

Oral and Written Testimony in Support of LD - Creation of Maine Healthy Soils Program

To: The 130th Legislature's Committee on Agriculture, Conservation and Forestry

February 4, 2021

Good morning members of the Joint Standing Committee on Agriculture, Conservation, and Forestry. My name is Cara O'Donnell, I am the Natural Resources Director for the Aroostook Band of Micmacs and I am speaking in support of LD 437, advocating to establish The Maine Healthy Soils program today.

The Aroostook Band of Micmacs operate a small mixed vegetable farm in Aroostook County, with a mission to provide a variety of sustainably-produced, healthy foods for both the Tribal and local communities. We provide a variety of produce, fruit, and value-added products as well as high quality brook trout that we raise at our farm store in Caribou, Maine. The farm began as a way for us to address health disparities experienced by our community, and to that end we aim to ensure access to wholesome produce to all local residents. For anyone who visits the farm and uses SNAP benefits, WIC vouchers, or Harvest Bucks we double the value of those benefits to help those who need it the most.

Speaking in support of the Healthy Soils Program: healthy soils do not stand alone; their presence directly relates to water quality and greenhouse gases - ensuring healthy soils results in clean water and clean air. Healthy soils require much less pesticides, insecticides and fertilizers. Healthy soils that consist of organic materials that improve soil structure and moisture retainment, holding soil in place during heavy rains, allowing the water to soak in where it is needed. Alternatively, overworked, dry soils lacking organic material take on hydrophobic qualities, repelling water, especially during intense rainfalls. These long drought periods followed by intense rains are becoming more common in Maine. These conditions lead to excess sediment, nutrients, fertilizers and insecticides running off agricultural fields, which can end up in our surface waters, leading to algae blooms that suffocate fish and impair aquatic life. In the face of climate change, rivers, streams and lakes will face not only increasing algae blooms but increasing occurrences of toxic cyanobacteria blooms. Ensuring healthy soils will ensure clean water.

Micmac Farms does not use artificial pesticides or fertilizers, and instead chooses to build our soil structure and composition with applications of manure on an annual basis. But this is a very costly expense to our farm. It is a slow process to rebuild soil when we cannot obtain enough organic material. We will look to the Maine Healthy Soils Program to build communications between farms; for example, connecting farms in need of compost, with farms or businesses with excess. Many of Maine's schools and restaurants are paying to dispose of food waste in landfills. Food material in landfills breaks down by anaerobic digestion, resulting in greenhouse gas emissions of methane and carbon dioxide. If the Maine Healthy Soils Program can make full circle connections by exploring composting on large scales, and bring value to compost, the

reduction of food waste to landfills will address greenhouse gas emissions. Therefore, healthy soils can also lead to clean air.

Healthy soils reduce the needs for pesticides that remain in soils for years, that unnecessarily harm soil microorganisms, threaten the survival of our pollinators and pose risks to human health. By nourishing our land, Micmac Farms can move closer to food sovereignty, increasing food access to our rural community, who experience health disparities at higher rates than the rest of the state and country. Our community, farmers and all Maine citizens will benefit from robust local food systems, and a future with muted climate impacts, by relieving the burden on fossil fuel-based food transportation systems.

This Healthy Soils Program will provide tools for farmers to resist crop stress and remain resilient to the multiple impacts we face from a changing climate, including projecting increase from insect damage, disease, and intense weather events. Micmac Farms strongly supports LD 437, creation of the Healthy Soils Program.