
Appendix O

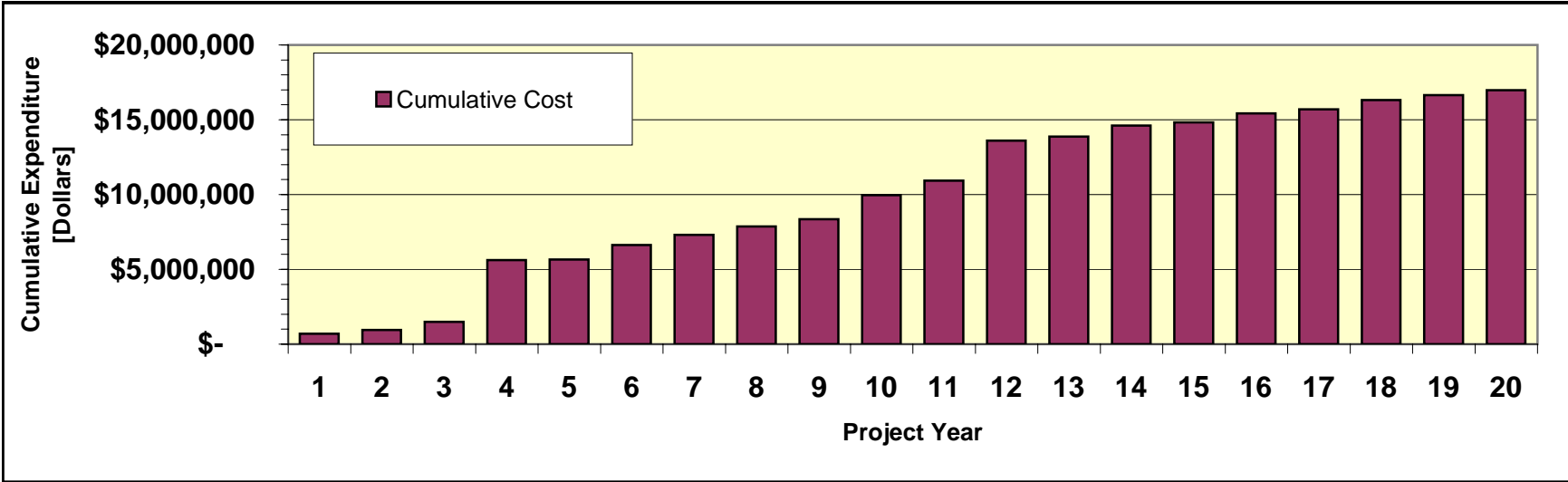
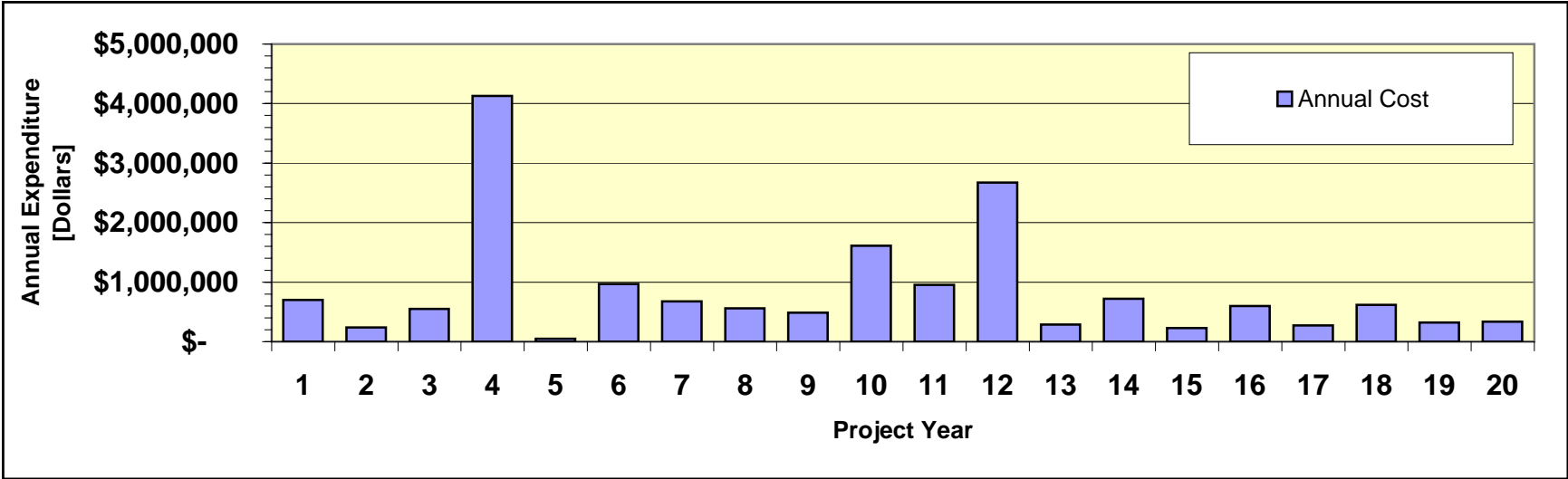
Cost Estimates and Schedules for Proposed Projects

Lake	Project Cost Summary										Total Lake Costs
	Internal Load Management			Watershed BMPs ¹	Shoreline Restoration	Capital Improvement Projects					
	Internal Load Reduction by Alum Treatment	Rough Fish Management / Removal	Curly Leaf Pondweed Management			Wetland Modification / Restoration	Infiltration Practices	Inlet / Outlet Modification	Wet Detention Basins	Wet Detention Basins	
Moody	Year 3	Year 2	Year 2	Year 1		Year 2					
Location						NBL 12					
Initial Capital Costs [\$]	\$54,000	\$21,000	\$15,000	\$1,600		\$760,000					\$850,000
Present Value ² [\$]	\$88,000	\$96,000	\$190,000	\$21,000		\$770,000					\$1,200,000
Annual Cost ³ [\$]	\$7,100	\$7,700	\$15,000	\$1,600		\$62,000					\$93,000
Load Reduction [lb]		257		107		99					460
Load Reduction Cost [\$ / lb]		\$120		\$15		\$620					\$200
Bone	Year 8	Year 7	Year 7	Year 1	Year 1	Year 7	Year 4	Year 4			
Location						SBL 38	SBL 07	NBL 17 ⁷			
Initial Capital Costs [\$]	\$260,000	\$21,000	\$56,000	\$7,700	\$600	\$470,000	\$490,000	\$320,000			\$1,600,000
Present Value ² [\$]	\$430,000	\$96,000	\$730,000	\$1,800	\$7,900	\$480,000	\$560,000	\$330,000			\$2,600,000
Annual Cost ³ [\$]	\$35,000	\$7,700	\$56,000	\$7,700	\$600	\$39,000	\$45,000	\$26,000			\$220,000
Load Reduction [lb]		92		138		40	120	250			640
Load Reduction Cost [\$ / lb]		\$1,100		\$56		\$980	\$380	\$100			\$340
Birch				Year 1		Year 7					
Location						LCL 20					
Initial Capital Costs [\$]				\$3,000		\$620,000					\$620,000
Present Value ² [\$]				\$39,000		\$650,000					\$690,000
Annual Cost ³ [\$]				\$3,000		\$52,000					\$55,000
Load Reduction [lb]				57		130					190
Load Reduction Cost [\$ / lb]				\$53		\$400					\$290
School				Year 1							
Location											
Initial Capital Costs [\$]				\$3,800							\$3,800
Present Value ² [\$]				\$50,000							\$50,000
Annual Cost ³ [\$]				\$3,800							\$3,800
Load Reduction [lb]				74							74
Load Reduction Cost [\$ / lb]				\$51							\$51
Little Comfort	Year 9	Year 8	Year 8	Year 1	Year 1			Year 8			
Location								LCL 04			
Initial Capital Costs [\$]	\$54,000	\$21,000	\$8,200	\$450	\$300			\$280,000			\$360,000
Present Value ² [\$]	\$88,000	\$96,000	\$110,000	\$5,900	\$3,900			\$290,000			\$590,000
Annual Cost ³ [\$]	\$7,100	\$7,700	\$8,200	\$450	\$300			\$23,000			\$47,000
Load Reduction [lb]		39		42				50			130
Load Reduction Cost [\$ / lb]		\$590		\$11				\$460			\$360
Shields	Year 10	Year 10	Year 10	Year 1	Year 1	Year 10					
Location				See Note ⁴	Golf Course	Biomaniipulation					
Initial Capital Costs [\$]	\$47,000	\$21,000	\$7,500	\$450	\$300	\$300,000					\$380,000
Present Value ² [\$]	\$83,000	\$96,000	\$98,000	\$5,900	\$3,900	\$420,000					\$710,000
Annual Cost ³ [\$]	\$6,700	\$7,700	\$7,500	\$450	\$300	\$34,000					\$57,000
Load Reduction [lb]		53		9		600					660
Load Reduction Cost [\$ / lb]		\$410		\$50		\$57					\$86
Sylvan				Year 1							
Location				See Note ⁵							
Initial Capital Costs [\$]				\$300							\$300
Present Value ² [\$]				\$3,900							\$3,900
Annual Cost ³ [\$]				\$300							\$300
Load Reduction [lb]				14							14
Load Reduction Cost [\$ / lb]				\$21							\$21

Lake	Project Cost Summary										Total Lake Costs
	Internal Load Management			Watershed BMPs ¹	Shoreline Restoration	Capital Improvement Projects					
	Internal Load Reduction by Alum Treatment	Rough Fish Management / Removal	Curly Leaf Pondweed Management			Wetland Modification / Restoration	Infiltration Practices	Inlet / Outlet Modification	Wet Detention Basins	Wet Detention Basins	
Forest Lake East	Year 10			Year 1	Year 1	Year 2					
Location						FL 44					
Initial Capital Costs [\$]	\$900,000			\$450	\$600	\$79,000					\$980,000
Present Value ² [\$]	\$900,000			\$5,900	\$7,900	\$79,000					\$990,000
Annual Cost ³ [\$]	\$72,000			\$450	\$600	\$6,300					\$79,000
Load Reduction [lb]		176		21		156					350
Load Reduction Cost [\$ / lb]		\$410		\$21		\$40					\$230
Forest Lake Center	Year 11			Year 1	Year 1						
Location											
Initial Capital Costs [\$]	\$430,000			\$450	\$600						\$430,000
Present Value ² [\$]	\$430,000			\$5,900	\$7,900						\$440,000
Annual Cost ³ [\$]	\$35,000			\$450	\$600						\$36,000
Load Reduction [lb]		68		1							69
Load Reduction Cost [\$ / lb]		\$510		\$450							\$520
Forest Lake West				Year 1	Year 1						
Location											
Initial Capital Costs [\$]				\$450	\$600						\$1,100
Present Value ² [\$]				\$5,900	\$7,900						\$14,000
Annual Cost ³ [\$]				\$450	\$600						\$1,100
Load Reduction [lb]				5							5
Load Reduction Cost [\$ / lb]				\$90							\$220
Comfort Lake	Year 11	Year 11	Year 11	Year 1	Year 1				Year 4	Year 12	
Location									Bixby Park #1	Bixby Park #2	See Note ⁶
Initial Capital Costs [\$]	\$260,000	\$21,000	\$19,000	\$2,800	\$600				\$3,500,000	\$2,100,000	\$3,800,000
Present Value ² [\$]	\$470,000	\$96,000	\$250,000	\$37,000	\$7,900				\$3,700,000	\$2,200,000	\$4,600,000
Annual Cost ³ [\$]	\$38,000	\$7,700	\$19,000	\$2,800	\$600				\$300,000	\$180,000	\$370,000
Load Reduction [lb]		94		15					265	49	370
Load Reduction Cost [\$ / lb]		\$690		\$190					\$1,100	\$3,700	\$1,000
Comfort Lake / Forest Lake Watershed											
Location											See Note ⁶
Initial Capital Costs [\$]	\$2,010,000	\$105,000	\$106,000	\$21,500	\$3,600	\$2,230,000	\$490,000	\$600,000	\$3,500,000		\$9,030,000
Present Value ² [\$]	\$2,490,000	\$480,000	\$1,380,000	\$182,000	\$47,300	\$2,400,000	\$560,000	\$620,000	\$3,700,000		\$11,900,000
Annual Cost ³ [\$]	\$201,000	\$38,500	\$106,000	\$21,500	\$3,600	\$193,000	\$45,000	\$49,000	\$300,000		\$962,000
Load Reduction [lb]		780		480	0	1000	120	300	270		3000
Load Reduction Cost [\$ / lb]		\$440		\$40		\$190	\$380	\$200	\$1,100		\$320

NOTES

- ¹ Watershed BMPs include Livestock / Manure Management; Conservation Tillage; Buffers / Swales / Rock inlets for Agricultural Land Use; and Lakeshore Septic Improvements (per County / Code).
- ² Net present value of capital, operation, and maintenance costs.
- ³ Annuity value based on the total present project cost.
- ⁴ Watershed BMPs for Shields Lake include Conservation Tillage; Buffers / Swales / Rock inlets for Agricultural Land Use; and Lakeshore Septic Improvements (per County / Code).
- ⁵ Watershed BMPs for Sylvan Lake include Conservation Tillage and Shoreline Restoration.
- ⁶ Total Costs excluding Bixby Park Pond #2.
- ⁷ An estimated additional load of 1,000 pounds was observed one out of four years of data. The estimated load reduction (250 pounds) provided by the capital improvement project within NBL 17 is an approximation of the long term annual load reduction.



Annual Project Cost Schedule

Projects	Project Start Year														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Moody Lake Watershed BMPs	\$ 1,600	\$ 1,600	\$ 1,700	\$ 1,700	\$ 1,700	\$ 1,800	\$ 1,800	\$ 1,800	\$ 1,900	\$ 1,900	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,100	\$ 2,100
Moody Lake Capital Improvement Project - NBL 12	\$ 640,000	\$ 120,000	\$ 830	\$ 850	\$ 1,900	\$ 880	\$ 900	\$ 2,000	\$ 940	\$ 960	\$ 2,200	\$ 990	\$ 1,000	\$ 2,300	\$ 1,100
Moody Lake Internal Load Alum Treatment	\$ -	\$ 14,000	\$ 42,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 68,000	\$ -	\$ -
Moody Lake Internal Load Rough Fish Management	\$ 5,500	\$ 16,000	\$ -	\$ 14,000	\$ -	\$ 14,000	\$ -	\$ 15,000	\$ -	\$ 15,000	\$ -	\$ 16,000	\$ -	\$ 17,000	\$ -
Moody Lake Internal Load Curly Leaf Management	\$ 3,800	\$ 11,000	\$ 15,000	\$ 16,000	\$ 16,000	\$ 17,000	\$ 17,000	\$ 17,000	\$ 18,000	\$ 18,000	\$ 18,000	\$ 18,000	\$ 19,000	\$ 19,000	\$ 19,000
Bone Lake Watershed BMPs	\$ 7,700	\$ 7,900	\$ 8,000	\$ 8,200	\$ 8,300	\$ 8,500	\$ 8,700	\$ 8,800	\$ 9,000	\$ 9,200	\$ 9,400	\$ 9,600	\$ 9,800	\$ 10,000	\$ 10,000
Bone Lake Capital Improvement Project - NBL 17	\$ -	\$ -	\$ 120,000	\$ 210,000	\$ 870	\$ 880	\$ 900	\$ 920	\$ 940	\$ 960	\$ 980	\$ 990	\$ 1,000	\$ 1,000	\$ 1,100
Bone Lake Shoreline Restoration	\$ 600	\$ 610	\$ 620	\$ 640	\$ 650	\$ 660	\$ 680	\$ 690	\$ 700	\$ 720	\$ 730	\$ 750	\$ 760	\$ 780	\$ 790
Bone Lake Capital Improvement Project - SBL 07	\$ -	\$ -	\$ 170,000	\$ 340,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 150,000	\$ -
Bone Lake Capital Improvement Project - SBL 38	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 370,000	\$ 150,000	\$ 920	\$ 940	\$ 960	\$ 980	\$ 990	\$ 1,000	\$ 1,000	\$ 1,100
Bone Lake Internal Load Alum Treatment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 77,000	\$ 220,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bone Lake Internal Load Rough Fish Management	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,000	\$ 18,000	\$ -	\$ 15,000	\$ -	\$ 16,000	\$ -	\$ 16,000	\$ -	\$ 17,000
Bone Lake Internal Load Curly Leaf Management	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,000	\$ 46,000	\$ 64,000	\$ 65,000	\$ 67,000	\$ 68,000	\$ 69,000	\$ 71,000	\$ 72,000	\$ 74,000
Birch Lake Watershed BMPs	\$ 3,000	\$ 3,100	\$ 3,100	\$ 3,200	\$ 3,200	\$ 3,300	\$ 3,400	\$ 3,400	\$ 3,500	\$ 3,600	\$ 3,700	\$ 3,700	\$ 3,800	\$ 3,900	\$ 4,000
Birch Lake Capital Improvement Project - LCL 20	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 510,000	\$ 180,000	\$ 920	\$ 940	\$ 960	\$ 980	\$ 990	\$ 1,000	\$ 1,000	\$ 1,100
School Lake Watershed BMPs	\$ 3,800	\$ 3,900	\$ 4,000	\$ 4,000	\$ 4,100	\$ 4,200	\$ 4,300	\$ 4,400	\$ 4,500	\$ 4,500	\$ 4,600	\$ 4,700	\$ 4,800	\$ 4,900	\$ 5,000
Little Comfort Lake Watershed BMPs	\$ 450	\$ 460	\$ 470	\$ 480	\$ 490	\$ 500	\$ 510	\$ 520	\$ 530	\$ 540	\$ 550	\$ 560	\$ 570	\$ 580	\$ 590
Little Comfort Lake Shoreline Restoration	\$ 300	\$ 310	\$ 310	\$ 320	\$ 320	\$ 330	\$ 340	\$ 340	\$ 350	\$ 360	\$ 370	\$ 370	\$ 380	\$ 390	\$ 400
Little Comfort Lake Capital Improvement Project - LCL 04	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 150,000	\$ 170,000	\$ 940	\$ 960	\$ 980	\$ 990	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,100
Little Comfort Lake Internal Load Alum Treatment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,000	\$ 47,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Little Comfort Lake Internal Load Rough Fish Management	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,100	\$ 18,000	\$ -	\$ 15,000	\$ -	\$ 16,000	\$ -	\$ 17,000	\$ -
Little Comfort Lake Internal Load Curly Leaf Management	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,400	\$ 7,000	\$ 9,600	\$ 9,800	\$ 10,000	\$ 10,000	\$ 10,000	\$ 11,000	\$ 11,000
Shields Lake Watershed BMPs	\$ 450	\$ 460	\$ 470	\$ 480	\$ 490	\$ 500	\$ 510	\$ 520	\$ 530	\$ 540	\$ 550	\$ 560	\$ 570	\$ 580	\$ 590
Shields Lake Shoreline Restoration	\$ 300	\$ 310	\$ 310	\$ 320	\$ 320	\$ 330	\$ 340	\$ 340	\$ 350	\$ 360	\$ 370	\$ 370	\$ 380	\$ 390	\$ 400
Shields Lake Biomanipulation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 360,000	\$ 12,000	\$ 12,000	\$ 13,000	\$ 13,000	\$ 13,000
Shields Lake Internal Load Alum Treatment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,000	\$ 41,000	\$ -	\$ -	\$ -	\$ -	\$ -
Shields Lake Internal Load Rough Fish Management	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,400	\$ 19,000	\$ -	\$ 16,000	\$ -	\$ 17,000	\$ -
Shields Lake Internal Load Curly Leaf Management	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,300	\$ 6,600	\$ 9,100	\$ 9,300	\$ 9,500	\$ 9,700	\$ 9,900
Sylvan Lake Watershed BMPs	\$ 300	\$ 310	\$ 310	\$ 320	\$ 320	\$ 330	\$ 340	\$ 340	\$ 350	\$ 360	\$ 370	\$ 370	\$ 380	\$ 390	\$ 400
Forest Lake East Lake Watershed BMPs	\$ 450	\$ 460	\$ 470	\$ 480	\$ 490	\$ 500	\$ 510	\$ 520	\$ 530	\$ 540	\$ 550	\$ 560	\$ 570	\$ 580	\$ 590
Forest Lake East Lake Capital Improvement Project - FL 44	\$ 30,000	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Forest Lake East Lake Shoreline Restoration	\$ 600	\$ 610	\$ 620	\$ 640	\$ 650	\$ 660	\$ 680	\$ 690	\$ 700	\$ 720	\$ 730	\$ 750	\$ 760	\$ 780	\$ 790
Forest Lake East Lake Internal Load Alum Treatment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 270,000	\$ 800,000	\$ -	\$ -	\$ -	\$ -	\$ -
Forest Lake Center Lake Watershed BMPs	\$ 450	\$ 460	\$ 470	\$ 480	\$ 490	\$ 500	\$ 510	\$ 520	\$ 530	\$ 540	\$ 550	\$ 560	\$ 570	\$ 580	\$ 590
Forest Lake Center Lake Shoreline Restoration	\$ 600	\$ 610	\$ 620	\$ 640	\$ 650	\$ 660	\$ 680	\$ 690	\$ 700	\$ 720	\$ 730	\$ 750	\$ 760	\$ 780	\$ 790
Forest Lake Center Lake Internal Load Alum Treatment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 130,000	\$ 390,000	\$ -	\$ -	\$ -	\$ -
Forest Lake West Lake Watershed BMPs	\$ 450	\$ 460	\$ 470	\$ 480	\$ 490	\$ 500	\$ 510	\$ 520	\$ 530	\$ 540	\$ 550	\$ 560	\$ 570	\$ 580	\$ 590
Forest Lake West Lake Shoreline Restoration	\$ 600	\$ 610	\$ 620	\$ 640	\$ 650	\$ 660	\$ 680	\$ 690	\$ 700	\$ 720	\$ 730	\$ 750	\$ 760	\$ 780	\$ 790
Comfort Lake Watershed BMPs	\$ 2,800	\$ 2,900	\$ 2,900	\$ 3,000	\$ 3,000	\$ 3,100	\$ 3,200	\$ 3,200	\$ 3,300	\$ 3,300	\$ 3,400	\$ 3,500	\$ 3,600	\$ 3,600	\$ 3,700
Comfort Lake Shoreline Restoration	\$ 600	\$ 610	\$ 620	\$ 640	\$ 650	\$ 660	\$ 680	\$ 690	\$ 700	\$ 720	\$ 730	\$ 750	\$ 760	\$ 780	\$ 790
Comfort Lake Capital Improvement Project - Bixby Park #1	\$ -	\$ -	\$ 170,000	\$ 3,500,000	\$ 870	\$ 880	\$ 900	\$ 920	\$ 940	\$ 960	\$ 980	\$ 990	\$ 1,000	\$ 330,000	\$ 1,100
Comfort Lake Internal Load Alum Treatment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 82,000	\$ 240,000	\$ -	\$ -	\$ -	\$ -
Comfort Lake Internal Load Rough Fish Management	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,500	\$ 19,000	\$ -	\$ 16,000	\$ -	\$ 17,000
Comfort Lake Internal Load Curly Leaf Management	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,000	\$ 18,000	\$ 24,000	\$ 25,000	\$ 25,000	\$ 26,000
Comfort Lake Capital Improvement Project - Bixby Park #2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 120,000	\$ 2,400,000	\$ 1,000	\$ 1,000	\$ 1,100
TOTAL CASH FLOW =	\$ 702,000	\$ 239,000	\$ 549,000	\$ 4,130,000	\$ 46,600	\$ 969,000	\$ 675,000	\$ 562,000	\$ 485,000	\$ 1,610,000	\$ 956,000	\$ 2,670,000	\$ 286,000	\$ 723,000	\$ 227,000

Alternative:		Moody Lake Wetland Restoration		NBL 12	
Item	Quantity	Unit	Unit Cost	Cost	
Investment Cost Estimate					
Fencing	4,300	Linear feet	\$ 10	\$ 43,000	
Dry Crossing structure (225')	1	Lump Sum	\$ 15,000	\$ 15,000	
Site Preparation Burn	31	acre	\$ 60	\$ 1,860	
Soil preparation	31	acre	\$ 165	\$ 5,115	
Seed and seeding buffer mix	29	acre	\$ 690	\$ 19,665	
Seed and seeding emergent mix	2.5	acre	\$ 1,650	\$ 4,125	
Watering Trough, well, and electrical hookup	1	ea.	\$ 2,000	\$ 2,000	
Sheet Pile Weir (15" x 30")	450	sq. feet	\$ 15	\$ 6,750	
				\$ -	
Mobilization/Demobilization	1	Lump Sum	\$ 2,000	\$ 2,000	
Contingencies	1	ea.	20%	\$ 19,903	
Subtotal, Construction	--	--	--	\$ 119,418	
Engineering, Legal, Admin.	1	ea.	15%	\$ 17,913	
Land, Easements	31	acre	\$ 20,000	\$ 620,000	
Total Investment Cost				\$ 760,000	
Annual Operating Cost					
Staff operational time	16	person hours	\$ 50	\$ 800	
				\$ -	
				\$ -	
Annual operation costs				\$ 800	
Overhaul Cost at 3 years					
Mowing	1	Lump Sum	\$ 1,000	\$ 1,000	
				\$ -	
				\$ -	
Total replacement costs				\$ 1,000	
Project Present Value					
Investment Cost				\$ 757,331	
Economic life	20	yr.			
Replacement occurs at	3	yr.			
Discount rate	5.0%				
Present Value of Annual Costs				\$ 9,970	
Present Value of Maintenance & Replacement				\$ 864	
Total Present Value				\$ 770,000	
Project Annual Cost					
Annual cost (annuity)				\$ 62,000	

Alternative: **In-Lake Alum Treatment Moody Lake**

Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
Supply and apply alum	23,625	gallon	\$ 1.00	\$ 23,625
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
Mobilization, Demobilization	1	ea.	\$ 10,000.00	\$ 10,000
Contingencies	1	ea.	20%	\$ 6,725
Subtotal, Construction	--	--	--	\$ 40,350
Engineering, Legal, Admin.	1	ea.	35%	\$ 14,123
Land, Easements	--	--	\$ 20,000.00	\$ -
Total Investment Cost				\$ 54,000
Reapplication Costs				
Reapplication interval	10	yr.	\$ -	\$ -
Reapplication Costs	1	ea.	\$ 54,473	\$ 54,473
Nominal Interest Rate	62.89%	per 10 yr		
Present Value of Reapplication Costs				\$ 33,441
Overhaul Cost at 10 years				
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Total replacement costs				\$ -
Project Present Value				
Investment Cost				\$ 54,473
Economic life	20	yr.		
Replacement occurs at	20	yr.		
Discount rate	5.0%			
Present Value of Reapplication Costs				\$ 33,441
Present Value of Maintenance & Replacement				\$ -
Total Present Value				\$ 88,000
Project Annual Cost				
Annual cost (annuity)				\$ 7,100

Alternative: **Rough Fish Management Moody Lake**

Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
Initial Fish Catch and Removal	4	crew-day	\$ 500.00	\$ 2,000
Fish Screen for Upper Watershed	1	ea.	\$ 8,000.00	\$ 8,000
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
Mobilization, Demobilization	1	ea.	\$ 3,000.00	\$ 3,000
Contingencies	1	ea.	20%	\$ 2,600
Subtotal, Construction	--	--	--	\$ 15,600
Engineering, Legal, Admin.	1	ea.	35%	\$ 5,460
Land, Easements	--	--	\$ 20,000.00	\$ -
Total Investment Cost				\$ 21,000
Reapplication Costs				
Reapplication interval	2	yr.	\$ -	\$ -
Reapplication Costs	9	ea.	\$ 13,060	\$ 13,060
Nominal Interest Rate	10.25%	per 2 yr		
Present Value of Reapplication Costs				\$ 74,471
Overhaul Cost at 10 years				
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Total replacement costs				\$ -
Project Present Value				
Investment Cost				\$ 21,060
Economic life	20	yr.		
Replacement occurs at	20	yr.		
Discount rate	5.0%			
Present Value of Reapplication Costs				\$ 74,471
Present Value of Maintenance & Replacement				\$ -
Total Present Value				\$ 96,000
Project Annual Cost				
Annual cost (annuity)				\$ 7,700

Alternative:		Curly Leaf Pondweed Management		Moody Lake	
Item	Quantity	Unit	Unit Cost	Cost	
Investment Cost Estimate					
Chemical Application - Aerial	11	acre	\$ 330.00	\$ 3,762	
Chemical Application - Shore	1642	linear foot	\$ 2.00	\$ 3,284	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
Mobilization, Demobilization	1	ea.	\$ 2,000.00	\$ 2,000	
Contingencies	1	ea.	20%	\$ 1,809	
Subtotal, Construction	--	--	--	\$ 10,855	
Engineering, Legal, Admin.	1	ea.	35%	\$ 3,799	
Land, Easements	--	--	\$ 20,000.00	\$ -	
Total Investment Cost				\$ 15,000	
Reapplication Costs					
Reapplication interval	1	yr.	\$ -	\$ -	
Reapplication Costs	19	ea.	\$ 14,655	\$ 14,655	
Nominal Interest Rate	5.00%	per 1 yr			
Present Value of Reapplication Costs				\$ 177,105	
Overhaul Cost at 10 years					
Other	-	--	\$ -	\$ -	
Other	-	--	\$ -	\$ -	
Other	-	--	\$ -	\$ -	
Total replacement costs				\$ -	
Project Present Value					
Investment Cost				\$ 14,655	
Economic life	20	yr.			
Replacement occurs at	20	yr.			
Discount rate	5.0%				
Present Value of Reapplication Costs				\$ 177,105	
Present Value of Maintenance & Replacement				\$ -	
Total Present Value				\$ 190,000	
Project Annual Cost					
Annual cost (annuity)				\$ 15,000	

Alternative: **Bone Lake North Inlet** **NBL17**

Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
30" HDPE pipe	2,550	linear feet	\$ 45	\$ 114,750
Hydraulic Outlet Structures	2	ea.	\$ 10,000	\$ 20,000
48" manholes	8	ea.	\$ 3,000	\$ 24,000
Restoration	3	acre	\$ 1,000	\$ 3,000
				\$ -
				\$ -
				\$ -
Mobilization/Demobilization	1	Lump Sum	\$ 4,000	\$ 4,000
Contingencies	1	ea.	20%	\$ 33,150
Subtotal, Construction	--	--	--	\$ 198,900
Engineering, Geotechnical, Legal, Admin.	1	ea.	30%	\$ 59,670
Land, Easements	3	acre	\$ 20,000	\$ 60,000
Total Investment Cost				\$ 320,000
Annual Operating Cost				
Staff operational time	16	person hours	\$ 50	\$ 800
				\$ -
				\$ -
Annual operation costs				\$ 800
Overhaul Cost at 20 years				
				\$ -
				\$ -
				\$ -
Total replacement costs				\$ -
Project Present Value				
Investment Cost				\$ 320,000
Economic life	20	yr.		
Replacement occurs at	20	yr.		
Discount rate	5.0%			
Present Value of Annual Costs				\$ 9,970
Present Value of Maintenance & Replacement				\$ -
Total Present Value				\$ 330,000
Project Annual Cost				
Annual cost (annuity)				\$ 26,000

Alternative: **Bone Lake Southeast Inlet - Infiltration Practice** **SBL07**

Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
Excavation, disposal	13,000	cu. yd.	\$ 10	\$ 130,000
30" HDPE pipe	1,000	linear feet	\$ 45	\$ 45,000
Restoration	4.8	acre	\$ 5,500	\$ 26,400
Sheet Pile Weir (10' x 230')	2300	sq. feet	\$ 15	\$ 34,500
48" manholes	5	ea.	\$ 3,000	\$ 15,000
				\$ -
				\$ -
Mobilization/Demobilization	1	Lump Sum	\$ 20,000	\$ 20,000
Contingencies	1	ea.	20%	\$ 54,180
Subtotal, Construction	--	--	--	\$ 325,080
Engineering, Legal, Admin.	1	ea.	20%	\$ 65,016
Land, Easements	4.8	acre	\$ 20,000	\$ 96,000
Total Investment Cost				\$ 490,000
Annual Operating Cost				
				\$ -
				\$ -
				\$ -
Annual operation costs				\$ -
Overhaul Cost at 10 years				
Maintenance excavation, disposal, replacement	3,900	cu. yd.	\$ 25	\$ 97,500
Hydraulic Structure Repair	1	ea.	\$ 20,000	\$ 20,000
		ea.	\$ -	\$ -
Total replacement costs				\$ 117,500
Project Present Value				
Investment Cost				\$ 490,000
Economic life	20	yr.		
Replacement occurs at	10	yr.		
Discount rate	5.0%			
Present Value of Annual Costs				\$ -
Present Value of Maintenance & Replacement				\$ 72,135
Total Present Value				\$ 560,000
Project Annual Cost				
Annual cost (annuity)				\$ 45,000

Alternative: **Bone Lake Southwest Inlet - Wetland Restoration** **SBL38**

Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
Site Preparation Burn	13.6	acre	\$ 60	\$ 816
Herbicide spray as needed	1	acre	\$ 150	\$ 150
Soil preparation	13.6	acre	\$ 165	\$ 2,244
Seed and seeding buffer mix	8.3	acre	\$ 690	\$ 5,727
Seed and seeding emergent mix	5.3	acre	\$ 1,650	\$ 8,745
Sheet Pile Weir (200" x 30")	6000	sq. feet	\$ 15	\$ 90,000
				\$ -
Mobilization/Demobilization	1	Lump Sum	\$ 4,000	\$ 4,000
Contingencies	1	ea.	20%	\$ 22,336
Subtotal, Construction	--	--	--	\$ 134,018
Engineering, Geotechnical, Legal, Admin. Land, Easements	1 13.6	ea. acre	50% \$ 20,000	\$ 67,009 \$ 272,000
Total Investment Cost				\$ 470,000
Annual Operating Cost				
Staff operational time	16	person hours	\$ 50	\$ 800
				\$ -
				\$ -
Annual operation costs				\$ 800
Overhaul Cost at 10 years				
				\$ -
				\$ -
				\$ -
Total replacement costs				\$ -
Project Present Value				
Investment Cost				\$ 470,000
Economic life	20	yr.		
Replacement occurs at	10	yr.		
Discount rate	5.0%			
Present Value of Annual Costs				\$ 9,970
Present Value of Maintenance & Replacement				\$ -
Total Present Value				\$ 480,000
Project Annual Cost				
Annual cost (annuity)				\$ 39,000

Alternative: **In-Lake Alum Treatment Bone Lake**

Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
Supply and apply alum	152,817	gallon	\$ 1.00	\$ 152,817
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
Mobilization, Demobilization	1	ea.	\$ 10,000.00	\$ 10,000
Contingencies	1	ea.	20%	\$ 32,563
Subtotal, Construction	--	--	--	\$ 195,380
Engineering, Legal, Admin.	1	ea.	35%	\$ 68,383
Land, Easements	--	--	\$ 20,000.00	\$ -
Total Investment Cost				\$ 260,000
Reapplication Costs				
Reapplication interval	10	yr.	\$ -	\$ -
Reapplication Costs	1	ea.	\$ 263,764	\$ 263,764
Nominal Interest Rate	62.89%	per 10 yr		
Present Value of Reapplication Costs				\$ 161,928
Overhaul Cost at 10 years				
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Total replacement costs				\$ -
Project Present Value				
Investment Cost				\$ 263,764
Economic life	20	yr.		
Replacement occurs at	20	yr.		
Discount rate	5.0%			
Present Value of Reapplication Costs				\$ 161,928
Present Value of Maintenance & Replacement				\$ -
Total Present Value				\$ 430,000
Project Annual Cost				
Annual cost (annuity)				\$ 35,000

Alternative: **Rough Fish Management Bone Lake**

Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
Initial Fish Catch and Removal	4	crew-day	\$ 500.00	\$ 2,000
Fish Screen for Upper Watershed	1	ea.	\$ 8,000.00	\$ 8,000
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
Mobilization, Demobilization	1	ea.	\$ 3,000.00	\$ 3,000
Contingencies	1	ea.	20%	\$ 2,600
Subtotal, Construction	--	--	--	\$ 15,600
Engineering, Legal, Admin.	1	ea.	35%	\$ 5,460
Land, Easements	--	--	\$ 20,000.00	\$ -
Total Investment Cost				\$ 21,000
Reapplication Costs				
Reapplication interval	2	yr.	\$ -	\$ -
Reapplication Costs	9	ea.	\$ 13,060	\$ 13,060
Nominal Interest Rate	10.25%	per 2 yr		
Present Value of Reapplication Costs				\$ 74,471
Overhaul Cost at 10 years				
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Total replacement costs				\$ -
Project Present Value				
Investment Cost				\$ 21,060
Economic life	20	yr.		
Replacement occurs at	20	yr.		
Discount rate	5.0%			
Present Value of Reapplication Costs				\$ 74,471
Present Value of Maintenance & Replacement				\$ -
Total Present Value				\$ 96,000
Project Annual Cost				
Annual cost (annuity)				\$ 7,700

Alternative: Curly Leaf Pondweed Management Bone Lake				
Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
Chemical Application - Aerial	69	acre	\$ 330.00	\$ 22,704
Chemical Application - Shore	4852	linear foot	\$ 2.00	\$ 9,703
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
Mobilization, Demobilization	1	ea.	\$ 2,000.00	\$ 2,000
Contingencies	1	ea.	20%	\$ 6,881
Subtotal, Construction	--	--	--	\$ 41,289
Engineering, Legal, Admin.	1	ea.	35%	\$ 14,451
Land, Easements	--	--	\$ 20,000.00	\$ -
Total Investment Cost				\$ 56,000
Reapplication Costs				
Reapplication interval	1	yr.	\$ -	\$ -
Reapplication Costs	19	ea.	\$ 55,740	\$ 55,740
Nominal Interest Rate	5.00%	per 1 yr		
Present Value of Reapplication Costs				\$ 673,634
Overhaul Cost at 10 years				
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Total replacement costs				\$ -
Project Present Value				
Investment Cost				\$ 55,740
Economic life	20	yr.		
Replacement occurs at	20	yr.		
Discount rate	5.0%			
Present Value of Reapplication Costs				\$ 673,634
Present Value of Maintenance & Replacement				\$ -
Total Present Value				\$ 730,000
Project Annual Cost				
Annual cost (annuity)				\$ 59,000

Alternative:		Birch Lake Wetland Restoration		LCL20	
Item	Quantity	Unit	Unit Cost	Cost	
Investment Cost Estimate					
Site Preparation Burn	20	acre	\$ 60	\$ 1,200	
Herbicide spray as needed	1	acre	\$ 150	\$ 150	
Soil preparation	20	acre	\$ 165	\$ 3,300	
Seed and seeding buffer mix	3	acre	\$ 690	\$ 2,070	
Seed and seeding emergent mix	17	acre	\$ 1,650	\$ 28,050	
Sheet Pile Weir (30' x 210')	6300	sq. feet	\$ 15	\$ 94,500	
				\$ -	
Mobilization/Demobilization	1	Lump Sum	\$ 4,000	\$ 4,000	
Contingencies	1	ea.	20%	\$ 26,654	
Subtotal, Construction	--	--	--	\$ 159,924	
Engineering, Geotechnical, Legal, Admin. Land, Easements	1	ea.	40%	\$ 63,970	
	20	acre	\$ 20,000	\$ 400,000	
Total Investment Cost				\$ 620,000	
Annual Operating Cost					
Staff operational time	16	person hours	\$ 50	\$ 800	
				\$ -	
				\$ -	
Annual operation costs				\$ 800	
Overhaul Cost at 10 years					
Vegetation Restoration	10	acre	\$ 1,650	\$ 16,500	
Outlet Structure Repair	1	ea.	\$ 10,000	\$ 10,000	
Other		ea.	\$ -	\$ -	
Total replacement costs				\$ 26,500	
Project Present Value					
Investment Cost				\$ 620,000	
Economic life	20	yr.			
Replacement occurs at	10	yr.			
Discount rate	5.0%				
Present Value of Annual Costs				\$ 9,970	
Present Value of Maintenance & Replacement				\$ 16,269	
Total Present Value				\$ 650,000	
Project Annual Cost					
Annual cost (annuity)				\$ 52,000	

Alternative: **School Lake Outlet Structure and Wetland Restoration** **LCL04**

Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
Sheet Pile Weir (30' x 170')	5100	sq. feet	\$ 15	\$ 76,500
Beaver Dam Removal	1	Lump Sum	\$ 2,000	\$ 2,000
Site Restoration	4	acre	\$ 5,500	\$ 22,000
				\$ -
				\$ -
				\$ -
				\$ -
Mobilization/Demobilization	1	Lump Sum	\$ 20,000	\$ 20,000
Contingencies	1	ea.	20%	\$ 24,100
Subtotal, Construction	--	--	--	\$ 144,600
Engineering, Legal, Admin.	1	ea.	35%	\$ 50,610
Land, Easements	4	acre	\$ 20,000	\$ 80,000
Total Investment Cost				\$ 280,000
Annual Operating Cost				
Staff operational time	16	person hours	\$ 50	\$ 800
				\$ -
				\$ -
Annual operation costs				\$ 800
Overhaul Cost at 20 years				
				\$ -
				\$ -
				\$ -
Total replacement costs				\$ -
Project Present Value				
Investment Cost				\$ 280,000
Economic life	20	yr.		
Replacement occurs at	20	yr.		
Discount rate	5.0%			
Present Value of Annual Costs				\$ 9,970
Present Value of Maintenance & Replacement				\$ -
Total Present Value				\$ 290,000
Project Annual Cost				
Annual cost (annuity)				\$ 23,000

Alternative: **In-Lake Alum Treatment Little Comfort Lake**

Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
Supply and apply alum	23,625	gallon	\$ 1.00	\$ 23,625
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
Mobilization, Demobilization	1	ea.	\$ 10,000.00	\$ 10,000
Contingencies	1	ea.	20%	\$ 6,725
Subtotal, Construction	--	--	--	\$ 40,350
Engineering, Legal, Admin.	1	ea.	35%	\$ 14,123
Land, Easements	--	--	\$ 20,000.00	\$ -
Total Investment Cost				\$ 54,000
Reapplication Costs				
Reapplication interval	10	yr.	\$ -	\$ -
Reapplication Costs	1	ea.	\$ 54,473	\$ 54,473
Nominal Interest Rate	62.89%	per 10 yr		
Present Value of Reapplication Costs				\$ 33,441
Overhaul Cost at 10 years				
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Total replacement costs				\$ -
Project Present Value				
Investment Cost				\$ 54,473
Economic life	20	yr.		
Replacement occurs at	20	yr.		
Discount rate	5.0%			
Present Value of Reapplication Costs				\$ 33,441
Present Value of Maintenance & Replacement				\$ -
Total Present Value				\$ 88,000
Project Annual Cost				
Annual cost (annuity)				\$ 7,100

Alternative: **Rough Fish Management Little Comfort Lake**

Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
Initial Fish Catch and Removal	4	crew-day	\$ 500.00	\$ 2,000
Fish Screen for Upper Watershed	1	ea.	\$ 8,000.00	\$ 8,000
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
Mobilization, Demobilization	1	ea.	\$ 3,000.00	\$ 3,000
Contingencies	1	ea.	20%	\$ 2,600
Subtotal, Construction	--	--	--	\$ 15,600
Engineering, Legal, Admin.	1	ea.	35%	\$ 5,460
Land, Easements	--	--	\$ 20,000.00	\$ -
Total Investment Cost				\$ 21,000
Reapplication Costs				
Reapplication interval	2	yr.	\$ -	\$ -
Reapplication Costs	9	ea.	\$ 13,060	\$ 13,060
Nominal Interest Rate	10.25%	per 2 yr		
Present Value of Reapplication Costs				\$ 74,471
Overhaul Cost at 10 years				
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Total replacement costs				\$ -
Project Present Value				
Investment Cost				\$ 21,060
Economic life	20	yr.		
Replacement occurs at	20	yr.		
Discount rate	5.0%			
Present Value of Reapplication Costs				\$ 74,471
Present Value of Maintenance & Replacement				\$ -
Total Present Value				\$ 96,000
Project Annual Cost				
Annual cost (annuity)				\$ 7,700

Alternative:		Curly Leaf Pondweed Management		Little Comfort Lake	
Item	Quantity	Unit	Unit Cost	Cost	
Investment Cost Estimate					
Chemical Application - Aerial	7.2	acre	\$ 330.00	\$ -	
Chemical Application - Shore	1535	linear foot	\$ 2.00	\$ 3,071	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
			\$ -	\$ -	
Mobilization, Demobilization	1	ea.	\$ 2,000.00	\$ 2,000	
Contingencies	1	ea.	20%	\$ 1,014	
Subtotal, Construction	--	--	--	\$ 6,085	
Engineering, Legal, Admin.	1	ea.	35%	\$ 2,130	
Land, Easements	--	--	\$ 20,000.00	\$ -	
Total Investment Cost				\$ 8,200	
Reapplication Costs					
Reapplication interval	1	yr.	\$ -	\$ -	
Reapplication Costs	19	ea.	\$ 8,215	\$ 8,215	
Nominal Interest Rate	5.00%	per 1 yr			
Present Value of Reapplication Costs				\$ 99,277	
Overhaul Cost at 10 years					
Other	-	--	\$ -	\$ -	
Other	-	--	\$ -	\$ -	
Other	-	--	\$ -	\$ -	
Total replacement costs				\$ -	
Project Present Value					
Investment Cost				\$ 8,215	
Economic life	20	yr.			
Replacement occurs at	20	yr.			
Discount rate	5.0%				
Present Value of Reapplication Costs				\$ 99,277	
Present Value of Maintenance & Replacement				\$ -	
Total Present Value				\$ 110,000	
Project Annual Cost					
Annual cost (annuity)				\$ 8,800	

Alternative: Biomanipulation Shields Lake				
Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
Biomanipulation	1	ea.	\$ 300,000	\$ 300,000
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
Mobilization/Demobilization	0	Lump Sum	\$ 2,000	\$ -
Contingencies	0	ea.	20%	\$ -
Subtotal, Construction	--	--	--	\$ 300,000
Engineering, Legal, Admin.	0	ea.	15%	\$ -
Land, Easements	0	acre	\$ 20,000	\$ -
Total Investment Cost				\$ 300,000
Annual Operating Cost				
Maintenance/Reapplication	1	ea.	\$ 10,000	\$ 10,000
				\$ -
				\$ -
Annual operation costs				\$ 10,000
Overhaul Cost at 20 years				
		Lump Sum		\$ -
				\$ -
				\$ -
Total replacement costs				\$ -
Project Present Value				
Investment Cost				\$ 300,000
Economic life	20	yr.		
Replacement occurs at	20	yr.		
Discount rate	5.0%			
Present Value of Annual Costs				\$ 124,622
Present Value of Maintenance & Replacement				\$ -
Total Present Value				\$ 420,000
Project Annual Cost				
Annual cost (annuity)				\$ 34,000

Alternative: **In-Lake Alum Treatment Shields Lake**

Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
Supply and apply alum	18,761	gallon	\$ 1.00	\$ 18,761
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
Mobilization, Demobilization	1	ea.	\$ 10,000.00	\$ 10,000
Contingencies	1	ea.	20%	\$ 5,752
Subtotal, Construction	--	--	--	\$ 34,513
Engineering, Legal, Admin.	1	ea.	35%	\$ 12,080
Land, Easements	--	--	\$ 20,000.00	\$ -
Total Investment Cost				\$ 47,000
Reapplication Costs				
Reapplication interval	5	yr.	\$ -	\$ -
Reapplication Costs	1	ea.	\$ 46,593	\$ 46,593
Nominal Interest Rate	27.63%	per 5 yr		
Present Value of Reapplication Costs				\$ 36,507
Overhaul Cost at 10 years				
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Total replacement costs				\$ -
Project Present Value				
Investment Cost				\$ 46,593
Economic life	20	yr.		
Replacement occurs at	20	yr.		
Discount rate	5.0%			
Present Value of Reapplication Costs				\$ 36,507
Present Value of Maintenance & Replacement				\$ -
Total Present Value				\$ 83,000
Project Annual Cost				
Annual cost (annuity)				\$ 6,700

Alternative: **Rough Fish Management Shields Lake**

Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
Initial Fish Catch and Removal	4	crew-day	\$ 500.00	\$ 2,000
Fish Screen for Upper Watershed	1	ea.	\$ 8,000.00	\$ 8,000
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
Mobilization, Demobilization	1	ea.	\$ 3,000.00	\$ 3,000
Contingencies	1	ea.	20%	\$ 2,600
Subtotal, Construction	--	--	--	\$ 15,600
Engineering, Legal, Admin.	1	ea.	35%	\$ 5,460
Land, Easements	--	--	\$ 20,000.00	\$ -
Total Investment Cost				\$ 21,000
Reapplication Costs				
Reapplication interval	2	yr.	\$ -	\$ -
Reapplication Costs	9	ea.	\$ 13,060	\$ 13,060
Nominal Interest Rate	10.25%	per 2 yr		
Present Value of Reapplication Costs				\$ 74,471
Overhaul Cost at 10 years				
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Total replacement costs				\$ -
Project Present Value				
Investment Cost				\$ 21,060
Economic life	20	yr.		
Replacement occurs at	20	yr.		
Discount rate	5.0%			
Present Value of Reapplication Costs				\$ 74,471
Present Value of Maintenance & Replacement				\$ -
Total Present Value				\$ 96,000
Project Annual Cost				
Annual cost (annuity)				\$ 7,700

Alternative: Curly Leaf Pondweed Management Shields Lake				
Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
Chemical Application - Aerial	15.0	acre	\$ 330.00	\$ -
Chemical Application - Shore	1308	linear foot	\$ 2.00	\$ 2,615
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
Mobilization, Demobilization	1	ea.	\$ 2,000.00	\$ 2,000
Contingencies	1	ea.	20%	\$ 923
Subtotal, Construction	--	--	--	\$ 5,539
Engineering, Legal, Admin.	1	ea.	35%	\$ 1,938
Land, Easements	--	--	\$ 20,000.00	\$ -
Total Investment Cost				\$ 7,500
Reapplication Costs				
Reapplication interval	1	yr.	\$ -	\$ -
Reapplication Costs	19	ea.	\$ 7,477	\$ 7,477
Nominal Interest Rate	5.00%	per 1 yr		
Present Value of Reapplication Costs				\$ 90,362
Overhaul Cost at 10 years				
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Total replacement costs				\$ -
Project Present Value				
Investment Cost				\$ 7,477
Economic life	20	yr.		
Replacement occurs at	20	yr.		
Discount rate	5.0%			
Present Value of Reapplication Costs				\$ 90,362
Present Value of Maintenance & Replacement				\$ -
Total Present Value				\$ 98,000
Project Annual Cost				
Annual cost (annuity)				\$ 7,900

Alternative: Forest Lake Wetland Restoration FL 44				
Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
Fencing	2,100	Linear feet	\$ 10	\$ 21,000
Site Restoration	2	acre	\$ 5,500	\$ 13,255
Rough Fish Barrier	1	ea.	\$ 2,000	\$ 2,000
				\$ -
				\$ -
				\$ -
				\$ -
Mobilization/Demobilization	1	Lump Sum	\$ 5,000	\$ 5,000
Contingencies	1	ea.	20%	\$ 8,251
Subtotal, Construction	--	--	--	\$ 49,506
Engineering, Legal, Admin.	1	ea.	20%	\$ 9,901
Land, Easements	1	acre	\$ 20,000	\$ 20,000
Total Investment Cost				\$ 79,000
Annual Operating Cost				
				\$ -
				\$ -
				\$ -
Annual operation costs				\$ -
Overhaul Cost at 20 years				
				\$ -
				\$ -
				\$ -
Total replacement costs				\$ -
Project Present Value				
Investment Cost				\$ 79,000
Economic life	20	yr.		
Replacement occurs at	20	yr.		
Discount rate	5.0%			
Present Value of Annual Costs				\$ -
Present Value of Maintenance & Replacement				\$ -
Total Present Value				\$ 79,000
Project Annual Cost				
Annual cost (annuity)				\$ 6,300

Alternative: **In-Lake Alum Treatment Forest Lake East**

Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
Supply and apply alum	544,957	gallon	\$ 1	\$ 544,957
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
Mobilization, Demobilization	1	ea.	\$ 10,000	\$ 10,000
Contingencies	1	ea.	20%	\$ 110,991
Subtotal, Construction	--	--	--	\$ 665,948
Engineering, Legal, Admin.	1	ea.	35%	\$ 233,082
Land, Easements	--	--	\$ 20,000.00	\$ -
Total Investment Cost				\$ 900,000
Reapplication Costs				
Reapplication interval	20	yr.	\$ -	\$ -
Reapplication Costs	-	ea.	\$ 899,030	\$ -
Nominal Interest Rate	165.33%	per 20 yr		
Present Value of Reapplication Costs				\$ -
Overhaul Cost at 10 years				
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Total replacement costs				\$ -
Project Present Value				
Investment Cost				\$ 899,030
Economic life	20	yr.		
Replacement occurs at	20	yr.		
Discount rate	5.0%			
Present Value of Reapplication Costs				\$ -
Present Value of Maintenance & Replacement				\$ -
Total Present Value				\$ 900,000
Project Annual Cost				
Annual cost (annuity)				\$ 72,000

Alternative: **In-Lake Alum Treatment Forest Lake Center**

Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
Supply and apply alum	257,103	gallon	\$ 1.00	\$ 257,103
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
Mobilization, Demobilization	1	ea.	\$ 10,000.00	\$ 10,000
Contingencies	1	ea.	20%	\$ 53,421
Subtotal, Construction	--	--	--	\$ 320,524
Engineering, Legal, Admin.	1	ea.	35%	\$ 112,183
Land, Easements	--	--	\$ 20,000.00	\$ -
Total Investment Cost				\$ 430,000
Reapplication Costs				
Reapplication interval	20	yr.	\$ -	\$ -
Reapplication Costs	-	ea.	\$ 432,707	\$ -
Nominal Interest Rate	165.33%	per 20 yr		
Present Value of Reapplication Costs				\$ -
Overhaul Cost at 10 years				
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Total replacement costs				\$ -
Project Present Value				
Investment Cost				\$ 432,707
Economic life	20	yr.		
Replacement occurs at	20	yr.		
Discount rate	5.0%			
Present Value of Reapplication Costs				\$ -
Present Value of Maintenance & Replacement				\$ -
Total Present Value				\$ 430,000
Project Annual Cost				
Annual cost (annuity)				\$ 35,000

Alternative: **Bixby Park Wet Detention Pond 1** **CL30**

Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
Excavation, disposal	175,500	cu. yd.	\$ 15	\$ 2,632,500
Hydraulic Structures	1	ea.	\$ 20,000	\$ 20,000
Site Restoration	14	acre	\$ 5,500	\$ 79,200
Dewatering	1	Lump Sum	\$ 20,000	\$ 20,000
				\$ -
				\$ -
				\$ -
Mobilization/Demobilization	1	Lump Sum	\$ 10,000	\$ 10,000
Contingencies	1	ea.	20%	\$ 552,340
Subtotal, Construction	--	--	--	\$ 3,314,040
Engineering, Geotechnical, Legal, Admin.	1	ea.	5%	\$ 165,702
Land, Easements	0	acre	\$ 20,000	\$ -
Total Investment Cost				\$ 3,500,000
Annual Operating Cost				
Staff operational time	16	person hours	\$ 50	\$ 800
				\$ -
				\$ -
Annual operation costs				\$ 800
Overhaul Cost at 10 years				
Maintenance excavation, disposal	17,550	cu. yd.	\$ 15	\$ 263,250
				\$ -
				\$ -
Total replacement costs				\$ 263,250
Project Present Value				
Investment Cost				\$ 3,500,000
Economic life	20	yr.		
Replacement occurs at	10	yr.		
Discount rate	5.0%			
Present Value of Annual Costs				\$ 9,970
Present Value of Maintenance & Replacement				\$ 161,613
Total Present Value				\$ 3,700,000
Project Annual Cost				
Annual cost (annuity)				\$ 300,000

Alternative: **Bixby Park Wet Detention
Optional (Future) Pond 2** **CL30**

Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
Excavation, disposal	99,500	cu. yd.	\$ 15	\$ 1,492,500
Hydraulic Structures	1	ea.	\$ 20,000	\$ 20,000
Site Restoration	9	acre	\$ 5,500	\$ 47,300
Dewatering	1	Lump Sum	\$ 20,000	\$ 20,000
(Optional) Sheet Pile Weir (30' x 110')	3300	sq. feet	\$ 15	\$ 49,500
				\$ -
				\$ -
Mobilization/Demobilization	1	Lump Sum	\$ 10,000	\$ 10,000
Contingencies	1	ea.	20%	\$ 327,860
Subtotal, Construction	--	--	--	\$ 1,967,160
Engineering, Geotechnical, Legal, Admin.	1	ea.	5%	\$ 98,358
Land, Easements	0	acre	\$ 20,000	\$ -
Total Investment Cost				\$ 2,100,000
Annual Operating Cost				
Staff operational time	16	person hours	\$ 50	\$ 800
				\$ -
				\$ -
Annual operation costs				\$ 800
Overhaul Cost at 10 years				
Maintenance excavation, disposal	9,950	cu. yd.	\$ 15	\$ 149,250
				\$ -
				\$ -
Total replacement costs				\$ 149,250
Project Present Value				
Investment Cost				\$ 2,100,000
Economic life	20	yr.		
Replacement occurs at	10	yr.		
Discount rate	5.0%			
Present Value of Annual Costs				\$ 9,970
Present Value of Maintenance & Replacement				\$ 91,627
Total Present Value				\$ 2,200,000
Project Annual Cost				
Annual cost (annuity)				\$ 180,000

Alternative: **In-Lake Alum Treatment Comfort Lake**

Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
Supply and apply alum	152,817	gallon	\$ 1.00	\$ 152,817
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
Mobilization, Demobilization	1	ea.	\$ 10,000.00	\$ 10,000
Contingencies	1	ea.	20%	\$ 32,563
Subtotal, Construction	--	--	--	\$ 195,380
Engineering, Legal, Admin.	1	ea.	35%	\$ 68,383
Land, Easements	--	--	\$ 20,000.00	\$ -
Total Investment Cost				\$ 260,000
Reapplication Costs				
Reapplication interval	5	yr.	\$ -	\$ -
Reapplication Costs	1	ea.	\$ 263,764	\$ 263,764
Nominal Interest Rate	27.63%	per 5 yr		
Present Value of Reapplication Costs				\$ 206,666
Overhaul Cost at 10 years				
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Total replacement costs				\$ -
Project Present Value				
Investment Cost				\$ 263,764
Economic life	20	yr.		
Replacement occurs at	20	yr.		
Discount rate	5.0%			
Present Value of Reapplication Costs				\$ 206,666
Present Value of Maintenance & Replacement				\$ -
Total Present Value				\$ 470,000
Project Annual Cost				
Annual cost (annuity)				\$ 38,000

Alternative: **Rough Fish Management Comfort Lake**

Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
Initial Fish Catch and Removal	4	crew-day	\$ 500.00	\$ 2,000
Fish Screen for Upper Watershed	1	ea.	\$ 8,000.00	\$ 8,000
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
Mobilization, Demobilization	1	ea.	\$ 3,000.00	\$ 3,000
Contingencies	1	ea.	20%	\$ 2,600
Subtotal, Construction	--	--	--	\$ 15,600
Engineering, Legal, Admin.	1	ea.	35%	\$ 5,460
Land, Easements	--	--	\$ 20,000.00	\$ -
Total Investment Cost				\$ 21,000
Reapplication Costs				
Reapplication interval	2	yr.	\$ -	\$ -
Reapplication Costs	9	ea.	\$ 13,060	\$ 13,060
Nominal Interest Rate	10.25%	per 2 yr		
Present Value of Reapplication Costs				\$ 74,471
Overhaul Cost at 10 years				
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Total replacement costs				\$ -
Project Present Value				
Investment Cost				\$ 21,060
Economic life	20	yr.		
Replacement occurs at	20	yr.		
Discount rate	5.0%			
Present Value of Reapplication Costs				\$ 74,471
Present Value of Maintenance & Replacement				\$ -
Total Present Value				\$ 96,000
Project Annual Cost				
Annual cost (annuity)				\$ 7,700

Alternative: Curly Leaf Pondweed Management Comfort Lake				
Item	Quantity	Unit	Unit Cost	Cost
Investment Cost Estimate				
Chemical Application - Aerial	53.4	acre	\$ 330.00	\$ -
Chemical Application - Shore	4988.42	linear foot	\$ 2.00	\$ 9,977
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
			\$ -	\$ -
Mobilization, Demobilization	1	ea.	\$ 2,000.00	\$ 2,000
Contingencies	1	ea.	20%	\$ 2,395
Subtotal, Construction	--	--	--	\$ 14,372
Engineering, Legal, Admin.	1	ea.	35%	\$ 5,030
Land, Easements	--	--	\$ 20,000.00	\$ -
Total Investment Cost				\$ 19,000
Reapplication Costs				
Reapplication interval	1	yr.	\$ -	\$ -
Reapplication Costs	19	ea.	\$ 19,402	\$ 19,402
Nominal Interest Rate	5.00%	per 1 yr		
Present Value of Reapplication Costs				\$ 234,485
Overhaul Cost at 10 years				
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Other	-	--	\$ -	\$ -
Total replacement costs				\$ -
Project Present Value				
Investment Cost				\$ 19,402
Economic life	20	yr.		
Replacement occurs at	20	yr.		
Discount rate	5.0%			
Present Value of Reapplication Costs				\$ 234,485
Present Value of Maintenance & Replacement				\$ -
Total Present Value				\$ 250,000
Project Annual Cost				
Annual cost (annuity)				\$ 20,000

Comfort Lake - Forest Lake Watershed District

Project: Watershed BMPs: Moody Lake

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)		
Project Time Frames								
Basis for Cost Estimates (Year)	1	0	\$ -				\$0	\$0
F/S, Design, Admin, Legal Cost Incurred in Year	2	1	\$ 1,600				\$1,600	\$1,600
Planned Construction Cost Year	3	1	2	\$1,632	\$0	\$0	\$1,632	\$1,632
Scenario Year (Overrides Construction Year)	1	2	3	\$1,665	\$0	\$0	\$1,665	\$1,585
Project Life [years]	30 years	3	4	\$1,698	\$0	\$0	\$1,698	\$1,540
Initial Costs		4	5	\$1,732	\$0	\$0	\$1,732	\$1,496
F/S, Design, Permitting, Legal, Admin. Cost	\$0	5	6	\$1,767	\$0	\$0	\$1,767	\$1,453
Construction Cost	\$1,600	6	7	\$1,802	\$0	\$0	\$1,802	\$1,412
Scenario Preliminary Cost	\$0	7	8	\$1,838	\$0	\$0	\$1,838	\$1,371
Scenario Construction Cost	\$0	8	9	\$1,875	\$0	\$0	\$1,875	\$1,332
Recurring Costs		9	10	\$1,912	\$0	\$0	\$1,912	\$1,294
Annual Cost ¹	\$1,600	10	11	\$1,950	\$0	\$0	\$1,950	\$1,257
3 Year Overhaul / Major Maint. Cost ²	\$0	11	12	\$1,989	\$0	\$0	\$1,989	\$1,221
Other Recurring Cost ³	\$0	12	13	\$2,029	\$0	\$0	\$2,029	\$1,186
"Other" Recurring Cost Period (years)	0	13	14	\$2,070	\$0	\$0	\$2,070	\$1,153
Discount Rate for Present Value Analysis		14	15	\$2,111	\$0	\$0	\$2,111	\$1,120
Discount Rate	5%	15	16	\$2,153	\$0	\$0	\$2,153	\$1,088
Inflation Rate (%)	2%	16	17	\$2,196	\$0	\$0	\$2,196	\$1,057
Notes: 1 2 3		17	18	\$2,240	\$0	\$0	\$2,240	\$1,026
		18	19	\$2,285	\$0	\$0	\$2,285	\$997
		19	20	\$2,331	\$0	\$0	\$2,331	\$969
		20	21	\$2,378	\$0	\$0	\$2,378	\$941
		21	22	\$2,425	\$0	\$0	\$2,425	\$914
		22	23	\$2,474	\$0	\$0	\$2,474	\$888
		23	24	\$2,523	\$0	\$0	\$2,523	\$863
		24	25	\$2,573	\$0	\$0	\$2,573	\$838
		25	26	\$2,625	\$0	\$0	\$2,625	\$814
		26	27	\$2,677	\$0	\$0	\$2,677	\$791
		27	28	\$2,731	\$0	\$0	\$2,731	\$768
		28	29	\$2,786	\$0	\$0	\$2,786	\$746
		29	30	\$2,841	\$0	\$0	\$2,841	\$725
		30	31	\$2,898	\$0	\$0	\$2,898	\$704
	Total Expenditure:			\$1,600	\$66,207	\$0	\$0	\$67,807
Total Net Present Value of Initial and Recurring Costs:								\$34,781

Comfort Lake - Forest Lake Watershed District

Project: Moody Lake Wetland Restoration: NBL 12

Inputs		Annual Cost / Present Value Analysis						
		Annual Cost					Project Year 1 Present Value	
		Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost		
Project Time Frames		Project Year						
Basis for Cost Estimates (Year)	1	1	\$ 637,913			\$637,913	\$637,913	
F/S, Design, Admin, Legal Cost Incurred in Year	2	2	\$ 121,806			\$121,806	\$116,006	
Planned Construction Cost Year	3	1	3	\$832	\$0	\$0	\$832	
Scenario Year (Overrides Construction Year)	2	2	4	\$849	\$0	\$0	\$849	
Project Life [years]	30 years	3	5	\$866	\$1,061	\$0	\$1,927	
Initial Costs		4	6	\$883	\$0	\$0	\$883	
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$637,913	5	7	\$901	\$0	\$0	\$901	
Construction Cost	\$119,418	6	8	\$919	\$1,126	\$0	\$2,045	
Scenario Preliminary Cost	\$0	7	9	\$937	\$0	\$0	\$937	
Scenario Construction Cost	\$0	8	10	\$956	\$0	\$0	\$956	
Recurring Costs		9	11	\$975	\$1,195	\$0	\$2,170	
Annual O&M Cost ¹	\$800	10	12	\$995	\$0	\$0	\$995	
3 Year Overhaul / Major Maint. Cost ²	\$1,000	11	13	\$1,015	\$0	\$0	\$1,015	
Other Recurring Cost ³	\$0	12	14	\$1,035	\$1,268	\$0	\$2,303	
"Other" Recurring Cost Period (years)	0	13	15	\$1,056	\$0	\$0	\$1,056	
Discount Rate for Present Value Analysis		14	16	\$1,077	\$0	\$0	\$1,077	
Discount Rate	5%	15	17	\$1,098	\$1,346	\$0	\$2,444	
Inflation Rate (%)	2%	16	18	\$1,120	\$0	\$0	\$1,120	
Notes: ¹ Inspections, reporting, minor maintenance ² Mowing ³ Mowing		17	19	\$1,143	\$0	\$0	\$1,143	
		18	20	\$1,165	\$1,428	\$0	\$2,594	
		19	21	\$1,189	\$0	\$0	\$1,189	
		20	22	\$1,213	\$0	\$0	\$1,213	
		21	23	\$1,237	\$1,516	\$0	\$2,752	
		22	24	\$1,262	\$0	\$0	\$1,262	
		23	25	\$1,287	\$0	\$0	\$1,287	
		24	26	\$1,312	\$1,608	\$0	\$2,921	
		25	27	\$1,339	\$0	\$0	\$1,339	
		26	28	\$1,366	\$0	\$0	\$1,366	
		27	29	\$1,393	\$1,707	\$0	\$3,100	
		28	30	\$1,421	\$0	\$0	\$1,421	
		29	31	\$1,449	\$0	\$0	\$1,449	
		30	32	\$1,478	\$1,811	\$0	\$3,289	
	Total Expenditure:				\$759,719	\$33,766	\$14,067	\$0
		Total Net Present Value of Initial and Recurring Costs:						\$777,554

Comfort Lake - Forest Lake Watershed District

Project: In-Lake Alum Treatment: Moody Lake

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost	
Project Time Frames								
Basis for Cost Estimates (Year)	1	2	\$ 14,405				\$14,405	\$13,719
F/S, Design, Admin, Legal Cost Incurred in Year	2	3	\$ 41,980				\$41,980	\$38,077
Planned Construction Cost Year	3	1	4	\$0	\$0	\$0	\$0	\$0
Scenario Year (Overrides Construction Year)	3	2	5	\$0	\$0	\$0	\$0	\$0
Project Life [years]	30 years	3	6	\$0	\$0	\$0	\$0	\$0
Initial Costs								
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$14,123	4	7	\$0	\$0	\$0	\$0	\$0
Construction Cost	\$40,350	5	8	\$0	\$0	\$0	\$0	\$0
Scenario Preliminary Cost	\$0	6	9	\$0	\$0	\$0	\$0	\$0
Scenario Construction Cost	\$0	7	10	\$0	\$0	\$0	\$0	\$0
Recurring Costs								
Annual O&M Cost ¹	\$0	8	11	\$0	\$0	\$0	\$0	\$0
10 Year Overhaul / Major Maint. Cost ²	\$54,473	9	12	\$0	\$0	\$0	\$0	\$0
Other Recurring Cost ³	\$0	10	13	\$0	\$67,730	\$0	\$67,730	\$43,659
"Other" Recurring Cost Period (years)	0	11	14	\$0	\$0	\$0	\$0	\$0
Discount Rate for Present Value Analysis								
Discount Rate	5%	12	15	\$0	\$0	\$0	\$0	\$0
Inflation Rate (%)	2%	13	16	\$0	\$0	\$0	\$0	\$0
Notes:								
¹ Inspections, reporting, minor maintenance		14	17	\$0	\$0	\$0	\$0	\$0
² Reapplication		15	18	\$0	\$0	\$0	\$0	\$0
³		16	19	\$0	\$0	\$0	\$0	\$0
		17	20	\$0	\$0	\$0	\$0	\$0
		18	21	\$0	\$0	\$0	\$0	\$0
		19	22	\$0	\$0	\$0	\$0	\$0
		20	23	\$0	\$82,562	\$0	\$82,562	\$32,673
		21	24	\$0	\$0	\$0	\$0	\$0
		22	25	\$0	\$0	\$0	\$0	\$0
		23	26	\$0	\$0	\$0	\$0	\$0
		24	27	\$0	\$0	\$0	\$0	\$0
		25	28	\$0	\$0	\$0	\$0	\$0
		26	29	\$0	\$0	\$0	\$0	\$0
		27	30	\$0	\$0	\$0	\$0	\$0
		28	31	\$0	\$0	\$0	\$0	\$0
		29	32	\$0	\$0	\$0	\$0	\$0
		30	33	\$0	\$100,643	\$0	\$100,643	\$24,451
Total Expenditure:			\$56,385	\$0	\$250,935	\$0	\$307,320	
Total Net Present Value of Initial and Recurring Costs:								\$152,579

Comfort Lake - Forest Lake Watershed District

Project: Rough Fish Management: Moody Lake

Inputs		Annual Cost / Present Value Analysis						
		Annual Cost					Project Year 1 Present Value	
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)		Total Annual Cost
Project Time Frames								
Basis for Cost Estimates (Year)	1	1	\$ 5,460				\$5,460	\$5,460
F/S, Design, Admin, Legal Cost Incurred in Year	2	2	\$ 15,912				\$15,912	\$15,154
Planned Construction Cost Year	3	1	3	\$0	\$0	\$0	\$0	\$0
Scenario Year (Overrides Construction Year)	2	2	4	\$0	\$13,588	\$0	\$13,588	\$12,941
Project Life [years]	30 years	3	5	\$0	\$0	\$0	\$0	\$0
Initial Costs								
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$5,460	4	6	\$0	\$14,137	\$0	\$14,137	\$12,212
Construction Cost	\$15,600	5	7	\$0	\$0	\$0	\$0	\$0
Scenario Preliminary Cost	\$0	6	8	\$0	\$14,708	\$0	\$14,708	\$11,524
Scenario Construction Cost	\$0	7	9	\$0	\$0	\$0	\$0	\$0
Recurring Costs								
Annual O&M Cost ¹	\$0	8	10	\$0	\$15,302	\$0	\$15,302	\$10,875
2 Year Overhaul / Major Maint. Cost ²	\$13,060	9	11	\$0	\$0	\$0	\$0	\$0
Other Recurring Cost ³	\$0	10	12	\$0	\$15,920	\$0	\$15,920	\$10,262
"Other" Recurring Cost Period (years)	0	11	13	\$0	\$0	\$0	\$0	\$0
Discount Rate for Present Value Analysis								
Discount Rate	5%	12	14	\$0	\$16,563	\$0	\$16,563	\$9,684
Inflation Rate (%)	2%	13	15	\$0	\$0	\$0	\$0	\$0
Notes:								
¹ Inspections, reporting, minor maintenance		14	16	\$0	\$17,232	\$0	\$17,232	\$9,139
² Reapplication		15	17	\$0	\$0	\$0	\$0	\$0
³		16	18	\$0	\$17,929	\$0	\$17,929	\$8,624
		17	19	\$0	\$0	\$0	\$0	\$0
		18	20	\$0	\$18,653	\$0	\$18,653	\$8,138
		19	21	\$0	\$0	\$0	\$0	\$0
		20	22	\$0	\$19,406	\$0	\$19,406	\$7,680
		21	23	\$0	\$0	\$0	\$0	\$0
		22	24	\$0	\$20,190	\$0	\$20,190	\$7,247
		23	25	\$0	\$0	\$0	\$0	\$0
		24	26	\$0	\$21,006	\$0	\$21,006	\$6,839
		25	27	\$0	\$0	\$0	\$0	\$0
		26	28	\$0	\$21,855	\$0	\$21,855	\$6,454
		27	29	\$0	\$0	\$0	\$0	\$0
		28	30	\$0	\$22,738	\$0	\$22,738	\$6,090
		29	31	\$0	\$0	\$0	\$0	\$0
		30	32	\$0	\$23,656	\$0	\$23,656	\$5,747
Total Expenditure:			\$21,372	\$0	\$272,883	\$0	\$294,255	
Total Net Present Value of Initial and Recurring Costs:							\$154,070	

Comfort Lake - Forest Lake Watershed District

Project: Curly Leaf Pondweed Management: Moody Lake

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost	
Project Time Frames								
Basis for Cost Estimates (Year)	1	1	\$ 3,799				\$3,799	\$3,799
F/S, Design, Admin, Legal Cost Incurred in Year	2	2	\$ 11,072				\$11,072	\$10,545
Planned Construction Cost Year	3	1	3	\$15,247	\$0	\$0	\$15,247	\$15,247
Scenario Year (Overrides Construction Year)	2	2	4	\$15,551	\$0	\$0	\$15,551	\$14,811
Project Life [years]	30 years	3	5	\$15,863	\$0	\$0	\$15,863	\$14,388
Initial Costs								
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$3,799	4	6	\$16,180	\$0	\$0	\$16,180	\$13,977
Construction Cost	\$10,855	5	7	\$16,503	\$0	\$0	\$16,503	\$13,577
Scenario Preliminary Cost	\$0	6	8	\$16,833	\$0	\$0	\$16,833	\$13,189
Scenario Construction Cost	\$0	7	9	\$17,170	\$0	\$0	\$17,170	\$12,813
Recurring Costs								
Annual O&M Cost ¹	\$14,655	8	10	\$17,514	\$0	\$0	\$17,514	\$12,447
Year Overhaul / Major Maint. Cost ²	\$0	9	11	\$17,864	\$0	\$0	\$17,864	\$12,091
Other Recurring Cost ³	\$0	10	12	\$18,221	\$0	\$0	\$18,221	\$11,745
"Other" Recurring Cost Period (years)	0	11	13	\$18,585	\$0	\$0	\$18,585	\$11,410
Discount Rate for Present Value Analysis								
Discount Rate	5%	12	14	\$18,957	\$0	\$0	\$18,957	\$11,084
Inflation Rate (%)	2%	13	15	\$19,336	\$0	\$0	\$19,336	\$10,767
Notes:								
¹ Reapplication		14	16	\$19,723	\$0	\$0	\$19,723	\$10,460
²		15	17	\$20,118	\$0	\$0	\$20,118	\$10,161
³		16	18	\$20,520	\$0	\$0	\$20,520	\$9,870
		17	19	\$20,930	\$0	\$0	\$20,930	\$9,588
		18	20	\$21,349	\$0	\$0	\$21,349	\$9,314
		19	21	\$21,776	\$0	\$0	\$21,776	\$9,048
		20	22	\$22,211	\$0	\$0	\$22,211	\$8,790
		21	23	\$22,656	\$0	\$0	\$22,656	\$8,539
		22	24	\$23,109	\$0	\$0	\$23,109	\$8,295
		23	25	\$23,571	\$0	\$0	\$23,571	\$8,058
		24	26	\$24,042	\$0	\$0	\$24,042	\$7,827
		25	27	\$24,523	\$0	\$0	\$24,523	\$7,604
		26	28	\$25,014	\$0	\$0	\$25,014	\$7,387
		27	29	\$25,514	\$0	\$0	\$25,514	\$7,176
		28	30	\$26,024	\$0	\$0	\$26,024	\$6,971
		29	31	\$26,545	\$0	\$0	\$26,545	\$6,771
		30	32	\$27,076	\$0	\$0	\$27,076	\$6,578
Total Expenditure:			\$14,872	\$618,524	\$0	\$0	\$633,395	
Total Net Present Value of Initial and Recurring Costs:								\$324,325

Comfort Lake - Forest Lake Watershed District

Project: Watershed BMPs: Bone Lake

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost	
Project Time Frames								
Basis for Cost Estimates (Year)	1	0	\$ -				\$0	\$0
F/S, Design, Admin, Legal Cost Incurred in Year	2	1	\$ 7,700				\$7,700	\$7,700
Planned Construction Cost Year	3	1	2	\$7,854	\$0	\$0	\$7,854	\$7,854
Scenario Year (Overrides Construction Year)	1	2	3	\$8,011	\$0	\$0	\$8,011	\$7,630
Project Life [years]	30 years	3	4	\$8,171	\$0	\$0	\$8,171	\$7,412
Initial Costs								
F/S, Design, Permitting, Legal, Admin. Cost	\$0	4	5	\$8,335	\$0	\$0	\$8,335	\$7,200
Construction Cost	\$7,700	5	6	\$8,501	\$0	\$0	\$8,501	\$6,994
Scenario Preliminary Cost	\$0	6	7	\$8,671	\$0	\$0	\$8,671	\$6,794
Scenario Construction Cost	\$0	7	8	\$8,845	\$0	\$0	\$8,845	\$6,600
Recurring Costs								
Annual Cost ¹	\$7,700	8	9	\$9,022	\$0	\$0	\$9,022	\$6,412
3 Year Overhaul / Major Maint. Cost ²	\$0	9	10	\$9,202	\$0	\$0	\$9,202	\$6,228
Other Recurring Cost ³	\$0	10	11	\$9,386	\$0	\$0	\$9,386	\$6,050
"Other" Recurring Cost Period (years)	0	11	12	\$9,574	\$0	\$0	\$9,574	\$5,878
Discount Rate for Present Value Analysis								
Discount Rate	5%	12	13	\$9,765	\$0	\$0	\$9,765	\$5,710
Inflation Rate (%)	2%	13	14	\$9,961	\$0	\$0	\$9,961	\$5,547
Notes:								
1		14	15	\$10,160	\$0	\$0	\$10,160	\$5,388
2		15	16	\$10,363	\$0	\$0	\$10,363	\$5,234
3		16	17	\$10,570	\$0	\$0	\$10,570	\$5,085
		17	18	\$10,782	\$0	\$0	\$10,782	\$4,939
		18	19	\$10,997	\$0	\$0	\$10,997	\$4,798
		19	20	\$11,217	\$0	\$0	\$11,217	\$4,661
		20	21	\$11,442	\$0	\$0	\$11,442	\$4,528
		21	22	\$11,671	\$0	\$0	\$11,671	\$4,399
		22	23	\$11,904	\$0	\$0	\$11,904	\$4,273
		23	24	\$12,142	\$0	\$0	\$12,142	\$4,151
		24	25	\$12,385	\$0	\$0	\$12,385	\$4,032
		25	26	\$12,633	\$0	\$0	\$12,633	\$3,917
		26	27	\$12,885	\$0	\$0	\$12,885	\$3,805
		27	28	\$13,143	\$0	\$0	\$13,143	\$3,696
		28	29	\$13,406	\$0	\$0	\$13,406	\$3,591
		29	30	\$13,674	\$0	\$0	\$13,674	\$3,488
		30	31	\$13,947	\$0	\$0	\$13,947	\$3,388
Total Expenditure:			\$7,700	\$318,622	\$0	\$0	\$326,322	
Total Net Present Value of Initial and Recurring Costs:								\$167,381

Comfort Lake - Forest Lake Watershed District

Project: Shoreline Restoration: Bone Lake

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost	
Project Time Frames								
Basis for Cost Estimates (Year)	1	0	\$ -				\$0	\$0
F/S, Design, Admin, Legal Cost Incurred in Year	2	1	\$ 600				\$600	\$600
Planned Construction Cost Year	3	1	2	\$612	\$0	\$0	\$612	\$612
Scenario Year (Overrides Construction Year)	1	2	3	\$624	\$0	\$0	\$624	\$595
Project Life [years]	30 years	3	4	\$637	\$0	\$0	\$637	\$578
Initial Costs		4	5	\$649	\$0	\$0	\$649	\$561
F/S, Design, Permitting, Legal, Admin. Cost	\$0	5	6	\$662	\$0	\$0	\$662	\$545
Construction Cost	\$600	6	7	\$676	\$0	\$0	\$676	\$529
Scenario Preliminary Cost	\$0	7	8	\$689	\$0	\$0	\$689	\$514
Scenario Construction Cost	\$0	8	9	\$703	\$0	\$0	\$703	\$500
Recurring Costs		9	10	\$717	\$0	\$0	\$717	\$485
Annual Cost ¹	\$600	10	11	\$731	\$0	\$0	\$731	\$471
3 Year Overhaul / Major Maint. Cost ²	\$0	11	12	\$746	\$0	\$0	\$746	\$458
Other Recurring Cost ³	\$0	12	13	\$761	\$0	\$0	\$761	\$445
"Other" Recurring Cost Period (years)	0	13	14	\$776	\$0	\$0	\$776	\$432
Discount Rate for Present Value Analysis		14	15	\$792	\$0	\$0	\$792	\$420
Discount Rate	5%	15	16	\$808	\$0	\$0	\$808	\$408
Inflation Rate (%)	2%	16	17	\$824	\$0	\$0	\$824	\$396
Notes: 1 2 3		17	18	\$840	\$0	\$0	\$840	\$385
		18	19	\$857	\$0	\$0	\$857	\$374
		19	20	\$874	\$0	\$0	\$874	\$363
		20	21	\$892	\$0	\$0	\$892	\$353
		21	22	\$909	\$0	\$0	\$909	\$343
		22	23	\$928	\$0	\$0	\$928	\$333
		23	24	\$946	\$0	\$0	\$946	\$323
		24	25	\$965	\$0	\$0	\$965	\$314
		25	26	\$984	\$0	\$0	\$984	\$305
		26	27	\$1,004	\$0	\$0	\$1,004	\$296
		27	28	\$1,024	\$0	\$0	\$1,024	\$288
		28	29	\$1,045	\$0	\$0	\$1,045	\$280
		29	30	\$1,066	\$0	\$0	\$1,066	\$272
		30	31	\$1,087	\$0	\$0	\$1,087	\$264
	Total Expenditure:			\$600	\$24,828	\$0	\$0	\$25,428
Total Net Present Value of Initial and Recurring Costs:								\$13,043

Comfort Lake - Forest Lake Watershed District

Project: Bone Lake North Inlet: NBL17

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value	
		Annual Cost							
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost		
Project Time Frames									
Basis for Cost Estimates (Year)	1	3	\$ 124,505				\$124,505	\$112,929	
F/S, Design, Admin, Legal Cost Incurred in Year	2	4	\$ 211,074				\$211,074	\$182,334	
Planned Construction Cost Year	3	1	5	\$866	\$0	\$0	\$866	\$866	
Scenario Year (Overrides Construction Year)	4	2	6	\$883	\$0	\$0	\$883	\$841	
Project Life [years]	30 years	3	7	\$901	\$0	\$0	\$901	\$817	
Initial Costs		4	8	\$919	\$0	\$0	\$919	\$794	
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$119,670	5	9	\$937	\$0	\$0	\$937	\$771	
Construction Cost	\$198,900	6	10	\$956	\$0	\$0	\$956	\$749	
Scenario Preliminary Cost	\$0	7	11	\$975	\$0	\$0	\$975	\$728	
Scenario Construction Cost	\$0	8	12	\$995	\$0	\$0	\$995	\$707	
Recurring Costs		9	13	\$1,015	\$0	\$0	\$1,015	\$687	
Annual O&M Cost ¹	\$800	10	14	\$1,035	\$0	\$0	\$1,035	\$667	
Year Overhaul / Major Maint. Cost ²	\$0	11	15	\$1,056	\$0	\$0	\$1,056	\$648	
Other Recurring Cost ³	\$0	12	16	\$1,077	\$0	\$0	\$1,077	\$630	
"Other" Recurring Cost Period (years)	0	13	17	\$1,098	\$0	\$0	\$1,098	\$612	
Discount Rate for Present Value Analysis		14	18	\$1,120	\$0	\$0	\$1,120	\$594	
Discount Rate	5%	15	19	\$1,143	\$0	\$0	\$1,143	\$577	
Inflation Rate (%)	2%	16	20	\$1,165	\$0	\$0	\$1,165	\$561	
Notes: ¹ Inspections, reporting, minor maintenance ² ³		17	21	\$1,189	\$0	\$0	\$1,189	\$545	
		18	22	\$1,213	\$0	\$0	\$1,213	\$529	
		19	23	\$1,237	\$0	\$0	\$1,237	\$514	
		20	24	\$1,262	\$0	\$0	\$1,262	\$499	
		21	25	\$1,287	\$0	\$0	\$1,287	\$485	
		22	26	\$1,312	\$0	\$0	\$1,312	\$471	
		23	27	\$1,339	\$0	\$0	\$1,339	\$458	
		24	28	\$1,366	\$0	\$0	\$1,366	\$445	
		25	29	\$1,393	\$0	\$0	\$1,393	\$432	
		26	30	\$1,421	\$0	\$0	\$1,421	\$420	
		27	31	\$1,449	\$0	\$0	\$1,449	\$408	
		28	32	\$1,478	\$0	\$0	\$1,478	\$396	
		29	33	\$1,508	\$0	\$0	\$1,508	\$385	
		30	34	\$1,538	\$0	\$0	\$1,538	\$374	
	Total Expenditure:				\$335,579	\$35,130	\$0	\$0	\$370,709
		Total Net Present Value of Initial and Recurring Costs:						\$312,869	

Comfort Lake - Forest Lake Watershed District

Project: Bone Lake Southeast Inlet - Infiltration Practice: SBL07

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost		
Project Time Frames		Project Year						
Basis for Cost Estimates (Year)	1	3	\$ 167,521			\$167,521	\$151,947	
F/S, Design, Admin, Legal Cost Incurred in Year	2	4	\$ 344,977			\$344,977	\$298,005	
Planned Construction Cost Year	3	1	5	\$0	\$0	\$0	\$0	
Scenario Year (Overrides Construction Year)	4	2	6	\$0	\$0	\$0	\$0	
Project Life [years]	30 years	3	7	\$0	\$0	\$0	\$0	
Initial Costs		4	8	\$0	\$0	\$0	\$0	
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$161,016	5	9	\$0	\$0	\$0	\$0	
Construction Cost	\$325,080	6	10	\$0	\$0	\$0	\$0	
Scenario Preliminary Cost	\$0	7	11	\$0	\$0	\$0	\$0	
Scenario Construction Cost	\$0	8	12	\$0	\$0	\$0	\$0	
Recurring Costs		9	13	\$0	\$0	\$0	\$0	
Annual O&M Cost ¹	\$0	10	14	\$0	\$149,018	\$0	\$149,018	
10 Year Overhaul / Major Maint. Cost ²	\$117,500	11	15	\$0	\$0	\$0	\$0	
Other Recurring Cost ³	\$0	12	16	\$0	\$0	\$0	\$0	
"Other" Recurring Cost Period (years)	0	13	17	\$0	\$0	\$0	\$0	
Discount Rate for Present Value Analysis		14	18	\$0	\$0	\$0	\$0	
Discount Rate	5%	15	19	\$0	\$0	\$0	\$0	
Inflation Rate (%)	2%	16	20	\$0	\$0	\$0	\$0	
Notes: ¹ Inspections, reporting, minor maintenance ² ³		17	21	\$0	\$0	\$0	\$0	
		18	22	\$0	\$0	\$0	\$0	
		19	23	\$0	\$0	\$0	\$0	
		20	24	\$0	\$181,653	\$0	\$181,653	
		21	25	\$0	\$0	\$0	\$0	
		22	26	\$0	\$0	\$0	\$0	
		23	27	\$0	\$0	\$0	\$0	
		24	28	\$0	\$0	\$0	\$0	
		25	29	\$0	\$0	\$0	\$0	
		26	30	\$0	\$0	\$0	\$0	
		27	31	\$0	\$0	\$0	\$0	
		28	32	\$0	\$0	\$0	\$0	
		29	33	\$0	\$0	\$0	\$0	
		30	34	\$0	\$221,434	\$0	\$221,434	
	Total Expenditure:				\$512,499	\$0	\$552,105	\$0
		Total Net Present Value of Initial and Recurring Costs:					\$671,692	

Comfort Lake - Forest Lake Watershed District

Project: Bone Lake Southwest Inlet - Wetland Restoration: SBL38

Inputs		Annual Cost / Present Value Analysis						
		Annual Cost					Project Year 1 Present Value	
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)		Total Annual Cost
Project Time Frames								
Basis for Cost Estimates (Year)	1	6	\$ 374,294				\$374,294	\$293,269
F/S, Design, Admin, Legal Cost Incurred in Year	2	7	\$ 150,926				\$150,926	\$112,624
Planned Construction Cost Year	3	1	8	\$919	\$0	\$0	\$919	\$919
Scenario Year (Overrides Construction Year)	7	2	9	\$937	\$0	\$0	\$937	\$893
Project Life [years]	30 years	3	10	\$956	\$0	\$0	\$956	\$867
Initial Costs								
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$339,009	4	11	\$975	\$0	\$0	\$975	\$842
Construction Cost	\$134,018	5	12	\$995	\$0	\$0	\$995	\$818
Scenario Preliminary Cost	\$0	6	13	\$1,015	\$0	\$0	\$1,015	\$795
Scenario Construction Cost	\$0	7	14	\$1,035	\$0	\$0	\$1,035	\$772
Recurring Costs								
Annual O&M Cost ¹	\$800	8	15	\$1,056	\$0	\$0	\$1,056	\$750
10 Year Overhaul / Major Maint. Cost ²	\$0	9	16	\$1,077	\$0	\$0	\$1,077	\$729
Other Recurring Cost ³	\$0	10	17	\$1,098	\$0	\$0	\$1,098	\$708
"Other" Recurring Cost Period (years)	0	11	18	\$1,120	\$0	\$0	\$1,120	\$688
Discount Rate for Present Value Analysis								
Discount Rate	5%	12	19	\$1,143	\$0	\$0	\$1,143	\$668
Inflation Rate (%)	2%	13	20	\$1,165	\$0	\$0	\$1,165	\$649
Notes:								
¹ Inspections, reporting, minor maintenance		14	21	\$1,189	\$0	\$0	\$1,189	\$630
²		15	22	\$1,213	\$0	\$0	\$1,213	\$612
³		16	23	\$1,237	\$0	\$0	\$1,237	\$595
		17	24	\$1,262	\$0	\$0	\$1,262	\$578
		18	25	\$1,287	\$0	\$0	\$1,287	\$561
		19	26	\$1,312	\$0	\$0	\$1,312	\$545
		20	27	\$1,339	\$0	\$0	\$1,339	\$530
		21	28	\$1,366	\$0	\$0	\$1,366	\$515
		22	29	\$1,393	\$0	\$0	\$1,393	\$500
		23	30	\$1,421	\$0	\$0	\$1,421	\$486
		24	31	\$1,449	\$0	\$0	\$1,449	\$472
		25	32	\$1,478	\$0	\$0	\$1,478	\$458
		26	33	\$1,508	\$0	\$0	\$1,508	\$445
		27	34	\$1,538	\$0	\$0	\$1,538	\$432
		28	35	\$1,569	\$0	\$0	\$1,569	\$420
		29	36	\$1,600	\$0	\$0	\$1,600	\$408
		30	37	\$1,632	\$0	\$0	\$1,632	\$396
Total Expenditure:			\$525,220	\$37,280	\$0	\$0	\$562,500	
Total Net Present Value of Initial and Recurring Costs:								\$424,576

Comfort Lake - Forest Lake Watershed District

Project: In-Lake Alum Treatment: Bone Lake

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost		
Project Time Frames		Project Year						
Basis for Cost Estimates (Year)	1	7	\$ 77,011			\$77,011	\$57,466	
F/S, Design, Admin, Legal Cost Incurred in Year	2	8	\$ 224,431			\$224,431	\$159,499	
Planned Construction Cost Year	3	1	9	\$0	\$0	\$0	\$0	
Scenario Year (Overrides Construction Year)	8	2	10	\$0	\$0	\$0	\$0	
Project Life [years]	30 years	3	11	\$0	\$0	\$0	\$0	
Initial Costs		4	12	\$0	\$0	\$0	\$0	
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$68,383	5	13	\$0	\$0	\$0	\$0	
Construction Cost	\$195,380	6	14	\$0	\$0	\$0	\$0	
Scenario Preliminary Cost	\$0	7	15	\$0	\$0	\$0	\$0	
Scenario Construction Cost	\$0	8	16	\$0	\$0	\$0	\$0	
Recurring Costs		9	17	\$0	\$0	\$0	\$0	
Annual O&M Cost ¹	\$0	10	18	\$0	\$362,091	\$0	\$362,091	\$233,407
10 Year Overhaul / Major Maint. Cost ²	\$263,764	11	19	\$0	\$0	\$0	\$0	
Other Recurring Cost ³	\$0	12	20	\$0	\$0	\$0	\$0	
"Other" Recurring Cost Period (years)	0	13	21	\$0	\$0	\$0	\$0	
Discount Rate for Present Value Analysis		14	22	\$0	\$0	\$0	\$0	
Discount Rate	5%	15	23	\$0	\$0	\$0	\$0	
Inflation Rate (%)	2%	16	24	\$0	\$0	\$0	\$0	
Notes: ¹ Inspections, reporting, minor maintenance ² Reapplication ³		17	25	\$0	\$0	\$0	\$0	
		18	26	\$0	\$0	\$0	\$0	
		19	27	\$0	\$0	\$0	\$0	
		20	28	\$0	\$441,387	\$0	\$441,387	\$174,672
		21	29	\$0	\$0	\$0	\$0	
		22	30	\$0	\$0	\$0	\$0	
		23	31	\$0	\$0	\$0	\$0	
		24	32	\$0	\$0	\$0	\$0	
		25	33	\$0	\$0	\$0	\$0	
		26	34	\$0	\$0	\$0	\$0	
		27	35	\$0	\$0	\$0	\$0	
		28	36	\$0	\$0	\$0	\$0	
		29	37	\$0	\$0	\$0	\$0	
		30	38	\$0	\$538,048	\$0	\$538,048	\$130,717
	Total Expenditure:				\$301,441	\$0	\$1,341,525	\$0
Total Net Present Value of Initial and Recurring Costs:								\$755,761

Comfort Lake - Forest Lake Watershed District

Project: Rough Fish Management: Bone Lake

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost	
Project Time Frames								
Basis for Cost Estimates (Year)	1	6	\$ 6,028				\$6,028	\$4,723
F/S, Design, Admin, Legal Cost Incurred in Year	2	7	\$ 17,568				\$17,568	\$13,110
Planned Construction Cost Year	3	1	8	\$0	\$0	\$0	\$0	\$0
Scenario Year (Overrides Construction Year)	7	2	9	\$0	\$15,002	\$0	\$15,002	\$14,287
Project Life [years]	30 years	3	10	\$0	\$0	\$0	\$0	\$0
Initial Costs		4	11	\$0	\$15,608	\$0	\$15,608	\$13,483
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$5,460	5	12	\$0	\$0	\$0	\$0	\$0
Construction Cost	\$15,600	6	13	\$0	\$16,238	\$0	\$16,238	\$12,723
Scenario Preliminary Cost	\$0	7	14	\$0	\$0	\$0	\$0	\$0
Scenario Construction Cost	\$0	8	15	\$0	\$16,895	\$0	\$16,895	\$12,007
Recurring Costs		9	16	\$0	\$0	\$0	\$0	\$0
Annual O&M Cost ¹	\$0	10	17	\$0	\$17,577	\$0	\$17,577	\$11,330
2 Year Overhaul / Major Maint. Cost ²	\$13,060	11	18	\$0	\$0	\$0	\$0	\$0
Other Recurring Cost ³	\$0	12	19	\$0	\$18,287	\$0	\$18,287	\$10,692
"Other" Recurring Cost Period (years)	0	13	20	\$0	\$0	\$0	\$0	\$0
Discount Rate for Present Value Analysis		14	21	\$0	\$19,026	\$0	\$19,026	\$10,090
Discount Rate	5%	15	22	\$0	\$0	\$0	\$0	\$0
Inflation Rate (%)	2%	16	23	\$0	\$19,795	\$0	\$19,795	\$9,522
Notes: ¹ Inspections, reporting, minor maintenance ² Reapplication ³		17	24	\$0	\$0	\$0	\$0	\$0
		18	25	\$0	\$20,594	\$0	\$20,594	\$8,985
		19	26	\$0	\$0	\$0	\$0	\$0
		20	27	\$0	\$21,426	\$0	\$21,426	\$8,479
		21	28	\$0	\$0	\$0	\$0	\$0
		22	29	\$0	\$22,292	\$0	\$22,292	\$8,002
		23	30	\$0	\$0	\$0	\$0	\$0
		24	31	\$0	\$23,193	\$0	\$23,193	\$7,551
		25	32	\$0	\$0	\$0	\$0	\$0
		26	33	\$0	\$24,130	\$0	\$24,130	\$7,126
		27	34	\$0	\$0	\$0	\$0	\$0
		28	35	\$0	\$25,104	\$0	\$25,104	\$6,724
		29	36	\$0	\$0	\$0	\$0	\$0
		30	37	\$0	\$26,119	\$0	\$26,119	\$6,345
	Total Expenditure:			\$23,596	\$0	\$301,285	\$0	\$324,881
Total Net Present Value of Initial and Recurring Costs:								\$165,179

Comfort Lake - Forest Lake Watershed District

Project: Curly Leaf Pondweed Management: Bone Lake

Inputs		Annual Cost / Present Value Analysis						
		Annual Cost					Project Year 1 Present Value	
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)		Total Annual Cost
Project Time Frames								
Basis for Cost Estimates (Year)	1	6	\$ 15,955				\$15,955	\$12,501
F/S, Design, Admin, Legal Cost Incurred in Year	2	7	\$ 46,498				\$46,498	\$34,697
Planned Construction Cost Year	3	1	8	\$64,028	\$0	\$0	\$64,028	\$64,028
Scenario Year (Overrides Construction Year)	7	2	9	\$65,308	\$0	\$0	\$65,308	\$62,198
Project Life [years]	30 years	3	10	\$66,614	\$0	\$0	\$66,614	\$60,421
Initial Costs								
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$14,451	4	11	\$67,947	\$0	\$0	\$67,947	\$58,695
Construction Cost	\$41,289	5	12	\$69,306	\$0	\$0	\$69,306	\$57,018
Scenario Preliminary Cost	\$0	6	13	\$70,692	\$0	\$0	\$70,692	\$55,389
Scenario Construction Cost	\$0	7	14	\$72,105	\$0	\$0	\$72,105	\$53,806
Recurring Costs								
Annual O&M Cost ¹	\$55,740	8	15	\$73,548	\$0	\$0	\$73,548	\$52,269
Year Overhaul / Major Maint. Cost ²	\$0	9	16	\$75,019	\$0	\$0	\$75,019	\$50,776
Other Recurring Cost ³	\$0	10	17	\$76,519	\$0	\$0	\$76,519	\$49,325
"Other" Recurring Cost Period (years)	0	11	18	\$78,049	\$0	\$0	\$78,049	\$47,916
Discount Rate for Present Value Analysis								
Discount Rate	5%	12	19	\$79,610	\$0	\$0	\$79,610	\$46,546
Inflation Rate (%)	2%	13	20	\$81,202	\$0	\$0	\$81,202	\$45,217
Notes:								
¹ Reapplication		14	21	\$82,827	\$0	\$0	\$82,827	\$43,925
²		15	22	\$84,483	\$0	\$0	\$84,483	\$42,670
³		16	23	\$86,173	\$0	\$0	\$86,173	\$41,451
		17	24	\$87,896	\$0	\$0	\$87,896	\$40,266
		18	25	\$89,654	\$0	\$0	\$89,654	\$39,116
		19	26	\$91,447	\$0	\$0	\$91,447	\$37,998
		20	27	\$93,276	\$0	\$0	\$93,276	\$36,913
		21	28	\$95,142	\$0	\$0	\$95,142	\$35,858
		22	29	\$97,044	\$0	\$0	\$97,044	\$34,833
		23	30	\$98,985	\$0	\$0	\$98,985	\$33,838
		24	31	\$100,965	\$0	\$0	\$100,965	\$32,871
		25	32	\$102,984	\$0	\$0	\$102,984	\$31,932
		26	33	\$105,044	\$0	\$0	\$105,044	\$31,020
		27	34	\$107,145	\$0	\$0	\$107,145	\$30,134
		28	35	\$109,288	\$0	\$0	\$109,288	\$29,273
		29	36	\$111,474	\$0	\$0	\$111,474	\$28,436
		30	37	\$113,703	\$0	\$0	\$113,703	\$27,624
Total Expenditure:			\$62,453	\$2,597,477	\$0	\$0	\$2,659,930	
Total Net Present Value of Initial and Recurring Costs:								\$1,348,958

Comfort Lake - Forest Lake Watershed District

Project: Watershed BMPs: Birch Lake

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value	
		Annual Cost							
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost		
Project Time Frames									
Basis for Cost Estimates (Year)	1	0	\$ -				\$0	\$0	
F/S, Design, Admin, Legal Cost Incurred in Year	2	1	\$ 3,000				\$3,000	\$3,000	
Planned Construction Cost Year	3	1	2	\$3,060	\$0	\$0	\$3,060	\$3,060	
Scenario Year (Overrides Construction Year)	1	2	3	\$3,121	\$0	\$0	\$3,121	\$2,973	
Project Life [years]	30 years	3	4	\$3,184	\$0	\$0	\$3,184	\$2,888	
Initial Costs		4	5	\$3,247	\$0	\$0	\$3,247	\$2,805	
F/S, Design, Permitting, Legal, Admin. Cost	\$0	5	6	\$3,312	\$0	\$0	\$3,312	\$2,725	
Construction Cost	\$3,000	6	7	\$3,378	\$0	\$0	\$3,378	\$2,647	
Scenario Preliminary Cost	\$0	7	8	\$3,446	\$0	\$0	\$3,446	\$2,572	
Scenario Construction Cost	\$0	8	9	\$3,515	\$0	\$0	\$3,515	\$2,498	
Recurring Costs		9	10	\$3,585	\$0	\$0	\$3,585	\$2,427	
Annual Cost ¹	\$3,000	10	11	\$3,657	\$0	\$0	\$3,657	\$2,357	
3 Year Overhaul / Major Maint. Cost ²	\$0	11	12	\$3,730	\$0	\$0	\$3,730	\$2,290	
Other Recurring Cost ³	\$0	12	13	\$3,805	\$0	\$0	\$3,805	\$2,225	
"Other" Recurring Cost Period (years)	0	13	14	\$3,881	\$0	\$0	\$3,881	\$2,161	
Discount Rate for Present Value Analysis		14	15	\$3,958	\$0	\$0	\$3,958	\$2,099	
Discount Rate	5%	15	16	\$4,038	\$0	\$0	\$4,038	\$2,039	
Inflation Rate (%)	2%	16	17	\$4,118	\$0	\$0	\$4,118	\$1,981	
Notes: 1 2 3		17	18	\$4,201	\$0	\$0	\$4,201	\$1,924	
		18	19	\$4,285	\$0	\$0	\$4,285	\$1,869	
		19	20	\$4,370	\$0	\$0	\$4,370	\$1,816	
		20	21	\$4,458	\$0	\$0	\$4,458	\$1,764	
		21	22	\$4,547	\$0	\$0	\$4,547	\$1,714	
		22	23	\$4,638	\$0	\$0	\$4,638	\$1,665	
		23	24	\$4,731	\$0	\$0	\$4,731	\$1,617	
		24	25	\$4,825	\$0	\$0	\$4,825	\$1,571	
		25	26	\$4,922	\$0	\$0	\$4,922	\$1,526	
		26	27	\$5,020	\$0	\$0	\$5,020	\$1,482	
		27	28	\$5,121	\$0	\$0	\$5,121	\$1,440	
		28	29	\$5,223	\$0	\$0	\$5,223	\$1,399	
		29	30	\$5,328	\$0	\$0	\$5,328	\$1,359	
		30	31	\$5,434	\$0	\$0	\$5,434	\$1,320	
	Total Expenditure:			\$3,000	\$124,138	\$0	\$0	\$127,138	
	Total Net Present Value of Initial and Recurring Costs:								\$65,214

Comfort Lake - Forest Lake Watershed District

Project: Birch Lake Wetland Restoration: LCL20

Inputs		Annual Cost / Present Value Analysis						
		Annual Cost					Project Year 1 Present Value	
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)		Total Annual Cost
Project Time Frames								
Basis for Cost Estimates (Year)	1	6	\$ 512,260				\$512,260	\$401,369
F/S, Design, Admin, Legal Cost Incurred in Year	2	7	\$ 180,100				\$180,100	\$134,394
Planned Construction Cost Year	3	1	8	\$919	\$0	\$0	\$919	\$919
Scenario Year (Overrides Construction Year)	7	2	9	\$937	\$0	\$0	\$937	\$893
Project Life [years]	30 years	3	10	\$956	\$0	\$0	\$956	\$867
Initial Costs								
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$463,970	4	11	\$975	\$0	\$0	\$975	\$842
Construction Cost	\$159,924	5	12	\$995	\$0	\$0	\$995	\$818
Scenario Preliminary Cost	\$0	6	13	\$1,015	\$0	\$0	\$1,015	\$795
Scenario Construction Cost	\$0	7	14	\$1,035	\$0	\$0	\$1,035	\$772
Recurring Costs								
Annual O&M Cost ¹	\$800	8	15	\$1,056	\$0	\$0	\$1,056	\$750
10 Year Overhaul / Major Maint. Cost ²	\$26,500	9	16	\$1,077	\$0	\$0	\$1,077	\$729
Other Recurring Cost ³	\$0	10	17	\$1,098	\$35,666	\$0	\$36,764	\$23,698
"Other" Recurring Cost Period (years)	0	11	18	\$1,120	\$0	\$0	\$1,120	\$688
Discount Rate for Present Value Analysis								
Discount Rate	5%	12	19	\$1,143	\$0	\$0	\$1,143	\$668
Inflation Rate (%)	2%	13	20	\$1,165	\$0	\$0	\$1,165	\$649
Notes: ¹ Inspections, reporting, minor maintenance ² ³		14	21	\$1,189	\$0	\$0	\$1,189	\$630
		15	22	\$1,213	\$0	\$0	\$1,213	\$612
		16	23	\$1,237	\$0	\$0	\$1,237	\$595
		17	24	\$1,262	\$0	\$0	\$1,262	\$578
		18	25	\$1,287	\$0	\$0	\$1,287	\$561
		19	26	\$1,312	\$0	\$0	\$1,312	\$545
		20	27	\$1,339	\$43,476	\$0	\$44,815	\$17,735
		21	28	\$1,366	\$0	\$0	\$1,366	\$515
		22	29	\$1,393	\$0	\$0	\$1,393	\$500
		23	30	\$1,421	\$0	\$0	\$1,421	\$486
		24	31	\$1,449	\$0	\$0	\$1,449	\$472
		25	32	\$1,478	\$0	\$0	\$1,478	\$458
		26	33	\$1,508	\$0	\$0	\$1,508	\$445
		27	34	\$1,538	\$0	\$0	\$1,538	\$432
		28	35	\$1,569	\$0	\$0	\$1,569	\$420
		29	36	\$1,600	\$0	\$0	\$1,600	\$408
		30	37	\$1,632	\$52,997	\$0	\$54,629	\$13,272
	Total Expenditure:			\$692,360	\$37,280	\$132,139	\$0	\$861,779
Total Net Present Value of Initial and Recurring Costs:								\$607,517

Comfort Lake - Forest Lake Watershed District

Project: Watershed BMPs: School Lake

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)		
Project Time Frames								
Basis for Cost Estimates (Year)	1	0	\$ -				\$0	\$0
F/S, Design, Admin, Legal Cost Incurred in Year	2	1	\$ 3,800				\$3,800	\$3,800
Planned Construction Cost Year	3	1	2	\$3,876	\$0	\$0	\$3,876	\$3,876
Scenario Year (Overrides Construction Year)	1	2	3	\$3,954	\$0	\$0	\$3,954	\$3,765
Project Life [years]	30 years	3	4	\$4,033	\$0	\$0	\$4,033	\$3,658
Initial Costs		4	5	\$4,113	\$0	\$0	\$4,113	\$3,553
F/S, Design, Permitting, Legal, Admin. Cost	\$0	5	6	\$4,196	\$0	\$0	\$4,196	\$3,452
Construction Cost	\$3,800	6	7	\$4,279	\$0	\$0	\$4,279	\$3,353
Scenario Preliminary Cost	\$0	7	8	\$4,365	\$0	\$0	\$4,365	\$3,257
Scenario Construction Cost	\$0	8	9	\$4,452	\$0	\$0	\$4,452	\$3,164
Recurring Costs		9	10	\$4,541	\$0	\$0	\$4,541	\$3,074
Annual Cost ¹	\$3,800	10	11	\$4,632	\$0	\$0	\$4,632	\$2,986
3 Year Overhaul / Major Maint. Cost ²	\$0	11	12	\$4,725	\$0	\$0	\$4,725	\$2,901
Other Recurring Cost ³	\$0	12	13	\$4,819	\$0	\$0	\$4,819	\$2,818
"Other" Recurring Cost Period (years)	0	13	14	\$4,916	\$0	\$0	\$4,916	\$2,737
Discount Rate for Present Value Analysis		14	15	\$5,014	\$0	\$0	\$5,014	\$2,659
Discount Rate	5%	15	16	\$5,114	\$0	\$0	\$5,114	\$2,583
Inflation Rate (%)	2%	16	17	\$5,217	\$0	\$0	\$5,217	\$2,509
Notes: 1 2 3		17	18	\$5,321	\$0	\$0	\$5,321	\$2,438
		18	19	\$5,427	\$0	\$0	\$5,427	\$2,368
		19	20	\$5,536	\$0	\$0	\$5,536	\$2,300
		20	21	\$5,647	\$0	\$0	\$5,647	\$2,235
		21	22	\$5,760	\$0	\$0	\$5,760	\$2,171
		22	23	\$5,875	\$0	\$0	\$5,875	\$2,109
		23	24	\$5,992	\$0	\$0	\$5,992	\$2,048
		24	25	\$6,112	\$0	\$0	\$6,112	\$1,990
		25	26	\$6,234	\$0	\$0	\$6,234	\$1,933
		26	27	\$6,359	\$0	\$0	\$6,359	\$1,878
		27	28	\$6,486	\$0	\$0	\$6,486	\$1,824
		28	29	\$6,616	\$0	\$0	\$6,616	\$1,772
		29	30	\$6,748	\$0	\$0	\$6,748	\$1,721
		30	31	\$6,883	\$0	\$0	\$6,883	\$1,672
	Total Expenditure:			\$3,800	\$157,242	\$0	\$0	\$161,042
Total Net Present Value of Initial and Recurring Costs:								\$82,604

Comfort Lake - Forest Lake Watershed District

Project: School Lake Outlet Structure and Wetland Restoration: LCL04

Inputs		Annual Cost / Present Value Analysis						
		Annual Cost					Project Year 1 Present Value	
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)		Total Annual Cost
Project Time Frames								
Basis for Cost Estimates (Year)	1	7	\$ 147,088				\$147,088	\$109,759
F/S, Design, Admin, Legal Cost Incurred in Year	2	8	\$ 166,100				\$166,100	\$118,044
Planned Construction Cost Year	3	1	9	\$937	\$0	\$0	\$937	\$937
Scenario Year (Overrides Construction Year)	8	2	10	\$956	\$0	\$0	\$956	\$911
Project Life [years]	30 years	3	11	\$975	\$0	\$0	\$975	\$885
Initial Costs								
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$130,610	4	12	\$995	\$0	\$0	\$995	\$859
Construction Cost	\$144,600	5	13	\$1,015	\$0	\$0	\$1,015	\$835
Scenario Preliminary Cost	\$0	6	14	\$1,035	\$0	\$0	\$1,035	\$811
Scenario Construction Cost	\$0	7	15	\$1,056	\$0	\$0	\$1,056	\$788
Recurring Costs								
Annual O&M Cost ¹	\$800	8	16	\$1,077	\$0	\$0	\$1,077	\$765
10 Year Overhaul / Major Maint. Cost ²	\$0	9	17	\$1,098	\$0	\$0	\$1,098	\$743
Other Recurring Cost ³	\$0	10	18	\$1,120	\$0	\$0	\$1,120	\$722
"Other" Recurring Cost Period (years)	0	11	19	\$1,143	\$0	\$0	\$1,143	\$701
Discount Rate for Present Value Analysis								
Discount Rate	5%	12	20	\$1,165	\$0	\$0	\$1,165	\$681
Inflation Rate (%)	2%	13	21	\$1,189	\$0	\$0	\$1,189	\$662
Notes:								
¹ Inspections, reporting, minor maintenance		14	22	\$1,213	\$0	\$0	\$1,213	\$643
²		15	23	\$1,237	\$0	\$0	\$1,237	\$625
³		16	24	\$1,262	\$0	\$0	\$1,262	\$607
		17	25	\$1,287	\$0	\$0	\$1,287	\$589
		18	26	\$1,312	\$0	\$0	\$1,312	\$573
		19	27	\$1,339	\$0	\$0	\$1,339	\$556
		20	28	\$1,366	\$0	\$0	\$1,366	\$540
		21	29	\$1,393	\$0	\$0	\$1,393	\$525
		22	30	\$1,421	\$0	\$0	\$1,421	\$510
		23	31	\$1,449	\$0	\$0	\$1,449	\$495
		24	32	\$1,478	\$0	\$0	\$1,478	\$481
		25	33	\$1,508	\$0	\$0	\$1,508	\$467
		26	34	\$1,538	\$0	\$0	\$1,538	\$454
		27	35	\$1,569	\$0	\$0	\$1,569	\$441
		28	36	\$1,600	\$0	\$0	\$1,600	\$429
		29	37	\$1,632	\$0	\$0	\$1,632	\$416
		30	38	\$1,665	\$0	\$0	\$1,665	\$404
Total Expenditure:			\$313,188	\$38,026	\$0	\$0	\$351,214	
Total Net Present Value of Initial and Recurring Costs:								\$246,861

Comfort Lake - Forest Lake Watershed District

Project: Watershed BMPs: Little Comfort Lake

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost	
Project Time Frames								
Basis for Cost Estimates (Year)	1	0	\$ -				\$0	\$0
F/S, Design, Admin, Legal Cost Incurred in Year	2	1	\$ 450				\$450	\$450
Planned Construction Cost Year	3	1	2	\$459	\$0	\$0	\$459	\$459
Scenario Year (Overrides Construction Year)	1	2	3	\$468	\$0	\$0	\$468	\$446
Project Life [years]	30 years	3	4	\$478	\$0	\$0	\$478	\$433
Initial Costs		4	5	\$487	\$0	\$0	\$487	\$421
F/S, Design, Permitting, Legal, Admin. Cost	\$0	5	6	\$497	\$0	\$0	\$497	\$409
Construction Cost	\$450	6	7	\$507	\$0	\$0	\$507	\$397
Scenario Preliminary Cost	\$0	7	8	\$517	\$0	\$0	\$517	\$386
Scenario Construction Cost	\$0	8	9	\$527	\$0	\$0	\$527	\$375
Recurring Costs		9	10	\$538	\$0	\$0	\$538	\$364
Annual Cost ¹	\$450	10	11	\$549	\$0	\$0	\$549	\$354
3 Year Overhaul / Major Maint. Cost ²	\$0	11	12	\$560	\$0	\$0	\$560	\$343
Other Recurring Cost ³	\$0	12	13	\$571	\$0	\$0	\$571	\$334
"Other" Recurring Cost Period (years)	0	13	14	\$582	\$0	\$0	\$582	\$324
Discount Rate for Present Value Analysis		14	15	\$594	\$0	\$0	\$594	\$315
Discount Rate	5%	15	16	\$606	\$0	\$0	\$606	\$306
Inflation Rate (%)	2%	16	17	\$618	\$0	\$0	\$618	\$297
Notes: 1 2 3		17	18	\$630	\$0	\$0	\$630	\$289
		18	19	\$643	\$0	\$0	\$643	\$280
		19	20	\$656	\$0	\$0	\$656	\$272
		20	21	\$669	\$0	\$0	\$669	\$265
		21	22	\$682	\$0	\$0	\$682	\$257
		22	23	\$696	\$0	\$0	\$696	\$250
		23	24	\$710	\$0	\$0	\$710	\$243
		24	25	\$724	\$0	\$0	\$724	\$236
		25	26	\$738	\$0	\$0	\$738	\$229
		26	27	\$753	\$0	\$0	\$753	\$222
		27	28	\$768	\$0	\$0	\$768	\$216
		28	29	\$783	\$0	\$0	\$783	\$210
		29	30	\$799	\$0	\$0	\$799	\$204
		30	31	\$815	\$0	\$0	\$815	\$198
	Total Expenditure:			\$450	\$18,621	\$0	\$0	\$19,071
Total Net Present Value of Initial and Recurring Costs:								\$9,782

Comfort Lake - Forest Lake Watershed District

Project: Shoreline Restoration: Little Comfort Lake

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost	
Project Time Frames								
Basis for Cost Estimates (Year)	1	0	\$ -				\$0	\$0
F/S, Design, Admin, Legal Cost Incurred in Year	2	1	\$ 300				\$300	\$300
Planned Construction Cost Year	3	1	2	\$306	\$0	\$0	\$306	\$306
Scenario Year (Overrides Construction Year)	1	2	3	\$312	\$0	\$0	\$312	\$297
Project Life [years]	30 years	3	4	\$318	\$0	\$0	\$318	\$289
Initial Costs		4	5	\$325	\$0	\$0	\$325	\$281
F/S, Design, Permitting, Legal, Admin. Cost	\$0	5	6	\$331	\$0	\$0	\$331	\$272
Construction Cost	\$300	6	7	\$338	\$0	\$0	\$338	\$265
Scenario Preliminary Cost	\$0	7	8	\$345	\$0	\$0	\$345	\$257
Scenario Construction Cost	\$0	8	9	\$351	\$0	\$0	\$351	\$250
Recurring Costs		9	10	\$359	\$0	\$0	\$359	\$243
Annual Cost ¹	\$300	10	11	\$366	\$0	\$0	\$366	\$236
3 Year Overhaul / Major Maint. Cost ²	\$0	11	12	\$373	\$0	\$0	\$373	\$229
Other Recurring Cost ³	\$0	12	13	\$380	\$0	\$0	\$380	\$222
"Other" Recurring Cost Period (years)	0	13	14	\$388	\$0	\$0	\$388	\$216
Discount Rate for Present Value Analysis		14	15	\$396	\$0	\$0	\$396	\$210
Discount Rate	5%	15	16	\$404	\$0	\$0	\$404	\$204
Inflation Rate (%)	2%	16	17	\$412	\$0	\$0	\$412	\$198
Notes: 1 2 3		17	18	\$420	\$0	\$0	\$420	\$192
		18	19	\$428	\$0	\$0	\$428	\$187
		19	20	\$437	\$0	\$0	\$437	\$182
		20	21	\$446	\$0	\$0	\$446	\$176
		21	22	\$455	\$0	\$0	\$455	\$171
		22	23	\$464	\$0	\$0	\$464	\$166
		23	24	\$473	\$0	\$0	\$473	\$162
		24	25	\$483	\$0	\$0	\$483	\$157
		25	26	\$492	\$0	\$0	\$492	\$153
		26	27	\$502	\$0	\$0	\$502	\$148
		27	28	\$512	\$0	\$0	\$512	\$144
		28	29	\$522	\$0	\$0	\$522	\$140
		29	30	\$533	\$0	\$0	\$533	\$136
		30	31	\$543	\$0	\$0	\$543	\$132
	Total Expenditure:			\$300	\$12,414	\$0	\$0	\$12,714
Total Net Present Value of Initial and Recurring Costs:								\$6,521

Comfort Lake - Forest Lake Watershed District

Project: In-Lake Alum Treatment: Little Comfort Lake

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost		
Project Time Frames		Project Year						
Basis for Cost Estimates (Year)	1	8	\$ 16,222			\$16,222	\$11,529	
F/S, Design, Admin, Legal Cost Incurred in Year	2	9	\$ 47,276			\$47,276	\$31,999	
Planned Construction Cost Year	3	1	10	\$0	\$0	\$0	\$0	
Scenario Year (Overrides Construction Year)	9	2	11	\$0	\$0	\$0	\$0	
Project Life [years]	30 years	3	12	\$0	\$0	\$0	\$0	
Initial Costs		4	13	\$0	\$0	\$0	\$0	
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$14,123	5	14	\$0	\$0	\$0	\$0	
Construction Cost	\$40,350	6	15	\$0	\$0	\$0	\$0	
Scenario Preliminary Cost	\$0	7	16	\$0	\$0	\$0	\$0	
Scenario Construction Cost	\$0	8	17	\$0	\$0	\$0	\$0	
Recurring Costs		9	18	\$0	\$0	\$0	\$0	
Annual O&M Cost ¹	\$0	10	19	\$0	\$76,275	\$76,275	\$49,167	
10 Year Overhaul / Major Maint. Cost ²	\$54,473	11	20	\$0	\$0	\$0	\$0	
Other Recurring Cost ³	\$0	12	21	\$0	\$0	\$0	\$0	
"Other" Recurring Cost Period (years)	0	13	22	\$0	\$0	\$0	\$0	
Discount Rate for Present Value Analysis		14	23	\$0	\$0	\$0	\$0	
Discount Rate	5%	15	24	\$0	\$0	\$0	\$0	
Inflation Rate (%)	2%	16	25	\$0	\$0	\$0	\$0	
Notes: ¹ Inspections, reporting, minor maintenance ² Reapplication ³		17	26	\$0	\$0	\$0	\$0	
		18	27	\$0	\$0	\$0	\$0	
		19	28	\$0	\$0	\$0	\$0	
		20	29	\$0	\$92,978	\$0	\$92,978	\$36,795
		21	30	\$0	\$0	\$0	\$0	
		22	31	\$0	\$0	\$0	\$0	
		23	32	\$0	\$0	\$0	\$0	
		24	33	\$0	\$0	\$0	\$0	
		25	34	\$0	\$0	\$0	\$0	
		26	35	\$0	\$0	\$0	\$0	
		27	36	\$0	\$0	\$0	\$0	
		28	37	\$0	\$0	\$0	\$0	
		29	38	\$0	\$0	\$0	\$0	
		30	39	\$0	\$113,340	\$0	\$113,340	\$27,536
	Total Expenditure:				\$63,499	\$0	\$282,593	\$0
Total Net Present Value of Initial and Recurring Costs:								\$157,025

Comfort Lake - Forest Lake Watershed District

Project: Rough Fish Management: Little Comfort Lake

Inputs		Annual Cost / Present Value Analysis							
		Annual Cost					Project Year 1 Present Value		
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)		Total Annual Cost	
Project Time Frames									
Basis for Cost Estimates (Year)	1	7	\$ 6,149				\$6,149	\$4,588	
F/S, Design, Admin, Legal Cost Incurred in Year	2	8	\$ 17,919				\$17,919	\$12,735	
Planned Construction Cost Year	3	1	9	\$0	\$0	\$0	\$0	\$0	
Scenario Year (Overrides Construction Year)	8	2	10	\$0	\$15,302	\$0	\$15,302	\$14,573	
Project Life [years]	30 years	3	11	\$0	\$0	\$0	\$0	\$0	
Initial Costs									
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$5,460	4	12	\$0	\$15,920	\$0	\$15,920	\$13,752	
Construction Cost	\$15,600	5	13	\$0	\$0	\$0	\$0	\$0	
Scenario Preliminary Cost	\$0	6	14	\$0	\$16,563	\$0	\$16,563	\$12,978	
Scenario Construction Cost	\$0	7	15	\$0	\$0	\$0	\$0	\$0	
Recurring Costs									
Annual O&M Cost ¹	\$0	8	16	\$0	\$17,232	\$0	\$17,232	\$12,247	
2 Year Overhaul / Major Maint. Cost ²	\$13,060	9	17	\$0	\$0	\$0	\$0	\$0	
Other Recurring Cost ³	\$0	10	18	\$0	\$17,929	\$0	\$17,929	\$11,557	
"Other" Recurring Cost Period (years)	0	11	19	\$0	\$0	\$0	\$0	\$0	
Discount Rate for Present Value Analysis									
Discount Rate	5%	12	20	\$0	\$18,653	\$0	\$18,653	\$10,906	
Inflation Rate (%)	2%	13	21	\$0	\$0	\$0	\$0	\$0	
Notes:									
¹ Inspections, reporting, minor maintenance		14	22	\$0	\$19,406	\$0	\$19,406	\$10,292	
² Reapplication		15	23	\$0	\$0	\$0	\$0	\$0	
³		16	24	\$0	\$20,190	\$0	\$20,190	\$9,712	
		17	25	\$0	\$0	\$0	\$0	\$0	
		18	26	\$0	\$21,006	\$0	\$21,006	\$9,165	
		19	27	\$0	\$0	\$0	\$0	\$0	
		20	28	\$0	\$21,855	\$0	\$21,855	\$8,649	
		21	29	\$0	\$0	\$0	\$0	\$0	
		22	30	\$0	\$22,738	\$0	\$22,738	\$8,162	
		23	31	\$0	\$0	\$0	\$0	\$0	
		24	32	\$0	\$23,656	\$0	\$23,656	\$7,702	
		25	33	\$0	\$0	\$0	\$0	\$0	
		26	34	\$0	\$24,612	\$0	\$24,612	\$7,268	
		27	35	\$0	\$0	\$0	\$0	\$0	
		28	36	\$0	\$25,606	\$0	\$25,606	\$6,859	
		29	37	\$0	\$0	\$0	\$0	\$0	
		30	38	\$0	\$26,641	\$0	\$26,641	\$6,472	
Total Expenditure:				\$24,068	\$0	\$307,311	\$0	\$331,379	
			Total Net Present Value of Initial and Recurring Costs:					\$167,616	

Comfort Lake - Forest Lake Watershed District

Project: Curly Leaf Pondweed Management: Little Comfort Lake

Inputs		Annual Cost / Present Value Analysis						
		Annual Cost					Project Year 1 Present Value	
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)		Total Annual Cost
Project Time Frames								
Basis for Cost Estimates (Year)	1	7	\$ 2,398				\$2,398	\$1,790
F/S, Design, Admin, Legal Cost Incurred in Year	2	8	\$ 6,990				\$6,990	\$4,967
Planned Construction Cost Year	3	1	9	\$9,625	\$0	\$0	\$9,625	\$9,625
Scenario Year (Overrides Construction Year)	8	2	10	\$9,817	\$0	\$0	\$9,817	\$9,350
Project Life [years]	30 years	3	11	\$10,014	\$0	\$0	\$10,014	\$9,083
Initial Costs		4	12	\$10,214	\$0	\$0	\$10,214	\$8,823
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$2,130	5	13	\$10,418	\$0	\$0	\$10,418	\$8,571
Construction Cost	\$6,085	6	14	\$10,627	\$0	\$0	\$10,627	\$8,326
Scenario Preliminary Cost	\$0	7	15	\$10,839	\$0	\$0	\$10,839	\$8,088
Scenario Construction Cost	\$0	8	16	\$11,056	\$0	\$0	\$11,056	\$7,857
Recurring Costs		9	17	\$11,277	\$0	\$0	\$11,277	\$7,633
Annual O&M Cost ¹	\$8,215	10	18	\$11,503	\$0	\$0	\$11,503	\$7,415
Year Overhaul / Major Maint. Cost ²	\$0	11	19	\$11,733	\$0	\$0	\$11,733	\$7,203
Other Recurring Cost ³	\$0	12	20	\$11,967	\$0	\$0	\$11,967	\$6,997
"Other" Recurring Cost Period (years)	0	13	21	\$12,207	\$0	\$0	\$12,207	\$6,797
Discount Rate for Present Value Analysis		14	22	\$12,451	\$0	\$0	\$12,451	\$6,603
Discount Rate	5%	15	23	\$12,700	\$0	\$0	\$12,700	\$6,414
Inflation Rate (%)	2%	16	24	\$12,954	\$0	\$0	\$12,954	\$6,231
Notes: ¹ Reapplication ² ³		17	25	\$13,213	\$0	\$0	\$13,213	\$6,053
		18	26	\$13,477	\$0	\$0	\$13,477	\$5,880
		19	27	\$13,747	\$0	\$0	\$13,747	\$5,712
		20	28	\$14,022	\$0	\$0	\$14,022	\$5,549
		21	29	\$14,302	\$0	\$0	\$14,302	\$5,390
		22	30	\$14,588	\$0	\$0	\$14,588	\$5,236
		23	31	\$14,880	\$0	\$0	\$14,880	\$5,087
		24	32	\$15,177	\$0	\$0	\$15,177	\$4,941
		25	33	\$15,481	\$0	\$0	\$15,481	\$4,800
		26	34	\$15,791	\$0	\$0	\$15,791	\$4,663
		27	35	\$16,106	\$0	\$0	\$16,106	\$4,530
		28	36	\$16,428	\$0	\$0	\$16,428	\$4,400
		29	37	\$16,757	\$0	\$0	\$16,757	\$4,275
		30	38	\$17,092	\$0	\$0	\$17,092	\$4,152
	Total Expenditure:			\$9,388	\$390,461	\$0	\$0	\$399,849
Total Net Present Value of Initial and Recurring Costs:								\$202,442

Comfort Lake - Forest Lake Watershed District

Project: Watershed BMPs: Shields Lake

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost	
Project Time Frames								
Basis for Cost Estimates (Year)	1	0	\$ -				\$0	\$0
F/S, Design, Admin, Legal Cost Incurred in Year	2	1	\$ 450				\$450	\$450
Planned Construction Cost Year	3	1	2	\$459	\$0	\$0	\$459	\$459
Scenario Year (Overrides Construction Year)	1	2	3	\$468	\$0	\$0	\$468	\$446
Project Life [years]	30 years	3	4	\$478	\$0	\$0	\$478	\$433
Initial Costs		4	5	\$487	\$0	\$0	\$487	\$421
F/S, Design, Permitting, Legal, Admin. Cost	\$0	5	6	\$497	\$0	\$0	\$497	\$409
Construction Cost	\$450	6	7	\$507	\$0	\$0	\$507	\$397
Scenario Preliminary Cost	\$0	7	8	\$517	\$0	\$0	\$517	\$386
Scenario Construction Cost	\$0	8	9	\$527	\$0	\$0	\$527	\$375
Recurring Costs		9	10	\$538	\$0	\$0	\$538	\$364
Annual Cost ¹	\$450	10	11	\$549	\$0	\$0	\$549	\$354
3 Year Overhaul / Major Maint. Cost ²	\$0	11	12	\$560	\$0	\$0	\$560	\$343
Other Recurring Cost ³	\$0	12	13	\$571	\$0	\$0	\$571	\$334
"Other" Recurring Cost Period (years)	0	13	14	\$582	\$0	\$0	\$582	\$324
Discount Rate for Present Value Analysis		14	15	\$594	\$0	\$0	\$594	\$315
Discount Rate	5%	15	16	\$606	\$0	\$0	\$606	\$306
Inflation Rate (%)	2%	16	17	\$618	\$0	\$0	\$618	\$297
Notes: 1 2 3		17	18	\$630	\$0	\$0	\$630	\$289
		18	19	\$643	\$0	\$0	\$643	\$280
		19	20	\$656	\$0	\$0	\$656	\$272
		20	21	\$669	\$0	\$0	\$669	\$265
		21	22	\$682	\$0	\$0	\$682	\$257
		22	23	\$696	\$0	\$0	\$696	\$250
		23	24	\$710	\$0	\$0	\$710	\$243
		24	25	\$724	\$0	\$0	\$724	\$236
		25	26	\$738	\$0	\$0	\$738	\$229
		26	27	\$753	\$0	\$0	\$753	\$222
		27	28	\$768	\$0	\$0	\$768	\$216
		28	29	\$783	\$0	\$0	\$783	\$210
		29	30	\$799	\$0	\$0	\$799	\$204
		30	31	\$815	\$0	\$0	\$815	\$198
	Total Expenditure:				\$450	\$18,621	\$0	\$0
Total Net Present Value of Initial and Recurring Costs:								\$9,782

Comfort Lake - Forest Lake Watershed District

Project: Shoreline Restoration: Shields Lake

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value	
		Annual Cost							
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost		
Project Time Frames									
Basis for Cost Estimates (Year)	1	0	\$ -				\$0	\$0	
F/S, Design, Admin, Legal Cost Incurred in Year	2	1	\$ 300				\$300	\$300	
Planned Construction Cost Year	3	1	2	\$306	\$0	\$0	\$306	\$306	
Scenario Year (Overrides Construction Year)	1	2	3	\$312	\$0	\$0	\$312	\$297	
Project Life [years]	30 years	3	4	\$318	\$0	\$0	\$318	\$289	
Initial Costs		4	5	\$325	\$0	\$0	\$325	\$281	
F/S, Design, Permitting, Legal, Admin. Cost	\$0	5	6	\$331	\$0	\$0	\$331	\$272	
Construction Cost	\$300	6	7	\$338	\$0	\$0	\$338	\$265	
Scenario Preliminary Cost	\$0	7	8	\$345	\$0	\$0	\$345	\$257	
Scenario Construction Cost	\$0	8	9	\$351	\$0	\$0	\$351	\$250	
Recurring Costs		9	10	\$359	\$0	\$0	\$359	\$243	
Annual Cost ¹	\$300	10	11	\$366	\$0	\$0	\$366	\$236	
3 Year Overhaul / Major Maint. Cost ²	\$0	11	12	\$373	\$0	\$0	\$373	\$229	
Other Recurring Cost ³	\$0	12	13	\$380	\$0	\$0	\$380	\$222	
"Other" Recurring Cost Period (years)	0	13	14	\$388	\$0	\$0	\$388	\$216	
Discount Rate for Present Value Analysis		14	15	\$396	\$0	\$0	\$396	\$210	
Discount Rate	5%	15	16	\$404	\$0	\$0	\$404	\$204	
Inflation Rate (%)	2%	16	17	\$412	\$0	\$0	\$412	\$198	
Notes: 1 2 3		17	18	\$420	\$0	\$0	\$420	\$192	
		18	19	\$428	\$0	\$0	\$428	\$187	
		19	20	\$437	\$0	\$0	\$437	\$182	
		20	21	\$446	\$0	\$0	\$446	\$176	
		21	22	\$455	\$0	\$0	\$455	\$171	
		22	23	\$464	\$0	\$0	\$464	\$166	
		23	24	\$473	\$0	\$0	\$473	\$162	
		24	25	\$483	\$0	\$0	\$483	\$157	
		25	26	\$492	\$0	\$0	\$492	\$153	
		26	27	\$502	\$0	\$0	\$502	\$148	
		27	28	\$512	\$0	\$0	\$512	\$144	
		28	29	\$522	\$0	\$0	\$522	\$140	
		29	30	\$533	\$0	\$0	\$533	\$136	
		30	31	\$543	\$0	\$0	\$543	\$132	
	Total Expenditure:				\$300	\$12,414	\$0	\$0	\$12,714
Total Net Present Value of Initial and Recurring Costs:								\$6,521	

Comfort Lake - Forest Lake Watershed District

Project: Biomanipulation: Shields Lake

Inputs		Annual Cost / Present Value Analysis					
		Annual Cost					Project Year 1 Present Value
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	
Project Time Frames							
Basis for Cost Estimates (Year)	1	9	\$ -				\$0
F/S, Design, Admin, Legal Cost Incurred in Year	2	10	\$ 358,528				\$231,110
Planned Construction Cost Year	3	1	11	\$12,190	\$0	\$0	\$12,190
Scenario Year (Overrides Construction Year)	10	2	12	\$12,434	\$0	\$0	\$11,842
Project Life [years]	30 years	3	13	\$12,682	\$0	\$0	\$11,503
Initial Costs		4	14	\$12,936	\$0	\$0	\$11,175
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$0	5	15	\$13,195	\$0	\$0	\$10,855
Construction Cost	\$300,000	6	16	\$13,459	\$0	\$0	\$10,545
Scenario Preliminary Cost	\$0	7	17	\$13,728	\$0	\$0	\$10,244
Scenario Construction Cost	\$0	8	18	\$14,002	\$0	\$0	\$9,951
Recurring Costs		9	19	\$14,282	\$0	\$0	\$9,667
Annual O&M Cost ¹	\$10,000	10	20	\$14,568	\$0	\$0	\$9,391
Year Overhaul / Major Maint. Cost ²	\$0	11	21	\$14,859	\$0	\$0	\$9,122
Other Recurring Cost ³	\$0	12	22	\$15,157	\$0	\$0	\$8,862
"Other" Recurring Cost Period (years)	0	13	23	\$15,460	\$0	\$0	\$8,609
Discount Rate for Present Value Analysis		14	24	\$15,769	\$0	\$0	\$8,363
Discount Rate	5%	15	25	\$16,084	\$0	\$0	\$8,124
Inflation Rate (%)	2%	16	26	\$16,406	\$0	\$0	\$7,892
Notes: ¹ Inspections, reporting, minor maintenance ² ³		17	27	\$16,734	\$0	\$0	\$7,666
		18	28	\$17,069	\$0	\$0	\$7,447
		19	29	\$17,410	\$0	\$0	\$7,234
		20	30	\$17,758	\$0	\$0	\$7,028
		21	31	\$18,114	\$0	\$0	\$6,827
		22	32	\$18,476	\$0	\$0	\$6,632
		23	33	\$18,845	\$0	\$0	\$6,442
		24	34	\$19,222	\$0	\$0	\$6,258
		25	35	\$19,607	\$0	\$0	\$6,079
		26	36	\$19,999	\$0	\$0	\$5,906
		27	37	\$20,399	\$0	\$0	\$5,737
		28	38	\$20,807	\$0	\$0	\$5,573
		29	39	\$21,223	\$0	\$0	\$5,414
		30	40	\$21,647	\$0	\$0	\$5,259
	Total Expenditure:			\$358,528	\$494,523	\$0	\$0
		Total Net Present Value of Initial and Recurring Costs:					\$478,947

Comfort Lake - Forest Lake Watershed District

Project: In-Lake Alum Treatment: Shields Lake

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost		
Project Time Frames		Project Year						
Basis for Cost Estimates (Year)	1	9	\$ 14,153			\$14,153	\$9,579	
F/S, Design, Admin, Legal Cost Incurred in Year	2	10	\$ 41,246			\$41,246	\$26,588	
Planned Construction Cost Year	3	1	11	\$0	\$0	\$0	\$0	
Scenario Year (Overrides Construction Year)	10	2	12	\$0	\$0	\$0	\$0	
Project Life [years]	30 years	3	13	\$0	\$0	\$0	\$0	
Initial Costs		4	14	\$0	\$0	\$0	\$0	
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$12,080	5	15	\$0	\$0	\$0	\$0	
Construction Cost	\$34,513	6	16	\$0	\$0	\$0	\$0	
Scenario Preliminary Cost	\$0	7	17	\$0	\$0	\$0	\$0	
Scenario Construction Cost	\$0	8	18	\$0	\$0	\$0	\$0	
Recurring Costs		9	19	\$0	\$0	\$0	\$0	
Annual O&M Cost ¹	\$0	10	20	\$0	\$66,546	\$66,546	\$42,896	
10 Year Overhaul / Major Maint. Cost ²	\$46,593	11	21	\$0	\$0	\$0	\$0	
Other Recurring Cost ³	\$0	12	22	\$0	\$0	\$0	\$0	
"Other" Recurring Cost Period (years)	0	13	23	\$0	\$0	\$0	\$0	
Discount Rate for Present Value Analysis		14	24	\$0	\$0	\$0	\$0	
Discount Rate	5%	15	25	\$0	\$0	\$0	\$0	
Inflation Rate (%)	2%	16	26	\$0	\$0	\$0	\$0	
Notes: ¹ Inspections, reporting, minor maintenance ² Reapplication ³		17	27	\$0	\$0	\$0	\$0	
		18	28	\$0	\$0	\$0	\$0	
		19	29	\$0	\$0	\$0	\$0	
		20	30	\$0	\$81,119	\$0	\$81,119	\$32,102
		21	31	\$0	\$0	\$0	\$0	
		22	32	\$0	\$0	\$0	\$0	
		23	33	\$0	\$0	\$0	\$0	
		24	34	\$0	\$0	\$0	\$0	
		25	35	\$0	\$0	\$0	\$0	
		26	36	\$0	\$0	\$0	\$0	
		27	37	\$0	\$0	\$0	\$0	
		28	38	\$0	\$0	\$0	\$0	
		29	39	\$0	\$0	\$0	\$0	
		30	40	\$0	\$98,884	\$0	\$98,884	\$24,023
	Total Expenditure:				\$55,400	\$0	\$246,549	\$0
Total Net Present Value of Initial and Recurring Costs:								\$135,189

Comfort Lake - Forest Lake Watershed District

Project: Rough Fish Management: Shields Lake

Inputs		Annual Cost / Present Value Analysis						
		Annual Cost					Project Year 1 Present Value	
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)		Total Annual Cost
Project Time Frames								
Basis for Cost Estimates (Year)	1	9	\$ 6,397				\$6,397	\$4,330
F/S, Design, Admin, Legal Cost Incurred in Year	2	10	\$ 18,643				\$18,643	\$12,018
Planned Construction Cost Year	3	1	11	\$0	\$0	\$0	\$0	\$0
Scenario Year (Overrides Construction Year)	10	2	12	\$0	\$15,920	\$0	\$15,920	\$15,162
Project Life [years]	30 years	3	13	\$0	\$0	\$0	\$0	\$0
Initial Costs		4	14	\$0	\$16,563	\$0	\$16,563	\$14,308
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$5,460	5	15	\$0	\$0	\$0	\$0	\$0
Construction Cost	\$15,600	6	16	\$0	\$17,232	\$0	\$17,232	\$13,502
Scenario Preliminary Cost	\$0	7	17	\$0	\$0	\$0	\$0	\$0
Scenario Construction Cost	\$0	8	18	\$0	\$17,929	\$0	\$17,929	\$12,742
Recurring Costs		9	19	\$0	\$0	\$0	\$0	\$0
Annual O&M Cost ¹	\$0	10	20	\$0	\$18,653	\$0	\$18,653	\$12,024
2 Year Overhaul / Major Maint. Cost ²	\$13,060	11	21	\$0	\$0	\$0	\$0	\$0
Other Recurring Cost ³	\$0	12	22	\$0	\$19,406	\$0	\$19,406	\$11,347
"Other" Recurring Cost Period (years)	0	13	23	\$0	\$0	\$0	\$0	\$0
Discount Rate for Present Value Analysis		14	24	\$0	\$20,190	\$0	\$20,190	\$10,707
Discount Rate	5%	15	25	\$0	\$0	\$0	\$0	\$0
Inflation Rate (%)	2%	16	26	\$0	\$21,006	\$0	\$21,006	\$10,104
Notes: ¹ Inspections, reporting, minor maintenance ² Reapplication ³		17	27	\$0	\$0	\$0	\$0	\$0
		18	28	\$0	\$21,855	\$0	\$21,855	\$9,535
		19	29	\$0	\$0	\$0	\$0	\$0
		20	30	\$0	\$22,738	\$0	\$22,738	\$8,998
		21	31	\$0	\$0	\$0	\$0	\$0
		22	32	\$0	\$23,656	\$0	\$23,656	\$8,491
		23	33	\$0	\$0	\$0	\$0	\$0
		24	34	\$0	\$24,612	\$0	\$24,612	\$8,013
		25	35	\$0	\$0	\$0	\$0	\$0
		26	36	\$0	\$25,606	\$0	\$25,606	\$7,562
		27	37	\$0	\$0	\$0	\$0	\$0
		28	38	\$0	\$26,641	\$0	\$26,641	\$7,136
		29	39	\$0	\$0	\$0	\$0	\$0
		30	40	\$0	\$27,717	\$0	\$27,717	\$6,734
	Total Expenditure:			\$25,041	\$0	\$319,726	\$0	\$344,767
Total Net Present Value of Initial and Recurring Costs:								\$172,712

Comfort Lake - Forest Lake Watershed District

Project: Curly Leaf Pondweed Management: Shields Lake

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost	
Project Time Frames								
Basis for Cost Estimates (Year)	1	9	\$ 2,271				\$2,271	\$1,537
F/S, Design, Admin, Legal Cost Incurred in Year	2	10	\$ 6,619				\$6,619	\$4,267
Planned Construction Cost Year	3	1	11	\$9,114	\$0	\$0	\$9,114	\$9,114
Scenario Year (Overrides Construction Year)	10	2	12	\$9,297	\$0	\$0	\$9,297	\$8,854
Project Life [years]	30 years	3	13	\$9,483	\$0	\$0	\$9,483	\$8,601
Initial Costs		4	14	\$9,672	\$0	\$0	\$9,672	\$8,355
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$1,938	5	15	\$9,866	\$0	\$0	\$9,866	\$8,117
Construction Cost	\$5,539	6	16	\$10,063	\$0	\$0	\$10,063	\$7,885
Scenario Preliminary Cost	\$0	7	17	\$10,264	\$0	\$0	\$10,264	\$7,659
Scenario Construction Cost	\$0	8	18	\$10,470	\$0	\$0	\$10,470	\$7,441
Recurring Costs		9	19	\$10,679	\$0	\$0	\$10,679	\$7,228
Annual O&M Cost ¹	\$7,477	10	20	\$10,893	\$0	\$0	\$10,893	\$7,021
Year Overhaul / Major Maint. Cost ²	\$0	11	21	\$11,110	\$0	\$0	\$11,110	\$6,821
Other Recurring Cost ³	\$0	12	22	\$11,333	\$0	\$0	\$11,333	\$6,626
"Other" Recurring Cost Period (years)	0	13	23	\$11,559	\$0	\$0	\$11,559	\$6,437
Discount Rate for Present Value Analysis		14	24	\$11,790	\$0	\$0	\$11,790	\$6,253
Discount Rate	5%	15	25	\$12,026	\$0	\$0	\$12,026	\$6,074
Inflation Rate (%)	2%	16	26	\$12,267	\$0	\$0	\$12,267	\$5,901
Notes: ¹ Reapplication ² ³		17	27	\$12,512	\$0	\$0	\$12,512	\$5,732
		18	28	\$12,762	\$0	\$0	\$12,762	\$5,568
		19	29	\$13,018	\$0	\$0	\$13,018	\$5,409
		20	30	\$13,278	\$0	\$0	\$13,278	\$5,255
		21	31	\$13,544	\$0	\$0	\$13,544	\$5,104
		22	32	\$13,814	\$0	\$0	\$13,814	\$4,959
		23	33	\$14,091	\$0	\$0	\$14,091	\$4,817
		24	34	\$14,372	\$0	\$0	\$14,372	\$4,679
		25	35	\$14,660	\$0	\$0	\$14,660	\$4,546
		26	36	\$14,953	\$0	\$0	\$14,953	\$4,416
		27	37	\$15,252	\$0	\$0	\$15,252	\$4,290
		28	38	\$15,557	\$0	\$0	\$15,557	\$4,167
		29	39	\$15,868	\$0	\$0	\$15,868	\$4,048
		30	40	\$16,186	\$0	\$0	\$16,186	\$3,932
	Total Expenditure:			\$8,890	\$369,754	\$0	\$0	\$378,644
Total Net Present Value of Initial and Recurring Costs:								\$191,111

Comfort Lake - Forest Lake Watershed District

Project: Watershed BMPs: Sylvan Lake

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost	
Project Time Frames								
Basis for Cost Estimates (Year)	1	0	\$ -				\$0	\$0
F/S, Design, Admin, Legal Cost Incurred in Year	2	1	\$ 300				\$300	\$300
Planned Construction Cost Year	3	1	2	\$306	\$0	\$0	\$306	\$306
Scenario Year (Overrides Construction Year)	1	2	3	\$312	\$0	\$0	\$312	\$297
Project Life [years]	30 years	3	4	\$318	\$0	\$0	\$318	\$289
Initial Costs		4	5	\$325	\$0	\$0	\$325	\$281
F/S, Design, Permitting, Legal, Admin. Cost	\$0	5	6	\$331	\$0	\$0	\$331	\$272
Construction Cost	\$300	6	7	\$338	\$0	\$0	\$338	\$265
Scenario Preliminary Cost	\$0	7	8	\$345	\$0	\$0	\$345	\$257
Scenario Construction Cost	\$0	8	9	\$351	\$0	\$0	\$351	\$250
Recurring Costs		9	10	\$359	\$0	\$0	\$359	\$243
Annual Cost ¹	\$300	10	11	\$366	\$0	\$0	\$366	\$236
3 Year Overhaul / Major Maint. Cost ²	\$0	11	12	\$373	\$0	\$0	\$373	\$229
Other Recurring Cost ³	\$0	12	13	\$380	\$0	\$0	\$380	\$222
"Other" Recurring Cost Period (years)	0	13	14	\$388	\$0	\$0	\$388	\$216
Discount Rate for Present Value Analysis		14	15	\$396	\$0	\$0	\$396	\$210
Discount Rate	5%	15	16	\$404	\$0	\$0	\$404	\$204
Inflation Rate (%)	2%	16	17	\$412	\$0	\$0	\$412	\$198
Notes: 1 2 3		17	18	\$420	\$0	\$0	\$420	\$192
		18	19	\$428	\$0	\$0	\$428	\$187
		19	20	\$437	\$0	\$0	\$437	\$182
		20	21	\$446	\$0	\$0	\$446	\$176
		21	22	\$455	\$0	\$0	\$455	\$171
		22	23	\$464	\$0	\$0	\$464	\$166
		23	24	\$473	\$0	\$0	\$473	\$162
		24	25	\$483	\$0	\$0	\$483	\$157
		25	26	\$492	\$0	\$0	\$492	\$153
		26	27	\$502	\$0	\$0	\$502	\$148
		27	28	\$512	\$0	\$0	\$512	\$144
		28	29	\$522	\$0	\$0	\$522	\$140
		29	30	\$533	\$0	\$0	\$533	\$136
		30	31	\$543	\$0	\$0	\$543	\$132
			Total Expenditure:		\$300	\$12,414	\$0	\$0
		Total Net Present Value of Initial and Recurring Costs:						\$6,521

Comfort Lake - Forest Lake Watershed District

Project: Watershed BMPs: Forest Lake East

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost	
Project Time Frames								
Basis for Cost Estimates (Year)	1	0	\$ -				\$0	\$0
F/S, Design, Admin, Legal Cost Incurred in Year	2	1	\$ 450				\$450	\$450
Planned Construction Cost Year	3	1	2	\$459	\$0	\$0	\$459	\$459
Scenario Year (Overrides Construction Year)	1	2	3	\$468	\$0	\$0	\$468	\$446
Project Life [years]	30 years	3	4	\$478	\$0	\$0	\$478	\$433
Initial Costs		4	5	\$487	\$0	\$0	\$487	\$421
F/S, Design, Permitting, Legal, Admin. Cost	\$0	5	6	\$497	\$0	\$0	\$497	\$409
Construction Cost	\$450	6	7	\$507	\$0	\$0	\$507	\$397
Scenario Preliminary Cost	\$0	7	8	\$517	\$0	\$0	\$517	\$386
Scenario Construction Cost	\$0	8	9	\$527	\$0	\$0	\$527	\$375
Recurring Costs		9	10	\$538	\$0	\$0	\$538	\$364
Annual Cost ¹	\$450	10	11	\$549	\$0	\$0	\$549	\$354
3 Year Overhaul / Major Maint. Cost ²	\$0	11	12	\$560	\$0	\$0	\$560	\$343
Other Recurring Cost ³	\$0	12	13	\$571	\$0	\$0	\$571	\$334
"Other" Recurring Cost Period (years)	0	13	14	\$582	\$0	\$0	\$582	\$324
Discount Rate for Present Value Analysis		14	15	\$594	\$0	\$0	\$594	\$315
Discount Rate	5%	15	16	\$606	\$0	\$0	\$606	\$306
Inflation Rate (%)	2%	16	17	\$618	\$0	\$0	\$618	\$297
Notes: 1 2 3		17	18	\$630	\$0	\$0	\$630	\$289
		18	19	\$643	\$0	\$0	\$643	\$280
		19	20	\$656	\$0	\$0	\$656	\$272
		20	21	\$669	\$0	\$0	\$669	\$265
		21	22	\$682	\$0	\$0	\$682	\$257
		22	23	\$696	\$0	\$0	\$696	\$250
		23	24	\$710	\$0	\$0	\$710	\$243
		24	25	\$724	\$0	\$0	\$724	\$236
		25	26	\$738	\$0	\$0	\$738	\$229
		26	27	\$753	\$0	\$0	\$753	\$222
		27	28	\$768	\$0	\$0	\$768	\$216
		28	29	\$783	\$0	\$0	\$783	\$210
		29	30	\$799	\$0	\$0	\$799	\$204
		30	31	\$815	\$0	\$0	\$815	\$198
	Total Expenditure:			\$450	\$18,621	\$0	\$0	\$19,071
Total Net Present Value of Initial and Recurring Costs:								\$9,782

Comfort Lake - Forest Lake Watershed District

Project: Shoreline Restoration: Forest Lake East

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost	
Project Time Frames								
Basis for Cost Estimates (Year)	1	0	\$ -				\$0	\$0
F/S, Design, Admin, Legal Cost Incurred in Year	2	1	\$ 600				\$600	\$600
Planned Construction Cost Year	3	1	2	\$612	\$0	\$0	\$612	\$612
Scenario Year (Overrides Construction Year)	1	2	3	\$624	\$0	\$0	\$624	\$595
Project Life [years]	30 years	3	4	\$637	\$0	\$0	\$637	\$578
Initial Costs		4	5	\$649	\$0	\$0	\$649	\$561
F/S, Design, Permitting, Legal, Admin. Cost	\$0	5	6	\$662	\$0	\$0	\$662	\$545
Construction Cost	\$600	6	7	\$676	\$0	\$0	\$676	\$529
Scenario Preliminary Cost	\$0	7	8	\$689	\$0	\$0	\$689	\$514
Scenario Construction Cost	\$0	8	9	\$703	\$0	\$0	\$703	\$500
Recurring Costs		9	10	\$717	\$0	\$0	\$717	\$485
Annual Cost ¹	\$600	10	11	\$731	\$0	\$0	\$731	\$471
3 Year Overhaul / Major Maint. Cost ²	\$0	11	12	\$746	\$0	\$0	\$746	\$458
Other Recurring Cost ³	\$0	12	13	\$761	\$0	\$0	\$761	\$445
"Other" Recurring Cost Period (years)	0	13	14	\$776	\$0	\$0	\$776	\$432
Discount Rate for Present Value Analysis		14	15	\$792	\$0	\$0	\$792	\$420
Discount Rate	5%	15	16	\$808	\$0	\$0	\$808	\$408
Inflation Rate (%)	2%	16	17	\$824	\$0	\$0	\$824	\$396
Notes: 1 2 3		17	18	\$840	\$0	\$0	\$840	\$385
		18	19	\$857	\$0	\$0	\$857	\$374
		19	20	\$874	\$0	\$0	\$874	\$363
		20	21	\$892	\$0	\$0	\$892	\$353
		21	22	\$909	\$0	\$0	\$909	\$343
		22	23	\$928	\$0	\$0	\$928	\$333
		23	24	\$946	\$0	\$0	\$946	\$323
		24	25	\$965	\$0	\$0	\$965	\$314
		25	26	\$984	\$0	\$0	\$984	\$305
		26	27	\$1,004	\$0	\$0	\$1,004	\$296
		27	28	\$1,024	\$0	\$0	\$1,024	\$288
		28	29	\$1,045	\$0	\$0	\$1,045	\$280
		29	30	\$1,066	\$0	\$0	\$1,066	\$272
		30	31	\$1,087	\$0	\$0	\$1,087	\$264
	Total Expenditure:			\$600	\$24,828	\$0	\$0	\$25,428
Total Net Present Value of Initial and Recurring Costs:								\$13,043

Comfort Lake - Forest Lake Watershed District

Project: Forest Lake Wetland Restoration: FL 44

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost	
Project Time Frames								
Basis for Cost Estimates (Year)	1	1	\$ 29,901				\$29,901	\$29,901
F/S, Design, Admin, Legal Cost Incurred in Year	2	2	\$ 50,496				\$50,496	\$48,092
Planned Construction Cost Year	3	1	3	\$0	\$0	\$0	\$0	\$0
Scenario Year (Overrides Construction Year)	2	2	4	\$0	\$0	\$0	\$0	\$0
Project Life [years]	30 years	3	5	\$0	\$0	\$0	\$0	\$0
Initial Costs		4	6	\$0	\$0	\$0	\$0	\$0
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$29,901	5	7	\$0	\$0	\$0	\$0	\$0
Construction Cost	\$49,506	6	8	\$0	\$0	\$0	\$0	\$0
Scenario Preliminary Cost	\$0	7	9	\$0	\$0	\$0	\$0	\$0
Scenario Construction Cost	\$0	8	10	\$0	\$0	\$0	\$0	\$0
Recurring Costs		9	11	\$0	\$0	\$0	\$0	\$0
Annual O&M Cost ¹	\$0	10	12	\$0	\$0	\$0	\$0	\$0
10 Year Overhaul / Major Maint. Cost ²	\$0	11	13	\$0	\$0	\$0	\$0	\$0
Other Recurring Cost ³	\$0	12	14	\$0	\$0	\$0	\$0	\$0
"Other" Recurring Cost Period (years)	0	13	15	\$0	\$0	\$0	\$0	\$0
Discount Rate for Present Value Analysis		14	16	\$0	\$0	\$0	\$0	\$0
Discount Rate	5%	15	17	\$0	\$0	\$0	\$0	\$0
Inflation Rate (%)	2%	16	18	\$0	\$0	\$0	\$0	\$0
Notes: ¹ Inspections, reporting, minor maintenance ² ³		17	19	\$0	\$0	\$0	\$0	\$0
		18	20	\$0	\$0	\$0	\$0	\$0
		19	21	\$0	\$0	\$0	\$0	\$0
		20	22	\$0	\$0	\$0	\$0	\$0
		21	23	\$0	\$0	\$0	\$0	\$0
		22	24	\$0	\$0	\$0	\$0	\$0
		23	25	\$0	\$0	\$0	\$0	\$0
		24	26	\$0	\$0	\$0	\$0	\$0
		25	27	\$0	\$0	\$0	\$0	\$0
		26	28	\$0	\$0	\$0	\$0	\$0
		27	29	\$0	\$0	\$0	\$0	\$0
		28	30	\$0	\$0	\$0	\$0	\$0
		29	31	\$0	\$0	\$0	\$0	\$0
		30	32	\$0	\$0	\$0	\$0	\$0
	Total Expenditure:				\$80,397	\$0	\$0	\$0
		Total Net Present Value of Initial and Recurring Costs:						\$77,993

Comfort Lake - Forest Lake Watershed District

Project: In-Lake Alum Treatment: Forest Lake East

Inputs		Annual Cost / Present Value Analysis						
		Annual Cost					Project Year 1 Present Value	
		Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost		
Project Time Frames		Project Year						
Basis for Cost Estimates (Year)	1	9	\$ 273,093			\$273,093	\$184,840	
F/S, Design, Admin, Legal Cost Incurred in Year	2	10	\$ 795,870			\$795,870	\$513,025	
Planned Construction Cost Year	3	1	11	\$0	\$0	\$0	\$0	
Scenario Year (Overrides Construction Year)	10	2	12	\$0	\$0	\$0	\$0	
Project Life [years]	30 years	3	13	\$0	\$0	\$0	\$0	
Initial Costs		4	14	\$0	\$0	\$0	\$0	
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$233,082	5	15	\$0	\$0	\$0	\$0	
Construction Cost	\$665,948	6	16	\$0	\$0	\$0	\$0	
Scenario Preliminary Cost	\$0	7	17	\$0	\$0	\$0	\$0	
Scenario Construction Cost	\$0	8	18	\$0	\$0	\$0	\$0	
Recurring Costs		9	19	\$0	\$0	\$0	\$0	
Annual O&M Cost ¹	\$0	10	20	\$0	\$0	\$0	\$0	
10 Year Overhaul / Major Maint. Cost ²	\$0	11	21	\$0	\$0	\$0	\$0	
Other Recurring Cost ³	\$0	12	22	\$0	\$0	\$0	\$0	
"Other" Recurring Cost Period (years)	0	13	23	\$0	\$0	\$0	\$0	
Discount Rate for Present Value Analysis		14	24	\$0	\$0	\$0	\$0	
Discount Rate	5%	15	25	\$0	\$0	\$0	\$0	
Inflation Rate (%)	2%	16	26	\$0	\$0	\$0	\$0	
Notes: ¹ Inspections, reporting, minor maintenance ² Reapplication ³		17	27	\$0	\$0	\$0	\$0	
		18	28	\$0	\$0	\$0	\$0	
		19	29	\$0	\$0	\$0	\$0	
		20	30	\$0	\$0	\$0	\$0	
		21	31	\$0	\$0	\$0	\$0	
		22	32	\$0	\$0	\$0	\$0	
		23	33	\$0	\$0	\$0	\$0	
		24	34	\$0	\$0	\$0	\$0	
		25	35	\$0	\$0	\$0	\$0	
		26	36	\$0	\$0	\$0	\$0	
		27	37	\$0	\$0	\$0	\$0	
		28	38	\$0	\$0	\$0	\$0	
		29	39	\$0	\$0	\$0	\$0	
		30	40	\$0	\$0	\$0	\$0	
	Total Expenditure:				\$1,068,963	\$0	\$0	\$0
Total Net Present Value of Initial and Recurring Costs:							\$697,865	

Comfort Lake - Forest Lake Watershed District

Project: Watershed BMPs: Forest Lake Center

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost	
Project Time Frames								
Basis for Cost Estimates (Year)	1	0	\$ -				\$0	\$0
F/S, Design, Admin, Legal Cost Incurred in Year	2	1	\$ 450				\$450	\$450
Planned Construction Cost Year	3	1	2	\$459	\$0	\$0	\$459	\$459
Scenario Year (Overrides Construction Year)	1	2	3	\$468	\$0	\$0	\$468	\$446
Project Life [years]	30 years	3	4	\$478	\$0	\$0	\$478	\$433
Initial Costs		4	5	\$487	\$0	\$0	\$487	\$421
F/S, Design, Permitting, Legal, Admin. Cost	\$0	5	6	\$497	\$0	\$0	\$497	\$409
Construction Cost	\$450	6	7	\$507	\$0	\$0	\$507	\$397
Scenario Preliminary Cost	\$0	7	8	\$517	\$0	\$0	\$517	\$386
Scenario Construction Cost	\$0	8	9	\$527	\$0	\$0	\$527	\$375
Recurring Costs		9	10	\$538	\$0	\$0	\$538	\$364
Annual Cost ¹	\$450	10	11	\$549	\$0	\$0	\$549	\$354
3 Year Overhaul / Major Maint. Cost ²	\$0	11	12	\$560	\$0	\$0	\$560	\$343
Other Recurring Cost ³	\$0	12	13	\$571	\$0	\$0	\$571	\$334
"Other" Recurring Cost Period (years)	0	13	14	\$582	\$0	\$0	\$582	\$324
Discount Rate for Present Value Analysis		14	15	\$594	\$0	\$0	\$594	\$315
Discount Rate	5%	15	16	\$606	\$0	\$0	\$606	\$306
Inflation Rate (%)	2%	16	17	\$618	\$0	\$0	\$618	\$297
Notes: 1 2 3		17	18	\$630	\$0	\$0	\$630	\$289
		18	19	\$643	\$0	\$0	\$643	\$280
		19	20	\$656	\$0	\$0	\$656	\$272
		20	21	\$669	\$0	\$0	\$669	\$265
		21	22	\$682	\$0	\$0	\$682	\$257
		22	23	\$696	\$0	\$0	\$696	\$250
		23	24	\$710	\$0	\$0	\$710	\$243
		24	25	\$724	\$0	\$0	\$724	\$236
		25	26	\$738	\$0	\$0	\$738	\$229
		26	27	\$753	\$0	\$0	\$753	\$222
		27	28	\$768	\$0	\$0	\$768	\$216
		28	29	\$783	\$0	\$0	\$783	\$210
		29	30	\$799	\$0	\$0	\$799	\$204
		30	31	\$815	\$0	\$0	\$815	\$198
	Total Expenditure:			\$450	\$18,621	\$0	\$0	\$19,071
Total Net Present Value of Initial and Recurring Costs:								\$9,782

Comfort Lake - Forest Lake Watershed District

Project: Shoreline Restoration: Forest Lake Center

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost	
Project Time Frames								
Basis for Cost Estimates (Year)	1	0	\$ -				\$0	\$0
F/S, Design, Admin, Legal Cost Incurred in Year	2	1	\$ 600				\$600	\$600
Planned Construction Cost Year	3	1	2	\$612	\$0	\$0	\$612	\$612
Scenario Year (Overrides Construction Year)	1	2	3	\$624	\$0	\$0	\$624	\$595
Project Life [years]	30 years	3	4	\$637	\$0	\$0	\$637	\$578
Initial Costs								
F/S, Design, Permitting, Legal, Admin. Cost	\$0	4	5	\$649	\$0	\$0	\$649	\$561
Construction Cost	\$600	5	6	\$662	\$0	\$0	\$662	\$545
Scenario Preliminary Cost	\$0	6	7	\$676	\$0	\$0	\$676	\$529
Scenario Construction Cost	\$0	7	8	\$689	\$0	\$0	\$689	\$514
Recurring Costs								
Annual Cost ¹	\$600	8	9	\$703	\$0	\$0	\$703	\$500
3 Year Overhaul / Major Maint. Cost ²	\$0	9	10	\$717	\$0	\$0	\$717	\$485
Other Recurring Cost ³	\$0	10	11	\$731	\$0	\$0	\$731	\$471
"Other" Recurring Cost Period (years)	0	11	12	\$746	\$0	\$0	\$746	\$458
Discount Rate for Present Value Analysis								
Discount Rate	5%	12	13	\$761	\$0	\$0	\$761	\$445
Inflation Rate (%)	2%	13	14	\$776	\$0	\$0	\$776	\$432
Notes:								
1		14	15	\$792	\$0	\$0	\$792	\$420
2		15	16	\$808	\$0	\$0	\$808	\$408
3		16	17	\$824	\$0	\$0	\$824	\$396
		17	18	\$840	\$0	\$0	\$840	\$385
		18	19	\$857	\$0	\$0	\$857	\$374
		19	20	\$874	\$0	\$0	\$874	\$363
		20	21	\$892	\$0	\$0	\$892	\$353
		21	22	\$909	\$0	\$0	\$909	\$343
		22	23	\$928	\$0	\$0	\$928	\$333
		23	24	\$946	\$0	\$0	\$946	\$323
		24	25	\$965	\$0	\$0	\$965	\$314
		25	26	\$984	\$0	\$0	\$984	\$305
		26	27	\$1,004	\$0	\$0	\$1,004	\$296
		27	28	\$1,024	\$0	\$0	\$1,024	\$288
		28	29	\$1,045	\$0	\$0	\$1,045	\$280
		29	30	\$1,066	\$0	\$0	\$1,066	\$272
		30	31	\$1,087	\$0	\$0	\$1,087	\$264
Total Expenditure:			\$600	\$24,828	\$0	\$0	\$25,428	
Total Net Present Value of Initial and Recurring Costs:								\$13,043

Comfort Lake - Forest Lake Watershed District

Project: In-Lake Alum Treatment: Forest Lake Center

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost		
Project Time Frames		Project Year						
Basis for Cost Estimates (Year)	1	10	\$ 134,069			\$134,069	\$86,422	
F/S, Design, Admin, Legal Cost Incurred in Year	2	11	\$ 390,716			\$390,716	\$239,866	
Planned Construction Cost Year	3	1	12	\$0	\$0	\$0	\$0	
Scenario Year (Overrides Construction Year)	11	2	13	\$0	\$0	\$0	\$0	
Project Life [years]	30 years	3	14	\$0	\$0	\$0	\$0	
Initial Costs		4	15	\$0	\$0	\$0	\$0	
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$112,183	5	16	\$0	\$0	\$0	\$0	
Construction Cost	\$320,524	6	17	\$0	\$0	\$0	\$0	
Scenario Preliminary Cost	\$0	7	18	\$0	\$0	\$0	\$0	
Scenario Construction Cost	\$0	8	19	\$0	\$0	\$0	\$0	
Recurring Costs		9	20	\$0	\$0	\$0	\$0	
Annual O&M Cost ¹	\$0	10	21	\$0	\$0	\$0	\$0	
10 Year Overhaul / Major Maint. Cost ²	\$0	11	22	\$0	\$0	\$0	\$0	
Other Recurring Cost ³	\$0	12	23	\$0	\$0	\$0	\$0	
"Other" Recurring Cost Period (years)	0	13	24	\$0	\$0	\$0	\$0	
Discount Rate for Present Value Analysis		14	25	\$0	\$0	\$0	\$0	
Discount Rate	5%	15	26	\$0	\$0	\$0	\$0	
Inflation Rate (%)	2%	16	27	\$0	\$0	\$0	\$0	
Notes: ¹ Inspections, reporting, minor maintenance ² Reapplication ³		17	28	\$0	\$0	\$0	\$0	
		18	29	\$0	\$0	\$0	\$0	
		19	30	\$0	\$0	\$0	\$0	
		20	31	\$0	\$0	\$0	\$0	
		21	32	\$0	\$0	\$0	\$0	
		22	33	\$0	\$0	\$0	\$0	
		23	34	\$0	\$0	\$0	\$0	
		24	35	\$0	\$0	\$0	\$0	
		25	36	\$0	\$0	\$0	\$0	
		26	37	\$0	\$0	\$0	\$0	
		27	38	\$0	\$0	\$0	\$0	
		28	39	\$0	\$0	\$0	\$0	
		29	40	\$0	\$0	\$0	\$0	
		30	41	\$0	\$0	\$0	\$0	
	Total Expenditure:				\$524,786	\$0	\$0	\$0
Total Net Present Value of Initial and Recurring Costs:								\$326,288

Comfort Lake - Forest Lake Watershed District

Project: Watershed BMPs: Forest Lake West

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost	
Project Time Frames								
Basis for Cost Estimates (Year)	1	0	\$ -				\$0	\$0
F/S, Design, Admin, Legal Cost Incurred in Year	2	1	\$ 450				\$450	\$450
Planned Construction Cost Year	3	1	2	\$459	\$0	\$0	\$459	\$459
Scenario Year (Overrides Construction Year)	1	2	3	\$468	\$0	\$0	\$468	\$446
Project Life [years]	30 years	3	4	\$478	\$0	\$0	\$478	\$433
Initial Costs		4	5	\$487	\$0	\$0	\$487	\$421
F/S, Design, Permitting, Legal, Admin. Cost	\$0	5	6	\$497	\$0	\$0	\$497	\$409
Construction Cost	\$450	6	7	\$507	\$0	\$0	\$507	\$397
Scenario Preliminary Cost	\$0	7	8	\$517	\$0	\$0	\$517	\$386
Scenario Construction Cost	\$0	8	9	\$527	\$0	\$0	\$527	\$375
Recurring Costs		9	10	\$538	\$0	\$0	\$538	\$364
Annual Cost ¹	\$450	10	11	\$549	\$0	\$0	\$549	\$354
3 Year Overhaul / Major Maint. Cost ²	\$0	11	12	\$560	\$0	\$0	\$560	\$343
Other Recurring Cost ³	\$0	12	13	\$571	\$0	\$0	\$571	\$334
"Other" Recurring Cost Period (years)	0	13	14	\$582	\$0	\$0	\$582	\$324
Discount Rate for Present Value Analysis		14	15	\$594	\$0	\$0	\$594	\$315
Discount Rate	5%	15	16	\$606	\$0	\$0	\$606	\$306
Inflation Rate (%)	2%	16	17	\$618	\$0	\$0	\$618	\$297
Notes: 1 2 3		17	18	\$630	\$0	\$0	\$630	\$289
		18	19	\$643	\$0	\$0	\$643	\$280
		19	20	\$656	\$0	\$0	\$656	\$272
		20	21	\$669	\$0	\$0	\$669	\$265
		21	22	\$682	\$0	\$0	\$682	\$257
		22	23	\$696	\$0	\$0	\$696	\$250
		23	24	\$710	\$0	\$0	\$710	\$243
		24	25	\$724	\$0	\$0	\$724	\$236
		25	26	\$738	\$0	\$0	\$738	\$229
		26	27	\$753	\$0	\$0	\$753	\$222
		27	28	\$768	\$0	\$0	\$768	\$216
		28	29	\$783	\$0	\$0	\$783	\$210
		29	30	\$799	\$0	\$0	\$799	\$204
		30	31	\$815	\$0	\$0	\$815	\$198
	Total Expenditure:			\$450	\$18,621	\$0	\$0	\$19,071
Total Net Present Value of Initial and Recurring Costs:								\$9,782

Comfort Lake - Forest Lake Watershed District

Project: Shoreline Restoration: Forest Lake West

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)		
Project Time Frames								
Basis for Cost Estimates (Year)	1	0	\$ -				\$0	\$0
F/S, Design, Admin, Legal Cost Incurred in Year	2	1	\$ 600				\$600	\$600
Planned Construction Cost Year	3	1	2	\$612	\$0	\$0	\$612	\$612
Scenario Year (Overrides Construction Year)	1	2	3	\$624	\$0	\$0	\$624	\$595
Project Life [years]	30 years	3	4	\$637	\$0	\$0	\$637	\$578
Initial Costs		4	5	\$649	\$0	\$0	\$649	\$561
F/S, Design, Permitting, Legal, Admin. Cost	\$0	5	6	\$662	\$0	\$0	\$662	\$545
Construction Cost	\$600	6	7	\$676	\$0	\$0	\$676	\$529
Scenario Preliminary Cost	\$0	7	8	\$689	\$0	\$0	\$689	\$514
Scenario Construction Cost	\$0	8	9	\$703	\$0	\$0	\$703	\$500
Recurring Costs		9	10	\$717	\$0	\$0	\$717	\$485
Annual Cost ¹	\$600	10	11	\$731	\$0	\$0	\$731	\$471
3 Year Overhaul / Major Maint. Cost ²	\$0	11	12	\$746	\$0	\$0	\$746	\$458
Other Recurring Cost ³	\$0	12	13	\$761	\$0	\$0	\$761	\$445
"Other" Recurring Cost Period (years)	0	13	14	\$776	\$0	\$0	\$776	\$432
Discount Rate for Present Value Analysis		14	15	\$792	\$0	\$0	\$792	\$420
Discount Rate	5%	15	16	\$808	\$0	\$0	\$808	\$408
Inflation Rate (%)	2%	16	17	\$824	\$0	\$0	\$824	\$396
Notes: 1 2 3		17	18	\$840	\$0	\$0	\$840	\$385
		18	19	\$857	\$0	\$0	\$857	\$374
		19	20	\$874	\$0	\$0	\$874	\$363
		20	21	\$892	\$0	\$0	\$892	\$353
		21	22	\$909	\$0	\$0	\$909	\$343
		22	23	\$928	\$0	\$0	\$928	\$333
		23	24	\$946	\$0	\$0	\$946	\$323
		24	25	\$965	\$0	\$0	\$965	\$314
		25	26	\$984	\$0	\$0	\$984	\$305
		26	27	\$1,004	\$0	\$0	\$1,004	\$296
		27	28	\$1,024	\$0	\$0	\$1,024	\$288
		28	29	\$1,045	\$0	\$0	\$1,045	\$280
		29	30	\$1,066	\$0	\$0	\$1,066	\$272
		30	31	\$1,087	\$0	\$0	\$1,087	\$264
	Total Expenditure:			\$600	\$24,828	\$0	\$0	\$25,428
Total Net Present Value of Initial and Recurring Costs:								\$13,043

Comfort Lake - Forest Lake Watershed District

Project: Watershed BMPs: Comfort Lake

Inputs		Annual Cost / Present Value Analysis					
		Annual Cost					Project Year 1 Present Value
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	
Project Time Frames							
Basis for Cost Estimates (Year)	1	0	\$ -				\$0
F/S, Design, Admin, Legal Cost Incurred in Year	2	1	\$ 2,800				\$2,800
Planned Construction Cost Year	3	1	2	\$2,856	\$0	\$0	\$2,856
Scenario Year (Overrides Construction Year)	1	2	3	\$2,913	\$0	\$0	\$2,913
Project Life [years]	30 years	3	4	\$2,971	\$0	\$0	\$2,971
Initial Costs		4	5	\$3,031	\$0	\$0	\$3,031
F/S, Design, Permitting, Legal, Admin. Cost	\$0	5	6	\$3,091	\$0	\$0	\$3,091
Construction Cost	\$2,800	6	7	\$3,153	\$0	\$0	\$3,153
Scenario Preliminary Cost	\$0	7	8	\$3,216	\$0	\$0	\$3,216
Scenario Construction Cost	\$0	8	9	\$3,281	\$0	\$0	\$3,281
Recurring Costs		9	10	\$3,346	\$0	\$0	\$3,346
Annual Cost ¹	\$2,800	10	11	\$3,413	\$0	\$0	\$3,413
3 Year Overhaul / Major Maint. Cost ²	\$0	11	12	\$3,481	\$0	\$0	\$3,481
Other Recurring Cost ³	\$0	12	13	\$3,551	\$0	\$0	\$3,551
"Other" Recurring Cost Period (years)	0	13	14	\$3,622	\$0	\$0	\$3,622
Discount Rate for Present Value Analysis		14	15	\$3,695	\$0	\$0	\$3,695
Discount Rate	5%	15	16	\$3,768	\$0	\$0	\$3,768
Inflation Rate (%)	2%	16	17	\$3,844	\$0	\$0	\$3,844
Notes: 1 2 3		17	18	\$3,921	\$0	\$0	\$3,921
		18	19	\$3,999	\$0	\$0	\$3,999
		19	20	\$4,079	\$0	\$0	\$4,079
		20	21	\$4,161	\$0	\$0	\$4,161
		21	22	\$4,244	\$0	\$0	\$4,244
		22	23	\$4,329	\$0	\$0	\$4,329
		23	24	\$4,415	\$0	\$0	\$4,415
		24	25	\$4,504	\$0	\$0	\$4,504
		25	26	\$4,594	\$0	\$0	\$4,594
		26	27	\$4,686	\$0	\$0	\$4,686
		27	28	\$4,779	\$0	\$0	\$4,779
		28	29	\$4,875	\$0	\$0	\$4,875
		29	30	\$4,972	\$0	\$0	\$4,972
		30	31	\$5,072	\$0	\$0	\$5,072
	Total Expenditure:			\$2,800	\$115,862	\$0	\$0
Total Net Present Value of Initial and Recurring Costs:							\$60,866

Comfort Lake - Forest Lake Watershed District

Project: Shoreline Restoration: Comfort Lake

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost	
Project Time Frames								
Basis for Cost Estimates (Year)	1	0	\$ -				\$0	\$0
F/S, Design, Admin, Legal Cost Incurred in Year	2	1	\$ 600				\$600	\$600
Planned Construction Cost Year	3	1	2	\$612	\$0	\$0	\$612	\$612
Scenario Year (Overrides Construction Year)	1	2	3	\$624	\$0	\$0	\$624	\$595
Project Life [years]	30 years	3	4	\$637	\$0	\$0	\$637	\$578
Initial Costs		4	5	\$649	\$0	\$0	\$649	\$561
F/S, Design, Permitting, Legal, Admin. Cost	\$0	5	6	\$662	\$0	\$0	\$662	\$545
Construction Cost	\$600	6	7	\$676	\$0	\$0	\$676	\$529
Scenario Preliminary Cost	\$0	7	8	\$689	\$0	\$0	\$689	\$514
Scenario Construction Cost	\$0	8	9	\$703	\$0	\$0	\$703	\$500
Recurring Costs		9	10	\$717	\$0	\$0	\$717	\$485
Annual Cost ¹	\$600	10	11	\$731	\$0	\$0	\$731	\$471
3 Year Overhaul / Major Maint. Cost ²	\$0	11	12	\$746	\$0	\$0	\$746	\$458
Other Recurring Cost ³	\$0	12	13	\$761	\$0	\$0	\$761	\$445
"Other" Recurring Cost Period (years)	0	13	14	\$776	\$0	\$0	\$776	\$432
Discount Rate for Present Value Analysis		14	15	\$792	\$0	\$0	\$792	\$420
Discount Rate	5%	15	16	\$808	\$0	\$0	\$808	\$408
Inflation Rate (%)	2%	16	17	\$824	\$0	\$0	\$824	\$396
Notes: 1 2 3		17	18	\$840	\$0	\$0	\$840	\$385
		18	19	\$857	\$0	\$0	\$857	\$374
		19	20	\$874	\$0	\$0	\$874	\$363
		20	21	\$892	\$0	\$0	\$892	\$353
		21	22	\$909	\$0	\$0	\$909	\$343
		22	23	\$928	\$0	\$0	\$928	\$333
		23	24	\$946	\$0	\$0	\$946	\$323
		24	25	\$965	\$0	\$0	\$965	\$314
		25	26	\$984	\$0	\$0	\$984	\$305
		26	27	\$1,004	\$0	\$0	\$1,004	\$296
		27	28	\$1,024	\$0	\$0	\$1,024	\$288
		28	29	\$1,045	\$0	\$0	\$1,045	\$280
		29	30	\$1,066	\$0	\$0	\$1,066	\$272
		30	31	\$1,087	\$0	\$0	\$1,087	\$264
	Total Expenditure:			\$600	\$24,828	\$0	\$0	\$25,428
Total Net Present Value of Initial and Recurring Costs:								\$13,043

Comfort Lake - Forest Lake Watershed District

Project: Bixby Park Wet Detention Pond 1: CL30

Inputs		Annual Cost / Present Value Analysis						
		Annual Cost					Project Year 1 Present Value	
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)		Total Annual Cost
Project Time Frames								
Basis for Cost Estimates (Year)	1	3	\$ 172,396				\$172,396	\$156,369
F/S, Design, Admin, Legal Cost Incurred in Year	2	4	\$ 3,516,886				\$3,516,886	\$3,038,018
Planned Construction Cost Year	3	1	5	\$866	\$0	\$0	\$866	\$866
Scenario Year (Overrides Construction Year)	4	2	6	\$883	\$0	\$0	\$883	\$841
Project Life [years]	30 years	3	7	\$901	\$0	\$0	\$901	\$817
Initial Costs		4	8	\$919	\$0	\$0	\$919	\$794
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$165,702	5	9	\$937	\$0	\$0	\$937	\$771
Construction Cost	\$3,314,040	6	10	\$956	\$0	\$0	\$956	\$749
Scenario Preliminary Cost	\$0	7	11	\$975	\$0	\$0	\$975	\$728
Scenario Construction Cost	\$0	8	12	\$995	\$0	\$0	\$995	\$707
Recurring Costs		9	13	\$1,015	\$0	\$0	\$1,015	\$687
Annual O&M Cost ¹	\$800	10	14	\$1,035	\$333,865	\$0	\$334,900	\$215,879
10 Year Overhaul / Major Maint. Cost ²	\$263,250	11	15	\$1,056	\$0	\$0	\$1,056	\$648
Other Recurring Cost ³	\$0	12	16	\$1,077	\$0	\$0	\$1,077	\$630
"Other" Recurring Cost Period (years)	0	13	17	\$1,098	\$0	\$0	\$1,098	\$612
Discount Rate for Present Value Analysis		14	18	\$1,120	\$0	\$0	\$1,120	\$594
Discount Rate	5%	15	19	\$1,143	\$0	\$0	\$1,143	\$577
Inflation Rate (%)	2%	16	20	\$1,165	\$0	\$0	\$1,165	\$561
Notes: ¹ Inspections, reporting, minor maintenance ² ³		17	21	\$1,189	\$0	\$0	\$1,189	\$545
		18	22	\$1,213	\$0	\$0	\$1,213	\$529
		19	23	\$1,237	\$0	\$0	\$1,237	\$514
		20	24	\$1,262	\$406,979	\$0	\$408,241	\$161,555
		21	25	\$1,287	\$0	\$0	\$1,287	\$485
		22	26	\$1,312	\$0	\$0	\$1,312	\$471
		23	27	\$1,339	\$0	\$0	\$1,339	\$458
		24	28	\$1,366	\$0	\$0	\$1,366	\$445
		25	29	\$1,393	\$0	\$0	\$1,393	\$432
		26	30	\$1,421	\$0	\$0	\$1,421	\$420
		27	31	\$1,449	\$0	\$0	\$1,449	\$408
		28	32	\$1,478	\$0	\$0	\$1,478	\$396
		29	33	\$1,508	\$0	\$0	\$1,508	\$385
		30	34	\$1,538	\$496,105	\$0	\$497,643	\$120,901
	Total Expenditure:			\$3,689,282	\$35,130	\$1,236,949	\$0	\$4,961,361
		Total Net Present Value of Initial and Recurring Costs:					\$3,708,787	

Comfort Lake - Forest Lake Watershed District

Project: Bixby Park Wet Detention Optional (Future) Pond 2: CL30

Inputs		Annual Cost / Present Value Analysis						
		Annual Cost					Project Year 1 Present Value	
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)		Total Annual Cost
Project Time Frames								
Basis for Cost Estimates (Year)	1	11	\$ 119,898				\$119,898	\$73,607
F/S, Design, Admin, Legal Cost Incurred in Year	2	12	\$ 2,445,916				\$2,445,916	\$1,430,077
Planned Construction Cost Year	3	1	13	\$1,015	\$0	\$0	\$1,015	\$1,015
Scenario Year (Overrides Construction Year)	12	2	14	\$1,035	\$0	\$0	\$1,035	\$986
Project Life [years]	30 years	3	15	\$1,056	\$0	\$0	\$1,056	\$957
Initial Costs		4	16	\$1,077	\$0	\$0	\$1,077	\$930
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$98,358	5	17	\$1,098	\$0	\$0	\$1,098	\$904
Construction Cost	\$1,967,160	6	18	\$1,120	\$0	\$0	\$1,120	\$878
Scenario Preliminary Cost	\$0	7	19	\$1,143	\$0	\$0	\$1,143	\$853
Scenario Construction Cost	\$0	8	20	\$1,165	\$0	\$0	\$1,165	\$828
Recurring Costs		9	21	\$1,189	\$0	\$0	\$1,189	\$805
Annual O&M Cost ¹	\$800	10	22	\$1,213	\$221,778	\$0	\$222,990	\$143,741
10 Year Overhaul / Major Maint. Cost ²	\$149,250	11	23	\$1,237	\$0	\$0	\$1,237	\$759
Other Recurring Cost ³	\$0	12	24	\$1,262	\$0	\$0	\$1,262	\$738
"Other" Recurring Cost Period (years)	0	13	25	\$1,287	\$0	\$0	\$1,287	\$717
Discount Rate for Present Value Analysis		14	26	\$1,312	\$0	\$0	\$1,312	\$696
Discount Rate	5%	15	27	\$1,339	\$0	\$0	\$1,339	\$676
Inflation Rate (%)	2%	16	28	\$1,366	\$0	\$0	\$1,366	\$657
Notes: ¹ Inspections, reporting, minor maintenance ² ³		17	29	\$1,393	\$0	\$0	\$1,393	\$638
		18	30	\$1,421	\$0	\$0	\$1,421	\$620
		19	31	\$1,449	\$0	\$0	\$1,449	\$602
		20	32	\$1,478	\$270,346	\$0	\$271,824	\$107,570
		21	33	\$1,508	\$0	\$0	\$1,508	\$568
		22	34	\$1,538	\$0	\$0	\$1,538	\$552
		23	35	\$1,569	\$0	\$0	\$1,569	\$536
		24	36	\$1,600	\$0	\$0	\$1,600	\$521
		25	37	\$1,632	\$0	\$0	\$1,632	\$506
		26	38	\$1,665	\$0	\$0	\$1,665	\$492
		27	39	\$1,698	\$0	\$0	\$1,698	\$478
		28	40	\$1,732	\$0	\$0	\$1,732	\$464
		29	41	\$1,766	\$0	\$0	\$1,766	\$451
		30	42	\$1,802	\$329,550	\$0	\$331,352	\$80,501
	Total Expenditure:				\$2,565,814	\$41,160	\$821,673	\$0
		Total Net Present Value of Initial and Recurring Costs:						\$1,854,319

Comfort Lake - Forest Lake Watershed District

Project: In-Lake Alum Treatment: Comfort Lake

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value
		Annual Cost						
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost	
Project Time Frames								
Basis for Cost Estimates (Year)	1	10	\$ 81,724				\$81,724	\$52,680
F/S, Design, Admin, Legal Cost Incurred in Year	2	11	\$ 238,168				\$238,168	\$146,214
Planned Construction Cost Year	3	1	12	\$0	\$0	\$0	\$0	\$0
Scenario Year (Overrides Construction Year)	11	2	13	\$0	\$0	\$0	\$0	\$0
Project Life [years]	30 years	3	14	\$0	\$0	\$0	\$0	\$0
Initial Costs		4	15	\$0	\$0	\$0	\$0	\$0
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$68,383	5	16	\$0	\$348,030	\$0	\$348,030	\$286,325
Construction Cost	\$195,380	6	17	\$0	\$0	\$0	\$0	\$0
Scenario Preliminary Cost	\$0	7	18	\$0	\$0	\$0	\$0	\$0
Scenario Construction Cost	\$0	8	19	\$0	\$0	\$0	\$0	\$0
Recurring Costs		9	20	\$0	\$0	\$0	\$0	\$0
Annual O&M Cost ¹	\$0	10	21	\$0	\$384,254	\$0	\$384,254	\$247,693
5 Year Overhaul / Major Maint. Cost ²	\$263,764	11	22	\$0	\$0	\$0	\$0	\$0
Other Recurring Cost ³	\$0	12	23	\$0	\$0	\$0	\$0	\$0
"Other" Recurring Cost Period (years)	0	13	24	\$0	\$0	\$0	\$0	\$0
Discount Rate for Present Value Analysis		14	25	\$0	\$0	\$0	\$0	\$0
Discount Rate	5%	15	26	\$0	\$424,247	\$0	\$424,247	\$214,274
Inflation Rate (%)	2%	16	27	\$0	\$0	\$0	\$0	\$0
Notes: ¹ Inspections, reporting, minor maintenance ² Reapplication ³		17	28	\$0	\$0	\$0	\$0	\$0
		18	29	\$0	\$0	\$0	\$0	\$0
		19	30	\$0	\$0	\$0	\$0	\$0
		20	31	\$0	\$468,403	\$0	\$468,403	\$185,363
		21	32	\$0	\$0	\$0	\$0	\$0
		22	33	\$0	\$0	\$0	\$0	\$0
		23	34	\$0	\$0	\$0	\$0	\$0
		24	35	\$0	\$0	\$0	\$0	\$0
		25	36	\$0	\$517,155	\$0	\$517,155	\$160,353
		26	37	\$0	\$0	\$0	\$0	\$0
		27	38	\$0	\$0	\$0	\$0	\$0
		28	39	\$0	\$0	\$0	\$0	\$0
		29	40	\$0	\$0	\$0	\$0	\$0
		30	41	\$0	\$570,981	\$0	\$570,981	\$138,718
	Total Expenditure:				\$319,892	\$0	\$2,713,070	\$0
Total Net Present Value of Initial and Recurring Costs:								\$1,431,621

Comfort Lake - Forest Lake Watershed District

Project: Rough Fish Management: Comfort Lake

Inputs		Annual Cost / Present Value Analysis						Project Year 1 Present Value	
		Annual Cost							
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)	Total Annual Cost		
Project Time Frames									
Basis for Cost Estimates (Year)	1	10	\$ 6,525				\$6,525	\$4,206	
F/S, Design, Admin, Legal Cost Incurred in Year	2	11	\$ 19,016				\$19,016	\$11,674	
Planned Construction Cost Year	3	1	12	\$0	\$0	\$0	\$0	\$0	
Scenario Year (Overrides Construction Year)	11	2	13	\$0	\$16,238	\$0	\$16,238	\$15,465	
Project Life [years]	30 years	3	14	\$0	\$0	\$0	\$0	\$0	
Initial Costs									
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$5,460	4	15	\$0	\$16,895	\$0	\$16,895	\$14,594	
Construction Cost	\$15,600	5	16	\$0	\$0	\$0	\$0	\$0	
Scenario Preliminary Cost	\$0	6	17	\$0	\$17,577	\$0	\$17,577	\$13,772	
Scenario Construction Cost	\$0	7	18	\$0	\$0	\$0	\$0	\$0	
Recurring Costs									
Annual O&M Cost ¹	\$0	8	19	\$0	\$18,287	\$0	\$18,287	\$12,996	
2 Year Overhaul / Major Maint. Cost ²	\$13,060	9	20	\$0	\$0	\$0	\$0	\$0	
Other Recurring Cost ³	\$0	10	21	\$0	\$19,026	\$0	\$19,026	\$12,264	
"Other" Recurring Cost Period (years)	0	11	22	\$0	\$0	\$0	\$0	\$0	
Discount Rate for Present Value Analysis									
Discount Rate	5%	12	23	\$0	\$19,795	\$0	\$19,795	\$11,573	
Inflation Rate (%)	2%	13	24	\$0	\$0	\$0	\$0	\$0	
Notes:									
¹ Inspections, reporting, minor maintenance		14	25	\$0	\$20,594	\$0	\$20,594	\$10,922	
² Reapplication		15	26	\$0	\$0	\$0	\$0	\$0	
³		16	27	\$0	\$21,426	\$0	\$21,426	\$10,306	
		17	28	\$0	\$0	\$0	\$0	\$0	
		18	29	\$0	\$22,292	\$0	\$22,292	\$9,726	
		19	30	\$0	\$0	\$0	\$0	\$0	
		20	31	\$0	\$23,193	\$0	\$23,193	\$9,178	
		21	32	\$0	\$0	\$0	\$0	\$0	
		22	33	\$0	\$24,130	\$0	\$24,130	\$8,661	
		23	34	\$0	\$0	\$0	\$0	\$0	
		24	35	\$0	\$25,104	\$0	\$25,104	\$8,173	
		25	36	\$0	\$0	\$0	\$0	\$0	
		26	37	\$0	\$26,119	\$0	\$26,119	\$7,713	
		27	38	\$0	\$0	\$0	\$0	\$0	
		28	39	\$0	\$27,174	\$0	\$27,174	\$7,278	
		29	40	\$0	\$0	\$0	\$0	\$0	
		30	41	\$0	\$28,272	\$0	\$28,272	\$6,868	
Total Expenditure:				\$25,542	\$0	\$326,121	\$0	\$351,662	
Total Net Present Value of Initial and Recurring Costs:								\$175,372	

Comfort Lake - Forest Lake Watershed District

Project: Curly Leaf Pondweed Management: Comfort Lake

Inputs		Annual Cost / Present Value Analysis						
		Annual Cost					Project Year 1 Present Value	
		Project Year	Investment Costs	Annual O&M	Overhaul / Major Maintenance Cost	Other Future Costs (See notes)		Total Annual Cost
Project Time Frames								
Basis for Cost Estimates (Year)	1	10	\$ 6,012				\$6,012	\$3,875
F/S, Design, Admin, Legal Cost Incurred in Year	2	11	\$ 17,520				\$17,520	\$10,756
Planned Construction Cost Year	3	1	12	\$24,125	\$0	\$0	\$24,125	\$24,125
Scenario Year (Overrides Construction Year)	11	2	13	\$24,607	\$0	\$0	\$24,607	\$23,435
Project Life [years]	30 years	3	14	\$25,099	\$0	\$0	\$25,099	\$22,766
Initial Costs								
F/S, Design, Permitting, Legal, Land, Admin. Cost	\$5,030	4	15	\$25,601	\$0	\$0	\$25,601	\$22,115
Construction Cost	\$14,372	5	16	\$26,113	\$0	\$0	\$26,113	\$21,483
Scenario Preliminary Cost	\$0	6	17	\$26,635	\$0	\$0	\$26,635	\$20,870
Scenario Construction Cost	\$0	7	18	\$27,168	\$0	\$0	\$27,168	\$20,273
Recurring Costs								
Annual O&M Cost ¹	\$19,402	8	19	\$27,712	\$0	\$0	\$27,712	\$19,694
Year Overhaul / Major Maint. Cost ²	\$0	9	20	\$28,266	\$0	\$0	\$28,266	\$19,131
Other Recurring Cost ³	\$0	10	21	\$28,831	\$0	\$0	\$28,831	\$18,585
"Other" Recurring Cost Period (years)	0	11	22	\$29,408	\$0	\$0	\$29,408	\$18,054
Discount Rate for Present Value Analysis								
Discount Rate	5%	12	23	\$29,996	\$0	\$0	\$29,996	\$17,538
Inflation Rate (%)	2%	13	24	\$30,596	\$0	\$0	\$30,596	\$17,037
Notes:								
¹ Reapplication		14	25	\$31,208	\$0	\$0	\$31,208	\$16,550
²		15	26	\$31,832	\$0	\$0	\$31,832	\$16,077
³		16	27	\$32,468	\$0	\$0	\$32,468	\$15,618
		17	28	\$33,118	\$0	\$0	\$33,118	\$15,172
		18	29	\$33,780	\$0	\$0	\$33,780	\$14,738
		19	30	\$34,456	\$0	\$0	\$34,456	\$14,317
		20	31	\$35,145	\$0	\$0	\$35,145	\$13,908
		21	32	\$35,848	\$0	\$0	\$35,848	\$13,511
		22	33	\$36,565	\$0	\$0	\$36,565	\$13,125
		23	34	\$37,296	\$0	\$0	\$37,296	\$12,750
		24	35	\$38,042	\$0	\$0	\$38,042	\$12,385
		25	36	\$38,803	\$0	\$0	\$38,803	\$12,032
		26	37	\$39,579	\$0	\$0	\$39,579	\$11,688
		27	38	\$40,370	\$0	\$0	\$40,370	\$11,354
		28	39	\$41,178	\$0	\$0	\$41,178	\$11,029
		29	40	\$42,001	\$0	\$0	\$42,001	\$10,714
		30	41	\$42,841	\$0	\$0	\$42,841	\$10,408
Total Expenditure:			\$23,531	\$978,686	\$0	\$0	\$1,002,218	
Total Net Present Value of Initial and Recurring Costs:								\$505,112