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Coastal water resources and watershed management

Geographic Scale, Fairness And Cost Efficiency In The Bay Tmdl

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In 2000, Maryland, Bay state partners, and EPA renewed their commitments and set new goals to restore water quality throughout the Chesapeake watershed by reducing nutrient loads to the Bay. In 2003, the State of Maryland revised its “Tributary Strategies” plan, setting forth a suite of programs, actions, controls, and best management practices for each source sector across the state at the major tributary basin scale (for 10 major basins). In 2010 the Chesapeake Bay TMDL was completed and within that process Maryland refined basin strategies and also defined county geographic scale restoration commitments to facilitate and engage local decision makers.The addition of the county geographic scale was based on Maryland’s strong and well-established system of county governments and soil conservation districts and that restoration goals defined at these local scales sets the stage for a practical implementation plan that provides a necessary scale for accountability, tracking and reporting progress, and building a partnership. Four key principles, also used by EPA in the Bay TMDL, guided the formulation of specific decision rules used to allocate “restoration responsibility” by pollutant source sector and geographic scale. The first principle was to maintain equity in implementation efforts among the pollution source sectors so that each sector had a similar responsibility relative to their implementation potential. Secondwas a provision for crediting practices already in place thus preventing penalties to areas further ahead in the restoration process.Third, consideration was given for eachsector’s specific impact on the Chesapeake Bay water quality. Lastly, feasibility of each sectors restoration was ensured. This allocation process was presented to and approved by the Governor's Bay Cabinet, a group of State agencies leaders that advise the Governor on management of the Chesapeake Bay and promote interagency coordination and integration of Bay-related programs. The allocation process is robust, in that it assigns responsibility to all sectors that are contributing nutrient pollution to streams draining to the Bay and the Chesapeake Bay tidal waters. In short, this allocation approach is the “polluter pays” principle and provides a “fair” process to ensure that all sectors participate in the solution. While there has been criticism that this solution is not founded on or does not promote the most cost effective scenario when considering all sectors in aggregate, critics of this approach may fail to realize the opportunity that exists to explore more cost efficient options by sectors working together. Opponents also sometimes fail to recognize

the implications of “the” most cost effective allocation option. Some failures include shifting a significant burden onto a low cost sector, which can limit opportunity to develop “market based” solutions such as trading. While there is no perfect allocation approach, the application of the “fair” approach, combined with “market based” allows the opportunity for “balancing” restoration costs.