

What local officials need to know about the Chesapeake Bay Restoration

Introduction

The following draft list of topics that local officials need to know about the Bay Restoration is presented for discussion with focus groups to be convened by Ecologix under a contract issued by the Bay Program. The list was compiled from the Local Leadership Outcome Management Strategy, other Watershed Agreement Management Strategies, a report by Environmental Leadership Strategies (ELS) based on interviews of local government officials and the Chesapeake Bay Stakeholder Assessment conducted by the Institute for Environmental Negotiation, University of Virginia (IEN).

The list is organized into general discussion topics, followed by topics of interest to local leaders under the 10 Watershed Agreement Goals with two headings: 1) “big picture” topics; and 2) more detailed project or issue specific workshops with peer to peer interaction. These two headings were derived from the recommendations of the ELS study and reflect the types of topics and presentations favored by the local officials interviewed for that project.

We are seeking input regarding additional topics that should be added to this list and the relative priority and local interest in each of these subjects. Please email comments and suggestions to Bob Summers (robert.summers.phd@gmail.com) or Bob Hoyt (bhoyt@ecologixgroup.com).

General

- 1) *Big picture perspective on watershed stewardship efforts, including the fundamentals of watershed conservation and restoration - what is broken, why it matters, and how to fix it*
 - a. Economic and social benefits of the watershed restoration to the Region and community – value of ecosystem services.
 - Business opportunities
 - Attracting new businesses
 - Jobs
 - Public Health
 - Quality of life for citizens
 - b. Cost and benefits of best management practices and ecosystem restoration.
 - c. Funding and technical resources available to local governments
- 2) *Platform for local officials to problem solve and build networks with peers who face similar issues and/or requirements*
 - a. Actions other states or local governments are taking – success stories
 - b. Technical assistance for complying with regulations
 - c. Skills to articulate the value of these projects to their constituencies, considering the difficulty of raising taxes or otherwise finding resources to allocate to environmental initiatives.
 - d. Officials need both to make contact with peers and have access scientists and technical experts.

Abundant Life

Poor water quality and harvest pressure challenge the health of species across the region, while our increasing need for land and resources has fragmented and degraded the habitats they depend on. Supporting sustainable fish and shellfish populations and restoring habitat for native and migratory species will support a strong economy and a balanced ecosystem.

Sustainable Fisheries Goal: Protect, restore and enhance finfish, shellfish and other living resources, their habitats and ecological relationships to sustain all fisheries and provide for a balanced ecosystem in the watershed and Bay.

Vital Habitats Goal: Restore, enhance and protect a network of land and water habitats to support fish and wildlife and to afford other public benefits, including water quality, recreational uses and scenic value across the watershed.

- 1) *Big picture perspective on watershed stewardship efforts, including the fundamentals of watershed conservation and restoration - what is broken, why it matters, and how to fix it*
 - a. Economic and social benefits of fisheries and the habitats that support a healthy ecosystem.
 - b. Importance of Chesapeake Bay seafood to the region's culture, tourism, quality of life
 - c. Importance of recreational opportunities for tourism and attracting businesses and the people (workforce) they value
- 2) *Platform for local officials to problem solve and build networks with peers who face similar issues and/or requirements*
 - a. Technical and funding assistance workshops for local habitat restoration, recreational opportunities
 - b. Case studies, lessons learned, success stories.

Clean Water

Excess nutrients, sediment and toxic contaminants degrade our waterways, harm fish and wildlife and pose risks to human health. Reducing these pollutants is critical to creating safe, healthy waters for animals and people alike.

Water Quality Goal: Reduce pollutants to achieve the water quality necessary to support the aquatic living resources of the Bay and its tributaries and protect human health.

Toxic Contaminants Goal: Ensure that the Bay and its rivers are free of effects of toxic contaminants on living resources and human health.

- 1) *Big picture perspective on watershed stewardship efforts, including the fundamentals of watershed conservation and restoration - what is broken, why it matters, and how to fix it*
 - a. Economic and social benefits of water quality restoration locally and regionally (protecting and restoring groundwater, streams, rivers, reservoirs and the Bay)
 - b. Watershed and jurisdiction-specific WIP requirements for each sector (wastewater, agriculture, etc.)

- c. Overview of regulatory actions by federal, state and local governments.
- d. Overview of restoration actions being taken by jurisdictions, federal, state, local and private land owners

2) Platform for local officials to problem solve and build networks with peers who face similar issues and/or requirements

- a. Technical and funding assistance workshops for specific regulatory requirements (wastewater, pollution prevention plans, erosion and sediment control, stormwater, etc.)
- b. Case studies, lessons learned, success stories.

Healthy Watersheds Goal: Sustain state-identified healthy waters and watersheds, recognized for their high quality and/or high ecological value.

1) Big picture perspective on watershed stewardship efforts, including the fundamentals of watershed conservation and restoration - what is broken, why it matters, and how to fix it

- a. Social and economic benefits – drinking water, recreation, wildlife habitat, flood mitigation, resiliency to invasive species and climate change.
- b. Preventing the loss of forest and wetlands to development
- c. Protection is cheaper than restoration.
- d. Need to develop local capacity and commitment to protect healthy watersheds.
- e. Restoring health to local rivers and streams not only benefits the fish, wildlife and people using them, but also is a necessary step toward meeting water quality standards in the Chesapeake Bay.
- f. Stressors degrading streams that originate from watershed land use, stormwater runoff and leaky public and private wastewater infrastructure are often very challenging to address because of the scale of the problem, cost of remediation, difficulty of acquiring space for remediation projects, and other challenges.
- g. Stormwater control (MS4 permits) and stream restoration must go together to successfully improve water quality and stream habitat.

2) Platform for local officials to problem solve and build networks with peers who face similar issues and/or requirements

- a. Comprehensive planning – water resources, transportation, parks and recreation, economic development
- b. Land use regulations – sub-division, zoning, land development, land preservation, easements.
- c. Education on the value and location of high-functioning landscapes
- d. Evaluation of land use options - Methodology for assessing landscape change with high-resolution data with sufficient precision to inform county-level decisions .
- e. Water and sewer plan implementation – sewer systems v. septic systems for large subdivisions
- f. Construction and post-construction erosion and sediment control and stormwater management.

- g. Inter-jurisdictional information exchange and technical training for stormwater and flooding control, MS4 permits
- h. Enhance the capacity of local governments, organizations and landowners of beneficial stream restoration and maintenance practices
- i. Engage with local governments to inform landowners as well as the general public of beneficial stream restoration and maintenance practices, as well as individual homeowner practices (e.g. rain barrels, lawn care) and their impact on the community.
- j. Provide technical training and assistance for stream restoration design
- k. Technical support/workshops on streamlining stream restoration permit acquisition

Climate Change

Storms, floods and sea level rise will have big impacts across the watershed. Monitoring, assessing and adapting to these changing environmental conditions will help our living resources, habitats, public infrastructure and communities withstand the adverse effects of climate change.

Climate Resiliency Goal: Increase the resiliency of the Chesapeake Bay watershed, including its living resources, habitats, public infrastructure and communities, to withstand adverse impacts from changing environmental and climate conditions.

1) Big picture perspective on watershed stewardship efforts, including the fundamentals of watershed conservation and restoration - what is broken, why it matters, and how to fix it

- a. All aspects of life in the Chesapeake Bay watershed—from living resources to public health, from habitat to infrastructure—are at risk from the effects of a changing climate.
- b. Warming temperatures, rising sea levels and more extreme weather events have already been observed in the region, along with coastal flooding, eroding shorelines and changes in the abundance and migration patterns of wildlife.

2) Platform for local officials to problem solve and build networks with peers who face similar issues and/or requirements

- a. Provide opportunities to learn from local governments that are taking steps to adapt to climate change impacts – coastal flooding, shore erosion, more intense storm events and stream/river flooding.
- b. Living shoreline regulations to prevent coastal erosion.
- c. Training for local governments from State National Flood Insurance Program (NFIP) coordinators regarding flood plain and flood zone ordinance improvements needed to lower insurance rates.

Conserved Lands

Changes in land use and development can impair water quality, degrade habitats and alter culturally significant landscapes. Conserving lands with ecological, historical and community value is integral to maintaining a healthy ecosystem and vibrant culture.

Land Conservation Goal: Conserve landscapes treasured by citizens in order to maintain water quality and habitat; sustain working forests, farms and maritime communities; and conserve lands of cultural, indigenous and community value.

- 1) *Big picture perspective on watershed stewardship efforts, including the fundamentals of watershed conservation and restoration - what is broken, why it matters, and how to fix it*
 - a. Economic, community development and environmental benefits of conservation of natural and culturally significant landscapes.
 - b. Comprehensive planning – water resources, transportation, parks and recreation, economic development
 - c. Land use regulations – sub-division, zoning, land development, land preservation, easements.
 - d. Education on the value and location of high-functioning landscapes
 - e. Preventing the loss of forest and wetlands to development
 - f. Protection is cheaper than restoration.
 - g. Role of local land use planning and zoning to protect the characteristics citizens value.
- 2) *Platform for local officials to problem solve and build networks with peers who face similar issues and/or requirements*
 - a. Evaluation of land use options - Methodology for assessing landscape change with high-resolution data with sufficient precision to inform county-level decisions.
 - b. Land use regulations – sub-division, zoning, land development, land preservation, easements.
 - c. Water and sewer plan implementation – sewer systems v. septic systems for large subdivisions

Engaged Communities

The long-term success of the Chesapeake Bay restoration effort depends on the work of individuals and communities living throughout the watershed. Connecting with current environmental stewards and encouraging future local leaders helps build the network that will keep our work moving forward.

Stewardship Goal: Increase the number and diversity of local citizen stewards and local governments that actively support and carry out the conservation and restoration activities that achieve healthy local streams, rivers and a vibrant Chesapeake Bay.

- 1) *Big picture perspective on watershed stewardship efforts, including the fundamentals of watershed conservation and restoration - what is broken, why it matters, and how to fix it*
 - a. Engage minority stakeholders that are not currently represented in conservation and restoration activities.
 - b. Community improvement/greening – trees, parks and recreation, litter, stormwater control.
 - c. Increasing the awareness of the impacts of toxic contaminants, especially safe consumption of fish and shellfish, targeted towards areas with diverse and underrepresented populations in the bay watershed.

2) *Platform for local officials to problem solve and build networks with peers who face similar issues and/or requirements*

- a. Community outreach/engagement during comprehensive planning process and prior to new industrial or commercial development
- b. Guidance, training, and technical assistance to help local governments and partners develop robust urban tree canopy implementation programs.
- c. Use online tools/webinars/list-serves to support ongoing training and information sharing in the urban forestry community of practice (e.g. a “Chesapeake Tree Canopy” group within the existing Chesapeake Network tools)
- d. Develop educational resources that expand the awareness, appreciation, planting and stewardship of trees within educational institutions, under-served communities, parks and other public lands.
- e. Inform the public regarding risks from consuming contaminated fish by developing communications materials and corresponding procedures for their dissemination throughout the targeted communities.

Public Access Goal: Expand public access to the Bay and its tributaries through existing and new local, state and federal parks, refuges, reserves, trails and partner sites.

1) *Big picture perspective on watershed stewardship efforts, including the fundamentals of watershed conservation and restoration - what is broken, why it matters, and how to fix it*

- a. Types of public access that communities value and citizens want
- b. Economic and community benefits of expanding public access

2) *Platform for local officials to problem solve and build networks with peers who face similar issues and/or requirements*

- a. Technical and funding assistance for public access development
- b. Case studies, lessons learned, success stories.

Environmental Literacy Goal: Enable students in the region to graduate with the knowledge and skills to act responsibly to protect and restore their local watershed.

1) *Big picture perspective on watershed stewardship efforts, including the fundamentals of watershed conservation and restoration - what is broken, why it matters, and how to fix it*

- a. Benefits of environmental education to the community
- b. Connecting the environment to STEM education opportunities to stimulate interest
- c. No child left inside

2) *Platform for local officials to problem solve and build networks with peers who face similar issues and/or requirements*

- a. Curriculum resources available
- b. Case studies, lessons learned, success stories.