ECCSCM

CAFO VIOLATION COUNT
1,085

This number reflects confirmed violations by Hudson-area Confined Animal Feeding Operations (CAFOs) 2000-2011, documented by federal and state agencies. Read details on all violations at:
www.nocafos.org/violations.htm

ENVIRONMENTALLY CONCERNED CITIZENS OF SOUTH CENTRAL MICHIGAN FALL 2011

Southern Michigan Dairies discharges manure to Medina Drain

DEQ says "unknown amount" of manure flowed downstream from pipe break

Neighbors of Southern Michigan Dairies reported a problem near Medina Drain, with unusual truck activity at the SMD 1 operation beginning Friday, Aug 12, 2011. ECCSCM photos on Sunday, Aug 14 showed gray water flowing in the stream. A tanker truck arrived while ECCSCM was on the scene and dumped water into Medina Drain.

Inquiries to DEQ brought this account of the SMD manure discharge: "Friday afternoon [Aug 12] there was a break at the pivot of the irrigation sprayer in the corn field west of Ingall Hwy. An unknown amount of liquid reached the beginning of the N Medina Drain."

The DEQ Violation Notice sent to SMD on Aug 25 noted that on Aug 12 DEQ staff "observed SMDs staff had shut down irrigation, blocked off the drain to stop further movement downstream into Bean Creek, as well as began removing the waste that had discharged."

Medina Drain – on "impaired waters" list

Medina Drain was added to Michigan's list of "impaired waters" in 2004 after multiple manure discharges to the stream from then-owners Vreba-Hoff.

Medina Drain and South Medina Drain both have their origin on SMD 1 property and drain only its fields.

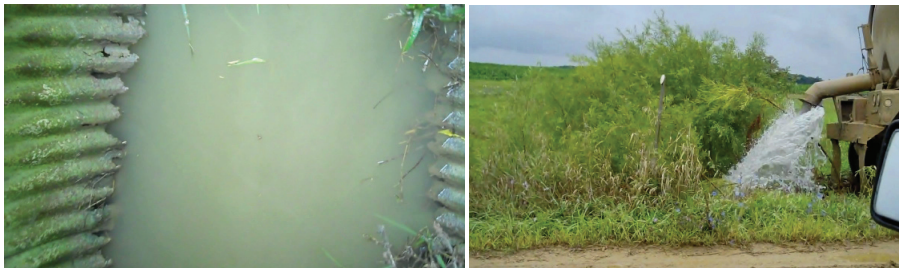
When SMD took over from Vreba-Hoff, they removed all cows from this facility. But the surrounding fields are still receiving liquid manure applications from SMD 2.

We are the headwaters of Lake Erie

Did you know?

Lake Erie is the southernmost, shallowest, warmest, and most biologically productive of the five Great Lakes – the largest Great Lakes sport fishery.

(Ohio DNR)



August 14 , 2011 - gray manure water was still flowing (left) in the Medina Drain culvert on Ingall Hwy, two days after a pipe break in SMD's manure irrigation system. Shortly after the first photo, a tanker truck arrived (right) and dumped flush water into the stream.

Back to the 70's–Lake Erie at risk from phosphorus

Manure runoff and manure discharges through tiles or broken pipes have added huge amounts of phosphorus to our streams, the headwaters of Lake Erie.

Phosphorus binds to the smallest soil particles and flows downstream to the Maumee River and out into Maumee Bay and Lake Erie.

In recent years, satellite images have shown plumes of sediment in western Lake Erie, and this summer that overload of phosphorus-laden sediment created one of the worst algae blooms in decades.

Toxic Microcystis Algae

Of special concern were the blue-green microcystis algae, which excrete neurotoxins that have sickened people and killed dogs and other wildlife.

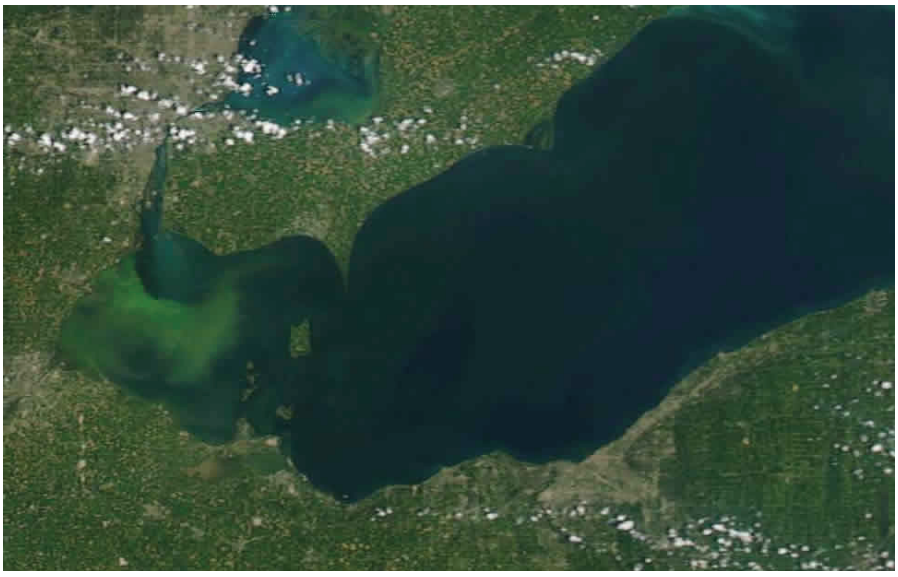
This summer Lake Erie suffered all the consequences of phosphorus overload – beach closings, algae alarms, dead zones.

Lake Erie hasn't looked this bad in almost 50 years. Not since the 1970s, before the Clean Water Act and before phosphates were removed from laundry detergents.

Agriculture changed a few of its practices back then, with the promotion of no-till in particular, to reduce sediment and phosphorus pollution.

But since 1995 (note the coincidence: the beginning of construction of CAFOs and liquid manure systems in Michigan and Ohio) phosphorus levels have increased and toxic algae blooms have boomed.

How many warning signs do we need? Before we re-think liquid manure on tiled fields? Before we re-think liquid manure systems?



Western Lake Erie on July 31, 2011, showing blue-green algae bloom at the far left, where the Maumee River flows into the lake. NOAA CoastWatch Satellite Imagery

Headline Pollution

Summer of 2011 – Toxic Algae in Lake Erie

"The blooms are back."
Cleveland Plain Dealer, July 29, 2011

"A huge bloom of potentially toxic microcystis algae... has been visible from space since at least July 22."
Toledo Blade, Aug 7, 2011

"[USGS] results list the Maumee as the leading phosphorus supplier and estimates that **82.6 percent came from farms**."
Columbus Dispatch, Sept 5, 2011

"We must provoke a major change in farming practices."
Jeff Tyson, Lake Erie Fisheries Research Ohio DNR

Lynn Henning featured in Oprah Winfrey's O!

The November issue of Oprah Winfrey's *O* magazine includes an article on the water quality work of Lynn Henning, CAFO Water Sentinel for the Michigan Sierra Club and a Director of ECCSCM.

The article follows Lynn and her husband Dean on their monitoring loop, looking at streams, checking the water, and taking water samples. They've logged many miles over the last decade, responding to calls about manure messes.

It's great to see national attention to water quality and watch-dogging!

USDA admits: cows on pasture – a good thing!

Studies by scientists at USDA determined that dairy cows on pasture leave a very small "ecological hoofprint" compared to confined operations.

USDA computer models calculated ammonia emissions from manure, nitrate losses, soil erosion and phosphorus losses from field runoff. The models estimated emissions of carbon dioxide, methane, and nitrous oxide. Compared to confinement systems, **keeping dairy cows outdoors all year lowered levels of ammonia emission by about 30 percent**.

Row-cropped fields converted to perennial pasture for grazing also sequesterd carbon, with sequestration levels rising from zero to as high as 3,400 pounds per acre – a major cut in greenhouse gasses.

Source: "Beyond the Barn: Keeping Dairy Cows Outside is Good for the Outdoors," USDA Agricultural Research Service (http://www.ars.usda.gov/is/pr/2011/110524.htm)

How to report CAFO pollution
(air emissions, odor, water pollution)

1) Call MDARD Right to Farm: 1-877-632-1783
2) Notify DEQ Air Division: 517-780-7481
or DEQ Water Resources: 517-780-7847
3) Fill out this ECCSCM form:
www.nocafos.org/reports/index.html

If it's an emergency, call 24-hr DEQ Pollution Emergency Hotline:
1-800-292-4706

How to report health symptoms from CAFOs

1) Fill out this ECCSCM health form:
www.nocafos.org/reportform.htm

2) Or, to keep track of chronic symptoms from CAFO emissions, write us for a free copy of *Manure Emissions Log Book*
ECCSCM, PO Box 254, Hudson, MI 49247
or contact-us@eccscm.org

JOIN US!
AT LAST, WE'RE TAX-DEDUCTIBLE!

Vegetated buffer strip along Durfee Creek Extension, Dillon Hwy

Conservation buffer strips on tiled fields are not enough to protect water quality

Wide buffer strips have long been a Best Management Practice for preventing nutrient runoff from fields. A recent study, however, looked at the effectiveness of BMPs in preventing phosphorus runoff from tile-drained fields.

Virtually all fields in our area where liquid manure is applied are drained by sub-surface tiles.

The study concludes that in tile-drained fields, buffer strips alone did not stop nutrients from reaching streams. The researchers note, "Conservation planning in tile-drained agricultural watersheds will require a combination of surface-water BMPs and conservation **practices that intercept and retain subsurface agricultural runoff.**"

Source: "Evaluating Agricultural Best Management Practices in Tile-Drained Subwatersheds of the Mackinaw River, Illinois," *Journal of Environmental Quality* (2010)

ECCSCM Meetings - 3rd Wednesday of the month, 7:30 p.m. Hudson Community Center

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

ECCSCM is a 501(c)3 nonprofit. Donations are tax-deductible.

Click on the Donate button on 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