

Testimony in support of Senate Bill 523

Vernal Pool Wetlands Protection Act of 2026

ECOLOGICAL VALUE

Vernal pools—small, seasonal wetlands that fill with water in the spring and dry by late summer—are vital ecological habitats in Maryland. Though they may seem temporary and insignificant compared to larger wetlands or rivers, these unique ecosystems play a critical role in supporting biodiversity and maintaining environmental health across the state.

Vernal pools provide essential breeding grounds for a variety of amphibians and invertebrates that cannot survive in permanent water bodies. In Maryland, rare and declining species such as the wood frog, spotted salamander, and fairy shrimp depend on these pools to complete their life cycles. Because vernal pools usually lack fish, which are major predators of amphibian eggs and larvae, they serve as safe havens for these species. Many of these organisms are considered indicator species, meaning their presence signals a healthy and balanced ecosystem.

Despite their small size, vernal pools support a disproportionately large amount of biodiversity. The temporary wetlands create a mosaic of distinct microhabitats, each supporting various forms of life—plants, insects, amphibians, and even some reptiles and mammals that rely on them for food and water. Protecting vernal pools thus helps conserve a wide range of species within Maryland's landscape, contributing to regional and statewide biodiversity goals.

WATER QUALITY

In addition to their biological importance, vernal pools serve crucial hydrological functions. They capture runoff, helping to reduce flooding during heavy rains, and gradually release water back into the surrounding soil and groundwater systems. This process filters pollutants, improves water quality, and maintains soil moisture balance in nearby ecosystems. In a landscape with a growing amount of impervious surface, the groundwater recharge function of vernal pools is hard to overstate. As Maryland faces increasing development pressure and climate variability, these natural water retention systems are becoming even more valuable; both locally and in the broader Chesapeake Bay ecosystem.

Vernal pools are often overlooked in conservation planning because of their small size and seasonal nature. Many are filled or drained during land development projects, leading to habitat loss for the specialized species that depend on them. In Maryland, Scientists and Conservationists are working to map, monitor, and protect vernal pools, integrating them into broader wetland protection policies and environmental education programs.

AGENCY EFFORT

The concern that the designation of vernal pools as wetlands would require an enormous amount of agency effort or a comprehensive mapping effort is misplaced. When a site is slated to be altered, wetlands are delineated and marked as part of that process. The process for protecting

vernal pools would not be very different from that used in protecting other wetlands. Conserving these critical habitats will not be a heavy administrative lift for the Maryland Department of the Environment. The Department of the Environment's enormous fiscal note is wildly inaccurate.

CONCLUSION

Senate Bill 523 is an important bill which will have a profound positive impact in conserving rare and endangered species in Maryland. I respectfully urge the Maryland General Assembly to vote to support it.

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