

**VOLUNTEERS NEEDED**

Research existing watershed and lake data on-line, for the East Bay area Watershed Plan. **Volunteer by Email:** [TNN.Mich@gmail.com](mailto:TNN.Mich@gmail.com)

TNN is working with *GT Bay Watershed Center & Tip of the Mitt Watershed Council*, as an integral part of the overall State sanctioned GT Bay Plan.

**EAST BAY SHORELINE BASIN WATERSHED PROTECTION PLAN**



The watershed runs from Elk Rapids to Norwood - 39 sq. mi. of forests, orchards, vine-yards, critical dunes, great lakes wetlands, cows & row crops. 50 streams. deliver 4% of East Bay inflows along 24 miles of shore.

**5<sup>TH</sup> ANNUAL TRI-TOWNSHIP SPENDING COMPARISON**

**Elk Rapids, Milton and Torch Lake Townships**

Analyst: Jim Welsh; Data—Mike Szymanski, ER Twp; Sandra Ball, Milton; Kathy Windiate, TL Twp

12 Month Est. 2014 -15	Elk Rapids Township	Milton Township	Torch Lake Township	TOTAL 3 Townships
<b>OVERHEAD COST</b>	<b>\$289,029</b>	<b>\$488,209</b>	<b>\$253,646</b>	<b>\$1,030,884</b>
<b>Overhead % of Total</b>	<b>34%</b>	<b>43%</b>	<b>26%</b>	<b>35%</b>
Building Related	20,994	87,512	22,077	130,583
Discretionary Expenses	8,123	8,355	10,026	26,504
Elected Officials	77,406	100,593	73,944	251,943
Gen Admin & Personnel	92,662	149,792	81,404	323,858
Professional Support	49,132	51,799	19,903	120,834
Taxation Related	40,712	90,157	46,292	177,161
<b>PUBLIC SAFETY &amp; SERVICE</b>	<b>\$573,019</b>	<b>\$641,740</b>	<b>\$735,038</b>	<b>\$1,949,797</b>
<b>Safety/Service % of Total</b>	<b>66%</b>	<b>57%</b>	<b>74%</b>	<b>65%</b>
EMS	337,889	186,285*	303,095	1,013,554
Fire	143,222	177,677	124,951	445,850
Roads, Parks, Elections	39,083	164,309	184,192	387,585
Capital Expenditures	52,825	113,469	122,800	289,094
<b>Grand Total</b>	<b>\$862,048</b>	<b>\$1,129,949</b>	<b>\$988,684</b>	<b>\$2,980,681</b>

\*Milton Ambulance Payment to Elk Rapids Township (Total Shared 24/7 EMS = \$524,174)

**TNN Estimates Three Townships spent \$2.98 million for FY 2014-15**

Why do cash balances exceed 6 months of spending? Cash ranges from 13.6 to 22.8 months of spending – which is up 9% from prior year – The data show Milton has the highest overhead; Torch Lake lowest administrative cost

**Spending priorities continue to shift to Public Safety & Service**

This is especially true in Elk Rapids Township where 24/7 EMS paramedic support (with Milton) has increased spending (EMS was recently outsourced). Elk Rapids Township spent 76% on public service, principally for EMS.

**This Fiscal Comparison aims to enable data-driven decisions.**

The public should insist on performance metrics. Public finance should measure output-per-\$\$\$ spent for services that directly benefit taxpayers.

**How This Study Was Done:** Elk Rapids and Torch lake Townships supplied data in Excel by E-mail for this report. Milton supplied monthly paper reports. This 12 month TNN Forecast, from 9 months of spending data, will differ from Townships' actuals.

**CASH ON HAND**

FY 2014-15 - CASH	ER Township	Milton Twp	TL Township
<b>April 1, 2014 - Start</b>	<b>\$833,484</b>	<b>\$1,470,400</b>	<b>\$1,806,588</b>
General Fund	+53,380	+269,331	+64,331
Fire/Ambulance	+93,077	+ 90,000	+97,938
Other Funds	+276	+ 6,111	-80,923
<b>FY CASH INCREASE</b>	<b>\$146,733</b>	<b>\$365,440</b>	<b>\$81,346</b>
<b>March 31, 2015 - End</b>	<b>\$980,217</b>	<b>\$1,835,840</b>	<b>\$1,877,934</b>
<b>Months to \$0.00 Cash on Hand</b>	<b>13.6 Months</b>	<b>19.5 Months</b>	<b>22.8 Months</b>

**SMELT DIPPING AND FISHING**

Michigan Department of Natural Resources

For years now, spring smelt runs have been shadows of their former selves. Gone are the days when rivers and streams would run black, teeming with billions of migrating smelt.



Each year, Michigan anglers eagerly awaited warm spring days and rainy evenings that trigger smelt spawning runs. These begin in early spring, soon after the ice disappears, and extend over a 3-week period, as long as temperatures stayed in the low to mid-forties. With only a few dips of the net, garbage cans could be filled with the tasty, bite-sized fish.

Runs like those haven't been (seen) in years. Why you ask? Well, it seems that more smelt are now breeding in lake waters as opposed to heading up-stream and past anglers nets.

These "shoal spawners", have always been in the smelt population, but they are much more numerous now. The dismal state of the smelt population has been confirmed. The DNR has limited the catch to two gallons per angler. This is the first time in Michigan's long history of smelt-netting that a limit has been imposed.

**What you need - When to go**

All you need is a valid DNR fishing license, a net and bucket, some warm clothes, dry waders, a life jacket and a flashlight. In some areas, a long-handled dip net comes in handy.

Dipping season - mid-April to mid-May.  
[https://www.michigan.gov/dnr/0,4570,7-153-10364\\_52261-21769--,00.html](https://www.michigan.gov/dnr/0,4570,7-153-10364_52261-21769--,00.html)

**LAKE FRONT PROTECTION PRINCIPLES**

Adapted from Antrim Conservation District – Heidi Shaffer, Soil Erosion Officer

**Plan landscaping.**

Capture and clean water that runs off your lot before it enters the lake - filter water through landscape beds placed around home and lot lines.

Install beach grass between fore-dune and the Bay. Lay out a path from home to water to avoid trampling the sensitive beach environment.

Install stone filled berms, swales, dry creek beds to slow runoff water. Monitor upland run-off into creeks and wetlands near your home.

**Reduce the size of mowed lawns.**

Grass at shorelines is not beneficial (roots are only 2" long), introduces fertilizers/ pesticides into waters. Irrigating with lake water may provide added filtration if storm water controls are in place.

**Plant native trees and shrubs along the shoreline fore-dune.**

Deep, expansive roots control erosion, stabilize banks, captures/filters storm water. Native plants are acclimated, pest resistant and need fewer chemicals. Trees/ shrubs provide habitat for birds, butterflies; protect from harsh weather.

**Reduce use of chemicals—excess nutrients cause algae blooms.**

Soil test before fertilizing; it is illegal to apply phosphorus nutrients to lawns after 2012. Algae and aquatic vegetation feed on nutrient run-off – cause stink and reduce dissolved oxygen in the water hurting fish.

**Caution: Be mindful of State and Federal Rules along the Bay-shore.**

**LAKES MICHIGAN-HURON WATER LEVELS – MAY 2015**

U.S. Army Corps of Engineers

