B25 Healthy Watersheds Recommendations

Vanguard Approach

Implement a more holistic and people-centric approach to improving and maintaining watershed health and ecosystem services as a foundational goal of the partnership.

Maintaining and improving watershed health and ecosystem services help local communities meet their needs for flood control, resilience to climate change, local biodiversity, public recreation, open space conservation and conservation of working lands. Characterizing the health and services provided by local sub-watersheds within the Chesapeake Bay Watershed along a spectrum of watershed health can help communities understand the value of their natural assets and lead to actions to maintain or improve local watershed and stream conditions. This approach attempts to marry feedback the Chesapeake Bay Program has received about the need for more local engagement to drive watershed actions while not losing the big picture of what is happening across the entire watershed as we work toward a functioning ecosystem.

Key elements of this approach that may suggest new approaches or directions for the partnership include:

- A network-of-networks approach to communicating with a diversity of communities and understanding their needs.
- Informing and addressing community-defined needs with data, tools and monitoring to facilitate strategic planning, conservation, and restoration decisions.
- Integrating support for living resources, underserved communities and building resilient landscapes into more robust local engagement.
- An integrated approach for characterizing stream, watershed health and ecosystem services.
- A revised accountability framework that relies on engagement through the network-of-networks, rather than reporting requirements, to collate and communicate the diverse array of local actions implemented to improve stream and watershed health and ecosystem services.

Recommendations

1. Through the use of partnership-approved monitoring data, assessments, and tools, characterize and track watershed health at various scales to inform and increase implementation.

A healthy watershed can be defined as an area draining to a stream, lake or wetland where natural land cover supports the dynamic processes, habitats, and water quality conditions able to support healthy and climate-resilient ecosystems and communities. Maintaining watershed health requires a long-term stewardship commitment by local governments and their residents. Watershed health is a multi-dimensional concept including the condition of the land, water, its biological, physical, chemical, and socioeconomic factors.

Leveraging existing data, it is possible to characterize watershed and stream health using multiple factors across all catchments (e.g., temperature, conductivity, pH, flow, nutrients, sediment, bacteria, impervious cover, forest cover, etc.). These data have yet to be integrated into a common platform or tool to make it easy for communities to understand their local watershed and stream health while

recognizing the multi-dimensional factors that influence it. The recently released Chesapeake Healthy Watersheds Assessment (CHWA 2.0) is a step in the right direction but further refinement and advancements should be driven by community-defined needs. Watershed and stream health data need to be explicitly linked with ecosystem services to bridge the gap between community interests and needs and CBP outcomes. This recommendation toward characterizing local watershed health and ecosystem services outcomes could support a more holistic, outcomes-focused accountability framework called for in the Comprehensive Evaluation of System Response (CESR) report.

2. Support strategic green infrastructure planning for watershed health at multiple scales.

The Healthy Watersheds Goal team, Land Use Workgroup and other goal teams have recognized the importance of local land use and conservation planning for watershed protection for some time. Several existing plans and frameworks can facilitate the integration of watershed health into local plans. For example, nature-based green infrastructure concepts (e.g., greenways, riparian forest corridors, large habitat conservation) can and have been applied within the watershed at various scales and can help determine spatial focus for watershed action.

The CBP Partners should help communities create strategic spatial plans for land conservation and restoration that leverage land use planning concepts where appropriate and incorporates conservation of key habitats, watershed protection and recovery, climate adaptation, and consideration of underserved communities including overlapping state priorities for wildlife, forests, outdoor recreation, public access, working lands and resilience. And to further incorporate watershed actions into existing planning efforts the Bay Program could create a 'playbook' or 'how-to-manual' helping to coordinate and package the information to make it easy to access, understand, and use for local planning needs with input from local planners. These efforts should be designed to complement and help fulfill actions called for in existing plans such as State Forest Action Plans, State Wildlife Action Plans, Outdoor Recreation Plans, Nonpoint source management plans, and of course Watershed Implementation Plans (WIPs).

Moreover, to better communicate the comprehensive needs for watershed action and all of the goals and outcomes of the Bay agreement the Bay program needs a consolidated comprehensive strategic plan. This plan should be updated on a periodic basis (e.g., every 5 or 10 years) that includes a logic model and key points of intervention consistent with these and other recommendations to better explain how the ecosystem works and what the partners are collectively doing and planning to do to protect, restore or maintain watershed health. Other large estuary programs around the country produce such comprehensive conservation management plans (e.g., Great Lakes, Puget Sound, Long Island Sound). Progress towards achieving this plan should be integrated into the accountability framework.

3. Increase the reach and effectiveness of Local Community and Partner Engagement through capacity building.

Local Engagement is key to help communities and other partners understand federal and state programs while also helping them plan, secure funds and take local watershed action. The Bay program jurisdictions and other partners engage in many different forms of outreach and engagement but often for specialized purposes. Supporting these coordination and technical assistance programs promises to be a more comprehensive and holistic mechanism that can be expanded to intersect with more communities in the watershed. These local coordinator programs go by different names but often have

similar functions including facilitation, communication, planning, funding/finance, project management, watershed actions and tracking results. Individuals trained in these areas of multi-disciplinary technical assistance can help engage local communities and conservation partners to assist them in planning and implementing their local priorities. They also help build awareness of nonpoint source pollution prevention and reduction efforts and incorporate living resources conservation, climate resilience and working with underserved communities.

To increase the reach and effectiveness of existing community and partner engagement efforts, the Bay Program could foster and support the creation of a "network of networks', providing a forum for coordination of these existing efforts, sharing best practices and identifying gaps that need to be filled. The Bay Program could also make an intentional effort to create space within existing goal team and workgroup meetings to facilitate better two-way communication between people working at the local level and the Bay Program.

4. Integrate land conservation and stewardship more explicitly into the goals of the Bay Program

Consistent with a more holistic approach to watershed health is more explicit recognition of the critical role that land conservation and stewardship play in maintaining watershed health. These additional actions can help maintain and improve watershed health, ensure the long-term resiliency of critical habitats, and directly benefit communities in the near term. Activities in each of these areas need to be accelerated and revisited to set new goals for 2025 and beyond and to integrate these actions more fully into the Bay program.

Integrated Protection/Restoration/Stewardship – Non-point source pollution is the number 1 problem for water quality nationally. Conserving intact parts of the watershed, forests and other habitats and developing land use plans to avoid impacts to these areas helps prevent pollution resulting from land use conversion. At a more local scale protecting and maintaining urban tree canopy or other green infrastructure should be strategically deployed to help support local waterways, lower stream temperatures, and provide other local community benefits. Protection and planning are much cheaper than restoration on a per acre basis and land conservation can provide increased opportunities for restoration because access to restoration opportunities is a limiting factor in many communities. Land conservation also provides source water protection and aquifer recharge benefits which have not traditionally been a part of the Bay Program.

This recommendation involves several components. For land protection, the focus is to leverage knowledge of local, state, and federal programs to accelerate protection of intact portions or other key areas of local watersheds to conserve 30% of the land by 2030 and to endorse a longer-term goal of 50% conservation by 2050. For restoration, it involves seeking opportunities to couple land protection with restoration to explicitly achieve ecological uplift. Our aim is to restore aspects of ecologic function that will help achieve and contribute to watershed and stream health. The partnership lags on outcomes for riparian buffers and wetlands. Aquatic resources also need continued attention such as oysters and shallow water habitat to which should be added a more robust approach to aquatic connectivity and freshwater or saltwater mussels. This recommendation leverages knowledge of local, state and federal programs to accelerate and strategically focus restoration of local watersheds toward watershed health (i.e., forest buffers, wetlands, shallow water habitat, etc.).

For stewardship, existing goals should be expanded to include the management of public and private lands that contribute to watershed health such as forests. As the partnership reaches its goals for restoration and protection in local watersheds there is a need to shift some of the program focus toward long-term maintenance and management to protect our investments. Climate change further underscores the need to actively manage the natural lands that support watershed health. With an increased risk of natural disturbances and future conditions likely to support the spread of invasive species, pests and pathogens in our highly fragmented landscape, ecosystem management and stewardship is essential to ensure resilience. The recommendation is to prioritize and improve coordination of efforts to manage and steward protected and restored areas to maintain ecosystem function and resiliency. Stewardship also includes the expansion of publicly accessible natural lands through the creation of more parks and trail networks. This is a critical component of the proposed people-centered approach and will enhance the livability and land values for local communities, particularly underserved communities. Expanding access to waterways and natural lands may increase public appreciation and support for the ecosystem services provided by healthy streams and watersheds.

5. Revise the Bay's Accountability Framework to promote protecting, restoring, and maintaining watershed health.

The Comprehensive Evaluation of System Response (CESR) report for the Bay recommends revising the accountability framework toward counting outcomes and not just practices. Consistent with this advice, this recommendation is to improve the Bay Program's crediting framework to better incentivize practices that will improve watershed health and ecosystem services provisioning, including land conservation and stewardship as complementary insurance policies for restoration.

A revised accountability framework could credit and incentivize those actions that move local waters/lands up the spectrum of watershed health and provide additional ecosystem services benefits. The recommended Bay Comprehensive Plan could serve as a blueprint against which progress is evaluated. Other metrics could include miles of delisted streams and mitigated point sources (acid mine drainage), reductions in impervious surfaces per capita, thresholds for percent of hardened shoreline, increased forest riparian buffer and urban tree cover acreages, increased or maintained habitat connectivity, and increased access to waterways and natural lands for people. Many of these potential metrics are already monitored or could be from existing data to gauge if watershed actions are having their intended effect. Lastly, but perhaps most importantly, a revised framework needs to showcase the diverse array of projects implemented by local communities that directly or indirectly help improve and maintain watershed and stream health.