# MONROE COUNTY ENVIRONMENTAL MANAGEMENT COUNCIL

# **April 16<sup>th</sup>, 2025**

#### In Attendance:

**EMC**At Large - Tom Dooley; EMC Chair

At Large- Haines Lockhart At Large- Deb Muratore

At Large- Mark McDermott (E. Rochester Parks

Commission)

Town of Brighton- David Briden Town of Chili - Larry Lazenby Town of Clarkson- Jake Straub Town of Gates - Charles Johnson

Town of Irondequoit – Alexandra Ferrente

Town of Mendon- Margaret Bailey
Town of Ogden – Bill Parkhurst
Town of Hamlin- Steve Rutherford
Town of Henrietta- Bill Santos
Village of Honeoye Falls – Andy Less
Town of Penfield – Cynette Cavaliere

Town of Perinton - Mark Gaul Town of Rush – Pat Kraus Town of Sweden – Meg Zimmer Town of Webster - Chuck Zlotkus Ex Officio Alternate - Steve Olufsen; Planning &

Dvpt

Ex Officio Alternate – Clement Chung; MC DES Monroe County Legislature LD4- Virginia

McIntyre

Monroe County Legislature LD14- Sue Hughes-

Smith

Recording Secretary – Liz Kaptein

#### Guests

Jarmila Haseler – Cornell Cooperative Extension Sally Howard- Federation of Monroe County

Environmentalists

Dana McCarthy – Churchville Chili High school Hunter Reece – Churchville Chili High school

Ethan Huynh – Gates Chili High school Dan Switzer - Keep Gates Clean

Madison Quinn - MCDES Sustainability

Coordinator

Yasmin Guevara- MCDES

Septimus Scott - Greater Rochester ROV

## Meeting location:

 Monroe County Fleet Center, Building 1 Conference Room 145 Paul Road, Rochester 14624

#### Call to Order:

Meeting was called to order at 4:02 pm by Chairman Tom Dooley.

#### **Introductions:**

Introductions were made from all present.

#### **Review of Minutes:**

Motion to approve March minutes- Motion by Tom Dooley, second by Mark Gaul.

**Meeting Topic(s):** Jarmila Haseler – Agriculture & Food System Educator Cornell Cooperative Extension of Monroe County- Presenting Soil to Sustenance: Building Healthy Ecosystems for a Sustainable Future

## What is soil and what is its important?

- Soil is considered one of the basic raw materials necessary for food production, climate and environmental resilience- highlighting the importance of soil health.
- Soil is a complex mixture of minerals, organic matter, water, air, and living organisms. Its
  composition is dynamic, varying according to factors such as geography, climate, and
  management practices.
- Soil is a limited resource, which is why regenerative agriculture practices are necessary. Only
  25% of earth's crust is solid land- 75% is covered by water. 13% of Land is not suitable for
  agriculture. 12.5% Is suitable for growing food. Why does this impact human population? Usable
  soil for agriculture is decreasing while population and demand is growing.
- Soil texture determines the type of soil: Clay, Silt, Sand Loam is a mixture of the three.
   MC has 11 Soil Classes within it these soil types can be explored using the USDA NRCS Soil
   Survey Tool, you can enter your address to view what kind of soil you have in your area. Soil
   types can vary widely on a piece of property. Similar to a micro climate but for soil. Accumulated
   through years of data logging from USDA 95% are already recorded.
- Sandy Soil contains large irregular shapes and particles. It has good aeration and is easy to warm and dry, this is good for early crops and cultivation when other soil may retain too much moisture and are unworkable. Sandy soil does not hold nutrients well and does not provide strong anchor for roots.
- Clay Soil is dense, low aeration, poor drainage, mud-like & sticky. If you add organic matter to clay soil it is significantly easier to use for agricultural purposes.

#### What is soil health?

- Soil Health is the continued ability of soil to function as a vital living ecosystem. It provides infiltrative water, sustains plants, animals, and people.
- Every farmer wants to know and maintain the soil health of their farms. The farms soil health is closely connected to the yield of their crop (and profitability).
- Organic matter is critical to healthy soil.
- In the Soil Food Web, there are many micro and macro organisms teeming with life.
- All living things are looking to eat something with carbon to sustain themselves, which always begins with plants. As the roots grow, they shed dead material, and release chemicals that attract the bacteria that eat the dead matter and absorb the released chemicals.
- It creates a symbiotic relationship (live system). The more activity within the soil, the better for soil health. Color of soil indicates health, the darker the soil, the more organic matter it likely has.
- Most living organisms are within the first 4 inches of soil. In 1 square foot of soil you should have about 50 earthworms.
- Farmers have to work with the soil in order to plant their crops. Intense tilling disturbs the soil and biology by cutting, blending mixing and disturbing the soil fauna and releasing carbon into the atmosphere- this also destroys the food web.
- Tilling turns the soil over to bury crop residues, weeds and pests, creates loose well drained seed beds but then exposes the loose soil that creates a layer that is vulnerable to erosion/runoff.
- To mitigate this, we promote regenerative agriculture and soil health management tactics, and

no till methods to plant crops into undisturbed land, reducing runoff/erosion and maintaining existing soil health.

## Regenerative Agriculture and Soil Health Management:

- Keep soil covered at all times, Cover cropping, keep plants growing throughout the year to feed
  the soil, disturb the soil as little as possible, create as much crop diversity as possible
  (monocultures are detrimental).
- Rotating crops allows to add different nutrients to soil, things like radishes increase soil porosity
  and break the soil apart, as where oats are more fibrous and add more organic matter to the
  soil.
- Make efforts to disturb the soil as little as possible.
- Diversify the crops being planted yearly.

## NY Outcomes fund Pilot Project:

- Intent of project is to accelerate regenerative agriculture in the region. When launched in 2021, 1000 acres were originally enrolled. Cornell University is a land grant institution with a mandate to move research to implementation.
- Led by the Atkinson center for sustainability and coordinated by Cornell extension of Monroe County.
- Secured a pre-purchase agreement for environmental outcomes from Cargill, allowing scaling up to 10k acres.
- NY Corn and Soybean Growers Association worked with Agronomist from Iowa & CCE Monroe county to teach previously-established best practices.
- The most relevant solutions for farmers, ranked –
   Farmers indicated most helpful would be Assistance to pay for successful model, crop insurance, equipment financing, carbon markets, transition loans, sustainability loans, impact investing, nutrient trading.
- Project is geared towards commodity farmers corn, soy, wheat. Baseline operations information was collected, and processes were assessed to identify areas of improvement.
- New practices were then proposed that helped reduce the risk to farmers when they wanted to change practices, their financial reward was identified & payment was received upfront and then again upon completion (verification), which was very well received by Farmers.
- Over 1Mil Provided to farmers directly at 34\$ per acre. Saved 117klbs of nitrogen from being lost in the soil, 6.8klbs of phosphorus that did not get leached into the waterways. 95% Reenrollment on annual contract, allowing for flexibility. In 2024 participation grew by 50%.

## **Questions and Answers:**

- Q: Cover cropping more efficient than "letting the soil rest?"
  A: Yes, because otherwise weeds will grow and keeping it bare will create allow for erosion.
- Q: Are different varieties of cover crops planted?
   A: Yes
- Q: Nitrogen, Carbon, Phosphorus reduction numbers are they reflective of just Monroe County, all of NY state, for only one year or three years?
   A: Great lakes protection fund: It is a calculation for the entire great lakes region.
- Q: Suburban Sprawl is covering up usable farmland Housing is going where farms used to be –

is that a significant contributor to reduction in usable farmland?

A: Agricultural practices, then mining are top contributors, followed by urban sprawl.

- Q: Are there other soil classifiers besides USDA?
   A: Yes, Monroe County is in process of updating farming protection plan. NRCS is the other classifier.
- Q: When farmer does no-till, does that change the soil type?

  A: No, the soil type stays the same. The farmer is only changing the top layer of the soil. Bedrock is what dictates soil type.
- Q: Where does compost come into the equation if one doesn't till?
   A: In the garden, you don't need to rototill. Shovel and spread it within the first 4inches you just incorporate it into the soil gently, do not flip/upend it.
- Q: Is mulching of leaves to avoid weeds a good practice?
   A: It can be, make sure to work it into the soil prior to planting with compost because of the nitrogen need.

#### **Committee Reports:**

### Program and Presentations

- Potluck in May 21st Reserved Community Center at Ontario Beach Park we will be reaching out formally. We need to do some housekeeping – We need numbers for anticipated attendance, as well as sign up for dishes to pass. 4-5:30
- There will be an additional email reminder going out in the upcoming weeks asking for RSVPs and sign-up for a dish to pass at the potluck.

#### Nominating and Community Liaison

- o Membership status has been submitted to county legislature, legal is looking into it.
- Nominating committee has been working hard on Youth EMC Mission/Vision/Leadership outline has been constructed, and is being passed around the executive committee. We've received input from the students and are intending on starting up in October.
- Liaison List is in progress, working on updating.

## Natural Resources

- o GIS layers shown to Resources committee.
- No updates at this time on status of new layers.

### **Monroe County Staff Reports:**

- Steve Olufsen, Planning & Dvpt Sustainable business roundtable kickoff upcoming insight on what practices would be best for the county. Consultant will be working with local chambers of commerce.
- Madison Quinn, DES Sustainability Earth Month is in full swing. Climate solutions accelerator summit was April 4<sup>th</sup>-5<sup>th</sup>, Every Saturday in April there are community events for earth day/arbor day. Earth Day Celebration at Seneca zoo. Interviews for sustainability engineer have begun.

Coordinating on food scraps recycling school grant program – they got 5 applications from local schools out of 18 school districts + 2 BOCES districts. The organic management survey is still ongoing – high residential participation. The survey is right on the front page of the monroecounty.gov website. We are currently ramping up the Climate Adaptation and Resilience Plan– Interdepartmental meeting will be held before the end of April, and there will be many opportunities for engagement through May and June.

• Starr O'Neil MCDPH – Food scraps survey went to all food operators – we participated in the Climate Solutions accelerator summit. Unfortunately, our Climate Health Fellows funding was cut and their last day will be May 30<sup>th</sup>. Budget season is upcoming, if anyone has any ideas about next year's budget, it needs to be submitted before the beginning of June.

## **Privilege of the Floor:**

Canadice.

- I. Deb Muratore: There are complaints that the water near Lakeshore Blvd. & St Paul Street is tasting funny Does the Seabreeze water tank have water in it?
  - a. MC Water authority can help. MC Water authority and Rochester Water Authority –
    Seabreeze buys the water and distributes it, but Irondequoit is distributed by MC. Hilton
    Purchases, then distributes.
     Kodak has its own water distribution. It either comes from Ontario, Hemlock or
- II. Irondequoit Conservation Board Question Lawn signs for residents with environmental actions that people could take. Such as promoting planting native wildflower seeds, "lights off for bird migration", "Protect our Pollinators" are there any projects going on like that?
  - a. Brighton is doing the pollinator/northeast national initiative.
- III. Mendon is beginning to consider climate smart community.
   Brighton Approved town nursery program replacing street trees and parks. Color Brighton Green. 250 Trees.
- IV. MC Fish advisory board Recent changes in regulations are impacting the great lakes the project to help with reducing invasive Asian carp has been fully funded. The lamprey project to attempt to treat the streams has been fully funded. Great lakes commission has vacancies. Research vessel on Lake Ontario called the KHOE has been fully funded. NETPEN Projects are in full swing in Charlotte the fish are growing well. Steelhead in sandy creek (NETPEN) also going well, will be kept until water is 65 degrees.

#### **Other Business/Announcements**

- Sierra Club is giving away trees on April 26- Webster Park, Seneca park, Genesee valley park, Northampton Park. Bare root plants will be available on Arbor Day from 10a-3pm.
- Monroe county soil and water tree pickup for pre-orders on 24<sup>th</sup> and 25<sup>th</sup> at ECO PARK.
- Penfield is doing arbor day celebration for tree city celebration.
- Genesee River Watch is having annual conference on Wednesday may 28<sup>th</sup>.
- There are 5 comment periods open right now relating to SEQR, Wetlands, Federal protections.
- NYSDEC & Trout Unlimited are hosting a family-friendly fishing event on April 26<sup>th</sup> from 1-4pm at Cobbs Hill Park. Town of Gates is doing 10 Market days this year starting on May 18th and ending on October 5st.

- Honeoye Falls is also doing April 26th environmental fair Tree city USA handing out plants, local boy scouts are doing chicken barbecue.
- Hamlin April 26th will be giving away 600 trees.

## Adjourn:

Meeting was adjourned at 5:30 by Steve Rutherford, Second by Starr O'Neil.

Next EMC Meeting – May 21st at the Roger Robach Community Center - 180 Beach Ave, Rochester, NY 14612