

Agriculture & Forestry Advisory Panel Meeting

Meeting Teleconference - WebEx

18 November 2020

10:00 am

At a Glance

- The Advisory Panel reviewed discussions and recommendations from the Subgroup meetings.
- The Advisory Panel discussed further subgroup meetings to continue developing recommendations as well as focus additional time to equity considerations.
- Ag and Forestry Advisory Panel recommendations will be brought to the Climate Action Council for initial review at their November 24th meeting.
- Information regarding meetings and materials can be found on – www.Climate.ny.gov

Present

WebEx: (87 total attendees including panelists and agency staff)

Advisory Panel:

Commissioner Richard Ball, Chair AGM; Peter Innes, DEC; Michelle Brown, TNC; Samantha Levy, AFT; Robert Malmshemer, SUNY ESF; Stephanie Morningstar, Northeast Farmers of Color Land Trust; Peter Woodbury, Tom Gerow, Wagner Lumber Co.; Elizabeth Wolters, NYFB; John Bartow, Empire State Forest Products Assoc.; John Noble, Noblehurst Farms (present for portion of meeting); Amanda Barber, Cortland SWCD; Julie Suarez, Cornell University; Nelson Villarrubia, Trees NY; Suzanne Hunt, HuntGreen LLC/Hunt Country Vineyards; Ned Sullivan, Scenic Hudson; Peter Lehner, Earth Justice; Donna Wadsworth, International Paper.

Absent: Rafael Aponte, Rocky Acres Community Farm.

Agency Staff:

David Valesky, Brian Steinmuller, (Presenter), Jennifer Clifford (meeting host) AGM; Suzanne Hagell, Willow Eyres, Jeffrey Mapes, Jason Drobnack, Gregory Mumby, Ian Crisman, DEC; Giovanni Holmquist, ESD; Stephanie Wojtowicz, DOS; Ziggy Majumdar, Stephen Hoyt, Kara Allen, Kathleen O'Connor, NYSERDA.

Welcome

Commissioner Ball, NYS Department of Agriculture and Markets

Panel Member Role Call

Absences are listed above.

Agricultural GHG emission reduction/sequestration recommendations

Brian Steinmuller, NYS Department of Agriculture and Markets

GOAL: Provide overview of agriculture sub-group discussions and recommendations.

RECOMMENDATIONS

The following criteria were discussed for each recommendation:

- Rationale
- Equity Considerations
- Potential Implementation Challenges
- Issues to Explore
- Additional Thoughts

Livestock Management: Enteric Fermentation

Rationale: reduce methane emissions by increasing precision feed management (PFM) planning and implementation, conducting/reviewing research on novel approaches (e.g. feed additives), advancing information, training, outreach and technical assistance to livestock producers at various scales.

DISCUSSION

- P Lehner – Is there any information on the cost (per ton CO₂e reduced) the PFM would incur? PFM costs should be closely scrutinized.
- S Levy – What are the different considerations for large versus small farms?
- J Suarez – From an equity perspective small farms need more support. Access to broadband is an obstacle to getting small farms to use online tools for PFM etc. There are 4,000 dairy farms in NYS approximately 65% of the cows in the state are enrolled in PFM.
- E Wolters – Outreach is important to adoption by small farmers.
- J Suarez - I agree wholeheartedly with Brian's comment about not limiting technology that gets us to PFM. Innovation will be the key as we move forwards. There will be other tools developed beyond CNCPS system, and there are other tools like adapt-n which manage nitrogen in cropping systems outside of dairy

Livestock Management: Alternative Manure Management

Rationale: Reduce methane emissions by an estimated 4 mmt CO₂/year by implementing cover and flare systems, anaerobic digesters and other systems that abate, collect, capture and combust methane from manure storages.

DISCUSSION

- E Wolters – Grass feed livestock either beef or dairy does not necessarily reduce methane, research actually shows that it is not as efficient of a feed. Where there may be some

difference/efficiency is in carbon sequestration as carbon is stored in the soil. However, it is not a methane solution

- P Lehner – We should strive to prevent methane from being produced instead of having to destroy it.

Nutrient Management to reduce Nitrous Oxide Emissions

Rationale: Reduce N₂O emissions by an estimated .2 mmt CO₂e/year through continued and expanded nutrient management planning and implementation.

DISCUSSION

- P Woodbury – There is a need for more surveys and data to learn more about what farms are doing versus our best estimations. Cost considerations will be extremely important as all of the changes being discussed will be costly and outside of what the current Ag sector can financially manage.
- J Bartow - Echoes Peter Woodbury's comments regarding need for more information about what landowners and managers are or are not doing. More information has to be voluntary as folks will not respond well to mandatory or regulatory discourse.

Soil Health (regenerative agricultural practice adoption)

Rationale: Increase carbon sequestration by an estimated 1.47 mmt CO₂e/year with the adoption of soil health management

DISCUSSION

- Uncertainty, impermanence, and difficult verification are major obstacles to counting the carbon sequestration. Practices require sustained adoption to realize benefits.
- S Levy – Also, need to consider how to increase adoption on rented land in addition to landowner operated lands.
- T Gerow – Supports the Carbon Farm Planning concept and should include elements of forest management into the overall plan.
- S Hunt – Carbon Farm Plans could be tied to access to cost-share programs as an incentive to adopt and follow a plan.

Agroforestry (including Silvopasture, alley cropping & forest buffers)

Rationale: Incorporating trees into areas of agricultural production (agroforestry) have the potential to reliably increase carbon sequestration and have numerous other environmental benefits.

RECOMMENDATIONS

Land Use Conversions – Agricultural Protection and Access

Rationale: Maintain land base for food production, reduce sprawl development, sequester and store carbon, and avoid vehicle travel emissions associated with development.

DISCUSSION

- J Suarez - I'd like to see if we could expand the equity statement to farmland access to read affordability to beginning farmers, including underrepresented minorities in NY agriculture.
- S Levy - Or specifically black, indigenous, and farmers of color.
- J. Suarez agreed with this statement.
- S Morningstar - I second that we should include BIPOC farmers in any equity statement. I will follow up with a more detailed update on equity for the work plan. Thank you for uplifting this specific language on the equity piece- we cannot assume that everyone is on the same page regarding what equity looks like and who it includes.

Land conversions and forestry and bioeconomy related sequestration recommendations

Peter Innes, NYS Department of Environmental Conservation

GOAL: Provide overview of forestry sub-group discussions and recommendations.

Land Use Conversions – Forestry

Rationale: Maintaining the land base of forestland will help ensure that NY's forest continue to sequester and store carbon for the long-term.

DISCUSSION

- Sequestration rates are lower in NYS forests due to conversions with latest research indicating conversion to farmland is a large factor, more so than to settlements and other forms of development.
- M Brown – Sequestration rates in NYS forests are stabilizing long-term.

Urban Forestry

Rationale: Increase percentage of tree canopy in urban and settlement areas to provide substantial carbon benefits. Utilize urban wood created from construction, deconstruction, regular maintenance and events (weather and forest health) to reduce waste and costs while storing carbon.

DISCUSSION

- N Villarrubia – Municipalities should also develop maintenance plans and replanting plans for their urban canopy cover.
- J Bartow/N Sullivan/S Hunt – A transferable income tax could be an incentive similar to Brown Fields. Discussion regarding incentives through a refundable tax credit ensued as a potential option.

Forestry: Increase statewide afforestation/reforestation efforts

Rationale: Increasing the afforestation and reforestation efforts statewide will increase carbon sequestration and provide numerous co benefits.

DISCUSSION

- A Barber/J Bartow – Many forest owners don't know what they own or how to manage it. As referenced earlier; need further surveys and data on who's managing what on forestland.
- A Barber - I've seen some discussions about the importance of shrubs. Shrubs offer many of the same benefits as trees but may actually be more desirable/viable in some places/spaces. Shrubs can also be food sources avoiding competition with farmland.
- J Suarez - Peter Smallidge has some projects on whether slash walls will help smaller scale woodlots/shrub lands regenerate by protecting against deer pressure. Results aren't out yet; it's part of the CAFRI endeavor with SUNY ESF.
- A Barber – Soil and Water Conservation Districts (SWCDs) are positioned well to work with private landowners on afforestation and promoting forest management. We recognize that there are owners who cannot or are unwilling to pay for planting. SWCDs could host/sponsor conservation corps programs to plant trees.

Bioeconomy

Maureen Leddy, NYS Department of Environmental Conservation

Rationale: Enhancing the markets for sustainably harvested, NY-grown products can provide direct benefits in the State, such as through carbon sequestration, as well as indirect benefits through the substitution bio-based products for fossil fuels-based products.

DISCUSSION

- J Bartow – Working on development of a Bioeconomy Roadmap.
- Further research and development are needed in this space.
- Concept and development of biorefinery is needed to drive supply and demand.
- P Woodbury - We led a study years ago with a large group including SUNY ESF to estimate bioenergy feedstock production potential through the State including purpose grown, residues, forest and ag. Focus was ethanol, but feedstock analysis is applicable to any conversion process.
- Wightman, J.L., Z.U. Ahmed, T.A. Volk, P.J. Castellano, C.J. Peters, S.D. DeGloria, et al. 2015. Assessing Sustainable Bioenergy Feedstock Production Potential by Integrated Geospatial Analysis of Land Use and Land Quality. *BioEnergy Research* 8: 1671-1680. doi:10.1007/s12155-015-9618-x.
- Woodbury, P., G.R. Volk T, Castellano P, Buchholz T, Wightman J, Melkonian J, et al. 2010. Analysis of sustainable feedstock production potential in New York State. In: e. a. Wojnar Z,

editor Renewable fuels roadmap and sustainable biomass feedstock supply for New York. New York State Energy Research and Development Authority.

Forestry management recommendation discussions were tabled to a future meeting.

Next Meeting

The next meeting is scheduled for December 9th at 1 p.m.

Meeting concluded at 12:45pm

Please contact Peter Innes, NYSDEC; Deputy Commissioner David Valesky (AGM) or Brian Steinmuller, Assistant Director of the Division of Land and Water Resources (AGM), if you have questions.

Peter Innes: peter.innes@dec.ny.gov

David Valesky: david.valesky@agriculture.ny.gov

Brian Steinmuller: brian.steinmuller@agriculture.ny.gov