QUARTERLY PROGRESS MEETING – August 2019
Chesapeake Bay Program

Healthy Watersheds

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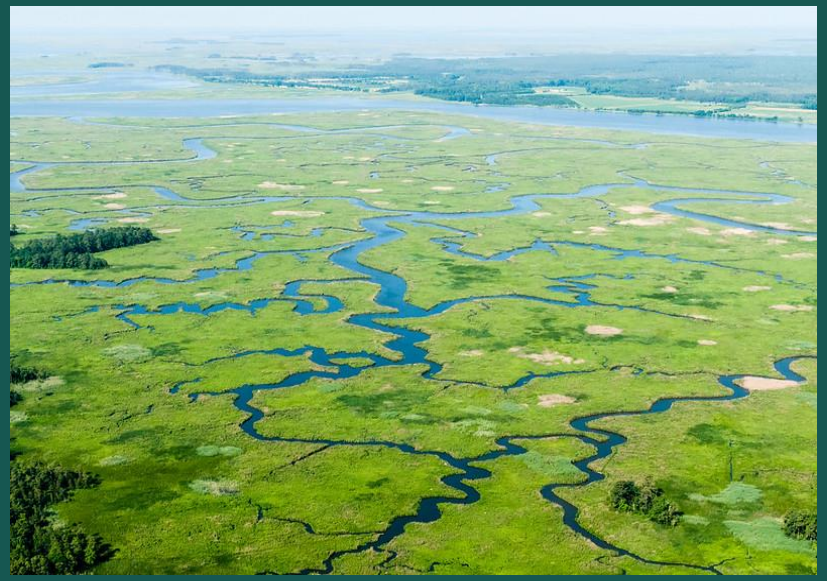
Maryland Department of the Environment
Maintain Healthy Watersheds GIT Chair

Through the Chesapeake Bay Watershed Agreement*, the Chesapeake Bay Program has committed to…*



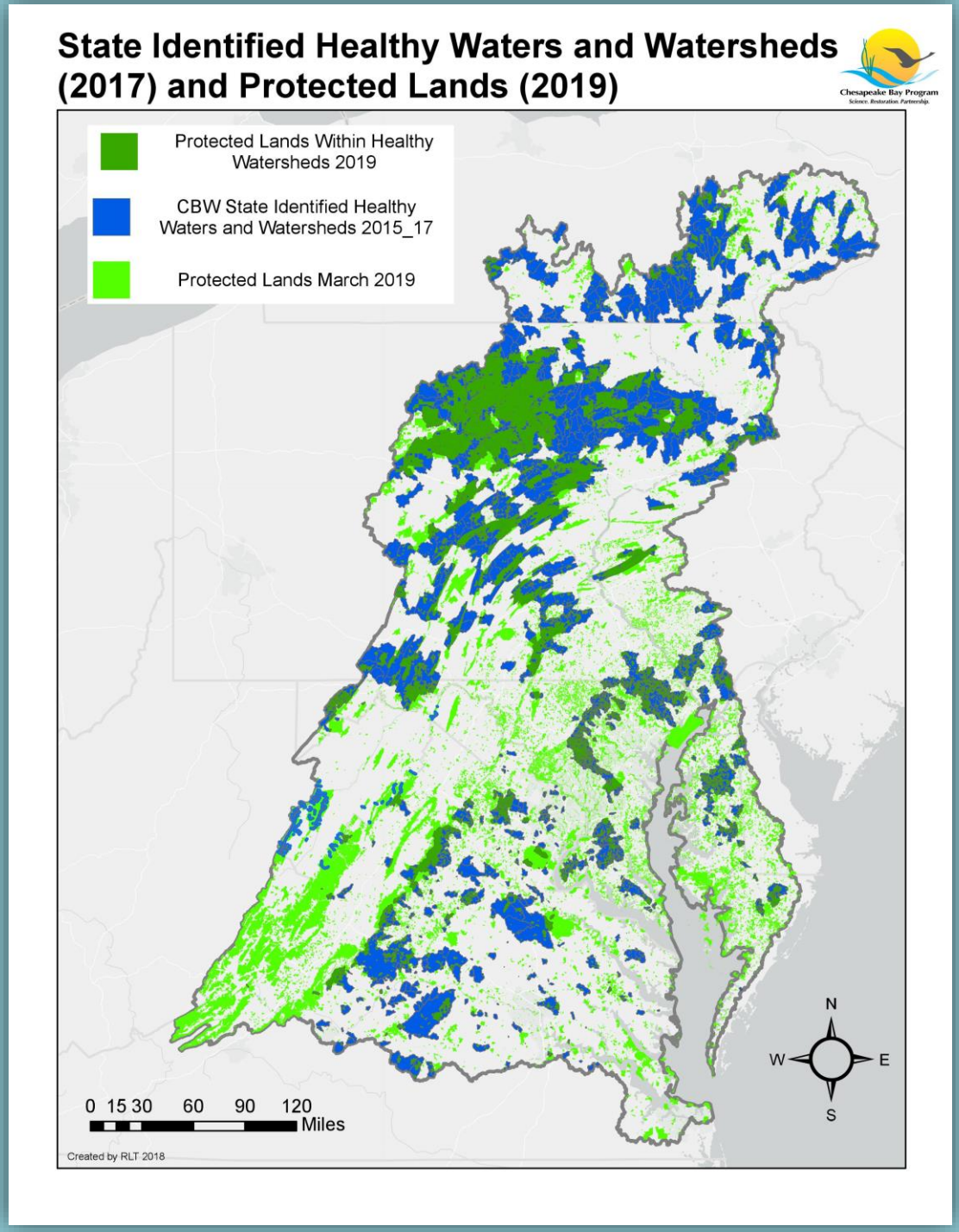
View of the Nanticoke River and wetlands in Wicomico County
Photo by Matt Roth/CBP

Goal: *Sustain state-identified healthy waters and watersheds recognized for their high quality and/or high ecological value*

Outcome: *100 percent of state-identified healthy waters and watersheds remain healthy.*

How You Can Help

- Renewed engagement of HWGIT members
- Communicate and share data, maps, assessment and vulnerability information with key stakeholders
- Convey messages and key policies, and provide planning and incentive products to stakeholders
- Improved coordination with USGS scientists, Land Use WG, Local Leadership WG, LGAC, Stream Health WG and the CBP Creative team.



L

Learn

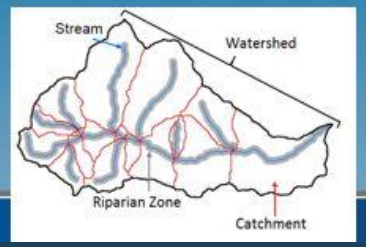
What have we learned in the last two years?

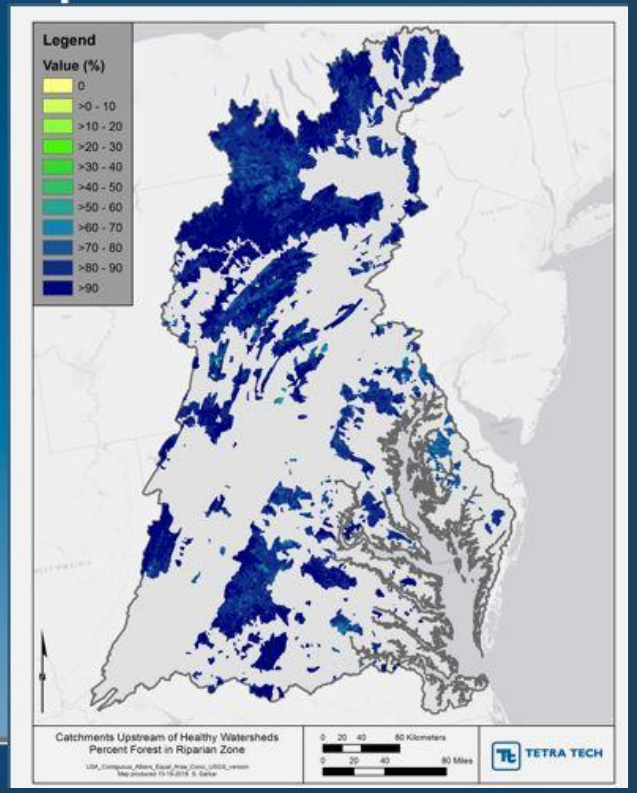
Successes and Challenges

Example from the healthy watersheds assessment

Metric Performance Example

- Example: Percent Forest in Riparian Zone
- Indicative of: Landscape condition
- Value calculated for riparian zone in entire upstream watershed
- Metric expected to be high in healthy watersheds





BMP co-benefit fact sheet

Healthy Watersheds:

Principles for Phase III Watershed Implementation Plans

Protecting Healthy Waters for Human Health, Economic Development, and Infrastructure

Maintaining healthy watersheds is of the utmost importance due to the critical ecosystem and economic services they provide which are essential to our social, environmental and economic well-being. These include, but are not limited to: nutrient cycling, carbon storage, sediment control, increased biodiversity, soil formation, wildlife movement corridors, source water protection, flood control, food, timber, recreation, and reduced vulnerability to natural disasters.

The wide array of critical ecosystem services provided by healthy watersheds is frequently undervalued when making land use decisions. Due to the complexity of natural systems and economic precedents, it is difficult to assign a dollar amount to a particular ecosystem service. However, there is a large body of research and evidence showing that intact healthy ecosystems prevent costly restoration and ecosystem service replacement and provide long-term societal benefits including economic opportunities and jobs. Property values are also generally higher near open space; therefore, integrating healthy watersheds into communities and the landscape provides an opportunity for an increased tax base.

Tetra Tech employed these metrics to assess watershed health and create a watershed health index.

Landscape Condition
Patterns of natural land cover, natural disturbance regimes, lateral and longitudinal connectivity of the aquatic environment, and continuity of landscape processes.

Geomorphology
Stream channels with natural geomorphic dynamics.

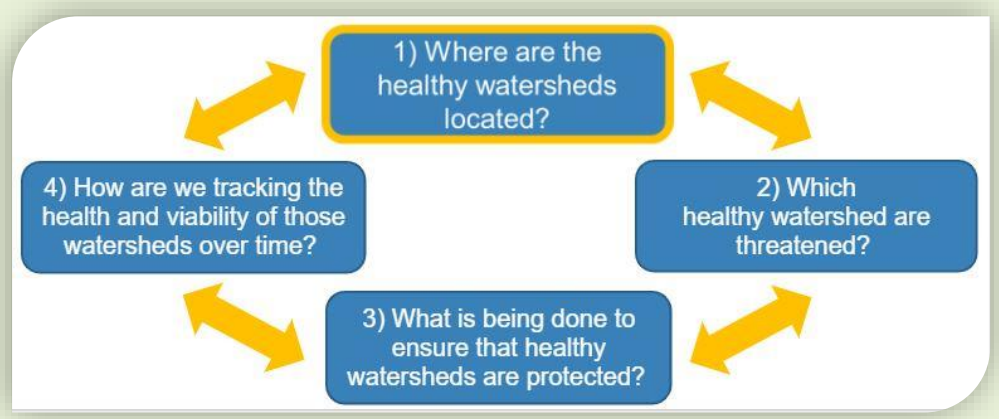
Habitat
Aquatic, wetland, riparian, floodplain, lake, and shoreline habitat. Hydrologic connectivity.

Water Quality
Chemical and physical characteristics of water.

Hydrology
Hydrologic regime: Quantity and timing of flow or water level fluctuation. Highly dependent on the natural flow (disturbance) regime and hydrologic connectivity, including surface-ground water interactions.

Biological Condition
Biological community diversity, composition, relative abundance, trophic structure, condition, and sensitive species.

Tracking Framework



2017 SRS Presentation

Where are the healthy watersheds located?

Which healthy watersheds are threatened?

What is being done to ensure that healthy watersheds are protected?

How are we tracking the health and viability of these watersheds over time?

J

Jurisdictions

Successful jurisdictional actions are key to achieving the Healthy Watersheds Outcome

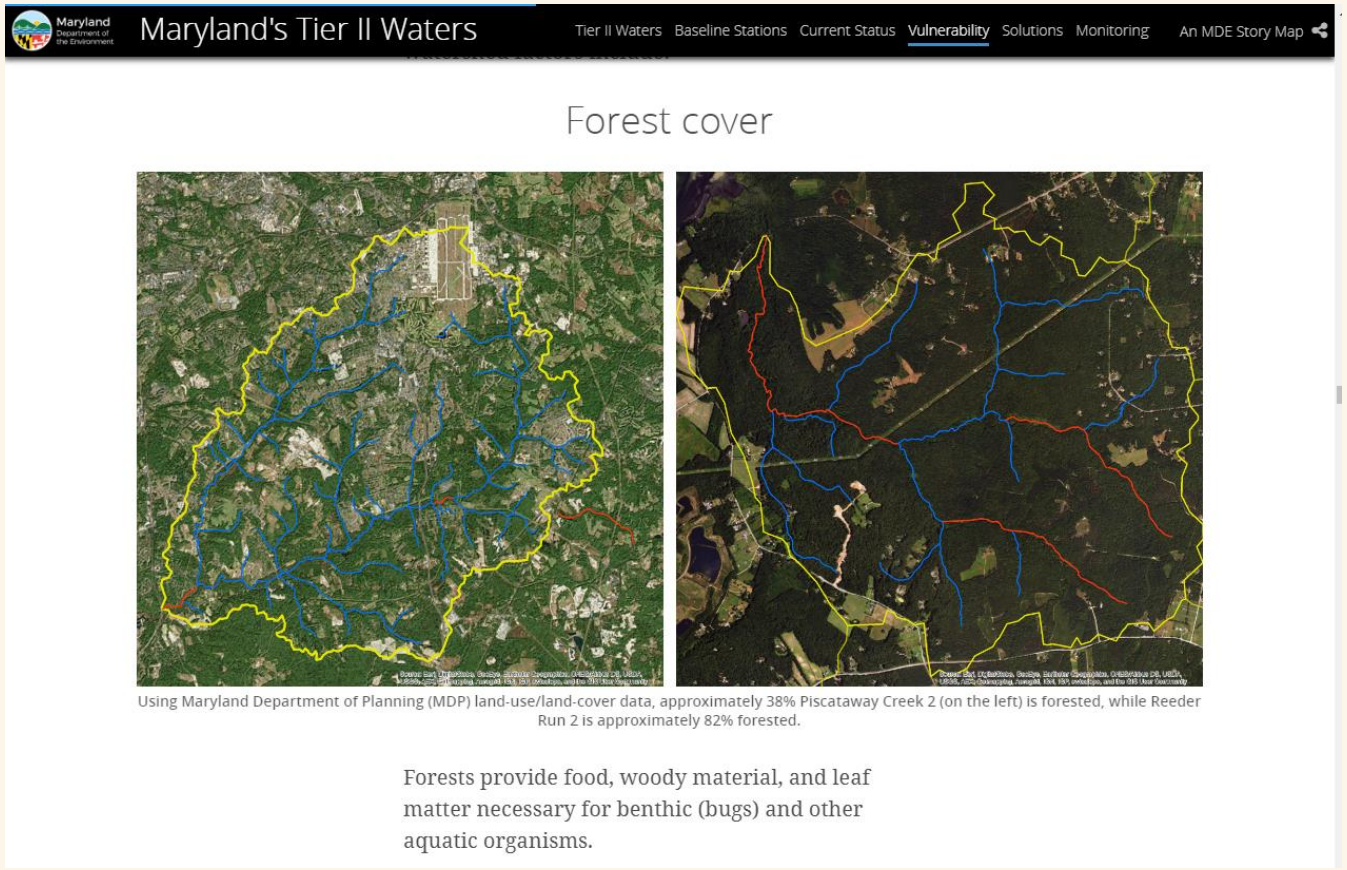
Success Stories: New York

The bags of seedlings are shipped to program participants

“Buffer in a Bag” Program

This program gives landowners native trees and shrubs to plant and maintain a riparian buffer on their property.

Success Stories: Maryland



Tier II Storymap

Maryland's Tier II Storymap is an interactive product that provides an introduction to Tier II waters, information about the many benefits of protecting them, and it also displays water quality data.

Commitment
Engagement
Partnership

CSLAP volunteers collecting water samples with Kemmerer sampler on Kirk Lake, and measuring the depth of water clarity with a secchi disk.

Citizens Statewide Lake Assessment Program (CSLAP)

New York uses the Citizens Statewide Lake Assessment Program (CSLAP) to help volunteers provide the NY Department of Environmental Conservation with high quality data.

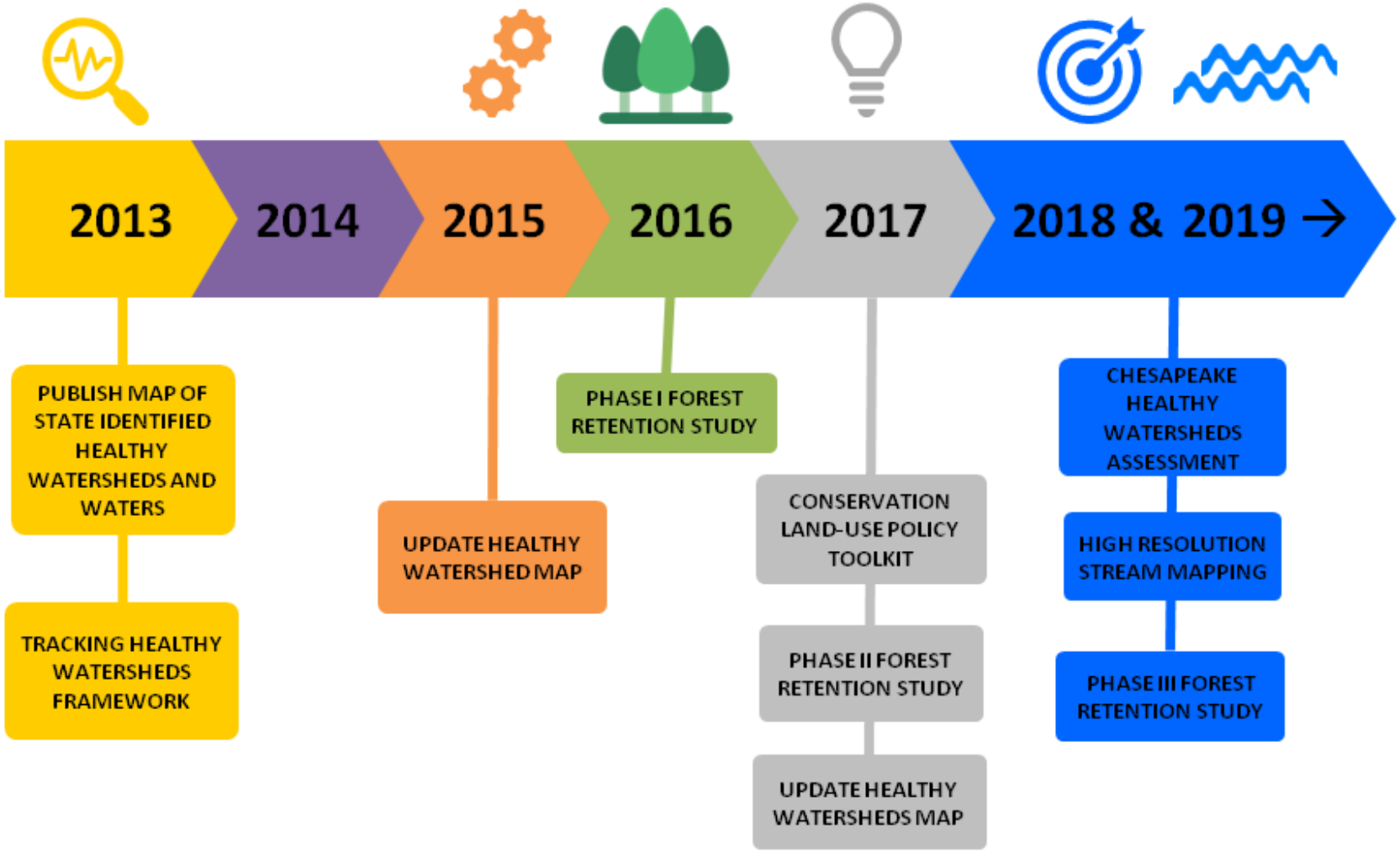
Commitment
Engagement
Partnership

RiverSmart Homeowner Program

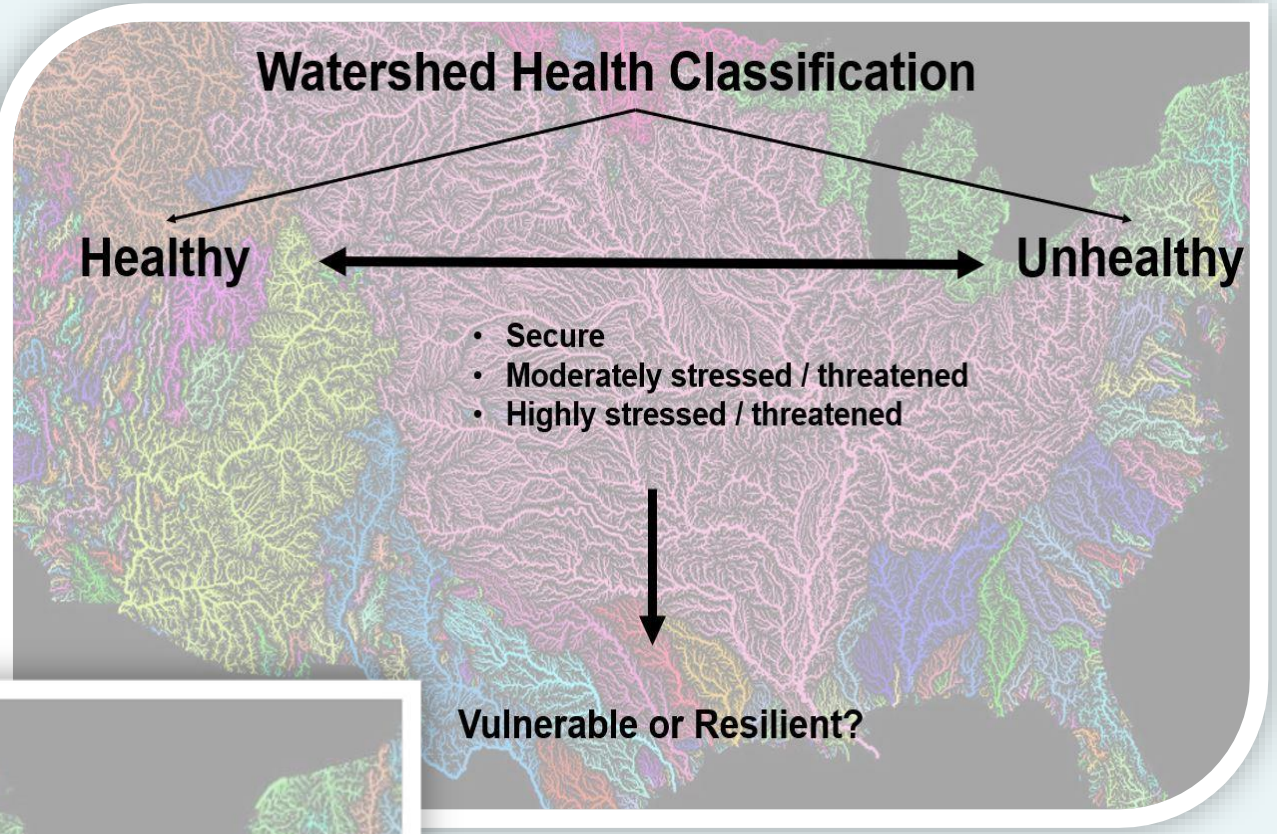
Washington D.C.'s RiverSmart Homeowner Program assists homeowners with stormwater runoff reduction projects.

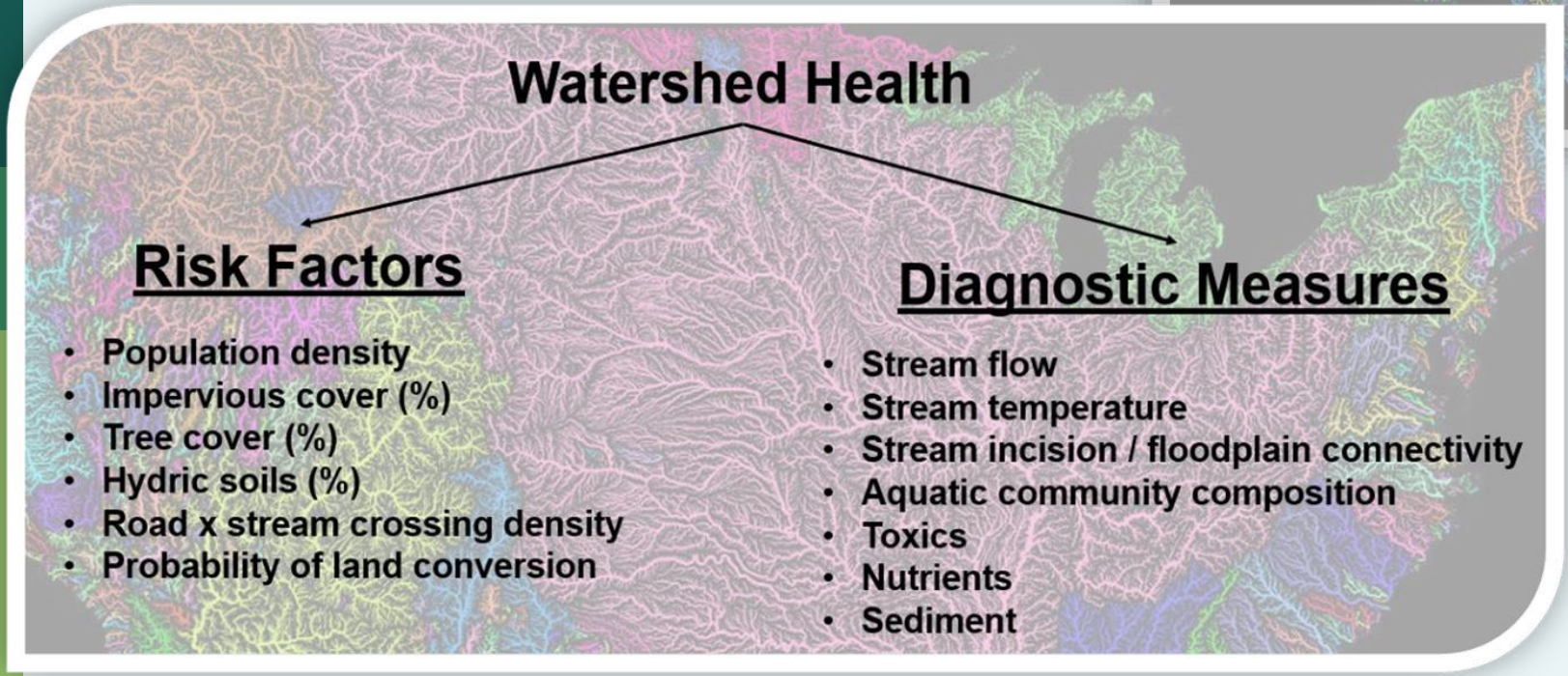
Progress Milestones

Healthy Watersheds Goal Team Milestones



On the Horizon



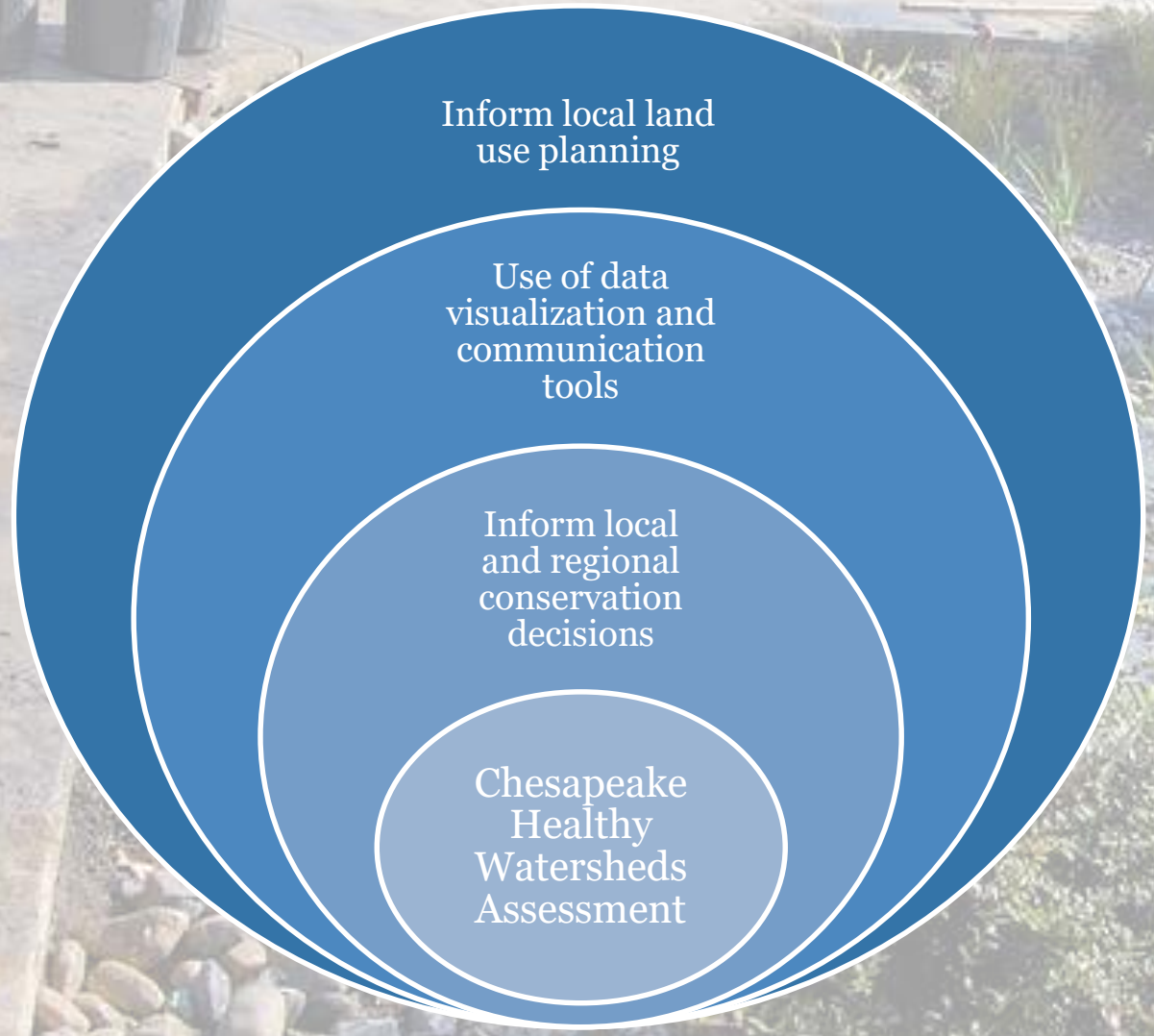


A

Adapt

How does all of this impact our work?

Based on what we learned, we plan to …



Help

How can the Management Board lead the Program to adapt?

Help Needed


Renewed Member Engagement
Share key information with stakeholders
Coordination among GITs and workgroups
Prioritizing our outcome in other groups
Healthy Watersheds Outcome

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Discussion