

Attachment A: Budget Detail for M.L. 2013 Environment and Natural Resources Trust Fund Projects

Project Title: Sustaining Lakes in a Changing Environment (SLICE): Phase 2
Legal Citation: tbd
Project Manager: Dr. Donald L. Pereira
M.L. 2013 ENRTF Appropriation: \$1,200,000
Project Length and Completion Date: June 30, 2016
Date of Update: 12/31/2012

ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET	Activity 1 Budget	Amount Spent	Balance	Activity 2 Budget	Amount Spent	Balance	TOTAL BUDGET	TOTAL BALANCE
BUDGET ITEM	<i>Monitoring sentinel lakes to gage status and trends of lake health</i>			<i>Build or adapt biophysical lake ecosystem models and forecast future lake conditions</i>				
Personnel (Wages and Benefits) - Overall	539,983		539,983				539,983	539,983
3 Long-Term Monitoring Fisheries Specialists (8L): 77% salary, 23% benefits; 100% FTE (30 mos: Jul 1, 2013 - Dec 30, 2015) (Est. \$410,623)								
7 Student Interns: 100% salary; 100% FTE (14 weeks in FY14, 14 weeks in FY15, 14 weeks in FY16) (Est. \$129,360)								
Professional/Technical/Service Contracts								
USGS Water Sciences Center - Dr. Richard Kiesling (PI) <ul style="list-style-type: none"> Lake model construction (three 0.25 FTE Hydrologists for three years; \$183,644) Supplies (\$7,800) Travel (\$3,000) Water sample shipping (\$600) Analytical lab costs (\$13,100) 				207,544		207,544	207,544	207,544
Univ of St. Thomas, Dept. of Biology - Dr. Kyle Zimmer (PI) <ul style="list-style-type: none"> Collect, process, and analyze stable isotope samples to examine food web responses to expanding zebra mussel populations in Lake Carlos and to obtain baseline characterization of the Elk Lake food web - UST intern salary (Est. \$11,299) - Equipment and stable isotopes analytical costs (Est. \$31,003) - 1.5 mos summer salary for K. Zimmer (Est. \$13,010) 	55,312		55,312				55,312	55,312
UMN, Department of Entomology - Dr. Len Ferrington (PI) <ul style="list-style-type: none"> Sample chironomid pupal exuvia communities from 8 Tier 1 sentinel lakes, explore relationships within and among lakes, and develop indicators that reflect lake trophic and thermal conditions - Graduate Research Assistant (M.S.) - 2 yrs (Est. \$76,137) - Travel Expenses (Est. \$6,496) 	82,633		82,633				82,633	82,633
Direct and Necessary Services for the Appropriation	70,268		70,268				70,268	70,268
Equipment/Tools/Supplies (estimates, actual may vary slightly)								
Transducers for water level gauges	11,400		11,400				11,400	11,400
Temperature thermistors and buoys	16,400		16,400				16,400	16,400
Dissolved oxygen sensors (8 @ \$1250/ea) and buoys (\$1000)	11,000		11,000				11,000	11,000
Lowrance HDS7 depth finder with card and sidescan (1 @ \$1,700/ea)	1,700		1,700				1,700	1,700
Contour Innovations BioBase online subscription to aquatic bathymetric and vegetation mapping software for 8 Tier 1 lakes for 3 yrs	4,000		4,000				4,000	4,000
Factory calibration and new calibration sphere for Biosonics DTx (or Biosonics DTE) and 420 kHz transducer	2,000		2,000				2,000	2,000
2 sets of vertical gill nets (\$3,500/set)	7,000		7,000				7,000	7,000
Supplies for invertebrate sampling (e.g., sample jars and preservative ethanol)	4,000		4,000				4,000	4,000
Waders, rain gear, PPE, etc.	2,400		2,400				2,400	2,400
Miscellaneous survey equipment and repairs	16,000		16,000				16,000	16,000
Phytoplankton taxonomy (MN Rapid Assessment Method)	23,040		23,040				23,040	23,040
Analytical services (water chemistry \$29,160)	29,160		19,440				29,160	19,440
Travel expenses in Minnesota	116,160		125,880				116,160	125,880
For DNR field staff to conduct regular bi-monthly sampling to all study lakes, and specialized seasonal sampling at study lakes, and to attend coordination meetings (hotels, fleet costs, meals)								
COLUMN TOTAL	\$992,456		\$992,456	\$207,544		\$207,544	\$1,200,000	\$1,200,000

05/28/2013