

## **Incorporating equity and climate change criteria into Maryland land protection**

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Sea levels in the Chesapeake Bay have risen a foot in the last century – more than twice the global average. By 2100, Maryland stands to lose 40% of its marshes to sea-level rise. Maryland's coastlines and communities need intervention now to adapt to these startling climate impacts. The state of Maryland has developed policies, including the Building Resilience to Climate Change policy (2010) and Saltwater Intrusion Management Plan (2019) to integrate climate change adaptation into natural resource planning. Land protection activities, such as acquisitions and easements, support climate adaptation by protecting lands from development, providing wildlife habitat, holding space for changing landscapes, and preserving land for future generations. The state is evaluating existing state policies to reveal barriers or opportunities for improving land acquisition criteria to incorporate marsh migration and co-benefits such as carbon sequestration. The evaluation is also a great opportunity to include equity considerations by highlighting acquisition opportunities in underserved communities. This will assist the state in reviewing financial options to support these underserved communities to adapt to sea-level rise and other climate impacts. Using multiple data layers developed by the Maryland Department of Natural Resources, including parcel data, revised marsh migration data, and sea level rise projection data, an analysis of the different policies and criteria will be conducted via a mapping exercise. For instance, the state of Maryland currently has a policy in place to avoid the purchase of lands within a 0-2 feet sea-level rise scenario. It is unclear whether this policy is helping or harming marsh migration potential and equity considerations. The visualization of this data will help inform necessary policy changes or evaluation criteria for future land protection activities that incorporate equity and climate change assessments.