

## NW Adrian area – new ag concerns for neighbors, water quality

In recent months, ECCSCM has heard increasing concerns about odors and water quality from neighbors of large livestock operations northwest of Adrian and Lake Adrian.



Photo taken Sept 20 from Elton Rd appears to show no containment of the large silage pile at Warner Farms. In 2003, this operation was cited by DEQ for discharging silage leachate to Rexford Drain which flows to Wolf Creek and Lake Adrian. Silage leachate is "hot" with nutrients; even a small amount in water can threaten aquatic life.

Neighbors of livestock operations in Adrian, Cambridge, and Franklin Townships have noticed the effects of more manure, more silage, more spraying on fields.

Terrehaven CAFO on Wolf Creek Hwy has expanded. Its CAFO Permit lists animal capacity at 2500-2600 cows, manure production at 600,000 gallons/year.

Warner Farms has submitted a Siting application, indicating an expansion is planned. Franklin Twp already has several Warner facilities, also Ries Dairy and Hardy Dairy.

### Wolf Creek, Lake Adrian, River Raisin

All these operations are in the River Raisin Watershed, with many fields draining to Wolf Creek and Lake Adrian.

As in other parts of Michigan where large livestock operations have clustered and greatly expanded, communities and watersheds suffer the consequences.

On Sept 11, neighbors reported intense emissions from a manure application by Terrehaven CAFO at the corner of Lenawee Hills Hwy and Hunt Rd.

Emissions from liquid manure, in particular, and the foul fermenting odors of silage leachate can affect breathing, irritate eyes, cause nausea, headache, and other symptoms.

In streams, manure and silage leachate, "hot" with nutrients, are pollutants that harm aquatic life and feed harmful algae. For years Wolf Creek has carried sediment and other ag pollutants to Lake Adrian.

As livestock operations expand, neighbors have reason to be concerned.

If you see manure or silage runoff, call:

**Water Division, Jackson Dist: 517-780-7847**

Or email ECCSCM and we'll report it.

**BULLETIN! SALE ... WITHDRAWN!**  
**defunct Vreba-Hoff CAFOs stay shuttered**

See page 2 for details

### LAKE ADRIAN CITY'S DRINKING WATER SUPPLY

Lake Adrian is the 85-acre drinking water reservoir constructed in 1942 by damming Wolf Creek and building the City's drinking water treatment plant at the Bent Oak Hwy impoundment.

Seventy years before, in 1873, the City had consulted an engineer about a safe water supply. He recommended **Wolf Creek** as the logical source. He pointed out that "it was largely spring fed and was unusually free from contaminates." He also noted, "The River Raisin might be selected, but as this stream is already contaminated with sewage and other impurities, the **evil effects** of which are likely to be augmented in proportion to the growth of the city, this source should be avoided."

(source: City of Adrian website)

Spring-fed Wolf Creek in recent years has suffered serious ag pollution – sediment loading to Lake Adrian, pesticides in Lake Adrian, excess nutrients – with the USDA funding a project in 1998 to improve Wolf Creek water quality. The "evil effects" of pollution continue to threaten Lake Adrian.

### TIMELINE – SHAPE-SHIFTING MANURE DUMP NEXT TO WOLF CREEK



Manure heap at Reed Rd & Gilbert Hwy, Aug 13, 2012 –



– Aug 15, 2012, The pile grows.



Is it coming or going? Aug 18, 2012 –



– Sept 13, 2012, And more manure, rain-soaked.



View of manure next to Wolf Creek, Sept 13, 2012 –



– Sept 14, 2012, Manure ponding and draining.

**WHAT NEXT? WHERE? WHICH FIELD DRAINING TO LAKE ADRIAN?**

## Sale of 3 Vreba-Hoff facilities to Wisconsin buyers falls through

HUDSON – A Wisconsin CAFO group, Milk Source LLC, made an offer to Rabo Agri-finance in early July for the three Southern Michigan Dairies operations (formerly Vreba-Hoff 1, 2, and Waldron Dairy).

The bid was accepted, with Milk Source given a month for various verifications before the purchase was final. Milk Source representatives visited the Hudson area and invited ECCSCM to meet with them.

### Milk Source at Medina Drain

ECCSCM met a Milk Source representative at the Medina Drain, a stream placed on Michigan's 303(d) list of impaired waters in 2004 after many manure discharges from Vreba-Hoff field applications. We emphasized that the Medina Drain and Durfee Creek, also impaired, originate on that property and we expressed concerns about pollution entering headwater streams— at the origin.

Milk Source stated their commitment to environmental protection, and asked ECCSCM to send a letter describing our concerns and expectations from a new operation.

### ECCSCM letter to Milk Source

In mid-July, ECCSCM responded with a detailed account of the decade-long degradation of streams here caused by the application of liquid manure to tiled fields, with the long list of discharges from Vreba-Hoff operations. We told Milk Source we were convinced that unless a new owner made systemic changes to the liquid waste system and changed practices drastically, the pollution would continue.

We listed our expectations for surface and groundwater monitoring, as the only way to verify an operation was not polluting. Performance-based testing is the only way to know if good intentions play out in practice.

Whether Milk Source found serious problems at the facilities (very likely), or realized the risks to already impaired waters (likely) or recognized their practices would be under very close scrutiny and monitoring (also likely), or all of the above, on July 31 Milk Source notified ECCSCM that the deal had fallen through and they would not be buying the facilities.



ECCSCM reps at the Medina Drain for meeting with Milk Source

## Another study in Bean/Lime Creek watershed shows risks of corn silage for water quality

A USDA-NRCS water monitoring study in Bean Creek, Lime Creek and Toad Creek has come to light. Conducted from 2005-2007 by Michigan Tech Research Institute with the assistance of local NRCS and Conservation District staff, the public was never notified about the final report. The Bean/Tiffin Watershed Coalition only recently found the 129-page final report online. ([http://www.mtri.org/LinkedDocs/WaterQuality\\_Final.pdf](http://www.mtri.org/LinkedDocs/WaterQuality_Final.pdf))

The study monitored 26 sites monthly plus several storm-event samplings. A portable Horiba U-22 monitor collected and stored data on 7 water quality parameters: pH, conductivity, turbidity, Dissolved Oxygen (DO), temperature, total dissolved solids (TDS), and Oxidation Reduction Potential (ORP).

### Turbidity, Dissolved Oxygen

One purpose of the study was to inform NRCS of the parameters most useful and cost-effective in measuring water quality in highly agricultural watersheds. The study concluded that 2 of the most important parameters were turbidity and Dissolved Oxygen. Turbidity is the murkiness in water, a good indicator of ag runoff, the sediment that can carry excess nutrients downstream – one of the major causes of Lake Erie's toxic algae blooms. Dissolved Oxygen is a good indicator of water quality for fish and other aquatic life.

### Corn Silage, Not Good for Water

Another interesting conclusion of the study is that corn silage is worse for water quality than grain corn. Harvesting corn for silage removes the whole plant, leaving little residue in the field. Combining corn for grain takes only the corn ears, while the plant residue in the field, like a cover crop, holds the soil. Statistical analysis of crops upstream from sampling sites found turbidity levels – runoff – significantly higher where corn silage was a major land use.

As we know from the last 10 years, where there are CAFOs, there is corn silage!

No wonder the USDA selected Bean and Lime Creeks (Upper Tiffin) as one of only 24 national Conservation Effects Assessment Project (CEAP) study areas. With all the degradation – habitat loss, trees cut for corn, acres and acres of corn silage, streams impaired by manure discharges, siltation, low DO levels – it's a shame the studies haven't led to changes in practice.

## What year is it? What decade? Michigan's 2013 ag practices are the same – NOT ONE CHANGE

Michigan's "Generally Accepted Agricultural Management Practices" (GAAMPs) were just revised for next year, 2013.

What changes, you ask? Everyone knows about the ag pollution problem (see study above), the toxic algae in Lake Erie, Lake Huron.

Well, no changes in ag practices! None! No changes even in the highest-risk practices. It's still an "accepted" practice to spray liquid manure on frozen or snow-covered fields.

When will Michigan's "accepted" practices be not just the same old same old – but better, even "best" practices?

**ECCSCM Meetings - 3rd Wednesday of the month, 7:30 p.m. Hudson Community Center**  
(check our website for last-minute changes)

**JOIN US:** Yes, I want to help protect our water and air, and promote sustainable agriculture. **All contributions support monitoring projects and community education.**

Name: \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

\_\_\_\_ Annual Membership \$25 \_\_\_\_ Senior Membership \$10

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Click on the  button on [www.eccscm.org](http://www.eccscm.org)

Or, mail check to: ECCSCM, P.O. Box 254, Hudson, MI 49247

**Thank You!**

### We Support Sustainable Agriculture

- that preserves and protects our air, streams and lakes
- that raises animals in a healthy, natural environment, grazing, absorbing sunshine
- that avoids the steady diet of hormones and antibiotics given animals in the crowded, confined conditions of industrial facilities
- that values and protects farmland, the environment and the rural community