Open Space and Recreation

The Town of Marshfield will likely approach buildout within the next 20 years. How the Town preserves its remaining open land will have a direct impact on the quality of life here. As the population grows, it will place ever increasing demands on recreational facilities and open space.

Marshfield has a significant amount of open space land and recreational facilities. Approximately 11.1% (or 2000 acres) of all land in the Town of Marshfield is owned by the Conservation Commission. In addition to the Townowned open space, there are several large tracts of conservation land owned by private land conservation agencies, such as the Massachusetts Audubon Society, The Wildlands Trust, and New England Forestry Foundation. A full inventory of the Town's open space resources can be found in the *Open Space Analysis Paper* contained in the Background Analysis of the Comprehensive Plan.

The Conservation Commission updated the Town's Open Space Plan in 1995. The Open Space Plan identifies existing open space and recreation areas, and makes broad recommendations with regard to land acquisition and improving recreational facilities. The Comprehensive Plan incorporates this information and offers specific recommendations about which areas in town should be considered for future land acquisition, recreation and open space preservation.

Open Space Protection Priorities and Needs

Why Protect Open Space?

Given the extent of Marshfield's public and private open space holdings some might argue that the Town has enough open space and should not spend funds to acquire additional lands. The results of the 1996 Comprehensive Plan Survey, however, indicate the desire for additional open space protection in Marshfield. Although 60% of respondents indicated that the quality of service currently provided by the Town with regard to open space was good or excellent, 32% rated this service as fair or poor. Perhaps more significantly 75% rated "Loss of Open Land" as a critical or important issue in the Town. When

asked how they felt about the statement "The Town should continue to acquire open land to reduce overall development and provide more protected open space", 81% agreed. Perhaps notable, the only question that received a higher level of support was that 83% supported a Design Review Committee for Route 139.

Open space protection has a number of benefits for the Town. Open space protection is one of the most effective measures for dealing with a variety of growth-related problems. It is an approach that can address several issues simultaneously:



The Comprehensive Plan Survey in 1996 results indicate that residents support open space protection.

Preservation of Community Character: As the Town approaches full development, more and more of the landscape will be removed from open space and built upon, reducing its scenic and aesthetic qualities. Since all existing unprotected land is zoned for development, loss of open space also means loss of the natural, less developed character that exists in many parts of the community. In particular, even the development of one home within an important scenic vista or on open fields can dramatically change the feel of a neighborhood. When all of the buildable land in Marshfield is developed, there should be significant open areas within each planning area that are left undisturbed so as to retain aspects of the original appeal of Marshfield for all who have settled here.

Reduction in Build-Out: Open space preservation in the form of acquisition of buildable land or its development rights will directly reduce the number of housing units zoning will permit at full development based on the build out analysis prepared for the land use section of the Comprehensive Plan. For every 10 acres of residentially zoned upland that are acquired, there will be approximately 7 fewer houses at build-out. The acquisition of just a few hundred acres can have a meaningful positive effect on traffic levels and population density.

Improved Community Fiscal Health: Every study that has been conducted regarding the tax consequences of residential development versus protection of open space indicates that residential development costs a community more than protection of open space. For example, a recent study of 11 diverse New England communities concerning the municipal costs associated with various forms of land use has shown that single-family residential development costs more than the tax revenues received by the community to cover those costs. If this money were instead used to pay for strategic open space purchases spread out over the same period, a significant amount of land could be purchased.

Maintaining Existing Open Space Opportunities in a Growing Community: Using current levels of protected open space and current population levels, it is possible to calculate a "Level of Service" for protected open space in the Town. As of 1995, 3230 acres of open space were protected in Marshfield, serving the needs of a population of 21,531. This means that there were approximately 0.15 acres of open space per capita in 1995 for a level of service of 0.15. Using build-out projections and open space acquisition scenarios, it is possible to project how this open space level of service (LOS) will change as Marshfield grows toward a build-out popu-

lation of 30,000. In order to maintain the current LOS of protected open space, approximately 1270 additional acres would need to be acquired by the Town. This LOS is relatively low compared to other communities in Massachusetts.

What Areas Should be Protected?

In the 1995 Open Space and Recreation Plan, the Marshfield Conservation Commission has established open space preservation goals for the Town by four broad areas. This section of the Comprehensive Plan highlights those goals and breaks them into the planning areas discussed throughout the Comprehensive Plan.

Furnace Brook Watershed and Carolina Hill: Although new wells have been constructed throughout the Town in the last ten years, the Furnace Brook Watershed remains the source of more than half the Town's water supply. To date, 1034 acres have been acquired by the Town in this area. This area has no private

conservation land holdings. Extensive areas in this important well recharge area remain unprotected. This area receives priority consideration for acquisition by the Conservation Commission. The 1995 Open Space Plan sets an acquisition goal of 1100 acres for this area. The 66 acres of upland proposed to be acquired in this area represent primarily isolated lots on the top of Carolina Hill. This area is primarily in the Center Marshfield planning area, but includes small portions of Standish and North Marshfield.

Northwest Green Area: Through a combination of public and private efforts, approximately 590 acres of this area of North Marshfield along the North River are protected. The Open Space Plan has established an acquisition goal of 800 acres in the Northwest Green Area, requiring the protection of an additional 210 acres. The goal in this area is the creation of a protected corridor abutting the North River to protect this valuable resource. This area is located within the North Marshfield planning area.

Green Harbor Reclamation District: Approximately 804 acres of this area are protected through a combination of efforts by the Town of Marshfield and the Massachusetts Audubon Society. This area contains a unusual geographic feature called a polder, created by the construction of a tidal gate across the Green Harbor River, and supports high quality wildlife habitat. The Open Space Plan sets an acquisition target of 900 acres of land in this area, leaving 96 acres to be protected. This area is located within the Green Harbor, Ocean Bluff and Marshfield planning areas.

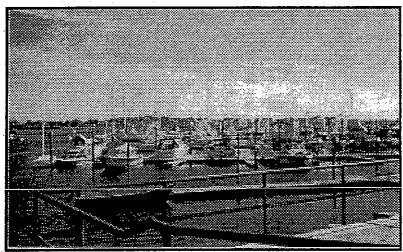
Marshland Area: This area consists of the extensive coastal salt marshes that give Marshfield its name. Approximately 2630 acres of salt marsh exist in town, the Open Space Plan has as a goal to protect 700 acres of this area. Of this approximately 480 acres have already been protected. This area is scattered throughout town and affects most of the planning areas due to the town's extensive estuarine areas.

In addition to these priority areas, some 550 acres have been protected in isolated areas throughout Marshfield. There are no stated goals for these areas. According to the Open Space Plan, the criteria for acquisition of these areas are: importance to future water quality and supply, passive recreation potential, and the protection of Marshfield's finite natural resources. Some areas that have been identified as priorities include: Tilden Island (Marshfield Hills), Pine Island (Seaview/ Humarock), Chestnut Tree Grove (Center Marshfield), White Cedar Swamp (Standish) and land within Zones of Contribution to public water supplies and potential high yield aquifer areas (North Marshfield, Marshfield Hills, Green Harbor, Marshfield, Standish, Center Marshfield).

In the neighborhood meetings conducted by the Planning Board as part of the process of development of the Comprehensive Plan, the Board heard concerns about the need for additional open space protection in many of the Planning Areas. In addition to the areas identified by the Marshfield Conservation Commission in its 1995 Open Space Plan, the following land protection priorities were suggested by residents and are incorporated as recommendations in this Comprehensive Plan.

- Lands in Pembroke along the Route 139 corridor and along the North River to protect the town's interests in ground water and surface water protection and traffic minimization in these areas.
- The old railroad bed to provide a trail linkage to the downtown area.
- The Coast Guard Communications Station to provide recreational opportunities and to serve as a possible site of a waste water treatment plant for the Humarock area.
- The Blackman's Point area of Brant Rock to protect this coastal resource from additional development.

- A park in the Green Harbor area to serve the recreational needs of the residents of Green Harbor.
- Creation of a protected corridor stretching from Dwyer's Farm/Webster's Wilderness southwest to the Duxbury line to preserve scenic views and wildlife habitat.
- More aggressive efforts to protect developable residentially-zoned lands in order to reduce the potential for new residential development.
- Key scenic vistas (e.g. along Route 139)
 such as Gerard's Farm and views of the South River.



Green Harbor Marina

- Additional areas in order to provide ballfields.
- Lands currently enrolled in preferential taxation programs in order to maintain the current use.
- Land in the South River Watershed and along the South River Trail.

Recreation Needs

South River Walking Trail

The South River Walking Trail was conceived by the Planning Board as a way to provide recreational opportunities on the South River to the residents of Marshfield. The proposed trail would run from Veteran's Park easterly to the railroad bed. The highlight of the trail is the replacement of the bridge that existed at the railroad bed site up until World War II. To be used by pedestrians, the trail and bridge would link up to over 1,000 acres of conservation land on Carolina Hill, which is accessible by a series of trails off of South River Street. The trail also provides pedestrian access to downtown Marshfield. Gifts of land or easements will have to be provided by landowners in order to make the trail a reality. This is currently being negotiated by the Planning Board. The permitting process for the bridge is ongoing, with completion expected sometime in 1998.

Pilgrim Trail

For the first settlers of Marshfield, the Pilgrim Trail was an important foot path from Plymouth. Originally an ancient Indian way, the trail led north from Plymouth along the edge of Plymouth Bay. It followed the beach in North Plymouth through present day Kingston, crossing the Jones River at the old Wading Place near Rocky Nook, and continued through Duxbury west of present Route 3A, Tremont Street, to enter Marshfield at the Duxbury line at Careswell Street.

The old path continued through Marshfield, crossed the South River at a narrow place known as the Valley Bars, and followed along the foot of Snake Hill to a ferry crossing of the North River near the present Humarock Bridge. From there it took a course along the beach to Scituate. This early road was recognized and formally designated by the Plymouth Court on 10 May 1637.



Winslow Cemetery

Today the path is called the Pilgrim Trail, honoring the early settlers from Plymouth. The Marshfield Historical Commission with the cooperation of the Marshfield Planning Board has actively pursued the preservation of the Pilgrim Trail along its southerly route through Marshfield from the Duxbury line to the Old Winslow Burying Ground.

Handicapped Accessibility

Most of the Town owned conservation land is not handicapped accessible. Rough terrain and steep slopes make it virtually impossible for navigation via wheelchair. The Conservation Commission has no current plans to upgrade any facilities. The current facilities appear to target the adolescent and adult population, offering very little services for the elderly. At present time, the elderly are served by the Council on Aging meeting room in the Ventress Library. The Board of Selectmen have established a community center committee to identify potential sites for a community center and develop cost projections for this project. After extensive study, the committee

has chosen a parcel of Town owned land on Plain Street as the preferred location to build a community center. In a report to the community center study committee by Gale Associates, they outlined the following proposed facilities to make up the community center:

700 s.f.	
3,600 s.f.	
1,200 s.f.	
3,200 s.f.	
1,800 s.f.	
3,400 s.f.	
500 s.f.	
8,000 s.f.	
5,800 s.f.	
4,000 s.f.	
120 s.f.	
2,000 s.f.	
Rooms2,000 s.f.	
Private Family Changing Rooms 200 s.f.	
1,500 s.f.	
cal, etc.)	
38,800 s.f.	

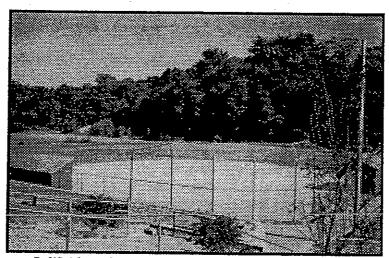
The estimated cost of this project is approximately \$6 million. As of this date, no final decisions have been made regarding uses or cost. The community center study committee has also indicated they would like to construct ballfields, type to be determined, on this site as well.

Recreational Fields

One of the concerns that constantly surfaces is the need for additional ballfields. The recreation facilities are mostly used by the youth population, and are used quite extensively. High School sports teams, recreation programs, and private leagues all contribute to the use of the athletic fields. Any improvements or new construction should be undertaken in conjunction with a long term maintenance plan and budget in place.

The Town appropriated \$500,000 at the 1996 Special Town Meeting for rehabilitation of the ballfields. As a result, a ballfield committee

has been established by the Board of Selectmen. Their goal is to inventory all of the fields in town, ascertain the use and condition of each field, and then hire a consultant to determine what the maximum and best use for each field would be. They will also look at what types of uses currently exists, determine if current and future needs are being met (example: Lacrosse fields), and will recommend a suggested maintenance and reconstruction plan, including possible field expansion at the high school complex.



Ballfields are being assessed and inventoried in town to determine the use and condition of each field.

Additional Recreation Department Needs

One of the Recreation Department's most important needs is a new recreation software system. This software would allow for all records to be stored on the computer, thus making the office more efficient. The following information is intended to be computerized via this software:

- Recreation Department program registration.
- Ballfield scheduling.
- Classroom/facility reservation.
- Financial information such as income/expense analysis and scholarship information.
- 24 hour telephone registration for recreation programs.

The Recreation Department would be able to access this information more easily if they had it on computer.

As the continued demand for recreation programs and services increases, the Department feels that the Town will need to increase its financial commitment in the following areas:

- Additional administrative staff is necessary in order to try to meet this increased demand.
- Playground facilities need to be upgraded and properly maintained.
- Larger office space is needed for administrative staff, as well as a storage area for program materials.
- •A new software system capable of providing detailed statistics, allowing for telephone registration, income and expenses documentation to assist the Department in meeting customer demands, as well as providing the necessary documentation on usage, program participation information, something that Town boards, departments, and commissions often request.

Future services will depend upon available indoor and outdoor facilities, financial resources, volunteer assistance and local trends.

Key Issues and Challenges for Open Space and Recreation

a. Funding for Land Protection

Several funding options are available for open space acquisition. The Commonwealth has recently approved the Open Space Bond Bill, providing \$25 million in self help funds for open space acquisition. Funding is also available from the Intermodal Surface Transportation and Efficiency Act (ISTEA) for trail development and acquisition of historical properties. The Conservation Commission has already established a Conservation Fund as set forth under M.G.L. Chapter 40, Section 5(51).

Funding of open space acquisition by the Town dried up in the late 1980s due to a poor economy, leaving the Conservation Commission to rely mostly on donations to fund land acquisition. They recently received a donation of \$162,400 left in a will. This money is now in the Town's Conservation Fund and will be used for additional open space acquisitions. Private donations of land due to wetland status or other problems continue to account for small additions to the open space inventory.

b. Subdivision Control Law/Special Permits

M.G.L. Chapter 41, Section 81U states that "before approval of a plan by a planning board, said board shall also in proper cases require the plan to show a park or parks suitably located for playground or recreation purposes or for providing light and air and not unreasonable in area in relation to the area of the land being subdivided and the prospective uses of such land, and if so determined said board shall by appropriate endorsement of the plan require that no building may be erected on such park or parks for a period of not more than three years without its approval." This law would allow the Planning Board to require developers to set aside large parcels of land for open space and give the town three years to raise the money to pay for the land.

The Town should be more aggressive in its promotion of cluster development to provide open space within residential subdivisions. The Town has had a cluster zoning bylaw in place for ten years and only one subdivision has been approved under this bylaw. The cluster bylaw should be rewritten to encourage its use.

c. Conservation Restrictions

Conservation Restrictions are defined by the Executive Office of Environmental Affairs as "means authorized by sections 31-33 of Chapter 184 of the General Laws of the Commonwealth of Massachusetts to limit the use of land in order to protect specified conservation values including the natural, scenic, or open condition of the land." CR's are used to keep land in its present state and prevent it from being developed. Land which is placed under conservation restriction is generally eligible to receive a substantial tax abatement. In addition, donors of conservation restrictions often qualify for federal income tax benefits. The town should work more actively with existing nonprofit organizations such as The Wildlands Trust to encourage land landowners to consider placing conservation restrictions on their land.