



Loudoun Wildlife Conservancy

People and Wildlife Living in Harmony

Why We Monitor: The Importance of Stream Monitoring

The water quality of Loudoun County's streams is integral to the well-being of local wildlife and can serve as an accurate indicator of overall ecosystem health. Most of Loudoun County's streams support diverse communities of aquatic life, but in the nation's third-fastest growing county, these irreplaceable resources are under a daily threat of destruction and need to be continually monitored. Streams and their associated shoreline habitats provide shelter, forage, and movement corridors for local animals, and are also used by many of the migratory species that make their seasonal journeys across our landscape.

DEQ stream monitoring data show that portions of all major streams in Loudoun County are unfit for recreational use. These streams are called "impaired for their intended uses." However, DEQ has assessed only 25% of the waters for chemical and bacteriological quality, and less than 5% for aquatic life and habitat quality. Budget limits restrict DEQ from expanding their monitoring, and limit helping Loudoun County clean up degraded streams. Citizen action is needed to supplement DEQ efforts to protect our streams and restore the health of the degraded ones.



Horsepen Run in Algonkian Regional Park has a natural riparian buffer that stabilizes the stream bank, cools the stream water, and provides organic matter to feed macroinvertebrates.

DEQ Citizen Stream Monitoring Program -- DEQ recognizes the need for supplemental citizen monitoring, and supports citizen groups with modest grants for equipment and training. The LWC Stream Quality Project receives this grant support. In return, LWC stream monitoring data are submitted to DEQ annually, and DEQ uses these data to help identify stream that need follow-up monitoring by DEQ when state resources allow. DEQ publishes a list of streams needing follow-up every two years, and several Loudoun streams are on this list based upon LWC citizen stream monitoring data.