

Water and Land

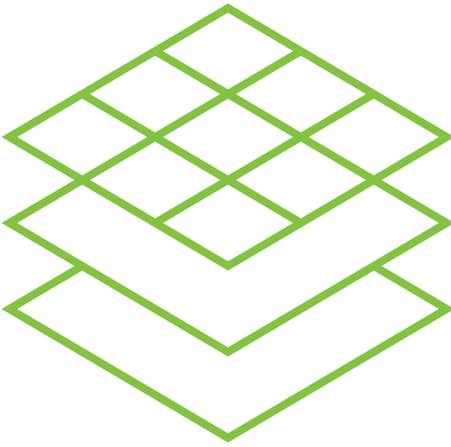
The roles of water and land efforts in the CAP2030 stem primarily from the repurposing and preservation of these resources. While land use changes have a modest impact on greenhouse gas emissions, the education and awareness building connected to land use issues has a disproportionate impact in gaining attention, movement building and adoption of other climate change actions. Although permanent changes in land use reduces emissions by only a small percentage, they have a disproportionate benefit by gaining attention from residents which helps in movement building and adoption of other climate change actions.

The heat island effect stemming from pavement and other non-permeable surfaces can be mitigated by greater planting, reduction of existing impermeable surfaces and the use of newer non-asphalt alternatives.

Additionally, land can be used to provide carbon sequestration to absorb CO₂ released by other activities in the Town of Bedford. The number of trees to be planted must be high and the preservation of old trees is essential, as young trees absorb 13 pounds of carbon per year while trees more than 10 years old absorb 50 pounds. Oak trees are the highest carbon absorbing tree species, fitting seamlessly into our local landscapes.

The repurposing of lawns to meadows and forests and the related no-chemical treatment options will be essential to make inroads within this impact category.

Current efforts to restrict the use of pesticides and chemical fertilizers are vital to the protection of our water supplies. These efforts should be expanded.



2030 OBJECTIVE

- Increase Carbon Sequestering Land Use
- Continue Protection of Water Quality

PROGRESS HIGHLIGHTS

Community

- No-Pesticide Pledge: 4,400 Town of Bedford acres pledged to eliminate pesticides and chemicals
- Branch Out
- Leaf Blower Restrictions Law passed

Municipal

- Modified water billing system shows a 5% decrease in water consumption
- Town completed Tree inventory in 2018; resulted in adoption of a new Tree Management Plan that includes tree planting efforts across several Town properties.

NEW STRATEGIES

Community

- Campaign to encourage conversion of lawns to carbon capture plants/trees
- Education campaign about value of plants/trees for carbon capture
- Educate landscapers and homeowners on carbon capture friendly landscaping techniques
- Implement incentive programs for tree planting
- Education campaign about risk of herbicides, pesticides and fertilizers

to humans, pets, water supply and the ecosystem

- Work with schools to ensure enforcement of NYS no pesticide policy on school properties
- Work with Town to phase out gas-powered equipment:
 - Encourage low maintenance landscaping
 - Promote electric landscaping machinery and tools
 - Create program to offer leasing of electric landscaping machines
 - Encourage mulching/mowing leaves into lawns
- Educate on detrimental impact of invasive vines on trees and how to address
- Educate homeowners to shift from impermeable and barren surfaces to soil covered with plants
- Encourage use of perennial ground cover rather than mulch

Municipal

- Adopt water and land use policy on Town property, including:
 - Elimination of pesticides, fertilizers or herbicides;
 - Reduced mowing;
 - Limitation of gas powered equipment;
 - Increased tree planting;
 - Implementation of low maintenance landscaping (already part of wetlands law); increased use of native plants; and
 - Use of perennial ground cover/living mulches rather than mulch.

- Consider legislation restricting the use of fertilizers, herbicides and pesticides on residential and commercial properties
- Phase out gas powered land maintenance equipment and replace with electric
 - Enforce and extend leaf-blowing laws to the entire community
 - Consider regulation to replace gas mowers/blowers/equipment with electric for residential and commercial properties
- Increase tree canopy in Bedford
- Adopt tree-planting and land use policy for residences
- Cut down vines and other invasives
- Work with County Health Department to allow for two types of grey water systems
- Research new paving materials to use as non-asphalt alternatives for local surfaces
- Identify municipally owned paved areas that can be converted to planted areas
- Replace Town of Bedford lawn spaces with trees and other carbon absorbing plants
- Change town management practices to examine land function and restore hydrological cycle and carbon capture
- Explore green roof opportunities on Town buildings