

To: Lake Lemon Conservancy District Board of Directors and Freeholders
From: Bob Madden, Manager
Subject: 2011 Annual Report
Date: February 1, 2012

This report is a summary of the most significant operational and administrative tasks LLCD addressed in 2011.

1. BOARD OF DIRECTORS:

One (1) LLCD Board position was filled in 2011. Tina Thrasher was elected to a four (4) year term in Sub Area VII. Term will expire in 2015. Board officers for 2011 were John Schell, Chairman; Bruce Cassal, Vice-Chairman; and Dennis Friesel, Treasurer.

2. PERSONNEL:

Staff for 2011 included Jake Morrow, Patrick Campbell, Joe Hopkins, and Chris Nguyen, Gate Attendants; Adam Casey, Lake Biologist; Hunter Mann, Maintenance Technician; Levi Warthan, Barge Operator; and Larry Hays, Push Boat/Truck Operator.

3. GATE HOUSE OPERATIONS:

The 2011 boating season started on Saturday, March 19th, and ended on Sunday, December 11th. Boat permits and launch fees collected in 2011 totaled \$118,742.00. The District hosted 34 fishing tournaments in 2011.

4. 2011 BOATING SAFETY/ENFORCEMENT:

- A.** There were no boating accidents reported to LLCD or IDNR Law Enforcement in 2011. However there were several personal injury accidents. 1. A 17 year old girl strained her back while tubing. 2. An 8 year old girl broke her arm at Riddle Point Park when she tripped over a fishing pole.
- B.** IDNR Law Enforcement had a visible presence on the reservoir in 2011. 68 citations and 70 warning tickets were issued. There were 3 misdemeanor arrests.

- C. LLCD Lake Patrol reported that a male driver of a dark gray Dodge Stratus drove the vehicle into the lake on the long causeway in June. No injury or environmental impacts. Vehicle was removed from the lake within an hour. Driver was never identified.

5. 2011 AQUATIC PLANT MANAGEMENT:

On July 22, Aquatic Control, Inc., Seymour, IN. treated 20.5 acres of Lotus and Spatterdock and 10.25 acres of Eurasian water milfoil and Naiad. Treatment primarily occurred around docks, boating lanes and maintenance lines. On August 10th, Aquatic Control treated 0.5 acres of lotus and spatter dock on the east end of the lake and 8.5 acres of Eurasian water milfoil and Naiad. Total expenses for 2011 vegetation treatments were \$15,185.00.

6. 2010/2011 WINTER DRAWDOWN:

Upon opening the sluice gate on November 22nd, 2010 to begin the drawdown process, the lake was 2 feet below normal pool. The two foot head start and relatively dry November/December allowed for a quick and effective drawdown. The six foot drawdown goal was achieved and the sluice gate was closed on December 12, 2010. A lack of ice formation prior to achieving our six foot drawdown goal allowed freezing temperatures to reach the root structures of aquatic plants. Studies have shown that a successful drawdown during extended periods of freezing temperatures decrease the abundance of aquatic vegetation, especially for rooted species such as Eurasian watermilfoil and Spatterdock that generally grow back from existent root structures. It is surmised that the lack of ice cover and extended benthic exposure to freezing temperatures was largely responsible for the decrease in vegetation abundance during the 2011 growing season. Though the chemicals used during the previous year's treatments play a large role in the reduction of plants, it is believed that the successful drawdown played a substantial role in the nearly \$44,000.00 dollar savings between 2010 and 2011 treatment costs. Drawing down the lake also plays a beneficial role in the health of fisheries. Decreasing the total volume of water helps to concentrate game fish such as bass with feeder fish during the drawdown.

7. 2011 INDIANA CLEAN LAKES PROGRAM:

LLCD continued its involvement with this program in a cooperative effort between LLCD, the Indiana Department of Environmental Management (IDEM), and School of Public and Environmental Affairs at Indiana University (IU-SPEA). This long-term monitoring program tests for water clarity/transparency and qualitative algae counts based on color readings. Monitoring is done multiple times a month during the boating season. The monitoring will help LLCD identify any changes in water quality over time. In 2011, the average Secchi Disk /clarity depth was around 3.5 feet. This is within an inch of the 2010 average (3.4) indicating a slight increase in light penetration depth.

8. 2011 WILDLIFE CONTROL:

Towards the end of March, the LLCDC received permission from the IDNR, Fish and Wildlife Division to treat resident Canada goose nests and eggs. Similar to last year, IDNR did not require a permit to treat resident Canada goose nests and eggs. IDNR only requires registration and a report on how many nests were treated. The primary nesting site for geese on Lake Lemon is Cemetery Islands located at the west end of the lake. On April 15th, 22 nests were treated on the islands, totaling 175 eggs. On May 17th, 4 additional nests were treated bringing the total number of eggs treated to 205. A follow up inspection showed that there were no new nests or eggs, and none of the treated eggs had hatched. This is an ongoing effort to help control the Canadian goose population on Lake Lemon

9. WEBSITE UPDATE:

Starting in September, 2011, LLCDC Began uploading audio recordings of monthly board meetings to the LLCDC website. This is an ongoing effort to increase transparency and public awareness of LLCDC Board Meetings. Our website is www.lakelemon.org.

10. 2011 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 2011 results are expected in May 2012 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 well below the risk threshold established by the State of Indiana.

11. 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 \$50.00; Monday thru Friday park admission was \$4.00 per vehicle; weekend/holiday park admission was \$5.00 per vehicle. Total park admissions collected was \$30,521.00.
- 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.** An event hosted by the IU Women's Varsity Rowing Team, and the Lake Lemon Triathlon, hosted by Phi Kappa Psi fraternity from IU, generated an additional \$2,275.00 in revenues.

- D. The LLCD Board hosted the Independence Day Fireworks Show at Riddle Point Park on July 2nd. Sky Magic Pyrotechnics, Inc, Brazil, IN, conducted the show at a cost of \$6,500.00. Donations and contributions collected for the event totaled \$6,156.90.

12. SHORELINE PROJECT PERMITS:

- A. Twelve (12) permits were issued to lake freeholders in 2011. These projects dealt primarily with shoreline erosion control, sea wall construction, and minor shoreline improvements. Since 1996, 307 shoreline permits have been issued to Conservancy freeholders.

13. 2011 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. Consisting of two (2) part-time 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; and F. Maintenance Utility Truck.

A Summary of 2011 Maintenance Functions are as follows:

- I. ATTACHMENT A- 2011 LAKE DEBRIS/STUMP REMOVAL: FINAL FINANCIAL SUMMARY
- II. ATTACHMENT B- FINAL FINANCIAL 2011 SHORE-LINE STABILIZATION (RIP-RAP) SUMMARY
- III. ATTACHMENT C- 2011 FINAL FINANCIAL SUMMARY OF LLCD DREDGING (SEDIMENT REMOVAL)
- IV. ATTACHMENT D- 2011 FINAL POSSOM TROT DISPOSAL SITE PREPARATION EXPENSES

14. INSURANCE SERVICES:

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

15. ACCOUNTING SERVICES:

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

16. LEGAL SERVICES:

Provided by Andrews, Harrell, Mann, Carmin, & Parker, Attorneys at Law,
Bloomington, IN. (Angela Parker).

17. LLCD'S FINANCIAL INSTITUTIONS:

The Peoples State Bank, Ellettsville, IN. (Johnny Lindsey)

Attachment A

2011 Lake Debris/Stump Removal: Final Financial Summary

Program	Started April 18 th , 2011 Ended June 1 st , 2011
2011 Budget Item for Lake Debris Removal	\$3,000.00
EXPENSES	
Staff Costs (Barge Operators)	73.5 hours @ \$51.67/hour = \$3,797.75
Supplies: <i>Estimated</i> (Fuel, Filters, Etc.)	7 Gallons/hour @ \$3.60/gallon x 60 hours= \$1,512.00
Contractual Services (Gary Barrow Excavating)	\$1,500.00
Grand Total	\$6,809.75

Attachment B

Final Financial 2011 Shore-Line Stabilization (Rip-Rap) Summary

Service Zone (District)	Total Tons (Rip-Rap) Stone	Total Linear Feet
107 (III)	744.33	255'
114 & 115 (II)		540'

Total Cost of Rip-Rap Stone: \$9,862.37
Total Staff Costs: \$1,860.12 (36 Hours @ \$51.67/hour)
Total Fuel, Grease, Oil, etc (estimate): \$907.20

Total Cost: \$12,629.69

Attachment C

2011 Final Financial Summary of LLC Dredging (Sediment Removal)

Personnel Costs	Actual 2011	Budgeted 2011
Dredger 556 Hours @ \$32/Hr.	\$17,792.00	\$16,000.00
Push Boat/Truck Operator 490 Hours @ \$16/Hr.	\$7,840.00	\$8,000.00
Benefits (FICA/SUTA)	\$2,114.85	\$1,990.00
Total Personnel	\$27,746.85	\$25,990.00
Difference (\$)	(+\$1,756.85)	

Supply Costs	Actual 2011	Budgeted 2011
Diesel Fuel	\$12,171.88	\$10,000.00
Dredging Supplies	\$7,384.26	\$4,000.00
Total Supply Cost	\$19,556.14	\$14,000.00
Difference (\$)	(+\$5,556.14)	

Services & Charges	Actual 2011	Budgeted 2011
Insurance	\$9,142.00	\$9,142.00
Repair/Maintenance & Equipment Rental	\$5,591.10	\$10,500.00
Loan Service	\$46,000.00	\$46,000.00
Total Services & Charges	\$60,733.10	\$65,642.00
Difference (\$)	(-\$4,908.90)	

Grand Total	Actual 2011	Budgeted 2011
	\$ 108,036.09	\$105,632.00
Grand Total Difference + \$2,404.09		

Attachment D

2011 Final Possom Trot Disposal Site Preparation Expenses

Category	Cost
End of 2010 Expenses (Attached)	\$62,574.51
↓ 2011 Expenses ↓	
Staff	\$5,718.70 (166 Hours @ \$34.45/hr) (16 Days)
	\$2,565.78 (149 Hours @ \$17.22/hr) (14 Days)
Total Staff Costs	\$8,284.48
Supplies Stone (Fuel, Grease, Oil, Etc... Costed out in 2010)	\$6,376.68
Total Supply Costs	\$6,376.68
Contractual Services Grinder Attorney Fees Rule 5 IDEM Permit Fee	\$4,615.00 \$495.00 \$100.00
Total Contractual Services	\$5,210.00
Capital Equipment* Excavator Bucket Thumb Attachment Bull Dozer	\$3,200.00 \$4,150.00 \$28,000.00
Total Capital Costs	\$35,350.00
2011 Grand Total	\$55,221.16
Total Project Cost	\$117,795.67

Budget Estimates for Disposal Site Preparation	2010: \$20,000.00
	2011: \$30,000.00

*NOTE: Capital Equipment is multi-purpose. While purchased and costed to the preparation of the disposal site, this equipment is also used for debris/stump removal and on-going long term maintenance of Disposal Site(s).