



# *Lake Lemon Conservancy District*

## **LAKE LEMON CONSERVANCY DISTRICT**

Board of Directors Meeting

Benton Township Senior Citizens Building

April 16, 2014

6:00 p.m.

### **AGENDA**

- I. Call Meeting to Order / Chairman's Remarks (JS)
- II. Approval of March 19, 2014 Board Meeting Minutes (JS)
- III. Treasurer's Report (LE)
  - A. March Financial Update
  - B. Report of Claims Approval for March 2014
  - C. Resolution 04-14-01: DNR Vegetation Grant
  - D. Resolution 04-14-02: Dredging Equipment Loan
- IV. Dredging Study Group Updates (BM)
  - A. Recommendations
- V. Manager's Report (BM)
  - A. Dam Emergency Action Plan
  - B. Agreement: 2014 Dam Inspection, DLZ, Indiana LLC
- VI. Public Comment (JS)
- VII. New Business / Correspondence for Future Agenda (JS)
  - A. Next Board Meeting: May 21, 2014
- VIII. Adjournment (JS)

# Lake Lemon Conservancy District



## MONTHLY MEETING

Benton Township Senior Citizens Building

6:00 PM

Date: 4/16/14

Name	Lake Address	District
Todd Fisher	5963 North Shore Dr	VI
Sue Mullin	1334 Lavender Lane	II
JEFF STEVENS	6831 NORTH SHORE DR.	A
BRUCE CRESSAL	7721 N. TUNNEL RD	T
Bob Nichols	9400 Derrett Rd	
FRANCES NICHOLS	9400 Derrett Rd	
Barbara Ritter	7750 Wildwood Dr.	2
Ron Thrasher	4206 Channel Rd	7
Sara Under Salmon	707 E Spillway	II
MIKE BLACKWELL	4071 SALMON HARBOR RD	7
VINCENT BRITT	6486 SOUTHSIDE	7
SARA TALA	8920 Southshore	
TOM DIEHL	4162 Channel	7
SCOTT ADAMSON	4154 WALKER	7
JAY WIDFEN	7530 Lakewood DR	IV
JORDA WIDFEN	7530 Lakewood DR	IV

**Lake Lemon Conservancy District  
Board of Directors Meeting Minutes  
Benton Township Senior Center Building  
April 16, 2014**

**The April 16<sup>th</sup>, 2014 Board of Directors Meeting of the Lake Lemon Conservancy District was held at the Benton Township Senior Center Building and was called to order by Chairman John Schell at 6:00 P.M.**

**BOARD MEMBERS PRESENT: John Schell, Lance Eberle, Sue Miller, Kim Mayer, Dennis Friesel, and Tina Thrasher. ALSO PRESENT: Bob Madden, Manager; James Van Tassel, Board Recorder; and LLCD Freeholders (see attached sign-in sheet). ABSENT: Pam Dugan, Director.**

**I. Opening Comments (Schell)**

**II. Approval of March 19, 2014 Board Meeting Minutes (Schell)**

**MILLER MOTIONED TO APPROVE THE MARCH 19, 2014 BOARD MEETING MINUTES. EBERLE SECONDED THE MOTION. ALL "AYE'S". THE MOTION CARRIED.**

**III. Treasurer's Report (Eberle)**

**a. March Financial Highlights**

**i. Notable revenue: Watercraft Permits**

**ii. Notable expenses: Salaries due to seasonal staff beginning to work.**

**THRASHER MOTIONED TO APPROVE THE MARCH 2014 TREASURER'S REPORT. SCHELL SECONDED THE MOTION. ALL "AYE'S". THE MOTION CARRIED.**

**b. Report of Claims Approval for March 2014**

**THRASHER MOTIONED TO APPROVE THE ALLOWNACE OF VOUCHERS FOR MARCH 2014. MILLER SECONDED THE MOTION. ALL "AYE'S". THE MOTION CARRIED.**

**c. Resolution 04-14-01: DNR Vegetation Grant**

**i. The LLCD received a \$5,000.00 DNR-LARE Grant for treatment of aquatic vegetation in the reservoir.**

**SCHELL MOTIONED TO APPROVE RESOLUTION 04-14-01: DNR VEGETATION GRANT. MAYER SECONDED THE MOTION. ALL "AYE'S". THE MOTION CARRIED.**

d. Resolution 04-14-02: Dredging Equipment Loan

- i. First Option: Make an additional \$25,000.00 principal payment on April 30, 2014, which would allow the loan to be paid off in October 2014.
- ii. Second Option: Pay off the loan by April 30, 2014. This requires no renewal of the loan and saves money in interest payments. We have sufficient funds in the checking account, especially with Brown and Monroe County Tax Settlement checks coming in June 2014. The payoff of the Dredging Equipment Loan would be \$57,641.00 if paid by April 30, 2014.
  1. Eberle recommended paying the loan off by April 30, 2014.
  2. Schell asked the other Board Members and they were all in agreement that the loan should be paid off by April 30, 2014 if funds are sufficient.

**EBERLE MOTIONED TO APPROVE RESOLUTION 04-14-02 AND PAY OFF THE DREDGING EQUIPMENT LOAN BY APRIL 30, 2014 FOR A TOTAL OF \$57,641.00. MILLER SECONDED THE MOTION. ALL "AYE'S". THE MOTION CARRIED.**

**IV. Dredging Study Group: Recommendations (Madden)**

- a. Thrasher was absent (illness) for the last DSG Meeting, and with Dugan absent this evening, Madden presented the recommendations.
- b. The DSG discussed available vendors for barge design. The DSG found no sufficient vendors. The DSG reiterates their recommendation to use Carl R. Payne, Payne Excavating. The DSG has concluded that Payne with his experience on Lake Lemon and in the design/building of three previous barges used on Lake Lemon, he is the best option. At this time the DSG recommends to the Board to enter into an agreement with Carl R. Payne as a consultant for the design and construction oversight of a small barge this fall/winter 2014/2015. Payne's fee will be 15% of final cost of barge.
- c. The DNR-LARE grant proposal for a sediment depth, bathymetry and volume assessment of Lake Lemon was denied because the LLC has reached the funding cap for sediment removal projects.
- d. The DSG recommends to the Board to have Management approach the CBU to cost share the expense of the study. Estimated total cost of project not to exceed \$30,000.00.

- e. Additionally, the DSG recommends to the Board to enter into agreements with Image Matters, LLC and ReMetrix, LLC to complete the study/assessment.
- f. Comments
  - i. The LLCD is required to send out bids on the smaller barge equipment. The LLCD Office will compile the necessary paperwork and bid materials for Board review.
  - ii. Schell asked if an “errors and omissions” clause will be in Payne’s agreement. Eberle will check on this matter.

**THRASHER MOTIONED TO APPROVE THE DSG RECOMMENDATIONS: ENTER INTO AGREEMENT WITH CARL R. PAYNE, PAYNE EXCAVATING; IMAGE MATTERS, LLC; AND REMETRIX LLC; AND TO HAVE MADDEN APPROACH THE CBU IN PARTNERING ON THE BATHYMETRY/SEDIMENT ASSESMENT COST. MILLER SECONDED THE MOTION. ALL “AYE’S”. THE MOTION CARRIED.**

**V. Manager’s Report (Madden)**

- a. Dam Emergency Action Plan
  - i. Christopher Burke, an engineering firm in Indianapolis, has been awarded a Homeland Security Grant for Incident and Emergency Action Plans for High Hazard Dams around Indiana. Lake Lemon has been selected by DNR for this program.
  - ii. The LLCD had looked into an EAP in the past, but the cost was expected to be \$20,000.00-\$30,000.00. The grant pays 100% of cost of the plan.
  - iii. The LLCD will set up a meeting with a representative from Christopher Burke and proceed with implementing an EAP.
  - iv. Please note the LLCD’s dam is classified as “high hazard” due to the fact that there are homes downstream.

**EBERLE MOTIONED TO APPROVE IMPEMETING AN EMERGENCY ACTION PLAN FOR THE LAKE LEMON DAM WITH CHRISTOPHER BURKE ENGINEERING. THRASHER SECONDED THE MOTION. ALL “AYE’S”. THE MOTION CARRIED.**

- b. Agreement: 2014 Dam Inspection, DLZ, Indiana LLC
  - i. DLZ performs a dam inspection every two years. It will be inspected in October 2014.

- ii. Management recommends approval of Professional Services Agreement with DLZ, Indiana LLC.

**EBERLE MOTIONED TO APPROVE THE AGREEMENT WITH DLZ, INDIANA LLC. MILLER SECONDED THE MOTION. ALL "AYE'S". THE MOTION CARRIED.**

**VI. Public Comment**

- a. Jeff Stevens (VI) informed the Board and Freeholders he had a rifle round hit his roof. Everyone is ok, but wanted to inform the Board.
- b. Susan Salmon (II) commented she will be working on Terrestrial Invasive Species Reduction around Lake Lemon. Anyone interested in helping or having knowledge of invasives around the lake can contact Salmon.
- c. Sura Gail Tala (V) commented since the lake was not lowered there was lots of dock damage due to ice.
  - i. Eberle commented the Board will take all feedback into account on their decision for next year.
- d. Ron Thrasher (VII) asked what the match will be for the CBU partnership on the bathymetry/sediment assessment?
  - i. Madden replied the LLCD is asking for a 50% match of final cost.

**VII. New Business / Correspondence for Future Agenda**

- a. Next Board Meeting: May 21, 2014 at the Benton Township Senior Citizens Building at 6:00 PM.

**VIII. Adjournment**

**MILLER MOTIONED TO ADJOURN THE APRIL 16, 2014 BOARD OF DIRECTORS MEETING. EBERLE SECONDED THE MOTION. ALL "AYE'S". THE MOTION CARRIED. MEETING ADJOURNED AT 7:10 PM.**

**RESPECTFULLY SUBMITTED BY:**

**JAMES VAN TASSEL**

**BOARD RECORDER**

Lake Lemon Conservancy District  
Budget Summary Report

16-Apr-14

Profit and Loss Summary	January Actuals	February Actuals	March Actuals	YTD Actuals	Notes
Revenue	\$6,219	\$12,502	\$13,968	\$32,689	
<b>Income Breakdown</b>					
Watercraft Permits			\$4,550	\$4,550	
Launch Fees			\$1,628	\$1,628	
Marina & Club Fees	\$0	\$0	\$2,000	\$2,000	
Sublease & Access Fees	\$5,550	\$12,450	\$4,210	\$22,210	
Property Tax - Brown County				\$0	
Property Tax - Monroe County				\$0	
Interest	\$169	\$52	\$181	\$402	
Grants & Donations	\$0	\$0	\$10	\$10	
Fish Tournaments	\$500	\$0	\$75	\$575	
Park/Lake Reservations	\$0	\$0	\$500	\$500	
Dredging/Rip-Rap Income	0		\$0	\$0	
Other Income			\$814	\$814	
<b>Expenses &amp; Margin:</b>					
SG&A expenses	\$29,488	\$12,772	\$22,924	\$65,183	
Salaries & Benefits	\$10,793	\$9,807	\$10,256	\$30,857	
Supplies	\$976	\$466	\$2,178	\$3,620	Permits, Dredging
Professional Services	\$853	\$450	\$840	\$2,143	
Communication/Travel	\$236	\$286	\$306	\$827	
Printing/Advertising	\$245	\$24	\$11	\$280	
Insurance	\$14,914	\$1,166	\$7,985	\$24,065	
Utility Services	\$450	\$573	\$456	\$1,479	
Repair & Maintenance	\$240	\$0	\$891	\$1,131	Boat
Other Services	\$0	\$0	\$0	\$0	
Machinery & Equipment	\$0	\$0	\$0	\$0	
Other Capital Outlays	\$781	\$0	\$0	\$781	
Pretax operating profit (loss)	(\$23,269)	(\$269)	(\$8,956)	(\$32,494)	
Operating margin	-374.2%	-2.2%	-64.1%	-99.4%	

Balance Sheet Summary	January	February Actuals	March Actuals		
Checking/Savings	\$128,355	\$128,355	\$119,359		
General Fund CDs	\$216,009	\$216,009	\$216,009		
Cumulative Maintenance Fund CDs	\$71,797	\$71,797	\$71,797		
<b>Other Balance Sheet Items:</b>					
Fixed Assets	\$494,943	\$494,943	\$494,943		
Accounts payable	\$1,921	\$2,191	\$2,151		
Long-term liabilities	\$58,023	\$58,023	\$58,023		
Equity	\$851,159	\$850,890	\$841,934		

**LAKE LEMON CONSERVANCY**

**Financial Statements**

**For the Period Ending**

**January 1, 2014 thru March 31, 2014**

**(UNAUDITED)**

**Watkins Accounting  
113 E. 19<sup>th</sup> Street  
Bloomington, IN 47408**



## LAKE LEMON CONSERVANCY

I have prepared the financial statements for Lake Lemon Conservancy as of March 31, 2014 on the basis used in the preparation of its federal income tax returns. The tax returns are prepared on the accrual basis when appropriate.

The following are the company's significant accounting policies under this basis:

Income Tax. No provision or liability for income taxes has been included in the financial statements.

Provision for Doubtful Accounts. No provision for doubtful accounts is made. The company follows the practice of charging off all accounts deemed uncollectible directly to expense.

Property and Equipment. Property and equipment, as well as liabilities pertaining thereto, are recorded at cost as determined for income tax purposes.

Shirley Watkins, CPA  
April 7, 2014

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04/07/14

Accrual Basis

## LAKE LEMON CONSERVANCY

## Balance Sheet

As of March 31, 2014

	Mar 31, 14
<b>ASSETS</b>	
Current Assets	
Checking/Savings	
1000 · Peoples State Bank	117,861.80
1010 · Petty Cash	100.00
1020 · Change Fund	200.00
1030 · CD's General Fund	216,008.85
1040 · CD's Cumulative Maint Fund	71,796.67
1050 · Savings Account	1,197.62
Total Checking/Savings	407,164.94
Total Current Assets	407,164.94
Fixed Assets	
1510 · Trucks	132,761.25
1520 · Other Asset	35,350.00
1550 · Boats	209,750.00
1680 · Other Fixed Assets	117,082.00
Total Fixed Assets	494,943.25
<b>TOTAL ASSETS</b>	<b>902,108.19</b>
<b>LIABILITIES &amp; EQUITY</b>	
Liabilities	
Current Liabilities	
Other Current Liabilities	
2010 · FICA & Federal Taxes Payable	1,828.30
2020 · State & Co. Withholding Payable	322.35
Total Other Current Liabilities	2,150.65
Total Current Liabilities	2,150.65
Long Term Liabilities	
2800 · Long Term Notes-Net of Current	58,023.29
Total Long Term Liabilities	58,023.29
Total Liabilities	60,173.94
Equity	
3000 · Opening Balance Equity	101,373.66
3040 · General Fund	568,661.67
3050 · Encumbered Fund	55.00
3060 · Cumulative Maintenance Fund	38,441.47
3200 · Retained Earnings	165,896.75
Net Income	-32,494.30
Total Equity	841,934.25
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<b>902,108.19</b>

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Accrual Basis

# LAKE LEMON CONSERVANCY

## Profit & Loss YTD Comparison

### March 2014

	Mar 14	Jan - Mar 14
<b>Income</b>		
4000 · Watercraft Permits	4,550.00	4,550.00
4010 · Launch Fees	1,628.00	1,628.00
4020 · Marina & Club Fees	2,000.00	2,000.00
4030 · Sublease & Access Fees	4,210.00	22,210.00
4060 · Interest	181.12	402.40
4070 · Grants & Donations	10.00	10.00
4080 · Fishing Tournament	75.00	575.00
4090 · Park Reservations	500.00	500.00
4120 · Other Income	813.75	813.75
<b>Total Income</b>	<b>13,967.87</b>	<b>32,689.15</b>
<b>Expense</b>		
6000 · Manager	4,582.58	13,747.74
6010 · FICA	556.35	1,577.29
6020 · State Unemployment Tax	0.00	17.57
6030 · Retirement	325.36	1,924.67
6040 · Health Insurance	2,102.28	5,465.30
6050 · Life Insurance	0.00	1,263.00
6110 · Lake Biologist	1,429.88	4,107.51
6112 · Dredger (Other)	1,260.00	2,754.00
6120 · Season & Launch Permits	1,246.83	1,246.83
6140 · Receipt/Tickets Books	0.00	347.05
6160 · Printer, Copier & Computer Supp	0.00	50.96
6170 · Miscellaneous-Other	9.99	156.19
6180 · Postage	98.00	210.17
6190 · General Business Supplies	10.00	200.98
6200 · Regular Gas	88.42	154.92
6210 · Diesel	0.00	207.80
6240 · Building & Grounds	70.80	187.84
6250 · Boat/Weed Harvester/Truck	437.36	485.64
6251 · Dredging Supplies	217.00	371.52
6300 · Accounting Services	450.00	1,350.00
6320 · Attorney	390.00	645.00
6350 · Other Prof/Secretarial Service	0.00	148.00
6370 · Phone, LDT, Pager, E-Mail	235.59	706.77
6380 · Travel	70.00	70.00
6410 · Subscriptions	0.00	50.00
6430 · Ads	10.83	35.29
6440 · Other	0.00	245.00
6450 · Insurance	7,985.00	24,064.75
6460 · Electric	413.95	1,269.85
6470 · Water	42.14	126.42
6480 · Trash	0.00	82.89
6510 · Building & Grounds Expense	185.00	185.00
6520 · Boat	706.25	946.25
6670 · Debt Service (Dredging Equip.)	0.00	781.25
<b>Total Expense</b>	<b>22,923.61</b>	<b>65,183.45</b>
<b>Net Income</b>	<b>-8,955.74</b>	<b>-32,494.30</b>

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04/07/14

Accrual Basis

**LAKE LEMON CONSERVANCY**  
**Profit & Loss Budget vs. Actual**  
 January through March 2014

	Jan - Mar 14	Budget	\$ Over Budget	% of Budget
<b>Income</b>				
4000 · Watercraft Permits	4,550.00	102,000.00	-97,450.00	4.5%
4010 · Launch Fees	1,628.00	16,000.00	-14,372.00	10.2%
4020 · Marina & Club Fees	2,000.00	8,000.00	-6,000.00	25.0%
4030 · Sublease & Access Fees	22,210.00	26,000.00	-3,790.00	85.4%
4040 · Property Tax - Brown Co.	0.00	65,000.00	-65,000.00	0.0%
4050 · Property Tax - Monroe Co.	0.00	185,000.00	-185,000.00	0.0%
4060 · Interest	402.40	2,500.00	-2,097.60	16.1%
4070 · Grants & Donations	10.00	6,000.00	-5,990.00	0.2%
4080 · Fishing Tournament	575.00	800.00	-225.00	71.9%
4090 · Park Reservations	500.00	4,500.00	-4,000.00	11.1%
4100 · Park Admission Fees	0.00	27,000.00	-27,000.00	0.0%
4110 · Concessions	0.00	0.00	0.00	0.0%
4120 · Other Income	813.75	0.00	813.75	100.0%
4130 · Dredging/Rip-Rap Income	0.00	20,000.00	-20,000.00	0.0%
<b>Total Income</b>	<b>32,689.15</b>	<b>462,800.00</b>	<b>-430,110.85</b>	<b>7.1%</b>
<b>Expense</b>				
6000 · Manager	13,747.74	54,991.00	-41,243.26	25.0%
6010 · FICA	1,577.29	11,681.00	-10,103.71	13.5%
6020 · State Unemployment Tax	17.57	314.00	-296.43	5.6%
6030 · Retirement	1,924.67	7,809.00	-5,884.33	24.6%
6040 · Health Insurance	5,465.30	21,000.00	-15,534.70	26.0%
6050 · Life Insurance	1,263.00	1,263.00	0.00	100.0%
6070 · Gate Attendant	0.00	15,000.00	-15,000.00	0.0%
6080 · Seasonal Labor	0.00	0.00	0.00	0.0%
6090 · Park Maintenance Technician	0.00	0.00	0.00	0.0%
6100 · Lake Patrol	0.00	4,800.00	-4,800.00	0.0%
6110 · Lake Biologist	4,107.51	21,700.00	-17,592.49	18.9%
6111 · Dredger	0.00	21,600.00	-21,600.00	0.0%
6112 · Dredger (Other)	2,754.00	13,500.00	-10,746.00	20.4%
6113 · Assistant Dredger	0.00	10,500.00	-10,500.00	0.0%
6114 · Assistant Dredger (Other)	0.00	5,250.00	-5,250.00	0.0%
6115 · Dredger (Private)	0.00	3,600.00	-3,600.00	0.0%
6116 · Assistant Dredger (Private)	0.00	1,750.00	-1,750.00	0.0%
6120 · Season & Launch Permits	1,246.83	1,200.00	46.83	103.9%
6130 · Daily Permits	0.00	300.00	-300.00	0.0%
6140 · Receipt/Tickets Books	347.05	400.00	-52.95	86.8%
6150 · Checks	0.00	200.00	-200.00	0.0%
6160 · Printer, Copier & Computer Supp	50.96	500.00	-449.04	10.2%
6170 · Miscellaneous-Other	156.19	1,300.00	-1,143.81	12.0%
6180 · Postage	210.17	1,300.00	-1,089.83	16.2%
6190 · General Business Supplies	200.98	500.00	-299.02	40.2%
6200 · Regular Gas	154.92	5,000.00	-4,845.08	3.1%
6210 · Diesel	207.80	14,000.00	-13,792.20	1.5%
6240 · Building & Grounds	187.84	3,500.00	-3,312.16	5.4%
6250 · Boat/Weed Harvester/Truck	485.64	2,000.00	-1,514.36	24.3%

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04/07/14

Accrual Basis

**LAKE LEMON CONSERVANCY**  
**Profit & Loss Budget vs. Actual**  
 January through March 2014

	Jan - Mar 14	Budget	\$ Over Budget	% of Budget
6251 · Dredging Supplies	371.52	9,000.00	-8,628.48	4.1%
6252 · Rip Rap/Erosion Control	0.00	8,000.00	-8,000.00	0.0%
6270 · Boat Equipment	0.00	300.00	-300.00	0.0%
6290 · Signs & Nautical Markers	0.00	2,500.00	-2,500.00	0.0%
6300 · Accounting Services	1,350.00	5,400.00	-4,050.00	25.0%
6310 · Grass	0.00	10,875.00	-10,875.00	0.0%
6320 · Attorney	645.00	6,000.00	-5,355.00	10.8%
6330 · Consulting Engineer	0.00	15,000.00	-15,000.00	0.0%
6350 · Other Prof/Secretarial Service	148.00	500.00	-352.00	29.6%
6370 · Phone, LDT, Pager, E-Mail	706.77	2,900.00	-2,193.23	24.4%
6380 · Travel	70.00			
6410 · Subscriptions	50.00	300.00	-250.00	16.7%
6430 · Ads	35.29	300.00	-264.71	11.8%
6440 · Other	245.00	1,300.00	-1,055.00	18.8%
6450 · Insurance	24,064.75	48,000.00	-23,935.25	50.1%
6460 · Electric	1,269.85	4,500.00	-3,230.15	28.2%
6470 · Water	126.42	600.00	-473.58	21.1%
6480 · Trash	82.89	1,100.00	-1,017.11	7.5%
6490 · Port-O-Lets	0.00	2,200.00	-2,200.00	0.0%
6500 · Pump Holding Tank	0.00	500.00	-500.00	0.0%
6510 · Building & Grounds Expense	185.00	4,000.00	-3,815.00	4.6%
6520 · Boat	946.25	1,500.00	-553.75	63.1%
6530 · Truck	0.00	1,000.00	-1,000.00	0.0%
6541 · Dredging Equipment Maintenance	0.00	7,000.00	-7,000.00	0.0%
6542 · Equipment Rental	0.00	2,000.00	-2,000.00	0.0%
6560 · Water Testing	0.00	4,300.00	-4,300.00	0.0%
6570 · Lake Weed Treatment	0.00	50,000.00	-50,000.00	0.0%
6590 · Contingency Funds 10%	0.00	5,000.00	-5,000.00	0.0%
6600 · 6% MarinaPermit Sales	0.00	2,300.00	-2,300.00	0.0%
6610 · Cumulative Maintenance Fund	0.00	5,000.00	-5,000.00	0.0%
6620 · Dam/Spillway Inspection	0.00	4,650.00	-4,650.00	0.0%
6630 · Spillway Repairs	0.00	10,000.00	-10,000.00	0.0%
6661 · Disposal Site Preparation	0.00	5,000.00	-5,000.00	0.0%
6662 · Debt Service-Dredging Loan	11,718.75	46,000.00	-34,281.25	25.5%
6670 · Debt Service (Dredging Equip.)	781.25			
6680 · Other Services and Charges	0.00	3,000.00	-3,000.00	0.0%
6681 · Fireworks	0.00	7,000.00	-7,000.00	0.0%
<b>Total Expense</b>	<b>76,902.20</b>	<b>501,983.00</b>	<b>-425,080.80</b>	<b>15.3%</b>
<b>Net Income</b>	<b>-44,213.05</b>	<b>-39,183.00</b>	<b>-5,030.05</b>	<b>112.8%</b>



# Lake Lemon Conservancy District

Date: March 31, 2014

## ALLOWANCE OF VOUCHERS

Lance Eberle  
Treasurer

### (Report of Claims)

(IC 5-11-10-2 permits the governing body to sign the Accounts Payable Voucher Register in lieu of signing each claim the governing body is allowing.) We have examined the vouchers listed on the foregoing accounts payable voucher register and payroll journal, consisting of 4 pages, and except for vouchers not allowed as shown on the Register such vouchers are allowed in the total of \$20,448.20

Dated this 16<sup>th</sup> day of April 2014

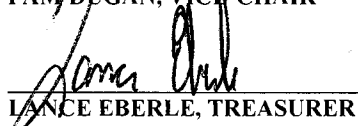
### Signature of Governing Board



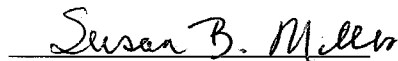
JOHN SCHELL, CHAIRMAN



PAM DUGAN, VICE-CHAIR



LANCE EBERLE, TREASURER



SUE MILLER, Sub-Area II



KIM MAYER, Sub-Area III



DENNIS FRIESEL, Sub-Area X



TINA THRASHER, Sub-Area VII

4:40 PM

04/07/14

**LAKE LEMON CONSERVANCY**  
**Check Detail**  
**March 2014**

Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
Check	2933	3/7/2014	B & B WATER CORP		1000 · Peoples Sta...		-42.14
				6470 · Water		-42.14	42.14
TOTAL						-42.14	42.14
Check	2934	3/7/2014	STAPLES CREDIT ...		1000 · Peoples Sta...		-38.79
				6170 · Miscellaneou...		-9.99	9.99
				6190 · General Busi...		-10.00	10.00
				6240 · Building & G...		-18.80	18.80
TOTAL						-38.79	38.79
Check	2935	3/7/2014	HOOSIER TIMES, I...		1000 · Peoples Sta...		-5.53
				6430 · Ads		-5.53	5.53
TOTAL						-5.53	5.53
Check	2936	3/7/2014	BROWN CO DEM...		1000 · Peoples Sta...		-5.30
				6430 · Ads		-5.30	5.30
TOTAL						-5.30	5.30
Check	2940	3/14/2014	WATKINS ACCOU...		1000 · Peoples Sta...		-450.00
				6300 · Accounting ...		-450.00	450.00
TOTAL						-450.00	450.00
Check	2941	3/14/2014	ALL ABOUT BOATS		1000 · Peoples Sta...		-364.69
				6250 · Boat/Weed ...		-120.94	120.94
				6520 · Boat		-228.75	228.75
				6200 · Regular Gas		-15.00	15.00
TOTAL						-364.69	364.69
Check	2942	3/14/2014	BAUGH ENTERPRI...		1000 · Peoples Sta...		-1,246.83
				6120 · Season & La...		-1,246.83	1,246.83
TOTAL						-1,246.83	1,246.83

# LAKE LEMON CONSERVANCY

## Check Detail

March 2014

Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
Check	2943	3/14/2014	COMCAST CABLE		1000 · Peoples Sta...	-202.75	-202.75
					6370 · Phone, LDT,...	-202.75	202.75
TOTAL						-202.75	202.75
Check	2945	3/14/2014	ANDREWS, HARR...		1000 · Peoples Sta...	-390.00	-390.00
					6320 · Attorney	-390.00	390.00
TOTAL						-390.00	390.00
Check	2946	3/18/2014	ANTHEM BLUE CR...		1000 · Peoples Sta...	-2,102.28	-2,102.28
					6040 · Health Insur...	-2,102.28	2,102.28
TOTAL						-2,102.28	2,102.28
Check	2947	3/18/2014	VERIZON WIRELE...		1000 · Peoples Sta...	-32.84	-32.84
					6370 · Phone, LDT,...	-32.84	32.84
TOTAL						-32.84	32.84
Check	2948	3/18/2014	VISA		1000 · Peoples Sta...	-555.42	-555.42
					6180 · Postage	-98.00	98.00
					6200 · Regular Gas	-73.42	73.42
					6240 · Building & G...	-52.00	52.00
					6250 · Boat/Weed ...	-115.00	115.00
					6251 · Dredging Su...	-217.00	217.00
TOTAL						-555.42	555.42
Check	2949	3/28/2014	COMMERCIAL SE...		1000 · Peoples Sta...	-185.00	-185.00
					6510 · Building & G...	-185.00	185.00
TOTAL						-185.00	185.00
Check	2950	3/28/2014	FIRST INSURANC...		1000 · Peoples Sta...	-7,985.00	-7,985.00
					6450 · Insurance	-7,985.00	7,985.00
TOTAL						-7,985.00	7,985.00



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04/07/14

## LAKE LEMON CONSERVANCY

## Check Detail

March 2014

Type	Num	Date	Name	Item	Account	Paid Amount	Original Amount
Check	2951	3/28/2014	SCI REMC		1000 · Peoples Sta...		-413.95
					6460 · Electric	-413.95	413.95
TOTAL						-413.95	413.95
Check	2954	3/31/2014	ALL ABOUT BOATS		1000 · Peoples Sta...		-678.92
					6250 · Boat/Weed ...	-201.42	201.42
					6520 · Boat	-477.50	477.50
TOTAL						-678.92	678.92
Check	3030	3/28/2014	ILMS		1000 · Peoples Sta...		-70.00
					6380 · Travel	-70.00	70.00
TOTAL						-70.00	70.00

\$ 14,769.44

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04/07/14

**LAKE LEMON CONSERVANCY**  
**Payroll Summary**  
**March 2014**

	MADDEN, ROBERT E			VanTassel, James P			WARTHAN, LEVI R			TOTAL		
	H	Rate	Mar 14	Hours	Rate	Mar 14	Hours	Rate	Mar 14	Hours	Rate	Mar 14
<b>Employee Wages, Taxes and Adjustments</b>												
Gross Pay												
Salary			4,582.58			0.00			0.00			4,582.58
HOURLY PAY-6110			0.00	92.25	15.50	1,429.88			0.00	92.25		1,429.88
Reg.Pay-6111			0.00			0.00		35.00	0.00			0.00
Reg.Pay-6112			0.00			0.00	35	36.00	1,260.00	35.00		1,260.00
Reg.Pay 6113			0.00		17.00	0.00			0.00			0.00
Total Gross Pay			4,582.58	92.25		1,429.88	35		1,260.00	127.25		7,272.46
Deductions from Gross Pay												
Insurance			0.00			0.00			0.00			0.00
Total Deductions from Gross Pay			0.00			0.00			0.00			0.00
Adjusted Gross Pay			4,582.58	92.25		1,429.88	35		1,260.00	127.25		7,272.46
Taxes Withheld												
Federal Withholding			-506.00			-78.00			-131.00			-715.00
Medicare Employee			-66.45			-20.73			-18.27			-105.45
Social Security Employee			-284.12			-88.66			-78.12			-450.90
IN - Withholding			-155.80			-48.61			-42.84			-247.25
Hamilton Co			0.00			-14.30			0.00			-14.30
Monroe Co.			-47.66			0.00			-13.14			-60.80
Total Taxes Withheld			-1,060.03			-250.30			-283.37			-1,593.70
Net Pay			3,522.55	92.25		1,179.58	35		976.63	127.25		5,678.76
Employer Taxes and Contributions												
Federal Unemployment			0.00			8.58			7.56			16.14
Medicare Company			66.45			20.73			18.27			105.45
Social Security Company			284.12			88.66			78.12			450.90
IN - Unemployment Company			4.14			17.67			15.57			37.38
Total Employer Taxes and Contributions			354.71			135.64			119.52			609.87



# Lake Lemon Conservancy District

## RESOLUTION 04-14-01

**WHEREAS**, the Lake Lemon Conservancy District (LLCD), on March 20, 2014, was conditionally awarded a \$5,000.00 Grant for exotic vegetation control from the Indiana Department of Natural Resources Lake and River Enhancement Program, and

**WHEREAS**, the LLCD Board of Directors, by unanimous vote, officially accepted the grant at it's April 16, 2014 Board Meeting, and

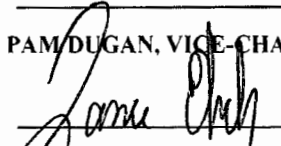
**THEREFORE, IT IS RESOLVED THAT** the Board of Directors of the Lake Lemon Conservancy District here-by authorizes an additional expenditure of \$5,000.00 for exotic vegetation control in 2014.

**ADOPTED BY THE FOLLOWING VOTE: this 16<sup>th</sup> Day of April 2014.**

**AYE**  
  
JOHN SCHELL, CHAIRMAN

**NAY**

**ABSTAIN**

  
PAM DUGAN, VICE-CHAIR

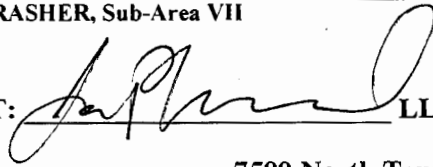
  
LANCE EBERLE, TREASURER

  
SUE MILLER, Sub-Area II

  
KIM MAYER, Sub-Area III

  
DENNIS FRIESEL, Sub-Area V

  
TINA THRASHER, Sub-Area VII

ATTEST:  LLCD Board Recorder



# Lake Lemon Conservancy District

## RESOLUTION 04-14-02

The Board of Directors of Lake Lemon Conservancy District (the "LLCD") hereby adopts the following resolutions as the resolutions and actions of the Directors of the LLCD. These resolutions will be filed with the records of the LLCD as the duly authorized actions of the Directors.

WHEREAS, by Resolution of the Board, the LLCD acquired dredging equipment ("Equipment") in April 2010;

WHEREAS, in order to finance the purchase of the Equipment, the LLCD obtained a loan from The Peoples State Bank ("Lender") in the sum of Two Hundred Seven Thousand Four Hundred Twenty-Five and 00/100 Dollars (\$207,425.00), which financing is secured by a UCC filing on the Equipment in favor of Lender;

WHEREAS, the loan was acquired for an initial two-year term; was renewed for a two year term; and now needs to be renewed for a final term of fifteen months;

WHEREAS, the District now desires to pay off the loan instead of renewing it for a fifteen month term;

NOW, THEREFORE, BE IT RESOLVED: that the Lake Lemon Conservancy District does hereby approve paying off the loan between the LLCD and Lender in the total projected sum of Fifty Seven Thousand Six Hundred Forty One Dollars (\$57,641.00) on April 30, 2014. See Exhibit "A"

IT IS FURTHER RESOLVED that LLCD Directors John Schell and Lance Eberle, along with LLCD Manager Bob Madden are hereby authorized to execute documents, certificates, instruments, agreements, and statements required to carry out the actions authorized by this Resolution, consistently with the directives set forth above.

IT IS FURTHER RESOLVED that all transactions, if any, in respect to the above-described actions and/or accompanying documents by or on behalf of the LLCD prior to the adoption of this Resolution be, and the same hereby are, in all things ratified, approved, and confirmed.

This action has been taken in accordance with the Indiana Conservancy District Act, Ind. Code § 14-33-1-1 *et seq.*

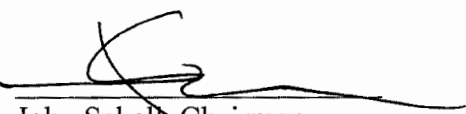
Dated and effective this 16<sup>th</sup> day of April, 2014.

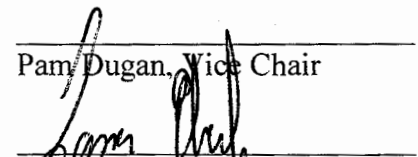
**ADOPTED BY THE FOLLOWING VOTE:**

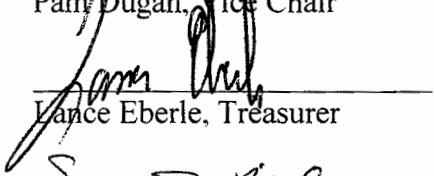
**AYE**

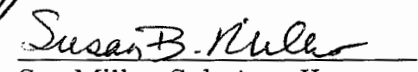
**NAY**

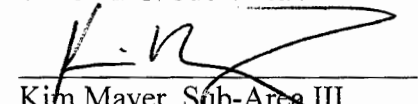
**ABSTAIN**

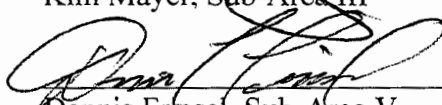
  
John Schell, Chairman

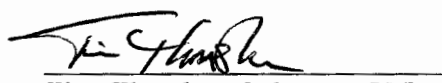
  
Pam Dugan, Vice Chair

  
Lance Eberle, Treasurer


  
Sue Miller, Sub-Area II

  
Kim Mayer, Sub-Area III

  
Dennis Frresel, Sub-Area V

  
Tina Thrasher, Sub-Area VII

ATTEST:

  
LLCD Board Recorder

## THE PEOPLES STATE BANK



April 1, 2014

Lake Lemon Conservancy District  
ATTN: Bob Madden  
7599 N Tunnel Rd.  
Unionville, IN 47468

Bob,

Per your request, please find attached the payoff quote of the equipment loan that LLCD has with The Peoples State Bank.

The current loan matures as of May 1, 2014 with one remaining quarterly principal and interest payment of \$11,500.00 to be due and payable on April 30, 2014. If the Lake Lemon Conservancy District chooses to pay the entire loan balance in full on April 30, 2014, the net amount due on April 30, 2014 is projected to be \$57,641.00. This amount includes a principal payment of \$56,984.13 and interest calculated to be \$656.87.

If you have any questions or need further information, please call me at any time.

Thank you for the opportunity to serve you.

Sincerely,

**Johnny R. Lindsey**

Executive Vice President

The Peoples State Bank

Phone: (812)935-2013

Fax: (812)876-9284

Email: [jlindsey@peoples-bank.com](mailto:jlindsey@peoples-bank.com)

P.O. Box 128  
Ellettsville, IN 47429  
(812)876-2228



## *Lake Lemon Conservancy District*

**To: LLCD Board of Directors**  
**From: Bob Madden: Dredging Study Group**  
**District Manager**  
**Subject: Recommendations**  
**Date: April 5, 2014**

**The Dredging Study Group (DSG) met on Saturday, April 5<sup>th</sup>, 2014 at the LLCD Office, and at the conclusion of this meeting, made the below recommendations for consideration by the LLCD Board of Directors at it's upcoming meeting on April 16, 2014.**

- I. Small Barge Designer
  - i. The DSG discussed available vendors for barge design. The DSG reiterates their recommendation to use Carl R. Payne, Payne Excavating. The DSG has concluded that Payne with his experience on Lake Lemon and in the design/building of three previous barges used on Lake Lemon, he is the best option. At this time the DSG recommends to the Board to enter into an agreement with Carl R. Payne as a consultant for the design and construction oversight of a small barge this fall/winter 2014. Payne's fee will be 15% of final cost of barge.
- II. Bathymetry/Sediment Map
  - i. The DNR-LARE grant proposal for a sediment depth, bathymetry and volume assessment of Lake Lemon was denied because the LLCD has reached the funding cap for sediment removal projects. (see attached)
  - ii. The DSG recommends to the Board to have Management approach the CBU to cost share the expense of the study. Estimated total cost of project not to exceed \$30,000.00.
  - iii. Additionally, the DSG recommends to the Board to enter into agreements with Image Matters LLC (see attached scope of work) and ReMetrix LLC (see attached proposal) to complete the study/assessment.



Indiana Department of Natural Resources

Michael R. Pence, Governor  
Cameron F. Clark, Director

Lake and River Enhancement Section  
Division of Fish & Wildlife  
402 W. Washington Street  
Room W273  
Indianapolis, IN 46204  
PH: 317/233-1484  
FAX: 317/232-8150

March 20, 2014

Robert Madden, District Manager  
Lake Lemon Conservancy District  
7599 N. Tunnel Road  
Unionville, IN 47468

Dear Mr. Madden,

Following a review of all applications submitted for fiscal year 2014-2015 Lake and River Enhancement (LARE) program grant funding, DNR Director Cameron F. Clark has made determinations regarding the project proposals. Requests for funding exceed the available funding and not all applications will be funded. Your proposal for sediment depth, bathymetry and volume assessment for Lake Lemon in Brown and Monroe Counties was not selected for funding. Your organization has already reached the funding cap for sediment removal projects and therefore not eligible for grant funds.

Thank you for your interest in Lake and River Enhancement.

Sincerely,

A handwritten signature in black ink, appearing to read "Greg Biberdorf", is written over a horizontal line.

Greg Biberdorf, Program Manager  
Lake and River Enhancement Section  
Division of Fish and Wildlife



## Draft Scope of Work for a Bathymetry Survey Update and Associated Products

Lake Lemon Conservancy District

Dredging Study Group

January 11, 2014

### Purpose of Document and Meeting:

- Introduce Project, draft Scope of Work (SOW), and Project Team
- Receive feedback from Dredging Study Group and draft SOW
- Secure agreement to move ahead in development of full SOW and contract

### Study Goal:

- Provide information for science-based lake management decision-making, and particularly future dredging siting and operations.

### Study Objectives

- Collect water depth (bathymetry) and sediment depth data in lake areas with depth < 6 feet.
- Update existing contour database and produce revised bathymetry for entire lake. (Original soundings will be used if available.)
- Generate sediment depth mapping for key areas (TBD)
- Evaluate change in water volume for entire lake
- Evaluate change in both water depth and sediment depth for key areas

### Draft SOW Items

1. Identify data, database, and specific sampling requirements
2. Plan Data Collection and Bathymetry and Sediment Synthesis
  - a. Identify and Analyze Options for Water and Sediment Depth Collection, e.g.,
    - i. Subcontract to specialized firm to collect data and provide documentation
    - ii. Contractor Team, with operational support from LLCD, collects data
  - b. Identify and Analyze Options for Bathymetry and Sediment Depth Database Production
    - i. Subcontract specialized firm to process data and create database and metadata
    - ii. Contractor Team processes data and creates database and metadata
3. Presentation of Options to DSG and other LLCD Leadership, with recommendation
4. (Optional) Secure subcontractor for data collection and/or data processing
  - a. Solicit formal bids from leading candidates identified in Item #2
  - b. Select subcontractor for data collection and/or data processing
5. Data collection
6. Data processing
7. QA/QC
8. GIS Analysis
9. Product Generation
  - a. Data and metadata
  - b. Maps
  - c. Tabular Statistics and Summaries
  - d. Report Preparation
10. Presentation on draft project deliverables to DSG and other LLCD Leadership
11. Revise draft deliverables as necessary and deliver final products

#### Deliverables

- Bathymetry data, metadata, and maps for the entire lake
- Sediment depth data, metadata, and maps for key areas
- Report with detailed collection and data processing and analytical methods, maps, and tabular information and summary statistics for both entire lake and key areas

#### Proposed Project Team

- Jeff Ehman, Senior Geospatial Analyst, Image Matters LLC
- Nathan Eaton, Senior GIS Analyst and Cartographer (Independent Consultant)
- (Option) Data collection and/or processing Subcontractor

#### Biosketches:

##### Jeff Ehman, Ph.D.

- Lifelong Bloomington resident
- 25 years of experience implementing geospatial technologies (e.g., GIS, GPS, Remote Sensing) in lab and field settings
- Employed by Image Matters LLC (403 E. 6<sup>th</sup>, Suite 100, Bloomington) since 2004
- Director of Midwest Operations, and Senior Analyst
- Adjunct Professor at SPEA, Indiana University, 8 years
- Successful completion of 150+ projects, primarily in environmental and natural resource management
- Expert in elevation data, aerial orthoimagery, horizontal coordinate systems, and vertical datums
- Expert in leveraging existing (free) resources for projects from spatial data infrastructures
- Expert in documenting data collection techniques and data products
- Career Highlights, relevant to this Scope of Work:
  - Helped establish GIS at the LLCD
  - Reviewed draft ReMetrix bathymetry and sediment survey (2003), and performed quality control that led to critical data and report revisions
  - Supervised generation of mapping products to support lake management at Lake Lemon

##### Nathan Eaton, BSES

- Lifelong Edinburgh/Columbus resident
- 12 years of experience implementing geospatial technologies (e.g., GIS, GPS, Remote Sensing) in lab and field settings
- Employed by Indiana National Guard (Camp Atterbury)
- GIS Coordinator
- Expert in GIS data production and analysis
- Expert in use of GIS and cartographic production for lake management, including support of dredging operations
- Career Highlights, relevant to this Scope of Work:
  - Generated mapping products to support lake management and dredging operations at Lake Lemon
  - Created interactive mapping application for the LLCD

## **Proposal for Bathymetry and Sediment Depth Survey**

Lake Lemon Conservancy District

Dredging Study Group

April 5, 2014

### Purpose of Document:

- Revisit Study Objectives
- Report on Request for Quotation (RFQ) process and response
- Summarize ReMetrix Proposal
- Recommendation

### Stated Study Objectives

- Collect water depth (bathymetry) and sediment depth data in lake areas with depth < 6 feet.
- Update existing contour database and produce revised bathymetry for entire lake. (Original soundings will be used if available.)
- Generate sediment depth mapping for key areas (TBD)
- Evaluate change in water volume for entire lake
- Evaluate change in both water depth and sediment depth for key areas

### RFP Process and Response

- Capability and availability inquiries sent to seven (7) Midwest firms that conduct bathymetric and sediment surveys; four (4) firms requested Study Objectives (requirements) package
- One (1) firm quoted ~\$40,000, due to "opportunity cost of leaving state" (MO) during key period
- One (1) other firm, Remetrix, submitted detailed proposal with \$21,700 quote, and options

### ReMetrix Proposal

- Indiana company, based in Carmel; conducted *Sediment Depths, Bathymetry, and Volume Assessment of Lake Lemon Conservancy District* (2003); they revised original report at no cost
- Sampling conducted from Carolina skiff with 4-stroke engine; canoe for extreme shallow-water
- Sampling equipment includes Trimble AgGPS 162, BioSonics DT-X scientific hydroacoustic system, and a sediment probe with 3-inch depth increments
  - Their hydroacoustic system needs 2.5 ft of depth; probe to be used in areas < 2.5 ft
  - Their experience indicates co-collection of sediment depth and water depth, or "sub-bottom profiling", in water depths < 5 feet, is not a recommended approach
- Proposed replicated hydroacoustic sampling of the ~62km of transects from original *Assessment*
  - Provides updated depth contours which are consistent with 2003 results
  - Allows for volume estimation, whole lake and by 1-ft depth zone, and valid change calculation from 2003
- Proposed collection of 375 sediment depth point samples, optimized for 15 "sub-zones; focused on areas < 6 ft water depth and not >8 ft depth; final sampling plan tailored to LLCD needs
  - Provides soft-sediment thickness and volume for each 1 ft water depth zone
  - Provides whole lake sediment volume, and valid calculation of change from 2003
  - Provides soft-sediment volumes in 1-foot depth intervals for 15 sub-zones

### Recommendation:

- Given that ReMetrix is reputable and that proposal meets all objectives, LLCD should consider full funding (with 62km transects) as soon as possible to ensure data collection during high water conditions, and to minimize the presence of vegetation for cleaner hydroacoustic signals
- Work with Remetrix to specify the 15 sub-zones for sediment sampling, and optimize point configuration. In doing so, evaluate need for additional soft-sediment thickness sampling points and sub-zones



## **Proposal for Soft-Sediment Depths, Bathymetry, and Volumetric Updates of Lake Lemon, IN**

*March 31, 2014*

### *Project overview*

This proposal contains a flexible mapping plan that can be adapted to meet the specific project goals of the Lake Lemon Conservancy District (LLCD). For example, the distribution of the proposed 375 soft-sediment depth sampling points and the 62-km of hydroacoustic transects can be adjusted to maximize collection in areas of greatest interest. ReMetrix is very willing to work with LLCD to optimize the final sampling strategy. So as you review this proposal, please keep in mind that adjustments can be made as a final sampling strategy is determined.

ReMetrix would like to note at the outset that we performed a very similar project to this at Lake Lemon in 2003. Our familiarity with the lake will help make this project a success.

Stated goals of the project (from 3/12/14 email from Jeff Ehman, PhD):

1. Collect water depth (bathymetry) and sediment depth data in lake areas with depth < 6 feet.
2. Update existing contour database and produce revised bathymetry for entire lake. (Original soundings may be used if available.)
3. Generate sediment depth mapping for key areas (TBD, but primarily the back end of the lake and coves with low gradient to deeper water)
4. Evaluate change in water volume for entire lake
5. Evaluate change in both water depth and sediment depth for key areas. The focus is on the relatively shallow areas of the lake.

Please prepare two quotes:

- A. One that includes the ~150m spacing transects that ReMetrix did in 2003.
  - B. One that ignores the deeper areas.
- Additional Question: Does ReMetrix have sonar technology that collects sediment depth in conjunction with bottom depth? Other firms claim to have this capability, presumably with some physical/pole calibration.

It makes sense to first address the bulleted Additional Question prior to outlining the ReMetrix plan for this project. The technology referred to is called 'sub-bottom profiling.' Sub-bottom profiling enables the interpretation of sediment thickness and layering by using hydroacoustic signals that penetrate into the sediment.

ReMetrix has investigated using sub-bottom profiling systems for previous sediment mapping projects. The systems offer excellent results when used in the right sampling conditions. However the acoustic wavelengths and signal power used by these systems do not consistently produce satisfactory results in very shallow waters. While some systems claim to be operable in water as shallow as 1-foot, those claims are based on optimal sampling conditions and sediment characteristics, and so the claims do not apply

to every situation. Our investigations into these systems and field-testing some systems have indicated that the success rate of obtaining consistent, useful data in waters shallower than about 5-feet of depth is highly variable. The water depth range of greatest interest in this project is less than 6-feet, and that is mostly within the range that ReMetrix believes is not conducive for using sub-bottom profiling technology.

Hydroacoustic technology advances rapidly and so we acknowledge that technology may now exist that generates consistent data in waters shallower than 5-feet. However ReMetrix has not encountered or field-tested such technology so we are not proposing its use for this project. Further, we would recommend that LLCD verify the results of such systems for sediment types and sediment thicknesses that are similar to those at Lake Lemon prior to using such systems. If the systems pass the test, then they are a very good option to consider. If not, then probe-based sampling is still a time-tested, viable option for the goals of this project.

#### *Plan for soft-sediment depth sampling*

The ReMetrix soft-sediment sampling strategy is designed to provide the best estimation of soft-sediment volume given the number of measurements taken. In carrying out that strategy, ReMetrix will endeavor to sample adjacent to as many docks as feasible, however every dock will not have an adjacent sampling point. Additionally, some points will be sampled in the middle area of larger coves to help refine the sediment volume calculations.

Before starting the project, ReMetrix will review the 2003 sediment thickness results map, identify dock locations from aerial imagery, and consult with the Conservancy District regarding lake use patterns before finalizing the sampling plan. LLCD will be given an opportunity to review the final sampling strategy and fine tune any specific sites and make sure the sampling strategy is satisfactory.

In 2003 ReMetrix sampled 369 soft-sediment depth points at Lake Lemon using a sediment probe method. Approximately 38% (140) of the sediment sampling points in 2003 were located within the eastern-most ‘back-end’ lobe of the lake (Figure 1). For 2014, we propose increasing the percentage of sampling points in the back-end of the lake to 60% (225) of the total 375 proposed points. Of the 225, we propose that at least 80% (180) be in waters 6-feet deep and shallower (and even the majority of those in less than 4-feet of water).

The remaining 40% of the sediment-depth sampling points will be distributed around the rest of the lake among locations also sampled in 2003. We envision half of the 150 points being evenly distributed around the shoreline and coves of the lake, and the other half being placed for greater detail in shallow coves and/or shallow coves that have a low gradient to deeper water. Weighting will be given to areas that are used more frequently for boating access. Portions of the shoreline and coves that are understood to be lower-use zones will have a reduced frequency of soft-sediment sampling points. Areas that are not candidates for dredging in the foreseeable future can also be left unsampled in favor of managed areas if LLCD wishes.

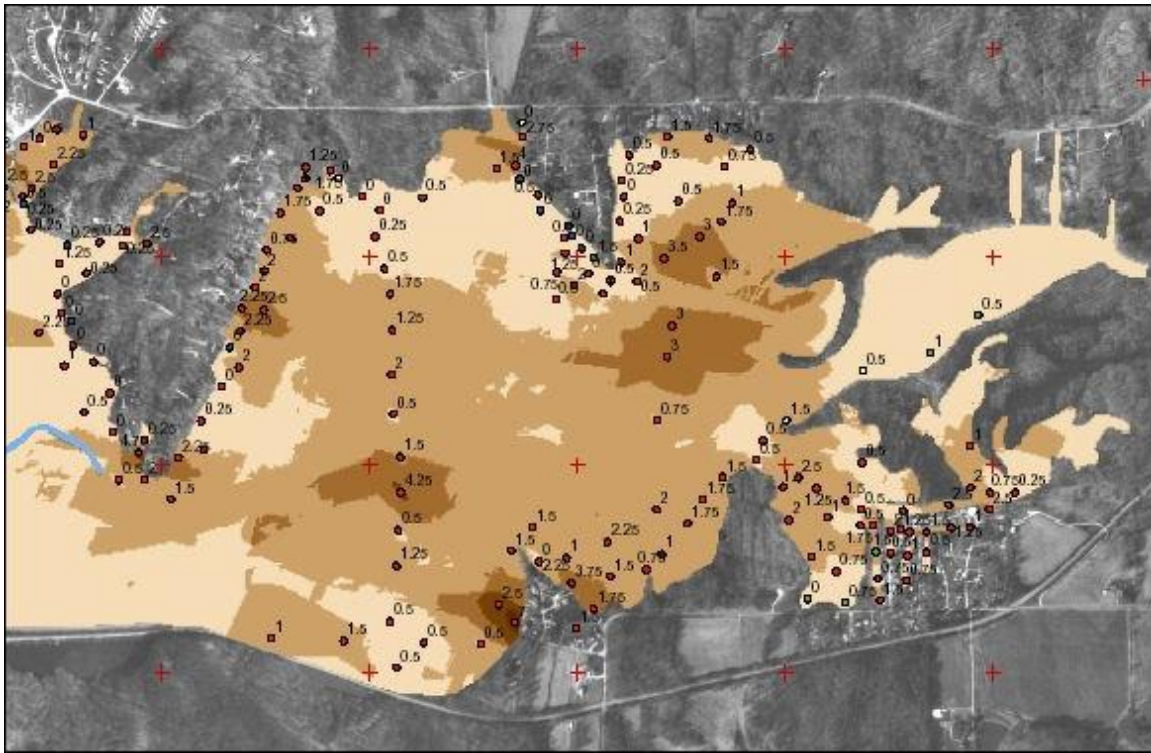


Figure 1. 2003 sediment thickness sample locations and interpolated sediment thickness model in the eastern 'back-end' lobe of the lake. 140 sample points were collected in this portion of the lake in 2003. ReMetrix proposes increasing to 225 sample points in this same area for 2014.

As stated at the beginning of this proposal, ReMetrix is very willing to work with LLCD to adjust the proposed sample point distribution to whatever configuration best meets the goals of the project. Part of the decision to redistribute points depends on the relative importance of calculating sedimentation change metrics from 2003-2014. The more the points are moved around, the more the change metrics may experience additional variance.

Please note in the Data Analysis section below that LLCD will be able to define 15 sub-zones of the lake for which sediment volumes will be provided, in addition to the whole-lake volume results.

#### *Soft-sediment sampling methodology*

Data will be collected using a sediment probe, GPS, and customized GIS data logger. Soft-sediment depths will be recorded at quarter-foot depth increments (every 3-inches), and rounded to the nearest 3-inch marking in instances where the sediment level measures in between two depth increments on the sediment probe.

The depth of the top of the sediment layer will be determined by the first sign of resistance to the probe as it is lowered into the water. The depth of the bottom of the sediment layer will be measured at the point where consistent arm-strength force cannot push the sediment probe any further into the sediment. No mechanical means will be used to push the sediment probe further into the sediment.

ReMetrix will only measure soft-sediment depths to a maximum of six feet of thickness. If the probe is still able to be pushed beyond six feet of sediment thickness,

ReMetrix will record the location as exceeding six feet in the data logger. During the subsequent step of estimating sediment volume for that cove, only the sediment volume above the six-foot sediment depth level will be estimated. Similarly, ReMetrix will only conduct probing in a maximum of eight feet of water depth, although for this project that is not expected to be a limitation.

While probing is a common methodology for efficiently measuring soft-sediment depths, a few caveats exist with this methodology. Periodically soft-sediment is deposited in a 'layer-cake' fashion, meaning unconsolidated sediment layers are interspersed with denser, strongly consolidated layers (typically clay) in an alternating arrangement. Thus it is possible that more soft-sediment exists below the initial consolidated layer encountered by the probe.

Additionally, sometimes the consolidated layer is not uniform and contiguous across a geographic area, and thus pockets of soft-sediment with widely varying total depths can occur within a relatively small area. If ReMetrix encounters an area such as this, we will make a note of the area and do our best within the scope of the project to estimate the extent, depth, and volume of the top-most unconsolidated layer. In our experience this situation is fairly infrequent, but it does occasionally occur.

Another situation that can occur in unusual instances is that the probe's progress through the soft-sediment is halted by a large rock, buried object, or pocket of cobbles. It is usually impossible to determine from the water surface what has halted the progress of the probe, so the person performing the probing can only reasonably conclude that the probe has reached the consolidated bottom of the soft-sediment layer and will record the sediment depth as such. These situations, again uncommon, can affect the estimates of total sediment volume within a particular cove, and thus the customer should be aware of this caveat of the probing method.

From a maintenance dredging standpoint, the above caveats may not be an issue if the goal is to only dredge the top-most soft layer of sediment for recreational access. However the customer should be aware of these potential situations and evaluate their potential implications in relation to their specific project goals. If layer-cake sediment properties are indeed a concern, then alternate sediment sampling technologies, such as sediment coring, should be evaluated as a potential solution.

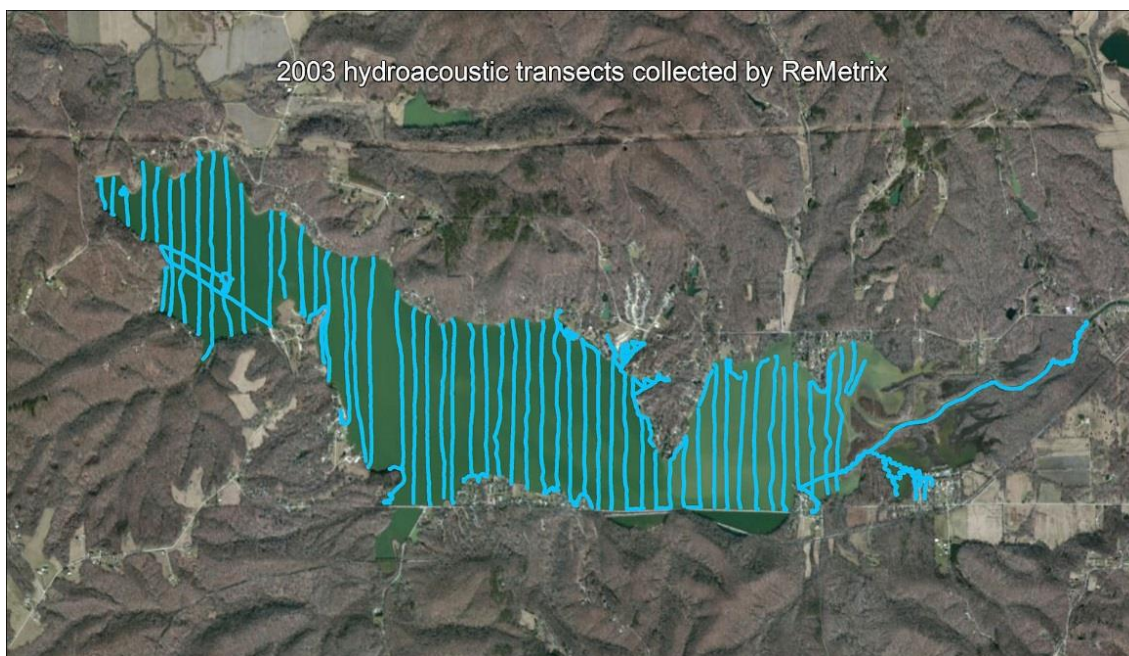
Areas where the soft-sediment protrudes above the water surface (e.g., sand bars) will also be measured with the probe unless they are already consolidated to a degree where probing is resistant to arm-strength force. Such areas will be recorded with special notation in the data logger and also noted on the final project maps. The thickness and extent of sediment protruding above the water surface will be estimated as best as possible using basic field measurement tools and observations.

The proposed sampling technique is the same method that was used in 2003, which will enable 'apples-to-apples' comparisons between the current soft-sediment depths, thicknesses, and volumes with those determined in 2003.



### *Plan for hydroacoustic sampling*

The request was made in Jeff Ehman's email to provide two price quotes regarding hydroacoustic sampling: one that includes the ~150m spacing transects that ReMetrix did in 2003, and one that ignores the deeper areas and focuses on the shallower areas. Below are maps that show the 2003 transect layout (Figure 2) and the areas of the lake below 6-feet of water depth in 2003 (Figure 3).



*Figure 2. Hydroacoustic data transects collected by ReMetrix in 2003. Transects within the lake total approximately 62km. Spacing averages approximately 100 meters between transects.*



*Figure 3. Areas of the lake shaded in white are shallower than 6-feet of water depth, according to the 2003 bathymetric map. The area shaded in white is 440 acres (30% of the lake).*



ReMetrix evaluated both scenarios. In 2003 ReMetrix collected approximately 62 km of transects at the lake. The price proposed for this 2014 project is based on repeating the same 62km of transects. An alternative hydroacoustic sampling plan that focuses instead on the shallower (sub-6-foot) areas of the lake would require less total distance of transects. ReMetrix can offer a price reduction of \$2,200 if the total hydroacoustic data collection is reduced to 30 km of transects within the sub-6-foot zones of the lake. This area is about a third of the lake acreage but its shallow nature requires a slower pace of data collection.

Another option is for ReMetrix to perform a hybrid approach of collecting every-other transect from 2003 and then use the remaining collection time to increase coverage in higher-priority zones of the lake. This is a compromise between the two options but might be a satisfactory solution. Water volume change calculations would not be an exact apples-to-apples comparison but would likely still compare enough to help discern if any significant water volume change has occurred since 2003.

ReMetrix will work with LLCD to determine the best transect layout options for whichever total distance of transects is desired. Recognize however that reducing the total distance of transects collected and/or changing the layout of transects will influence the degree to which the stated goals of evaluating changes in water volume and depths can be achieved.

Aside from price, two factors should be considered in whether to select the option to repeat the 2003 sampling or focus only in zones <6-feet of water depth. The first factor is the relative importance of evaluating the change in lake-wide water volume. If that is a high-level goal, then repeating the 2003 transects is recommended because focusing only in the sub-6-foot zone will prevent the ability to perform an apples-to-apples whole-lake water volume change comparison.

The second factor to consider is that the ReMetrix hydroacoustic system does not collect data in water depths shallower than about 2.5-feet due to the physics of the hydroacoustic beam emitted by the system. So for a sampling campaign that focuses on areas < 6-feet, the hydroacoustic data will mostly be collected in the zone ranging from 6-feet of depth to 2.5-feet of depth. Water depths shallower than 2.5-feet are supplemented by physical measurements of water depth, (e.g., pole depths while collecting the sediment thickness measurements).

Again we welcome any opportunity to fine-tune a hydroacoustic collection strategy with LLCD to maximize the value of the final data.

#### *Other sampling factors*

ReMetrix will take digital photos of data collection results at a minimum of 10-percent of the sediment sample sites for quality assurance.

If collecting water depth measurements in areas shallower than approximately 2.5-feet of depth is necessary in some portions of the lake, ReMetrix will elect to use the sediment probe to measure water depth to the sediment surface for incorporation into the bathymetric model. We do not anticipate that this will be a widespread occurrence during the project but may occur periodically.

ReMetrix recommends collecting hydroacoustic data as early as possible in the year to avoid any significant plant biomass from aquatic plant beds. ReMetrix is able to filter out the plant biomass from hydroacoustic data, however lake-bottom data with minimal aquatic vegetation is always cleaner than lake-bottom data with significant aquatic vegetation.

As stated in the ‘other information and disclaimers’ section below, collecting hydroacoustic data at the highest possible lake water level is advantageous. The lake level during the ReMetrix data collection activities in 2003 was 629.7 feet of elevation, as measured at the gauge located near the LLCD office. ReMetrix can adjust for any variation in water elevation from the 2003 level, so the lake does not need to be at exactly the same elevation.

### *Sampling equipment*

ReMetrix will use a sub-meter Trimble AgGPS 162, a BioSonics DT-X scientific hydroacoustic system, a sediment probe with 3-inch depth increments, and a Carolina skiff with 4-stroke engine for this project. A canoe may also be used for extreme shallow-water navigation.

### *Data analysis*

ReMetrix uses various commercial and proprietary software to perform data processing and analyses, but the final maps and data layers are created in Esri® ArcGIS.

Following the completion of field sampling, the sediment thickness data points will be imported into ArcGIS for mapping and analysis. Thickness of locations between data points will be interpolated using geostatistical techniques. A final 3D GIS-based soft-sediment thickness model will be created at 1-foot thickness increments for the extents of the areas sampled.

As part of the project price, LLCD will have the opportunity to demarcate up to 15 specific sub-zones for which they would like to obtain soft-sediment volume statistics. More sub-zones can be added if desired; see the Budget Adjustment Options section below. The sub-zones can be coves, shoreline segments, or other areas within the lake. ReMetrix will calculate the statistics of these zones following the creation of the sediment thickness model.

For the hydroacoustic data analysis, ReMetrix will first post-process the hydroacoustic data for water depth values. Depths of locations between data points will be interpolated using geostatistical techniques. A final 3D GIS-based surface model will be created for the extent of the area sampled (whole-lake or sub-6-foot zones) and contouring algorithms will be used to create depth contours at 1-foot depth intervals. A segmented water-volume table will also be created that provides the volume of each contour interval.

All of the final data outputs and volumetric tables will be assembled into a set of final project maps similar to those provided in the 2003 project, with some updated elements and formatting.

The following geographic coordinate system was used for the 2003 data files, and will be used again for the 2014 data files. ReMetrix can provide data in an alternate coordinate system if desired.

Projection: State Plane Indiana West  
Datum: NAD83  
Spheroid: GRS1980  
Units: feet

### *Project deliverables*

Esri ArcGIS data layers:

- 1) Soft-sediment depth points
- 2) Hydroacoustic water depth points
- 3) Grid for bathymetric depth model within the zone collected (either whole-lake or sub-6-foot focus area)
- 4) Grid for soft-sediment depth within the zones collected
- 5) Lake shoreline polygon

The following maps will be provided in 11x17 and jpg formats:

- 6) Bathymetry (at 1-foot depth resolution)
- 7) Soft-sediment thickness (at 1-foot depth resolution)
- 8) Hydroacoustic transects
- 9) Boundaries of sediment sub-zone delineation areas (see deliverable 12 below)

*Note: some maps may be split into east and west sections to show greater detail (as was done in 2003). Please inform us if that is not desired.*

The following volumetric estimates will be provided:

- 10) Whole-lake water volume for each 1-foot bathymetric depth interval.
- 11) Whole-lake soft-sediment volume for each 1-foot depth interval (based on the extent of the final sampling layout).
- 12) Soft-sediment volumes for 15 sub-zones as defined by the LLCD, provided in 1-foot depth intervals. These zones can be coves, shoreline segments, or other areas within the lake.

The following historic volumetric comparison tables will be provided:

- 13) Whole-lake water volume change from 2003-2014.
- 14) Whole-lake soft-sediment volume change from 2003-2014.

Other deliverables:

- 15) A project summary report (one electronic PDF copy and five bound printed copies).
- 16) Digital photos from a minimum of 10-percent of the sediment sampling sites.

*Note: An amended project deliverable list will be provided for approval if any adjustments are made to the project plan that affect the list of deliverables. Changes to the list of deliverables may require a project pricing adjustment.*

### *Project Budget*

The total price for the above described field data collection, data analyses, and deliverables is **\$21,700**.

#### *Budget adjustment options:*

- a) Reduction of total hydroacoustic transect collection from 62 km to 30 km (as discussed in the hydroacoustic sampling section) will reduce the project price by \$2,200.
- b) Additional blocks of 100 soft-sediment thickness sampling points: \$2,150 per block of 100.
- c) Additional blocks of 5 sub-zones for sediment volume statistics: \$200 per block of 5.
- d) Addition of soft-sediment type recording: \$2,500.

*Description:* A first-order assessment of soft-sediment type will be recorded at all 375 soft-sediment sampling locations. Surficial soft-sediment will be sampled using a Petite Ponar device. The sediment brought into the boat will be recorded in one of the following categories: clay, cobble, sand, and sand/clay mix. If a sample is determined to be other than one of these four categories, the category will be added. An ArcGIS layer of the soft-sediment type points and a map of the soft-sediment types for each sample point will be provided.

### *Qualifications*

- ReMetrix performed soft-sediment thickness, soft-sediment type, and bathymetric mapping at Lake Lemon in 2003.
- ReMetrix has performed mapping projects in over 250 lakes ranging in size from 20 to 40,000 acres.
- ReMetrix remains the national leader in aquatic habitat mapping, having mapped over 2.5 million acres of inland aquatic resources...more than any other company.
- ReMetrix has led and performed many of the largest and most complex inland aquatic mapping projects in the world.
- ReMetrix has a licensed professional surveyor as a principal in its business.
- ReMetrix methods have been validated by third party experts.
- ReMetrix is an Esri® Business Partner.

Thank you for considering ReMetrix for this project. Please contact us with any further questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Doug Henderson", with a stylized, flowing script.

Douglas Henderson  
Commercial Manager  
ReMetrix LLC  
(317) 580-8035  
[doug@remetrix.com](mailto:doug@remetrix.com)

## Other Relevant Information and Project Disclaimers

Ideally, the data collection for this project should be performed during maximum annual water levels at the lake (or as close to maximum water levels as realistically possible).

Depending on field conditions, hydroacoustic data are sometimes unable to be collected in waters shallower than 2.5-feet. ReMetrix may periodically navigate into waters shallower than 2.5-feet to collect hydroacoustic data when conditions allow, but the client should recognize that most or all hydroacoustic data for this project may end up being collected in waters 2.5-feet and deeper. ReMetrix will use a physical sampling device to sample water depths in waters 2.5-feet and shallower.

Proposed sampling strategies and grids may have to be modified in the field during collection if certain areas prove too difficult to navigate safely or pose a risk to damaging ReMetrix equipment. Should ReMetrix encounter such situations we will make every reasonable effort to carry out the sampling program with as few deviations as possible from the original plan.

The client is responsible for providing any information relevant to accessing the lake, including any restrictions on hours we may work at the lake (e.g., sunrise to sunset, etc.). The client is also responsible for providing any safety-relevant information regarding the lake (such as known navigational hazards, etc.). Any dates, including weekend dates, which may not be appropriate for data collection (e.g., fishing tournament dates, public festivals at the lake, lake management activities, etc.) should be communicated to ReMetrix as soon as the dates are known so that we are able to schedule around them. The client is responsible for costs incurred should ReMetrix arrive at the lake to perform field data collection and encounter a previously planned public activity on or around the lake that impedes our ability to appropriately perform the contracted work.

Unless a previously created digital shoreline file and/or digital aerial imagery is provided by the client in advance of the project, ReMetrix intends to use publicly available orthophoto-quality aerial imagery to delineate the lake shoreline and as a background layer for final maps. No budget for purchasing existing or acquiring new aerial/satellite imagery has been included in the project budget. Instead ReMetrix will use imagery available at no cost. ReMetrix will make every reasonable effort to locate and use the most-recent and/or high-quality imagery it can find as of the start date of the project. Imagery updates made available to the public after the start date of the project are not guaranteed to be incorporated. In most instances, no-cost public imagery of sufficient quality is available for projects such as this. If ReMetrix is unable to find adequate public imagery for use, we will contact the client and discuss the options before proceeding with the project.

Additions or changes to the finalized, contracted scope-of-work may incur additional costs.

ReMetrix participation extending beyond the scope of the contracted project is not included in the project budget. Examples of participation beyond the project scope include but are not limited to: requests to create new, currently non-existent features or layers to the project data set; significantly editing or redesigning features that were part of the original scope of work; importing and manipulating additional data layers not designated above; creating specialty graphics or PowerPoint slides from the project (aside from the deliverables included above), travel to meetings for presentations, routine technical help with data products, etc. Requests for activities such as those listed above or similar are welcome but must be arranged for in a separate agreement.

*CAD digital data formats available for deliverables:*

If requested, ReMetrix can provide data to the client in the following AutoCAD formats: DGN-V8, DWG-R14, DWG-R2000, DWG-R2004, DWG-R2005, DWG-R2006, DWG-R2007, DXF-R14, DXF-R2000, DXF-R2004, DXF-R2005, DXF-R2006, DXF-R2007. Please inquire if additional options are sought.

*Data ownership:*

ReMetrix grants the client a non-exclusive, royalty-free license to use all final data products and reports developed by ReMetrix as part of this project. The license shall have a perpetual term and the client may not transfer it. ReMetrix shall retain all digital and print copyrights, patent rights, data rights and other intellectual property rights to the project data and deliverables.

## **Other Relevant Information and Project Disclaimers (continued)**

### *General disclaimer:*

ReMetrix data for this project are intended for general aquatic management activities. Their purposes are to provide estimates of water depth contours and/or volumes, soft-sediment depth contours and/or volumes, and general surficial soft-sediment types. These data are not intended for any other function. The data products provide estimations and do not represent a survey or an engineering report. These data are not to be used for navigation. Some of the project data are modeled using statistical techniques. Some information portrayed herein, such as shorelines, may have been derived from third-party data sources; the data provider is in no way responsible for the validity of third-party data or its use by others. The user assumes all risks associated with altering the data or using the data outside of their intended purpose.

Subj: **Dam Safety Plan Program**  
 Date: 3/31/2014 5:09:06 P.M. Eastern Daylight Time  
 From: [africke@cbbel-in.com](mailto:africke@cbbel-in.com)  
 To: [llcdoffice@aol.com](mailto:llcdoffice@aol.com)

James,

Thank you for taking the time to talk with me today regarding the dam safety plan grant. As I mentioned in our conversation, Christopher B. Burke Engineering, LLC (CBBEL) has been working with the Indiana Department of Homeland Security (IDHS) to develop a program that will use grant money to prepare Incident and Emergency Action Plans (IEAPs) for high hazard dams in Southern Indiana. We are now under contract with IDHS to prepare the IEAPs, and Lake Lemon Dam has been selected as a candidate for this program by IDHS and the Indiana Department of Natural Resources (IDNR).

As you may already know, the purpose of an IEAP is to protect human life and property downstream of a dam in the event of an incident or an emergency which could compromise the integrity of the structure and cause an uncontrolled release from the reservoir. Events that could trigger an incident or emergency include, but are not limited to, extreme rainfall, earthquakes, structural failure, and sabotage. A dam failure flood can be catastrophic due to the nature and velocity of the flood wave. I'm sure you know that dam owners are responsible for maintaining and operating their dams. Having a comprehensive, up-to-date IEAP is a good way to reduce your risk and liability as a dam owner. The training that is to be provided in the program will help you to understand in greater detail the importance of dam safety, how to use the IEAP, and who the key emergency response personnel are in the county.

**Services will be provided to the dam owner at no direct cost and will be funded through the grant.**

- As a participant in the program, the dam owner is expected to:
  - Provide IDHS/IDNR/CBBEL with pertinent data and information regarding the dam as required to complete the project
  - Permit access to the dam for one (1) site visit by CBBEL staff
  - Assist IDHS/IDNR/CBBEL with obtaining the names and contact information for plan holders of the IEAP
  - Designate an IEAP Coordinator and Public Information Officer (and alternates for each position)
  - Attend a 2-hour individual dam owner training session
  - Attend a full-day tabletop exercise and workshop for dam owners, emergency response agencies, and technical agencies that will include an overview of dam safety as well as tabletop exercises to that help users understand the processes and challenges that may be involved during an actual event
  - Take ownership of the IEAP and responsibility for activating the plan when necessary and taking appropriate action during an incident or emergency event
  - Take responsibility for maintaining and updating the document and issuing revisions to plan holders
- IDHS/IDNR/CBBEL are expected to:
  - Develop a dam-specific IEAP utilizing the current IDNR template
  - Perform a site visit to the dam to verify field conditions
  - Prepare for and conduct a 2-hour training session with the dam owner while the IEAP is in draft format
  - Prepare for and conduct a full-day tabletop exercise and workshop for multiple dams in the vicinity
  - Distribute copies of the final deliverables to the dam owner and/or individual plan holders

Saturday, April 12, 2014 AOL: Llcdoffice



- Provide the dam owner with editable copies of digital source material to be used for future updates

The preliminary schedule is to have the draft IEAPs completed by mid-August 2014. The training sessions would then be held in September and October. Final deliverables would be completed by the end of November.

Please let me know if you have any questions regarding the program and if the Lake Lemon Conservancy District is willing to participate. We can then move forward to confirm your selection with IDHS and IDNR.

Thanks for your time and consideration!

A.J.

**Aaron J. Fricke, P.E.**

*Civil Engineer*

**Christopher B. Burke Engineering, LLC**

115 West Washington Street, Suite 1368 South, Indianapolis, IN 46204

Phone: (317) 266-8000 Fax: (317) 632-3306

E-Mail: [africke@cbbel-in.com](mailto:africke@cbbel-in.com)

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## *Lake Lemon Conservancy District*

### **PROFESSIONAL SERVICES AGREEMENT**

This Agreement is entered into by and between Lake Lemon Conservancy District (hereinafter "LLCD") and DLZ Indiana, LLC. (hereinafter "DLZ"):

In consideration of the mutual promises herein, the parties agree as follows:

1. Services to be performed: DLZ will timely furnish the materials and perform labor necessary for the inspection of the dam:

See Scope of Services: Attachment "A" incorporated herein

Total Amount of Material, Labor, and Reimbursable Items: \$4,650.00

All work shall be completed by DLZ on or by December 31, 2014. Any alteration or deviation from specifications attached as Exhibit A will require a modified, written agreement, signed by the Parties.

2. Payment: LLCD will pay in full all invoices for work satisfactorily performed by DLZ within thirty (30) days of the date of invoice ("Due Date").
3. LLCD's Obligation: LLCD will provide DLZ access to the property that is the subject of this Agreement at all reasonable times necessary to DLZ's work.
4. Relationship of the Parties: DLZ is an independent contractor in the performance of each and every part of this Agreement and solely and personally liable for the costs of all labor, equipment, tools, and expenses in connection therewith and for any and all damages that may occur because of DLZ's performance under this Agreement, whether for personal injuries or damages of any other kind. Nothing in this Agreement shall be construed in any way to constitute DLZ as the agent or representative of the LLCD. DLZ shall maintain appropriate commercial general liability insurance in a minimum amount of Two Million Dollars (\$2,000,000.00) per occurrence. The LLCD and CBU shall be included as additional named-insureds on the policy. DLZ shall provide proof of insurance.

5. **Liability:** The LLC and DLZ acknowledge and agree that the services to be performed by DLZ under this Agreement are to be performed by DLZ at its own risk and that it assumes all responsibility for any damages or injuries that may result from its negligent performance of services under this Agreement. DLZ agrees to indemnify and hold harmless the LLC and CBU from any and all liability for any injuries (including death), damages, loss or claims based upon, arising out of, or in any manner connected with its negligent performance of services provided under this Agreement, which includes but is not limited to claims for workers' compensation coverage. It is further agreed that DLZ shall bear all costs of obtaining and maintaining for the term of this Agreement all required licensing, permits, liability insurance and Workers' Compensation insurance, as required by law.
6. **Tax Liability:** DLZ shall exonerate, indemnify, and hold harmless the LLC from and against, and shall assume full responsibility for, payment of self-employment taxes, all federal, state and local taxes, or contributions imposed or required under unemployment insurance, workmen's compensation, social security, and income tax laws with respect to the services under this Agreement.
7. **Remedies:** A party shall be entitled to seek and obtain all relief, whether in law or in equity, for breach of the Agreement by the other party, including damages and reasonable attorney fees.
8. **Addresses:** Payments and other notices shall be provided to DLZ Indiana, LLC at 360 Century Building, 36 S. Pennsylvania Street, Indianapolis, IN 46204-3628. Invoices and other notices shall be provided to LLC, Attention: Robert Madden, at 7599 N. Tunnel Road, Unionville, IN 47468.
9. **Severability:** In the event any provision of this Agreement conflicts with applicable law, such conflict shall not affect other provisions of this Agreement.
10. **Choice of Law and Venue:** The terms and provisions of this Agreement shall be construed in accordance with Indiana law. The parties waive trial by jury for any dispute arising out of this Agreement. The parties hereby stipulate that Monroe County, Indiana shall be the sole and exclusive venue for any dispute arising from this Agreement.

SO AGREED ON THE DATE STATED BELOW:

DLZ INDIANA, LLC

Dated: \_\_\_\_\_

By: \_\_\_\_\_  
Its: \_\_\_\_\_

LAKE LEMON CONSERVANCYDISTRICT

Dated: \_\_\_\_\_

By: \_\_\_\_\_  
Its: \_\_\_\_\_

This Instrument Prepared By:  
Angela F. Parker, Attorney at Law  
ANDREWS HARRELL MANN CARMIN & PARKER, P.C.  
400 West 7<sup>th</sup> Street, Suite 104, P.O. Box 2639  
Bloomington, IN 47402-2639  
Telephone: (812) 332-4200

313536/11820-62

## Attachment "A"



INNOVATIVE IDEAS  
EXCEPTIONAL DESIGN  
UNMATCHED CLIENT SERVICE

March 18, 2014

Mr. Robert Madden  
Manager  
Lake Lemon Conservancy District  
7599 N. Tunnel Road  
Unionville, Indiana 47468

Re: Proposal for Professional Engineering Services for Regulatory Dam Inspection

Dear Mr. Madden:

DLZ Indiana, LLC (DLZ) is pleased to have the opportunity to submit this proposal for professional engineering services for the above referenced subject.

### DESCRIPTION OF THE PROJECT

The Indiana Dam Statute, IC 14-27-7.5-9, requires the inspections of high hazard structures to be conducted by experienced engineers at least one time every two years. It is understood that while the Lake Lemon Conservancy District (District) manages the property, the City of Bloomington Utilities Department is the owner of the high hazard structure and is required to meet the new inspection regulations. The scope of services below has been prepared in order to meet these DNR requirements.

### SCOPE OF SERVICES

DLZ proposes to perform the following dam inspection services:

- 1.) DLZ will perform a file review. The file review will include an evaluation of the background, design, construction, and performance history of the dam using readily available files and data such as as-built drawings and specifications and previous inspection reports.
- 2.) A geotechnical engineer will perform a visual inspection of the facility taking photographs of pertinent features to assess and document current conditions. Checklists will be used to document the visible condition of the dam and its appurtenant structures.
- 3.) If available, the project operations and maintenance personnel will be interviewed to document any operational or maintenance issues with the dam.
- 4.) The results of the three previous tasks will be assembled in a report for the project. The report will document the existing visible condition of the dam, and make necessary recommendations for remedial work to correct deficiencies that were noted during the inspection. Photographs from the inspection will also be included in the report.

## INFORMATION AND SERVICES TO BE PROVIDED BY THE DISTRICT

For the purposes of this proposal, it was assumed that the Lake Lemon Conservancy District will:

- 1.) Identify a single point of contact for the District for coordination and distribution of information.
- 2.) Provide as-built drawings and specifications for the facility (if available).
- 3.) Provide copies of all known inspection reports in the possession of the District.
- 4.) Arrange for access to and make all provisions for DLZ to enter the facility as required to perform services under this proposal.
- 5.) Make available operations and maintenance personnel (if any) for needed interviews.

## DELIVERABLES

DLZ will deliver to the District one (1) electronic copy on CD and three (3) bound paper copies of the completed dam inspection report.

## SCHEDULE

Upon written notice to proceed, DLZ will complete the field inspection during a one day visit scheduled in coordination with the Lake Manager. The remaining work described in the *Scope of Services* section will be completed within forty-five (45) calendar days of completion of the field inspection.

## COMPENSATION

DLZ proposes to be compensated a lump sum amount of Four Thousand Four Hundred Dollars and No Cents (\$4,400.00) for completion of the above tasks. Additional services must be approved in writing by the Lake Lemon Conservancy District, prior to the commencement of that work, and will require additional compensation as mutually agreed to.

Reimbursable items will be charged as a separate direct cost and will include travel mileage, CD's, copying costs, etc. These charges are as needed and will be based on a not-to-exceed amount of Two Hundred Fifty Dollars and No Cents (\$250.00). A rate schedule is enclosed as **Exhibit A** for reimbursable charges and for use if additional services are warranted.

## ADDITIONAL SERVICES

If authorized in writing by the District, DLZ will furnish, or obtain from others, Additional Services of the types listed below. These services are not included as part of the basic services presented in the *Scope of Services*

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INNOVATIVE IDEAS  
EXCEPTIONAL DESIGN  
UNMATCHED CLIENT SERVICE

Title  
Subtitle  
Page 3 of 3

section of this Proposal. These Additional Services would be paid for by the District as indicated in the *Compensation* section of this Proposal.

- 1.) Additional Services in connection with the project, including services that are to be furnished by the District in accordance with the *Information and Services to be Provided by the District* section of this Proposal, and services not otherwise provided for in this Proposal.

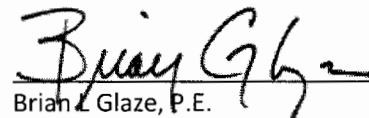
#### STANDARD TERMS AND CONDITIONS

The Standard Terms and Conditions, as set forth in **Exhibit B**, are incorporated here into and made part of this proposal. The Owner referred to in the Standard Terms and Conditions means the Lake Lemon Conservancy District.

DLZ Indiana, LLC trusts that this proposal meets with your approval. We look forward to working with the District on this project and appreciate the opportunity to submit this proposal for engineering services. If for any reason you should have any questions, please do not hesitate to contact Timothy Hampshire at 614-888-0040 or Jon LaTurner at 317-633-4120.

Sincerely,

**DLZ INDIANA, LLC**




Brian L. Glaze, P.E.  
President

Approved and Accepted

**LAKE LEMON CONSERVANCY DISTRICT**



Chairman



Jonathan E. LaTurner, P.E.  
Division Manager



Manager

Enclosures: Attachments

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**DLZ INDIANA, LLC  
STANDARD FEE STRUCTURE  
ENGINEERING/ARCHITECTURAL  
2014**

<i>Activity Code</i>	<i>Employee Classification</i>	<i>Hourly Rate</i>
1	Principal	\$220.00
49	Division Manager	\$185.00
50/480/556	Department Manager/Planner VI/Engineer VI	\$160.00
55	Registered Land Surveyor	\$130.00
21	Project Manager	\$140.00
330	Electrical Engineering Specialist	\$150.00
555/565/214	Engineer V/Architect V/Landscape Architect V/ Planner V/Scientist V/Geologist V / Surveyor V	\$145.00
554/564	Engineer IV/Architect IV/Landscape Architect IV/ Planner IV/Scientist IV/Geologist IV	\$140.00
53/58	Engineer III/Architect III/Landscape Architect III/ Planner III/Scientist III/Geologist III	\$125.00
52/57	Engineer II/Architect II/Landscape Architect II/ Planner II/Scientist II/Geologist II	\$115.00
51/56	Engineer I/Architect I/Landscape Architect I/ Planner I/Scientist I/Geologist I	\$90.00
28	Designer I	\$85.00
472	Designer II	\$100.00
473	Designer III	\$125.00
29	Technician	\$65.00
147	Construction Administrator	\$110.00
152	Construction Observer	\$90.00
43	Clerical	\$60.00

	<i>Crew Classification</i>	<i>Hourly Rate</i>
143/99/99	3 – person Survey Crew	\$200.00
142/99	Topographic Survey Crew (straight time)	\$145.00
142/99	Topographic Survey Crew (over time)	\$220.00
63	1 – person Field Crew	\$110.00
63	1 – person Field Crew (over time)	\$150.00
GPS	1 – person GPS/RTK Field Crew	\$160.00
13/94	Field Survey Technician / Survey-Mapping Assistant	\$65.00

<i>Reimbursable Expenses</i>	<i>Rate</i>
Mileage	\$0.565/mile
Travel Expenses	@ Cost
Living Expenses	@ Cost
Reproduction	Cost plus 20%
Subconsultants	Cost plus 20%
Equipment Rental	Cost plus 20%

Rates are subject to revision on January 1, 2015.

Cost of living/inflation increases of 3 to 7% per annum can be anticipated.

\\sbi1\shared\Dept\Administration\Clerical\RATES\2014 Hourly Rates 2014-02-13.doc



**EXHIBIT B**  
**DLZ'S STANDARD TERMS AND CONDITIONS**

**1. INVOICE AND PAYMENT PROCEDURES:** DLZ shall submit invoices, once a month, at a minimum, to the CLIENT for Services accomplished during each calendar month.

The CLIENT hereby agrees that payment will be made for DLZ's Services within thirty (30) days from the date of the invoice; and, in default of such payment, hereby agrees to pay all cost of collection, including reasonable attorney's fees, regardless of whether legal action is initiated. The CLIENT hereby acknowledges that unpaid invoices shall accrue interest at 18 percent per annum after they have been outstanding for over thirty (30) days. If an invoice remains unpaid sixty (60) days after the date of the invoice, DLZ may, upon giving seven (7) days written notice of its intent to do so, suspend all Services on the CLIENT's project. This suspension shall remain in effect until all unpaid invoices are paid in full. If an invoice remains unpaid ninety (90) days after the date of the invoice, DLZ may, upon giving seven (7) days written notice of its intent to do so, declare CLIENT to be in breach of this Agreement and pursue its remedies for collection.

**2. CONSTRUCTION SERVICES:** Construction Phase Services are not intended to include exhaustive detailed inspections of contractor work but site observations to become generally familiar with and to keep CLIENT informed about the progress and quality of work. The Contractor is solely responsible for its compliance or noncompliance with the Contract Documents. If, under this Agreement, professional services are provided during the construction phase of the project, DLZ shall not be responsible for or have control over contractor means, methods, techniques, sequences, or procedures; or for safety precautions and programs in connection with the Work. Nor shall DLZ be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents or for Contractor's failure to comply with applicable laws, ordinances, rules or regulations. Under no circumstances will DLZ have any direct contractual relationship with the Construction Manager, Contractor, any subcontractors, material suppliers or other consultants unless DLZ and the CLIENT expressly agree otherwise in writing. CLIENT agrees that DLZ will perform on-site construction observation for this project and that such services will not be performed by others.

**3. SUBSURFACE INVESTIGATION:** DLZ makes no representations concerning soil conditions unless specifically included in writing in this Agreement, and DLZ is not responsible for any liability that may arise out of the making or failure to make soil surveys, or sub-surface soil tests, or general soil testing.

**4. AGENCY REVIEW:** In the event that, due to a change in applicable laws or a change in the requirements or policies of a governmental agency after the date of this Agreement, additional office or field work is required, said additional work shall be paid for by CLIENT as extra work.

**5. SURVEY STAKING:** In the event that any survey staking is disturbed by an act of God or parties other than DLZ, the cost of restaking shall be paid for by CLIENT as extra work.

**6. MISCELLANEOUS EXPENSES:** The CLIENT shall pay the costs of checking and inspection fees, zoning and annexation application fees, assessment fees, soils engineering fees, soils testing fees, aerial topography fees, and all other fees, permits, bond premiums, title company charges, blueprints and reproductions, and all other charges not specifically covered by the terms of this Agreement.

**7. CHANGE OF SCOPE:** The scope of Services set forth in this Agreement is based on facts known at the time of execution of this Agreement, including, if applicable, information supplied by DLZ and CLIENT. DLZ will promptly notify CLIENT of any perceived changes of scope in writing and the parties shall negotiate modifications to this Agreement before commencement of any change in scope.

**8. SAFETY:** DLZ shall establish and maintain programs and procedures for the safety of its employees. DLZ specifically disclaims any authority or responsibility for general job site safety and safety of persons other than DLZ employees.

**9. REUSE OF PROJECT DELIVERABLES:** Reuse of any documents or other deliverables, including electronic media, pertaining to the Project by CLIENT for any purpose other than that for which such documents or deliverable were originally prepared, or alternation of such documents or deliverables without written verification or adaption by DLZ for the specific purpose intended, shall be at CLIENT's sole risk.

**10. OPINIONS OF CONSTRUCTION COST:** Any opinion of construction costs prepared by DLZ is supplied for the general guidance of the CLIENT only. Since DLZ has no control over competitive bidding or market conditions, DLZ cannot guarantee the accuracy of such opinions as compared to contract bids or actual cost to CLIENT.

**11. INSURANCE:** DLZ will maintain insurance coverage for Professional, Comprehensive General, Automobile, Worker's Compensation and Employer's Liability in amounts in accordance with all legal requirements and DLZ business requirements. Certificates evidencing such coverage will be provided to CLIENT upon request. For projects involving construction, CLIENT agrees to require its construction contractor, if any, to include DLZ as an additional insured on its policies relating to the Project. DLZ coverage referenced above shall, in such case, be excess over contractor's primary coverage.

**12. INDEMNITY:** To the fullest extent permitted by law, DLZ shall indemnify and save harmless CLIENT from and against liability and damages sustained by CLIENT, its employees, and representatives by reason of injury or death to persons or damage to tangible property to the proportionate extent caused directly by the negligence of DLZ or its employees.

**13. LIMITATION OF LIABILITY:** No employee of DLZ, its parent, subsidiary or affiliate companies, shall have individual liability to CLIENT. CLIENT agrees that, to the fullest extent permitted by law, DLZ's total liability to CLIENT for any and all injuries, claims, losses, expenses or damages whatsoever arising out of or in any way related to the Project or this Agreement from any causes including, but not limited to, DLZ's negligence, error, omissions, strict liability, or breach of contract shall not exceed the total compensation received by DLZ under this Agreement. If CLIENT desires a limit of liability greater than provided above, CLIENT and DLZ shall include in the Agreement the amount of such limit and the additional compensation to be paid to DLZ for assumption of such risk.

**14. PREVAILING PARTY LITIGATION COSTS:** In the event any actions are brought to enforce this Agreement, the prevailing party shall be entitled to collect its litigation costs from the other party. Any litigation shall be governed by the laws of the state in which the Project is located.

**15. AUTHORITY:** The persons signing this Agreement warrant that they have the authority to sign as, or on behalf of, the party for whom they are signing.

**16. STATUTE OF LIMITATIONS:** To the fullest extent permitted by law, parties agree that, except for claims for indemnification, the time period for bringing claims regarding DLZ's performance under this Agreement shall expire one year after Project Completion.

**17. SCHEDULE:** DLZ shall not be responsible for the Contractor's schedule or failure to carry out the Work in accordance with the Contract documents. DLZ shall not have control over or charge of acts or omissions of the Contractor, Subcontractors, or their agents or employees, or any other persons performing portions of the Work.

**18. SHOP DRAWINGS:** Review of such submittals is not conducted for the purpose of determining the accuracy or completeness of other details such as dimensions and quantities, or for substantiating and/or coordinating instructions for installation or performance of equipment of systems with other contract disciplines, all of which remain the responsibility of the Contractor as required by the Contract. DLZ's review shall not constitute approval of safety precautions or, of any construction means, methods, techniques, sequences or procedures. DLZ's approval of a specific item shall not indicate approval of an assembly of which the item is a component.