

## Environmental Features

### 4.1 Introduction

An analysis of the borough's physical characteristics is important in determining the developability of the community's remaining vacant undeveloped acreage. This data enables a clearer assessment of the community's development potential, and assists in establishing projections for future population growth.

The principal environmental features which are typically assessed within the framework of a master plan include topography, slope, wetlands, and flood plain characteristics. Each of these five elements is described below, as well as an assessment of Category One waterways and threatened and endangered species habitat. While this municipal-wide environmental review provides pertinent information, it should be noted that physical features and environmental factors are best reviewed on a site by site basis as development applications are submitted to the Borough's local review agencies.

### 4.2 Topography and Slope

Topography in Park Ridge is varied and presents difficulties to development in a number of sections of the borough. Elevation ranges from highs of approximately 370 feet above sea level, at a ridge top in the northwestern portion of the borough in the vicinity of West Ridge Elementary School, to lows of approximately 80 feet, in the southeast corner of the borough. Slopes in excess of 15 percent are found throughout the borough, posing considerable challenges to development. Specifically, steep slopes are limiting in terms of run-off control, soil erosion, suitability of terrain for specific land uses, and potential for safe road access.

The most significant bands of steep slopes are located in the southern portion of the borough, including areas just north of Bear Brook, just east of Fifth Street, and just east of Broadway. These areas are heavily dominated by single-family residential land uses, but also contain some dedicated open space.

The accompanying Environmental Constraints map (page \_\_\_\_ ) provides a detailed analysis of all of the borough's steep slopes and their location. This map was created from New Jersey Geological Survey data, which presents contours at an interval of ten (10) feet for this portion of the state. As such, this map provides a good indication of where steep slopes are located in Park Ridge, but only evaluations of individual properties can officially determine their presence.

### 4.3 Floodplains

As shown on the accompanying Environmental Constraints map (page \_\_\_\_ ), 100-year floodplains are associated with all of Park Ridge's streams, including Holdrum Brook, Hillside Brook, Pascack Brook, Mill Brook, Echo Glenn Brook and Bear Brook. The map also shows that 500-year floodplains are located in more limited areas adjacent to Pascack Brook, Mill Brook, Echo Glenn Brook. This data was derived from the Federal Emergency Management Agency (FEMA) as part of the National Flood Insurance Program.

Although this data does provide a broad overview of potential flood problems throughout the municipality, it does not necessarily show all areas in the borough that are subject to flooding. To reduce the potential of flood damage, as well as pollutants in stormwater runoff, the Borough has adopted a Municipal Stormwater Management Plan which requires environmentally sensitive site design and structural source controls for all major development. It is a goal of the municipality to ensure that all future development is consistent with this plan.

#### 4.4 Wetlands

The National Wetlands Inventory, prepared by the United States Department of the Interior Fish and Wildlife Service, provides an inventory of wetland areas in Park Ridge as well as other municipalities in the State of New Jersey. The wetland delineations are based upon vegetation, visible hydrology and geography in accordance with acknowledged source data pertaining to wetlands classification. This data has been mapped by the New Jersey Department of Environmental Protection (NJDEP) and is illustrated on the accompanying Environmental Constraints map (page \_\_\_\_).

As indicated on the map, there are a number of wetland areas throughout Park Ridge, with the largest being the 42.5-acre Bear Swamp area in the northeastern corner of the borough, adjacent to the municipal border with the Borough of Montvale. The second largest wetland area is an 11.8-acre area in the vicinity of Woodcliff Lake in the southern portion of the borough. Although this map provides a good indication of where wetlands are located in the borough, only an official determination from the NJDEP (called a "letter of interpretation" or "LOI") can validate the presence of wetlands on a given property.

The adoption of the Freshwater Wetlands Protection Act in 1988 established a host of regulations aimed towards the preservation of New Jersey's wetlands as well as transition areas, or "buffers". Specifically, the Act requires the NJDEP to regulate virtually all activities proposed in wetlands, including cutting of vegetation, dredging, excavation or removal of soil, drainage or disturbance of the water level, filling or discharge of any materials, driving of pilings, and placing of obstructions. In addition, the DEP must determine the width of transition areas around wetlands, which is dependent on the sensitivity of the particular wetland. For example, especially valuable wetlands may require a 150-foot buffer. On the other hand, zero feet of buffer may be required when transition area averaging is applied. Most wetlands, however, require a minimum fifty (50) foot buffer. Proposed activity within these transition areas typically require permits from the DEP.

#### 4.5 Category One Waterways and Buffers

All of Park Ridge's streams are considered Category One waterways, as delineated on the accompanying Environmental Constraints map (page \_\_\_\_). Category One waterways, as well as those areas within 300 feet of the stream, receive special protection under New Jersey's Surface Water Quality Standards (SWQS) because of their exceptional ecological, water supply, and/or recreational significance. In addition, protection is afforded to those waterways with exceptional shellfish or fisheries resources.

In those waters designated as Category One and their surrounding buffers, known as Special Water Resource Protection Areas (SWRPA), existing development is not regulated. However, new construction or expansion to existing structures that will disturb one (1) acre or more of the property or that would increase impervious surfaces on-site by at least one-quarter (1/4) of an acre is prohibited within SWRPAs.

The subwatersheds draining to each of Park Ridge's Category One waterways are shown in the accompanying HUC14 Subwatersheds map (page \_\_\_\_). As can be seen, the majority of the borough is located in the Pascack Brook (above Westwood gage) subwatershed, with the eastern portion of the borough located in the Hackensack River (above Old Tappan gage) subwatershed.

#### 4.6 Threatened and Endangered Species Habitat

The primary source of information with regard to the location of threatened and endangered plant and animal habitat in Park Ridge is the New Jersey Landscape Project, which was developed by the State's Division of Fish and Wildlife.

The Landscape Project combines threatened, endangered and priority species location information with land use/land cover data to provide maps of critical habitats throughout the state. The Project looks individually at each of the five major habitat types in New Jersey - forest, forested wetlands, emergent wetlands, grasslands, and beach - and classifies each based on the presence of federally threatened or endangered species, state endangered species, state threatened species, non-listed species of special concern, and/or the presence of suitable habitat that has not been surveyed to determine the actual presence or absence of species. The Project also delineates critical areas for some species with special habitat requirements, including bald-eagle foraging areas, urban peregrine falcon nests, and wood turtle habitat.

The accompanying Critical Habitat map (page \_\_\_) presents the habitats of state and federally threatened and endangered species in Park Ridge as per the Landscape Project's most recent data, Version 2.1 (released July 2008). The map also illustrates critical areas for wood turtles in the borough.

The following table enumerates Park Ridge's species by habitat type and classification.

**Table \_\_\_**  
**Threatened and Endangered Species by Habitat Type**

Habitat Type	Species		State Threatened	State Endangered	Federally Listed
	Common Name	Scientific Name			
Emergent Wetlands	Black-crowned Night-heron	<i>Nycticorax nycticorax</i>	X		
Forested Wetlands	Black-crowned Night-heron	<i>Nycticorax nycticorax</i>	X		
Forest	Black-crowned Night-heron	<i>Nycticorax nycticorax</i>	X		
Stand-Alone	Wood Turtle	<i>Clemmys insculpta</i>	X		