

Natural Resources Chapter

Introduction

Dublin is a town that has been both blessed and limited by its natural environment. Our town's elevation on the shoulder of Mount Monadnock meant a short growing season, and its steep slopes and rocky soil presented a challenge to the early settlers who struggled to make a living tilling the land. Despite the prevalence of water bodies and wetlands, there was a lack of the type of water resources that could power industry, such as led to industrial development and population growth in neighboring towns. Later, the town's agriculture focused on sheep farming, and most of the land was cleared and fenced for pasture. When sheep farming ceased to be profitable, Dublin's population waned as people left to find better land, as indicated in the Population graph, Page _____. Subsequently, most of the pastures and farmland have turned back into forests.

But the undeniable beauty of the rugged landscape gave rise to a new focus for Dublin's economy: serving as a resort for tourists, artists, and writers. The cool temperatures that meant a short growing season to farmers provided a welcome summer respite to city dwellers in an age before air conditioning. The high rocky hills that were so hard to farm were beautiful to paint and hike, and the cool clean waters of our lakes were wonderful for swimming, fishing, and boating. Locals made a living renting rooms to visitors, selling them produce, and building them summer homes.

Only a handful of contemporary Dubliners cater to the tourist industry, and fewer still attempt to make a living off of the land, but the scenic beauty of the area continues to be one of the leading reasons why people live here (cite % in survey). Along with the small-town charm, the natural beauty of Dublin was a major factor in the re-population of the town in the period between 1970-1990 by new residents who mostly commuted to work in other towns. Fortunately, this growth has not had any significantly adverse impact on Dublin's beauty or natural resources.

Agriculture

As previously mentioned, Dublin elevation and rocky soil work against agriculture. Despite this, there have always been farms here, and an increasing interest in locally grown food will likely result in increased farming here in the coming years. Dublin should encourage this, and try to ensure that there is some protection for prime agricultural soils for future use.

Conservation.

There has been an ongoing effort on the part of individuals and non-profit organizations to conserve important tracts of land in Dublin, especially on and around Mt. Monadnock. As a result, Dublin has a relatively high percentage of land that is now in permanent conservation easement, including significant portions of the mountain and the area around it, as shown on the

Development constraints map. In addition, the town commissioned an Open Space Committee to review unprotected tracts of land in order to advise what additional parcels might be a priority for protection in the future based on scenic beauty, wildlife habitat/corridors, hiking trails, contiguity with other protected parcels, recreation, and other factors. The Planning Board and Conservation Committee should monitor the most important parcels identified by the Open Space Committee to see if opportunities arise in coming years for protection of those properties, or parts of them, with permanent easements. When possible, this should be done through cooperation with landowners, contributions from private individuals or organizations, or as part of a development process that allows the use of less important sections of the tract. Dublin should consider using proceeds from the Land Use Change Tax to obtain easements where other options are not available, or to fund other activities by the Conservation Committee that will protect and enhance Dublin's natural environment, including such actions as the Commission's ongoing attempts to control the spread of invasive species.

Water Resources.

Water is an important component of Dublin's natural environment. As noted by Concom Chair Traceymay Kalavitas in her series of articles in the Dublin Advocate, Dublin is divided almost in half as a headwater of two different drainage basins: the west part of town feeds water into the Connecticut River running south, and the eastern portion of town sends water into the Contoocook River, which is part of the Merrimack River system draining water east to the Atlantic Ocean in northeastern Massachusetts. This is a blessing in that we don't face pollution flowing into Dublin from other towns, but brings with it a responsibility to our downstream neighbors to ensure the water flowing out of Dublin is clean and free of chemicals or other pollutants.

Our lakes and ponds, and especially Dublin Lake, are part of Dublin's scenic beauty and are also important for recreation activities such as swimming, boating, skating, fishing, and diving. These activities also benefit the Town economically by bring people in to patronize local businesses. Dublin Lake is well-known for its beauty and has stayed surprisingly clean despite the fact that one of New Hampshire's major east-west highway runs along its northern shore, thanks to efforts by the Town, the state, and private organizations. The Town should support the continuation of these efforts in the future.

Our wetlands, once considered wastelands to be drained whenever possible, are now recognized as not only beautiful, but also vitally important ecologically. They serve such functions as habitat for a disproportionately high number of diverse species of plants and animals, trapping floodwaters, recharging groundwater supplies, and removing pollution. The Planning Board should continue to closely monitor and regulate activities in the wetlands or wetlands buffer areas to maintain the beauty and ecological integrity of our wetlands.

Dublin also has important water resources located beneath the surface. Groundwater is held both in the cracks and fissures in the bedrock that underlies Dublin, and in a large stratified drift aquifer located in the Mud Pond area. Groundwater in the bedrock can generally meet the needs of homeowners for a well to serve their house, but the stratified drift aquifer, which is made of

sand and gravel type materials left by glaciers, reportedly contains a large amount of water that could be important to Dublin in future years.

All of these water resources, including the source of our drinking water, can easily be degraded by such pollutants as petroleum products, stormwater runoff, including salt and petroleum from roads, chemical fertilizers and pesticides, so it is essential that Dublin have (and enforce) ordinances that limit the type of uses and activities that could threaten Dublin's groundwater, especially in the area of the stratified drift aquifer. A final consideration is whether there exists a need to limit groundwater withdrawals (i.e., for commercial purposes) that could threaten nearby wells and/or draw pollutants down into the groundwater as the natural water level is reduced.

Steep Slopes

As illustrated on the Development Constraints Map, Dublin contains a relatively high percentage of steep land compared to nearby towns. The town includes roughly one-third of Mt Monadnock, Beech Hill, and a number of other hills and ridges. Although steep slopes can be developed, special precautions are necessary to prevent erosion, site septic systems, and prevent damage to Dublin's scenic viewscapes. Sufficient regulations must be kept in place to ensure that such development be engineered and constructed in a manner that will minimize these risks.

Recreation

Although the availability of organized recreation is limited in Dublin, the opportunity for outdoor recreation is a very important part of the town's appeal. Mt Monadnock is one of the most climbed mountains in the world, and many of the hikers pass through Dublin. In addition to the trails on the mountain and on Beech Hill, there are many miles of other trails throughout the town, many of which are used year-round by walkers, equestrians, cross-country skiers, bikers, snow-shoers, and snowmobilers. The Town should work with volunteers and non-profit organizations to keep these trails open and maintained. (Should we specifically reference groups that are doing this?)

Other important outdoor recreation includes boating, swimming, diving and fishing, especially in Dublin Lake. Other, smaller water bodies also offer opportunities for fishing, and hunting for deer, wild turkey, and other game is still popular.

The future

Some of the same limitations that affected early farmers also limit development today. Tracts with steep slopes are difficult and costly to develop, and require special care to prevent erosion. Rules restricting development of land in or near wetlands are important to protect wetlands, but also diminish the amount of usable land, which is already reduced by the significant amount of land under permanent conservation easement. See the Development Constraints Map which

shows the land which is constrained by steep slopes, water or wetlands (including the current 100' wetland buffers) and permanent conservation easements.

Given the importance of Dublin's natural resources and the limited amount of land available for development, it is vital that the planning process balance the need for preservation with the need to provide some room for the town to grow by identifying areas of the town where future growth should (and could) occur. This can be done in a way that will protect the natural beauty that is so important to Dubliners while still protecting property owners' right to use their land and providing opportunities for future growth.