

# LAND USE & DEVELOPMENT

The land use pattern of any community is typically the result of several influences: physical constraints of the land, historical development patterns, transportation routes, economic influences, and personal preferences. This pattern of uses and development give a community character and serve as the foundation for future development.

## Current land use pattern

The development pattern of Hardwick is typical of the communities throughout northern Vermont. This pattern is one of traditional New England settlement with compact village centers surrounded by agricultural and forest lands. The villages of Hardwick and East Hardwick, both located along the Lamoille River, serve as the activity centers of the community with community services, commercial and industrial activity, and higher density residential development. Both of these areas were historically mill sites and both benefited by having direct access to the railroad. These historic centers also maintain much of their historic character with many older buildings having been renovated. This rich concentration of historic resources is reflected in the fact that five historic districts have been designated within the Town of Hardwick.

The Lamoille River enters the town in the northeast and exits in the southwest. In addition to the productive soils found in the flood plains along the bottom, the valley is also home to important transportation corridors providing access to the community via state highways.

Areas such as Bunker Hill, Bridgman Hill, Center Road, Hopkins Hill, Hardwick Street, and Ward Hill all have their own concentrations of agricultural land uses. Low density scattered residential development exists throughout these areas with densities highest closer to village centers. The community's higher elevations and steep slopes are typically forested - much of which is covered with mixed hardwoods, with stands of softwood dominating the highest ground. Most of this forestland is in medium sized blocks from 100 to 500 acres and serve as private woodlots with some commercial harvesting. In addition to wildlife, recreational and economic benefits, these forestlands provide the backdrop for the seasonal display of color that dominates the landscape every fall.

Thus, a generalization of the overall Character of Hardwick is that of an economically diverse community. Hardwickians take pride in their heritage of traditional Vermont skills such as farming while also valuing and protecting the scenic beauty of the area hillsides and waterways, areas which most citizens utilize for their recreational activities. Hardwick is known for its "neighbor helping neighbor" philosophy and its intergenerational collaboration has created a network of knowledge sharing throughout the community. Hardwick serves as the center of education and culture for the area, as witnessed by the presence of Hazen Union High School, the Jeudevine Memorial library, and The Hardwick Town House.

It is this hierarchy of land use activity, in combination with contrasting open and forested land, that provides the essential character of Hardwick and it is this pattern and character of development that the community wishes to maintain into the future.

## Future land use districts

In order to achieve the goals of this town plan, the Town of Hardwick is divided into seven districts with two overlay districts. These districts include: Central Business District, Village Neighborhood, Highway Mixed Use, Compact Residential, Industrial, Rural Residential, and Forest Reserve, as well as the two overlay districts of Flood Hazard Area and Wellhead Protection Area. The plan attempts to classify the town into various districts based on current land uses, characteristics identified in earlier chapters, conversations with neighbors and residents, and by using common sense.

### Central Business District

The Character of the Central Business Districts in Hardwick and East Hardwick differ greatly. East Hardwick has seen a decline in its business activity since the end of the 19th century and its CBD, spread along both sides of Main Street, is almost exclusively comprised of single and multi-family residences. On the other hand, Hardwick

Village's CBD which lies along the Lamoille River and the intersections of State Highway 14 and 15 remained active throughout the 20th century and has experienced revitalization in the 21st, thanks in part to the localvore movement. This preference for local/Vermont owned businesses has made Hardwick the area's Market Destination for both commerce and entertainment. Much of what has been achieved is due to the Hardwick's success in attracting grant funds from outside institutions and much more remains to be done to maximize the benefits of the CBD's interrelationship of the Lamoille River, community space, and businesses in this walkable downtown.

- Purpose. The Central Business District is intended to support a compact mix of commercial, professional, civic, and residential uses in Hardwick's traditional downtown in a manner that maintains and enhances the area's historic character and economic vitality.
- Present Land Uses. This area already supports the mix of uses desired in the plan. High density residential, commercial, and civic uses are common throughout the area.
- Future Land Uses. The district should continue to be used as described above. One issue with future land use in this district lies with vacancies in a couple older of buildings. Though few, these buildings are in conspicuous locations which challenge the vibrancy of the area. Continued development of new shops and restaurants will enhance the appeal of the area.

#### Village Neighborhood

The Character of the Village Neighborhood District is best described as residential homes that represent a significant historical architectural resource. The district is very walkable in that its streets have low traffic volumes and that it lies adjacent to the Central Business District and the excellent recreational resources of Hardwick Lake and the surrounding wooded hillsides.

- Purpose. This district is intended to provide for high density residential development and appropriate non-residential uses in existing neighborhoods located close to Hardwick's traditional downtown in a manner that maintains historic settlement patterns and streetscapes.
- Present Land Uses. This area is currently used for residential, commercial, and public uses (including Hazen Union and Hardwick Health Center). Most of these buildings continue to have significant historic value.
- Future Land Uses. The district should continue to be used as described above. Any development or redevelopment in this area should respect the historic character of the neighborhood in which it is located. Improvements in pedestrian infrastructure would help connect this area to the Central Business District and Highway Mixed Use District.

#### Highway Mixed Use District

The Character of the Highway Mixed Use District is by its very nature varied. It serves as an important part of Hardwick's identity as a Market Destination and as a location for light industry, a well-recognized anchor to future economic growth.

- Purpose. The Highway Mixed Use District is proposed to allow automobile-oriented businesses and other compatible uses along major travel corridors contiguous to the historic village centers, while maintaining a safe efficient traffic flow.
- Present Land Uses. This area already supports a mix of uses including commercial, light industrial, and residential uses.
- Future Land Uses. The district should continue to be used as described above. A more balanced mix of residential and other uses would improve the vibrancy of the area. Improved pedestrian networks would help connect these areas to the Village Neighborhood areas and Central Business District.

#### Compact Residential

The Character of the Compact Residential District is best described as residential homes that represent a significant historical architectural resource. The districts are very walkable in that their streets have low traffic volumes and that they lie adjacent to the recreational resources of the surrounding wooded hillsides

- Purpose. The purpose of the Compact Residential District is to provide moderate to high density residential development and appropriate non-residential uses in predominantly built-up areas within and surrounding the town's village centers.

- Present Land Uses. This area is currently used primarily for residential uses, but agriculture and commercial operations are also common.
- Future Land Uses. The district should continue to be used as described above. This area is expected to accommodate much of the future residential growth in the Town of Hardwick. The issues with future land use in this district lie with the amount and scale of development. Development must respect the environmental and physical constraints that exist on the site including slopes, soils, and wildlife habitat.

### Industrial

The Character of the Industrial District is one of light industry and small manufacturing. Hardwickians recognize that these businesses provide the basis for future economic growth, but state a preference for local/Vermont owned businesses in the belief that they often contribute much more to the community than out-of-state corporate businesses do. Many businesses in the Industrial District were created thanks to Hardwick's success in attracting grant and investment start-up funding.

- Purpose. The Industrial District is intended to encourage a variety of industrial, manufacturing, and appropriate commercial uses while protecting such uses from incompatible residential uses in locations served by municipal water and sewer and good highway access
- Present Land Uses. This area is exclusively industrial.
- Future Land Uses. The district should continue to be used as described above.

### Rural Residential

The Character of the Rural Residential District is one that balances excellent recreational resources, historic architectural resources, and the revitalized agricultural economy comprised of traditional farming and value-added agri-business.

- Purpose. The purpose of the Rural Residential District is to promote agriculture, forestry and low to moderate density residential development in areas well served by public roads but lacking municipal water and sewer. To ensure the protection of environmental resources and maintaining open space, the clustering of new development is strongly encouraged.
- Present Land Uses. Due to the size and extent of this district, many land uses exist within its borders. This area is currently used for agriculture, forestry, and earth extraction but also residential and commercial uses. Most developed lands are within a few hundred feet of the existing road network.
- Future Land Uses. The district should continue to be used as described above. The issues with future land use in this district lie with the amount and scale of development. Development must respect the environmental and physical constraints that exist on the site including slopes, soils, and wildlife habitat. Preservation of open space for continued use in forestry and agriculture is desired as well.

### Forest Reserve

The Character of the Forest Reserve is self-evident. This area is important as forest blocks and habitat connectors.

- Purpose. The purpose of the Forest Reserve District is to protect significant forest resources and limit development to low densities in areas with steep slopes, shallow soils, unique or fragile resources, significant wildlife habitat, and poor access to town roads and community facilities and services.
- Present Land Uses. This area is currently used for forestry and wildlife habitat. A limited amount of agriculture and residential development also exists.
- Future Land Uses. The district should continue to be used for forestry and wildlife habitat as well as limited agriculture and residential development.

### Overlay Districts

Other overlay districts include the following:

- Flood Hazard District. This area was defined by FEMA in order to protect the safety and welfare of residents and to prevent public and private economic losses resulting from floods.
- Wellhead Protection District. Three areas have been identified as regions that provide water for public wells including Hardwick's well on Wolcott Street, East Hardwick's well on Ward Hill, and Greensboro Bend's well in the northeast corner of town.

## Timing and intensity of growth

Future development in Hardwick should be timed so that the demands placed on community services will not result in them being overburdened. The Town has a responsibility to its taxpayers and residents to continue to provide the highest level of service while keeping costs under control. Future development - both residential and non-residential - should be encouraged in a manner that is sensitive to this responsibility.

## Implementing the land use plan

The two most common land use planning tools used in Vermont are zoning bylaws and subdivision regulations. Both of these are effective tools to implement many of the goals and objectives of land use plans. Hardwick has adopted both of these tools and combined them into a Unified Development Bylaw.

Hardwick's zoning was originally adopted in 1973. The bylaws have amended four times since 2002 to bring them up to date with changing state laws. Permit activity has been fairly steady over the past decade. The number of permits issued annually is generally between 40 and 50 and the number of new houses is about 5 to 7.

## Goals, Policies, and Recommendations

### GOAL

- Maintain Hardwick's present patterns of land use: dense residential and commercial uses concentrated in Hardwick village and East Hardwick and sparsely developed agricultural and forest land outside these village centers, with a rural and natural skyline.

### POLICIES

- The clustering and/or siting of development is encouraged in order to replicate traditional patterns of development, to protect rural and scenic character, and to maintain contiguous tracts of resources and open land.
- The Flood Hazard district is intended to protect life and property within federally designated flood hazard areas. New construction should not occur within these areas and existing buildings should be flood proofed.
- Higher density residential developments should be located closer to major roadways and existing villages to improve emergency service response.
- Mixed-use developments are encouraged to allow commercial, business, and residential uses to be located near each other.
- The scale of new construction and buildings shall be in keeping with the development patterns of the immediate surround areas.
- Development in areas that require an extension of services, such as sidewalks, electricity, or water, shall be discouraged.
- Abandoned, unsafe and unsanitary lots should be remediated in order to improve public safety and facilitate adaptive reuse.

## ACTIONS & RECOMMENDATIONS FOR IMPLEMENTATION

- When subdividing existing lots or building new structures, it is important to maintain the character of residential areas as regards to historic layout and green space.

Goal: To identify, protect, and preserve important natural and historic features of the Hardwick landscape, including significant scenic roads, waterways and views, important historic structures, sites or districts, archaeological sites, and archaeologically sensitive areas.

## **HISTORIC, SCENIC, AND ARCHEOLOGICAL RESOURCES**

### **Historic resources**

#### Historic record

The Town of Hardwick has a rich history, which informs the values and traditions held by residents today. A period of about 30 years (1890-1920) of industrial production of commercial granite sets it apart from other towns in the region. The town, through support of the Hardwick Historical Society (HHS) will ensure that this history is available for residents, new and old. The HHS spearheaded a major renovation of the 19th century railroad depot into a remarkable archives and museum for its holdings.

A survey of historical documents in the various repositories in Hardwick, completed in April 2001, revealed a wealth of holdings. The Hardwick Gazette, holds a complete morgue that dates to 1896. The Jeudevine Memorial library houses records and manuscripts of its development and operation since its founding in 1896. The Town Clerk's Office has responsibility for town records from the early 19th century, including the records of the school system. HHS has focused on on records in the areas of business and social activity as well as genealogical resources.

The two Historic Districts recorded on the National Register of Historic Places are the Downtown Hardwick Village Historic District and the Hardwick Street Historic District. In addition, the Vermont Division of Historic Preservation recognizes the West Church Street Historic District, Granite Street Historic District, Wakefield Farm Historic District, Holton and Kimball Hills Historic District, the East Hardwick District and the Mackville Historic District.

#### Historic sites and structures

Listing in the National Register honors a historic place by recognizing its importance to its community, State, or Nation. Recognition does not add any additional permit requirements or limit the use of private property. Owners have no obligation to open their properties to the public to restore them, or even to maintain them. Similarly, recognition on the state survey does not add any additional permit requirements or limit the use of private property.

Hardwick is fortunate to have had an inventory of the historic structures completed for the town. The *Town of Hardwick Historic Sites and Structures Survey* (1985) includes descriptions of the 434 structures. Of all these historic structures, only two have been listed on the National Register- the Cobb School and 143 Highland Avenue.

In 1898 the former Hardwick Academy / Town House was converted to an opera house. In 2001 the Northeast Kingdom Arts Council was founded and began work to restore the Town House. Many improvements have been completed and the Town House is once again a functioning theatre.

### **Scenic resources**

Hardwick is the "Gateway to the Northeast Kingdom". Almost 40 miles boast a varied landscape including open and wooded land, working farms and appealing village areas. Views of rural lands from the following vantage points have special scenic importance to the community: Center Road, Bridgman Hill, Slapp Hill, Ward Hill, and Belfry Road. Central to Hardwick's scenic offerings is Buffalo Mountain, Hardwick Lake, the Lamoille River, and Mackville Pond contribute to the beauty and recreational opportunities of Hardwick. Built on the old Lamoille

County - St. Johnsbury Railroad bed, the Lamoille Valley Rail Trail (LVRT) provides walking and biking paths in the warmer months and snowshoeing, cross-country skiing, fat biking and snowmobiling in the winter. ..

## **Archeological resources**

Archeological sites contain a fragile, complex and irreplaceable record of past human activity. Two areas of have been identified as “expected moderate-to-high archeological sensitivity.” . The first is located on both sides of Alder Brook ) from Hardwick Lake to of Eligo Pond in Craftsbury. The second area of archeological sensitivity is along the entire length of Greensboro Brook from the Lamoille River up to Caspian Lake in Greensboro. This rating does not necessarily indicate that any archaeologically significant resources have been located in the area and none have yet been found..

...only utilized rivers and streams for food and water, but also as vital transportation corridors. Although there have been no Native American archaeological sites reported in Hardwick to date, this is largely due to a lack of professional archeological studies conducted in the area, the alteration of some portions of town’s landscape through development, and the inundation of certain areas due to dam impoundment. Native American archaeological sites and historic archaeological sites related to early settlement, agriculture, industry and tourism likely remain to be discovered within Hardwick’s borders, as they have been in most of the towns surrounding Hardwick.

Cumulatively and individually, these sites constitute tangible links to the rich cultural, religious, social, economic and technological traditions of past generations of Vermonters. These resources can help us understand little known chapters of Vermont’s history. Precontact archaeological sites are often the only sources of information about the thousands of years of human history before European contact. Historic and archaeological resources are educational and recreational assets to communities and certain sites can be important attractions to locals and potentially even to tourists. The Vermont division of Historic Preservation hopes that sites will be preserved and protected whenever possible to ensure these vital cultural resources will be available to enjoy, appreciate, and study in the future. Any questions about archaeological sites can be directed to the Division for Historic Preservation’s State Archaeologist.

Photo? Graph?? Etc.???

## Goals, Policies, & Recommendations

### OVERALL GOAL

- To identify, protect, and preserve important natural and historic features of the Hardwick landscape, including significant scenic roads, waterways and views, important historic structures, sites or districts, archaeological sites, and archaeologically sensitive areas.

### POLICIES

#### Historic resources

- Development within any designated historic districts should be in character with the surrounding architecture.

#### Scenic resources

- Telecommunications towers and other large obvious structures should be carefully sited to minimize impacts on scenic resources.
- Development around the natural scenic resources identified should be sited and constructed in such a manner as to retain the natural scenic beauty of the areas. Removal of the natural vegetation on the site should be minimized and structures should be screened or hidden from view as best possible.
- Development should avoid ridgelines, especially those visible from roadways. Any ridgeline development should be set back from the edge of the hill and have a forested buffer to protect the view from the valley.
- Storage of abandoned vehicles and junk must comply with local and state limitations on such materials.

### ACTIONS & RECOMMENDATIONS FOR IMPLEMENTATION

#### Historic resources

- Collect and make available the history of Hardwick and the preservation of items and artifacts of historic significance. Develop good legal, physical, and intellectual control of Hardwick's holdings and arrange and describe them to make them available to researchers of all types. Publish a comprehensive history of the Town of Hardwick. The Select Board should continue to support the Village Center Designations in the Hardwick Village and in East Hardwick, but should also consider applying for Downtown Designation for the Hardwick Village.
- The Select Board and Planning Commission should investigate the possibility of pursuing Certified Local Government status.
- The Select Board should explore a tax stabilization program for downtown façade improvements.
- The Select Board should continue to provide funds that will make a significant contribution to those matching funds raised by local organizations and individuals for the purpose of maintaining or improving the above named historic structures owned by the Town of Hardwick. Line items for these funds for each of these buildings should be included as part of the town budget.

#### Scenic resources

- The Select Board should follow up with violations of the state abandoned vehicles and junk regulations.
- The Planning Commission should pursue funding to conduct a survey of local opinions on protection of scenic resources including such topics as telecommunications and wind towers.
- The Planning Commission should pursue funding to conduct an inventory of view corridors.
- The Planning Commission should consider establishing some incentives to maintain open land.

#### Archeological resources

- Where an archeological site is discovered on an undeveloped property or part of a property, the town supports the purchase of development rights on the effected portion as a means of compensating landowners for the loss of development rights. Purchase of development rights are always on a willing seller basis.

Goal: For Hardwick to have safe and affordable housing available in a variety of types for all incomes, ages, and for those with special needs.

## HOUSING

### Safe housing

In Hardwick, the Select Board only enforces the state health codes through the appointment of a Health Officer. The health codes apply to commercial and rental properties. Other basic standards that the town has adopted include flood hazard regulations (to require any housing in the flood hazard area to be safe for occupants), subdivision regulations (to require private roads to be wide enough to accommodate emergency vehicles), zoning regulations (to require driveways and buildings to be serviceable by emergency vehicles), and fire codes (to enforce additional fire code requirements on rental units).

### Housing demographics

A typical goal for housing is to have a variety of housing types available in Town. This is important because peoples housing needs change over time: renting when someone is younger; owning homes as one gets the resources to afford it; and downsizing homes as individuals move into retirement. Having a variety of housing options in town means residents can remain in town as their housing needs change.

Single-family units are the predominate form of housing in Hardwick. A breakdown of housing from the Grand List records from 2012 is as follows:

- 644 residential homes on 6 or less acres
- 243 residential homes on 6+ acres
- 73 mobile homes without land
- 134 mobile homes with land
- 13 vacation homes on 6 or less acres
- 35 vacation homes on 6+ acres
- 26 operating farms
- 11 commercial apartments

According to the 2010 Census, there were 1,423 housing units in Hardwick. Of these units, 1,239 are occupied, with 909 being owner-occupied, and 330 renter occupied.

### Affordable housing

The Department of Housing and Community Affairs housing policy states that housing is regionally affordable when the costs required for housing (mortgage plus taxes) are no more than 30% of the income for a household earning 80% of the median county income. The affordability threshold for Caledonia County is \$902 per month. (Caledonia County's affordability threshold is calculated as follows: \$44,435 is the county median household income, according to American Community Survey Estimates adjusted to 2012 inflation; 35,548 is the 80% figure; \$10,664 is 30% of the 80% figure; \$889 is arrived at by dividing the \$10,664 by 12 months).

According to most recent American Community Survey 5-year averages (2008-2012), median monthly housing costs were \$1,114 for those with a mortgage and \$523 for those without a mortgage. The median housing cost for those with a mortgage was \$225 above the regional affordability threshold, which means that household earning \$35,548 could not afford the median mortgage expense in the Town of Hardwick. Unlike mortgages, rents in Hardwick were considered affordable. The median gross rent in Hardwick was \$523. However, before we simply assume that rental housing is affordable in Hardwick, it should be noted that more than 50% of renters in Hardwick are paying more than 30% of their household incomes on housing.

Affordable housing continues to be a challenge for Vermonters throughout the region and the state. The Vermont Housing Finance Agency reports that a persistently high proportion of Vermonters pay too much for housing. Forty-seven percent of renters and 38% of owners with mortgages pay more than 30% of their income for housing costs - which has helped Vermont to be ranked as the 17th worst state in the nation for housing. Hardwick's affordable housing challenges are the same as those elsewhere in the state: stagnating incomes and aging housing stock, particularly among rental units.



## Special needs housing

Listed below are groups with special needs which are found in Hardwick and an evaluation of how well their needs are being met. Generalizations are made throughout this section based on age and they are not intended to be derogatory in any manner. With each generation, individuals are staying healthier longer and can live independently much later in life. But, in general, taking care of oneself and one's home gets significantly more difficult as one gets older especially if someone loses a spouse.

- Seniors living alone: According to the 2010 Census there were 143 seniors living alone in Hardwick. This group is important for social reasons as being retired and living alone in northern Vermont can be hard. In many cases, opportunities to rent apartments in senior housing are desired. Hardwick currently has no senior housing available (Level IV- senior living- no assistance provided). While there are no Level IV facilities, there are private senior housing options including the Bemis Block (14 units), Highland Hills Apartments (14 units), and Maple Street Apartments (16 units).
- Seniors 70-85: Most seniors between 70 and 85 continue to live independently, but many require some assistance especially as they get older. These may be situations where seniors have difficulty driving or require a visiting nurse periodically. Residents are typically still active and take care of themselves and their apartments. In Hardwick there were 219 seniors in this age group and there are no Level III living arrangements available (Level III housing has 24 hour assisted living).
- Seniors 85 and over: Beyond age 85, seniors increasingly need more intensive care. In the most serious cases, full institutional care is required. There are 44 seniors in Hardwick over 85. Hardwick has no Level II or Level I housing. These types of living arrangements are also known as nursing homes or convalescent homes. Residents generally are unable to live on their own due to physical or mental difficulties. The construction of assisted living facilities or a nursing home would be of benefit to the Hardwick community and to its seniors, allowing them to remain living near their homes.
- 65 and over with a disability. According to the latest American Community Survey 5-Year Averages, there were 114 individuals in Hardwick identified as having a disability. In addition to social services to address some of these needs, there are wheelchair accessible units in the Bemis Block, Highland Hills Apartments and Maple Street Apartments. Although not exclusively for seniors, Hardwick House Partnership (South Main Street) and Hardwick Family Housing (Cherry Street) have wheelchair accessible units available as well.
- 18 to 64 with a disability. There were 182 individuals in Hardwick with some kind of disability. Depending on the severity of the limitation, human services, transportation services, or special construction (handicapped accessibility) may be required. Social services are available in Hardwick although special living situations for those in serious conditions do not exist. Wheelchair accessibility is available to residents at the Hardwick House Partnership (South Main Street) and Hardwick Family Housing (Cherry Street).
- Families in poverty. According to latest ACS estimates, 10.6% of Hardwick families have been living below the poverty level within the past 12 months. For families with children under the age of 18, this percentage jumps to 15.5%. These are groups with housing needs that are difficult to meet. Federal programs provide housing assistance under "Section-8" but there is limited availability for those under 65 in Hardwick. Bemis Block has 14 approved Section 8 units (seniors only), Maple Street has 16 approved units (seniors only); Hardwick Family Housing (Cherry Street) has 8 units of Section 8 housing designed for families (2 to 3 bedroom units). Section 8 housing is in many cases the housing of last resort for some families before becoming homeless. The housing and support programs are necessary to help families keep a roof over their heads while they get their lives back in order.

## Fair housing

Hardwick has few areas of concern at this time. The zoning and subdivision regulations have been written to allow for multifamily housing, mobile home parks and other housing options to ensure affordable housing options are available to residents. The zoning district lines and regulations have not been written to isolate or single out any group and the bylaws are administered and enforced without bias.

## Goals, Policies, & Recommendations

### GOAL

- For Hardwick to have safe and affordable housing available in a variety of types for all incomes, ages, and for those with special needs.

### POLICIES

#### Safe housing

- Residential development should not be permitted in the flood hazard area and existing housing in the floodplain should be flood-proofed for the safety of the residents and the town as a whole.

#### Variety of types

- Accessory apartments are encouraged as they provide needed income for the homeowner and needed small apartments for residents living alone.
- Multifamily housing is encouraged in our village centers.

#### Affordable housing

- Affordable housing should minimize long-term living costs through high quality design, efficient construction, energy efficiency, and proximity to employment.
- Hardwick encourages land use patterns which are inherently more affordable by nature of cost of efficiencies associated with construction (e.g. shorter access roads, smaller lots, proximity to utilities).

#### Special needs housing

- Hardwick supports efforts to assist elderly and disabled residents who wish to remain in their homes, and to community based health care systems that enable elderly and disabled people to remain in the community.

Goal: For Hardwick to have a diverse and resilient economy based on agriculture, small business, and light industry that is compatible with Hardwick's scenic landscape and will raise income levels and provide employment for Hardwick residents.

## **Economic Development**

### **Hardwick's strengths**

The foundation of Hardwick's economy is from its natural resources. Historically, agriculture, forestry, and granite all powered the local economy; sending milk, lumber, and granite into the villages for processing and shipping to other parts of the country. Today we are less dependent on these but they still establish a base of raw materials for value added businesses. Success in these areas is not easy. Many towns have experienced significant declines in agriculture and forestry. Hardwick continues to encourage innovation, diversification, and education. A solid technical center program (see education chapter) provides a young well-trained work force for careers in these areas.

To support this foundation Hardwick has the infrastructure and much of the labor force necessary for economic development are already in place. Hardwick has an industrial park that is equipped with municipal water, sewer, roads and 3-phase power. We also have a sewage treatment plant with excess capacity to handle new growth. While this park is almost full, the town is already looking for a location for a second industrial park. The Village areas have broadband internet access from multiple venues. The Hardwick area has strength in numbers when it comes to value added agricultural businesses. A soy processing and a whey processing facility (both located in the industrial park, a seed production business in neighboring Wolcott, and three cheese producers are among a few of the bigger businesses. In 2011, the nonprofit Vermont Food Venture Center opened for business in the industrial park. This 15,000 sq. ft. multi-purpose food processing incubator is managed and operated by the Center for an Agricultural Economy, a nonprofit whose mission is to build a regenerative, locally based, healthy food system by engaging the greater Hardwick community through collaboration opportunities, educational outreach and providing infrastructure. Equipped with coolers, freezers, shared kitchens, a bakery, hot pack, and minimal processing area, the VFVC has already assisted dozens of entrepreneurs, resulting in the start-up of 25 new businesses. The facility also hosts a cheese production cell for aspiring cheese makers in this facility.

To assist start-up ventures, the Town has a revolving loan fund with approximately \$607,000 loans currently outstanding with 13 local businesses. As businesses repay their loans, the money is loaned out to new ventures. To date this fund has helped create and/or retain at least 60 jobs in Hardwick.

The Hardwick Area Chamber of Commerce is active in marketing the region. It has membership with over 100 members and holds a number of functions during each year to promote local businesses. They also host a web site, and produce brochures and advertising to promote the Hardwick area.

Hardwick's location at the intersection of major east-west and north-south state highways makes it the hub for at least seven surrounding towns. The town provides goods and services to many people beyond the borders of Hardwick.

Hardwick has many recreational assets which can be used to support a greater tourism and hospitality sector. Construction on the Lamoille Valley Rail Trail is just now beginning, and the village of Hardwick is at the transition point where the almost level river valley starts to climb over the hills to the Connecticut River valley. This makes Hardwick an excellent location for starting or ending a trip whether it is for a relaxed ride down the valley or a challenging ride over the hill. Hardwick also offers hunting, fishing, biking, hiking and cross-country ski trails, and numerous intersecting snowmobile trails. There is also an active ATV organization who is working with the Town and private land owners to create a network of ATV trails. The Hardwick Trails were created in 2003 and recently held a public event to celebrate 10 years of offering Hardwick area residents and visitors a 10k four-season trail system for non-motorized use.

## Challenges to Hardwick's economy

Hardwick's location at the intersection of many state highways makes it an excellent location for regional markets. Unfortunately the lack of interstates and US Routes means Hardwick will need to work harder to bring people to the town from beyond the region. The lack of interstates or easy access to them is also a challenge for manufacturing especially in times of high fuel prices.

Although Hardwick has long held a reputation as an older industrial town, there is a significant opportunity to re-establish the community as a destination spot for industry, recreation, and tourism. And, the three forms of development need not be seen as competing or even conflicting uses. To achieve this, Hardwick will need to work hard to change our reputation to an up-and-coming place to do business

Hardwick needs a more proactive approach to economic development. Hardwick should work with business owners and the Chamber to develop a clear set of plans and policies so that everyone is working towards the same goals. For instance, if the town wants Hardwick to be a tourist destination then certain policies should be adopted to improve the appearance of the downtown and our highways. If our industrial park is intended to support value added agriculture then policies need to be in place to support farms. If the town wants to maximize the benefits of the rail trail then signage, parking, bike racks, and sidewalks are necessary to make visitors feel welcome. We need a plan to get them from the trail to various points in the downtown. The town has many assets and opportunities which can be used to have a positive influence on economic development.

Hardwick is well established with respect to utilities such as sewer and electricity although some issues with the water system remain. This is not true for twenty-first century technologies though. Broadband access for the internet is available in the villages and some rural locations but this technology needs to be widely available and from a variety of sources (DSL, Cable, WISP).

Finally, Hardwick has a need for additional industrial space. The industrial park - which is occupied exclusively by agriculture and value-added processing enterprises -- is nearly full. The area directly across from the park has accommodated some value-added processing activity as well. Both areas on either side of Route 15 have some capacity for development, albeit limited. For the short- to medium-term, the production area that encompasses both sides of Route 15 may be able to accommodate up to six structures, assuming that build-out of the industrial area follows the typical footprint of an agricultural processor (approximately 6,000 to 10,000 sq. ft.). A typical value-added producer needs about 1,000 to 3,000 sq. ft. of space. Storage is usually the greatest need - about three times that of production space. Until now, smaller startups have often been able to sublet or co-reside with other producers, which means that more than six small producers may be able to locate to Hardwick. Other businesses that complement the existing cluster of value-added producers would be helpful, such as a small engine repair shop for repairing and refurbishing food production equipment.

The abovementioned additions, however, will only satisfy the interim needs for Hardwick's manufacturing cluster. What is needed is additional - preferably neighboring or nearby -- land that will accommodate a corporate campus for Hardwick's agricultural and value-added food producers. This production area must leverage the community's unique brand in order to become successful and sustainable. While Hardwick may lack some of the traditional industrial development enticements (such as Interstate highway access) it offers a compelling premise of sustainability and grass-roots entrepreneurship. If Hardwick's value-added sector is expanded, this synergy must be maintained in order to ensure Hardwick's critical edge as a destination spot for entrepreneurs.

Maintaining a light environmental footprint is also critical to maintaining Hardwick's "industrial" edge. Industrial development must not compromise or fragment Hardwick's vast resources of productive farmland or impede access to passive recreation resources, such as hiking or cycling. It is possible to accommodate all three uses in a way that makes Hardwick an outstanding example of sustainable economic development. Future additions to the Hardwick economy could include test gardens, community kitchens, and even a visitor/retail component, such as production viewing area or tasting center. If appropriately sited and attractively landscaped, Hardwick's agricultural processing campus could incorporate access to hiking and recreation, and could itself become a destination spot for agri-tourism. As manufacturing plays an increasing role in our overall economy, it will have a broad impact on the overall economy. Manufacturing not only employs persons at the plant but also provides markets for farmers. If industrial expansion is executed thoughtfully, it will be mutually beneficial to the town's farmland, tourism, and recreational resources.

## Goals, Policies, and Recommendation

### GOAL

- For Hardwick to have a diverse and resilient economy based on agriculture, small business, and light industry that is compatible with Hardwick's scenic landscape and will raise income levels and provide employment for Hardwick residents.

### POLICIES

- Economic development at the expense of the environment is not encouraged. Businesses and industries shall not degrade or endanger air and water resources.
- Industries that extract renewable resources, such as timber, must do so in a sustainable manner.
- Home based businesses shall be in scale with their surroundings and context - and as an accessory to the primary residential use.
- Home-based business shall not create impacts that are uncharacteristic of the areas in which they are located.

### ACTIONS & RECOMMENDATIONS FOR IMPLEMENTATION

- The Town Manager, Planning Commission, and Select Board should investigate Downtown Designation for the village area.
- The Town Manager and Planning Commission should pursue funding to identify a new location for an industrial park.
- Yellow barn?

# FLOOD RESILIENCE

## Flood Risks in Hardwick

In Hardwick, most flooding occurs when too much rain is delivered too quickly or for too long a period and this causes the streams and rivers to overflow their banks. The Lamoille River quickly becomes a rushing torrent in the hours after a particularly large thunderstorm or after several days of slow, steady rain. If the river is already “running high” due to the melting of the winter’s snowpack, the effect of these rainfall events are even more dramatic.

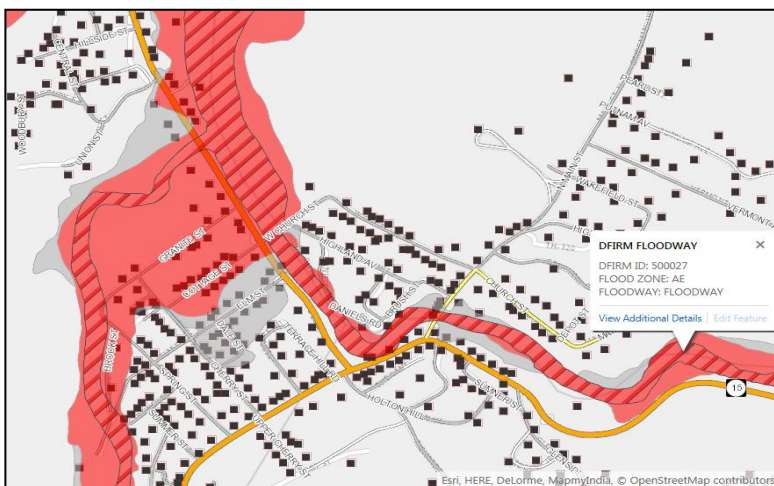
Additionally, if large sheets of ice or woody debris are “floated” by this rising water, they can form ice-jams or debris-dams at sites where the river is constricted by a sharp bend or a bridge. These blockages of the river often start small, but as the river backs up behind them, then more ice or debris are floated off of the streambed and banks to add to the jam/dam. This can create a large, long “lake” that fills the river valley from side to side, drowning all roads, facilities, and buildings located there. Once formed, these jams/dams can be long lasting and difficult to remove, especially when the roads to access them are several feet beneath the newly formed “lake”. The damage to built structures caused by being submerged by water and/or rammed by icesheets/trees can be enormous. Also, there is the increased risk to human life and property due to these road closures because this impairs the response of fire and rescue emergency vehicles. The best way to deal with flooding in Hardwick is to attempt to prevent as many of these events from happening as possible, or at least to try to reduce the damage they now can produce.



Long Reach Breaks Up Ice Jam in Hardwick  
(Copyright 2012 Tibbits Equipment Services, Inc. All Rights Reserved.)

## FEMA Flood Insurance Rate Maps (FIRMS)

To identify a community's flood risk, FEMA uses data to create the flood hazard maps that outline your community's different flood risk areas. Some floodplain areas are shown as high-risk areas or Special Flood Hazard Areas (SFHAs). Some parts of floodplains may experience frequent flooding while others are only affected by severe storms. However, areas directly outside of these high-risk areas may also find themselves at considerable risk. Changing weather patterns, erosion, and development can affect floodplain boundaries. Digital flood hazard maps provide an official depiction of flood hazards for each community and for properties located within it. Unfortunately, it has been 40 years since the Effective Date for the FIRM's for Caledonia County and no updates are presently scheduled. The Flood Insurance Rate Map for Hardwick dates to 1984 and received only minor updates since then; once in 1987 and again in 2002.



## Hardwick Flood map data: Close-up of FIRM for Downtown Hardwick

### The Cost of Flooding to Hardwick

Many people think that if they do not live near a river or the coast, they are not in danger of flooding, giving them a false sense of security. Floods are the number one natural disaster in the United States and in a high-risk area, your home is more likely to be damaged by flood than by fire. For a 1,000 square foot home built on a concrete slab, the average cost of being subjected to only a six inch flood is \$20,150 (National Flood Insurance Program). The high cost associated with even a “minor” flood helps to explain why flooding in Vermont accounted for 67% (\$626 million) of the losses due to Hazard Events between 1960 and 2009. Presently, Hardwick has 35 flood insurance policies and all but five are for structures in the Special Flood Hazard Area. The total coverage value is more than \$3.7 million and represents the third highest coverage value in the county. There have been 56 claims since 1978, representing a total payout of more than \$260,000.

### The Lay of the Land & Flood Damage Risk

The Town of Hardwick is situated in an area where the landscape greatly controls where buildings, roads, and agriculture can occur, and thus both creates a large risk of flood damage while also limiting the options for flood mitigation. The majority of Hardwick is relatively gently-sloped land lying at elevations between 1000 and 1500 feet. This surface is incised by three major river valleys; Lamoille River (east-west), Alder Brook (north-south), and Cooper Brook (south-north). Agricultural fields are confined to the “flatter” area away from these rivers, as well to the wider portions of the level floodplains alongside them, with the remaining areas of town being forested. The highways and many roads follow the river valleys and their tributaries as seen by Route 16 and much of Route 15 bordering the Lamoille River and by Route 14 traveling alongside Alder Brook, the Lamoille River, and Cooper Brook.

### Culverts & Bridges

The combination of roads, steep slopes, and running water not only constitute areas of higher Road Erosion risk, it also often marks areas where the Town of Hardwick has installed and maintains culverts and bridges. The Vermont Online Bridge and Inventory Tool (VOBCIT) database shows that Hardwick has 474 culverts, with the majority found to be in fair to poor condition. The two critical culverts are on Porter Brook Road and Scott Road.

**Table 5: Hardwick Highway Culvert Conditions (2013)**

Excellent	6	1.3%
Good	219	46.2%
Fair	192	40.5%
Poor	55	11.6%
Critical	2	0.4%

Source: VOBCIT

Critical (failing) means that less than 25% of the culvert was open at the time it was assessed. This is due to sediment load which is deposited during storm events. Undersized or “plugged” culverts often result in storm runoff flowing over the road or highway, rather than under it, and damaging or even washing out the roadway. The Northeastern Vermont Development Association (NVDA) annually assists towns in updating their culvert data by hiring consultants to do the field work using GIS and then uploading this to the VOBCIT. The VTTrans Maintenance Districts ideally want an inventory done every three years, but NVDA can only do 4-5 towns per year. NVDA is working to get towns to use VOBCIT to input their annual updates so that they will always have an up to date inventory.

### Critical Facilities

Critical facilities are essential to a community’s resilience and sustainability. Because they are defined by their ability to quickly and efficiently respond to and recover from floods, critical facilities should never be flooded, and their critical actions should never be conducted in floodplains if at all avoidable. Hardwick has two critical facilities in the Special Flood Hazard Area - the fire station and the Hardwick Electric garage. The town should consider a full range of options to mitigate risk to these structures in the future in order to ensure continuity of services during a disaster. Potential mitigation measures should include either relocation of the facility or its elevation/flood-proofing to the 500-year flood level (this is the elevation for a flood event that has a 0.2% annual chance of flooding).

## **Flood Resilience Plans, Goals, & Strategies**

### **Goals:**

To encourage flood-resilient communities. (A) New development in identified flood hazard, fluvial erosion, and river corridor protection areas should be avoided. If new development is to be built in such areas, it should not exacerbate flooding and fluvial erosion. (B) The protection and restoration of flood plains and upland forested areas that attenuate and moderate flooding and fluvial erosion should be encouraged. (C) Flood emergency preparedness and response planning should be encouraged.

### **Policies:**

Adopt flood hazard regulations that, at a minimum, ensure eligibility for flood insurance through the National Flood Insurance Program.

Maintain and regularly update the Local Emergency Operations Plan.

Continue to meet the VTrans Road and Bridge standards. Participate in regional road foreman trainings and Transportation Advisory Committee meetings to stay abreast of flood resilience measures for the Town's roads and bridges.

Attempt to achieve yearly updating of the Town's transportation infrastructure information in the Vermont Online Bridge and Culvert Inventory Tool.

Identify and replace undersized and failing culverts.

Relocate the Fire Station and HED garage out of the floodplain, or floodproof these structures to 500-year flood standards.



## **PUBLIC AND PRIVATE FACILITIES & SERVICES**

### **Hardwick's government**

Hardwick operates under a Town Manager form of government. The manager reports to the Select Board made up of five elected citizens. The manager is responsible for the day to day operations of the Town and prepares the annual budget for approval by the Select Board and also functions as the Police Commissioner. Staff employed by the Town includes a police chief, police officers, public works foreman and highway crew, water and wastewater systems operator, administrative staff persons and a half time zoning administrator.

There are a number of boards, committees, and positions appointed by the Select Board. These include the Planning Commission/Development Review Board, Hardwick's representative to the Northeastern Vermont Development Association (NVDA), the Hardwick Electric Department Board of Commissioners, and the Hardwick Recreation Committee. In addition to the Select Board, Town Clerk, and Treasurer, there are also more than twenty elected positions including three Listers, three auditors, two constables, four cemetery commissioners, and seven library trustees.

Adoption of budgets and election of officials are done at the annual Town Meeting, held the first Tuesday in March.

Prior to 1988, Hardwick had both a Village and a Town government. In 1988, they merged into one entity and a new Town charter was written and approved by the Vermont Legislature.

### **Water systems**

The Town of Hardwick operates a water system that serves 645 customers in the main business and residential district of Hardwick including the former Village and the industrial park. The Hardwick Water Department is funded entirely by user fees and receives no money from the Town General Fund.

The system is supplied by two high yield sand and gravel wells located on the south side of Route 15 near the Hardwick Industrial Park. The water is pumped to a covered concrete reservoir on Bridgman Hill with a capacity of 500,000 gallons. The water mains are fed by gravity from the reservoir. These wells have provided an abundant supply of pure water to residents since the 1940s and should meet the system's current and projected needs. While the wells are adequate, the reservoir is approximately 300,000 gallons undersized and plans are being developed to construct a new 300,000 gallon reservoir to ensure adequate water supply during times of high use, such as fires, line breaks, or flushing operations. The cost of this project will be approximately \$1.8 million. The Town approved the bond for the water system improvements at the 2013 Town Meeting. The bond will be repaid by the users of the water systems and will likely lead to increased water rates. Since 2008, the Town has installed a new 8 inch water main on West Church Street, rebuilt the river connection from Cottage Street to Wolcott Street, installed a new 12 inch main on South Main Street and replaced smaller water lines on Kellogg and Winter Streets. However, the distribution system is still in need of upgrades. There remain undersized water lines and low water pressure areas within the system in a 2012 hydraulic analysis prepared by Aldrich and Elliot under contract to the Town.

The two main water wells are situated in an area of intensive use, being adjacent to a major road (Wolcott Street), the industrial park, and near underground storage tanks, leading to concern that the wells may eventually be contaminated. To attempt to maintain the current water quality of the wells, the Town Manager's Office developed the Wellhead Protection Plan for the Town of Hardwick Water System. The Source Protection Plan (SPP), as it is now known, is updated regularly relative to State regulations. The last update of the plan was in June 2012. The SPP lists potential sources of contamination, discusses managing existing risks, managing to minimize future risks, and states a contingency plan in case of an emergency. The SPP establishes a protection area where growth and land use need to be monitored and controlled.

To ensure a continuous supply of clean water, a backup chlorination system was installed at the well site in 1998. In 2006 a generator was added to allow the pumps to continue to operate during an emergency. In 2012 and 2013, the control systems of both well pumps were updated to provide more efficient and reliable operations.

The East Hardwick Fire District operates a water system supplying 106 customers in the Village of East Hardwick. User fees fund the system. The system is fed by gravity from a well field and is stored in a concrete reservoir above the village for delivery to system users. There are several hydrants in the Village area, maintained by the Fire District.

## **Sewage and septic systems**

The Hardwick Sewer Department serves 583 customers, covering the same area as the water lines. The Hardwick Sewer Department, like the Water Department, is funded entirely by user fees and receives no money from the Town General Fund. The wastewater treatment facility is an aerated lagoon system built in 1980. It has a rated capacity of 371,000 gallons of domestic sewage per day. The town conducted a 20-year review of the facility in 2001. While still in good shape, several upgrades to equipment were required. These upgrades will extend the life of the facility and will also make it more efficient. One requirement was the installation of a phosphorous removal system which was completed in 2007. The wastewater treatment facility is set for relicensing in 2014.

Tightening of water quality standards at the state level could require further capital improvements at the facility and throughout the storm drainage system in the village area. Currently, about 1/3 of the facility's capacity is available for new users. This capacity is sufficient to accommodate some residential and industrial growth but major growth in population or a heavy industrial user could require expansion of the existing facility. The maximum capacity of the sewer system, the amount of waste that can be received and treated, affects growth by limiting the number of homes and businesses that can hook onto the system.

One significant area of concern is the age of the wastewater collection system. Some of the sewer lines date back 100 years or more. Town staff have identified streets where sewer lines have partially collapsed, but the Town has made significant efforts to slip line and replace bad sections of piping and that effort will continue until all damaged lines have been repaired.

Outside of the village service area, all sewage is treated via individual, on-site septic systems. Permitting and enforcement of these systems is the responsibility of the State Department of Environmental Conservation Regional Office in St. Johnsbury.

## **Public safety**

### Police

In 1979 the Village of Hardwick decided to disband the Village police department. Equipment was turned over to the Town and a search for a new police chief was instituted. In 1980 the first chief of the Hardwick Police Department was hired and began 24-hour coverage with a staff of three officers.

In April of that year, the Town of Hardwick entered into a contract to provide police coverage for the Town of Greensboro leading to the hiring of a fifth officer. Greensboro contributed 20% of the Department budget in exchange for 48 hours of coverage per week. The Town of Greensboro renegotiated their contract in 1991 to contribute 22-½ percent of the budget for 54 hours of service a week. In 1991 a budget was approved to add a sixth officer and a seventh was added 10 years later.

In January 2013, the Hardwick Police Department moved to its new location at 56 High Street, which is now known as the Town Public Safety Building. This building was donated to the town, and according to the terms of the donation, a portion of the building must be used for a healthcare concern. Therefore, a portion of the top floor has been reserved for the Hardwick Emergency Rescue Squad. All newly hired police officers are required by law to attend an initial 16-week Police Academy training in Pittsford. All officers attend training on a regular basis provided by the Vermont Criminal Justice Training Council. The Department's service area includes approximately 75 square miles, including the Towns of Hardwick and Greensboro. The Department is unique in Vermont in providing coverage in two counties, Caledonia and Orleans.

Police vehicles include four cruisers, two of which are 4x4 SUVs, and two of which are all-wheel drive sedans. Each of the officers is equipped with body camera recording systems and there are computer workstations in each vehicle. Additionally, one vehicle is equipped with a computerized license plate reader system that allows for an instant records check on each vehicle encountered by the Police vehicle. The Police radio systems were

upgraded to digital format in 2012 including in car mobile radios, portables and the base station and included the addition of a digital radio repeater, located on West Hill.

The Department works closely with the area schools, domestic violence advocates, and the prosecutor's office for Caledonia and Orleans Counties, as well as other law-enforcement and state agencies. The Lamoille County Sheriff's Department provides holiday, weekend and afterhours dispatching services for the Hardwick Police Department.

In July of 2012 the Department became a member of the Caledonia Special Investigation Unit and assigned a Hardwick officer as a detective to the Unit. The detective is charged with investigating crimes of a sexual nature against children, adults, and the elderly. The organization of County Special Investigation Units was mandated by the Vermont Legislature.

The Department currently maintains a staff of 7 full-time Certified Police Officers, 2 part-time Police Officers, a Dispatcher/Administrative Secretary, and a Part-Time Dispatcher. The Officers consist of a Chief of Police, Sergeant, Detective, and uniformed Patrol Officers.

#### Rescue

The **Hardwick Emergency Rescue Squad** provides Hardwick's triage services. Founded in 1967, it was one of the first volunteer rescue organizations in the state. The first ambulance was a partially equipped hearse donated by a community member. The ambulance building on Creamery Road was built in 1981, funded by the Hardwick Hospital Association, and was expanded in 1992.

Hardwick Rescue responds to about 450 calls annually, including standby at community events and at structure fires. There are two fully equipped ambulances, Rescue 1 and the four wheel drive Rescue 2. The service area includes all of Hardwick Greensboro, Craftsbury, Wolcott, Woodbury, and Stannard, as well as parts of Walden, Elmore, West Wheelock, and East Calais.

New EMS requirements have kept the volunteers busy maintaining and advancing their skills. In 2006, due to declining volunteers, the rescue squad hired an EMT to cover some shifts. If volunteer counts continue to decline the squad may need to hire another EMT.

#### Fire

The "Granite Hose Company, Number 1" was formed on December 14, 1891 with approximately 18 charter members. The name was changed to the Hardwick Fire Department in the early 1900s. The present fire station on Wolcott Street was built in 1972-73.

Currently the Department has 22-25 members. Equipment includes two pumper-trucks, two tankers, and one rescue truck. In 2005 the department added a new aerial ladder truck which will be a great asset to the department and the community as a whole. Plans are underway to replace one of the pumper trucks, which is more than 30 years old. Fire personnel carry pagers and the department is dispatched by radio.

Hydrants are well distributed throughout the area served by the village water system. If the reservoir is drawn down to a certain level, an automated system sends water from the Town wells to the reservoir, in order to maintain adequate water flows. There are several hydrants in the village area which are maintained by the Fire District. The hydrants in East Hardwick are not in service due to undersized waterlines feeding them.

The Department has been installing a dry hydrant system to give better access to water in the rural areas of town. There are currently dry hydrants on West Hill, Cobb School Road, Porter Brook Road and two at Mackville Pond. The Fire Department coordinates with the Rescue Squad and has a "jaws of life" to assist them. Hardwick participates in a Mutual Aid Agreement with other area Departments.

#### Emergency coordination

Since 2000 the United States has experienced both acts of terrorism and natural disasters that have highlighted the need for local emergency planning and coordination. There are regional and statewide efforts involving pre-disaster mitigation (to fix problems before they become disasters), Rapid Response Planning (to have a coordinated local approach during disasters), LEPC (Local Emergency Planning Committee for regional emergency planning) and CERT (a local citizen corps created to provide assistance during disasters and coordinated nationally by FEMA). It is important for Hardwick to remain involved in these efforts so that in the event a disaster occurs in town or in the county, we will be prepared to provide help.

Locally, the Select Board appoints an emergency coordinator generally the Police Chief who oversees local emergency efforts. The Town Manager is typically appointed as the Emergency Director for Hardwick to make critical decisions on behalf of the town in emergency situations. The town should support the efforts of both of these positions.

The Emergency Relief and Assistance Fund (ERAF) provides Public Assistance grants through the Federal Emergency Management Agency (FEMA) to Vermont cities and towns to repair damaged infrastructure after a presidentially declared disaster. The state typically contributes half of the required 25 percent non-federal match for approved projects. Under new ERAF rules, the Town will need to have a FEMA-approved local Hazard Mitigation Plan in order to ensure that the town receives level funding from the state as a match to FEMA funds. The plan was updated and accepted in 2018.

### **Health services**

The Hardwick Area Health Center is part of Northern Counties Health Care, Inc., a non-profit organization administering several rural health clinics in the Northeast Kingdom. It operates a family care facility providing general health care for Hardwick and surrounding towns. Health maintenance is emphasized through a variety of educational programs and special clinics.

A major expansion and renovation of the facility was completed in 1991 as a part of the consolidation of services following the closing of the Greensboro Health Center. Northern Counties Health Care Inc. also opened a dentist office on South Main Street in 2001. In 2013, the Health Center was relocated to Slapp Hill.

Medical services are provided by four full time physicians, a nurse practitioner, and additional nurses, facilitated by office staff. Medical services are available for emergency calls 24 hours a day, reachable through the Center's answering service. Caledonia Home Health also offers services at the Health Center.

Hardwick is also fortunate to have two dental offices- the Hardwick Dental Group and Northern Counties Dental Center. There are also local specialists in physical therapy as well as a variety of mental health providers. Hardwick is also home to many "holistic" medical providers such as chiropractic care, Reiki, acupuncture, massage therapy, and more.

Copley Hospital is the closest full care facility, located in Morrisville, 13 miles to the west. Providing continuity of care, the Health Center physicians are also members of the staff at Copley Hospital. Other area hospitals include North Country Hospital in Newport, Northern Vermont Regional in St. Johnsbury, Central Vermont Hospital in Berlin, and the Fletcher Allen Health Center in Burlington.

### **Child care**

Childcare is a critical service for many families, especially single parent families and where both parents work. Child care facilities are all privately operated although there are some state programs to help individuals and families pay for the service. According to the state childcare database ([www.brightfutures.dcf.state.vt.us](http://www.brightfutures.dcf.state.vt.us)), in 2013 there were 11 registered child care homes and three licensed child care facilities in town.

### **Jeudevine Memorial Library**

Since 2000 and under the leadership of the new Library Director, several short-term goals have been achieved at the public library to bring it up to modern standards. Equipment improvements include public access computers, a copy machine, high-speed internet, and 24-hour wireless internet access to anyone with a laptop computer.

The library has recently been equipped with fiberoptic cables. The library is open Monday through Saturday for a total of 31 hours, only 4 hours of which are on the weekend.

Presently the library meets state standards set by the Vermont Department of Libraries which allows it to apply for certain grants and receive free cataloguing and books as well as other services. When new standards are adopted by the State Library Board of Trustees, the Jeudevine Library will have to develop and carry out a plan to become more handicapped accessible. The building also requires attention to roof and attic damage. The long-range plan, therefore includes a building fund and endowment campaign be initiated by the Friends of the Library.

The Jeudevine Memorial Library is one of the most beautiful libraries in the state. The library aspires to maintain its heritage while at the same time offering all the modern information services to its community. EXPANSION?

## **Cemeteries**

There are seven cemeteries in the Town of Hardwick with four of these under the care of the Hardwick Cemetery Trustees. Main Street Cemetery, Maple Street Cemetery, Fairview Cemetery, and Sanborn Cemetery are all under the care of the Cemetery Trustees. West Hill and Hardwick Center Cemeteries are under the authority of the Select Board and Hardwick Street is under the care of Marcel LaBlanc.

## **Recreation facilities**

Hardwick's recreation facilities include the ball fields at Hazen Union High School and at the Elementary School. Men and Women's softball leagues use Hazen Union during the summer as well as two privately maintained fields, Shepard's field on Bridgman Hill and the Hootie Dome in East Hardwick. Little League is played at the Hardwick Elementary field. Hodgdon field, located on the corner of Cottage and Cherry Streets is used for T-Ball. This park is enclosed by fencing and is a play area within the village.

There are two public tennis courts are located at Hazen Union. Walking and biking trails begin at Hazen Union and wind through the woods. The Town of Hardwick is currently making plans to extend a bike path west of the village. This trail system would also use existing paths maintained by the Vermont Association of Snow Travelers (VAST) and connect with trails established by Hazen Union. These trails are also available for cross country skiing. The trail network was designed by John Morton (a two time winter Olympian) and constructed by the students.

In 2005 the state of Vermont officially rail-banked the Lamoille Valley rail-line. This designation allows the state to use the land owned by the state for non-motorized recreational uses until such time as rail becomes feasible again. Snowmobiles are the only exception to the "non-motorized" prohibition established by Congress at this time. Although the opening of this trail has been delayed, once completed it will be a valuable recreational asset for Hardwick year round.

In addition to the Lamoille Valley Rail Trail, the VAST has an entire network of trails throughout the state (see the Transportation Map for the approximate location of VAST trails in Hardwick). The Vermont All-terrain vehicle Sportsman's Association (VASA) also has plans for an expanded ATV trail network in Hardwick.

The Town has a volunteer Recreation Committee that coordinates a number of activities for youth including a swimming program at Caspian Lake and maintaining an outdoor skating rink during the winter months. They are hoping to encourage greater use of Mackville Pond as a village park for picnics and swimming. The Recreation Committee hosts family events,

The Hardwick Trails were created in 2003 and recently held a public event to celebrate 10 years of offering Hardwick area residents and visitors a 10k four-season trail system for non-motorized use. Supported by Hardwick's taxpayers and by active grant writing and fundraising by the Hardwick Trails Committee, the Trails offer hiking, mountain biking, cross-country skiing and snowshoeing, cross several hundred acres of rolling terrain shared by Hazen Union, Hardwick Electric, the Town of Hardwick and Wendall & Bev Shepard. Maintained

by a part-time caretaker and a group of volunteers, the trails are mowed in the summer and groomed for skiing in the winter. Skis and snowshoes are available for lending.

Several events and programs are offered throughout the year, including the annual Pumpkin Walk, moonlight snowshoe tours, wildlife and wildflower identification walks, bird-watching walks, and a children's ski program, all at no cost to users.

The plan by all involved is to connect the Lamoille Valley Rail Trail, the Hardwick Trails, the Hardwick to Woodbury Rail Trail, and other local trails. The Hardwick Trails also has a long range cooperative plan to connect to the Highland Lodge and Craftsbury Outdoor Center ski trails.

It has been recognized that the village doesn't have much park land beyond recreation fields. The village has the community gardens and some trails but little open space directly adjacent to the residential developments where local parents and children can gather. With so much of the village in the flood hazard area a portion should be set aside for a park for outdoor enjoyment by all.

### **Solid waste facilities**

Hardwick is a member of the **Central Vermont Solid Waste Management District (CVSWMD)**, a municipal district formed to serve 22 towns in Central Vermont. Funding for CVSWMD expenses is covered entirely by user fees and service fees. More information on CVSWMD can be found at [www.CVSWMD.org](http://www.CVSWMD.org)

The mission of CVSWMD is to provide leadership, education, and services for residents and businesses in reducing and managing their solid waste in order to protect public health and the environment to the greatest extent feasible. The District takes the lead on developing and implementing new programming and incentive for solid waste reduction in the member communities. They strive to serve their geographically diverse communities equitably and cost-effectively.

The CVSWMD is also committed to *Zero Waste*. Zero Waste is an international movement where communities and businesses strive to shift how they think about and use resources. Zero Waste won't eliminate discards. Rather, working towards Zero Waste means striving to capture all of the resources in such products so they can be reused and recycled in the region instead of wasted by burying them in a landfill. Reducing waste up front through good product choices is also a critical component of a Zero Waste effort.

In addition to CVSWMD, there are private haulers for curbside pickup as well as All Metals Recycling (AMR) and Gates Salvage.

### **Town owned buildings and properties**

According to the Grand List the Town of Hardwick owns 24 properties totaling 139.9 acres. These include 0.40 acre for the Memorial Building, 14.00 acres for the wastewater treatment facility, 70.5 acres on Buffalo Mountain Road and 36.5 acres on Hopkins Hill Road. A complete list of Town owned buildings and undeveloped parcels greater than 10 acres can be found in Appendix C. In addition to the Town-owned lands the Hardwick School District owns 13.1 acres associated with the elementary school and the Hazen Union School District owns 96.7 acres with the high school. Hardwick Electric also owns 5 properties totaling 390 acres, most of this associated with 320 acres on Billings Road.

### **Other public lands**

Within the Town of Hardwick are four properties owned by the State of Vermont, two by the Agency of Transportation (AOT) and two by the Vermont Department of Fish and Wildlife (F&W). The AOT properties are associated with the Glenside landslide region along Route 15 heading out of Town toward Walden. The F&W properties are associated with accesses onto Hardwick Lake (Craftsbury Rd) and the Lamoille River (Route 15). The State of Vermont recently constructed a boat access to Hardwick Lake, much to the delight of many bird-watching and recreational kayakers and canoers who had been requesting easy access for years.

## Goals, Policies, & Recommendations

### OVERALL GOAL

- To ensure adequate facilities and services are available to protect and enhance the lives of the residents, visitors, and businesses of Hardwick.

### POLICIES

- All wastewater treatment systems must receive a state wastewater permit before construction begins.
- Septic systems are not permitted on slopes greater than 20%. (state standard)
- All wells must be located at least 100 feet from any septic field. (state standard)
- All residential development should be accessible to emergency vehicles.
- Hardwick supports any reasonable proposal to locate a health or dental facilities into town.
- The development of day care facilities and other related services will be supported.
- Human services should be delivered locally to the extent feasible.
- Hardwick supports the efforts of the Jeudevine Memorial Library.
- For Hardwick's cemeteries to be maintained with respect and dignity and have sufficient capacity to support future need.
- Developers of large residential projects should include adequate open space for recreation by the future residents of the project.
- All projects must provide for adequate removal of solid waste.
- All projects shall maintain water quality in Hardwick's lakes and streams through proper treatment of storm water runoff.
- Before any purchase of land to be held by the public, the entity must report the anticipated loss of value from the Grand List to the Select Board.
- Rail trail?

### ACTIONS & RECOMMENDATIONS FOR IMPLEMENTATION

- The Health Officer and Select Board should report any failed wastewater systems to the state for compliance with state wastewater regulations.
- The Planning Commission should consider requiring developers of large residential projects to include adequate open space for recreation by the future residents of the project.
- The Select Board should review local solid waste, junk and health ordinances to ensure the proper regulations are in place to protect the public health safety and welfare.

## How the plan relates to the Regional Plan and adjacent municipalities

Hardwick shares borders with Greensboro to the north, Walden to the east, Woodbury to the south, Wolcott and a small portion of Elmore to the west. Additionally, Stannard and Cabot meet Hardwick at corners.

Most of the surrounding towns have an agricultural base, many commuters, village centers with mom and pop stores or gas stations, and a significant number of self-employed trades people and other small enterprises. The Cabot Creamery is the only major employer in the adjacent towns.

One major land use goal of this plan is to retain agricultural and forest potential while preserving options for landowners. This is a goal shared widely in the region. Hardwick's goal of creating employment opportunities for local people and expanding goods and services available in Hardwick should benefit surrounding towns.

No negative impacts or incompatible development is anticipated as a result of the actions of this plan.

### Regional Plan

Nothing in the Hardwick Town Plan 2019 is expected to be in conflict with the regional plan or will have a negative effect on any future implementation of the regional land use plan. The Hardwick Planning Commission is willing to work with Northeastern Vermont Development Association to address any concerns they may have.

