

VII Natural Environment

The 1990 *Master Plan* discussed the importance of natural features - wetlands, floodplains, woodlots and steep slopes - and recommended their protection through acquisition or the development of overlay district regulations. In 1993, Environmental Protection Overlay District (EPOD) regulations were adopted by the town and have since been effective in minimizing development impacts on the natural features mentioned above. Other local, state and federal agencies, regulations and policies, particularly the State Environmental Quality Review Act (SEQRA) regulations, provide numerous levels of review of large projects. Brighton regulations and project review policies and practices have been, for the most part, effective at preventing or mitigating the environmental impacts of projects both large and small.

This report briefly discusses some of the important physical features of the town, existing environmental impact control tools, and environmental issues and opportunities.

Physical Features

Discussion of physical features is taken from the 1990 *Master Plan*. For purposes of this section, the town has been divided into three geographic areas: eastern Brighton - north of East Ave., central Brighton - between East Ave. and East Henrietta Rd.; and western Brighton - west of East Henrietta Rd.

Eastern Brighton

The topography of the eastern sector is primarily gently rolling terrain. The area within 1,500 feet of Irondequoit Creek is marked by numerous ravines. It contains slopes of 15% or more and drops in elevation from 400 to 250 feet above mean sea level. The area immediately adjacent to Irondequoit Creek is also classified as a Class I wetland and is in a 100-year floodplain.

All of eastern Brighton drains into Irondequoit Creek, although it is in two drainage areas. The southern portion is in the central drainage area that drains into Allen's Creek and is then discharged into Irondequoit Creek. The remainder of eastern Brighton is in the eastern drainage area which drains into a network of small creeks which flow through the area and down ravines into Irondequoit Creek. The small creeks in the eastern drainage area are in the 10 and 25 year floodplains.

Central Brighton

Central Brighton is dominated by gently rolling topography. A small portion of the central sector north of Highland Ave. consists of steep slopes (a grade of 15% or more) and wooded ravines highlighted by the highest point in the town at 744 feet -Pinnacle Hill. Pinnacle Hill straddles the Brighton/Rochester border and is the centerpiece of the "Pinnacle Range," a glacial kame-

moraine (deposits of earth material picked up during the advance of a glacier and dropped at the ice-front as the glacier began to recede). The Pinnacle Range was created by the Quebec ice sheet and is still visible between Winton Rd. and the Genesee River. Other visible features of the kame-moraine are Cobb's Hill, Highland Park, and Mt. Hope Cemetery, all located in the City of Rochester. Much of the moraine and its unique features have been destroyed by development and by gravel and sand mining operations to support the construction industry in Rochester in the 19th and early 20th centuries.

Central Brighton contains three significant waterways: Allen's Creek, which runs southwest to northeast through the southern portion; Buckland Creek, which flows west to east through the northern portion; and the Erie Canal, which flows through the southern portion. Both creeks are surrounded by 100 year floodplains.

There is a Class I wetland between Westfall Rd. and Elmwood Ave., south of the Town Hall, and a Class II wetland south of Elmwood Ave. near the City line, although this wetland is under review for declassification as a state wetland. The former is surrounded by vacant land, the latter is adjacent to residential development (St. John's Meadows) to the east and the State Hospital campus in Rochester to the west. There are also woodlots scattered throughout central Brighton.

The town's central drainage area covers all of central Brighton except the northeast portion. Drainage is picked up mainly by Buckland Creek and Allen's Creek, which eventually flow into Irondequoit Creek. The area south of the Erie Canal drains into a tributary of Allen's Creek and eventually to Irondequoit Creek. The northeast portion is picked up by small streams which eventually flow into Irondequoit Creek.

Western Brighton

Western Brighton has generally flat terrain. The area west of the abandoned Lehigh Valley Railroad right-of-way has a high water table and poorly drained soils. It contains numerous Class I and Class II state wetlands. The classified wetlands encompass approximately 192 acres of land. Nearly all of the area west of the Lehigh Valley RR right-of way is in a 100 year floodplain.

The low areas bordering the Genesee River play a significant role in the ecological system of Brighton and Monroe County as a whole. In addition to the Genesee River, this area contains Red Creek and its tributaries and numerous smaller streams. All of western Brighton, with the exception of a narrow strip of land along the west side of E. Henrietta Rd., drains through small streams into Red Creek and the Genesee River.

Western Brighton also contains two glacial formations of special interest. Located east of the abandoned Erie/Lehigh Valley Railroad right-of-way and north of the Niagara-Lockport and Ontario power easement is a kame, or rounded hill, formed from the deposits of glacial rivers in glacial lakes. There are also esker ridges running northeast to southwest, south of Crittenden Rd. in the vicinity of the Crittenden Apartments. These ridges were formed by deposits from underground glacial rivers.

Environmental Controls

Brighton has numerous tools for controlling the environmental impacts of development. The town adopted, in 1993, four Environmental Protection Overlay Districts (EPODs), that regulate activities in defined sensitive areas. There are also many other town regulations intended to control negative environmental impacts, including impacts from unreasonable noise, odors, fumes, and visual pollution.

Significant environmental controls are provided in regulations for Excavation and Clearing (Chapter 66 of the Town Code) and Stormwater Management (Chapter 215). The intent of the Excavation and Clearing regulations is to prevent irreversible loss of natural resources, destruction of wildlife habitats, endangerment of soil and slope stability, reduction of the quality and aesthetics of open space, endangerment of environmentally sensitive areas and damage to the property of others. The purpose of the Stormwater Management regulations is to protect the town and its residents from the adverse effects of stormwater runoff caused by the modification of existing drainage systems during construction, reconstruction or development on one or more parcels of land, and to promote water quality.

The Planning Board and Conservation Board have important roles in reviewing projects for their overall environmental impacts, including noise and visual pollution and traffic impacts. Administrative reviews of smaller projects such as site clearing are sensitive not only to larger potential impacts, such as siltation of waterways, but also smaller ones, such as the unnecessary tracking by construction vehicles of dirt onto public roads. In fact, all board and administrative reviews of projects involve environmental review to some extent.

Other levels of government also help to protect Brighton's sensitive areas.

- C Activities in classified wetlands are regulated by either the state Department of Environmental Conservation or the federal Army Corps of Engineers.
- C The Monroe County Health Department ensures that solid waste and sewage are controlled and disposed of in a safe and appropriate manner.
- C The state mandates that the State Environmental Quality Review (SEQR) process is followed for most types of development.
- C It is town policy that development projects comply with the New York State Guidelines for Urban Erosion and Sediment Control.
- C The *Irondequoit Watershed Collaborative Report* (see Issues & Opportunities on next page), a cooperative effort of several governments and agencies, will promote stormwater quality enhancements in conjunction with development.
- C The Monroe County Environmental Management Council produced, in 1996, a county-wide report identifying significant environmentally sensitive areas in the county. Two areas

in Brighton were identified: Corbett's Glen (rated "Highest Priority" for acquisition) and Pinnacle Hill (rated "High Priority" for acquisition). Corbett's Glen was recently acquired by the town, and Pinnacle Hill has been identified in both the 1990 *Master Plan* and this update as an area that should be acquired by the town.

Environmental Protection Overlay Districts

Brighton has designated four (4) types of EPODs: woodlot, watercourse/floodplain, steep slopes and waste disposal site. EPODs serve to: 1) define, geographically and by description of site characteristics, sensitive environmental areas in Brighton; and 2) provide standards for development and other activities occurring within the defined areas. The determination of EPOD areas is aided by official maps kept in the Building and Planning Department. These maps serve to indicate the probability of an existing EPOD on a project site, but actual determination of the existence of an EPOD is determined by site inspection. EPOD regulations do not prohibit development within a district, but provide standards so that 1) development is sensitive to existing conditions and preserves, to the extent possible, natural features of the site, and 2) off-site impacts from the project are prevented.

Issues & Opportunities

- ♦ Flood control, stormwater control, and water quality are already prominent issues in the region. To address the issue of water quality on a watershed-wide basis, the *Irondequoit Watershed Quality Report* is being developed to set policies and standards for the entire Irondequoit watershed, which covers the entire town east of approximately E. Henrietta Rd. The town has taken part in this project and should benefit from the recommendations of the report. Following completion of the report, the town's regulations and policies regarding flood, stormwater and water quality control should be reviewed and updated.
- ♦ Most of Brighton west of the abandoned Lehigh Valley Rail Line is located in a floodplain, has soils with poor drainage and lacks sanitary sewers. There are also numerous Woodlot EPODs there, and the extensive wetlands there play an important role in the Genesee River and Red Creek watersheds by providing water quality enhancement and wildlife habitat. Although much of the area is owned by Monroe County and is unlikely to be developed, the existing residential zoning in the area provides for minimum permitted lots of from 7,000 to 13,500 sf — app. 1/6 to 1/3 acre. Development at these densities could compromise the sensitive environmental characteristics mentioned above, and could create stormwater drainage problems between properties. Concentrated individual septic systems also carry a risk of contaminating surface and ground water due to potential septic system failures. To mitigate development impacts on the environment, the minimum residential lot size in these environmentally sensitive areas should be increased; this would also help to preserve the open character of the area.

- ♦ The importance of wetlands is well documented. The creation of a wetland in Chili for the purpose of selling “wetland credits” to be used to compensate for the loss of wetlands in other areas raises the possibility that wetlands in Brighton could be lost and compensated for by wetland credits in Chili or some other community. To preserve and protect Brighton’s wetlands, the town should establish policies that make wetland mitigation a last resort, and that ensure that mitigation, if necessary, takes place within the town. Further protection of wetlands should be sought through the investigation of code amendments to provide protection in cases where state or federal regulations do not provide adequate controls.
- ♦ The existing Watercourse and Floodplain Environmental Protection Overlay District regulations specify protected waterways. Changes in the floodplains for various streams in Brighton have prompted the amendment of these regulations to include two streams: the West Branch of Allens Creek and Crittenden Creek. The regulations will now restrict development along these creeks within 100 ft. of the banks or to the limits of the 100-year floodplain.
- ♦ Although development reviews routinely assess the impacts of exterior lights on surrounding properties, Brighton has no general regulations to control the impacts of light. Control of the impacts of lights, both on surrounding properties and on the environment in general, has become an increasingly important issue nationally. Regulations would help to ensure that impacts were minimized/mitigated and would help to maintain the residential character of the town.
- ♦ Noise is a particularly difficult nuisance to control; it is invisible and transitory, and the perception of volume is dependent on the ambient (normal background) noise in the area. Brighton has a noise ordinance, which should be enforced to enhance the quality of life of Brighton’s citizens. As technological advances are made, and as other communities create or update noise regulations, Brighton should stay informed of new tools and methods for noise control and amend the current regulations to increase their effectiveness.
- ♦ As the Comprehensive Plan is being completed, the town is considering code amendments to create a tree ordinance for the town. The main purpose of the ordinance is to promote the preservation of trees in right-of-ways and in other public places. Once adopted, the tree ordinance will create a Town Tree Council, whose duties will include the development of a forestry plan for the town. The forestry plan will establish the goals and objectives of the Town Forestry Program, set specifications and standards for replacement/maintenance of trees on town-controlled lands, and establish a Master Tree List. The ordinance will also: control impacts to trees on public lands by defining the rights of adjacent property owners to plant, maintain or destroy public trees; control impacts to trees on private lands by reference to existing Excavation and Clearing regulations; and set penalties for violations of the ordinance.
- ♦ Since 1990, there have been several wildlife management issues that have caused concern in the Rochester region, including Brighton.

Brighton examined, in 1996, its policies and practices for deer management, including ways to improve regulation of bow hunting in the town and ways to reduce deer/car accidents. This examination resulted in recommendations to improve deer management within the town.

Brighton has a “resident” (year-round) Canada Goose population that increased significantly in the late 1990s. Associated with the increased population are issues of unsightly droppings, damage to lawns, obstruction of pedestrians and vehicles, potential for physical confrontations with nesting geese, increased spreading of disease among birds, increased stress on the geese during severe weather, and decreased water quality in water bodies used by the geese. In response to these issues, a task force was formed by the Town Board in October 2000 to develop a plan for goose management. The Town Board adopted the plan in March 2001, and implementation of plan strategies was begun.

The West Nile Virus, transmitted by mosquitoes and known to cause illness in humans, was detected in New York State in 2000. The species of mosquito that most commonly carries the virus is common in residential neighborhoods in Monroe County. In summer 2000, the Town of Brighton participated in a campaign to control mosquito populations in the county through the dissemination of information about the virus and control of the mosquitoes that carry it, the cooperative efforts of residents, and public control of mosquito populations in public bodies of water and other potential breeding areas. The campaign continues in 2001.