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STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
LANSING



LIESL EICHLER CLARK
DIRECTOR

MICHIGAN COUNCIL ON CLIMATE SOLUTIONS MEETING
Draft Meeting Minutes

Tuesday, June 22, 2021 – 3:00 to 4:30 p.m.
Virtual Meeting via Microsoft Teams
Find meeting information at Michigan.gov/Climate

Attendees

Paul Ajegba	Marnese Jackson
Frank Beaver	Gary McDowell
Steve Bakkal	Phyllis Meadows
Liesl Eichler Clark	Jonathan Overpeck
Mary Draves	Tanya Paslawski
Kerry Duggan	Cynthia Render-Williams
Dan Eichinger	Phillip Roos
Meghan Groen, for Elizabeth Hertel	Dan Scripps
James Harrison	Derrell Slaughter
Judd Herzer, for Susan Corbin	Larry Steckelberg, for Rachel Eubanks
Brandon Hofmeister	Samuel Stolper

- **Meeting Goals**
 - Introduction of the Natural Working Lands (NWL) and Forest Products workgroup co-chairs.
 - Build a shared understanding (high level) on the topic of NWL and Forest Products.

- **Welcome, Introductions (Liesl Clark, Director, EGLE)**
 - The meeting commenced at 3:00 p.m.
 - Attendance was taken.
 - Council members received pre-read materials prior to today’s meeting.
 - Proposing to add 30 minutes to the July agenda – no objections.
 - For the August meeting we hope to be at a point to start seeing some draft recommendations coming out of the workgroups.

- **Council Business (Liesl Clark, EGLE)**
 - Derrell Slaughter moved and Dan Eichinger seconded a motion to approve the agenda. The agenda was approved unanimously by voice vote.

- Derrell Slaughter moved and Mary Draves seconded a motion to approve minutes from the May 25 council meeting. The minutes were approved unanimously by voice vote.
- **Introduction of the Natural Working Lands (NWL) & Forest Products Workgroup (Lauren Cooper, Michigan State University; and Scott Whitcomb, DNR)**
- **Presentation: Agriculture (Mitch Hunter, American Farmland Trust)**
 - Three main focuses:
 - Accelerate the adoption of regenerative agriculture
 - Protect farmland and compact growth
 - Expanding smart solar siting
 - Majority of emissions are from soil management and fertilizer applications followed by methane and manure management
 - The Carbon Reduction Potential Evaluation tool (CaRPE tool) aggregates AgCensus Data and COMET-Planner tool to see the carbon impacts of soil farming method.
 - Practices evaluated:
 - Soil health
 - Nitrogen Management
 - Grazing and Pasture
 - Allows you to see per acre per year the impacts of the reduction strategies to determine reduction potential
 - Agriculture has the potential to play a big part of the decarbonization solution.
 - Theoretical reduction potential from cover crops and tillage in Michigan is equivalent to roughly 39% of Michigan agriculture's total emissions
 - Scenario example—Row crops:
 - Overall the three practices resulted in greenhouse gas (GHG) reductions
 - Closing thoughts:
 - Conservation practices is a key tool in the climate toolbox and CaRPE tool can support state efforts
 - It is critical to address nutrient management, enteric fermentation, and manure management
 - Most agricultural climate solutions provide numerous co-benefits
- **Presentation: Forestry (Haley Leslie-Bole, World Resources Institute)**
 - They are working with the US Climate Alliance

- Reaching net zero by midcentury
 - Even with aggressive emissions reductions, there are still hard to abate sectors which will require carbon removal
 - Carbon removal can happen through natural or technological solutions
- Carbon Removal pathways
 - NWL represent about half of the carbon removal opportunities at the national scale
 - Tree restoration and agricultural soil carbon have the most potential for annual reductions for NWL pathways
- Tree restoration:
 - Need to account for the long-term health of forests in the face of climate change
 - Most land is in private hands to the federal government's role is incentives
 - Pathways
 - Reforestation
 - Restocking existing forests
 - Cropland Agroforestry
 - Urban reforestation
 - Silvopasture
 - There is a need for Economic incentives for land owners to plant trees
- Other strategies:
 - Avoided conversion to land types that store less carbon
 - Land use change correlated with proximity to ethanol plants
 - Conservation and restoration of terrestrial wetlands
 - Can be a GHG source and sink
 - Small carbon impact, but a lot of co-benefits
- Opportunities for MI:
 - Existing forests removed 14.4 million tons of CO₂, followed by urban trees removing nearly 4 million metric tons
 - Forest gain and forest lost balanced each other out
 - NWL Opportunity assessment top 3 opportunities:
 - Restocking in understocked forests
 - Reforestation
 - Silvopasture
- GHG inventory for NWL
 - Can inform targets and goal setting and track changes overtime
 - Challenges:

- GHG constantly flux, still understanding how practices impact GHG
- There are limitations in federal data and the state inventory tool
- High level of uncertainty based on models
- Opportunities:
 - Enhance field data collection
 - Integrate remote sensing
 - Customer GHG Models and emissions factors
- **Next Steps (Liesl Clark, EGLE)**
 - The next meeting is July 27 (fourth Tuesday of every month) and will focus on Energy Intensive Industries. This meeting will be extended by 30 minutes, from 3 p.m.-5 p.m.
 - Meeting materials are available at [Michigan.gov/climate](https://www.michigan.gov/climate).
 - An update was provided on the workgroups:
 - There is a lot of activity going on in the workgroups.
 - One way to create consistency amongst workgroups is a set of seven questions each workgroup is thinking through as they draft recommendations.
 - A template for recommendations will soon be sent to co-chairs and the Council for feedback.
- **Adjournment**
 - The meeting adjourned at 4:27 p.m.

Approved at June 27, 2021, Council on Climate Solutions meeting.

Michigan Council on Climate Solutions

6/22/2021

WHAT IS YOUR TOP PRIORITY/OPPORTUNITY OR QUESTION WITH REGARD TO NATURAL WORKING LANDS AND FOREST PRODUCTS?

NOTE: Comments have been organized into themes and are listed alphanumerically for reference purposes only; these do not indicate a ranking or priority. Some Council Members provided multiple different comments. Presenters answered some of the questions asked.

1. Forest Management

- a. In a sense, the Department of Natural Resources (DNR) is the largest landowner in the state and Michigan has the largest state forest system in the nation. The DNR is talking about management approaches and is at the intersection to test some of the strategies that were mentioned today. Part of what the DNR is looking for is proof of concept for management techniques (harvest rotation schedules or what species make up the composition of the forest). The DNR has an opportunity to test these strategies to populate theoretical data sets.
- b. Drought will be a problem; the west coast is likely an indicator of what will come.
 - i. Figure out how to manage the forests through change.
 - ii. Many of the trees we plant will die. We need to create a new rural industry across the country and managing the forest floor and the ecosystem services they provide.
 - iii. We can augment soil in forest with biochar to increase the sequestration of carbon, its nutrient characteristics, and water capacity.
- c. How do we plan to address that there is not enough available land on the planet or specifically Michigan to accommodate all the combined corporate and government "net zero" plans for offsets and Bioenergy with Carbon Capture tree plantations or unproven technologies? Net zero by 2050 will be a little too little or too late.
- d. There are a lot of co-benefits between ag and forestry. It's good to think about these holistically. Regarding urban reforestation, even though it is a small portion of emissions reductions, the co-benefits cannot be underestimated.
- e. Think about the jobs and workforce side of the forest management.
- f. There may be an opportunity to look at best practices from similar areas in Europe.

- g. Natural land management is one tool in the toolbox, and Michigan is one state that knows how to do that. There are well developed practices and practices we could implement rapidly. It is an opportunity for quick wins.
- h. Importance of private land/forest land-owner – the whole component of active forest land – most landowners are passive. How do we mobilize hundreds of individual landowners? Need to reframe what active forest management looks like. We have to build some positive compensation for owning and managing land.

2. Reduction and Mitigation of Emissions – Agricultural Sector

- a. Working with the farmers to help them adapt to better practices.
- b. Incentives for farmers.
- c. Reauthorization of program – shifting focus to results and water quality.
- d. From the agricultural perspective, there is an opportunity to meet multiple needs at the same time for those who want to grow food in carbon-beneficial ways. There are barriers to making that happen, but there should be targeted programs to making that happen.

3. Direct engagement with tribes

- a. Tribes can have multiple roles including with economic development and government.
- b. Co-benefits of healthy forests such as food sovereignty for tribes.
- c. Tribes are resilient and adaptable, terms used often when discussing climate.

4. Planning for implementation of NWL pathways at scale

- a. Raises a challenge and opportunity to engage with stakeholders who are not normally at the forefront of the decarbonization discussion (landowners and farmers) – getting the right funding in place will be critical.
- b. There are jurisdictional questions to sort through.
- c. To get to the public support we need will be critical.
- d. There is an environmental justice component to this work.
- e. We want to understand the role of wetlands and lakes.

5. Economic and health perspective

- a. Are there studies or other ways of understanding the health benefits of these approaches relative to cost?

- i. Looking across the scope of carbon removal options, planting trees in urban areas is a good option for health and cost. They can reduce pollution, heat island effect, and noise.
- ii. Some of these options are expensive, but we also need to consider the cost of inaction. There are a lot of ways to finance these options, government spending is one, but we can also leverage the private sector.
- iii. Land is wealth and there are conversations around the equity implications.
- iv. Land as a resource for economic development.
- v. Is there a disconnect between economic reasons and private owners' ability to act?
- vi. The hope is that planting trees wouldn't impact land value.
- vii. Looking for ways to make tree planting more affordable and accessible.
- viii. Cost-share programs for tree planting