Promote carbon stewardship actions to increase the carbon storage and sequestration benefits of watershed restoration (Recommendation 3)

Climate change poses a major threat to the sustainability of communities and ecosystems within the Chesapeake Bay watershed and will impact our ability to meet water quality and other partnership goals. The *latest IPCC report* emphasizes the urgent need to reduce emissions worldwide to mitigate the most catastrophic effects of climate change for current and future generations. Carbon stewardship is a holistic approach that balances carbon storage and sequestration objectives with other ecosystem restoration goals. In the context of the Chesapeake Bay Program, practices like forest and wetland conservation, management, and restoration deliver climate mitigation benefits while ensuring ecosystems also maintain the health, function, and resiliency needed to continue delivering water quality benefits.

Impact to how we work: Use carbon stewardship as a framework to integrate carbon considerations throughout the partnership's restoration, conservation, and scientific efforts.

- Apply carbon stewardship science by adopting carbon accounting methods to better target existing above- and below-ground carbon sinks for conservation and management, to inform BMP selection and improvement, and to minimize emissions associated with restoration.
- Develop better incentives for carbon stewardship to improve consideration of carbon in land use planning and decision-making, increase the conservation and stewardship of carbon sinks, and improve BMP selection to support climate mitigation and build soil health.
- Use decision support frameworks for considering tradeoffs between climate mitigation and other objectives associated with projected climate and land use changes.
- Improve regional coordination around carbon stewardship using natural climate solutions by convening national, state, and local partners already engaged in these efforts.

Impact on Chesapeake Bay Watershed Agreement: Without changing the agreement, carbon stewardship could be advanced by identifying opportunities to integrate carbon benefits into management strategies for existing goals or outcomes. Eventually, the partnership could consider developing a new goal or outcome focused on carbon stewardship.

General Level of Effort: High. Since the Bay Program is not currently directly engaged with climate mitigation work, significant effort would be required to develop and implement a strategy for integrating carbon stewardship into the work of the partnership.

How to Strategies (Phase 2 Actions):

- Adopt a carbon accounting strategy to quantify and communicate the carbon storage and sequestration currently being provided by ecosystems as well as the carbon impacts of current and new water quality BMPs that could deliver climate benefits.
- Identify opportunities across multiple sectors to better incentivize carbon stewardship through policies, incentives, crediting, and markets. This should include promoting the conservation and stewardship of existing carbon sinks to ensure climate resilience as well as the implementation of BMPs that deliver water quality and climate mitigation benefits. Feasibility analyses could inform if carbon crediting (including blue carbon) or more traditional markets (for forest products, agroforestry, etc.) could provide financial support.
- Identify existing national, regional, state and local natural climate solution initiatives and relevant organizations to engage to inform opportunities for improved regional coordination.