

CHAPTER

4

PUBLIC INFRASTRUCTURE AND MUNICIPAL SERVICES

The master planning surveys in both Buckland and Shelburne identified town services as an important issue to be addressed in the Master Plan. Public safety, recreation and elder services were identified as top priorities by survey respondents. In Shelburne, 66% of the residents who responded to the Community survey stated that the public services had been important or very important in their decision to move to or live in Shelburne.

The public infrastructure and municipal services section addresses:

Water Supply

Waste Disposal

- Solid and Hazardous Waste
- Wastewater Treatment

Schools

Emergency Services

Elder Services

Recreational Facilities

Parking – Parking in downtown Shelburne Falls has been discussed in the Transportation section of this Master Plan.

Water Supply

The Shelburne Falls Fire District (“Fire District”) was established in 1912, and provides water supply to approximately 2,200 persons within the village of Shelburne Falls, on both the Buckland and Shelburne side. The water supply currently exceeds demand given the recent addition of a new public water supply well. It was found to be less expensive to drill a new well than to build a surface water filtration plant for the reservoir. The reservoir now serves as an emergency back up for the system. The Fire District's permit from the Department of Environmental Protection allows them to draw up to 310,000 gallons/day. The current demand averages approximately 210,000 gallons/day over the course of the year. Thus, approximately 70% of the system's capacity is currently being utilized. The water sources for the Shelburne Falls Fire District are listed in Table 4-1.

One of the issues facing the Shelburne Falls Fire District is the protection of the water source. The wells providing water to Shelburne Falls are located in Colrain. The town of Colrain is not willing to utilize town funding to protect land around the wellheads. The onus is, therefore, on

the Fire District to protect this resource. The Fire District has already acquired land around the water supplies in Colrain. However, this is an expensive and time-consuming strategy. The towns of Buckland and Shelburne would be well served to identify any aquifers and potential water supply sources within their own town boundaries to ensure protection of the local water supply. Potential aquifer areas are identified on the Water Resources and Wildlife Habitat Map in the Natural Resources section of this Master Plan. The Natural Resources section also proposes the establishment of aquifer protection overlay districts to protect the aquifer resources within the town boundaries that may serve as potential water sources for the towns at a future date if needed. The United States Geological Survey (USGS) has identified a single area in the two towns with a potential yield of 51 - 200 gallons per minute. This area lies right below Shelburne Falls Village Center on the Shelburne side and would not be suitable for locating a public water supply given the type and intensity of uses which currently exist. The next yield category of 50 gallons or less per minute runs along the Deerfield River on both the Buckland and the Shelburne banks, and along the Clesson Brook and Clark Brook in Buckland. It is important to note that these ranges are estimates based on soil conditions. Ideally, the Fire District would need a well with a yield of 150 gallons per minute (GPM) to be a suitable source for public water supply.

Table 4-1: Shelburne Falls Fire District Public Water Supplies

Source Name/Type	Ground Or Surface	Availability/Status
Well #1	G	Inactive
Fox Brook Reservoir	S	Emergency
Well #2	G	Inactive
Well #1 Replacement	G	Active

Source: Massachusetts Department of Environmental Protection

Notes: GP = Gravel Packed

P = Purchased

Protection of drinking water quality is of critical importance in Buckland and Shelburne. Development always impacts water quality, and future expansion will affect resources available for use as the towns grow. Threats to ground water include agricultural runoff, salt storage residue, road salting, contaminated runoff from paved surfaces, failing septic systems, leaking underground storage tanks (UST), abandoned unlined landfills, and chemical contamination from business and industry. Development in the two towns has been moderate, and the municipal public water supply, which is closely monitored, has not suffered from contamination. Central water supply in Shelburne Falls allows residences and businesses to share the expense of providing and maintaining a water supply, thereby reducing development costs and encouraging growth in the parts of the towns serviced by the system. An important link exists between the availability of water service and control of development.

There are two Non-Community public water supply wells in Buckland and eleven in Shelburne. By definition, a public water supply provides piped water for human consumption, if such system has at least fifteen service connections or regularly serves a minimum of 25 individuals daily at least 60 days of the year. A Non-Community source is one that serves 25 or more persons, such as a school, factory, campsite, or restaurant. This may be Transient or Non-

Transient, depending upon the usage period. Sources that are in use for less than six months are considered Transient.

As increasingly demanding regulations have been adopted to ensure environmental integrity under the Safe Drinking Water Act, public water suppliers in the region have been challenged to upgrade facilities and to expand testing and monitoring. Several state, federal and independent agencies and organizations exist to aid suppliers with the financial burden of planning, infrastructure maintenance and testing. The FRCOG Planning Department provides technical assistance and local planning services to Buckland and Shelburne.

Wellhead Protection

The risk of water supply contamination is evident in tests seen throughout the state. According to the DEP, 231 public water sources were permanently closed due to ground water contamination in 89 Massachusetts communities as of January, 1998. Volatile organic compounds were the cause of contamination in 59% of cases; 27% were closed due to inorganic compounds, synthetic organic compounds and natural causes; 8% were discontinued due to a combination of these; and the rest were closed due to varied causes. Because preventive measures are much more cost effective than remedial efforts, protection of public water supplies is best done before problems arise. Contaminants may be either agricultural or industrial in origin. Contamination of ground water results from hazardous material leaks, agricultural and golf course runoff, road salt, landfills, surface impoundments, sewers, pipelines, and underground storage tanks (USTs). Waste disposal practices for sanitary, solid, and industrial waste are the most serious sources of ground water pollution. Approximately one-half of all homes in Buckland and Shelburne rely on septic systems to dispose of human waste. The large number and widespread use of these systems makes them a serious possible contamination source.

Ground water conductivity is determined by gravity, pressure, material permeability and slope. Well pumping alters the natural movement of ground water. When pumped, ground water around the well is pulled down and into the well. This area may extend to many miles, depending on local hydrogeological conditions. Replenishment of the ground water aquifer is known as recharge and occurs primarily from precipitation percolating through the land's surface. Under certain conditions, surface waters also provide ground water recharge, called induced recharge. A Zone II wellhead protection zone should encompass the entire pumped and recharge area.

In general, the protection of water resources, particularly wellheads, is crucial because ground water pollution is difficult to correct and the cost of clean-up and remediation is usually high. The purpose of delineating wellhead protection areas is to define the geographic limits most critical to the preservation of a wellfield. Properly identifying the recharge area is also critical because the introduction of contaminants into the recharge area can cause aquifer contamination.

The EPA lists a five-part process for wellhead protection including: forming a community group, mapping water protection areas, identifying potential contamination sources, managing the

protection area, and planning for the future. Identification of water protection areas should include overlay maps of watersheds, aquifers and their recharge areas; wellhead zones of influence and contribution; direction of ground water flow, soil, geology; FEMA floodplain maps; and all wetlands, streams, lakes and ponds from which wells may induce recharge.

The EPA-designated zones of protection comprise several levels of safety. The Zone I designation is a 400' radius around the wellhead for primary resource protection. Because any breach within this first zone of defense could directly and immediately impact water quality, acquisition or control of land in this zone is imperative for protection. The Interim Wellhead Protection Area reaches to a radius of one half mile and is intended to be a temporary designation until a Zone II protection area can be established by a pump test. The Zone II designation extends to the area drawn upon if no rain falls for 180 days. Zone II areas supply recharge to the public supply well under the most severe pumping and recharge conditions that can be realistically anticipated. Local regulation of land use activity in this area is critical to maintain potable water supplies. Contaminants that percolate down through the unsaturated zone to the aquifer have the potential to move with the ground water flow and pollute a public supply well. Unlike the mixing and dilution that occurs between pollutants and the water in surface water bodies such as lakes and streams, pollutants in the ground water often remain concentrated in a contaminant plume.

The Safe Drinking Water Act of 1974 designated the Environmental Protection Agency as the federal authority for implementation of this new law. In Massachusetts, authority was delegated to the DEP to govern the oversight of public water supplies in the state. Because the double protection of federal and state-mandated restrictions are in place, municipal public water supply systems are closely regulated and monitored for quality. However, some municipal and non-municipal public water suppliers have not yet identified or protected their Zone II areas. The towns should encourage entities that own and manage public water supply wells to identify and protect the Zone II areas around these wells.

Protection of Private Wells

Currently, no coordinated program exists to monitor and track water quality of private wells in Buckland and Shelburne. The local Boards of Health are only able to review private water supplies at the time of new well installation. Subsequent contamination may remain undetected for years. Because approximately half of the homes in the two towns rely on private wells for water supply, the need for protection of these water resources is important. According to a nationwide study, about 60% of all private wells contain various pollutants at levels exceeding public drinking water standards. The most common sources of private well pollution are septic systems, pesticides, road salt, underground fuel tanks, hazardous waste, and landfills. One gallon of cleaning solvent, waste oil, or gasoline can contaminate one million gallons of ground water. The quantity of water has also decreased noticeably in some wells as new housing has drawn upon the same sources.

Goal

To safeguard the quality and quantity of public and private drinking water supplies.

Strategies

Pursue state financial assistance to identify ground water supplies and Zone II recharge areas, as well as technical assistance to develop resource protection strategies.

Prioritize the acquisition of land in Zone I protection areas for all community water supplies.

Prioritize the delineation of Zone II wellhead protection areas within the towns to preserve community water supplies utilizing the EPA's five-part Wellhead Protection Program.

Protect zones of influence for existing and potential water supplies through adoption of aquifer overlay districts and associated zoning regulations.

Manage the Zone II wellhead protection area by orchestrating adequate land use regulations to protect all ground water supplies and resources. For more details on the tools and techniques that may be used, refer to the Land Use and Zoning section.

Plan for the future by reviewing the Wellhead Protection Program yearly, identifying future problems and their solutions, and developing contingency plans for alternate water supplies.

Notify the DEP of all new public water suppliers to monitor water quality for public safety.

Establish a growth boundary for the water mains to be consistent with areas identified in the Land Use Section where future development is being encouraged.

Maximize water conservation when planning for development in order to limit demands on the water supply.

Initiate a program to identify all underground storage tanks. Establish leak detection and repair programs as needed and remove USTs over 20 years old.

Encourage the adoption of best management practices in all town departments, especially for the use of road salt by the highway department.

Cooperate regionally to develop a public program for affordable testing of private drinking water supplies to ensure preservation of high quality resources.

Encourage the development of educational outreach and guidelines for private well maintenance and wellhead protection to protect private water supplies.

Identify and map locations of private wells to prevent contamination from road salt, herbicides and other contaminants by limiting applications near those locations.

Educate septic system owners about the dangers of septic system cleaners and the importance of adhering to a maintenance schedule.

Boards of Health should strictly adhere to Title 5 requirements and encourage the use of alternative septic systems in situations where enhanced wastewater treatment is needed to protect ground water supplies.

Waste Disposal

Solid and Hazardous Waste

A number of landfills have been closing around New England in the last 10 years. There are several reasons for landfill closure, including lack of space, environmental concerns, and the will of local community groups. However, the major reason is Subtitle D of the federal Resource Conservation and Recovery Act, which mandates the closure of unlined landfills.

Since 1989, the Massachusetts Department of Environmental Protection has conducted environmental assessments of operating town landfills, which is the first step in closure. After landfill operations cease, capping of the site requires three to four months when the weather is most conducive to earthmoving functions, usually July through October. The procurement of funding to cap landfills presents a challenge to towns as costs average \$100,000 per acre for capping. In addition, ground water testing and monitoring must be maintained for up to thirty years at neighboring sites. The various components involved in landfill closure are:

- Excavation and removal of refuse
- Impervious cover layer
- Drainage layer, loaming, and seeding
- Site Preparation
- Gas vents
- Rip-rap

Buckland and Shelburne have been challenged to provide for environmentally sound solid and hazardous waste disposal as local landfills have closed, costs for waste transfer and disposal have escalated, and increasingly sophisticated regulations have been adopted to ensure environmental integrity. The closure of local unlined, potentially polluting landfills has generated a need for regionally integrated waste management systems.

The Buckland landfill was closed in June 1997. According to the DEP schedule, the landfill was due for capping in October 1998. The estimated cost to the town for this project is \$1.3 million, spread over twenty years. The waste from Buckland and Shelburne is currently being sent to the Bernardston landfill via a transfer station. This landfill is due for closure in July 1999. The two

most immediate issues facing Buckland and Shelburne are how trash will be managed and how sludge will be handled after that date. As of April 1999, Buckland and Shelburne will most likely pay to have their waste sent to the Northampton landfill.

The Franklin County Solid Waste Management District (FCSWMD) was formed a decade ago as a waste planning and contracting consortium of twenty-one Franklin County towns. It is working to locate a long-term disposal site outside the region, as no Franklin County town has expressed an interest in siting a landfill within its boundaries. Since disposal options are limited, the towns should seek long term contracts with a clear schedule of disposal fees. Equally important, the towns should implement aggressive composting and recycling programs, supported by strong educational programs, to reduce costs. The 1998 recycling rates for Buckland and Shelburne were 53% and 34% respectively. Further improving the recycling rates should be a focus for both communities. Regional plans for transfer of non-recyclables using larger compactors or transfer trailers to carry more tonnage will mean cost containment for towns in the FCSWMD.

The Massachusetts Integrated Solid Waste Management Plan provides specifications and policies to direct regional groups and municipalities. The plan calls for a waste management hierarchy, as follows: first, reduce waste as much as possible, then compost organic wastes which have an end-use, collect and market recyclables, incinerate waste where possible, and landfill waste which cannot be handled in any other manner.

This waste management plan decreases air and ground water pollution by removing the number of harmful chemicals, which are released into the ground water and atmosphere through usage and improper dumping. Municipal disposal costs are lowered by reducing the need to pay for costly disposal methods. Hazardous waste disposal is decreased by removing the amount of chemicals which must be properly collected and incinerated. Fuel usage is reduced when fewer trucking trips are required to haul waste. Use of scarce landfill space is lessened if a smaller portion of waste must be landfilled. Waste reduction decreases the use of natural resources, such as metals, minerals, timber and oil, when fewer materials are used for manufactured items or packaging and more materials are returned to the manufacturing stream by recycling programs.

Ways to generate less waste include change of buying habits by purchasing in bulk quantities, by purchasing without containers, or by utilizing reusable containers. Less trash is generated if manufacturing processes are improved to eliminate excess. Waste reduction is more efficient if redesign of packaging materials (1/3 of all waste) makes packaging reduced, recycled or eliminated altogether. Trash is further reduced by product redesign to make articles more durable and recyclable. Adoption of variable rate disposal fees, or "pay by the bag," is useful to provide waste generators with direct economic incentives to conserve resources.

Composting is a safe, efficient and relatively inexpensive way to convert food and yard wastes into a usable product. Town and home composting programs, combined with public education, have expanded participation. In our region's smaller towns, yard waste has never been a significant part of the waste stream but the larger towns maintain yard waste piles. On-site food composting for schools, hospitals, institutions and large businesses has been successfully

initiated in other parts of the country and would significantly reduce our region's waste stream. It is slowly being incorporated into some local institutional waste management programs.

The cost of trash collection is likely to increase after July 1, 1999. Hauling and tipping fees are likely to increase for the waste will need to be transported a greater distance. Types of waste that will continue to need to be landfilled are mostly construction and demolition material, mattresses, carpeting, furniture, street sweepings, dead animals, and grit and screenings from treatment plants. The anticipated increases in both hauling and disposal fees, provide an incentive to further reduce waste generation.

Hazardous Waste

While source reduction of solid waste remains a high priority, the towns of Buckland and Shelburne must also address the use and disposal of hazardous materials. Appropriate hazardous waste management is critical to ensure the protection of the environment and of public health. If hazardous wastes are improperly disposed of at landfills, down drains and through the incineration process, even though they are in small quantities, they will contaminate air, land and potentially drinking water supplies. Cost-effective management of hazardous wastes begins with education aimed at minimizing use. Environmentally safe disposal methods in use include paint swaps, paint collection, and collection of pesticides, solvents and other hazardous wastes. Since 1992, the FCSWMD has sponsored an annual collection of household hazardous waste. The collected toxic substances can be safely burned using specialized incinerators. In 1998, the FCSWMD developed four regional "super depot" sites for permanent, year-round collection of special wastes (also called universal wastes) that are no longer considered hazardous but require restricted collection and handling. These include fluorescent bulbs, oil-based paint, antifreeze, waste oil, oil filters, and rechargeable and button batteries. While the household hazardous waste collection program gathered 14 tons of toxic materials in 1997, many more tons are still uncollected and may potentially pollute our ground water and atmosphere.

Goals

To manage solid waste using an integrated management system that includes waste reduction, recycling, composting, incineration and landfilling.

To collect and dispose of hazardous waste in an environmentally sound manner.

To cap the existing landfill in Buckland with environmentally sound methods.

To identify a suitable method for disposal of municipal solid waste and institute a long-term contract with the facility.

Strategies

Establish priorities for the handling of solid waste. The first priority is to reduce the amount of waste as much as possible. The second priority is to recycle or compost waste that cannot be avoided. The third priority is to incinerate waste that cannot be recycled or composted. Finally, wastes must be landfilled that cannot be recycled, composted or burned.

Decrease the volume of municipal solid waste from incinerator and landfill facilities by maximizing participation in recycling and composting programs through public education or by providing incentives to recycle like variable rate disposal fees.

Allocate adequate storage for the collection and interim storage of materials for recycling.

Continue and expand regular hazardous waste collection.

Require commercial and industrial businesses that use, store, generate or transport hazardous materials or wastes to prepare and maintain an emergency response plan that identifies potential environmental and health risks and recommends ways to reduce those risks. Plans should be provided to local officials responsible for emergency response coordination.

Wastewater Treatment

The Shelburne Falls Wastewater District is responsible for municipal sewage treatment in Shelburne Falls. The sewage treatment plant is currently functioning at a rate that is nearing its capacity. According to the Massachusetts Department of Environmental Protection (DEP), the average monthly flow into the Shelburne Falls wastewater treatment plant was 0.23 Million Gallons per Day (MGD), implying that it was functioning at 92% of its design capacity, which is 0.25 MGD. State regulation plays a prominent role affecting the potential use of remaining capacity. Each wastewater treatment facility is required by the DEP to initiate plans for expansion when the influent loading rates reach 80% of the facility's design capacity for 90 days.

Wastewater treatment facilities are point sources of pollution. In Massachusetts, wastewater treatment facilities are licensed and regulated by the DEP through the National Pollution Discharge Elimination System (NPDES) to control types and levels of contaminants. Wastewater must be treated before being released to ground or surface waters in order to ensure the adequate removal of solids, destruction of pathogens and removal of pollutants, such as metals and organic compounds. Wastewater is generated from households and from commercial and industrial operations. There are three significant categories of wastewater to be treated: municipal sewage, which may be treated in a municipally-owned or privately-owned treatment plant; domestic septage, which typically is treated along with municipal sewage; and industrial waste water, which may be entirely or partially treated at the source, or may be incorporated into the flow of municipal sewage.

Municipal sewage contains material from commercial and industrial sources as well as from residential units, a situation that occasionally presents management concerns for wastewater treatment plants. Domestic septage is the material that is removed from a residential septic tank upon cleaning. Its composition varies and depends on many factors: household size, condition of the septic system, and user behavior. Use of a garbage disposal alters the quality and increases the quantity of septage to be treated, while a delay of pumping maintenance increases the amount of accumulated solids.

Three levels of wastewater treatment exist: primary treatment involves the physical removal of suspended particles by screens, sedimentation chambers and skimmers; secondary treatment additionally digests organic wastes using bacteria in a controlled system; and tertiary treatment adds further steps to precipitate out solids and remove compounds more difficult to extract. Facility types include: extended and conventional aeration, trickling filter, sand filter and solar aquatic system. The Shelburne Falls wastewater facility is of the Extended Aeration type.

After treatment, the solids and liquid effluents undergo separate disposal processes. The Shelburne Falls Wastewater District utilizes phragmites reed beds, as a treatment method that duplicates natural wetland cleansing processes. Reed beds incorporate specific plant materials to absorb and retain compounds from treated sludge and can reduce the volume of sludge by up to 95%. They are long-term sludge accumulation and storage systems, with reed beds being emptied approximately every ten years. The sludge is then applied to fields or incinerated. The liquid effluent is released into the Deerfield River.

The Shelburne Falls Wastewater system staff have determined that a large percentage of the load on the system is due to Combined Sewer Overflow (CSO). CSO occurs when storm water runoff mixes with sewer inflow and overloads the wastewater treatment biological process. During peak storms a portion of the sewer/storm water mixture is released directly into the nearest river to prevent overloading of the system. Ultimately, towns are responsible for conducting a comprehensive study to identify CSOs, then develop and implement separate infrastructures to alleviate the mixing of storm water and sewer inflow.

Another problem, which taxes the wastewater system, is inflow and infiltration of groundwater into the underground pipe system. The Shelburne Falls Wastewater District has purchased video equipment over the past few years to identify problem areas and begin the process of repairing damaged pipes. Last year, some of the oldest lines were replaced. This has had a positive influence on the system by reducing the inflow and infiltration problem. The task, however, is a large one. According to the Wastewater District, approximately 40% of the lines, both on the Buckland side and the Shelburne side, need to be replaced to eliminate the problem and enhance the efficiency of the system. The replacement of old sewer lines is the major project before the Wastewater District at present. Therefore, they are not planning any expansion of the sewer lines. Replacement of lines, however, will eventually free up additional capacity.

As in public water supply systems, the availability of wastewater treatment infrastructure plays a major role in determining the rate and location of development in town centers. Planning for capital improvements must be an integral part of the towns' planning efforts. The Wastewater District has a budget of \$193,000, which is raised entirely from sewer fees. The sewer fees are

calculated based on the water usage. The current rate is \$2.84 per hundred cu.ft. of water used. These fees cover operation and maintenance of the system. Capital improvements must be covered by Community Development Block Grants (CDBG) or other funding sources.

The Federal Clean Water State Revolving Fund (SRF) program provides seed money to the states to make loans to communities, individuals, and others for high-priority water-quality activities. Massachusetts uses the SRF to provide subsidized loans to communities that approximate a zero percent loan and are equivalent to a 50% grant*. While traditionally used to build or improve wastewater treatment plants, loans are also used for:

- agricultural, rural, and urban runoff control;
- estuary improvement projects;
- wet weather flow control, including stormwater and sewer overflows; and
- alternative treatment technologies.

* A zero-percent loan for 20 years saves the community 50 percent of the total project costs over a similar loan at 7.5 percent.

Both Shelburne and Buckland actively encourage growth in those parts of town where there is public sewer service for environmental reasons, since public treatment facilities safeguard water quality in densely built residential areas. However, they run the risk of exceeding the carrying capacity of their sewage treatment systems if development is not controlled through planning.

The possible introduction of privately owned wastewater treatment facilities into the towns could allow formerly undeveloped parts of the landscape to grow. The existing rural town centers, Shelburne Center and Buckland Center, and cluster developments are examples of growth that could be served by private wastewater treatment. These facilities eliminate some of the built-in growth constraints that individual septic system requirements provide.

The towns could also consider the adoption of a Phased Growth Bylaw. A Phased Growth Bylaw allows towns to limit the amount of development that occurs in any one year to ensure that the service infrastructure is not overburdened by a spurt of growth. This allows a community time to plan for infrastructure improvements within its capital budget. This is particularly important within the village district in both Buckland and Shelburne, given that the wastewater system is functioning close to capacity.

Goals

To maintain the sewer system and remove impediments to efficient functioning.

Support renovations and maintenance of the current sewer system.

To provide environmentally sound wastewater treatment.

Strategies

Establish sewer extension limits consistent with the Master Plan. The Village Residential District, as proposed in the Land Use and Zoning section (refer to the Potential Zoning Districts Map), is the area currently served by sewer and water and, given the capacity of the water and sewer system, would serve as a suitable definition of the sewer extension limit.

Consider adopting a Phased Growth Bylaw to ensure that development within the towns does not exceed the capacity of the sewer system.

Consider neighborhood treatment systems for existing development in Buckland Center and new clustered housing developments.

Plan for the construction or expansion of infrastructure that reinforces the traditional character and village development patterns of the region.

Support proposals to upgrade and improve existing wastewater treatment facilities and sewer lines.

Support the implementation of the recommendations being prepared by the engineering study of the wastewater treatment plant that is currently underway to determine the state of the plant and needed renovations.

Direct rain gutters to dry wells or alternative means of disposal to reduce stormwater runoff.

Schools

The school system includes the Buckland - Shelburne Regional Elementary School in Shelburne Falls and the Mohawk Regional High School in Buckland. The functioning of each of these schools is overseen by separate school committees. Generally, a Master Plan analyzes the expected capital needs of a school system based on projected populations and school-aged children. Shelburne and Buckland, however, have recently addressed the capital needs of their school system. The Mohawk Regional High School District has just completed an addition costing \$3.8 million which should address the needs of the communities for the next 10 to 20 years. Similarly, renovations have recently been completed at the Buckland-Shelburne Elementary School and are expected to last for a similar time frame. Since the capital needs have recently been addressed, the Master Plan will not include this topic.

However, from the results of the community surveys, it is evident that the school system remains a critical and important issue for town residents. The issues that were raised in the survey responses suggest that the cost of the school system and the curriculum provided by the school system are the main areas of concern. In Shelburne, 66% of the residents who responded to the Community survey stated that the public school system had been important or very important in their decision to move to, or live in, Shelburne.

Overall, 82% of survey respondents from Shelburne felt that it is important, or very important, for the Master Plan to assess future capacity needs of the school system and plan for those needs. Of the survey respondents, 16% did not comment on the school system. We speculate that this may be due to demographic reasons with some respondents not having members of their family that are of school age.

In Shelburne, 50% of the survey respondents stated that they are dissatisfied with the public school system and 35% are satisfied with it. Of the people who were dissatisfied with the school system, 45% identified the curriculum as a problem, 30% cited inefficient use of money, and 10% expressed the need for more discipline. The school related issues prioritized by the respondents from Shelburne are the year round use of school facilities (44% of survey respondents) and job preparatory skills and the curriculum (42% of survey respondents).

Goal

To create a school system that meets the needs of the students, the faculty, and the residents of Shelburne.

Strategies

Encourage excellence in the educational system of the community.

Devise a method to address curriculum issues.

Pursue a School-to-Work program.

Lobby the State for increased State responsibility and funding for public schools to ensure an equitable educational system throughout the Commonwealth of Massachusetts and to ease the financial burden on municipalities.

Libraries

There are three libraries within the study area: the Buckland Public Library in Buckland Center, the Shelburne Free Public Library in Shelburne Center, and the Arms Library in Shelburne Falls. In Shelburne, 21% of the survey respondents selected the Arms Library as their favorite historic resource. Renovation of Arms Library was cited as one of the three most important capital expenditures needed in the Town of Shelburne by 30% of the survey respondents. In Shelburne, 27% of the respondent households use the libraries at least once a week and an additional 25% use it at least once a month. Only 26% of the households responding to the survey do not use the libraries at all.

The Buckland survey asked residents if they would like to see expanded services in the Buckland Public Library. Additional programs for children and new material, including print, non-print, and electronic material, received the highest support, both selected by 53% of survey respondents. Increased hours were favored by 39% and programs for general patrons by 36% of the respondents.

Shelburne residents were asked similar questions about the Arms Library and the Shelburne Free Public Library. For the Arms Library, new material was prioritized by 49% of the survey respondent, programs for children by 44%, handicapped access by 42%, and increased hours by 36% of the respondents. For the Shelburne Free Public Library, 33% of the respondents identified new material as a high priority. Additionally, 30% of the respondents would like to see more programs for children, and 27% would like increased hours.

The Library Commission for the Arms Library recently received a grant of \$30,000 from the Board of Library Commissioners for repairs to the roof of the building. The Arms Library Commission is also currently involved in a twenty year Needs Study for Accessibility. The proposed improvements include handicapped access ramps, expanded space for the Children's Room, and possible expansion of the facility. The approximate cost for design and construction of the improvements is estimated at \$1 million. The town of Shelburne has agreed to include the library renovations in the next Community Development Block Grant (CDBG) application. However, it is important to note that additional space and multiple exits created as a result of expansion will place additional demands on library staff.

Elder Services

How a community takes care of its aging residents is reflective of the quality of life that is present for all residents, especially for those who have made the Shelburne Falls area their home. This sense of support for one's own community is evident in the Survey results that focused directly and indirectly on the quantity and quality of elder services provided to residents. Respondents to Shelburne's Community Survey felt that the budget for Elder Services, as part of Human Services should be increased (47% of respondents) or at least maintained (50% of the respondents). Based on the budget question in Buckland's Community Survey, Elderly Services was elected as the fourth most important expenditure among respondents.

According to an analysis of 1990 Census of Population and Housing figures (see Table 4-2), just under 13 % of Buckland's population was 65 years or older, while the same cohort represented 19 % of Shelburne's total population. This is likely due to the presence of nursing homes (e.g. Anchorage, Labelle's) and the Highland Village elderly housing complex in Shelburne. Population projections show that by the year 2010, the percentage of the population comprised of elders will be roughly 15 % for each town (see Table 4-3).

Table 4-2: Number of Buckland and Shelburne Residents \geq 65 Years In Age – 1990

Age Group	Buckland	Shelburne
65-69 years	75	88
70-74 years	59	75
75-79 years	51	73
80-84 years	38	62
85 + years	22	76
Total 65+	245	374
Total Pop.	1928	2012

Source: 1990 Census of Population and Housing, Summary Tape File

Table 4-3: Number of Buckland and Shelburne Residents \geq 65 Years In Age – 2010

Age Group	Buckland	Shelburne
65-69 years	100	101
70-74 years	73	52
75-79 years	60	52
80-84 years	38	44
85 + years	45	60
Total 65+	316	309
Total Pop.	2178	2107

Source: MISER Population Projections, Zongli Tang, demographer

In the following report the goals and objectives will be followed by a description of the services provided by the Shelburne Senior Center. Next, the main issues of concern relating to the effectiveness of the current system will be presented. Finally, recommendations based on the current and future needs of elderly residents will conclude this section.

Based on Buckland's and Shelburne's Community Surveys that were completed in 1996 and 1997, respectively, each town's Master Planning Committee prepared a document describing their goals and objectives for the joint Master Plan. Although the objectives that focused on improving elder services were included only within Shelburne's sections titled Town Services and Transportation, (there were no Goals and Objectives in Buckland's plan), they have been consolidated and are presented in the format below.

Goals

To expand elder services.

To improve accessibility for the elderly and disabled.

Strategies

Explore the feasibility of developing new or expanding existing elder services and housing including identification of funding sources.

Assist in implementing accessibility improvements for municipal and other village center buildings, which are compatible with the historic character of the business district.

Elder Services Provided

The Shelburne Senior Center is currently the “hub” from which elder services are provided to residents of Buckland and Shelburne as part of the Ashfield, Buckland, Colrain, and Shelburne Council on Aging Consortium’s activities. The Consortium was formed when it became apparent that each individual town’s Council on Aging was too small to provide the services required. The Selectmen from each community signed a Memorandum of Understanding (M.O.U.) agreeing to share the expenses of providing for elder services together.

The Shelburne Senior Center is located at 7 Main Street in Shelburne Falls within a small building currently owned by the Masons. The Center has four rooms, two offices for seven (7) people, a dining area, a small activity room, and one bathroom. There are three types of services that are currently provided through the activities of the Shelburne Senior Center: programming, meals, and transportation.

Shelburne acts as the lead town in the Consortium and provides a payroll payment process and access to a town-wide health insurance and retirement plan for employees of the Consortium. The Consortium has in its employ, the Director, at 32 hours per week (each town receiving 8 hours of the Director’s time per week), and one other part-time person at 20 hours per week. A volunteer board, the Council on Aging, acts as the direct supervisor to the Director.

The funding for the Shelburne Senior Center elder service programs come from three main sources. The first is currently an \$85,000/year contract with the Franklin County Home Care Area Agency that is used exclusively for the nutrition program. This pays for all the meals that caterers provide on a daily basis. Next, a separate contract through the Franklin Regional Transit Authority (FRTA) pays for all transportation related expenses, which is limited to supporting one driver at thirty (30) hours per week and another driver at ten (10) hours per week. All the social and recreational, health and exercise, and informational programming is funded through low user-fees, grants, and volunteerism, all organized by Center staff.

Programming

There are three different types of programming that the Shelburne Senior Center provides. *Social and recreational programs* include a variety of activities and events that are organized to provide weekly, monthly, and special opportunities for socialization. Parties and get-togethers are organized around appropriate holidays. Outside trips to area restaurants, musical

presentations, and bingo are also regular programs. Painting and creative writing classes, and book discussion groups are scheduled on a monthly basis as well.

The other two types of programming include *health and exercise programs* and *monthly speakers*. The health and exercise programs include three (3) different weekly exercise programs. Two of these weekly exercise programs take place at the Cowell Gymnasium in association with the Mohawk Valley Health and Educational Services, and the other one takes place at the Senior Center. Monthly blood pressure and foot-care clinics are provided as well. Monthly speakers present important information on current issues. One or two speakers per month share information on health related topics such as diet and nutrition. Other speakers present issues relevant to the elderly, including legal services, estate planning, caregiving, and changes to medical insurance processes.

Meals

Meals are provided to elderly residents of Buckland and Shelburne in three different capacities. First, *congregate meals* are served at the Senior Center. A caterer delivers prepared meals that are warmed before serving at the Senior Center. These meals are served on Mondays, Tuesdays, and Thursdays. Secondly, the Center provides *home delivered meals* five days a week. Lastly, all are welcome to request *frozen dinners for the weekends*. Thus in all, elderly residents may receive meals seven (7) days per week.

Transportation

The Shelburne Senior Center is mandated by the Franklin Regional Transit Authority to prioritize their transportation services in the following order from most important to least: rides for medical appointments; rides to Senior Center programs, including meals; shopping trips; and rides to social and recreational activities.

Elder Service Issues

According to the Senior Center Director, Bill Korzenowski, there is one main issue of concern that affects the ability of the Shelburne Senior Center to effectively deliver elder services for the residents of Buckland and Shelburne, now and in the future. That is, the need for adequate funding.

Inadequate Funding

Within the issue of inadequate funding lie several concerns. The first is that although the number of elderly served in both towns is considerable, it could be higher. Seniors, who fear intervention because it may result in their living in a nursing home, may be less likely to ask for meals. An Outreach Worker could help to reassure people by letting them know that it is the full

intention of the Senior Center to help elders have fulfilling lives while still being as independent as possible. The people who are in most need of nutritional assistance often do not receive it until they are in trouble. At that point, an intervention is likely to happen, resulting in the unnecessary loss of personal independence for that person and expensive nursing home care. A potential indirect result of the early entrance of elderly residents into long-term nursing home care could very well be the premature conversion of their land assets to support that expense.

Secondly, transportation services are mandated by the FRTA to provide services to the greatest number of people over time. FRTA funds transportation services for nine towns, four of which make up the Consortium. Without additional transportation funds, the Shelburne Senior Center is tied to that policy. Additional transportation services are needed to assist seniors requiring frequent medical visits that require long waiting periods from the drivers.

Finally, improved coordination between the Shelburne Senior Center, the Council on Aging, and the town governments in Buckland and Shelburne is needed to increase the Center's ability to access financial support from State agencies. Much of the additional funding that a community might compete for to provide elder services requires an active partnership between the towns of Buckland and Shelburne, the Senior Center and the Consortium.

Recommendations

Based on the Community Surveys, the residents of both Buckland and Shelburne expect a sustained and effective level of elder services to be provided to their elderly community members and themselves. The Shelburne Senior Center is an important community resource for senior citizens. Additional services could be offered but require financial support from state programs that must be accessed by the Towns in partnership with the Senior Center. The following short and long-term recommendations are offered in the spirit that the care of our elder community members is extremely important and benefits all residents, either now or in the future.

- The Council on Aging and the Towns of Buckland and Shelburne need to improve coordination to support the short-term and long-term success of the Shelburne Senior Center and the Elder Services Program.
- The Selectmen from each Town should meet with the Council of Aging and the Director of the Shelburne Senior Center together on a quarterly basis to discover solutions for expanding services.
- The Council on Aging should identify potential funding sources that are available to Buckland and Shelburne to help support elder services.
- The Council on Aging should explore the feasibility of formalizing a link between the Senior Center and the Towns for the purpose of accessing State programs.

- The Council on Aging, working in conjunction with the Director of the Center, should determine the feasibility of developing a volunteer program specifically for the purpose of providing transportation for necessary medical services.
- The Council on Aging should work with the Shelburne Falls Business Association as well as the Historical Commissions to implement accessibility improvements for buildings and sidewalks.

Emergency Services

Emergency services in the towns of Shelburne and Buckland are handled by the town Police and the Fire Districts. Fire and Emergency Management Services (EMS) in Shelburne are not part of the Town Budget. Financing for these items comes from Fire District taxes. The towns currently have three fire districts: Shelburne Falls, rural Buckland, and rural Shelburne. According to the community surveys, the residents of the two towns are satisfied with the Fire and Emergency Management Services, both within the Shelburne Falls village district and in the outlying rural area. Of the survey respondents from Shelburne, 80% find the fire services satisfactory and only 4% do not, and 66% find the Emergency Management Services satisfactory, while 6% do not. However, 11% of the Shelburne respondents also felt that overburdened police and fire services was one of the serious problems facing Shelburne today.

Vandalism and theft was identified as the biggest concern by Shelburne residents who responded to the Community Survey. Overall, 36% of the respondents stated that this was one of the major problems facing Shelburne. When asked about the Town budget, 59% of the respondents to the Shelburne Community Survey favored keeping the percentage of funds allocated to public safety functions, including police and animal control, constant. Of the remaining respondents, 19% would like to see the allocation to public safety increased, and 10% would like to see it decreased. In addition, 30% of the survey respondents felt that new facilities for the Police and Fire Services are an important capital expenditure for Shelburne.

The Shelburne Falls Fire District and the rural EMS staff are encountering shortage of space for staff and department vehicles. They are interested in locating to a larger facility, which would allow for efficient use of space and services. The Shelburne Falls Fire District has not yet found a suitable and affordable location within Shelburne Falls for their new facility. The rural Shelburne Fire Department has sufficient space at present. However, as population grows in the rural areas, the need for additional staff and equipment will create additional space needs. The space needs of the Shelburne Fire District should be reevaluated in a few years.

Goal

To improve public safety.

Strategies

Increase police services to improve safety from crime and vandalism.

Evaluate programs to improve safety and decrease vandalism including community policing, neighborhood watch, and increasing involvement of parents and the school system.

Support the efforts of the Shelburne Falls Fire District to acquire a new Emergency Services Facility.

Recreational Facilities

The towns of Shelburne and Buckland have both a vibrant village center offering a host of cultural events as well as a landscape offering scenic, historic, and recreational experiences unmatched in the region. The recreational resources in the two towns provide both visitors and residents opportunities to relax, play, learn new skills, and enhance the overall quality of their lives. According to the Community Surveys taken in 1996 and 1997, many residents of Buckland and Shelburne identified recreational opportunities as being important in their decision to move to, or live in their communities.

Findings from Shelburne's and Buckland's Community Surveys show that residents view their communities as rural New England hill towns rich in recreational opportunities. They identify two main types of recreational resources. The first type includes particular facilities (i.e. Buckland Recreation Center) and areas for recreation (i.e. open spaces such as parks or natural areas) that residents cherish for their recreational value. The second type of recreational resource is recreational programming, which the towns or private organizations may provide for residents (i.e. summer and winter activities for teens). Both towns' residents expressed a desire to maintain, or enhance, the value of facilities such as the Cowell Gymnasium and the Buckland Recreation Area. Overall, 82% of the survey respondents from both towns felt it was important to preserve open space for recreational needs. Also the most important needs expressed by respondents from both towns focused on programming for more winter/summer programs and an increase in teen activities.

The following section will include the main goal and supporting strategies, inventories of recreational areas and facilities, and recreational issues. It will conclude with a list of recommendations.

Based on Buckland and Shelburne's community surveys that were completed in 1996 and 1997, respectively, each town's Master Planning Committee prepared a document describing their goals and objectives for the Master Plan. Although the objectives that focused on improving recreational services were included within sections titled Family Services (in Buckland's plan) and Town Services (in Shelburne's plan), they have been consolidated and are presented in the format below, multiple strategies supporting one main goal.

Goal

To provide additional recreational programs and facilities for Shelburne's and Buckland's residents, especially its youth.

Strategies

Establish summer and winter programs to provide youth with organized and supervised activities especially for teens.

Promote greater utilization of the existing facilities at the Buckland Recreation Area and of Cowell Gymnasium by supporting renovation efforts.

Increase recreational facilities in Shelburne including a swimming pool and a fitness center (public or private).

Help families of Buckland and Shelburne by providing additional youth services such as day care options for Buckland families.

Establish after-school programs to provide supervision and activities for youth.

Publicize family oriented programs and facilities in place for use by residents.

Address safety, maintenance, and operations issues for all recreational sites.

Inventory of Recreation Resources

Both Buckland and Shelburne identified significant recreational areas in their Open Space and Recreation Plans that were completed in March 1987. In their plans, properties were listed and described in an inventory. Much of that information has been updated and is summarized in Tables 4-4 and 4-5 on the following pages.

Table 4-4: Recreational Resources -- Areas in Buckland

Map #	Name of Area or Facility	Main Recreational Value or Use	Owner of Land/Manager	Size of Parcel	Extent of Resources	Issues/ Opportunities
1	Buckland State Forest	Hiking and cross-country skiing	Commonwealth of Massachusetts/ DEM**	88 acres	No facilities	Potential site for programs
2	Kenneth Dubuque Memorial State Forest	Fishing, hiking, wilderness camping, and skiing	Commonwealth of Massachusetts/ DEM**	57 acres	Marked trails and rest rooms (in Hawley)	Potential site for programs
3	Buckland Recreation Area	Playground, picnicking, and swimming	Town of Buckland/ Recreation Commission	21 acres	Softball diamond, horseshoe pits, etc.	55% of residents want to keep supporting it with public funds *
4	Mohawk Trail Regional High School	Field sports, tennis, and archery	Mohawk Trail Regional School District	65 acres	Baseball diamonds, football field, 4 tennis courts, etc.	Potential site for after-school programs
5	Cricket Field	Softball and snowmobiling	Veterans of Foreign Wars	2.5 acres	Softball diamond and rest rooms	Safety issues associated w/ Conway Rd.
6	Gardner Falls Project	Picnicking, fishing, and hiking	Western Massachusetts Electric Co.		Trail system, benches, and a barbecue	Improve access for good fishing for bass and trout.
7	Mary Lyon Birth Place	Hiking	Mount Holyoke College	11.6 acres	Stone marker	Road needs to remain public
8	Mohawk Trail Rest Area	Picnicking and hiking	Commonwealth of Massachusetts/ DPW***	3 acres	Tables and parking	Potential for enhancements and information kiosk
9	NEPCO Park		Owned and managed by NEPCO****		Picnic tables, park benches, fishing platform, new landscaping, and a low safety fence	Park area for residents and tourists

*: Based on the 1996 Community Survey

** DEM – Department of Environmental Management

*** DPW – Department of Public Works

**** NEPCO – New England Power Company

Table 4-5: Recreational Resources -- Areas and Facilities in Shelburne

Map #	Name of Area or Facility	Main Recreational Value or Use	Owner of Land/Manager	Size of Parcel	Extent of Resources	Issues/ Opportunities
1	High Ledges	Hiking, cross country skiing	Massachusetts Audubon Society	370.5 acres	Trails and views	Potential site for recreational and educational programming
2	Glacial Potholes	Scenic Views	Mole Hollow Candles/Town of Shelburne	Several acres	Viewing Deck	Maintenance and safety questions related to access to Glacial Potholes
3	Mt. Massamont	Hiking	Commonwealth of Massachusetts/ DEM** Fire tower owned and managed by the Town of Shelburne	49 acres	On top of Mt. Massamont there is a fire tower that provides spectacular views	Publicize this and other scenic lookouts
4	Veterans Memorial Field	Games, sports, and concerts	Town of Shelburne	0.25 acres	Field for sports next to Elementary School and the Military Band Shell	Maintenance costs supported by residents, based on survey *
5	Cowell Gym	Basketball and street hockey	Town of Shelburne		Gymnasium and outdoor basketball courts	Maintenance of facilities and building renovations needed
6	Buckland-Shelburne Elementary School	Playground activities	Buckland, Colrain, Shelburne School District	16 acres	Basic play equipment for small children	Potential site for after school programs
7	Grange Pond	Picnicking	Shelburne Grange	9 acres	Pond Area with Picnic Tables	Facilities need improvement
8	Arms Cemetery	Walking and bird-watching	Arms Cemetery Association	32 acres	Maintained cemetery	Potential trail connection to High Ledges
9	Mohawk Field	Little League baseball field	Town of Shelburne	3 acres	Baseball field & Picnic Area	
10	Goodnow's Chip and Putt	Golf course, skating and cross-country skiing	Privately owned and managed	25 acres	Baseball Fields, Basketball Courts, Archery Range & Pool	Support owner to keep it as a popular recreation area
11	Camp Apex	Summer camp for 6-14 year olds - sports and hiking	Greenfield YMCA	33 acres	Nature trails, lodge, and pavilion	Support YMCA to maintain or enhance to include year-round programming

12	Spring-brook Family Camping Area	Family tent and trailer camping	Privately owned and managed	25 acres	Swimming Pool & Playground	Potential site for year-round activities
13	Wilcox Hollow	Fishing and hiking	Northeast Utilities	25 acres	Access to River and trail system; Links to Mahican-Mohawk Trail	Potential danger due to periodic flooding
14	Wells Forest	Off trail hiking	Owned and managed by the New England Forestry Foundation	65 acres	No signs.	Potential for use as recreational/ educational area
15	Baptist Lot	Used as a playground and an area for flea markets and fairs	Owned and managed by the Trinity Church	1 acre	A triangular, grassy area in Shelburne Falls	Potential for continued use for community events
16	Mahican-Mohawk Trail	Hiking	Maintained by Friends of Mohawk, Deerfield River Watershed Association, etc.	100 miles long in all	Trail system that varies in its quality	Potential to enhance connectivity of open spaces and downtown with spur trails

*: Based on the 1997 Community Survey

** DEM – Department of Environmental Management

*** DPW – Department of Public Works

Recreational Resource Issues

The two most important issues regarding recreational resources for both Buckland and Shelburne are based on the expressed needs of the communities' residents for programming and facilities. A third issue, dealing with open spaces is included based partially on the Survey respondents' expressed appreciation for their favorite recreational resources (i.e. High Ledges) and because of the relative paucity of accessible recreational resources.

Funding for Operation and Maintenance Given Constraints to Town Budget

Residents in both Buckland and Shelburne are concerned about the level of programming available to young people, whether it's after-school or during the winter and summer months. In Buckland and Shelburne, Survey respondents identified an increase in teen activities and programming as their top priority for new recreational services. The relative quantity and quality of youth recreational programming depends on many factors: location of facilities or area, safety

and security, funding for adult supervision in special circumstances, and access to recreational choices throughout the year.

Some of these programming needs may require a significant increase in town expenditures or community-based volunteerism. Acquiring new sports field facilities, a swimming pool, and a fitness center could require creative budgeting and fundraising. However, the realization of these facilities may be more likely if jointly developed and owned by both communities or, if developed by a fitness chain. Other programming needs could be satisfied through an expansion of the existing volunteer program in partnership with public agencies and private non-profit organizations, like Massachusetts Audubon Society. Improving and expanding relations with the state forests, private camps, and non-profit conservation organizations and helping to improve existing trail systems and facilities could add to the residents' recreational choices. However, in either case, the necessity for an accurate and thoughtful assessment of recreational resources is paramount to determining the most effective allocation of limited municipal funds or precious volunteer time by both communities.

Facilities for Recreational Uses

Buckland

Residents of both communities share a love and concern for the facilities that support a variety of recreational activities for young people and their families, as well as for residents of all ages. In Buckland this type of facility includes the Buckland Recreation Area and the Mohawk Trail Regional High School and Cricket Field. The Buckland Community Survey focused on the Buckland Recreation Area and 55% of respondents felt that the town should not privatize it while 45% said the town should. The two most popular types of improvements that residents would like to see at the Buckland Recreation Area are other kinds of facilities and more playing fields.

Shelburne

Again, according to the Community Survey completed in 1997, 97% of the survey respondents felt that the funds allocated for recreational services including Cowell Gymnasium, Bridge of Flowers, and the military band, should stay the same or increase in the following year's budget. The priorities for recreational facilities the respondents would like to see in Shelburne include a swimming pool, hiking trails, and a fitness center.

Open Spaces for Recreational Uses

Overall, 82% of Buckland survey respondents and 83% of Shelburne survey respondents felt that it was important to maintain and preserve open spaces for recreational needs. It appears that land protection for recreational needs is an activity that residents of both towns would support. According to the 1987 Buckland Open Space and Recreation Plan, the town of Buckland owns

21 of the 248 acres of recreational open space. Shelburne's Plan identifies 5 to 6 acres owned by the town with an additional 633.75 acres owned by others.

The Question of Ownership

Why is ownership an important factor to consider? From an access perspective, the ownership of the open spaces in each town is an important factor in determining whether the current and future recreational needs of the residents are being, or would be met. Also, the fields and forests that provide access to other important recreational resources, such as the Deerfield River or the High Ledges, provide added, albeit indirect, value to the residents. Some private landowners with non-profit status, like the New England Forestry Foundation and the Massachusetts Audubon Society, provide free access to their lands, though facilities that would enhance the visitor's experience may be non-existent. Other open spaces, the State forests, for example, provide access to the public and yet decisions to enhance the facilities on site may be difficult to influence.

Ownership of open space by the towns has advantages and disadvantages. One advantage is that the community has the ability to determine and enforce the policies regarding the uses of the land. The town can also more easily affect a change in the types of facilities present and the quality of facilities management. Disadvantages may include the additional costs in materials and amenities, and maintenance activities such as trash removal that come with the responsibility of ownership. The obvious disadvantage is that land prices for developable land are often very high and purchasing parcels that may be slated for development is a challenging prospect for towns with little practice in acquiring conservation land.

A compromise could be attained perhaps through the towns' residents working in association with a local or regional conservation land trust. In this manner, parcels of land that became available could receive the attention of both the municipality and a land trust. By working in partnership with non-profit land trusts, towns may be able to protect parcels of land with a greater degree of flexibility. For example, with lands enrolled in the Chapter 61 and 61A programs, which are put up for sale, the towns have 120 days to act on their right-of-first-refusal. Sometimes, non-profit land trusts can acquire the necessary funding for land or conservation easement purchases, using contacts with private donors, federal and state government agencies, and their membership, much faster than a town's residents could prepare for a Town Meeting vote. In this case, Buckland or Shelburne could transfer their right-of-first-refusal to a land trust. Then the land trust could purchase the parcel for themselves or, for later resale to the town. Reselling the land back to the town would only be appropriate if the town had an active open space acquisition program with the necessary backing of the community's residents. The ownership of open space by non-profit conservation organizations could provide Buckland and Shelburne with the public access they desire for their community members without the associated expenses of ownership. Finally, working in partnership with land trusts could allow local residents, as volunteers, access to the decision-making processes affecting facilities and trail maintenance and management.

Open Space and Recreation Plan

Towns are required to have current Open Space Plans (updated every five years) to be eligible for Self Help funding from the Massachusetts Executive Office of Environmental Affairs (EOEA). Both Buckland and Shelburne's Open Space Plans date back to 1987. The EOEA's Open Space Planner's Workbook lists the requirements for an Open Space Plan. This Master Plan has completed the required components listed in the workbook within the Natural Resources and the Public Infrastructure and Municipal Services section, with the exception of a soils map and an analysis of "Landscape Character." These sections of the Master Plan can therefore, serve as a basis for the town Open Space Plans. This information can be used to identify high priority areas for land conservation efforts where landowners are interested in permanently protecting their land (see the Potential Wildlife Corridors on the Composite Environmental Assessment Map in Chapter 1). This step is very important given the recent adoption of the Open Space Bond bill, which provides \$25 million in Self-Help funds for local land acquisition projects statewide. Additional funding sources may include the Enhancements Program of the Transportation Equity Act for the 21st Century (TEA-21) for projects relating to recreational and alternative transportation trail corridors, such as the Mahican-Mohawk Trail.

Recommendations

Consider Hiring a Half-time Department of Recreation Coordinator for each town.

It is clear from the Town of Buckland's 1997 Annual Report that the Recreation Department provides a significant amount of recreational value for a small percentage of the town's annual budget. The value appears to come from the volunteer coordination of residents and many sources of support. To test the commitment of these volunteers by asking them to provide even more services, including after school programs seems unrealistic. Hiring a half-time recreation coordinator may be the most reasonable alternative to requiring an extensive upgrading in the volunteerism capacity of a limited number of Buckland and Shelburne's residents.

Support the Renovation and the Development Efforts of Recreational Facilities

In Buckland and Shelburne, the two facilities that require the most attention for improvements are the Buckland Recreation Area and the Cowell Gymnasium. Both facilities are included in the joint Buckland and Shelburne Capital Improvement Program (CIP). The CIP identifies an expenditure of \$50,000 in the year 2002 to fund land acquisition for the Buckland Recreation Area. It also shows \$25,000 to be spent on a new water filter system for the pool. Between 1999 and the year 2001, Shelburne estimates that \$950,000 will be needed for the renovation of the Cowell Gymnasium. The sources for funding for the Cowell Gymnasium are yet to be determined. Therefore, it is very important to educate residents about the process and effort needed to substantially improve these facilities.

Support the Open Space and Recreation Program

Both towns should use the Natural Resources section of the Master Plan relating to open space protection as a basis for updating their Open Space Plans and encourage the continued and increased use and stewardship of town-wide open spaces. Towns with active open space related

recreation programs are more successful in receiving donations of land and easements from landowners. If willing landowners present the town acquisition opportunities, the Wildlife Corridor definitions on the Composite Environmental Constraints map can help to further define the significance of the parcel. A parcel-level analysis may at that time be appropriate. Finally, the Open Space and Recreation Plan would need to be updated every five years to keep abreast of the current funding opportunities through State Self-Help programs.

Parking

Parking, particularly within the Shelburne Falls village, seems to be of concern to a number of the survey respondents from both Buckland and Shelburne. The FRCOG is conducting a parking study of the village. The study is discussed in the Transportation Resources section of this Master Plan (see Chapter 3).

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