Appendix M

Project Screening

	Short Term				Long Term			
Lake Name	Load Reduction Goal (lb)	Load Reduction (lb)	Cost ($)	Annual Cost per pound TP Reduction [$/lb]	Load Reduction Goal (lb)	Load Reduction (lb)	Cost ($)	Cost per pound TP reduction [$/lb]
Moody	880	950	$ 1,900,000	$ 160	880	1000	$ 1,900,000	$ 150
Bone	570	630	$ 2,300,000	$ 290	790	860	$ 4,700,000	$ 440
Birch	450	330	$ 1,000,000	$ 240	450	400	$ 1,000,000	$ 200
School	460	240	$ 3,800	$ 1	460	310	$ 3,800	$ 1
Little Comfort	630	600	$ 1,800,000	$ 240	810	690	$ 3,700,000	$ 430
Sylvan	0	0	$ -	$ -	0	0	$ -	$ -
Shields	910	790	$ 2,400,000	$ 240	1000	790	$ 2,400,000	$ 240
Forest Lake East	110	140	$ 500,000	$ 290	710	810	$ 3,200,000	$ 310
Forest Lake Center	0	210	$ 450	$ 0	430	430	$ 2,000,000	$ 370
Forest Lake West	0	0	$ -	$ -	62	0	$ -	$ -
Comfort	310	320	$ 2,800	$ 1	930	930	$ 2,000,000	$ 170
TOTAL:	***4,300***	***4,200***	***$ 9,800,000***	***$ 190***	***6,500***	***6,200***	***$ 21,000,000***	***$ 270***

Moody Lake		**Reduction**			***Short Term***		**Long Term**	
Alternative		Short Term	Long Term	**Total Present Value**	**TP Load Reduction (lb)**	**Total Present Value**	**TP Load Reduction (lb)**	**Total Present Value**
Upstream Lakes		N/A		N/A				
Internal	In-Lake Alum Treatment	260		$ 88,000	4	$ 88,000	260	$ 88,000
	Rough Fish Management			$ 100,000		$ 100,000		$ 100,000
	Curly Leaf Pondweed Management			$ 190,000		$ 190,000		$ 190,000
Watershed Management	BMPs	93	150	$ 1,600	93	$ 1,600	150	$ 1,600
	Ponds	290		$ 9,300,000				
	Wetlands	0		$ -				
	Infiltration	580		$ 9,500,000				
	Chemical treatment of tributaries - NBL19	600		$ 1,500,000	600	$ 1,500,000	600	$ 1,500,000
Total Load Reduction and Present Value (excl. upstream costs) =					***950***	***$ 1,900,000***	***1000***	***$ 1,900,000***
Total Load Reduction Goal =					***880***	***$ -***	***880***	***$ -***

Bone Lake		**Reduction**			***Short Term***		**Long Term**	
Alternative		Short Term	Long Term	**Total Present Value**	**TP Load Reduction (lb)**	**Total Present Value**	**TP Load Reduction (lb)**	**Total Present Value**
Upstream Lakes (Moody)		160	180	$ 1,900,000	160	$ 1,900,000	180	$ 1,900,000
Internal	In-Lake Alum Treatment	90		$ 430,000	4	$ 430,000	90	$ 430,000
	Rough Fish Management			$ 100,000		$ 100,000		$ 100,000
	Curly Leaf Pondweed Management			$ 730,000		$ 730,000		$ 730,000
Watershed Management	BMPs	81	130	$ 7,700	81	$ 7,700	130	$ 7,700
	Pond - SBL07	200		$ 5,000,000				
	Infiltration - SBL38	160		$ 2,500,000			160	$ 2,500,000
	Infiltration - SBL07	300		$ 5,000,000				
	Shoreline restoration	0		$ 600				
	Chemical treatment of tributaries - SBL07	300		$ 1,000,000	300	$ 1,000,000	300	$ 1,000,000
Total Load Reduction and Present Value (excl. upstream lake costs) =					***630***	***$ 2,300,000***	***860***	***$ 4,700,000***
Total Load Reduction Goal =					***570***	***$ -***	***790***	***$ -***

Birch Lake		**Reduction**			***Short Term***		**Long Term**	
Alternative		Short Term	Long Term	**Total Present Value**	**TP Load Reduction (lb)**	**Total Present Value**	**TP Load Reduction (lb)**	**Total Present Value**
Upstream Lakes (Bone)		97	140	$ 2,300,000	97	$ 2,300,000	140	$ 2,300,000
Internal	In-Lake Alum Treatment	0		$ -	4			
	Rough Fish Management			$ -				
	Curly Leaf Pondweed Management			$ -				
Watershed Management	BMPs	32	54	$ 3,000	32	$ 3,000	54	$ 3,000
	Wetland Rest. / Mod. - LCL15-27	200		$ 1,000,000	200	$ 1,000,000	200	$ 1,000,000
	Ponds	0		$ -				
	Infiltration	0		$ -				
	Shoreline restoration	0		$ -				
	Chemical treatment of tributaries	0		$ -				
Total Load Reduction and Present Value (excl. upstream costs) =					***330***	***$ 1,000,000***	***400***	***$ 1,000,000***
Total Load Reduction Goal =					***450***	***$ -***	***450***	***$ -***

School Lake		**Reduction**			***Short Term***		**Long Term**	
Alternative		Short Term	Long Term	**Total Present Value**	**TP Load Reduction (lb)**	**Total Present Value**	**TP Load Reduction (lb)**	**Total Present Value**
Upstream Lakes (Birch)		190	230	$ 1,000,000	190	$ 1,000,000	230	$ 1,000,000
Internal	In-Lake Alum Treatment	0		$ -	4			
	Rough Fish Management			$ -				
	Curly Leaf Pondweed Management			$ -				
Watershed Management	BMPs	45	74	$ 3,800	45	$ 3,800	74	$ 3,800
	Wetland Rest. / Mod.	0		$ -				
	Ponds	0		$ -				
	Infiltration	0		$ -				
	Shoreline restoration	0		$ -				
	Chemical treatment of tributaries	0		$ -				
Total Load Reduction and Present Value (excl. upstream costs) =					***240***	***$ 3,800***	***310***	***$ 3,800***
Total Load Reduction Goal =					***460***	***$ -***	***460***	***$ -***

Little Comfort Lake		**Reduction**			***Short Term***		**Long Term**	
Alternative		Short Term	Long Term	**Total Present Value**	**TP Load Reduction (lb)**	**Total Present Value**	**TP Load Reduction (lb)**	**Total Present Value**
Upstream Lakes (School)		100	130	$ 3,800	100	$ 3,800	130	$ 3,800
Internal	In-Lake Alum Treatment	40		$ 54,000	40	$ 54,000	40	$ 54,000
	Rough Fish Management			$ 22,000		$ 22,000		$ 22,000
	Curly Leaf Pondweed Management			$ 8,200		$ 8,200		$ 8,200
Watershed Management	BMPs	23	40	$ 450	23	$ 450	40	$ 450
	Wetland Rest. / Mod. - LCL07	200		$ 1,000,000	200	$ 1,000,000	200	$ 1,000,000
	School Lake Outlet Modification			$ 100,000		$ 100,000		$ 100,000
	Pond - LCL 49	48		$ 1,900,000			48	$ 1,900,000
	Chemical treatment of tributaries	230		$ 600,000	230	$ 600,000	230	$ 600,000
Total Load Reduction and Present Value (excl. upstream costs) =					***600***	***$ 1,800,000***	***690***	***$ 3,700,000***
Total Load Reduction Goal =					***630***	***$ -***	***810***	***$ -***

Sylvan Lake		**Reduction**		**Total**	***Short Term***		**Long Term**	
Alternative		Short Term	Long Term	**Present Value**	**TP Load Reduction (lb)**	**Total Present Value**	**TP Load Reduction (lb)**	**Total Present Value**
Upstream Lakes		N/A	N/A	N/A				
Internal	In-Lake Alum Treatment							
	Rough Fish Management							
	Curly Leaf Pondweed Management							
Watershed Management	BMPs							
	Wetland Rest. / Mod.							
	Pond							
	Infiltration							
	Chemical treatment of tributaries							
Total Load Reduction and Present Value (excl. upstream costs) =					***0***	***$ -***	***0***	***$ -***
Total Load Reduction Goal =					***0***		***0***	

Shields Lake		**Reduction**			***Short Term***		**Long Term**	
Alternative		Short Term	Long Term	**Total Present Value**	**TP Load Reduction (lb)**	**Total Present Value**	**TP Load Reduction (lb)**	**Total Present Value**
Upstream Lakes								
Internal	In-Lake Alum Treatment (5-yr)	620		$ 130,000	620	$ 130,000	620	$ 130,000
	Rough Fish Management			$ 100,000		$ 100,000		$ 100,000
	Curly Leaf Pondweed Management			$ 98,000		$ 98,000		$ 98,000
Watershed Management	BMPs	5	8	$ 450	5	$ 450	8	$ 450
	Bio-manipulation	100		$ 500,000	100	$ 500,000	100	$ 500,000
	Pond - FL61	60		$ 1,600,000	60	$ 1,600,000	60	$ 1,600,000
	Chemical treatment of tributaries	0		$ -				
	Infiltration	0		$ -				
Total Load Reduction and Present Value (excl. upstream costs) =					***790***	***$ 2,400,000***	***790***	***$ 2,400,000***
Total Load Reduction Goal =					***910***	***$ -***	***1000***	***$ -***

Forest Lake East		**Reduction**			***Short Term***		**Long Term**	
Alternative		Short Term	Long Term	**Total Present Value**	**TP Load Reduction (lb)**	**Total Present Value**	**TP Load Reduction (lb)**	**Total Present Value**
Upstream Lakes (Sylvan)				$ -		$ -		$ -
Internal	In-Lake Alum Treatment	180		$ 1,500,000			180	$ 1,500,000
	Rough Fish Management			$ -				
	Curly Leaf Pondweed Management			$ -				
Watershed Management	BMPs	50	98	$ 450	50	$ 450	98	$ 450
	Wetland Rest. / Mod. - FL44	220		$ 1,000,000				
	Pond - FL44	220		$ 4,200,000				
	Chemical treatment of trib. - FL44	450		$ 1,200,000			450	$ 1,200,000
	Chemical treatment of trib. - FL71	90		$ 500,000	90	$ 500,000	90	$ 500,000
Total Load Reduction and Present Value (excl. upstream costs) =					***140***	***$ 500,000***	***810***	***$ 3,200,000***
Total Load Reduction Goal =					***110***	***$ -***	***710***	***$ -***