

The Maryland Department of Natural Resources has rated the quality of streams using the Maryland Biological Stream Survey (MBSS). Based on the MBSS, most streams have been categorized as having poor habitat and biological health, and elevated nutrient levels, while still supporting and maintaining a diversity of biological life.

The Anne Arundel County Department of Public Works has rated the quality of 410 miles of county streams through their Watershed Ecosystem and Restoration Services division (WERS) and reached similar conclusions. High levels of sediment erosion plague 33% of stream miles, and 53% of physical habitats are severely degraded. Our streams need our help!

We need volunteers to help us continue monitoring Galloway Creek and other Sanctuary streams. Volunteers collect water samples, capture fish and aquatic insects, identify songbirds, catch amphibians, and measure stream flow.

We need homeowners in the watershed to practice stewardship on their property by learning how to keep the rainwater from running off their lands, reducing nutrient runoff, reducing pesticide use, and improving habitats for wildlife.

To learn how you can help improve Galloway Creek for fish, wildlife and people, please contact the naturalists at the Jug Bay Wetlands Sanctuary.



1361 Wrighton Road
Lothian, MD 20711

(410) 741-9330

www.jugbay.org

Galloway Creek

Get To Know Your Local Watershed



Galloway Creek Watershed

- The watershed or drainage basin covers 1400 acres.
- Galloway Creek is about 3.3 miles long from headwaters between Greenock Road and Route 408 to the mouth at the Patuxent River.
- There are about 470 residences and a population of about 1100 in the watershed.
- The watershed is composed mostly of: 809 acres of forest (58% of total), 227 acres of residential (16%), and 191 acres of agriculture fields (14%).
- About 311 acres of the watershed (22%) are covered with impervious surface.
- About 331 acres of the watershed (24%) is within the Jug Bay Wetlands Sanctuary.

Life in the Creek

Galloway Creek has had several beaver dams come and go along its lower reaches in recent years. Standing dead trees and open areas in the creek's floodplain have expanded the wetland habitat. Red-headed woodpeckers, wood ducks, and river otters have been observed. Winterberry holly thrives in the sunny parts of the floodplain, and a grove of young sycamore trees is established nearby a culvert helping to slow water flow and prevent erosion. We have identified 10 species of fish and 12 families of aquatic insects. Streamside salamanders have also been seen during surveys.



Environmental Problems

Galloway Creek flows through the town of Waysons Corner and right under Route 4, giving it the highest percentage of impervious surface of the three study streams. Because of its proximity to the highway, Galloway receives debris from illegal dumping. It also has a small sewage treatment plant in its headwaters that releases 90,000 gallons of effluent a day. Galloway shows consistently higher nutrient levels than the other streams and preliminary surveys show degraded aquatic habitat.



Beginning in 2009, Sanctuary volunteers have assessed stream health by collecting water samples, and by monitoring fish and aquatic insect populations. Our studies reveal that Galloway ranks Poor when compared with other county streams.

Solutions

Solutions to improving the condition of Galloway Creek rest mostly with private landowners. Homeowners can:

- reduce the size of lawns and impervious surfaces
- stabilize exposed soil
- use rain barrels
- maintain septic tanks
- plant wildlife habitats
- pick up pet waste
- reduce fertilizer and pesticide use