

Lake Lemon Conservancy District
2016 Annual Report
February 23, 2017

This report is a summary of the most significant operational objectives the LLCD addressed in 2016.

1. BOARD OF DIRECTORS:

Two (2) LLCD Board positions were filled in 2016. Mary Jane Brown ran unopposed and was elected to a four (4) year term in Sub Area III. The LLCD Board of Directors appointed Andy Hoffman, Sub Area V, to a one year term, expiring at the 2017 Annual Meeting. Board officers for 2016 were Pam Dugan, Chairman; Sue Miller, Vice-Chairman; and Lance Eberle, Treasurer.

2. PERSONNEL:

Staff for 2016 included Joe Hopkins, Chris Nguyen, Alex Snooks, and Andrew O'Malia Gate Attendants; James Van Tassel, Operations Supervisor; Levi Warthan, Barge Operator, Jim Walker Back-up Barge Operator; and Isaac Walls, Push Boat Operator.

3. GATE HOUSE OPERATIONS:

The 2016 boating season started on Saturday, March 19th, and ended on Sunday, November 26th. Boat permits and launch fees collected in 2016 totaled \$135,257.00. The District hosted 20 fishing tournaments in 2016.

4. 2016 BOATING SAFETY/ENFORCEMENT:

- A. IDNR Law Enforcement had a strong presence on the reservoir in 2016. Fourteen (14) boating citations. Twenty three (23) boating warning tickets,

5. 2016 AQUATIC PLANT MANAGEMENT:

Date	Acreage	Description
6/17/16	38.5	Milfoil (<i>Renovate</i>) & Submersed (Aquathol)
7/22/16	19.4	Milfoil (<i>Renovate</i>) & Submersed (Aquathol)
	17.6	Lotus/Spatterdock (AquaPro)
8/10/16	4.3	Milfoil (<i>Renovate</i>)
	17.6*	Lotus/Spatterdock (AquaPro)
TOTAL	79.8	

*: Touch Up Treatment

Lake Lemon being a shallow reservoir experiences heavy vegetation growth which is treated annually under a maintenance schedule. In 2016 vegetation growth started later in the season with the first treatment on June 17, 2016. The LLCDC's approach in aquatic vegetation control is to keep main lake boating and access free of nuisance vegetation. The submersed vegetation was well maintained in 2016 treating a total of 62.2 acres. The American Lotus maintenance line was moved westward and closer to the shore in 2015 due to lack of water depth and beneficial factors of established Lotus. In 2016 the line was moved back east per the recommendation of the board. This line will be closely monitored in 2017. A total of 79.8 acres were treated in 2016 totaling \$38,689.90. The LLCDC did receive a \$5,000.00 DNR LARE Grant for the treatment of Eurasian Watermilfoil.

6. 2015/2016 WINTER DRAWDOWN:

The LLCDC drew down the lake 3.5' for the 2015/2016 winter season. The sluice gate was opened on December 2, 2015 and shut on December 11, 2015. Due to precipitation, the gate was reopened on December 29, 2015, and shut again at 41" below normal pool on January 21, 2016.

7. 2016 WILDLIFE CONTROL:

The LLCDC received permission from the IDNR, Fish and Wildlife Division to treat resident Canada Goose nests and eggs. IDNR only requires registration and a final report on how many nests were treated. In the spring, James Van Tassel, the LLCDC Lake Biologist, treated 19 nests on Cemetery Island in Monroe County. In addition, one nest was treated on south shore drive near a private home. It appears the treatment was effective as little to no goslings were seen around Cemetery Island. The LLCDC will continue its efforts in treating resident Canada Geese in 2017.

8. 2016 WATER TESTING:

- A.** Indiana University's School of Public and Environmental Affairs (SPEA) conducted the tests. The tests included a review of such parameters as clarity, nutrients, algae, dissolved oxygen, and fecal coliform bacteria. The 2016 results are expected in May 2017 from SPEA. All previous reports may be found on our website.
- B.** The LLCDC Biologist monitored E. coli concentrations at Riddle Point Park beach once a week starting in May and ending in September. All tests were below the risk threshold established by the State of Indiana.

9. RIDDLE POINT PARK:

- A.** The park opened on Saturday, May 28th. Park admissions were charged daily thru Monday, September 5th. The season vehicle pass was \$60.00; daily park admission was \$7.00 per vehicle. Total park admissions collected was \$39,960.00.
- B.** The Riddle Point Park shelter was rented 13 times. The shelter rental fee was \$125.00/day. Total shelter rental fees collected were \$1,625.00.
- C.** Events hosted by the IU Women's Varsity Rowing Team, and the Lake Lemon Triathlon generated an additional \$2,727.00 in revenues.
- D.** The LLCDC Board hosted the Independence Day Fireworks Show at Riddle Point Park on Saturday July 2rd. Sky Magic Pyrotechnics, Inc, Brazil, IN, conducted the show at a cost of \$6,500.00. Donations and contributions collected for the event totaled \$6,950.00.

10. SHORELINE PROJECT PERMITS:

- A.** Seven (7) permits were issued to lake freeholders in 2016. These projects dealt primarily with shoreline erosion control, sea wall construction, and minor shoreline improvements. Since 1996, 369 shoreline permits have been issued to Conservancy freeholders.

11. 2016 LLCD LAKE ENHANCEMENT PROGRAM:

The Lake Enhancement Program consists of four primary maintenance functions: lake debris and stump removal; shore-line erosion control stabilization (rip-rap stone); lake dredging (sediment removal); and sediment/debris disposal site(s) development and maintenance.

These functions are accomplished through LLCD's self managed barge operation. Operation consisted of two (2) seasonal employees and the following pieces of equipment: A. 66 foot long x 36 foot wide steel barge; B. Excavator; C. Push boat; D. Bulldozer; E. Articulated off road truck; F. Maintenance Utility Truck; and G. 40 foot long x 20 foot wide steel barge.

A Summary of 2016 Maintenance Functions are as follows:

- I. **ATTACHMENT A- 2016 LAKE DEBRIS/STUMP REMOVAL:
FINAL FINANCIAL SUMMARY**
- II. **ATTACHMENT B- FINAL FINANCIAL 2016 SHORE-LINE
STABILIZATION (RIP-RAP) SUMMARY**
- III. **ATTACHMENT C- 2016 FINAL FINANCIAL SUMMARY OF
LLCD DREDGING (SEDIMENT REMOVAL)**
- IV. **ATTACHMENT D- 2016 FINAL POSSOM TROT DISPOSAL SITE
PREPARATION EXPENSES**

12. INSURANCE SERVICES:

Provided by First Insurance Group, Bloomington, IN. (Lance Eberle).

13. ACCOUNTING SERVICES:

Provided by Watkins Accounting, Bloomington, IN. (Shirley Watkins).

14. LEGAL SERVICES:

Provided Carmin Parker PC, Bloomington, IN. (Angela Parker).

15. LLCD'S FINANCIAL INSTITUTION:

The Peoples State Bank, Ellettsville, IN. (Ashley Hazelrig)

2016 Lake Debris
Financial Summary

EXPENSES	
Staff Costs: Dredger 56 hours @ \$37.50/hr Assistant Dredger 53 hours @ \$18.00/hr	\$2,100.00 \$954.00
Fuel (Estimated)	7 Gallons/hour @ \$1.82/gallon x 50 hours = \$637.00
Contractual / Rental Services	\$2,082.35
Grand Total	\$5,773.35

Note: 2014 Grand Total - \$5,237.72
 2015 Grand Total - \$9,729.50

Debris Removal - East End of Long Causeway

Staff Cost	Contractual	Rental	Total
\$832.50	\$1,500.00	\$582.35	\$2,914.85

2014	2015
\$1,447.02	\$3,092.35

2016 Shore-Line Stabilization (Rip-Rap)

Financial Summary

Service Zone (District)	Total Tons (Rip-Rap) Stone
109 (I)	20.58 (small stone)
111 (I)	59.43
115 (II)	80.45 81.24 (CBU)
127 (IV)	20.21 20.05 (small stone)
Total	160.09 Private 40.63 Private (small stone) 81.24 CBU 281.96

Note: 305 Lineal Feet of Shoreline were stabilized

Total Cost of Rip-Rap Stone: \$2,841.60
Total Cost of #8 Stone: \$574.91
LLCD Cost of Rip-Rap Stone (CBU Property): \$1,442.01
Total Staff Costs: \$721.50 (13 Hours @ \$37.50/hour),
(13 Hours @ \$18.00/hour)
Total Fuel (estimated): \$165.62
(7 Gallons/hour @ \$1.82/gallon x 13 hours)

Total Cost: \$5,745.64
Private Cost: \$4,303.63*

*: The LLCD for 2016 did mostly private shoreline stabilization. This is effectively cost neutral for the LLCD.

Attachment "C"

2016 Sediment Removal**Financial Summary**

Personnel Costs	Actual 2016	Budgeted 2016
Dredger 515 Hours @ \$37.50/Hr.	\$19,308.76	\$22,500.00
Assistant Dredger 495.25 Hours @ \$18.00/Hr.	\$8,914.50	\$10,800.00
Total Personnel	\$28,223.26	\$33,300.00

Supply Costs	Actual 2016	Budgeted 2016
Diesel Fuel	\$3,257.25	\$11,000.00
Dredging Supplies	\$9,881.69	\$15,000.00
Total Supply Cost	\$13,138.94	\$26,000.00

Services & Charges	Actual 2016	Budgeted 2016
Insurance	\$10,658.00	\$10,658.00
Repair/Maintenance	\$3,210.31	\$7,000.00
Loan Service	\$0.00	\$46,000.00
Total Services & Charges	\$13,868.31	\$63,658.00

Grand Total	Actual 2016	Budgeted 2016
	\$55,230.51	\$122,958.00

Attachment "D"

2016 Possom Trot Disposal Site Preparation**Financial Summary**

Category	Cost
2016 Expenses	
Staff Dredger	\$881.25 (23.5 Hours @ \$37.50/hr)
Assistant Dredger	\$225.00 (12.5 Hours @ \$18.00/hr)
Total Staff Costs	\$1,106.25
Supplies Stone Erosion Control (silt fencing) Diesel (estimated) (7 gal/hr @ \$1.82/gal x 20 hrs)	\$1,340.95 \$0.00 \$254.80
Contractual Equipment Rental Kenny Clark Site	\$0.00 \$1,000.00
Total Supply/Contractual Costs	\$2,595.75
2016 Grand Total	\$3,702.00

Other Staff CostsSmall Barge Assembly

Dredger (102.5 Hours @ \$37.50/hr) = \$3,843.75
Assistant Dredger (102.5 Hours @ \$18.00/hr) = \$1,845.00

Total = \$5,688.75Equipment Maintenance

Dredger (156 Hours @ \$37.50/hr) = \$5,850.00
Assistant Dredger (116.5 Hours @ \$18.00) = \$2,097.00

Total = \$7,947.00

Private Dredging

Dredger (54 Hours @ \$37.50/hr) = \$2,025.00
Assistant Dredger (44 Hours @ \$18.00/hr) = \$792.00
Total = **\$2,817.00***

Office/Park Work

Dredger (10 Hours @ \$37.50/hr) = \$375.00
Assistant Dredger (0 Hours @ \$18.00/hr) = \$0.00
Total = **\$375.00**

*: Private Dredging is effectively cost neutral for the LLCD