Maine Climate Council Natural and Working Lands Work Group Meeting Wednesday, May 15, 2024; 10:00 am – 1:00 pm Deering Building, Room 101, Blossom Lane, Augusta

For Zoom attendees, register in advance:

https://us02web.zoom.us/meeting/register/tZEsdOutpj4rH9FTKkf6m8to9suV2wXvwjkk

Desired Outcomes - By the end of this meeting, we will have:

- Finalized the Work Group recommendations
- Provided input into Deliverable Template questions focused on Equity and Metrics
- Provided opportunities for public input

Agenda

What	When
Welcome – co-Chairs Tom Abello, Amanda Beal Agenda and Working Agreements Review	10:00 – 10:05
Public Input	10:05 – 10:20
Discussion and Finalization of Recommendations	10:20 – 12:00 (with break)
Deliverable Template Questions on Priority Populations and Measuring Outcomes	12:00 – 12:40
Public Input	12:40 – 12:50
Next Steps NWL Work Group information: https://www.maine.gov/future/climate/council/workinggroups/lands	12:50 – 1:00

Note: Agenda item times are subject to change based on the progress of the group

Maine Climate Council Natural and Working Lands Working Group Membership List

Co-Chairs

Tom Abello Governor's Office

Amanda Beal Department of Agriculture, Conservation and Forestry (DACF)

Members

Bethany Atkins Department of Inland Fisheries and Wildlife (DIFW)

Sen. Richard Bennett Maine State Senate
Adam Bishop Maine Farmland Trust
Hannah Carter University of Maine

Rep. Dean Cray

Maine State House of Representatives

Andy Cutko

DACF Bureau of Parks and Lands

Norm Daigle Hannaford Supermarkets Phillip deMaynadier DIFW Wildlife Division

Molly Docherty DACF Maine Natural Areas Program

Dana Doran Professional Logging Contractors of the Northeast

Maureen Drouin Maine Conservation Voters

Ivan Fernandez University of Maine

Ellen Griswold Wolfe's Neck Center for Agriculture and the Environment

Ches Gundrum Maine Audubon Society
Bethany Humphrey The Climate Initiative
Sen. Henry Ingwersen Maine State Senate

Tony Jenkins USDA Natural Resource Conservation Service

Gary Lamb Hallowell City Manager

Craig Lapine DACF Bureau of Agriculture, Food & Rural Resources

Melissa Law Bumbleroot Organic Farm

John Naylor Rosemont Market

Rep. Margaret O'Neil Maine State House of Representatives

Darren Ranco University of Maine
Kaethe Rice Waterville High School
Jeff Romano Maine Coast Heritage Trust

Johnny Sanchez Food and Medicine Silvan Shawe Cultivating Community

Heather Spalding Maine Organic Farmers & Gardeners Association

Pat Strauch Maine Forest Products Council

Karin Tilberg Forest Society of Maine

David Trahan Sportsman's Alliance of Maine

Carol Weymouth Maine Association of Conservation Districts

Andrew Whitman DACF Maine Forest Service

Staff

Jo D. Saffeir DACF Commissioner's Office
Tom Gordon DACF Commissioner's Office

Maine Climate Council Natural and Working Lands Work Group Working Agreements

- Meetings will start and end on time.
- When meetings are held in person, Committee members will make every effort to attend in person to maximize learning, communication, and collaboration.
- Cameras will remain on during virtual meetings to facilitate communication and understanding.
- Meeting materials will be shared in advance of meetings with sufficient time for review.
- Come prepared, having read meeting materials and completed assignments.
- Be present and engaged.
- Strive for equal airtime, enabling all to participate fully.
- Listen with curiosity and an openness to learning and understanding.
- Adopt a creative problem-solving orientation.
- Name the tension, kindly.
- Humor is welcome!

The Natural and Working Lands Work Group will strive for consensus in its recommendations through a facilitated, discussion-based process, and will not hold votes on specific decisions. The Work Group may choose to include a significant minority opinion as part of its final recommendations.

GOPIF Guidance for Co-Chairs and WGs

Finalizing recommendations and WG role after June.

- 1. Suggestions on drafting recommendations and actions
- a. Aim for all recommendations / actions to have **active language**, be **specific**, and include a **date or timeframe** where appropriate (remembering that this plan looks out 4 years). Avoid passive language such as "consider," "continue investing," or "better understand."
- b. Be intentional in how your list your actions. Start with the ones having the highest likely impact.
- c. If you wish, suggest a **new bold** goal as a recommendation for top-level metrics that could become part of the dashboard for tracking progress and easily communicated to broad audiences. Focus on areas where the state will have federal and other resources that make it well-positioned to make noticeable progress. Show how the goal relates to low- and moderate-income households and / or other **vulnerable populations**.
- d. **Do not spend time** considering changes to MWW strategies or **overall organization**. Once all the WGs have submitted recommendations and actions, GOPIF and the Council will look at what goes where and potential updates to the plan's structure.
- 2. WG role after June 2024
- a. The process this year will be almost identical to 2020
- i. The WGs play an essential role developing recommendations for the Council.
- ii. WG members are encouraged to attend the June 18 Council meeting, during which Councilors and WG members will look across all the different content coming in.
- iii. After June, the Council, with support of WG co-chairs and GOPIF's staff, will consolidate all the recommendations into a coherent, widely supported updated plan. The Council will not likely tap the WGs for additional help during this period, though co-chairs will be pulled into conversations.
 - The Council will have additional information at its disposal, including economy-wide emissions modeling (that can guide updated targets), public input from summer / fall activities, and detailed information from the Mitchell Center's work with vulnerable populations.
- iv. WGs should expect that the Council, with GOPIC staff support, will likely combine, edit, and otherwise modify the language coming out of the six WGs and the Materials Management Task Force, similar to 2020.

Introductory Paragraph to unify the 3 sub-introductions in the final submission

The Natural and Working Lands Work Group selected three of its original recommendations to define further through the 2024 update to *Maine Won't Wait*. Maine's significant undeveloped land base consisting of working forests, active agricultural land, and natural lands is the envy of the region and the nation. These lands play an essential role in sequestering carbon, offsetting Maine's greenhouse gas emissions, supporting a vibrant local food system, and providing essential habitat for biodiversity protection and species migration, all necessary attributes to mitigate and adapt to climate change. These expanded recommendations identify the most promising approaches Maine can take to increase protected land, local food consumption, and forest carbon sequestration. While the recommendations are distinct, there are commonalities in approach. Collectively, they require a commitment to and investments in research and monitoring, expanded capacity, technical support, incentives, planning, public engagement, stewardship, and longterm funding. With these further investments, the state can maximize the potential of its natural and working lands to mitigate climate change and support community and natural resource resilience.

30% Land Sub-Group Recommendations May 8, 2024 DRAFT

Introduction

The Natural and Working Lands Working Group reviewed Strategy E, Recommendation 1-Protect Natural and Working Lands and Waters from Maine Won't Wait:

- Increase by 2030 the total acreage of conserved lands in the state to 30% through voluntary, focused purchases of land and working forest or farm conservation easements.
- Additional targets should be identified in partnership with stakeholders to develop specific sub-groups for these conserved land for Maine's forest cover, agriculture lands and coastal areas.
- Focus conservation on high biodiversity areas to support land and water connectivity and ecosystem health.

Maine is a land rich in contrasts between the boreal and temperate, freshwater and saltwater, upland and wetland, alpine and lowlands. The State's 33,315 square miles includes 17.5 million acres of forestland interspersed with rugged mountains, over 700,000 acres of productive farmland, more than 5,600 lakes and ponds, roughly 5 million acres of wetlands, 31,800 miles of rivers and streams, 4,100 miles of coastline, and 4,613 coastal islands. Most of Maine's conserved lands consist of large working forest easements in northern and eastern Maine. Southern Maine, with a higher population density and numerous biodiversity 'hot spots,' has a lower proportion of conserved lands. Maine has been most successful in conserving wetlands and mountaintops with high ecological, scenic, and recreational values. Compared to forestlands and wetlands, farmland conservation lags significantly behind, with only 3.5% conserved. (Due to this discrepancy, this set of recommendations includes a stand-alone section for farmland funding and conservation planning.)

The *Maine Won't Wait* 2023 Update notes that 4,357,462 acres, or 22.2% of Maine, are permanently conserved through fee and/or easement. Over recent years, Maine has conserved about 50,000 acres annually; to reach the 30% goal, this rate will need to increase *nearly fivefold*. Our sub-group recognized that the 2030 goal should represent a milestone rather than an end in itself; land conservation will surely need to continue beyond 2030.

The following is a collaboratively developed definition for 'conserved lands':

"Conserved Lands" means any natural and working land that is durably* protected and provides natural resource-based benefits. These benefits can include clean water; healthy soils; habitat for diverse and thriving populations of plants and wildlife; food security; climate resiliency; carbon storage; and cultural, economic, and outdoor recreational opportunities for all Maine people.

"Conserved Lands" means any land in a primarily natural or traditionally managed condition that is both durably* protected and managed to provide or maintain ecosystem services, climate resiliency, or cultural values. These services and values include equitably and inclusively supporting Maine's economy, providing drinking water, ensuring food security, conserving biodiversity, and providing recreational opportunities.

*Durable includes lands under permanent fee or conservation easements (meeting GAP status 1-3) in the Maine Conservation Lands GIS layer) or natural and traditionally managed lands identified in government-to-government relationships with Wabanaki Nations in Maine. Durable lands do not include temporary protections by such tools as, for example, lease agreements, shoreland or municipal land use restrictions, carbon offset projects, or areas enrolled in tree growth or other open space current use tax law provisions.

The importance of evaluating Maine's suite of conserved lands (both current and future) through a lens of equity and inclusivity was a central focus of many discussions. The benefits of conserved lands should be equitably distributed and inclusive to all Maine residents with a focus on ensuring access for marginalized communities. Specific recommendations are included below.

Although sub-group discussions focused on permanent land conservation, we also recognized the value of other programs that maintain Maine's landscape in compatible land uses. These compatible land uses include many municipally owned lands and Tree Growth, Open Space, and Farmland 'current use' tax programs. Collectively, these compatible land uses, together with permanently conserved lands, account for 65.9% of Maine. (Note that although the definition above suggests the inclusion of tribally owned lands, the 65.9% figure excludes approximately 330,000 acres of those lands, which comprise 1.7% of the state.) The role of tribal lands and tribal interests/needs in state land conservation needs further discussion and engagement with tribes). One suggestion for tracking this 'compatible land use' statistic is to recommend no net loss.

Sub-group discussions also touched on a wide range of related topics, including the importance of the forest economy (and balance between reserves and working forests), recognizing other community needs (e.g., housing, economic growth), and workforce housing for conservation employees. . . , and the role of equity in public access to lands and funding.

Recommendation 1: Priorities

Focus land protection efforts in areas with high biodiversity value, high carbon storage and sequestration, cultural and economic importance, and/or which offer opportunities to improve public access equitably.

Metric: Through voluntary, focused purchases of land and conservation easements, increase the area of conserved lands in Maine by at least 1.5 million acres by December 2030 with the following targets in mind:

- Conserve land within Beginning with Habitat Focus Areas of Statewide Ecological
 Significance, add new state and private-owned ecological reserves (including high carbon
 forests), and increase fee and easement conservation for important terrestrial and aquatic
 areas that ensure landscape-level connectivity as identified through efforts such as a new
 Landscape Conservation Design statewide landscape conservation blueprint (referenced
 as an action item in the recommendation on increasing capacity).
- Conserve lands that fill gaps in equity for land use and access, including working waterfronts and properties that support the goals of and secure land to the Wabanaki

tribes of Maine; establish open space opportunities for Maine residents located within a 10-minute walk of where they live; and construct ADA accessible trails and boat access within 10 miles of Maine population centers-Conserve lands that fill gaps in equity for land use, cultural significance, and access. Conservation efforts should prioritize properties that support the goals of and secure land for the Wabanaki Nations; increase open space opportunities for Maine residents located within a 10-minute walk of where they live; include ADA-accessible trails and boat access within 10 miles of Maine population centers; protect working waterfronts; amongst others. Focusing land conservation efforts on ensuring equitable access and use for marginalized communities will help provide cultural, economic, and recreational opportunities for all Maine people.

Sustain ecosystem services and lands needed for carbon storage and sequestration and
natural resource-based industries by securing significant and well-distributed working
forest conservation, including productive lands for storage and sequestration and durable
wood product production; and new complete fee and easement conservation within
source drinking water watersheds (including for Portland and Lewiston-Auburn) to
ensure water quality without additional water treatment measures.

Recommendation 2: Funding

Significantly expand the funding and funding eligibility for fee and easement acquisition through existing and new land conservation programs, including the Land for Maine's Future Program.

Metric: By December 2025, Maine has established permanent conservation funding that generates at least \$50 million per year (excluding farmland, which is addressed in Recommendation 4).

- Establish permanent and ongoing funding for the Land for Maine's Future Program; consider a variety of mechanisms, including mitigation funding, real estate transfer tax, reallocation of sporting outdoor goods or rooms and meals tax, enhancing dedicated funds for resource conservation (deer yards, stream buffers, etc.) (as an umbrella habitat for many species) and others (in part) to create a match for federal funds.
- Advocate for increased, sustained, and more flexible federal conservation funding that supports state, tribal, and non-governmental efforts (e.g., a new Forest Conservation Easement Program). Examples of critical funding include the Forest Legacy Program, Pittman-Robinson Funds, North American Wetlands Conservation Act, Land and Water Conservation Fund, and others.
- Streamline state processes for conservation funding and grant review, approval, and administration.

Recommendation 3: Capacity

Expand public and private capacity to support all conservation acquisition and stewardship elements, including participatory planning efforts, acquisition and due diligence, ongoing land management and monitoring, and program evaluation and accountability.

Metric: By 2030 (and using 2023 as a baseline), increase the conservation acquisition and stewardship staff of land management agencies in proportion to the acreage of land owned, under easement, and other legal stewardship responsibilities, and develop a plan for long-term land uses for the state of Maine.

- Ensure agency staffing keeps pace with acquisition and stewardship responsibilities, including land acquisition, grant, database administration, land management, and monitoring.
- Create incentives to expand the network of land acquisition contractors, including appraisers, surveyors, and legal services, and recruit conservation workers (land stewards, park rangers, foresters, ecologists) that reflect the diversity of current and future generations.
- Over the next three years, state agencies will work with a coalition of partners and large landowners, as well as Wabanaki tribes Nations in government-to-government relationships, to develop a non-regulatory statewide landscape conservation blueprint. This action allows a collaborative process to unfold for setting goals to and beyond 2030 for the conservation and management of key places for biodiversity, recreation, and ecosystem services (drinking water, timber products etc.) in the broader context of land use in Maine's natural and working lands, while respecting individual management objectives of private landowners.

This addresses the following 2020 Maine Won't Wait recommendation: "Additional targets should be identified in partnership with stakeholders, to develop specific sub-goals for these conserved lands for Maine's forest cover, agriculture lands, and coastal areas.".

Recommendation 4: Farmland

Safeguard the state's agricultural resources by doubling the permanently protected farmland in Maine by 2030 through a comprehensive and collaborative strategy that brings increased state funding, capacity, and new strategies to this work.

Metric: Annually invest \$20 million in state funding toward permanent conservation of Maine's farmland, with the goal of protecting By December 2030, Maine will invest 100M toward permanent conservation of at least 7% of the state's presently undeveloped farmland by 2030. Develop a strategy to continue and fund this work past 2030, with a goal of no net loss of farmland.

- Establish a well-funded, sufficiently staffed, stand-alone state program or mechanism (in addition to Land for Maine's Future) to prioritize the efficient flow of farmland conservation resources in collaboration with non-profit and federal partners, which includes both traditional easement acquisition as well as seamless support for alternative methods of protecting farmland outside of the process (Buy/Protect/Support/Sell, community land trust/non-profit acquisitions, etc.).
- Commission a Maine Farmland Action Plan to articulate goals and strategies regarding Maine's farmland resource and agricultural economy beyond 2030, identifying the highest priority lands to secure against nonagricultural development along with affordable and achievable pathways to farmland access and development of practical tools and programs for supporting Maine's agricultural economy.
- Recognizing that farmland viability is critical to this recommendation, expand funding for state programming and infrastructure (such as grant, loan, and assistance programs) that have a tangible, positive impact on farm viability in Maine.

Deliverable Template Questions:

1. Impacts – How do the recommendation and its actions address Maine's four climate goals?

Mitigation: Maine's natural landscape is vital to mitigating greenhouse gas emissions: each year, Maine's forests sequester an amount of carbon equal to at least 60 percent of the state's annual carbon emissions, a figure that rises to 75 percent when durable forest products are included. In addition, conserved lands also provide innumerable other benefits – maintaining wildlife habitat, ensuring clean water, providing access to food, and creating recreational opportunities that support the physical and mental health of all Mainers. Preserving land prevents conversion to other uses that would typically result in higher energy use and emissions rates. An increase in climate-friendly farming practices on permanently conserved farmland can enhance long-term carbon sequestration in soils, helping to mitigate an increase in greenhouse gas emissions.

Workforce and Economic Opportunity: Maine's natural landscapes are central to the state's economy and high quality of life. Maine's outdoor economy provides \$3.3 billion through jobs and tourism dollars. Additional conserved lands will support the health of these industries. Farmland conservation investments provide critical capital for farm businesses, supporting infrastructure and equipment improvements and reducing debt. Purchased agricultural conservation easements directly support the viability of the farm economy, often leading to opportunities for new and beginning farmers to develop their businesses.

One challenge related to the conservation workforce is the need for more affordable housing for seasonal workers, particularly in southern and coastal Maine. Similarly, wages for entry-level workers can create challenges for workforce recruitment and retention. Agencies and organizations involved in hiring should create incentives and best recruitment practices that increase the number of conservation workers and increase access to conservation careers for priority populations.

Andy Cutko: A further NWL group suggestion related to an analysis of hiring barriers.

<u>Resilience</u>: Conserved lands increase the resilience of the landscape. Healthy and intact ecosystems are less susceptible to pests, and conserved lands provide important buffers to flood waters, rising sea levels, and other natural disasters, including fire. They allow habitat connectivity, essential for shifting species ranges from warming climate conditions. In addition, farmland conservation contributes to the resilience of Maine's local food system in the face of future climate-related disruptions to the global supply chain.

Equity: Future conservation must consider equitable land access for underserved populations and communities. There is also an interest in expanding conservation opportunities for Wabanaki tribes. Affordable and equitable land access in the agricultural space has been and will continue to be accomplished primarily through farmland conservation and the purchase of conservation easements. The purchase of agricultural conservation easements and associated farmland conservation tools are often used to conserve land, make land affordable, and help lower-income and socially disadvantaged populations overcome the lack of capital as a land access barrier. As the pace for agricultural land conservation expands, affordable and equitable land access opportunities will also be critical as farmers of color and New American farmers continue to seek avenues to participate in Maine's food system.

<u>Proven Strategy and Feasibility</u>: Maine has an excellent track record of federal funding, collaboration among public agencies and conservation groups, and public support for conservation. Maine also has property owners typically willing to engage in conservation alternatives for their land—in other words, the project 'pipeline' presents opportunities for increased conservation. However, the feasibility of the 30% goal is dependent on funding and capacity. We estimate that up to \$1.5 billion of funding could be required over six years (with an average land cost of \$1,000/acre).

1. Cross-over – Does the recommendation and its actions involve other working groups?

<u>Coastal and Marine</u>: Funding for land conservation will likely include properties that conserve coastal ecosystems and working waterfronts.

<u>Resilience:</u> In particular, projects emphasizing habitat connectivity, landform diversity, and land conservation will support ecological resilience. The Community Resilience Work Group would be another cross-over group, as they look at human populations and vulnerabilities to climate-related disasters, e.g., flooding, wildfire, and human health.

2. Priority Populations – What priority populations are impacted by this recommendation and its actions, and how?

<u>Populations</u>: Efforts to fund land conservation should recognize the importance of low-income and marginalized populations, particularly those with limited access to conserved lands and conservation funding. In addition, consideration should be given to expanding funding for land conservation opportunities for Wabanaki tribes. Regarding increased farmland conservation, in line with recent experience and trends, affordable and equitable land access opportunities will

increase for low-income and socially disadvantaged groups (including BIOPC and New American farmers)

3. Timeframe – What is the timeframe for this recommendation and its actions to implement and realize outcomes?

Efforts should be made to identify and create a permanent land conservation funding mechanism by the end of 2025. Recognizing the need for the pace of farmland conservation to rapidly increase to bring Maine in line with the rest of the northeast, investment is needed immediately to achieve the goal of doubling the amount of farmland protected in Maine by 2030.

- 4. Implementation what next steps are required to implement this recommendation and its actions?
 - <u>Legislative action</u> would be needed to create permanent state funding sources to conserve lands and farms. Legislative action would also be needed to increase 'head count' to boost state agency capacity.
 - <u>Incentives</u> may be needed to increase the number of appraisers, surveyors, and legal staff required for due diligence efforts.
 - Advocacy will be needed to maintain or increase various federal land and farm conservation funding programs.
 - <u>Collaboration and teamwork</u> will be needed among public agencies, conservation groups, and landowners.
- 5. Measuring Outcomes how will this recommendation and its actions be measured, and how will effectiveness be evident?

The Maine Climate Council currently has a dashboard metric for conserved lands based on the Conserved Lands GIS data layer administered by DACF. Various other databases and GIS layers maintained by DACF and DIFW track progress on land conservation and protection of specific habitats. Note that the Climate Council's Science and Technical Team previously estimated that the rate of land conservation needed to increase three-fold to reach the 2030 goal, and the NWL group estimates that the rate needs to increase five-fold. This difference reflects variations in the definitions of conservation used, the lengths of time considered, and the specific time periods used for the calculation. Furthermore, both estimations indicate that the rate of conserved land will need to substantially increase to meet the 30% by 2030 goal, and the NWL WG strategies were updated with this in mind.

30% Maine Food by 2030 Subgroup

Working Group Recommended Climate Recommendations,
Actions and Measurable Outcomes

WORKING GROUP DELIVERABLE TEMPLATE May 6, 2024

INTRODUCTION

The Natural and Working Lands Work Group identified specific actions to accomplish the Maine Won't Wait goal of increasing the amount of food consumed in Maine from state food producers to 30% by 2030 through local food system development.

About a third of all human-caused greenhouse gas emissions are linked to food¹. Moreover, climate-related disruptions pose a serious threat to the production and transportation of food around the globe. These realities make strengthening Maine's food system a fundamental climate strategy for no fewer than three reasons: we can reduce the climate impacts of transporting food long distances; we can reduce dependence on fragile global supply chains; and we can enhance the state's ability to support climate-friendly agricultural practices, including cover cropping, reduced/no-till, crop rotation, agroforestry, soil carbon/organic matter amendments, and rotational grazing — a power that is largely lost with imported food.

The overarching recommendation to accomplish this goal is to create a state-level food plan; this is a necessary precursor to strategic improvements in Maine's food system. The working group acknowledged that there have been important, NGO-led food system planning efforts in Maine, and that the state itself has created plans for aspects of Maine's food system—notably a plan to reduce food insecurity and a plan to support the marine economy. However, the state has no comprehensive plan for its food system, a system that impacts every resident and two significant heritage industries. A food planning process involving the state, the University of Maine, and other key institutional players will have the capacity to bring together a broad range of stakeholders and collect baseline information about local food production and consumption. It will also include recommended policies, expanded funding mechanisms, new programs, and additional cooperation, which the state, businesses, and non-profits will implement. While the creation of this plan is underway, the recommendations to increase the viability of food businesses and ensure that more consumers can access local food can be implemented.

¹ United Nations (n.d.). *Food and Climate Change: Healthy diets for a healthier planet*. Climate Action. Retrieved April 22, 2024, from https://www.un.org/en/climatechange/science/climate-

issues/food#:~:text=Food%20needs%20to%20be%20grown,emissions%20is%20linked%20to%20food.

SUMMARY OF RECOMMENDATIONS AND ACTIONS

- 1. Create a Maine Food Plan
 - a. Identify funding for the state food planning process and identify key goals for the plan.
 - b. Align food plan recommendations with those of existing Maine strategic plans.
 - c. Center community involvement, in particular youth and priority populations, in every phase of plan creation, especially and including in strategic decisionmaking
 - d. Create a local food definition <u>and metrics</u> that can be adopted and used statewide.
- 2. Strengthen the viability of Maine farms, fisheries, and other food producers through expanded, <u>equitable</u>, and ongoing access to funding, technical assistance, and processing and distribution infrastructure.
 - a. Maintain and expand access to farmland, working waterfront, and other key pieces of the food supply chain infrastructure.
 - b. Establish permanent funding for the state to help producers navigate the technical assistance and funding opportunities available throughout the state, with a focus on reaching priority populations.
 - c. Create an inventory of the current food processing, storage, and aggregation capacities and evaluate the infrastructure gaps and needs.
 - d. Establish permanent funding for infrastructure development that aligns with the scale, geography, and food type needs and increase the capacity of the Maine Agriculture, Food and Forest Products Investment Fund.
 - e. Target funding to support producers in adopting climate change mitigation and resilience strategies including the Maine Healthy Soils Program.
- 3. Create more Maine markets for Maine producers and increase access to Maine food.
 - a. Develop a marketing plan to increase the consumption of Maine food that:

 supports consumer education efforts focused on the climate-related, economic,
 and nutritional value of Maine food; aligns Real Maine and the Seafood Directory
 towards the 30% Maine food by 2030 goal; and educates consumers about local
 food preparation.
 - b. <u>Support producers to diversify market channels and identify and connect with profitable Maine markets for their products.</u>
 - c. Leverage State contracting and appropriations to incentivize the purchase of local foods and establish permanent funding for equitable local food access programs. Direct State investments should grow from \$1.75 million to \$4 million annually to support existing and innovative programming in support of local food procurement, local food access, and food equity initiatives.

d.

ANALYSIS AND SUPPORTING INFORMATION

For each recommendation and its respective set of actions, provide concise analysis using the questions below. Analysis should focus mostly on new recommendations and significant revisions to existing recommendations.

RECOMMENDATION 1: Create a Maine Food Plan

1. Impacts - Describe the recommended recommendation and its actions and how they address Maine's four climate goals – reducing greenhouse gas emissions, increasing resilience, creating economic opportunity, and achieving equity through Maine's climate response.

If 30% of food purchased in the state were grown, fished, and raised in Maine, climate change impacts would be reduced, primarily by reducing the greenhouse gas emissions associated with long-distance food transportation. Increasing Maine's food production with a focus on local markets will strengthen the resiliency of our food system in the face of inevitable future climate-driven disruptions.

Increasing the number of consumers of Maine food and the amount they purchase will strengthen the economic viability of the farms throughout the state, an important natural heritage industry. Many producers could scale up, enabling them to hire more workers which would help to strengthen rural communities.

The state is known for small, diversified farms. These farmers are good stewards of the land who use a variety of practices to increase the health of the soil, air, and water. Keeping land in farming helps ensure that the land won't be used in ways that would negatively impact the environment and climate change.

Increasing local food availability will enable all people in Maine to have access to high-quality, nutritious, and delicious food as Maine has the capacity to produce enough local food to supply a much larger proportion of Mainer's diets.

Food system questions evoked the most passionate engagement from youth participants and we recommend that engagement be encouraged and leverage through a youth-centered planning process.

2. Cross-over - Does the recommended recommendation involve other working groups/sectors?

Coastal and Marine Working Group Waste Management Working Group 30% Land by 2030 Subgroup

How did the Working Group coordinate with others around these overlaps?

The Working Group coordinators met with the coordinators of the three relevant Working Groups and look forward to sharing recommendations.

3. Priority Populations - Consider the priority populations impacted or affected by this recommended recommendation.

Many people from priority populations are food insecure and many work in the farming, fishing, food processing, and food distribution industries. Strengthening the local food system will positively impact many priority populations by increasing economic activity and making healthy, local food more accessible.

Many farms and food processing businesses are in rural areas with limited access to public transportation. Most farms in Maine are small businesses and many farm owners earn below the poverty line. Farm workers and food processing workers are often low-income, migrant workers, new Mainers, undocumented workers, and members of tribal nations. Investments in these businesses will improve their economic sustainability, enabling them to flourish and expand.

Supporting local food producers will make local food more available and accessible. There will need to be continued focus to ensure that local food is affordable and accessible to everyone throughout the state.

This subgroup had little input from priority populations. Those invited from priority populations could not attend because of time constraints. We hope the Mitchell Center process will help fill these gaps and strengthen these recommendations.

4. Timeframe - What is the timeframe for this recommendation and its actions?

All of these actions could be implemented in the short term. The outcomes for creating a local food definition will be realized in the mid-term while the outcomes from creating a food plan will be seen in the long term.

5.	Implementation Next Steps - What types of next steps would be required to implement
	the recommendation?

☐ Legislation, rules/regulation, internal program guidance changes
☑ Establishment of a new program or a fund,
☑ Conduct additional research
☐ Provide education or training
☑ Coordinate with other parties/agencies/states

Please provide some detail around these steps. If possible, identify specific actors who would lead in the implementation of the recommendation and actions.

University of Maine Cooperative Extension has secured funding for some aspects of a strategic food plan. The state could collaborate with the university to create a more comprehensive plan. The Department of Agriculture, Conservation and Forestry will identify additional funding for the state food plan and will work with state, federal, private, and philanthropic funders to leverage additional funds.

The planning process will provide an opportunity to coordinate activities outside DACF across other state agencies, including DECD, DHHS, DOE, DMR, and others, to ensure that the plan aligns with the goals and plans of those agencies. The process can also leverage and support the ongoing work of non-state entities, including the Maine Food Strategy, Focus Maine, CEI, New England Food Planners Partnership, and others.

DACF will endorse the report's findings, identify funds to implement the recommendations, and work with food system partners to act on the recommendations. Outputs will include key food system infrastructure inventories and a Maine food system data dashboard.

DACF will organize a work group to develop a definition of local food. The work group will include consumers and grocery and institutional buyers and will learn from New England states that have implemented local food definitions.

6. Measuring Outcomes - How will you know the recommended recommendation is effective? Are outcomes measurable using current monitoring/data collection? Are there benchmarks or short-term indicators of success?

A state-level food plan will enable the state to make strategic decisions about strengthening the Maine food system. The state will have metrics by which to evaluate funding priorities. The outcome will be that the Maine food system is more equitable, financially sustainable, and environmentally sustainable.

Outcomes include increasing the economic strength and diversity of the Maine food system. Farmers and food producers will reduce their impact on climate change and increase their ability to adapt to climate disruptions. Local food sales at all market channels will increase and local food access and public health outcomes will improve.

The Maine food system will become better networked, with various businesses, agencies, and nonprofits understanding how their work fits together and leads to common goals. Policies will be implemented to remove barriers and build on opportunities in the Maine food system.

RECOMMENDATION 2: Strengthen the viability of Maine farms, fisheries, and other food producers through expanded and ongoing access to funding, technical assistance, and processing and distribution infrastructure.

1. Impacts - Describe the recommended recommendation and its actions and how they address Maine's four climate goals – reducing greenhouse gas emissions, increasing resilience, creating economic opportunity, and achieving equity through Maine's climate response.

Same as Recommendation 1.

2. Cross-over - Does the recommended recommendation involve other working groups/sectors?

Same as Recommendation 1.

3. Priority Populations - Consider the priority populations impacted or affected by this recommended recommendation.

Same as Recommendation 1.

4. Timeframe - What is the timeframe for this recommendation and its actions?

All the actions can be implemented in the short-term aside from maintaining and expanding access to farmland and the working waterfront, will take place in the mid-term. Realizing the outcomes of creating an inventory of the food processing and storage facilities will take place in the short term while the outcomes of establishing targeted funding streams will take place in the mid-term. The outcomes of expanding access to farmland and the working waterfront will be realized in the long term.

5. Implementation Next Steps - What types of next steps would be required to implement the recommendation?

X	Legislation, rules/regulation, internal program guidance changes
X	Establishment of a new program or a fund,
\boxtimes	Conduct additional research
\boxtimes	Provide education or training
X	Coordinate with other parties/agencies/states
	Other (please describe)

Please provide some detail around these steps. If possible, identify specific actors who would lead in the implementation of the recommendation and actions.

The Maine Department of Agriculture, Conservation, and Forestry will lead many of these efforts in collaboration with Soil and Water Conservation Districts, the University of Maine Cooperative Extension, the USDA Natural Resources Conservation Service, the Department of Economic and Community Development, and the Division of Marine Resources. In addition, DACF will work with non-profit technical assistance providers including MOFGA, Maine Farmland Trust, and others. They will also collaborate with funders, such as Community Development Financial Institutions, including CEI; local credit unions, including Farm Credit East; and philanthropic organizations, including those in the Maine Food Funders Network.

6. Measuring Outcomes - How will you know the recommended recommendation is effective? Are outcomes measurable using current monitoring/data collection? Are there benchmarks or short-term indicators of success?

These actions will enable businesses that grow, raise, produce, harvest, catch, and distribute food to be more financially and environmentally sustainable. It will be important to capture baseline measurements of economic and sustainability indicators and then track these over time. These measurements may include the number of farms and food businesses, the profitability of farms and food businesses, the amount of food produced, and the number of people employed in the food sector. It will also be useful to measure the amount of funds distributed and the number of recipients and the return on investment of that funding.

Regarding sustainability measures, acres of land in conservation, and a reduction in food production activities that negatively impact climate change should be tracked.

Increased viability of farms and food businesses will also positively impact the farming, fishing, and food-producing community. The state should see more young and beginning farmers fishermen and better mental health among farmers and food producers.

RECOMMENDATION 3: Create more Maine markets for Maine producers and increase access to Maine food.

1. Impacts - Describe the recommended recommendation and its actions and how they address Maine's four climate goals – reducing greenhouse gas emissions, increasing resilience, creating economic opportunity, and achieving equity through Maine's climate response.

Same as Recommendation 1.

2. Cross-over - Does the recommended recommendation involve other working groups/sectors?

Same as Recommendation 1.

3. Priority Populations - Consider the priority populations impacted or affected by this recommended recommendation.

Same as Recommendation 1.

4. Timeframe - What is the timeframe for this recommendation and its actions?

The actions to create a marketing plan and increase food equity will take place in the short term and the outcomes will be realized in the mid-term.

5. Implementation Next Steps - What types of next steps would be required to implement the recommendation?
 ☐ Legislation, rules/regulation, internal program guidance changes
 ☑ Establishment of a new program or a fund,
 ☐ Conduct additional research
 ☑ Provide education or training
 ☑ Coordinate with other parties/agencies/states
 ☐ Other (please describe)

Please provide some detail around these steps. If possible, identify specific actors who would lead in the implementation of the recommendation and actions.

Real Maine and the Division of Marine Resources will lead the development of a comprehensive marketing plan for Maine food. They will partner with many organizations offering nutrition education to strengthen and align the work.

The state will pursue additional funding to expand existing food equity programs and will work to create new programs to reach additional populations. They will pursue federal, state, and philanthropic funds to expand this work. The state will partner with many non-profits focusing on food justice and equity.

6. Measuring Outcomes - How will you know the recommended recommendation is effective? Are outcomes measurable using current monitoring/data collection? Are there benchmarks or short-term indicators of success?

Ultimately, metrics will be guided by the state food plan. In the short term, farm and fishing indicators include: the value of harvests by indicator crop and the value of landings by indicator species. To capture new market channels identified by producers, the number of new products sold in Maine and the number of new channels will be collected. Understanding consumer purchases of Maine foods and consumer sentiments will strengthen this recommendation.

7. Other - Additional Rationale/Background Information

^{**}Please footnote substantive disagreements among the Working Group members

Forest Carbon Recommendations

5.15.24

Introduction

The Forest Carbon Task Force, established by Executive Order in 2021, identified multiple recommendations aimed at increasing forest carbon sequestration and storage in Maine forests. Three key principles formed the starting point for these previous recommendations and the new set of recommendations below because they are foundational to Maine forests successfully sequestering and storing more carbon. These principles were:

- Maintaining existing forestland ("keeping forests as forests") is fundamentally important if forests are to make a growing contribution toward achieving the State's climate goals;
- Improving forest condition through widespread adoption of climate-friendly forest management practices is equally important to increase forest carbon; and
- Increasing economically viable markets for low-grade wood is necessary to facilitate adoption of carbon-enhancing forest practices.

The Natural and Working Lands Work Group re-affirms these principles. Forests in Maine are the primary contributor to carbon sequestration and storage, and maintaining as much forest land as possible is essential to meeting Maine's climate goals. The management of Maine forestland is closely linked to its capacity to provide climate-related and other important ecosystem services, including contributing to human health with clean air and water, and supporting local and regional wood markets. Yet forest carbon management, inventorying, and accounting are parts of a highly dynamic field, and new programs and methodologies are constantly emerging.

Informed by these realities, the following three new recommendations aim to increase carbon sequestration and storage in Maine forests while also ensuring these forests continue to support other critical economic, environmental, and cultural values.

1. Improve forest carbon data, monitoring, and verification to support forest policy-making and outreach program development.

a. With further funding, the Maine Forest Service's (MFS) Forest Resource Assessment program should work with the Maine Department of Environmental Protection and the University of Maine to develop a climate-focused forest data and monitoring program that continuously produces the best available information on Maine's forest composition, management and harvest activity, and forest carbon sequestration and storage, and identifies climate-driven forest health and resilience metrics, to better inform climate-friendly forest management practices and public policy decision-making.

2. Increase the availability of technical assistance, training and education for forest landowners, foresters, and loggers to increase the application of climate-friendly forest practices.

- a. MFS, in collaboration with others, should develop and maintain up-to-date materials and provide training on extreme weather BMPs, forest carbon offset programs, other revenue-generating forest carbon programs, current use taxation programs, and other strategies, targeting outreach to specific audiences such as landowners of over 40 acres, new woodland owners, farmers, foresters, and loggers to expand the implementation of climate-friendly forest management practices, resulting in increased forest carbon sequestration and storage.
- b. MFS should work with partner entities to increase and diversify forest sector-related natural resource professional capacity to apply climate-friendly forest management practices.

3. Provide incentives to forest landowners, foresters, and loggers to increase the implementation of climate-friendly practices

- a. The Maine Forest Service and other entities should identify additional technical and financial resources to increase the implementation of climate/carbon-friendly forest management and timber harvesting practices; provide cost-share assistance to loggers to purchase low-impact harvesting equipment and implement carbon-enhancing forest management practices; and support the voluntary use of professionals and service providers who follow protocols to validate the implementation of climate-smart practices.
- b. Given the rapidly evolving availability, content, and geographic focus of carbon-offset and practice-based forest carbon programs for forest landowners, Maine should explore potential opportunities to increase the suitability and availability of incentive programs for Maine's forest landowners that increase forest carbon sequestration and storage while maintaining a robust forest economy.
- c. With further funding, MFS should expand the WoodsWISE incentives program and include climate-friendly management strategies in forest management plans.
- d. The Department of Agriculture, Conservation and Forestry's Bureau of Parks and Lands should explore the potential benefits of engaging in forest carbon pilot projects that increase carbon sequestration and/or storage, maintain forest sector jobs, provide new revenue streams for the management of the self-funded Public Reserve Lands System, and contribute practical knowledge on climate-friendly forest management practices.
- e. Coordinate with existing forest sector development initiatives to help improve markets for low-grade wood that help make implementation of climate-smart forest management practices financially viable.
- f. Continue to engage in a multistate collaboration with state agencies and universities in consultation with landowners regarding the role of forest carbon sequestration in reducing net greenhouse gas emissions, which, among other benefits, will help inform one outcome of which would be to define how Maine the State of Maine as it defines how it will account for voluntary/regulatory carbon sequestration markets in its emissions accounting approach.

g. Maine's open space current use taxation program should be updated to include the broadly supported modifications proposed in LD 1648 (131st legislature) that incorporate incentives for forest owners to adopt climate-friendly land management practices.

Forest Carbon Deliverable Template

RECOMMENDATION 1 (Data/Monitoring/Verification)

1. Impacts

Mitigation - Will improve the accuracy of data to validate climate-smart initiatives, confirming whether Maine is meeting its climate commitments. It is necessary to accurately quantify the CO2e sequestered and the amount reduced over time. It will confirm whether the intended outcomes of lower atmospheric GHG and reduced co-pollutant impacts on human and ecosystem health are being achieved.

Adaptation and Resilience - Reduces the likelihood and risk of climate hazards by improving the efficacy of GHG reductions. Improved forest carbon data will inform management decisions that lead to increased ecosystem services such as water quality protection, erosion control, and wildlife habitat and connectivity. Improved data access could improve community engagement in climate-smart programming and educational activities.

Workforce/Economic Opportunity - Would create job/economic benefits through the University of Maine to assist the MFS in the development and maintenance of a climate-focused forest data and monitoring program.

Achieving Equity - One barrier could be access to technology (internet, smart-phone, computer) to adequately access and use the data. An improved carbon measurement and verification system assures that priority populations are included in the data used for decision-making. The recommendation is currently silent on specific details that encompass culture, historical access, and low-income and communities of color and is also silent on tribal communities, including the potential impact of issues of trust and sovereignty in the management of data necessary for improved carbon accounting. However, the data could be useful for assessing and mitigating the impacts to these communities.

Additional Costs - Any useful set of data/tools would likely cost several \$100K in staffing and other expenses to develop and then an annual budget of \$100K to maintain. At a minimum, funding would be needed to develop a prototype and solicit public feedback on how this information could best be distributed and used. USFS and EPA are possible funding sources.

Proven Strategy/Feasibility - Current technology can be used at the outset but data collection techniques must keep pace with emerging technology. Financial and workforce capacity are current barriers to implementation. Generally, other states are spending more than Maine on monitoring and data management of carbon budgets.

2. Cross-over

Community Resilience WG. Coastal and Marine WG for blue carbon data and monitoring. Buildings, Infrastructure, and Housing WG and Energy WG with likely recommendations that rely on forest products to meet their goals (biomass, mass timber, etc.). More generally, intersection with other WGs is through Maine's biennial GHG reporting and carbon budget development that encompasses GHG sources and sinks across all sectors.

3. Priority Populations

Populations - The majority of Maine forestland is located in the state's <u>rural and low-income</u> <u>communities</u>. Forest management, timber harvesting, and wood processing are all vital components of the state's <u>forestry</u> sector, one of Maine's major <u>natural resource industries</u>. The sector is comprised largely of <u>small businesses</u>.

Impacts - The Equity Subcommittee recommended (Ch. E, Goal 2) consulting with priority populations including tribal communities on climate change-related data collection. This forestry recommendation would increase access to forest carbon data by these communities.

Sources of Information - The Forest Carbon Subgroup included representatives of woodland owners and small businesses from Maine's rural communities.

Implementation - The MFS, DEP and the University of Maine will need to consult and partner with priority populations to develop data collection and monitoring protocols <u>including</u> <u>participatory approaches to data collection</u>, and ensure maximum usability of climate data by priority communities.

4. Timeframe

Increased data collection will first require funding to support staffing. Implementation and initial outcomes should then be achievable in the short/mid-term (2025-2030). The need, however, is continuous. New data could potentially be the next (11th) DEP GHG reporting cycle.

5. Implementation Next Steps

Type: Legislation; Coordinate with other parties/agencies; Establishment of a new program or a fund; Conduct additional research.

Next Steps: Secure funding. MFS, UMaine, DEP to identify key individuals; solicit input to identify data acquisition and analytical needs to develop a framework that complements other relevant reporting frameworks (e.g. USEPA, IPCC, UNEP).

6. Measuring Outcomes

Metrics should measure the extent of improved access to Maine forest carbon data by priority populations. Progress will be evident by improved precision, accuracy, and completeness of Maine carbon budget calculations and improved understanding of the relationship between Maine calculations and those of other states and federal agencies (e.g., USFS FIA, USEPA).

RECOMMENDATION 2 (Technical Assistance/Training/Education)

1. Impacts

Mitigation - Would directly enhance mitigation of greenhouse gas emissions by increasing carbon sequestration and storage through better implementation of climate-friendly forest practices.

Adaptation and Resilience - Climate-friendly forest practices have the benefit of increased resilience of the forest resource, allowing for greater adaptation in the face of climate change. These practices also have co-benefits related to the creation and maintenance of wildlife habitat and improved connectivity if implemented on a wide scale. Decreased negative impacts from major storm events, wildfire, or other natural disasters would also be an outcome.

Workforce/Economic Opportunity - Engaging new forest landowners and others not currently managing their forests will lead to more active timber management and will create economic opportunities for foresters, loggers, and landowners. This strengthens one of the state's key natural heritage industries.

Achieving Equity - Targeted outreach to underserved landowner groups can ensure priority populations are engaged. Existing cost-share programs make the development of forest management plans accessible to previously underserved populations.

Additional Costs - An existing network for training already exists, although it would likely require additional resources to handle additional demand and outreach needs. Materials will need to be maintained and distributed through ongoing outreach which may require additional MFS staff.

Proven Strategy/Feasibility - Landowner outreach and direct technical assistance are proven strategies that lead to active landowner engagement with their land. Barriers include a shrinking pool of consulting foresters in Maine and ongoing difficulty filling open MFS forester positions with qualified candidates. (JDS)

2. Cross-over

Community Resilience WG (through flood mitigation); Transportation (wood haulers); Building, Infrastructure/housing (wood products)

3. Priority Populations

Populations - <u>Rural communities</u> (family woodland owners), <u>natural resource industries</u>, <u>small businesses</u> (logging and contractor businesses), and previously <u>underserved populations of forest landowners</u> who have a presumed higher-than-average potential to increase carbon sequestration and storage on their lands including those with over 40 acres, new woodland owners, and farmers. Climate-smart forestry has indirect benefits for <u>people</u> with health vulnerabilities.

Impacts - The Equity Subcommittee recommended (Ch. D, Goal 2) providing workforce training opportunities for natural resource industry workers to help adapt to a changing climate. This recommendation aims to increase and diversify forest sector-related natural resource professional capacity. The Equity Subcommittee also recommended (Ch. E, Goal 1) expanding access to natural resource grants for priority communities.

Sources of Information - The lack of individuals entering forestry professions in Maine and nationwide is broadly understood. A myriad of industry assessments by the public and private sector confirms this.

Implementation (via consultation with/access by Priority Populations) — MFS will need to develop training materials that target the unique needs of priority populations and provide targeted technical assistance to priority populations that results in increased access to financial incentives and other funding opportunities.

4. Timeframe

Implementation and realized outcomes should be achievable in the short/mid term (2025-2030). The actions will need to be ongoing.

5. Implementation Next Steps

Type: Provide education/training; Coordinate with other parties; Internal program guidance changes; Establishment of a new program or a fund

Next Steps: New training opportunities can build upon multiple existing training programs. Certain educational resources can be developed with existing MFS staff. Increased landowner outreach will require filling vacant MFS forester positions. Increasing and diversifying professional capacity will require collaboration between MFS, the University and community college system, and the private sector.

6. Measuring Outcomes

Outcomes could be measured by the number of individuals trained on climate-friendly forest management practices, including the number of individuals from priority populations. Requiring that such training be incorporated into Woodland Resource Action Plans is one possible approach. Increases in the availability and diversity of forest sector-related natural resource professionals could also be tracked. Additional metrics could be established to document which practices are being implemented, and on how many acres. MFS's BMP Monitoring Annual Report could gauge the effectiveness in training to climate-smart practices. Baseline data are needed to measure progress.

RECOMMENDATION 3 (Incentives)

1. Impacts

Mitigation - Providing financial incentives to forest landowners, foresters, and loggers that enables them to implement climate/carbon-friendly forest management and timber harvesting practices will have a direct mitigation impact through increased forest carbon sequestration and storage.

Adaptation and Resilience - Providing financial support to forest landowners, foresters, and loggers will enable them to implement forest management strategies that improve resilience and adaptation in the face of a changing climate. Climate-friendly forest management can reduce wildfires and other climate hazards and safeguard neighboring communities. It also can increase ecosystem services such as wildlife habitat and connectivity and water quality protection.

Workforce/Economic Opportunity - Engaging more forest landowners in managing their forests will lead to more active timber management, and will create economic opportunities for technical service providers, loggers, and landowners. This strengthens one of the state's primary natural heritage industries.

Achieving Equity – These financial incentives will make the development of forest management plans and the implementation of climate-friendly forest management practices accessible to previously underserved populations.

Additional Costs - Providing financial incentives to forest landowners, foresters, and loggers to implement climate-friendly forest management and harvesting practices will require the identification and/or development of new public funding mechanisms or funding from the private or non-profit sector. Funding from practice-based forest carbon programs are a potential source of new funding.

Proven Strategy/Feasibility - Providing direct financial support to forest landowners to incentivize adoption of certain forest management practices is a rapidly evolving field. New voluntary and regulatory forest carbon markets and associated implementation approaches are emerging each year. Barriers include program complexity and length of commitment. (JDS)

2. Cross-over

Community Resilience WG

3. Priority Populations

Populations - <u>Rural communities</u> (family woodland owners), <u>natural resource industries</u>, <u>small businesses</u> (logging and contractor businesses), and previously <u>underserved populations of forest landowners</u> who have a presumed higher-than-average potential to increase carbon sequestration and storage on their lands including those with over 40 acres, new woodland owners, and farmers. Climate-smart forestry has indirect benefits for <u>people with health vulnerabilities</u>.

Impacts - Financial incentives to increase carbon sequestration and storage would provide new economic opportunities for rural landowners and loggers.

Sources of Information - Maine Forest Service surveys confirm that landowners with a forest management plan are far more likely to manage their forest in ways that improve forest condition and associated ecosystem services. Surveys also confirm that small forestland owners face barriers to engaging in forest carbon programs due to program complexity and cost of entry.

Implementation (via consultation/access by Priority Populations) – MFS will need to develop training materials that target the unique needs of priority populations and provide targeted technical assistance to priority populations that results in increased access to financial incentives and other funding opportunities.

4. Timeframe

• Implementation and realized outcomes should be achievable in the short/mid-term (2025-2030) dependent on additional funding allocations. The actions are ongoing.

5. Implementation Next Steps

Type:- Legislation; Establishment of a new program or fund; Coordinate with other parties/agencies/states.

Next Steps: Many of the actions depend on securing stable and adequate funding to implement. Partnerships must be developed to modify existing or develop new programs.

6. Measuring Outcomes

Standard metrics include the number of new forest landowners with forest management plans; the number of forest landowners who received funding and are implementing carbon-friendly forest management practices; the amount of acreage engaged; the number of acres enrolled in revised Open Space Tax Program climate-enhancing options; the use of practices by loggers; and the total forest carbon sequestration and storage in Maine's forests. Metrics should also include an ongoing assessment of the relative impact of different climate-enhancing forest management practices to identify those that result in the greatest carbon sequestration and storage over time. Baseline data are needed to measure progress. MFS's BMP monitoring program could be adapted to test and verify educational and operational ground performance.

PUBLIC COMMENTS

Public Comment: Eliza Townsend, Appalachian Mountain Club Comments on *draft* 30% Land Sub-Group Recommendations

Thank you for the opportunity to comment on the draft recommendations. Thank you for your work to date, and please accept these comments.

Introductory paragraph

Over the past year, the indications of climate change have become more intense and frequent. Any update to *Maine Won't Wait* should acknowledge the numerous storms, the extended power outages, the impacts to livelihoods and the landscape, and the financial impact of extended business closures and infrastructure damage.

Recommendations

Accordingly, the recommendations of all subgroups must be strong enough to meet the moment. To that end, AMC suggests that the 30% Land Sub-Group's recommendations Highlight that to meet the 30% goal set four years ago Maine must increase the rate of land conservation by nearly fivefold. We also suggest that the recommendations include the amount of funding needed to achieve the 30% by 2030 goal set in *Maine Won't Wait* and identify a funding source to achieve that goal. We agree that the Sub-Group should recommend no net loss.

We strongly support maintaining the consensus definition of conserved lands and the recommended development of a Landscape Conservation Design that addresses biodiversity and species movement corridors. When that process takes place, we will advocate for the importance of a large, intact and healthy forest to meet those goals.

We are a private landowner but recognize the role that public funding has played in conserving the lands we own. We believe that equity and inclusivity are important values to apply in land conservation. We also recognize the vital role that our lands play in mitigating and adapting to climate change, in promoting biodiversity, and in providing ecosystem services like absorbing storm water and protecting drinking water.

Public Comment: Ellen Griswold, Wolfes Neck Center

WNC Suggested Changes to 4.30.24 NWLWG Draft Recommendations

30% Land Sub-Group Recommendations

In general, we are confused whether Recommendations 1-3 also apply to farmland protection or if only Recommendation 4 is meant to address farmland protection.

Question 1:

Does the definition of "conserved lands" on pg. 5 (with the revisions suggested today) also apply to conserved farmland?

Question 2:

Does "Recommendation 1: Priorities" (pg. 6) relate to farmland conservation as well as other types of land conservation such that the recommendation would also require that farmland protection efforts are focused "in areas with high biodiversity value, high carbon storage and sequestration, cultural and economic importance, and/or which offer opportunities to improve public access equitably"? Similarly, do the targets listed under the metric also apply to farmland protection efforts?

Question 3:

Does "Recommendation 2: Funding" (pg. 7) also apply to farmland protection efforts such that the \$50 million/year metric also encompasses farmland protection projects? Similarly, do the bullets under the metric also apply to farmland protection? If so, then the federal ACEP-ALE program should also be listed as a target for more flexible federal conservation funding.

Question 4:

Does "Recommendation 3: Capacity" (pg. 7) also apply to farmland protection efforts, such that increases to private and public capacity to support the acquisition and stewardship elements also applies to farmland protection capacity?

30% Maine Food by 2030 Subgroup Recommendations

We suggest adding the word "equitable" to Recommendation 2 so that it reads: "Strengthen the viability of Maine farms, fisheries, and other food producers through expanded, equitable, and ongoing access to funding, technical assistance and processing and distribution infrastructure.

We suggest revising Recommendation 3a such that it reads "Develop a marketing plan to increase the consumption of Maine food that: (1) supports consumer education efforts focused on the climate-related, economic, and nutritional value of Maine food; (2) aligns Real Maine and the Seafood Directory towards the 30% Maine food by 2030 goal; and (3) educates consumers about local food preparation.

For recommendation 3c, we suggest revising the recommendation to read: "Create permanent and ongoing funding for the Fund to Address Food Insecurity and Provide Nutrition Incentives, the Local Foods Fund, and other state programs and funds that support food equity and access."

Public Comment: Kristina Kalolo, Elmina B. Sewall Foundation

Uplifting Food Equity Programs + A Call for More Equity Throughout Process

My name is Kristina Kalolo. I am the Food Systems Community Partner with the Elmina B. Sewall Foundation whose mission is to support a culture of equity and interconnected well-being for people, animals, and the environment in Maine.

I want to uplift the importance of the Local Food subgroup's Recommendation 3. C. "Increase funding for food equity programs such as local school food programs, nutrition incentive programs, and Maine Senior Farm Share. Create additional programs to reach underserved populations, including seniors." Out of all the recommendations put forward by the Local Foods Subgroup, I believe this is the one that speaks most directly to providing tangible support and resources to what this process is calling "priority populations". These are critical programs that embody multi-solving. These are models that significantly increase the amount of local food being produced and consumed in Maine, which as we know reduces greenhouse gas emissions and invests in producers using more climate-friendly practices AND they simultaneously bolster food and nutrition security, which promotes a healthier population and stronger local economy. These food equity programs build community and greater resilience. During supply chain disruptions in early COVID (something that will only continue to worsen with the impacts of climate change) – these were the sorts of programs that provided vital support to our most vulnerable community members and provided consistent markets for our local producers. As we heard in the report shared by the Mitchell Center, they are seen as an important and valued community resource.

I also think a state food plan is an extremely powerful *opportunity* to create widespread investment, to truly listen to the place-based expertise of our communities, and to create a shared vision of where we want to go together as a state. However, for that to be an equitable process, it depends on *how* it is done. To ensure its feasibility it is necessary that the DACF, and other involved agencies, make a firm and clear commitment of staff capacity and funding for the duration of the entire strategic planning AND implementation process.

I encourage much greater specificity around how each of the recommendations that are finalized and move forward will build more equitable systems for "priority populations" and urge significantly more representation in the ongoing planning, decision-making, and implementation by communities most impacted by climate change in our state.

For future process, I advocate for members of "priority populations" to comprise the core and majority of committee representatives – not just as part of a separate and satellite process where feedback from extremely diverse communities is aggregated and presented towards the end of decision-making process. I believe we can create sustainable, systemic change if it is led and guided by the expertise of those most impacted by the problems we are working to solve.

Thank you for your time, consideration, and the important work you all are doing for our communities.

Public Comment: Val Watson, Maine Climate Science Information Exchange

My name is Val Watson. I am a part of the Maine Climate Science Information Exchange, a member of the 30% land subgroup, and a resident of Old Town.

I want to recommend that in the planning processes this working group has proposed (Maine food plan, landscape conservation blueprint) the working group specify that:

- 1. Those planning processes be led by committees with at least 60% of the membership consisting of folks from priority populations (as mentioned by Kristina, public commenter). Systems that serve the most vulnerable among us benefit everyone (including those with more resources), and there is no better way to include people's needs and ideas than by putting them in charge.
- 2. Those planning processes explicitly include mechanisms that make participation possible for *anyone*, for example by compensating members for their time, offering transportation and language resources, or offering childcare at meetings.

We heard a lot about the importance of equity in the April 30th meeting. While the Mitchell Center's process is a start, it is clear to me that it is not sufficient. I want to echo concerns shared by Nyalat and others about insufficient engagement, and I argue that they are a symptoms of a larger problem: equity in this iteration of the climate planning process is being considered in a separate, parallel process to the climate plan, and equity considerations have not been effectively integrated into the working groups.

This is a significant concern, because ineffective inclusion of priority populations in the climate planning process is likely to reduce the amount of trust those groups have in the process, making it even harder to engage with them in the future. When I feel myself growing skeptical of the sincerity of some of these equity initiatives as a middle class white woman, I can only imagine how members of those priority populations must feel, and I empathize with their frustration.

I realize that the Natural and Working Lands Working Group has little control over these larger scale equity systems are created (like the equity subcommittee or the Mitchell Center's work). However, in our recommendations we have proposed at least two future planning processes, focused on a Maine food plan and a Landscape Conservation blueprint, both of which are intended to include diverse communities and serve priority populations. And this working group DOES have the power to at least suggest some ways that those processes could unfold.

I recommend that the working group specify how equity and inclusion should be addressed in the planning processes they propose. Specifically, membership of those planning processes should be majority priority populations. It is telling that it took six months of meetings before someone noticed that some of our recommendations have much more direct benefits to priority populations than others, and the person who brought it up (Alex Redfield) was a member of the public, NOT a working group member. While our working group membership aims to include leaders of groups who serve priority populations, those leaders are often not members of priority populations themselves, and thus lack essential lived experience that might lead to different recommendations. Second, mechanisms need to be in place to make sure priority populations can actually afford to participate in these future processes as full committee members, such as compensation, transportation assistance, or child care.

Thank you.

Public Comment: Matthew Cannon, Sierra Club

I'm following up on the public comment opportunity after the Natural & Working Lands Working Group meeting last week. I'm cc'ing my colleagues, Philip and Nyalat, also. They might have more comments, and I know there is still more opportunity to shape the final plan, but I want to share some ideas by today's deadline.

Overall, the draft recommendations seem like a great start, and can include a lot of policy ideas moving forward.

For the definition, please include 'equity' in the definition. I think other Working Group members are sending you specific comments for what should be included. Nyalat/Philip might have more suggestions, also.

I hope there can be more focus given to some of the 'parking lot' ideas, but I think many of them could be included in the Conservation Design group. I've added and expanded some of the previously mentioned ideas here:

- -Convening some type of group to analyze forest management practices all across the state and how to protect/enhance biodiversity and capture C.
- -The Design Plan or something similar (new state planning office?) should integrate other intersectional policy needs, including housing, public transit, outdoor recreation access, etc. It appears to be mentioned in a way that would allow for this.
- -This Climate Action Plan needs to mention a process for our long-term goals, beyond 2030 and beyond 30% land conservation. The Conservation Design group seems well suited to focus on this, as they are called upon to plan for 2030 and beyond.
- -Add a recommendation to specifically call on the LUPC to improve its policies for the unorganized territories, focused on 2030 and beyond. They could also be added to the Conservation Design group.

I'm sure we will have more comments as the process continues, but this is a good start.

On the equity recommendations, I look forward to reading the Equity report and implementing the recommendations. We are happy to help spread the word for those engagement opportunities as they arise. Also, I know the timing was challenging, but the actual policymaking, which is much of what this Working Group has been tasked with, should include impacted communities in a meaningful way. Even if they are not on the Working Group, there should be more surveys/engagement to develop this original list of ideas, instead of asking them to join later. I know this is where we are, so we look forward to the next level of broad engagement, and hope the Climate Council can really solicit the depth and breadth of feedback that ensures a robust Climate Action Plan.

Thank you for considering.

Mitchell Center: Engaging Diverse Voices in Maine's Climate Action Planning

CBO Partners & "Priority Populations" they may reach

- 1. A Climate to Thrive
 - Understaffed small, rural towns
- 2. Center for an Ecology-Based Economy
 - Older adults
 - Low income households
 - Low income/Disadvantaged communities
 - Businesses in the natural resource industries operating at economic margin or suffer disproportionate climate risk
 - Rural communities and small towns with limited staff or fiscal capacity
 - Recipients of LIHEAP, LIAP, or other energy assistance benefits
 - People with mobility challenges
 - People without access to reliable transportation
 - Unhoused people
- 3. Coastal Enterprises Inc.
 - Small businesses
 - People in natural resource industries
- 4. Community Organizing Alliance
 - BIPOC
 - Low-income, marginalized populations
- 5. Kennebec Valley Community Action Partnership
 - Older adults
 - Low-income families
- 6. Maine Community Action Partnership
- 7. Maine Community Sustainable Energy Team
 - Citizens of understaffed small, rural communities
- 8. Maine Council on Aging
 - Older adults
- 9. Maine Environmental Education Association
 - Youth
- 10. PassivHausME
 - Builders, code officers
- 11. Resilient Communities L3C
- 12. Sunrise County Economic Council/Mano e Mano
 - Low-income rural residents, particularly those experiencing food, housing and/or heating insecurity
 - New Mainers
 - Small business owners/ entrepreneurs
 - Workers and business owners in natural resource-based industries
 - Small, low-capacity municipalities
 - People in addiction recovery
 - Individuals who have been incarcerated



RESEARCH ARTICLE

ECONOMIC SCIENCES SUSTAINABILITY SCIENCE





Distribution of capitalized benefits from land conservation

Corey Lang^{a,1} , Jarron VanCeylon^a, and Amy W. Ando^{b,c}

Edited by Catherine Kling, Cornell University, Ithaca, NY; received September 6, 2022; accepted March 23, 2023

Land conservation efforts throughout the United States sustain ecological benefits while generating wealth in the housing market through capitalization of amenities. This paper estimates the benefits of conservation that are capitalized into proximate home values and quantifies how those benefits are distributed across demographic groups. Using detailed property and household-level data from Massachusetts, we estimate that new land conservation led to \$62 million in new housing wealth equity. However, houses owned by low-income or Black or Hispanic households are less likely to be located near protected areas, and hence, these populations are less likely to benefit financially. Direct study of the distribution of this new wealth from capitalized conservation is highly unequal, with the richest quartile of households receiving 43%, White households receiving 91%, and the richest White households receiving 40%, which is nearly 140% more than would be expected under equal distribution. We extend our analysis using census data for the entire United States and observe parallel patterns. We estimate that recent land conservation generated \$9.8 billion in wealth through the housing market and that wealthier and White households benefited disproportionately. These findings suggest regressive and racially disparate incidence of the wealth benefits of land conservation policy.

land conservation | open space | environmental justice | housing | non-market valuation

Accelerating biodiversity loss is increasing global calls to protect more natural land from conversion and degradation (1). Much research informs conservation strategies that are effective, cost effective, and resilient to climate change, such as refs. 2–5. However, little research explores how the benefits of land conservation are distributed among different groups of people in society, even though conflicts over justice are core challenges to sustainable land use (6). Distributional issues are now a federal policy priority in the United States (US) (7), which has long faced problems of income and wealth inequality (8) and environmental injustice (9, 10). Evidence for environmental injustice is well documented by research on how exposure to environmental hazards like poor air quality (11–13), toxic emissions (14), hazardous waste sites (15, 16), and flooding (17) is disproportionately borne by poor and minority communities. However, much less research has focused on equity issues in the incidence of benefits from the provision of public environmental goods like land conservation (18–20).

Significance

Land conservation protects the nature from future development and produces benefits to people; some of those benefits increase the values of homes near newly protected areas, which increase the wealth of the people who own those homes. Concern about environmental justice in the United States is high, but little research documents how the benefits from land conservation are distributed among different groups of people. We estimate how the values of protected areas increase home values in Massachusetts and the entire United States and find that wealth increases generated by newly protected areas accrue disproportionately to households who are wealthy and White. Effort may be needed to account for human inequities while continuing land conservation needed for ecological reasons.