

Current MVP Projects

Healthy Soils Initiative

The extensive areas of prime agricultural soils that occupy the bottom lands of Deerfield have shaped the character and economy of the town for centuries. Today, much of this rich soil is managed as cropland, large turf farms, and home to acres of turf play fields. Together these managed lands cover over 5,000 acres of soil, or 24% of the town.

The Healthy Soils Initiative will help Deerfield to understand the importance of its soils for climate resilience with a focus on protecting soil structure and soil carbon, and accelerating carbon sequestration through better soil management practices and targeted conservation measures.

Regenerative Design Group will pilot several recommended actions from the State's new Healthy Soils Action Plan (HSAP). The HSAP and its new companion state legislation is intended to:

- (i) improve soil quality on lands utilized for commercial farming, suburban and urban lawns, yards and gardens, public and private forests, parks and other open or green spaces and non-paved outdoor areas of office complexes, mixed-use facilities, businesses, industries and colleges and other institutions;
- (ii) increase carbon sequestration or storage on such lands to help reduce harmful atmospheric greenhouse gases and the effects of climate change; and
- (iii) provide other measurable benefits, determined as applicable under the program to certain types of lands, related to climate change, plant growth, erosion control and water absorption and quality.

Regenerative Design Group will work with several local farmers and a school on demonstration projects to do soil sampling on their grounds to assess the current soil profile and carbon sequestration capacity and then make recommendations for management practices to improve their soil nutrients and carbon sequestration capacity.



This pilot project will explore how soil-smart management and planning may be integrated into local bylaws and zoning to ensure better soil stewardship and performance outcomes in one of most agricultural watersheds in the Commonwealth. The project will assist the Town and its stakeholders to identify locations where soil BMPs and other nature-based-solutions can be established or enhanced.

By identifying opportunities to align Deerfield’s municipal land management practices and development planning with the needs of soil health and by helping land owners to implement practices that reduce erosion and carbon emissions, improve production and increase carbon storage, Deerfield will build resilience to extreme weather events, preserve and enhance its agricultural heritage, and help its residents proactively adapt to climate change and other natural hazards.

Green Infrastructure Coordinating Committee

Deerfield completed work on a comprehensive green infrastructure policy, which was adopted by the Selectboard in 2020. Under this task, the town’s MVP consultant worked with town officials to put into practice the new Green Infrastructure Policy recently adopted.

Implementation work included establishing a Green Infrastructure Coordinating Committee made up of, or including representatives from:

- Selectboard
- Town Administrator and Assistant Town Administrator
- Planning Board
- Energy Committee
- Conservation Commission
- Building Inspector

- Police Chief
- Public Works Director

This committee, with coordination from the town's MVP consultant, has been meeting monthly over the course of the project to oversee the new policy. The committee's work has included developing a Green Infrastructure Policy implementation table, which lists each policy component, potential implementation projects, and funding sources. Substantial progress has already been made on several policy areas, including purchase of hybrid police cruisers, replacement of municipal lighting with LED lights, green streets improvements, energy efficiency improvements in municipal buildings and more.

Frontier High School Student Engagement on Climate Resiliency

Following up on Deerfield's "Climate Resiliency: Deerfield 2030" Forum for all town residents, the town explored with Frontier Regional High School additional ways to get students involved in climate change.

Deerfield's MVP consultant, Conservation Works, collaborated with Frontier science teachers to develop a climate change and resiliency curriculum for Environmental Science classes at Frontier High School and Middle School. In the Frontier science courses, students analyze various environmental issues ranging from those created by people to those that are naturally occurring. Students analyze issues and determine what solutions or possibilities may exist. The new climate curriculum added content that focuses students on a global environmental problem (climate change), seen through the lens of a local environmental issue (promoting climate resilience and action in Deerfield). This curriculum included identifying climate discussion topics, such as:

- Global Climate Change and Regional Climate Projections
- Forest and Wildlife Impacts of Climate Change
- Ecosystem Climate Adaptation
- Building Resilient Soils with Climate Change
- Wildlife Corridors for Climate Adaptation

The curriculum also included guest speakers from the Massachusetts Ecosystem Climate Adaptation Center, Northeast Climate Adaptation Science Center, Franklin Land Trust, Natural Resources Conservation Service, The Nature Conservancy and other organizations.

In addition to developing the curriculum, the town's MVP consultant worked with Frontier science teachers to implement the curriculum over the school year, including coordinating

presentations from guest speakers. This was fully successful in the first semester. Unfortunately, the Covid pandemic resulted in remote learning, and restricted some of the planned field trips and guest speakers in the second semester. Frontier science teachers were pleased with the new climate curriculum, and plan to continue using it in the future.

In the Spring, 2022, the climate curriculum will again be employed at the middle school and high school levels at Frontier Regional School, working in collaboration with the science teachers.

Upcoming Meetings and Events

CLIMATE CHANGE FORUM 2022: What Individuals, Homeowners And Towns Can Do to Affect Climate Change

Re-scheduled to Saturday, April 2, 2022 Frontier Regional School



The Towns of Deerfield, Sunderland, Conway and Whately invite all town residents to participate in “Climate Forum 2022: What Individuals, Homeowners and Towns Can Do to Affect Climate Change” scheduled for Saturday, February 12, 2022 from 9am to 3pm at the Frontier Regional High School.

The goal of this forum is to inform and motivate residents about actions that they can take that will make a difference on climate change and climate resiliency. The forum will feature workshops on a wide variety of topics including:

- Home Strategies for Reducing Carbon Footprint
- Home Energy Efficiency and Home Solar

- Greening Your Community
- Municipal Climate Strategies
- Maximizing Solar in Your Community
- Moving Toward Net Zero Buildings
- Student Activities to Address Climate Change
- Resources for Sustainable Farming and Forestry

In addition, our state legislators, Senator Jo Comerford and Representative Natalie Blais, will be joining us to discuss state programs and new initiatives.

PLEASE COME AND JOIN US!

The forum will be free and open to all and a free catered lunch will be provided.

Pre-registration is required and there is a limit on the number of participants, so please call or email the Deerfield Selectboard office at 665-1400 x111 or

Adminasst@town.deerfield.ma.us to register.

Links

- Pioneer Valley Mosquito District, Dragonfly Habitat: <https://www.mass.gov/info-details/pioneer-valley-mosquito-control-district-pvmcd>
- Resilient Communities: <https://www.massaudubon.org/our-conservation-work/policy-advocacy/shaping-climate-resilient-communities>
- Resilient Massachusetts:
<https://resilientma.org/resources/resource::2152/massachusetts-climate-change-projections-statewide-and-for-major-drainage-basins>