

Goal 3: To ensure no net loss of flood storage capacity in an effort to minimize potential negative impacts. These impacts include the loss of life and property, disruption of commerce, and demand for extraordinary public services and expenditures that result from flood damage.

Objective 3.1. Prohibit all new fill and construction of buildings in mapped floodways (unless corrected by FEMA).

Action 3.1.1. Amend Village Zoning Regulations to prohibit development in floodways.

Goal 4: Encourage Woodstock to be resilient in the event of a severe flood.

Objective 4.1. After flood events, recovery and reconstruction with the river area should be managed according to Vermont River Program's best practices to avoid negative impacts downstream.

Action 4.1.1. The Selectboard should continue active participation in the region's Local Emergency Planning Committee (LEPC #12).

Goal 5: To protect municipal infrastructure and buildings from the potential of flood damage.

Objective 5.1. Move or abandon roads that often experience serious flood damage.

Objective 5.2. Design culverts and bridges, at minimum, to meet VTrans Hydraulics Manual, ANR Stream Alteration Standards, and VTrans Codes and Standards. Maintain culverts to ensure they are effective during severe weather events.

Action 5.2.1. Continue to maintain and update town bridge and culvert inventories. Use this information to develop a schedule to replace undersized culverts.

Objective 5.3. Do not build Woodstock's emergency services, power substations, municipal buildings in the Special Flood Hazard or River Corridor Areas.

Action 5.3.1. Evaluate flood vulnerability of emergency services locations.

Objective 5.4. Work with VTrans and the Regional Planning Commission on

UTILITY LINES

Woodstock has identified the unsightliness of utility lines as undesirable and proposes that Woodstock encourage Green Mountain Power, Fairpoint, ECFiber and Comcast to run transmission lines along one side of a Town Highway and encourages that all development and subdivisions install underground utilities. Those utility companies responsible for placement of lines are encouraged to involve individual landowners in discussions with municipal officials as early as possible in the planning process to avoid delays and adversarial interactions for the parties concerned.

WINDSOR COUNTY BUILDING

The former correctional facility property is owned by Windsor County and is currently being used by the Windsor County Sheriff and Windsor County Courts. Woodstock should keep abreast of developments affecting this property.

WINDSOR COUNTY COURT HOUSE

There are buildings in Woodstock which are uniquely valuable for their historic usage as well as their architecture. When necessary to preserve historic usage, compromises should be reached between renovation and architectural integrity. Methods of reaching such compromises can include zoning variances and special exceptions

At the present, the Windsor County Administration is in the process of upgrading the building to make it ADA compliant and increasing the number of court rooms. Woodstock is opposed to moving the courthouse to another location.

WOODSTOCK AQUEDUCT

Representatives of the Woodstock Aqueduct Company report that facilities are continually being upgraded and expanded to meet increasing demand. A deep well on Route 12 provides water for domestic use, with a one million-gallon well water storage tank as the primary supply located near the Cox Reservoir. Both Cox and Vondell reservoirs are maintained for fire protection and emergency domestic backup but are not part of the daily supply stream.

Fire protection is adequate where hydrants are located along large distribution mains, but is limited by capacity in outlying areas due to smaller pipe sizes. An ongoing effort is underway to transform spurs into loops to help minimize this limitation.

High river currents resulting from Tropical Storm Irene caused damage to the distribution piping. It appears essential that Woodstock should work closely with the Woodstock Aqueduct Company and initiate an analysis of this vital resource and to assure an adequate water supply and modernization of the system, and if water for fire protection cannot be provided by the Woodstock Aqueduct Company, then alternative water supplies should be provided by developers to take care of fire protection needs.

residents or any segments of the Town's population. In the case of siting biomass facilities, the Plan calls for a minimization of polluting emissions.

Energy Goals, Policies, and Recommendations

Energy Goals:

1. *To increase the use of energy efficiency and energy conservation measures.*
2. *To increase building efficiency.*
3. *To reduce GHG emissions.*
4. *To continue with a pattern of settlement and land use that uses energy efficiently.*
5. *To encourage the use of renewable energy to meet energy demand.*
6. *To encourage the responsible development and storage of renewable energy.*
7. *To increase awareness and use of energy conservation practices through educational outreach to the public.*
8. *To promote electric grid and power line hardening.*
9. *To implement a transportation system that reduces the emission of greenhouse gases, including park-and-ride access, biking paths, and sidewalks.*
10. *To increase the utilization of heat pumps by residences and commercial establishments.*
11. *To increase the use of light-duty electric vehicles.*

Energy Policies:

1. *It is the policy of the Town of Hartland to encourage the conservation and efficient use of energy.*
2. *It is the policy of the Town of Hartland to encourage patterns and densities of land use likely to result in the conservation of energy.*
3. *It is the policy of the Town of Hartland to encourage the reduction of transportation energy demand and single occupancy vehicle use and to encourage the use of renewable and lower-emission energy sources for transportation.*
4. *Promote energy-efficient travel by residents by encouraging carpooling, increased use of public transportation, telecommuting, home businesses, ebikes, and electric vehicles, and safe bike routes.*
5. *Site generation and transmission projects in locations that reinforce Hartland's traditional patterns of growth. The applicant should take all feasible measures to minimize the visual impact of the project and its impact on the town's rural character.*
6. *Exclude new energy generation, transmission, and distribution projects from the following areas because of their distinctive value:*

Goals, Policies, and Recommendations: **Flood Resilience**

Goals

1. The citizens, property, and economy of the TRO Region and the quality of the Region's rivers as natural and recreational resources are protected by using sound planning practices to address flood risks.
2. The Region is able to recover from flooding quickly and in a manner that improves flood resilience.
3. The creation of impervious surfaces and development in wetlands or upland forests is lessened, and where it does occur, is done in a manner that does not worsen flooding.

Policies

1. All new fill and construction of buildings in FEMA-mapped Special Flood Hazard Areas increases flood risk and is discouraged, and at a minimum must comply with the Association of State Floodplain Managers' No Adverse Impact policy.
2. All new buildings, other than accessory structures, in FEMA-mapped flood areas must have the lowest floor elevated or floodproofed at least one foot above base flood elevation.
3. Natural areas, non-structural outdoor recreational, and agricultural uses are the preferred land uses within river corridor areas due to the dangerous erosive nature of these areas. Commercial, industrial, and residential uses within river corridors are strongly discouraged outside of village and town centers.
4. New buildings within FEMA-mapped floodways shall be prohibited.
5. In order to lessen the conflict between roads and streams, towns and the State should consider moving or abandoning roads when there are more cost-effective solutions or other routes.
6. The State and municipalities should only rebuild/install culverts and bridges that are designed at least to VTrans' Hydraulics Manual and ANR's Stream Alteration Standards, and are encouraged to adopt road and bridge standards to the 50 or 100-year storm level for identified critical transportation routes.
7. Critical facilities such as emergency services, wastewater treatment plants, power substations, and municipal buildings shall not be built in Special Flood Hazard Areas unless floodproofed or elevated to at least 2 feet above the base flood elevation and designed to withstand erosion risk, and they must have dry access above the base flood.
8. To reduce flood flows and be more protective of existing development, the current one-acre threshold in Vermont's Stormwater Management Rule should be reduced to one-half acre.
9. Rock rip-rap and retaining walls should only be used to the extent necessary and when bioengineering techniques may not be adequate to prevent significant loss of land or property.
10. Upland forests and watersheds should be maintained predominately in forest use to ensure high-quality valley streams and to ensure that flood flows are absorbed.
11. Outside of areas of existing compact development, new development must preserve vegetated riparian buffer zones that are consistent with state riparian buffer guidelines.
12. All wetlands that provide flood storage functions shall remain undeveloped or have compensatory storage constructed so as to achieve no net loss of such wetland function.
13. In the long term, restoration and enhancement of additional wetlands should be pursued in order to improve the Region's flood resilience.



Goals, Policies, and Recommendations: Electricity Conservation and Fuel Generation

Goals

1. Twenty-five percent of overall energy needs comes from renewables by 2025, 40 percent by 2035, and 90 percent by 2050.
2. The amount of renewable electricity generated in the TRO Region increases from 2022 levels by 86,740 MWh by 2050.

Policies

1. TRORC supports using demand-side management measures, such as Flexible Load Management (FLM), to manage the expected electric energy demand increase in the TRO Region.
2. TRORC supports Efficiency Vermont and other incentive programs to reduce electric energy use and encourage the use of devices and equipment that perform work using less energy input than otherwise necessary, such as [Energy Star or CEE2, CEE](#)³¹ or advanced appliances.
3. TRORC encourages the deployment of grid resilience measures such as energy storage, microgrids, and grid hardening that lead to improved reliability of electric service for the region's residents.
4. TRORC will promote a wide variety of renewable energy generation types, including adding photovoltaic solar installations, wind turbines, and run-of-the-river hydroelectric facilities, optimizing existing hydroelectric dams, promoting sustainable use of bio-digesters, and encouraging passive solar building designs.

Recommendations

1. TRORC will advocate for the continuation of policies that lead to the retirement of Renewable Energy Credits in state.
2. TRORC will help interested towns meet the standards set forth in [Act 174](#)³² for enhanced energy planning so that local preferences receive “substantial deference” in the Public Utility Commission’s [Section 248](#)³³ proceedings.
3. PSD and TRORC should support and provide outreach for Energy Action Network’s Community Energy Dashboard and Efficiency Vermont’s customer engagement web portal and home energy reports.
4. TRORC and PSD should support efforts to develop programs that encourage energy conservation through behavioral change by advocating for [smart grid technology](#)³⁴ and a pilot of advanced meter infrastructure and time-of-use rates in the Region.
5. TRORC will maintain an enhanced energy compliant Regional Plan in order to play a stronger regional role in the Public Utility Commission (PUC) permitting process.
6. TRORC will work to expand its shared energy coordinator (SEC) program and encourage other RPCs to duplicate the model around the state.

