

ENVIRONMENTALLY SENSITIVE AREAS

Several distinct criteria may be employed to determine the environmental sensitivity of an area. According to CAFRA, an area is considered environmentally sensitive if it meets any of the following criteria.

- It is a slope, with an angle of 15 degrees or greater from the horizontal plane;
- It is an area prone to flooding activity (such as Brielle's wetlands);
- It is a swamp, marsh, bog, lowland or any other soil characterized by poor drainage;
- It possesses historical significance;
- It contains an exceptional, unique, irreplaceable, or delicately-balanced natural environment; or
- It has special scenic, aesthetic, or unusual characteristics that may be considered environmentally related.

In light of these above standards, any land or area in Brielle that is environmentally sensitive should either be properly preserved or, at the very least, be subjected to carefully regulated development. Areas conforming to the guidelines include:

- **All wetlands.** Since they are flood prone, they are subject to the various provisions of the applicable Wetlands Act. The marsh grasses of Ellis Point (at the Golf Course), Sedge Island, Debbies Creek, and Osborn Island are examples of territories within this category.
- **The swamps, creeks and ponds west of Riverview Drive and north of the golf course.** As a low-lying area, the above soak up and channel heavy rains harmlessly out to the Manasquan River. Due to erosion caused by construction of homes proximate to them, these ponds (et al) have been silting at an accelerated rate, and thus becoming unable to carry out their function with proper efficiency. A state Erosion and Sediment Control Act should help to alleviate this problem in the future.
- **"Owl Woods".** *This is the lowlying swamp, bordering the northern boundary of the golf course and the southern boundary of the Hayward health project. Known as "Owl Woods", this area represents the last complete natural habitat (ecosystem) in Brielle (disregarding the other two wooded areas which have received site plan approval for development).

*For older residents, parts of this area would be known as Big and Little Butters.

As such, "Owl Woods" would fall under the classification of "exceptional, irreplaceable, and delicately balanced".

Half of the swamp area has been declared a conservation easement, thus protecting and preserving the natural state for subsequent enjoyment and study by future generations. This area can only remain undisturbed, however, if the steeply-wooded slopes along Owl Woods are also protected from development.

This area is home to some 200 types of plants and 70 species of birds. Moreover, it houses any number of kinds of fish, reptiles and other amphibians, as well as the gray squirrel, chipmunk, opossum, red fox, skunk, raccoon, weasel, muskrat, and many other smaller creatures.

The Great Horned Owl, who has nested here and is rarely seen at the Jersey shore, is what gave the woods its name. The pitch pines, growing along the edge of the swamp, are among the finest of their species to be found anywhere in the state. Three of these trees exceed 80 feet in height and 65 inches in circumference. Lastly, the area is noted not only for its excellent stand of Black Gum, but also for the largest stand of swamp hyacinth in New Jersey.

The latter specimen is so rare that only one other location in the state is known to support it.

- **The slope near Owl Woods.** Referred to in the preceding paragraphs, this steep slope forms the northern boundary of the Manasquan River Golf Course. As long as the slope is allowed to remain "as is", Owl Woods can also exist. If it is developed in the future, however, the lowlands may be irreparably affected. Should it be possible for the slope to be made part of a conservation easement, Owl Woods would be safe for the enjoyment of future generations. Such an easement could permit the slope to remain under the ownership of the golf course, yet possibly result in a corresponding reduction in value for property tax purposes.





Plaque marking site of 5,000 year old Indian settlement.

- **The Indian Settlement.** Estimated to date back some 5,000 years, the Indian Settlement is a part of a 26 acre tract designed as a housing development. Approximately an acre of this Indian Settlement has been declared a conservation easement by the Rathjen Family, to preserve it in its natural state. Part of this easement contains a large holly grove, some of which may actually date back to the era of the settlement itself (1600).

Another portion of the easement is a swamp, which is believed to be a portion of the lake (see Map) that initially attracted the Indians to this location.

Professor Herbert C. Kraft, of Seton Hall University, undertook an archeological study of the Indian Settlement area, under the auspices of the Brielle Environmental Commission. A copy of the report can be inspected at the Brielle Library.

The site has been appropriately marked with a boulder and plaque by the Union Landing Historical Society and the Brielle Environmental Commission.

- **The former Indian Lake.** Situated northwest of the bend on Riverview Drive (see Map), the location was a large swamp prior to being filled as a result of dredging the river during the early 1930's. The soil under the fill remains poorly drained, thus rendering the area generally unsuitable for development or construction. Due to the poor drainage characteristics, water may set for long periods on the surface after a heavy rain (a commonplace occurrence at the present time). If drain fields were installed, the swamp bottom could dry and shrink, causing any existing housing above it to both settle and crack.
- **Brielle's Wildlife Sanctuary.** Waterfowl hunting was a serious menace to river utilization, as well as a hazard to the residents near Osborn Island and Ellis Point. Thanks to the concentrated efforts of many

Brielle citizens and youth organizations, this practice was brought to a halt by a ban imposed by the State Fish and Game Council. This state law prohibits hunting in that portion of the Manasquan River contained within the Borough of Brielle from the Ocean Inlet to the Highway 70 Bridge. As such, Brielle is considered an official wildlife sanctuary.

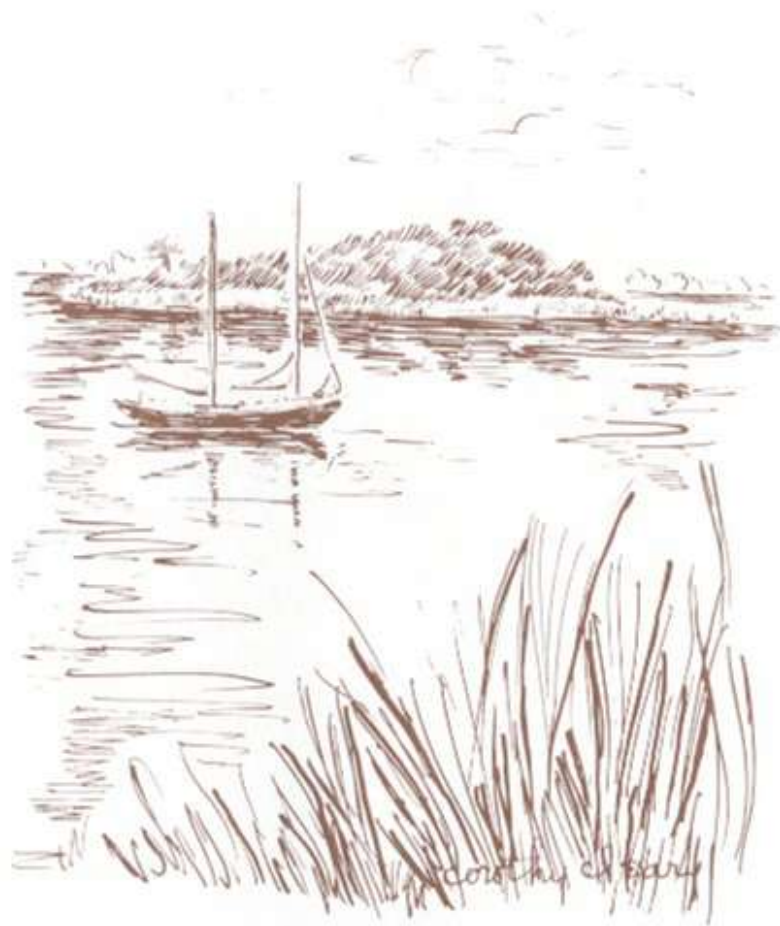
- **Robert's Swamp Brook and Steep Slope.** The portion of the northwest corner of the Borough that includes a steep slope dropping to Robert's Swamp Brook and the flood plain of the Brook should be considered a sensitive area. Any disturbance of the steep slope would cause serious erosion into Robert's Swamp Brook with possible downstream flooding and excessive silting of the Glimmer Glass.



- **Osborn Island.** More commonly referred to as Treasure Island, it is one of the very few beautifully wooded islands existing along the coast. Area residents boast the tale that the island served as the inspiration to Robert Louis Stevenson when composing his famous literary masterpiece of the same name.

The northwestern portion of the island contains many large specimen oak. Of the Island's total 7½ acres, fully 5 are comprised of woods, making it well suited for various primitive camping ventures.







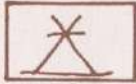

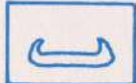



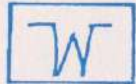




Osborn Island should be classified as a special scenic/aesthetic area, and preserved in its natural state for passive recreation purposes by either purchasing its development rights or by having its owner declare it as a conservation easement.



Osborn Island is one of the few beautifully wooded islands along the coast.

SENSITIVE AREAS MAP KEY

(and Biocommunity)

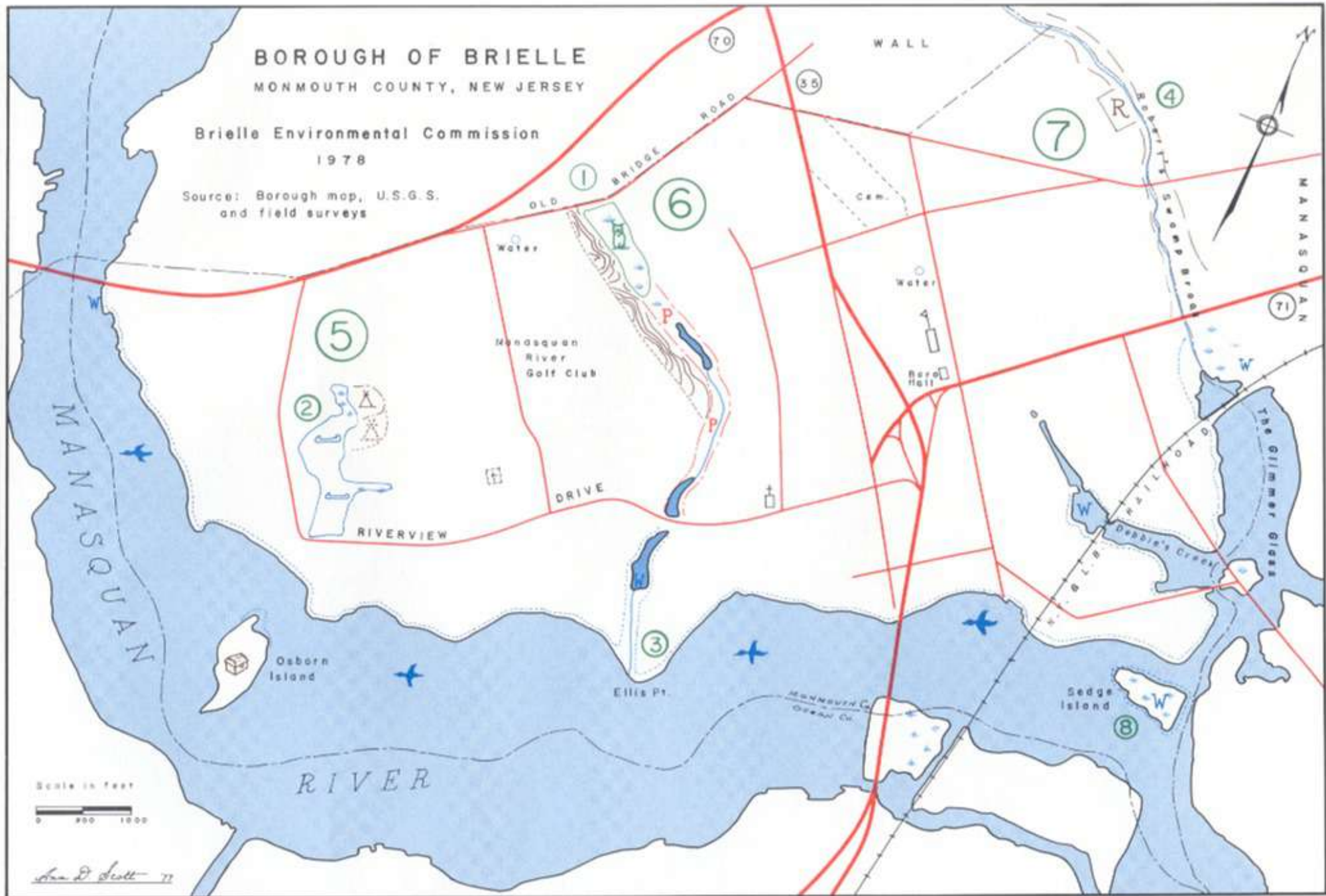
Sensitive Areas		Biocommunity*	
	Owl Woods		Owl Woods and golf course slope
	Steep slope on N golf course boundary		Indian site swamp area
	Creek and ponds on N golf course boundary		Ellis Point
	Indian Settlement		Roberts Swamp Brook area
	Former Indian Lake		Woods (proposed development)
	Osborn Island (Treasure Island)		Woods (proposed development)
	Wetlands		Woods (proposed development)
	Roberts Swamp Brook, floodplain and slope		Sedge Island
	Wildlife Sanctuary		

*Number key for Bird and Animal Appendix

BOROUGH OF BRIELLE
MONMOUTH COUNTY, NEW JERSEY

Brielle Environmental Commission
1978

Source: Borough map, U.S.G.S.
and field surveys



Scale in feet
0 500 1000

Ana D. Scott '77