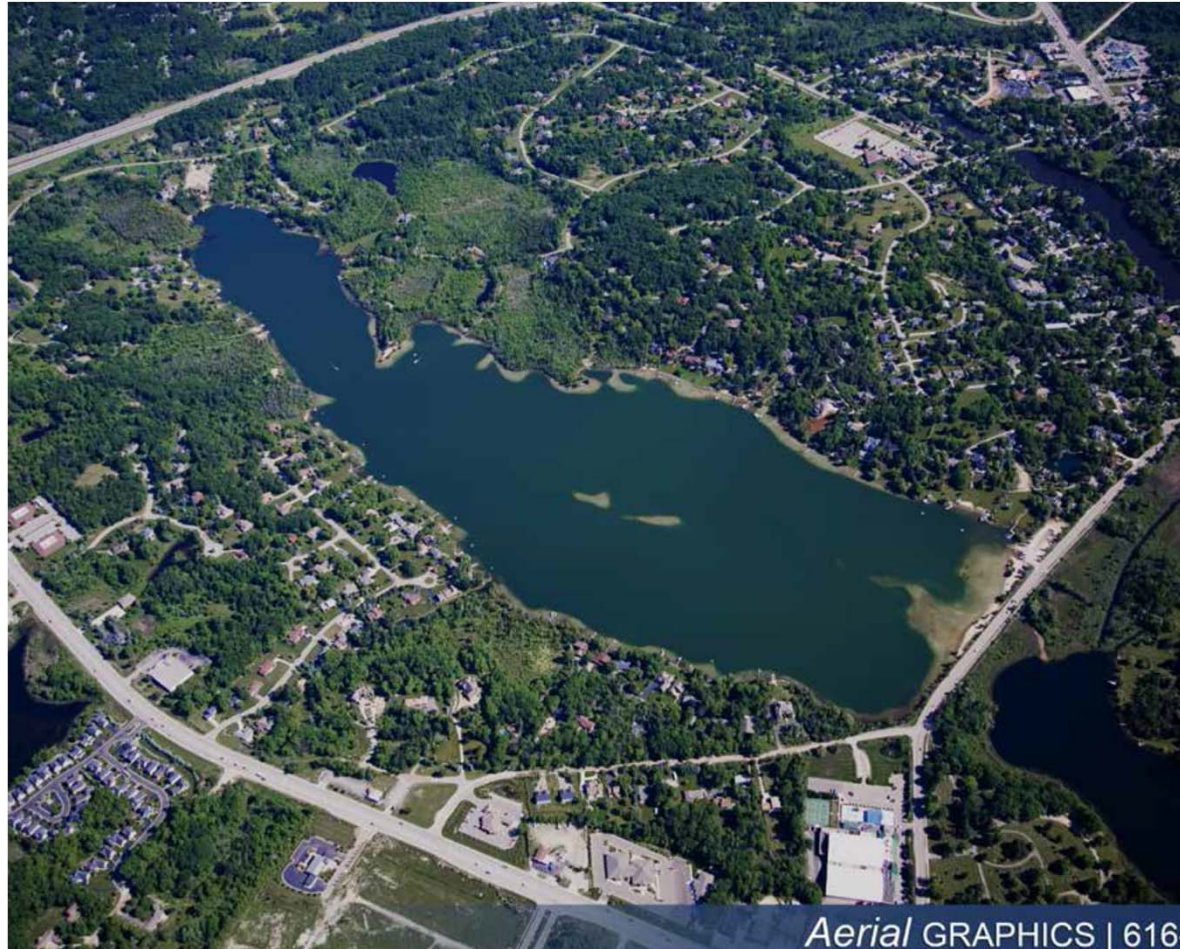


USING COOPERATIVE LAKES DATA IN A REAL WORLD SITUATION



MEMBER - DEER LAKE PROPERTY OWNERS ASSOCIATION

WATER QUALITY

MARINE PATROL

LAKE MANAGEMENT

GENERAL GRUNT!!!



- A LITTLE BACKGROUND OF DEER LAKE
- TWO MAJOR INLETS
 - SURROUNDED BY FOUR MAJOR ROADS



WEST INLET 1,200' LONG WITH A 4' DEPTH



WEST INLET AFTER A
MEDIUM TO HARD RAIN



**17' BOWRIDER TO SHOW SCALE
MARINE PATROL BOAT SPONSERED BY DEER LAKE
PROPERTY OWNERS**



WEST INLET HAS TWO INVASIVES

1. CURLY LEAF PONDWEED
2. STARRY STONEWART (UNDER CONTROL)



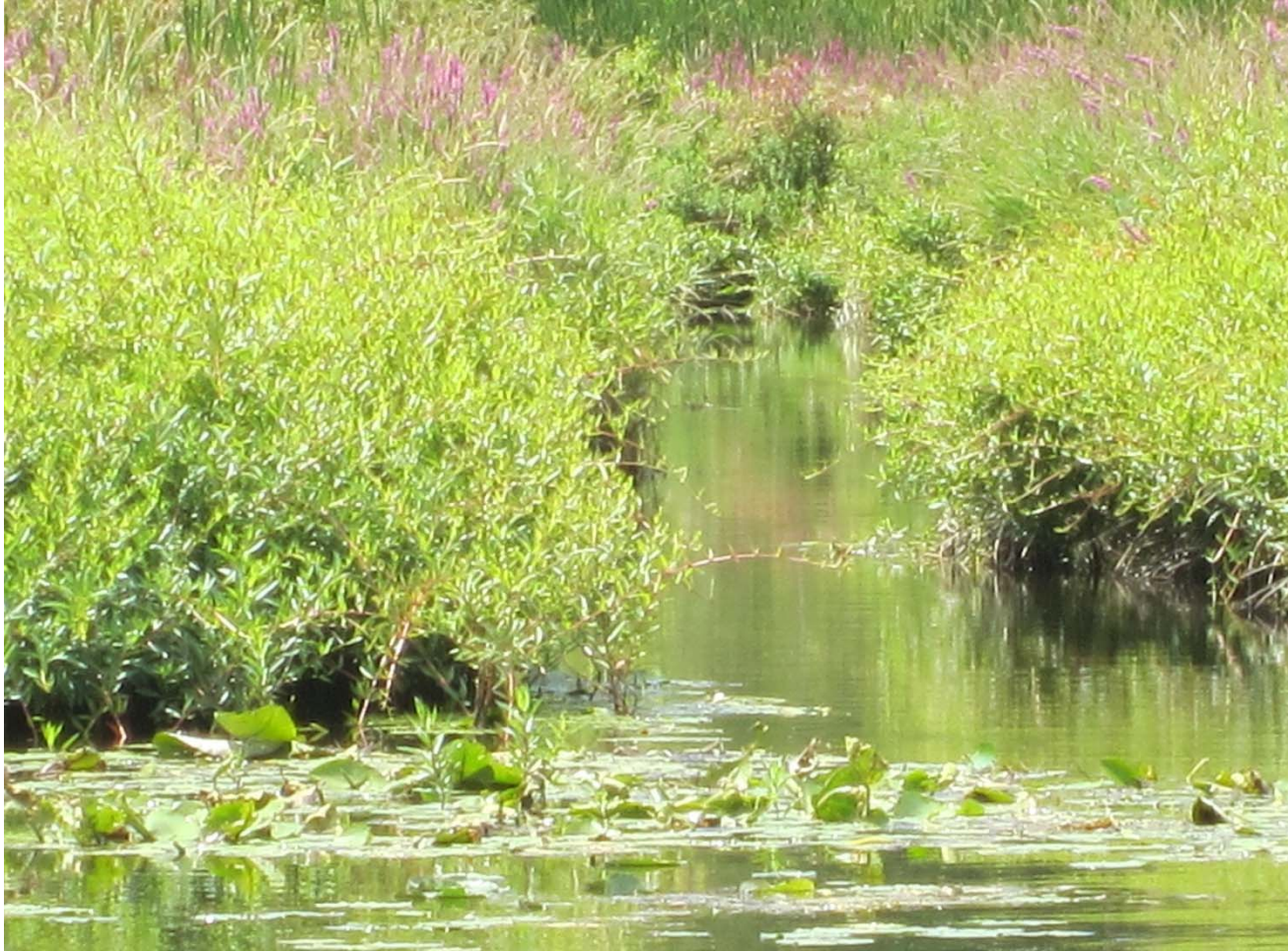
THE PRESENCE OF STARRY STONE
WART WAS CONFIRMED IN THE CANAL





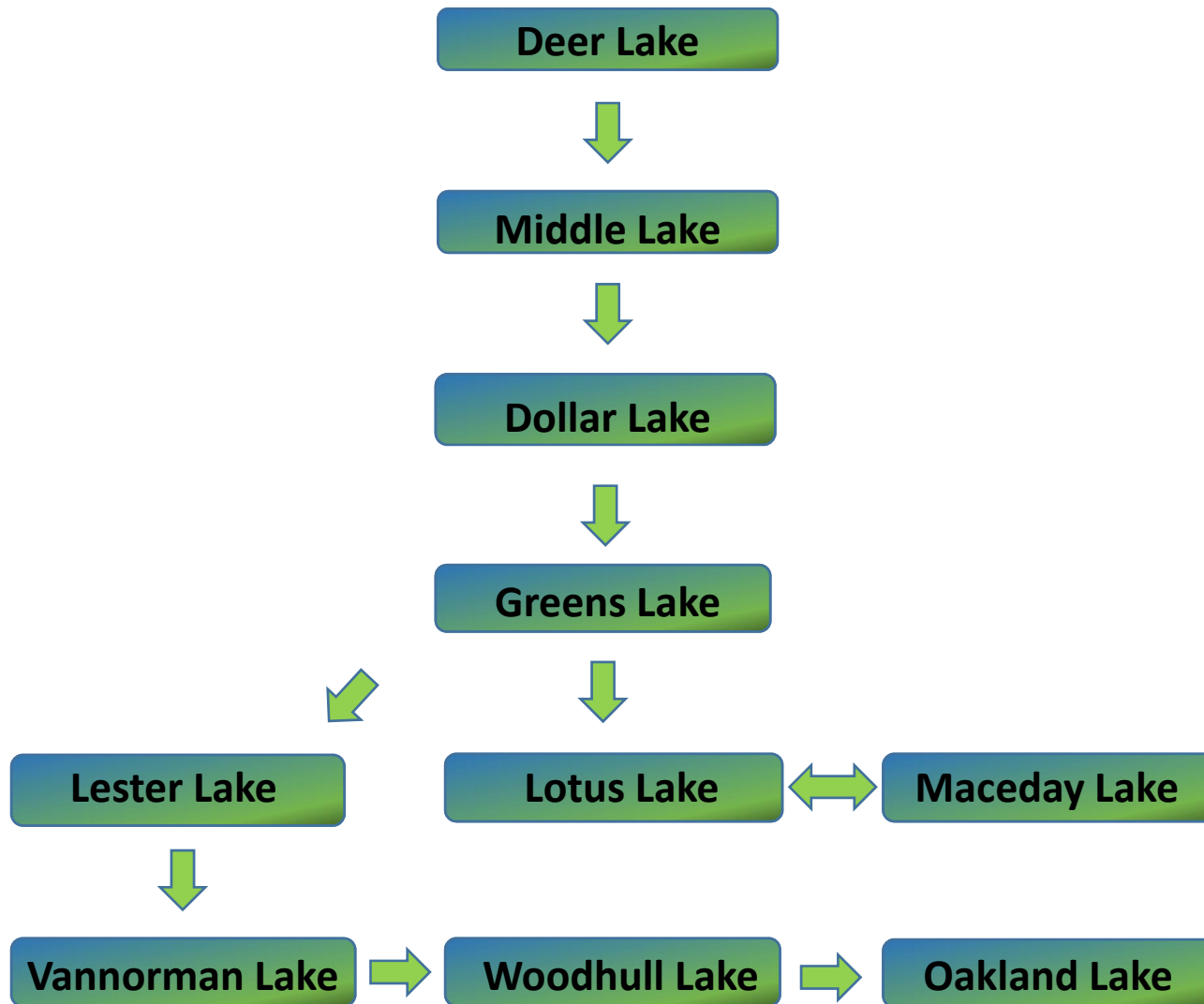
Potamogeton crispus (curly-leaf pondweed)

DR. LATIMORE IDENTIFIES CURLY-LEAF PONDWEED



NORTH INLET CLINTON RIVER WATER SHED
SMALL AMOUNT OF CURLY LEAF PONDWEED AND
EURASIAN MILLFOIL
NOT PROBLEMATIC

LAKES FED BY DEER LAKE IN INDEPENDENCE TOWNSHIP



WE HAVE A FEW LAND INVASIVE SPECIES

SUMMER
2014



THE MICHIGAN RIPARIAN

Vol. 49 No. 3

www.mi-riparian.org

RIPARIAN (ri-'pair-ee-en) adj. Relating to or living or located on the bank of a natural watercourse, such as a river, or of a lake or a tidewater.

DEVOTED TO THE MANAGEMENT AND WISE USE OF MICHIGAN'S LAKES AND STREAMS Published Quarterly



Photo Credit: Aerial Graphics Photography

Deer Lake

Deer Lake is in a distinct category of lakes that can be recognized as a small lake that likes to act like a big lake. Located in Oakland County, formed by glaciers thousands of years ago, it is 137 acres in size and 63 feet deep at its deepest point. Anglers can expect to catch a variety of fish, including Black Crappie, Bluegill, Largemouth Bass and Northern Pike.



CONTROL PHRAGMITE TREATMENT



40' PHRAGMITE ROOT



YOU COULD NOT SEE MIDDLE LAKE BEFORE THE PHRAGMITES TREATMENT

SUMMER
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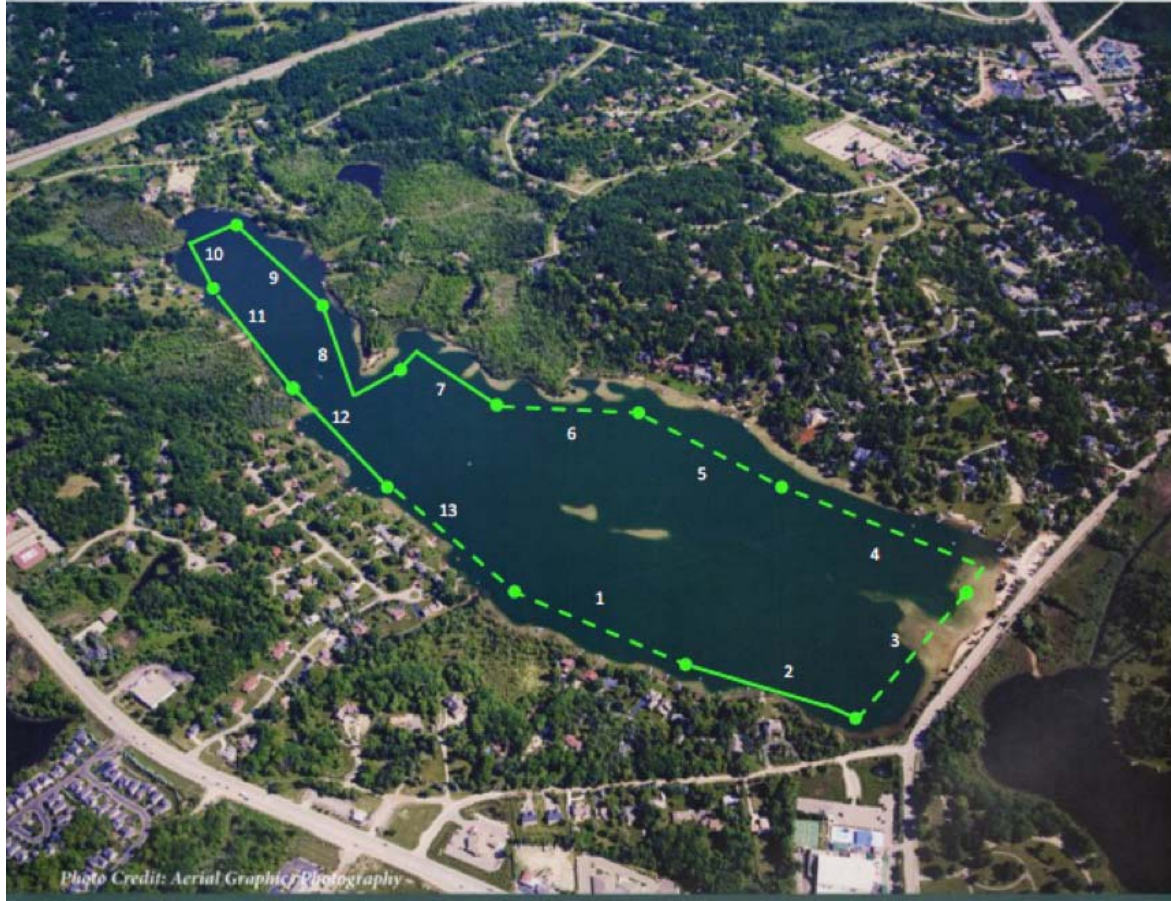


Photo Credit: Aerial Graphics Photography

Deer Lake

Score the Shore - Key

- Good
- Fair
- Poor
- Extremely Impacted

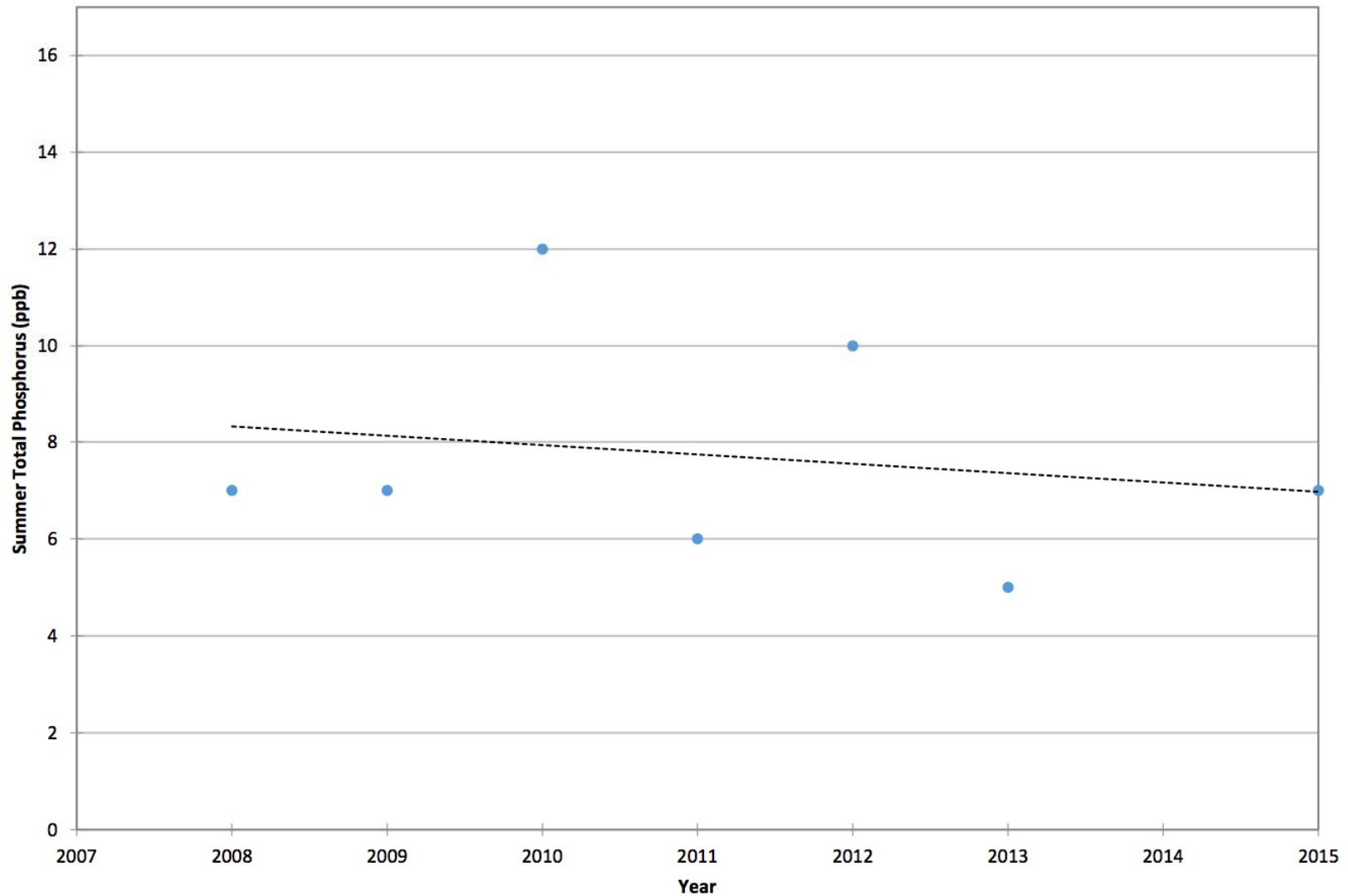
In 2015, seven lakes participated in the Score the Shore parameter. The following table shows a comparison of all of the lakes (sorted by total score, highest to lowest).

Lake	# of Lakeshore Sections	Houses/Docks per 1000 ft	Averages			
			Total Score	Littoral	Riparian	Erosion
Duck	15	5.9	79	67	82	87
Deer	13	11.0	74	80	65	77
Independence	36	8.2	71	64	70	79
Pleasant	15	13.2	58	50	52	73
Stony	20	15.7	55	55	44	65
Klinger	25	28.0	48	39	50	56
Eagle	7	67.1	42	45	27	56

Source: Paul Steen (psteen@hrwc.org), MiCorps Program Manager
 2015 Data Report for Deer Lake, Oakland County
 Site ID: 631128 42.73166°N, 83.43300°W

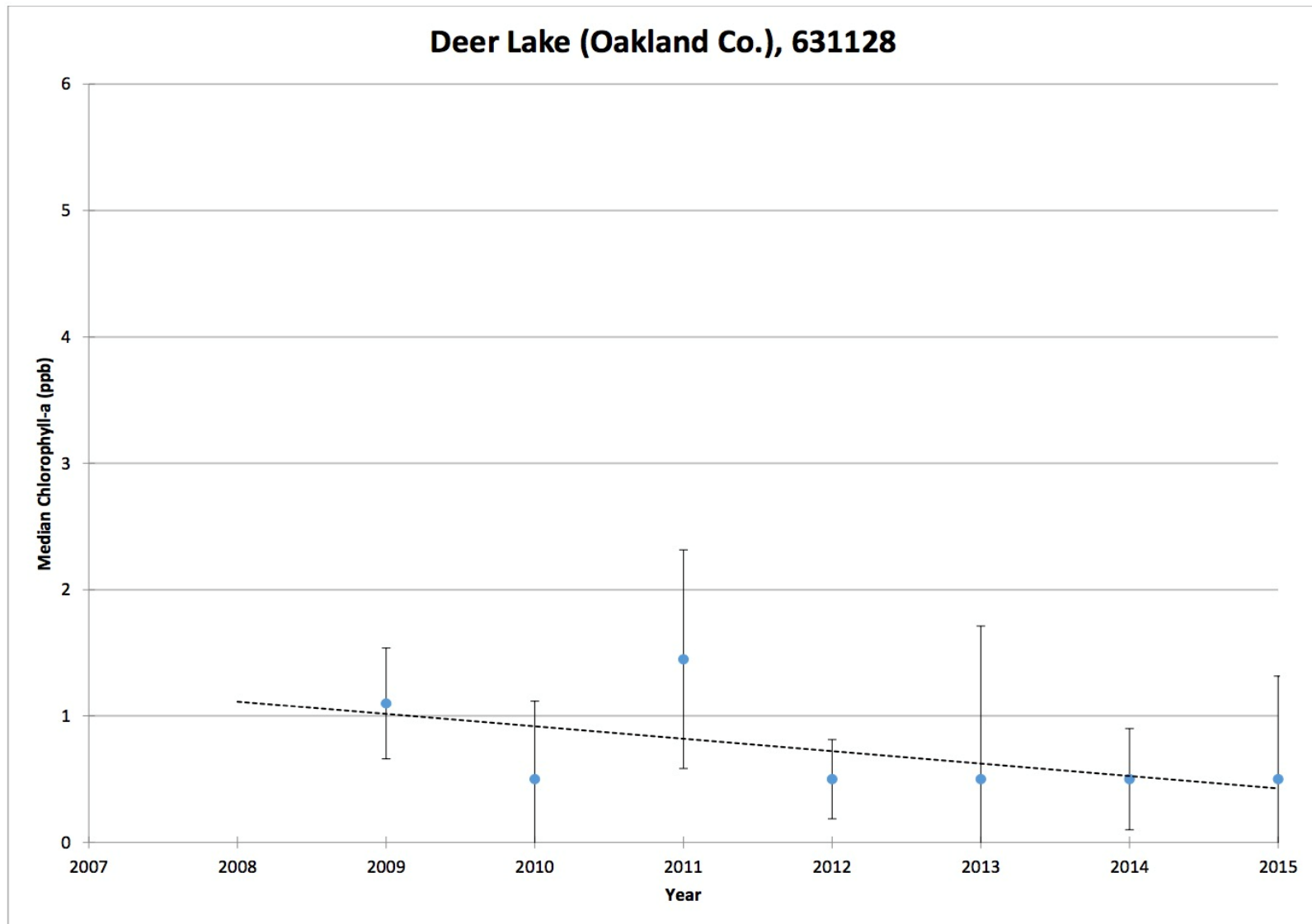
COOPERATIVE LAKES MONITORING PROGRAM
SUMMER TOTAL PHOSPHORUS

Deer Lake (Oakland Co.), 631128



Source: Paul Steen (psteen@hrwc.org), MiCorps Program Manager
2015 Data Report for Deer Lake, Oakland County
Site ID: 631128 42.73166°N, 83.43300°W

COOPERATIVE LAKES MONITORING PROGRAM
SUMMER MEDIAN CHLOROPHYLL-A



Vertical bars indicate standard deviation

Source: Paul Steen (psteen@hrwc.org), MiCorps Program Manager
2015 Data Report for Deer Lake, Oakland County
Site ID: 631128 42.73166°N, 83.43300°W

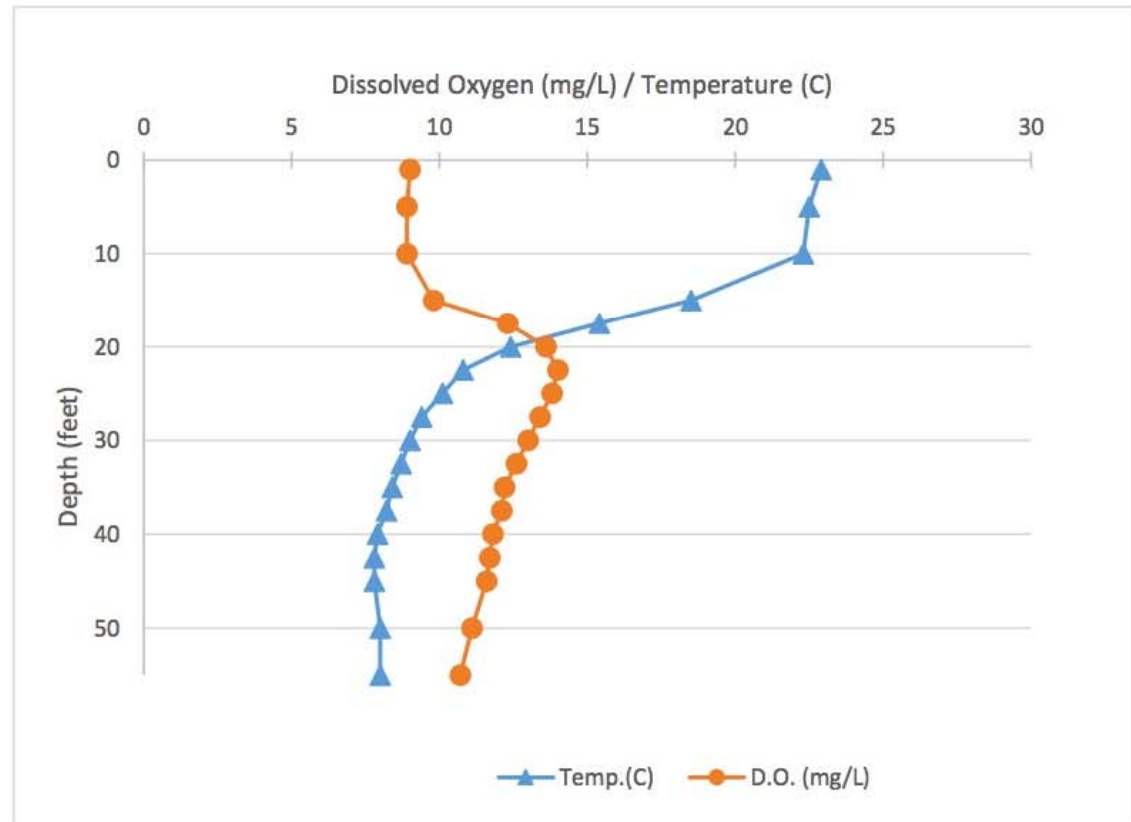
Name: Deer
 County: Oakland
 Site ID: 631128
 Date: 6/18/2015

Dissolved Oxygen and Temperature Profile

Depth (ft)	Temp.(C)	D.O. (mg/L)
1	22.9	9
5	22.5	8.9
10	22.3	8.9
15	18.5	9.8
17.5	15.4	12.3
20	12.4	13.6
22.5	10.8	14
25	10.1	13.8
27.5	9.4	13.4
30	9	13
32.5	8.7	12.6
35	8.4	12.2
37.5	8.2	12.1
40	7.9	11.8
42.5	7.8	11.7
45	7.8	11.6
50	8	11.1
55	8	10.7

Lake: Deer (Oakland Co.)

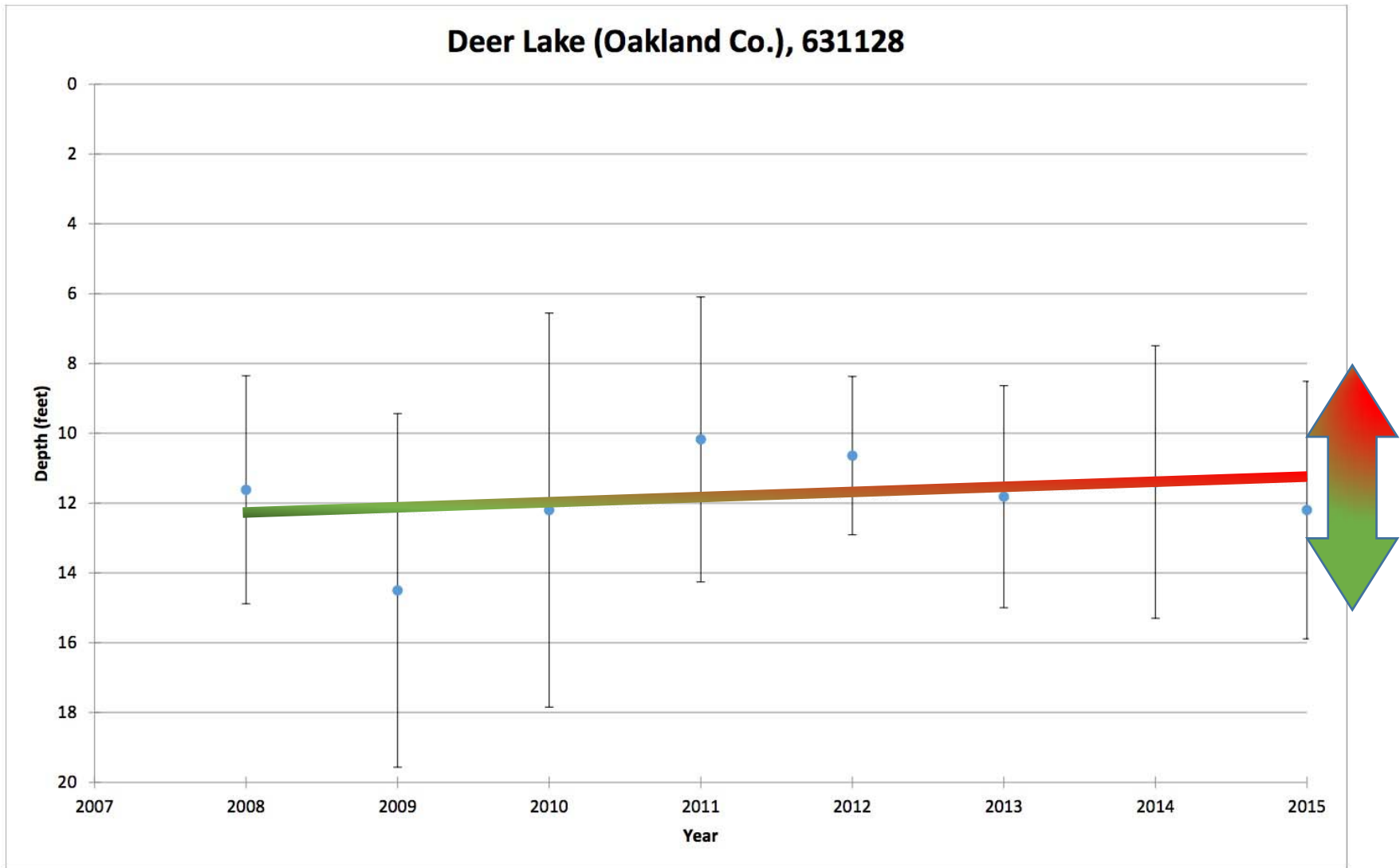
6/18/2015



Source: Paul Steen (psteen@hrwc.org), MiCorps Program Manager
 2015 Data Report for Deer Lake, Oakland County
 Site ID: 631128 42.73166°N, 83.43300°W

COOPERATIVE LAKES MONITORING PROGRAM
SUMMER MEAN TRANSPARENCY

Deer Lake (Oakland Co.), 631128



Vertical bars indicate standard deviation

Note: Graphical emphasis added

Source: Paul Steen (psteen@hrwc.org), MiCorps Program Manager
2015 Data Report for Deer Lake, Oakland County
Site ID: 631128 42.73166°N, 83.43300°W



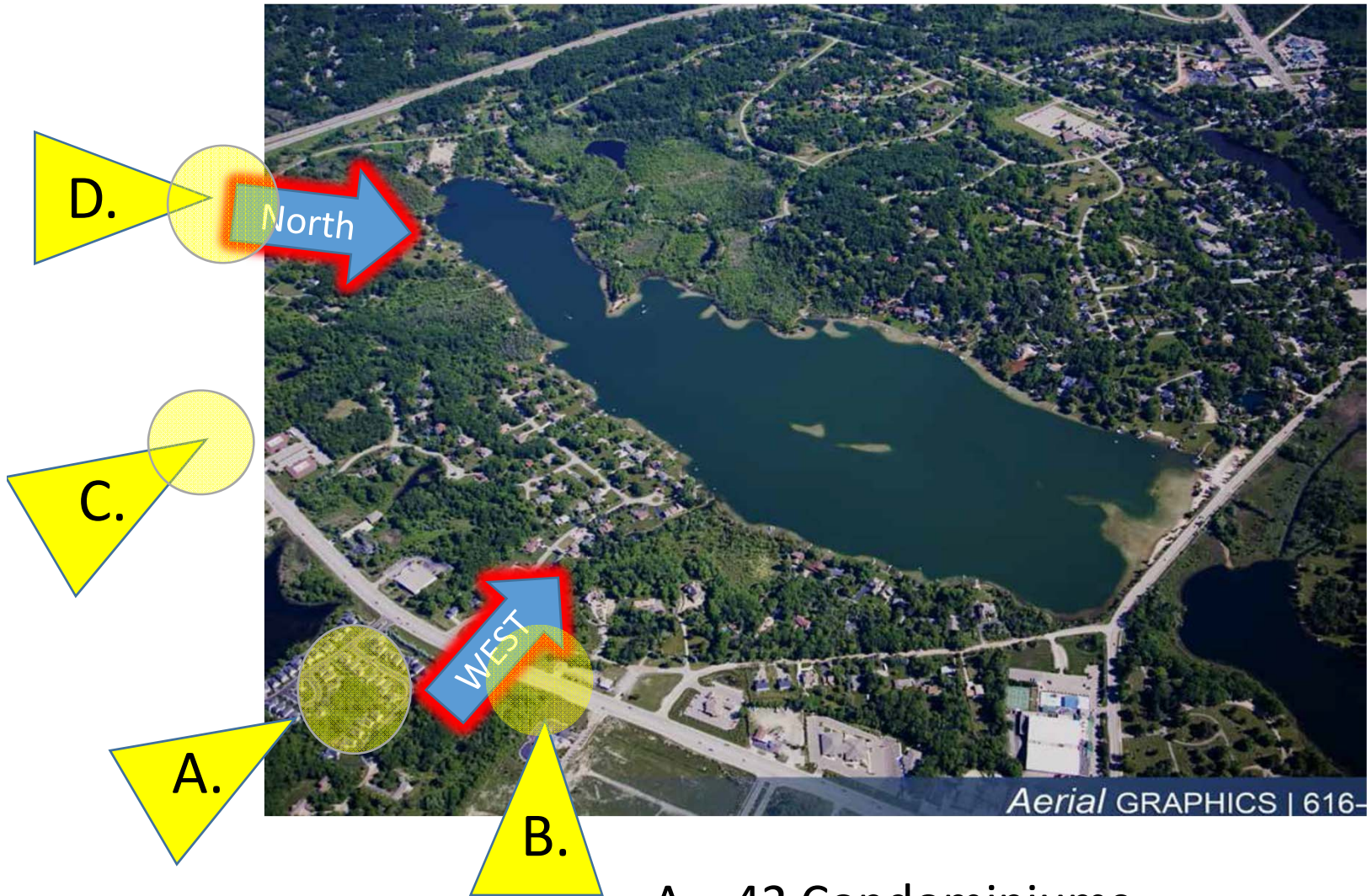
STREET ENTRANCE TO WEST INLET
ELEVATION 1000'
DEER LAKE ELEVATION 968'



THREE YEARS AGO THIS WAS FIELD & WOODS
ELEVATION 1013'
DEER LAKE ELEVATION 968'



ELEVATION 1023'
DEER LAKE ELEVATION 968'



- A. 42 Condominiums
- B. Restaurant parking lot
- C. Future Clarkston Courthouse
- D. 92 Condominiums approved

INDEPENDENCE TWP. PLANNING TO DEVELOP DIXIE HIGHWAY CORRIDOR WITH BUSINESSES & LARGE HOUSING PROJECTS

WORKING WITH LOCAL AND COUNTY AGENCIES

- PLANNING
- WATER COMMISSION
- DPW
- PARKS
- TO INSURE BEST PRACTICES DETAINING AND FILTERING RUNOFF, ETC.

➤ QUESTIONS

➤ CONCERNS

➤ COMMENTS