1.419	0.025	1.444	33	71	
WY2011		N	0.137	1.3	0.133	0.9	10,973	1,614	3,192	15,779	0.531	0.016	0.547	28	39	
WY2012		Y	0.071	1.1	0.066	0.8	9,534	-	3,970	13,504	0.264	0.020	0.283	17	22	
POR							42,336	17,295	15,826	75,457	3.164	0.078	3.242	35	61	
							56%	22.9%	21.0%		97.6%	2.4%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
STA-5, Cell 3B																
WY2009	3,247	2,139	5,386	4,394	9,780	-	(1,351)	-13%	0.122	0.080	0.202	30	30	0.828	86%	2.07
WY2010	3,603	2,042	5,645	4,200	9,845	-	(25,198)	-112%	0.160	0.091	0.250	36	36	1.259	87%	2.08
WY2011	2,774	2,925	5,699	4,447	10,146	-	(5,632)	-43%	0.262	0.277	0.539	77	77	0.269	49%	-1.43
WY2012	4	-	4	4,117	4,121	-	(9,383)	-106%	0.000	-	0.000	19	19	0.264	93%	0.25
				17,158	33,893	-	(41,564)	-76%	0.544	0.447	0.992		46	2.619	83%	
				50.6%					55%	45%						

Table 6. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
<u>STA-5, Flow-way 1</u>		2055														
WY2001		Y	0.682	1.8	0.682	1.5	36,866	-	6,589	43,455	5.668		5.668	106	125	
WY2002		Y	2.843	4.3	2.843	4.0	99,465	-	6,088	105,553	23.648		23.648	182	193	
WY2003		Y	2.817	4.5	2.817	4.2	103,480	-	8,173	111,653	23.428		23.428	170	184	
WY2004		Y	2.547	4.9	2.547	4.6	113,060	-	7,814	120,874	21.185		21.185	142	152	
WY2005		N	1.818	4.1	1.818	3.8	92,868	1,629	7,196	101,693	15.116		15.116	121	132	
WY2006		Y	3.379	6.0	3.379	5.7	139,263	426	6,893	146,582	28.101		28.101	155	164	
WY2007		Y	2.303	2.6	2.303	2.3	56,942	-	7,200	64,142	19.155		19.155	242	273	
WY2008		Y	0.174	0.9	0.174	0.5	12,363	939	7,718	21,020	1.447		1.447	56	95	
WY2009		N	1.809	2.9	1.809	2.5	62,435	757	7,335	70,527	15.044		15.044	173	195	
WY2010		N	0.549	1.7	0.549	1.2	30,215	73	10,779	41,067	4.568		4.568	90	123	
WY2011		Y	0.418	1.6	0.418	1.4	33,423	-	6,674	40,097	3.473		3.473	70	84	
WY2012		Y	0.572	1.8	0.572	1.5	36,393	-	8,301	44,694	4.757		4.757	86	106	
POR							816,774	3,824	90,760	911,358	165,591	-	165,591	147	164	
							90%	0.4%	10.0%		100.0%	0.0%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground-water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
<u>STA-5, Flow-way 1</u>																
WY2001	20,566	8,626	29,192	9,615	38,807	(1,953)	(6,601)	-16%	3.610	1.513	5.123	142	142	2.058	36%	-0.56
WY2002	83,779	9,341	93,120	9,052	102,172	1,907	(1,474)	-1%	8.762	0.977	9.738	85	85	14.886	63%	11.16
WY2003	100,938	7,601	108,539	8,760	117,299	(25)	5,621	5%	17.965	1.352	19.317	144	144	5.463	23%	3.65
WY2004	100,922	8,667	109,589	8,775	118,364	1,006	(1,504)	-1%	8.554	0.734	9.288	69	69	12.632	60%	12.59
WY2005	73,465	6,383	79,848	8,692	88,540	(2,748)	(15,901)	-17%	5.680	0.493	6.174	63	63	9.436	62%	9.18
WY2006	112,732	10,080	122,812	8,875	131,687	(79)	(14,975)	-11%	12.468	1.114	13.583	90	90	15.633	56%	11.24
WY2007	64,530	7,300	71,830	8,998	80,828	45	16,731	23%	14.130	1.598	15.728	178	178	5.025	26%	3.87
WY2008	3,855	2,348	6,203	8,827	15,030	1,439	(4,551)	-25%	0.425	0.259	0.684	89	89	1.022	71%	0.07
WY2009	69,976	5,231	75,207	9,185	84,392	(64)	13,801	18%	3.940	0.294	4.235	46	46	11.104	74%	14.28
WY2010	24,253	5,070	29,323	8,780	38,103	1,033	(1,931)	-5%	1.393	0.291	1.684	47	47	3.175	70%	3.91
WY2011	16,926	9,342	26,268	9,298	35,566	(2,271)	(6,802)	-18%	0.851	0.470	1.321	41	41	2.621	75%	2.71
WY2012	22,643	8,419	31,062	8,607	39,669	1,265	(3,760)	-9%	0.997	0.370	1.367	36	36	3.760	79%	4.77
694,585		88,408		107,464	890,457	(445)	(21,345)	-2%	78.774	9.466	88.241		92	86.816	52%	
78%		9.9%		12.1%					89%	11%						

Table 6. Continued.

Location			Inflow												
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)
<u>STA-5, Flow-way 2</u>			2055												
WY2001		Y	1.304	2.2	1.300	1.9	46,512	1,095	6,589	54,196	10.813	0.032	10.846	162	188
WY2002		Y	3.149	4.0	3.145	3.8	92,964	375	6,088	99,427	26.156	0.030	26.186	214	228
WY2003		Y	4.248	4.3	4.243	3.9	96,968	-	8,173	105,141	35.285	0.040	35.325	272	295
WY2004		Y	3.428	3.3	3.424	3.0	74,608	-	7,814	82,422	28.474	0.039	28.512	280	309
WY2005		Y	1.322	2.6	1.317	2.3	55,609	-	7,196	62,805	10.955	0.035	10.991	142	160
WY2006		N	3.061	4.9	3.057	4.1	99,952	14,678	6,893	121,523	25.423	0.034	25.457	170	206
WY2007		N	0.705	1.7	0.700	1.2	29,614	4,932	7,200	41,746	5.824	0.036	5.860	114	159
WY2008		Y	0.130	0.9	0.125	0.3	7,970	6,249	7,718	21,937	1.041	0.038	1.080	40	106
WY2009		N	1.402	2.3	1.398	1.7	42,802	6,719	7,335	56,856	11.626	0.036	11.662	166	220
WY2010		Y	1.765	3.5	1.759	2.7	67,503	7,164	10,779	85,446	14.625	0.053	14.678	139	176
WY2011		Y	0.211	1.0	0.207	0.4	9,379	9,569	6,674	25,622	1.725	0.033	1.758	56	149
WY2012		Y	0.606	1.6	0.601	1.0	24,515	7,611	8,301	40,427	4.998	0.041	5.039	101	165
POR							648,396	58,392	90,760	797,548	176,947	0.448	177.394	180	221
							81%	7%	11%		100%	0%			

Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
<u>STA-5, Flow-way 2</u>																
WY2001	19,410	20,481	39,891	49.2	49	(2,019)	(56,166)	-207%	1.288	1.359	2.648	54	54	9.525	88%	6.13
WY2002	42,402	18,726	61,128	9,052	70,180	1,617	(27,630)	-33%	4.110	1.815	5.925	79	79	22.045	84%	10.70
WY2003	59,580	27,183	86,763	8,760	95,523	(173)	(9,792)	-10%	8.491	3.872	12.363	116	116	26.794	76%	10.88
WY2004	37,822	22,740	60,562	8,775	69,337	1,183	(11,901)	-16%	8.000	4.808	12.808	171	171	20.474	72%	4.92
WY2005	48,323	27,524	75,847	8,692	84,539	(852)	20,882	28%	6.558	3.734	10.292	110	110	4.397	40%	2.87
WY2006	88,343	16,238	104,581	8,875	113,456	(2,507)	(10,574)	-9%	11.199	2.058	13.257	103	103	14.224	56%	9.72
WY2007	3,140	2,444	5,584	8,998	14,582	432	(26,731)	-95%	0.947	0.737	1.684	244	245	4.877	83%	-1.04
WY2008	3,220	408	3,628	8,827	12,455	995	(8,487)	-49%	0.410	0.052	0.462	103	103	0.632	59%	0.02
WY2009	37,684	1,967	39,651	9,185	48,836	397	(7,624)	-14%	3.383	0.177	3.560	73	73	8.243	71%	6.61
WY2010	67,742	364	68,106	8,780	76,886	1,895	(6,665)	-8%	4.014	0.022	4.036	48	48	10.610	72%	13.00
WY2011	4,618	-	4,618	9,298	13,916	(2,453)	(14,159)	-72%	0.306	-	0.306	54	54	1.419	81%	1.06
WY2012	19,133	284	19,417	8,607	28,024	614	(11,790)	-34%	0.663	0.010	0.673	28	28	4.335	86%	5.74
431,416		138,359		97,898	627,783	(871)	(170,637)	-24%	49.371	18.642	68.013		93	127.576	72%	
69%		22%		16%					73%	27%						

Table 6. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
STA-5, Flow-way 3		1985														
WY2009		N	0.638	0.9	0.633	0.5	11,362	3,514	7,084	21,960	5.089	0.035	5.123	189	363	
WY2010		N	0.530	3.2	0.524	0.8	18,490	47,699	10,412	76,601	4.207	0.051	4.258	45	184	
WY2011		N	0.101	0.4	0.097	0.1	1,989	1,788	6,446	10,223	0.782	0.032	0.813	65	319	
WY2012		Y	0.008	0.3	0.003	0.0	147	-	8,017	8,164	0.022	0.040	0.061	6	119	
POR							31,988	53,001	31,959	116,948	10.099	0.158	10.256	71	256	
							27%	45.3%	27.3%		98.5%	1.5%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
STA-5, Flow-way 3																
WY2009	3,247		3,247	8,873	12,120	(88)	(9,927)	-58%	0.122	-	0.122	30	30	4.967	97%	2.78
WY2010	3,603		3,603	8,481	12,084	-	(64,517)	-145%	0.160	-	0.160	36	36	4.047	95%	2.77
WY2011	2,774		2,774	8,980	11,754	86	1,617	15%	0.262	-	0.262	77	77	0.519	64%	0.52
WY2012	4		4	8,314	8,318	-	154	2%	0.000	-	0.000	19	19	0.021	35%	0.02
9,629				34,648	44,277	(2)	(72,672)	-90%	0.544		0.544		46	9.554	95%	
22%		NC		78%					100%	NC						

Table 7. Annual and period-of-record water and TP budgets for treatment cells and flow-ways in STA-6. [Note: Section 2 was off-line for all of WY2012.]

Location			Inflow												
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)
STA-6, Cell 3		245													
WY2004		Y	0.556	4.9	0.551	4.6	13,376	-	1,125	14,501	0.546	0.006	0.552	31	33
WY2005		Y	1.207	4.4	1.202	4.1	11,971	-	1,026	12,997	1.192	0.005	1.197	75	81
WY2006		Y	1.036	4.1	1.031	3.8	11,003	-	927	11,930	1.023	0.005	1.027	70	75
WY2007		Y	0.736	3.5	0.733	3.3	9,670	-	582	10,252	0.727	0.003	0.730	58	61
WY2008		Y	0.108	0.8	0.104	0.5	1,518	10	915	2,443	0.103	0.005	0.107	36	55
WY2009		Y	0.367	1.0	0.362	0.6	1,901	252	907	3,060	0.359	0.004	0.364	96	153
WY2010		Y	1.250	3.6	1.244	3.0	8,919	321	1,321	10,561	1.233	0.007	1.240	95	112
WY2011		Y	0.654	2.2	0.650	1.9	5,629	61	862	6,552	0.644	0.004	0.648	80	93
WY2012		Y	0.733	1.8	0.733	1.8	5,251	NC	NC	5,251	0.727		0.727	112	112
POR							69,239	644	7,665	77,548	6,554	0.038	6,592	69	77
							89%	1%	10%		99%	1%			

Outflow																								
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water								
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)								
STA-6, Cell 3																								
WY2004	12,464	-	12,464	1,073	13,537	(328)	(1,293)	-9%	0.188	-	0.188	12	12	0.358	65%	16.01								
WY2005	6,883	-	6,883	1,075	7,958	180	(4,859)	-46%	0.157	-	0.157	18	18	1.035	86%	17.31								
WY2006	11,151	-	11,151	1,080	12,231	(76)	225	2%	0.449	-	0.449	33	33	0.573	56%	11.52								
WY2007	5,232	-	5,232	1,071	6,303	(102)	(4,051)	-49%	0.278	-	0.278	43	43	0.449	61%	3.21								
WY2008	586	87	673	1,084	1,757	211	(475)	-23%	0.039	0.006	0.045	54	54	0.064	60%	0.03								
WY2009	2,065	226	2,291	1,113	3,404	(211)	133	4%	0.087	0.009	0.096	34	34	0.273	75%	3.71								
WY2010	3,518	45	3,563	1,090	4,653	376	(5,532)	-73%	0.187	0.002	0.189	43	43	1.047	84%	7.41								
WY2011	5,443	393	5,836	1,129	6,965	(374)	38	1%	0.111	0.008	0.119	17	17	0.533	82%	11.89								
WY2012	2,214	275	2,489	1,103	3,592	6	(1,654)	-37%	0.145	0.018	0.163	53	53	0.582	80%	3.48								
Σ												49,554	1,026	9,818	60,398	(318)	(17,467)	-25%	1.640	0.044	1.684	27	4,914	75%
												82%	2%			16%								

Table 7. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
<u>STA-6, Cell 5</u>		625														
WY2004		Y	0.460	3.8	0.455	3.4	25,380	-	2,869	28,249	1.151	0.014	1.165	33	37	
WY2005		Y	0.756	3.2	0.751	2.9	21,344	-	2,617	23,961	1.900	0.013	1.913	65	72	
WY2006		Y	0.594	2.2	0.590	1.9	14,369	-	2,366	16,735	1.491	0.012	1.503	73	84	
WY2007		Y	2.116	2.7	2.113	2.5	18,936	-	1,484	20,420	5.345	0.007	5.353	213	229	
WY2008		Y	0.190	1.0	0.186	0.7	5,484	37	2,334	7,855	0.470	0.012	0.482	50	70	
WY2009		Y	0.389	1.1	0.384	0.5	3,784	2,097	2,314	8,195	0.972	0.011	0.983	97	208	
WY2010		Y	0.940	3.4	0.933	2.7	20,252	1,516	3,370	25,138	2.360	0.017	2.377	77	94	
WY2011		Y	0.473	1.7	0.469	1.3	9,941	491	2,199	12,631	1.186	0.011	1.197	77	97	
WY2012		Y	0.733	1.6	0.733	1.6	11,650	NC	NC	11,650	1.853		1.853	129	129	
POR							131,140	4,141	19,553	154,834	16.729	0.096	16.826	88	103	
							85%	2.7%	12.6%		99.4%	0.6%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
<u>STA-6, Cell 5</u>																
WY2004	16,585	-	16,585	2,736	19,321	(622)	(9,550)	-40%	0.228	-	0.228	11	11	0.922	79%	12.20
WY2005	9,399	-	9,399	2,743	12,142	5	(11,814)	-65%	0.225	-	0.225	19	19	1.676	88%	9.86
WY2006	12,095	-	12,095	2,756	14,851	28	(1,856)	-12%	0.277	-	0.277	19	19	1.215	81%	9.76
WY2007	6,293	-	6,293	2,733	9,026	(1)	(11,395)	-77%	0.355	-	0.355	46	46	4.990	93%	9.90
WY2008	1,089	-	1,089	2,766	3,855	172	(3,829)	-65%	0.035	-	0.035	26	26	0.435	90%	1.56
WY2009	4,857	337	5,194	2,839	8,033	(185)	(347)	-4%	0.143	0.010	0.153	24	24	0.829	84%	4.56
WY2010	11,058	654	11,712	2,781	14,493	957	(9,688)	-49%	0.354	0.021	0.375	26	26	2.006	84%	9.87
WY2011	10,328	1,266	11,594	2,879	14,473	(956)	887	7%	0.217	0.027	0.244	17	17	0.969	81%	8.57
WY2012	6,486	4,721	11,207	2,813	14,020	(37)	2,332	18%	0.678	0.494	1.172	85	85	1.175	63%	1.85
78,191		6,978		25,046	110,215	(639)	(45,258)	-34%	2.513	0.551	3.064		26	14.216	85%	
71%		6.3%		22.7%					82.0%	18.0%						

Table 7. Continued.

Location			Inflow													
	Area	On-Line status entire Water Year	PLR	HLR	PLR based on Surface Water	HLR based on Surface Water	Surface Water	Seepage	Rainfall	Σ Volume	Surface Water TP Load	Rainfall TP Load	Σ TP Load	Inflow FWM TP	Inflow FWM TP based on Surface Water	
	(acres)	(Y/N)	(g/m ² /yr)	(cm/day)	(g/m ² /yr)	(cm/day)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(mt)	(mt)	(mt)	(ppb)	(ppb)	
<u>STA-6, Section 2</u>		1387														
WY2009		Y	2.245	3.5	2.240	3.1	51,580	751	5,135	57,466	13	0.025	12.599	178	198	
WY2010		Y	2.019	5.0	2.012	4.4	73,711	1,692	7,478	82,881	11	0.037	11.333	111	124	
WY2011		N	1.484	3.7	1.480	3.4	57,152	127	4,880	62,159	8	0.024	8.331	109	118	
POR							182,443	2,570.0	17,493	202,506	32.177	0.086	32.263	129	143	
							90%	1%	9%		100%	0%				
Outflow																
Location	Surface Water	Ground-water	Σ Surface Water + Groundwater	ET	Σ Volume	Change in Storage	Water Budget Residual	Water Budget Error	TP Load from Surface Water	Ground- water TP Load	Σ TP Load	Outflow FWM TP	Outflow FWM TP based on Surface Water	TP Retained Based on Surface Water	TP from Surface Water Retained	k based on Surface Water
	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(%)	(mt)	(mt)	(mt)	(ppb)	(ppb)	(mt)	(%)	(m/yr)
<u>STA-6, Section 2</u>																
WY2009	35,401	13,057	48,458	6,300	54,758	(1,327)	(4,035)	-7%	5	1.712	6.356	106	106	7.930	63%	5.92
WY2010	60,391	29,591	89,982	6,172	96,154	2,975	16,248	18%	4	1.976	6.011	54	54	7.261	64%	12.23
WY2011	62,233	22,760	84,993	6,389	91,382	(2,986)	26,236	34%	2	0.754	2.818	27	27	6.243	75%	19.38
		158,024	65,408	18,861	242,293	(1,338)	38,449	17%	10.742	4.443	15.185		55	21.434	67%	
		65%	27%	8%					71%	29%						

Notes:

1. Water budget terms expressed in acre feet (ac-ft); hm³ = ac-ft/810.7
2. NC indicates that the parameter was not calculated; negative values are shown in parenthesis
3. Gray shading indicates that the treatment cell was off-line part of the year
4. ET = Evapotranspiration
5. Surface water volume and total phosphorus (TP) loads from Nutrient Load program
6. Rainfall, seepage, and ET from Water Budget program
7. Rainfall TP was estimated using station ENR308 rainfall TP and median concentration from 2000–2011
8. Groundwater TP was estimated from outflow flow-weighted mean TP.
9. Water Budget residual (r): (Σoutflow + Change in Storage) – Σinflow; Water budget error: $r \div [(\Sigma\text{inflow} + \Sigma\text{outflow})/2]$
k = TP removal coefficient (equation 5.1)