CHAPTER 13 – NATURAL AND CULTURAL RESOURCES

Maintaining significant natural and cultural resources, including open space and scenic, working landscapes are among Williston's most important goals for the future. The vision statement presented in Chapter 2 states that the town will:

- sustain rural landscapes by requiring an open space pattern for subdivisions, conserving lands identified as high priority through acquisitions or easements, and supporting continued stewardship of working lands; and

- use regulatory and non-regulatory tools, including funding for the acquisition of development rights or land to protect water quality, wildlife habitat including forest blocks and habitat connectors, scenic views, and other natural and cultural resources.

This chapter expands on the vision statement in Chapter 2 by presenting a long-range strategy for preserving and protecting Williston's conservation areas, scenic viewsheds, working landscapes, and cultural resources:

13.1 Conservation Areas protect important natural resources, including wetlands, streams, and wildlife habitat, from incompatible development. Public access is limited.

13.2 Scenic Viewsheds are identified through a detailed visual assessment. They include open fields and meadows, and wooded slopes and ridgelines.

13.3 Working Landscapes include farms and other lands that are managed for the production of agricultural, forest, and earth products. They also include lands used for outdoor recreation, such as golf courses or fee-based trail systems. In some cases, public access is not necessary, and may be undesirable.

13.4 Cultural Resources include historic and archaeological sites that document the town's human history. This section focuses on archaeological resources, while historic resources are addressed in Chapters 3 and 4.

The goals and objectives provided in this chapter account for the changes in land use and development patterns that have taken place since Williston adopted its first Open Space Plan in 1989. In 2005, the Open Space Plan was broadened and became Appendix C to the *2006 Comprehensive Plan*. In 2010, the town decided that Williston's Open Space Plan is in no way ancillary to the way that Williston is managed, Appendix C was divided into two chapters in this plan: Chapter 8 - Recreation & Parks and Chapter 13 - Natural and Cultural Resources, and incorporated into the main body of this Plan.

From Foothills to the Valley Floor: Williston's Landscape

From east to west Williston touches the foothills of the Green Mountains and includes the lowlands that surround Lake Champlain (Map 1). Encompassing over 30 square miles along the southern banks of the Winooski River, the town of Williston has a unique physical setting whose roots trace back over millennia to ancient river deltas in Glacial Lake Vermont and to the great tectonic forces of geology that uplifted the Green Mountains and shaped the very bedrock the town stands on.

Such ancient stories shape the lives of animals, plants and humans to create the patterns we see on the landscape today. From moist floodplain forests and wetlands to dry craggy ridgelines, Williston hosts diverse plant communities that include rare species and telling signs of past human land use. While not

always noticed, Williston is home to abundant wildlife including such dramatic creatures as bobcats, fishers, black bears and moose as well as a rich springtime chorus of amphibians.

Humans have been part of the Williston landscape for over 10,000 years leaving a rich archeological heritage with much yet to be discovered on the land. As the more than 9,000 residents of Williston look to the future, they can celebrate their ongoing part in the rich and exciting landscape of stories around them. Geological events of millennia past, which explain everything from why there is sand mining in north Williston to why it is difficult to locate a good site for wastewater disposal south of I-89, set the stage for the town's development and this plan.

Although forests cover 74% of the state today, Vermont wasn't always the "Green Mountain" state. At the time of European settlement, forests covered almost all of Vermont. During the 18th century, Vermont's and Williston's landscape changed dramatically. The forests were rapidly cleared for agriculture. Clearing reached its peak in the mid to late 1800s and reduced forest cover to about 35% of the state. Over the last century, westward expansion, the decline of the sheep industry, and reduced timber harvesting have contributed to the steady regrowth of Vermont's forests. Today's forests are the result of a major reforestation.

Forests provide Vermonters with enormous benefits and a range of critical goods and services. A thriving forest economy, functioning natural systems, and Vermont's quality of life rely on maintaining healthy forests across our landscape. Forest benefits include water supply and water quality protection, flood control and protection, wildlife habitat and biodiversity, clean air, carbon sequestration, outdoor recreation, and scenic beauty. Forests also provide cultural, spiritual, and intellectual enrichment benefits. All of these benefits are known as ecosystem services because of the value they provide. Without forests, these services would need to be replaced and at a great expense.

At present, reforestation is slowing as commercial and residential development increases. For the first time in a century, Vermont is experiencing an overall loss of forest cover. While it is hard to pin down the exact amount of acreage, a US Forest Service report indicates Vermont may have lost up to 69,000 acres of forest land from 2010 to 2015.

The main cause of this loss is scattered, incremental residential development. Forest fragmentation results when development physically breaks up continuous forest and often happens during low-density, uncoordinated residential development. This pattern of development compromises many of the ecological and economic benefits of forests, including native fish and wildlife habitat, forest health, water quality, outdoor recreation, and forest management. Much of this type of development never triggers Act 250 review.

In recent times, Williston's landscape has experienced rapid, dramatic change. Residential, commercial and industrial development has not only resulted in forest fragmentation and loss of forest cover; Williston has also lost a sizeable area of productive farmland to development. Map 16 shows the overall extent of productive agricultural soils in Williston and the farms that were evaluated for long term agricultural viability using the town's Land Evaluation, Site Assessment (LESA) system in 1988. At that time (when some farmland had already been lost to development), there were about 9,700 acres of active or potential farmland in Williston. Roughly 2,600 more acres of farmland have been developed or taken out of production since 1988. Most of the remaining active farmland is located along the Winooski River in the Floodplain and Agricultural/Rural Residential zoning districts.

The remainder of this chapter outlines long-range strategies for preserving and protecting Williston's conservation areas, scenic viewsheds, working landscapes, and cultural resources.

13.1 - Conservation Areas - The Town of Williston will protect conservation areas that provide significant benefits for soil conservation, water quality, groundwater recharge, biological diversity and the well-being of residents.

There are seven distinct types of Conservation Areas in Williston:

1) significant wildlife habitat areas, including large meadows, forest blocks and habitat connectors;
2) areas containing uncommon, rare, threatened, or endangered species;
3) unique natural communities;
4) farmlands of local importance;
5) scenic viewsheds;
6) special flood hazard areas; and
7) streams, wetlands, lakes and ponds.

The Williston Development Bylaw Chapter 27 *Conservation Areas* defines these areas in detail.

Incompatible development would impair the ecological functions of these areas and reduce the benefits they naturally provide to humans and wildlife. For example, wetlands and vegetated stream buffers protect water quality and healthy aquatic habitat by filtering stormwater runoff and slowing downstream flooding. Conservation of forested uplands will reduce soil erosion, attenuate flooding and fluvial erosion, and provide valuable wildlife habitat. Limited recreation (hiking, cross-country skiing, birding), environmental education, and scientific research are acceptable in conservation areas as long as they are compatible with the goal of protecting the physical features, ecological functions, and biodiversity they provide.

13.1.1 Maintain Existing Conservation Areas. Williston has protected conservation areas through a mix of land acquisition, the purchase of development rights (PDR), the transfer of development rights (TDR), the designation of open space within planned developments, and its land use bylaws. Map 18 shows the location of the existing protected areas. Conservation properties that are owned by the town or the Lake Iroquois Recreational District include:

- Mud Pond and a majority of the surrounding bog and wetlands within the upper reach of Allen Brook (158 acres):
- approximately half of the headwater wetlands north of Lake Iroquois (about 53 acres), which are also part of the Champlain Water District's source water protection area (see Section 11.5 of this plan);
- approximately half of the forested slopes of Brownell Mountain (107 acres), which will also function as a country park, as described in Chapter 9 - Recreation and Parks;
- the former Hill property, located along the Sucker Brook off Route 2A (20 acres), which also functions as a country park, as described in Chapter 9 - Recreation and Parks;
- the 14-acre red maple/blueberry swamp on Marshall Avenue that the town acquired when it extended Marshall Avenue, along with adjoining areas of the O'Brien Brothers development on which use is restricted due to the presence of wetlands;
- the forested slopes of the former Burnett property south of I-89 (91 acres); and
- the former Senecal property located between the Chatham Woods development and the town-owned Allen Brook Nature Trail property (14 acres).

Conservation areas that have been protected by the purchase of development rights include 70 acres on the northern part of Gramma Ridge, which is located southwest of the Five Tree Hill overlook and

portions of the conserved farms and woodlots listed in section 12.3 below. Numerous acres of streams and wetland buffers have been protected as a result of the town's development review process.

13.1.2 Continue to Protect Conservation Areas in Development Review. Development of conservation areas is subject to the town's bylaws, including the stormwater management and watershed health regulations that apply throughout Williston and the specific requirements of the zoning districts. Depending on their location and scale, projects that include conservation areas may be asked to set at least some portion of those areas aside as open space. This is required for most developments in the ARZD (see Policy 3.2.1) and encouraged in the RZD (see Policies 3.5 and 5.1.4).

Table 13.1: Residential Developments with Designated Open Space

Subdivision name	Zoning District	Open Space (acres)
Brownell	ARZD	15
Gardner	ARZD	91
Tangalos	ARZD	16
Hayes	ARZD	24
Reardon, Beers and Connelly	ARZD	34
Goldman	ARZD	10
Miller	ARZD	32
Brownell	ARZD	10
New England Theological Seminary	ARZD	42
River Hill Farm	ARZD	111
TOTAL ARZD		**384**
Wood Lily	RZD	14
Brennan Woods	RZD	101
Bittersweet Village	RZD	14
Pinecrest Village	RZD	36
Pleasant Acres	RZD	10
Old Stage Estates	RZD	46
Southridge	RZD	79
Coyote Run	RZD	14
Chelsea Commons	TCZD	2
Finney Crossing	TCZD	66
The Commons	VZD	44
TOTAL OTHER ZONING DISTRICTS		**433**
TOTAL OPEN SPACE		**818**

Approximately 818 acres of open space have been protected through Williston's development review requirements. As summarized in Table 13.1 above, 384 acres of open space has been protected by Williston's 75% open space requirement in the Agriculture/Rural Zoning District (ARZD) and an additional 433 acres of open space has been protected in all other zoning districts.

13.1.3 Develop Conservation Area Management Plans. The Conservation Commission should continue to develop and update management plans for the conservation areas owned by the town, as it does for the country parks. The commission should also work with the landowners and the Vermont Land Trust in developing management plans for the conservation areas that are under easement. These plans should emphasize the maintenance of water quality, biodiversity, and other conservation values. Currently there are management plans for Mud Pond, Five Tree Hill and Sucker Brook Hollow Country Parks, and for

the former Lyon property The Conservation Commission is currently developing a management plan for Brownell Mountain and updating the Mud Pond Country Park management plan.

13.1.4 Protect Significant Wetland and Riparian Conservation Areas. The town has identified several important wetland and riparian conservation areas including:

- the Griswold Farm and adjacent wetlands and riparian forests, located off River Cove Road at the confluence of the Muddy Brook, Allen Brook, and Winooski River;
- the floodplain forests, tributary confluences, and wetlands along the Winooski River;
- several wetlands south of I-89, including the glacial spillway, located south of Old Creamery Road; the remainder of the wetlands north of Lake Iroquois; and the remainder of the wetlands and forested uplands surrounding Mud Pond;
- the Allen Brook tributaries, wetlands, and riparian areas;
- the remaining hemlock woodlands and wetlands, located south of Mountain View Road;
- the remaining wetlands in the Industrial Zoning District, specifically including those along Marshall Avenue and south of the intersection of Industrial Avenue and Rt. 2; and
- Johnson Falls off Governor Chittenden Road.

Wetlands and riparian corridors are partially protected from incompatible development by the town's stormwater management and watershed health regulations, the Special Flood Hazard Area (in some cases), and other state and federal regulations. As part of a multi-year streambank restoration project, the town acquired six conservation easements totaling 26 acres along the Allen Brook. Permanent protection via conservation easements or acquisitions should continue to be pursued as funding opportunities allow.

The Benefits of Protecting River Corridors. Vegetated buffers along the banks of rivers, streams, lakes, ponds, and wetlands help prevent water pollution, attenuate floods, protect development from stream bank erosion, and provide important wildlife habitat. Williston's Watershed Protection regulations require a 150-foot buffer adjacent to major streams (Allen Brook, Sucker Brook, Muddy Brook), the Winooski River, and major ponds and wetlands, and a 50-foot buffer along tributary streams. More information on river corridors is available in some of the publications available on-line at http://www.anr.state.vt.us/dec/waterq/cfm/ref/Ref_Rivers.cfm.

13.1.5 Protect Significant Upland Conservation Areas. Upland conservation areas are partially protected from incompatible development by the town's regulations; nonetheless uplands are more likely to be developed than wetlands or riparian corridors and should have priority in Williston's land conservation efforts. Upland conservation areas include:

- the remaining undeveloped lands on Brownell Mountain, where conservation and trail easements or strategic acquisitions would complement the town's existing conservation area/country park;
- the unprotected portion of Gramma Ridge, north of Butternut Road, where the town has already obtained one easement; and
- the remainder of the Bur Oaks knoll (the town already owns the water tank) east of Maple Tree Place. This conservation area was set aside to protect the only regional stand of bur oaks.

This list may be expanded as the town's conservation and planning commissions identify other parcels that have significant conservation value.

13.1.6 Protect Significant Wildlife Habitat Conservation Areas. Despite past development patterns that have fragmented wildlife habitats in Williston and surrounding communities, significant areas of habitat remain that are essential for a variety of plant and animal species, that contribute to local biological diversity and ecological integrity, and that support traditional activities such as hunting and fishing. Maintaining connectivity through the protection of wildlife habitat and travel corridors is critical to the long-term survival of several wildlife species.

Utilizing a Lake Champlain Basin Grant, several objectives stated in the 2011-2016 Williston Comprehensive Plan were accomplished, including 1) Identification of significant wildlife habitat and travel corridors, 2) Development of a mechanism to protect significant wildlife habitat, and 3) Development of standards to protect significant wildlife habitat in development review. As the first step, several areas characterized as significant habitat were identified in *An Assessment of Wildlife Habitat in Williston, VT, 2005.* This University of Vermont study, copies of which are available from Williston Planning, identifies seven wildlife habitat "units" – blocks of land characterized by relatively low development densities - that comprise functional habitat for many identified wildlife species.

A follow-up study, *An Assessment of Wildlife Habitat in Williston: Expanded Land Cover Mapping and Corridor Modeling*, was completed in 2011. This assessment completed the land-cover mapping of the entire town; revised the potential habitat maps for the previously-used set of representative species; and 3) identified possible wildlife migration corridors or landscape connections between important habitat blocks.

A clear and unambiguous definition of significant wildlife habitat was developed based on the data from the studies. The definition of significant wildlife habitat and associated map was incorporated in the town's *Unified Development Bylaw* together with appropriate habitat protection standards as an overlay district. These standards facilitate the protection of areas characterized as significant wildlife habitat (i.e., located within one of the defined wildlife areas, or encompassing an identified wildlife travel corridor or other identifiable significant habitat feature).

The town should continue to implement these standards. For these areas to retain their ecological functions for wildlife, it is important that future development be carefully located and designed to avoid habitat fragmentation and adverse impacts (i.e., impacts that would demonstrably reduce the ecological function of habitat on a particular parcel).

13.1.7 Monitor and Assess the Significant Wildlife Habitat Area Modeled Data for its Continued Relevance. The town will periodically review the modeled data on which the significant wildlife habitat area is based. This can be accomplished through field surveys by town staff, hired consultants and/or trained citizen science volunteers. The resulting data will be used to further refine the significant wildlife habitat area maps.

Now that the habitat protection standards have been in place for a few years, there is an opportunity to evaluate their effectiveness and incorporate information from the Habitat Disturbance Assessments (HDA) conducted under the new standards. Since 2014, 27 development applications have been reviewed for impacts to the Significant Wildlife Habitat Area (SWHA), including 17 residential developments, 5 commercial developments, 2 Boundary Line Adjustments, 2 conservation subdivisions, and 1 municipal project. Fifteen of these projects were required to submit an HDA in order to demonstrate a finding of no adverse impact to the SWHA. None of the HDAs submitted to date have resulted in the denial of a permit or major alterations to a project. Often, however, an HDA's recommendations have been incorporated into the conditions of approval, such as retaining hedgerows and soft edges between fields and forests, or following a mowing schedule for open fields that supports

nesting grassland birds. The Town should continue to document the HDA findings and resulting effects on habitat protection, and if necessary, modify the standards in the Williston Development Bylaw Chapter 27 to more effectively achieve its intended goals.

13.1.8 Further refine the Significant Wildlife Habitat Area (SHWA) by identifying significant forest blocks and habitat connectors; develop regulatory and non-regulatory mechanisms to reduce forest fragmentation, enhance forest health, and support essential ecological functions. When the SWHA was developed in 2010/2011, the town utilized an all-inclusive and non-discriminatory approach, which modeled habitat for several species and aggregated all the different habitat types together in a single layer without discrimination, in a well-intentioned attempt to protect as much habitat as possible. Since then, regional and statewide research has highlighted the importance of a subset of natural resources – **forests** – to the maintenance of overall ecological health and function; and has also documented the increasing threat to forests from incremental development and the lack of protections under state law. Forests and wildlife ranges extend beyond parcel and political boundaries, so planners must consider how state, regional, and local actions and decisions affect these important resources and promote their longevity and productivity.

In recognition of these facts, in January 2018 Vermont adopted Act 171, which encourages and allows municipalities to address protection of forest blocks and habitat connectors. Vermont Agency of Natural Resources (ANR) has developed guidance for municipalities looking to implement Act 171. The Town should utilize this guidance to identify and prioritize significant forest blocks and habitat connectors within the SWHA, and to develop regulatory and non-regulatory mechanisms to reduce forest fragmentation, enhance forest health, and support essential ecological functions.

13.1.9 Utilize Environmental Reserve Funds and Other Non-Regulatory Strategies to Protect Conservation Areas. Because conservation areas are especially sensitive to impacts from not only development but also land management techniques (e.g., clearing) that are not easily covered by development regulations, the town should employ appropriate non-regulatory strategies in addition to regulatory standards to protect significant wildlife habitat and other conservation areas. In 2013 the Town used Geographic Information Systems (GIS) technology and scoring criteria to develop a prioritization matrix to identify and prioritize key areas for long-term protection through the use of the town's Environmental Reserve Fund. Total parcel scores were used to classify parcels as high, medium or low priority. This prioritization matrix serves as an important tool to guide decisions about funding future conservation easements or land acquisitions, and should be updated periodically. Other non-regulatory strategies should be promoted, such as encouraging landowner involvement in the wetlands reserve program, habitat improvement programs, and conservation easements and/or current use if applicable. The town will continue to fund its Purchase of Development Rights (PDR) program, and to work with other organizations including the Vermont Land Trust and the Vermont Housing and Conservation Board to leverage funds. While many landowners are uncomfortable with permanent restrictions on their rights, the town should always be ready to assist those who are willing to commit to conservation.

13.1.10 Promote Private Stewardship of Conservation Areas. Listing private lands as a conservation area will not affect their continued use for farming, forest management, or fee-based recreation. In fact, the town supports private stewardship and encourages sound land management practices (for example, maintaining a forest structure – including snags, downed trees, and understory vegetation – that supports diverse wildlife). The town is also proactive in educating landowners about the current regulations designed to protect conservation areas, such as watershed protection buffer requirements, and encourages them to take steps that bring them closer to compliance with all applicable laws.

13.1.11 Ensure Compliance with Conditions of Approval. In many cases, conditions of approval for new developments include required actions that are designed to protect Williston's natural resources. For example, as a condition of approval, a Class III wetland may require a 25-foot buffer and permanent demarcation on the ground, such as a fence or a tree line, to memorialize its location. The town will work to ensure ongoing compliance with conditions of approval. Compliance with pre-existing conditions of approval is required prior to issuing any new permits. When a property changes ownership, the buyer usually requests verification that no outstanding zoning violations exist on the seller's property.

13.1.12 Improve the Transfer of Development Rights (TDR) Program to Better Protect Open Space Resources. Transferring the development rights from one piece of land to another can be an effective tool for preserving important agricultural lands and other environmentally sensitive landscapes. The town has used this mechanism to a limited degree but the process for doing this has been defined only in outline form. The town should consider developing a more robust set of standards for transferring development rights from land areas that the town wishes to preserve to those portions of town where the town wishes to encourage development, such as the Growth Center. Such standards might include the establishment of a "Land Bank," where the town purchases development rights, "banks" those rights and then later sells them to developers who wish to increase the density of their projects.

13.2 - Scenic Viewsheds - The town will protect and maintain the visual character that defines Williston, including open fields and meadows, wooded slopes and ridgelines, and scenic viewpoints.

When driving, bicycling, or hiking through Williston - especially the rural areas - one enjoys views of rolling fields framed by a background of wooded slopes, nearby ridgelines, and distant mountains. These views are central to the sense of place the residents of Williston treasure. To help maintain that sense of place, the town undertook a detailed assessment that systematically evaluated the visual character and quality of the local landscape in 1989. The results of that analysis are provided on Map 19. The accompanying report is available from the town planning office. Briefly, Williston's visual character is created by open fields and meadows, wooded hillsides, and ridgelines. These features, and the contrast between them, create a visually satisfying mosaic that is especially appealing where it includes long views to dramatic landforms, such as Camel's Hump or Mt. Mansfield.

Some of the most important visual resources illustrated on Map 19 are listed below. This list does not include scenic farmlands, which are listed separately in section 13.3 below. Note the substantial overlap with other open space types. Scenic viewsheds that are at least partially protected from incompatible development include:

- the Brennan field, south of Mountain View Road, part of which was designated as open space when the Brennan Woods Subdivision was approved;

- the Martel Hill, located north of Mountain View Road, a portion of which was set aside as open space when a residential subdivision was approved;

- the Southridge fields – which were designated as open space in the development review process - that provide an open view up to the homes of the Southridge Subdivision, north of Rt. 2;

- the former Mahan Farm fields, south of Route 2, which the town has committed to conserve as mitigation for the approval of Maple Tree Place;

- the LaCasse fields along South Brownell Road, a portion of which were designated as open space when a residential subdivision was approved;

- Brownell Mountain, the northern slopes of which are a future country park and conservation area; and

- the former Lyons fields south of Town Hall, which are town property.

- the fields southwest of the intersection of Mountain View and Old Stage roads, approx. 15¶ acres, as well as an additional approx. 38¶ acres of forest and pasture open space, which are protected as open space and offered as town property as the substantial benefit for the Glaser Specific Plan SP 23-01. Parcel ID 09-012-082-000.

Some viewsheds have recently been subdivided, or are now in the development review process, including the former Swift property along Oak Hill Road, the former Brown fields west of South Road, the former Foxwood Farm north of Maple Tree Place, and a portion of the ridge that forms (roughly) the boundary between Williston and Richmond. Some open space will be protected in each of these developments. Scenic properties that currently have no formal protection from incompatible uses include:

- open fields and meadows, including the pastures along River Cove Road; ~~the fields southwest of the intersection of Mountain View and Old Stage roads;~~ meadows south of Governor Chittenden Road; and portions of several parcels along Oak Hill; and

- prominent ridgelines, including much of the Richmond Ridge; the hills that lie above the Winooski River; the highlands above I-89 between South Brownell and Oak Hill roads; and the north-south ridge, including Gramma Ridge that runs through the central portion of Williston south of Old Creamery Road.

13.2.1 Update the Visual Resource Assessment. Williston's landscape has changed since the visual resource assessment was done in 1989. Development has filled some views, formerly open fields are no longer mowed, and the number of public viewpoints has grown as roads and trails are extended. A new visual resources analysis should be conducted using a combination of public participation and geographic information systems technology.

13.2.2 Continue to Consider Visual Resources in Development Review. Visual impacts will continue to be considered in the review of any proposed development project in a scenic viewshed identified on Map 19 or its successor (as called for by Policy 13.2.1, above), including Administrative Permit proposals to construct new homes and other buildings that were not part of a subdivision process where building envelopes were identified. The bylaw should be updated to clarify this permit review criteria.

The town originally implemented this policy through two overlay zoning districts: the Ridgelines/Wooded Hillside and Special Features. In 2008, the Ridgelines/Wooded Hillside and Special Features Overlays were replaced with specific performance standards, including standards designed to minimize the impact of development on important viewsheds. These standards address the siting of structures (outside the viewshed if possible, or where they will have the least impact if it is not) and building design, including height, color, scale, area of glass surface, outdoor lighting, and signs. The standards also limit clearing and thinning of wooded landscapes on ridgelines and steep slopes.

13.2.3 Explore New Methods and Technologies That Will Better Illustrate the Impact of Proposed Development on the Landscape. The town currently relies on the Visual Resource Overlay to guide development projects in Williston. To avoid being subjective, the town should explore new visual assessment methods and technologies that developers can use to better illustrate how the proposed development will impact the landscape.

13.2.4 Promote Private Stewardship of Scenic Viewsheds. Like conservation areas, scenic viewsheds are best protected by continuing private use for agriculture, wood lots, and recreation. The town will implement the same tools listed in Policy 13.1.8 to help landowners maintain scenic viewsheds.

13.3 - Working Landscapes - The Town of Williston will encourage landowners to actively manage their resources for the production of food, forest, and earth products; wildlife, scenic views; and outdoor recreation. This support will include continued funding for the purchase of development rights; zoning for a reasonable range of income-generating activities in the ARZD; and encouraging landowners to take advantage of Current Use and other working lands incentive programs.

Working landscapes are lands actively used for the production of food, fiber, earth products, and outdoor recreation. They include cropland, dairies, woodlots, orchards, sugarbushes, pastures, plant nurseries, sand mines, and fee-based recreation areas. Working landscapes do not include meadows or fields that are only periodically hayed for aesthetic purposes. These lands may fall into types of open space, but the intent here is to include only lands from which the owners derive at least a part of their livelihood.

Working landscapes are what many residents and visitors see as the classic image of Vermont. The persistence of these traditional land uses in rapidly changing Williston is a credit to the perseverance and hard work of dedicated private landowners. The policies adopted here seek to support their continued stewardship.

13.3.1 Support and Encourage Enrollment in the Current Use Program. Rapidly increasing property taxes are one of the factors contributing to the loss of working landscapes and other open spaces. Current Use helps farm and forest landowners keep their land productive by assessing it for property tax purposes based on its use value, not its development value. This lowers the owners' property tax burden. In exchange for the use value assessment, owners keep their land in productive management and pledge not to develop it while they are enrolled in the program. While the state's Current Use Program has been effective at protecting large parcels of working lands, the minimum size requirement and the program's complexity has been an obstacle for many landowners who wish to keep active farms or woodlots. Several years ago, a legislative Current Use Task Force helped to develop strategies for improving the Program. Citizen groups such as the Working Lands Enterprise Board and the Current Use Tax Coalition continue to advocate for Current Use and strategize improvements to the program. Williston should participate in discussions of Current Use and how to improve it, and should periodically sponsor outreach efforts to encourage eligible landowners to participate in the program.

Current Use Program. The Use Value Appraisal program provides an incentive for private landowners to keep farmland or forestland productive and undeveloped. The program assesses agricultural or forestland at its use value rather than fair market value, which lowers the property tax assessment for landowners who enroll. There are many misperceptions about the tax implications of enrolling land in the Use Value Appraisal program. For example, the State of Vermont reimburses communities for all of the tax revenue that is lost due to enrollment of land under the program. More information on Vermont's Current Use tax program may be obtained from the Department of Taxes at http://www.state.vt.us/tax/pvr.shtml.

13.3.2 Continue to Protect Important Agricultural Lands. As noted earlier in this plan, Williston has lost a sizeable area of productive farmland to development. Agriculture is still an important part of the local landscape, however, and the town will continue to work with landowners to sustain it. The town developed the LESA (Land Evaluation, Site Assessment) system on which Map 16 is based to help identify important farms in the late 1980s. The top five farms identified by that system are all still in production. These include the Clark (Riverhill), Conant, Fontaine, and Landvater properties along the Winooski River, and the Imajica farm. None of these farms are protected from conversion to other uses

by a conservation easement or other restriction. Working farms the town has helped conserve through the purchase of development rights include the Lacasse Farm on South Brownell Rd, the Johnson Farm and Woodlot at the east edge of the Village, the Siple Farm on South Rd, the Isham Farm and Bruce Farm on Oak Hill Rd, and the Burnett Farm on Route 2 west of the Village. With the local food movement, there are many small farm operations cropping up in Williston. The town should encourage and support these small farms wherever possible.

Defining Farmlands. The State of Vermont uses a definition of agricultural lands that is based solely in the important farmlands definitions adopted by the Natural Resources Conservation Service (see 10 V.SA. § 6001(15)). Those definitions, which include "prime farmland" and "farmlands of statewide importance," reflect the inherent characteristics and management of a parcel, but ignore its context. Their use in Williston and other suburban areas has been counterproductive, making it more difficult to promote a compact pattern of development because the state is "protecting" isolated parcels of productive soils that are surrounded by development and urban infrastructure. Williston follows the experience of numerous jurisdictions throughout the nation in focusing its farmland protection efforts on working farms (which may include soils that are not so productive) rather than on soil bodies.

13.3.3 Protect Other Working Landscapes. Other working landscapes include tree farms, commercial wood lots, nurseries, sand and gravel mines, and fee-based outdoor recreation. Some local examples include the Comeau sugarbush at the end of Bradley Lane, the sand and gravel operations in North Williston, the Boomhower wood lot and the former O'Brien property wood lot, located on Gramma Ridge south of Five Tree Hill, which the town has helped conserve through PDR. Outdoor recreation facilities include two golf courses (Williston and Catamount), the North Country Sportsman Club located off Old Creamery Road; and the Catamount Family Center on Governor Chittenden Road.

13.3.4 Ensure that the Town Bylaws Permit a Reasonable Range of Uses in Working Landscapes. The town will periodically review its bylaws to ensure promotion of the development of diverse, innovative agricultural activities, including farm stands; cottage industries like cheese making or other value-added enterprises; farm waste recovery for energy generation; and fee-based recreation, hospitality, and educational activities.

13.3.5 Promote Community Gardens in Designated Open Space. The town should encourage developers to designate community garden space into their development plans whether inside or outside of the designated open space.

13.3.6 Consider Land Use Conflicts when Investing in Parks or Trails. The town should carefully consider the potential conflict between public access and farm and woodlot operations before investing in country parks or trails.

13.4 Cultural Resources – The town will strive to protect and maintain significant archaeological and historic resources.

This section primarily addresses the protection of archaeological resources. The protection of historic resources is addressed in Chapter 3 - Land Use and Chapter 4 - Community Design.

Williston has a long and rich history of human settlement far predating the last several centuries of European influence. Though the clues are not so easily found and interpreted as those of European settlement, the Williston landscape abounds with evidence of its prehistoric past. To date, almost 100 archeological sites have been documented in Williston spanning the time period from about 9500BC-1600AD.

In Williston, as in every town, locating archaeological sites is a basic and necessary activity if these resources are to be preserved, interpreted and considered in town planning. In 1990 the Town of Williston began the process of identifying, inventorying and planning for the preservation of the Town's cultural resources, when it received a Certified Local Government (CLG) grant from the Vermont Division for Historic Preservation (VDHP). The CLG grant allowed the town to develop a preliminary overview of archaeological resources in town, consisting of the mapping of known sites and the development of an archaeological sensitivity map based on environmental parameters. Through this grant, 65 Native American, 92 European American and 5 unspecified archaeological sites were documented. The archaeological sensitivity map provided a predictive model of areas in Williston expected to contain more Native American sites. As more information has been gathered from around the region and through the development of more sophisticated modeling tools, this now statewide model continues to be updated and refined by the VDHP.

This map is used to provide notice to a developer that certain areas may contain archaeological sites, and may require further investigation. Areas mapped as highly sensitive have typically been established as not-to-be-disturbed buffer zones or required to conduct archaeological surveys under Act 250 regulations. The Town of Williston is currently working on strategies to incorporate protection of these cultural resources into the Town Bylaws, in much the same way we have addressed protection of other resources such as wetlands, wildlife habitat, open space and agricultural lands.

Identifying and recording archaeological sites is a lengthy and ongoing process. Since 1990, many additional sites have been identified in Williston. The concentration of known Native American sites north of Interstate 89 is primarily the result of archaeological investigations conducted as part of federal and state environmental review required for development activities. There is an abundance of identified sites in areas where surveys have been done, and an absence of sites in areas where surveys have been lacking. Therefore, the absence of sites is likely a result of not having looked in those areas, rather than an actual lack of sites.

Many of the prehistoric sites are clustered near the Allen Brook, for it not only provided water for drinking, but the rich floodplain soils also harbored prolific edible plants such as butternuts, ostrich ferns (fiddleheads), and wild leeks. The Allen Brook would have been used for transportation both on foot and by boat as well. Southern-facing rises on the landscape were particularly attractive for settlements, as these provided good views and a drier, slightly warmer microclimate. The Mahan site is one example. It is one of the largest Paleoindian sites in the Northeast, dating to about 10,500 years ago, and containing over 5,000 stone artifacts including projectile points, scrapers, knives, a drill, and many stone flakes (Thomas 2001). This site is interpreted as a summertime base camp occupied for an extended period by 25-40 people, perhaps representing a staging area for the early explorations that populated the region.

The Mahan site gives us a glimpse of the earliest cultures in Williston, but prehistoric cultures changed over the millennia as their environment continued to change and as new technologies, such as the bow and arrow, pottery and agriculture, were developed. The archeological sites in Williston document these changing technologies and cultures and suggest a nearly continuous human occupation from the earliest inhabitants of Vermont to the time of European settlement.

To ensure the protection of these and other significant sites, the following policies have been adopted.

13.4.1 All development/planning projects should be evaluated to determine the potential for impacting archaeological resources and whether there is a need for preservation action prior to site development.
All development projects under Act 250 Jurisdiction are reviewed by the Vermont Division of Historic Preservation (VDHP) for potential impacts to archaeological resources, and are required to avoid or mitigate any impacts. For development not covered by Act 250, the town should consider the inclusion

of archaeological resources as an additional Conservation Area for which impacts are considered during site plan review. The town should also consider including the following standards in the bylaw:

- New construction should be designed to avoid known archaeological sites or at least to minimize impacts on them.
- Limit soil disturbance to the minimum necessary on sites where testing for potential archaeological sites has not been done.
- Preserve known archaeological sites by capping with clean fill and sealing with asphalt or turf.

13.4.2 Utilize the assistance of the Vermont Division for Historic Preservation in evaluating potential impacts to archaeological resources. The VDHP can assist in examining maps and other documents, as well as viewing the site itself, to decide if a project could have an impact on visible ruins or buried deposits important to Williston's and Vermont's history. An archaeological consultant may need to be hired to conduct research, survey, and excavation.

13.4.3 Consider the appointment of an archaeologist to the Conservation Commission to assist in developing appropriate standards of protection and in the review of a proposed development's impacts on archaeological resources.

13.4.4 Leverage outside funding sources to conduct archaeological surveys or to protect archaeological resources. Williston is a Certified Local Government (CLG) and as such is eligible for grant funding to conduct historic research and documentation related to buildings and archaeology. Williston should use this funding where appropriate.

13.4.5 Use the archaeological sensitivity map as a focus for future archaeological surveys, through grants or donations, especially in under surveyed areas of town.