ENVIRONMENTAL FEATURES

As a rural and riverfront community, Eagle Harbor has diverse environmental features. And as a coastal community the Town is vulnerable to certain hazards that have intensified with climate change. This section reviews and documents environmental features; the next section highlights coastal hazards.

The River and Shoreline

The Patuxent River and waterfront characteristics are major community assets and important environmental resources. Eagle Harbor has 4,000 feet of shoreline and its characteristics are varied. There are shallow, retreating beach areas; grassy edges of private properties meeting the shoreline; deep grassy areas with screen-covered rip-rap where properties slope upward; natural marsh areas; areas edged with large rocks; and, an elevated area at least 10 feet above the river. A retaining wall shoring up the highest elevation along the river collapsed during the planning process due to erosion of the soil from wave action. The shoreline is also equipped with piers, most of them private.

Despite the length and diversity of the shoreline in Eagle Harbor, access to this part of the river is limited due to years of silt buildup. This situation has made it difficult to launch boats from the shoreline, especially during low tide, and has created a hazardous situation for swimmers. There is speculation that the outflow from the power plant has

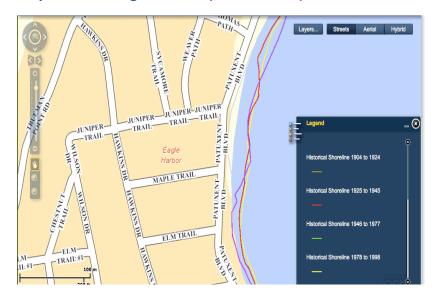
created this situation, while it is also possible that upstream runoff has caused the problem. Both may be true. In any case the situation requires an effective long-term solution.

Over time erosion has redefined the shoreline, shrinking it in most locations; expanding it through accretion (the gradual accumulation of sediment) in others. While the movement of water, waves and wind and the resulting erosion of the shoreline and silt buildup are natural processes, there is increasing evidence that climate change has accelerated this process. Map 11 shows evident of this process and conditions in Eagle Harbor. For the most part, the shoreline has retreated over the last century and the process is accelerating.



Evidence of Beach/Shoreline Erosion

Map 11: Shrinking Shoreline (1904 to 1998)





Accessory Structure at Risk of Flooding



Evidence of Shoreline Erosion and Risk to Existing Structure

Green Infrastructure and Special Conservation Areas

Eagle Harbor's green infrastructure network was first identified and mapped in the 2005 Approved Countywide Green Infrastructure (GI) Plan and updated in the 2017 Prince George's County Resource Conservation Plan. The GI Plan identified three categories of sensitive and important environmental features: Regulated Areas that capture

existing and connected environmental features including streams, wetlands and their buffers, the 100-year floodplain and steep slopes; Evaluation Areas that identify patches of land that are at least one acre in size, within 600 feet of another patch, and at least 50 feet wide that contain interior forests, wetlands, unique habitats and/or bird nesting sites; and, Network Gaps that highlight in-between areas that are critical to a complete green infrastructure system. Network Gaps were not identified in the 2017 plan.

In the 2005 plan, Regulated Areas are concentrated along the shoreline including portions of Trueman Point, and along Coleman Creek (Map 12). Most of Eagle Harbor at that time is classified as Evaluation Areas; the rest, as Network Gap areas -important to establishing a complete green infrastructure network. In the 2017 plan, Regulated Areas still define the coastline and Coleman Creek. However, this category now includes the entire Trueman Point (Map 13). Evaluation Areas still define most of the Town. While Network Gaps are not identified in 2017, through a future master plan for the subregion, or development processes, Network Gaps identified in 2015 will likely be reestablished.

Map 12: Green Infrastructure (2005 Plan)





Map 13: Green Infrastructure (2017 Plan)

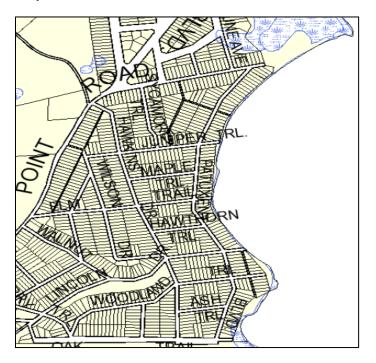


Wetlands and Areas of Concerns

Wetlands cover most of Trueman Point and most of the coastline in Eagle Harbor. (Map 14.) Beyond Trueman Point,

the largest wetlands are in the southeasternmost corner of the community, on private property. The State has determined that these wetlands may contain certain rare, threatened and endangered species or unique habitat that should receive special attention and protections. As such these areas are labeled Areas of Concern and are protected from development through the 100-foot Buffer Zone.

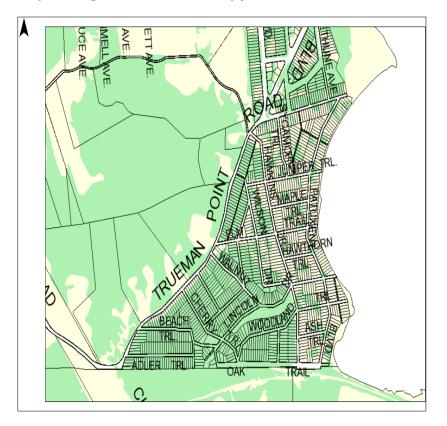
Map 14: Wetlands and Areas of Concern



Tree Canopy

Eagle Harbor has an extensive tree canopy, primarily in the uptown area and along Trueman Point Road. The tree canopy is spotty in the rest of Town, especially along Patuxent Blvd and many of the east-west Trail streets in Downtown Eagle Harbor.

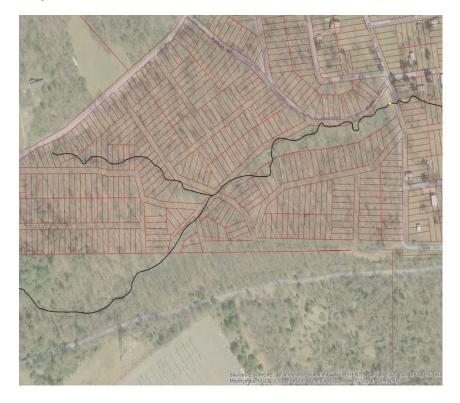
Map 15: Eagle Harbor Tree Canopy



Coleman Creek

Coleman Creek, named after a prominent Town resident, runs from Uptown to Downtown Eagle Harbor, in the southern section of Town (Map 16). It runs through both developed and underdeveloped property and makes its way to the Patuxent River via a culvert beneath Patuxent Blvd. The width and depth of the creek vary along its length, and changes over time, reaching its shallowest point about 40 to 50 feet from the river.

Map 16: Coleman Creek







Coleman Creek East (Top) and West (Bottom) of Patuxent Blvd

A wall of vegetation grows up along the creek bank east of Patuxent Blvd that must be cut back regularly to avoid filling in the creek. Sand also regularly travels in the creek, also necessitating regular dredging to keep stormwaters from overflowing the bank.



Wall of Vegetation along Coleman Creek east of Patuxent Blvd



Coleman Creek East of Patuxent Blvd after Dredging

The shallowness of Coleman Creek close to the river coupled with the vegetation along the coastline at this location can serve to filter stormwater to some degree as it flows into the river. However, the quality of the stormwater reaching the river is still an issue. Stormwater picks up, carries and deposits

pollutants it encounters along its route into the river. Leaky and poorly maintained septic systems release bacteria and viruses that can pollute stormwater that flows into the river. Best practices in stormwater management dictate that stormwater be reduced or retained close to its source, or at other locations closest to the source. Rain barrels, rain gardens, ditches, swales, detention and retention facilities and floodplains would help to reduce stormwater reaching the river and allow water quality in the river to improve as a result.



Shallowness of Coleman Creek Near the River



Coleman Creak at its Shallowest Point Near the Patuxent River