

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 Pindell Branch 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, planting more trees and shrubs, reducing pesticide use, and improving habitats for wildlife.

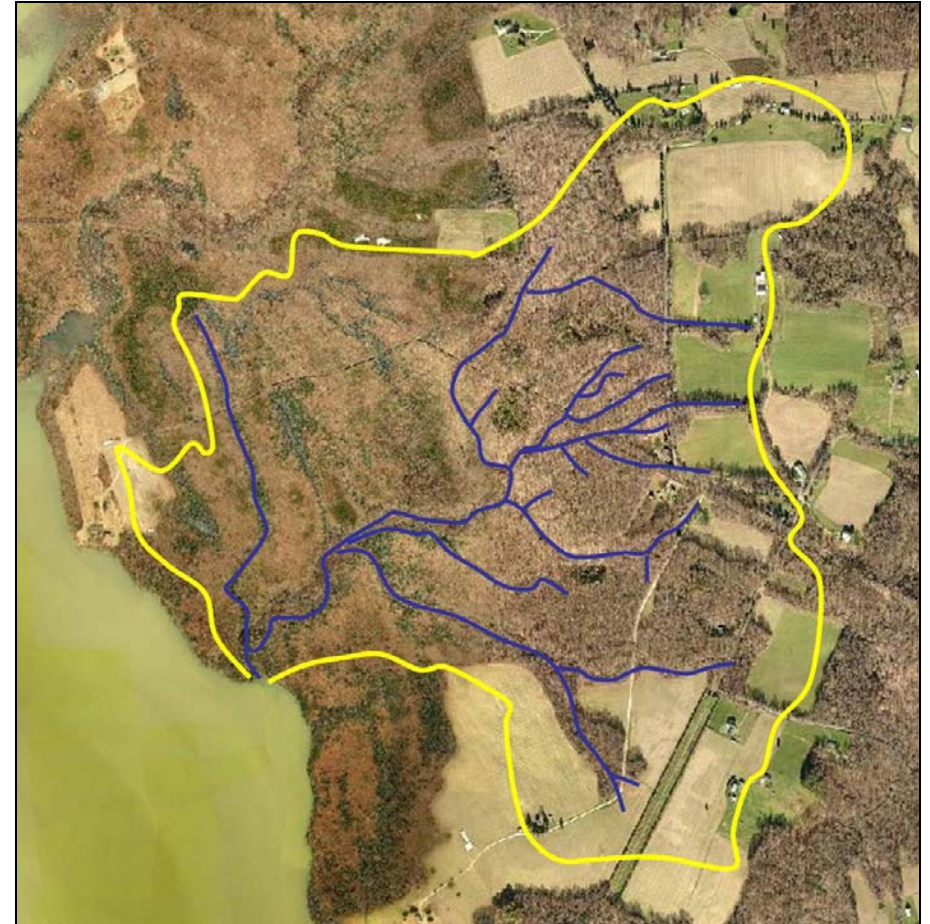
To learn how you can help keep Pindell Branch a healthy and important aquatic habitat for fish, wildlife and people, please contact the naturalists at the Jug Bay Wetlands Sanctuary.



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Pindell Branch

Get To Know Your Local Watershed



Pindell Branch Watershed

- The watershed or drainage basin covers 513 acres.
- Pindell Branch is about 1.5 miles long from headwaters along Pindell Road to the mouth at the Patuxent River.
- There are 8 residences and a population of only about 10 in the entire watershed.
- The watershed is composed mostly of: 370 acres of forest (72% of total), 86 acres of agriculture fields (17%), and 45 acres of residential (9%).
- About 52 acres of the watershed (10%) are covered with impervious surface.
- About 393 acres of the watershed (77%) are within the Jug Bay Wetlands Sanctuary, including a warm season grass meadow.



Life in the Creek

The floodplain is filled with spring beautys and jack-in-the-pulpit flowers, and huge sycamores line the banks. At the creek mouth a small tidal marsh is a lush green in summer. We've identified 16 species of fish and 15 families of aquatic insects in this small shady stream. For several years, bald eagles nested in high trees overlooking the water.



Environmental Problems

The old Chesapeake Beach Railroad, built in the 1890s cuts straight through the watershed. Borrow pits and a high earthen levee are evidence of this construction. Culverts have downcut the creek channel deeply under the railroad bed, making it impossible for fish and other animals to move upstream.

Though the Pindell watershed is sparsely populated our data still show elevated nitrogen levels. Nitrogen from septic tanks and agricultural fields can cause over enrichment of the water. 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 Pindell ranks Fair when compared with other county streams.



Solutions

Solutions to improving the condition of Pindell Branch rest mostly with private landowners. Homeowners can:

- stabilize exposed soil quickly
- use rain barrels
- maintain septic tanks
- plant wildlife habitats
- pick up pet waste
- reduce fertilizer and pesticide use

