



Thursday, January 28, 2021

Governor Charlie Baker
Massachusetts State House
24 Beacon St., Room 280
Boston, MA 02133

RE: S9 An Act creating a next-generation roadmap for Massachusetts climate policy

Dear Governor Baker:

In speaking about climate change in your 2020 State of the State address, you noted that for farming “there’s no dispute that the consequences of climate change are real and potentially devastating.” Further, your veto statement concerning *An Act creating a next-generation roadmap for Massachusetts climate policy* noted its lack of attention to climate resiliency.

We value your understanding of the issues, and note that the bill as currently before you for consideration falls short of addressing the needs of farmers. At the same time, farmers and the hundreds of thousands of acres of Massachusetts farmland they steward play a critical role in contributing to climate resiliency, and those contributions deserve acknowledgement and support. We hope you will take this opportunity to strengthen the bill as you consider changes before returning it to the legislature. Following are some recommendations for your consideration.

Farm sustainability

Agriculture is rightly cited in the bill as a consumer of energy and an emitter of greenhouse gasses. At the same time, agriculture contributes significantly to the protection and enhancement of natural resources, and the industry has made dramatic strides in recent years in employing new technology and management practices that have already dramatically reduced emissions and continue to provide positive environmental impacts such as increased carbon sequestration.

As a critical element of the Commonwealth’s economic health, food security, public health, and natural resource protection assets, the bill should provide the agricultural sector with technical and financial support to offset any pricing or other mechanisms that seek to further limit

emissions. Without such offsets for environmental services provided – such as carbon credits, sequestration credits, or compensation for water filtration and retention, wildlife habitat creation and protection, and other services – farms will be unable to continue to operate sustainably. The most recent USDA Census of Agriculture (2017) found that for every dollar Massachusetts farms spent on production they earned only 96 cents. By increasing the costs of production without providing commensurate offsets, farms will go deeper into debt or fail altogether.

I am attaching a short briefing paper on the opportunities for mutually supportive policies for agriculture and climate change. It offers additional recommendations, such as increased support for UMass Extension, policies that allow farmers to benefit from renewable energy siting, incentives for electric tractors and other farm equipment, and investments in urban agriculture.

Engagement of the Agricultural Sector

Section 3 of the bill lays out the process for setting sector-based greenhouse gas emissions sublimits. Though agriculture is a critical sector, as proven throughout the ongoing pandemic, the Department of Agricultural Resources (MDAR) is conspicuously missing from the list of agencies to be consulted in setting these sublimits. If MDAR is not part of that process, economically unsustainable limits could result in further loss of farms.

Section 10 of the bill further calls for the development of “...a natural and working lands plan that outlines actions to meet these statewide goals, including, but not limited to, land protection...” Again, MDAR is not explicitly cited as a key player in this process, which it should be. At the same time, mention should be made in the bill of the importance that this plan align with the Administration’s recent Resilient Lands Initiative. This planning effort also provides an opportunity to coordinate with the development of a Farmland Resiliency and Action Plan, as provided for in the 2018 Environmental Bond legislation.

Section 21N of existing law states that the “...secretary shall convene an advisory committee to advise the executive office in overseeing the greenhouse emissions reduction measures...” and enumerates sectoral and community representation on that committee. Agriculture is absent from this list and since the new language includes it as a regulated sector should be part of this process represented by MDAR or UMass Extension.

Advancing Racial Equity

The bill makes reference to existing law, section 9 of chapter 23J, which stipulates how the Massachusetts Renewable Energy Trust Fund shall operate and make expenditures. Paragraph (d) states that “...the center shall generally employ a preference for competitive procurements...” The bill under consideration provides an opportunity to align the Fund’s

spending protocols with those of the Supplier Diversity Office, to further advance racial equity in state spending. Section 10 of the same chapter, establishing the “Pathways out of poverty initiative,” could similarly be enhanced to address racial justice, along with the economic and geographic balance it currently cites as its mission.

The Collaborative is a network of Massachusetts food system organizations, working to promote, monitor, and facilitate implementation of the Massachusetts Local Food Action Plan. The Plan was developed for and accepted by the Massachusetts Food Policy Council, a 17-member entity comprising state agency, legislative, and industry representatives, established by the Legislature and Governor to develop recommendations, including legislative and regulatory changes, to promote sustainability, equity, and resilience in the Commonwealth’s food system.

Thank you very much for the opportunity to provide this input.

Sincerely,

A handwritten signature in black ink, appearing to be 'Winton Pitcoff', with a long horizontal stroke extending to the right.

Winton Pitcoff
Director



Massachusetts' Local Food System and Climate Change

Opportunities for mutually supportive policy

December 2020

The disruption caused by the COVID pandemic, along with state, municipal, and stakeholder responses to the crisis, have illuminated the broad value of our local food system on the residents of the Commonwealth. COVID's impact on our food system has exposed systemic issues that, if not addressed, will become even more problematic through the unrelenting pressures caused by climate change.

Climate change's impact on the food system will be particularly acute in its effects on agriculture. Inconsistent growing seasons and weather patterns, new invasive species, and degraded soils will all disrupt farm sustainability, which in turn will exacerbate existing problems of equitable access to food. At the same time, farmers and the land they steward hold the key to many solutions to help mitigate climate change, from sequestering atmospheric carbon, to siting green energy production infrastructure on non-productive land, to protecting land from development. But research, education, technical support, policy changes, and investments are needed to help farmers adapt their management practices to the changing climate, to help them remain financially sustainable while contributing to climate change mitigation, and to help our local food system more equitably serve our communities.

During listening sessions and conversations that led to the MA Food System Collaborative's report, *Massachusetts' Local Food System: Perspectives on Resilience and Recovery*,ⁱ climate change was often cited as one of the core concerns to address as the Commonwealth recovers from the COVID crisis. Those concerns, along with many of the positive systemic responses implemented Massachusetts during the pandemic, reflect the United Nations' Intergovernmental Panel on Climate Change's (IPCC) conclusion that multilevel, hybrid, and cross-sectoral governance and policies can maximize mutual benefits and minimize the need for trade-offs, supporting the food system while at the same time positively supporting climate change adaptation and mitigation. Such actions can also help reduce poverty and improve public health, key indicators of inequity that systemic changes to the food system can help to address.

The IPCC further states that the food supply is projected to become more unstable due to climate change, while the USDA has concluded that "changes in climate and extreme weather have already occurred and are increasing challenges for agriculture".ⁱⁱ These assessments highlight the need for Massachusetts' climate change policies to recognize and address the needs of our local food system. Such consideration will, as the IPCC report says, generate social, ecological, economic, and development benefits that contribute to eradicating poverty and which foster livelihoods that are more resilient for those who are vulnerable.

Opportunities for action

Substantial bills related to climate change mitigation, adaptation, and preparedness provide lawmakers opportunities to address the role the local food system has, as both an asset in these efforts as well as a sector in need of support. The Collaborative's report offers insight on policies that are likely to be most impactful in addressing climate change issues and could be integrated into proposed legislation, including:

- Compensate farmers and fishermen for the environmental services they provide. From carbon sequestration, to water storage and filtering, to providing wildlife habitat, to recycling food waste, farmers' and fishermen's work creates positive benefits that have real value to the Commonwealth. Creating mechanisms to compensate farmers and fishermen for these efforts helps producers remain viable and continue to provide both healthy food and these public benefits while competing with industrial food production that intensify climate change.
- Significantly increase funding and rebuild our state's Agricultural Cooperative Extension System in order to provide the research, information, and tools required to adapt successfully to climate change as well as to reduce greenhouse gas emissions.
- Ensure local farmers and fishermen do not have a net increase in tax liability when crafting tax policy for climate change programs and incentives. Offsets to carbon taxes or taxes on greenhouse gas GHG emissions, such as carbon credits and EV incentives, should be extended to vulnerable farmers and fishermen. Local-option taxes on sales of gasoline and diesel fuel for transportation and stormwater infrastructure programs must be crafted to minimize the financial impact on farmers and fishermen, or offsets such as tax credits should be provided. Municipal water, stormwater, and wastewater utility fees should include exemptions for farmland and farm and fisheries infrastructure.
- Allow farmers to benefit fully from solar development on less- and non-productive farmland. The current Solar Massachusetts Renewable Target (SMART) regulations have expanded the limits of solar production on farmland without much consideration to the productive capacity, or lack of it, on the land. Limitations on total land percentages and net shading, disregard for the capacity of solar development to increase the amount of quality farmland at the end of their life cycles, and restrictive municipal zoning and other local bylaws significantly limit farmers' ability to benefit from state goals to increase the amount of solar production.
- Allow municipalities to contract with private land owners to place renewable energy infrastructure on land not well-suited for agriculture when public land suitable for agriculture could be brought into food production in exchange, rather than being used for energy production.
- Support projects in which a municipality contracts with private land owners to provide ecosystem services such as water diversion structures, retention ponds, or water absorption, wetlands restoration, composting, etc. or functional participation in land or infrastructure improvements that benefit public infrastructure, without requiring municipal ownership, a right of way, or easement.
- Municipal Vulnerability Preparedness projects, meant to help cities and towns build resilience in the face of climate change, should support and prioritize food system projects, and funds should be eligible for public-private partnerships with landowners and businesses in order to increase efficiency.
- Include incentives for electric tractors and other energy-efficient farming equipment.

- The state’s renewable energy goals should increase support for anaerobic digesters in a manner that also provides farms with less expensive and more readily available soil organic matter inputs.

Other actions that can be taken to improve farm sustainability connect with climate change and natural resource concerns as well, including:

- Enact lower thresholds for food waste bans and mandate residential, municipal, school composting programs.
- Provide tax credits for compost facilities and ensure compost goes to local agriculture at affordable rates.
- Incentivize small farms in urban areas that foster converting local food, yard, and leaf waste into carbon reducing compost that also increases productivity.
- Incorporate modern materials and construction methods into the state building code in a manner that supports efficient and cost effective infrastructure growth for the food system. For example, lack of consideration of the negative impact the required use of cast iron drains for food processors with acidic or alkaline sanitation practices, after years of improved science and drain pipe materials, remains a barrier to safer and less costly operations.

Integration with planning efforts

Recent administration efforts, such as the Resilient Land Initiative (RLI) and Rural Policy Plan (RPP) also address problems and solutions that would benefit from increased integration of local food system issues.

The RLI’s goal to create policies and mechanisms to ensure development does not create a net loss of farm and forestland should integrate lands that are highly effective carbon sinks, such as marshlands and wetlands, and enhance existing regulations and executive orders for no net loss of farmland. In addition, the RLI should support using forestland for silviculture and other food production, and support using farmland, especially pastureland, for carbon sinks.

As stated in its draft, the RLI should add green infrastructure to the State Revolving Fund, which currently offers affordable loan options to cities and towns to improve water supply infrastructure and drinking water safety. Green infrastructure projects should be encouraged to partner with private landowners so that greater efficiency in the use of public funds is created.

The RLI should also support urban agriculture in playing a significant role in creating more green space and cooling zones in urban settings.

The Rural Policy Plan highlights Climate Change as well as Land Use and Working Lands as two of its 15 focus areas. Some of the recommendations are key to food system resilience in the face of climate change.

First, the RPP states the need for expert technical assistance for rural communities and collaboration with state academic institutions to study climate-related issues. In addition, it recommends significantly expanded UMass technical assistance services for farms and forests by supporting county conservation districts or other vehicles. Both of these objectives can be accomplished by significantly expanding

UMass Cooperative Extension’s climate change adaptation and mitigation research, education, and outreach.

The RPP further recommends the creation of a land use plan to guide future growth in a responsible and proactive manner, especially in the face of climate change. This aligns with the 2015 Food Plan’s proposal for a Farmland Action Plan to set measurable goals and benchmarks related to farmland protection, retention, and access, coupled with state program spending levels to meet those goals and benchmarks. It also echoes a need to enhance farmland access developed in the Collaborative’s recent report. Properly implemented, such a plan can become a core component of creating greater equity in the Commonwealth.

Connecting with broader initiatives

Underlying these and many other science-based recommendations for addressing climate change mitigation as contained in work done by the USDA,ⁱⁱⁱ the Northeast Climate Adaptation Science Center,^{iv} the Northeast Healthy Soils Network,^v and the 4 per 1000 Initiative^{vi} lies the unavoidable tie between land and food production, and carbon sequestration, renewable energy generation, and other climate change initiatives.

These ties show that zoning, land protection and valuation/tax incentives, food waste, carbon taxation and credits, improving and making water and transportation infrastructure more resilient, energy related building codes, and electric vehicle and equipment incentives are key elements of a successful strategy to address climate change. In these efforts, farming and protecting parcels of land under five acres in size, supporting the use of electric vehicles and equipment in food production and transportation, wide use of agricultural composting, and renewable energy generation on non-productive and minimally productive farmland become critical elements.

There is much to be learned about how the local food system is tested and adapts to crises from the current response to COVID-19, and much benefit to be had from integrating those learnings into preparation for the ongoing climate change crisis. In addition, president-elect Biden has indicated a commitment to embed climate action across the federal government, including USDA. A team of former White House and government officials have drawn up a 300-page blueprint for how to leverage the government to fight climate change. The Climate 21 Project^{vii} argues USDA has enormous capacity to contribute meaningfully to the administration’s climate ambitions.

As the federal government begins to create climate change solutions that involve agriculture, state officials should work closely with local food system stakeholders to consider the capacity of the local food system to leverage federal programs with state programs in all aspects of climate change policymaking and public investments, and to act on the above recommendations.

ⁱ <https://mafoodsystem.org/projects/2020perspectives/>

ⁱⁱ https://www.climatehubs.oce.usda.gov/sites/default/files/adaptation_resources_workbook_ne_mw.pdf

ⁱⁱⁱ <https://www.usda.gov/topics/climate-solutions>

^{iv} <https://necsc.umass.edu/>

^v <https://sites.tufts.edu/gdae/conferences-panels-and-events/>

^{vi} <https://www.4p1000.org/>

^{vii} <https://climate21.org/>