

Short Term Goal Team Actions for 2022 and 2021 Year in Review



Maintain Healthy Watersheds GIT meeting
December 13, 2021

Renee Thompson, Coordinator HWGIT, USGS
Chesapeake Bay Program
rthompson@chesapeakebay.net

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.



HEALTHY WATERSHEDS GOAL

Sustain watershed health where it is *high, exceptional and/or outstanding...*

to *increase the number of healthy watersheds* in the future...

Provide the forum for mutual shared learning...

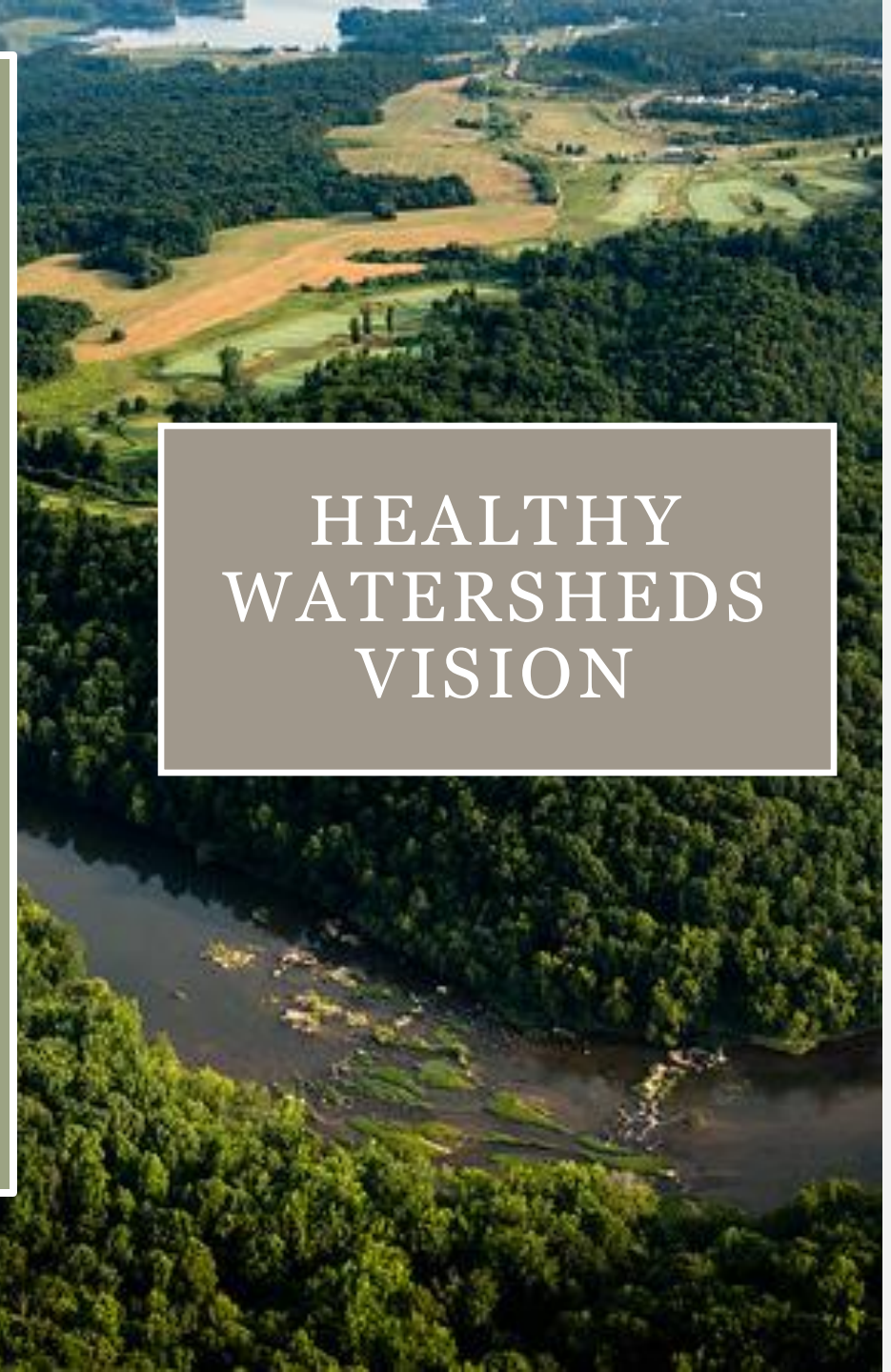
Develop information resources...

Promote the science...

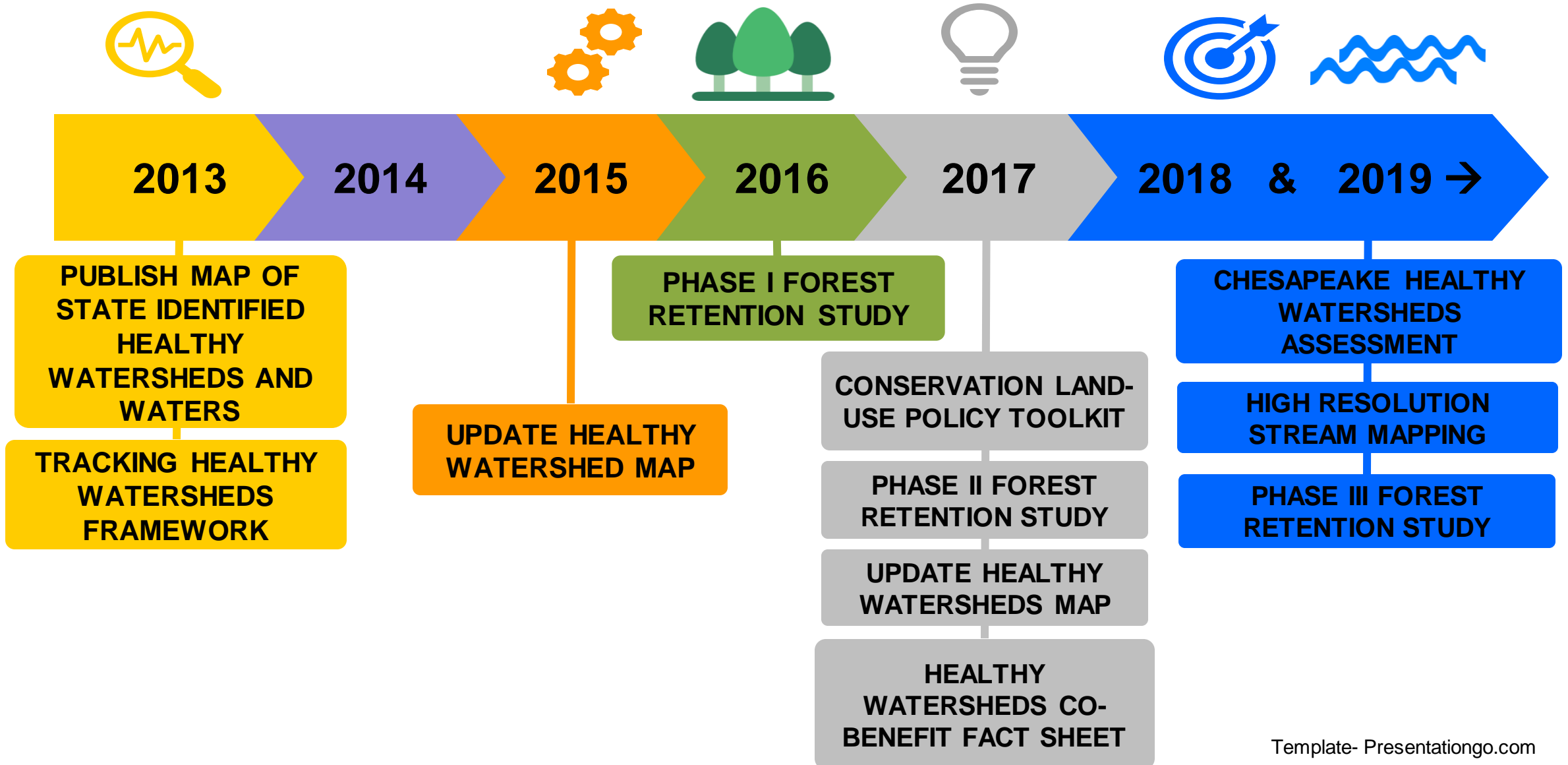
And

Coordination, Integration and Collaboration.

HEALTHY
WATERSHEDS
VISION

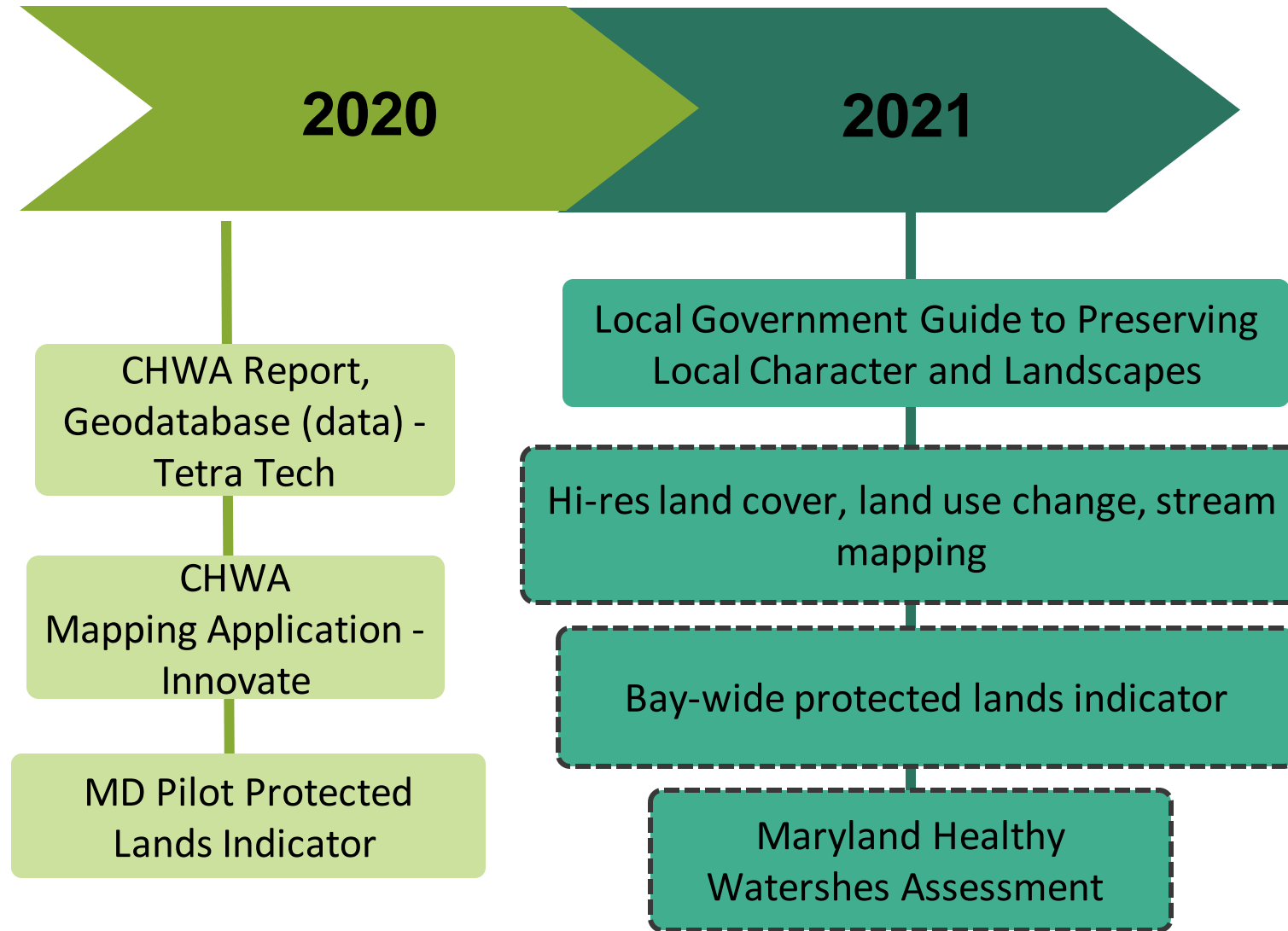


SRS Cycle Progress Milestones





2021 SRS Cycle Progress Milestones



Management Approaches:

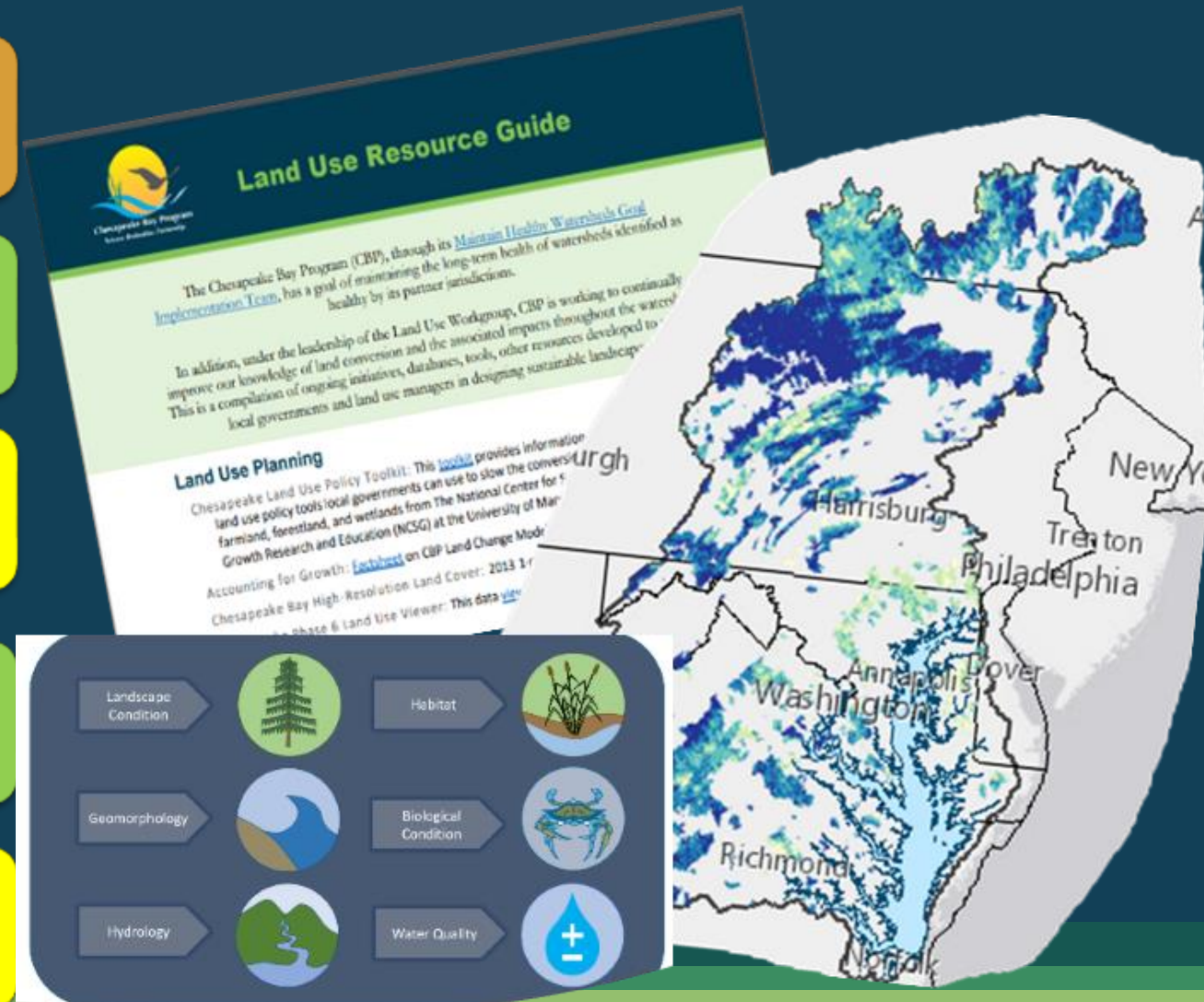
Tracking Healthy Watersheds

Local leadership strengthen capacity and commitment to protect healthy watersheds

Federal and State Leadership

Support State Based Efforts

Cooperation, Coordination and Integration



Management Approach 1: Tracking Healthy Waters and Watersheds

Continue gathering inventory of healthy watersheds; Develop vulnerability information; Prioritize protection; Maintain and expand assessment activities and information

2022

Inventory of healthy waters and watersheds:

- Update State Identified Healthy Waters and Watersheds in the CBW
- Refine SIHW definitions in communications and outreach materials

Vulnerability:

- Which factors are most important, how to communicate spectrum of water and watershed health, impact of land conversion.
- Investigate and develop interim indicators related to impervious surface, protected lands and habitat suitability and resilience.
- Development of refined Healthy Watersheds Assessment 2.0 tool to communicate outcome progress.

Prioritize protection:

- Assess protected status of SIHW using new 2022 waters and watersheds and 2020 protected lands data
- Assist in overseeing the update of the Chesapeake Conservation Partnership Priority Habitat conservation dataset (scoping project)
- Investigate additional threats to high-valued lands using best available data related to development pressure and forest, farmland and wetland conversion utilizing the results of the Land Use Methods and Metrics Outcome as well as the CHWA (pending LUMM rates of conversion)

Management Approach 1: Tracking Healthy Waters and Watersheds

Continue gathering inventory of healthy watersheds; Develop vulnerability information; Prioritize protection; Maintain and expand assessment activities and information

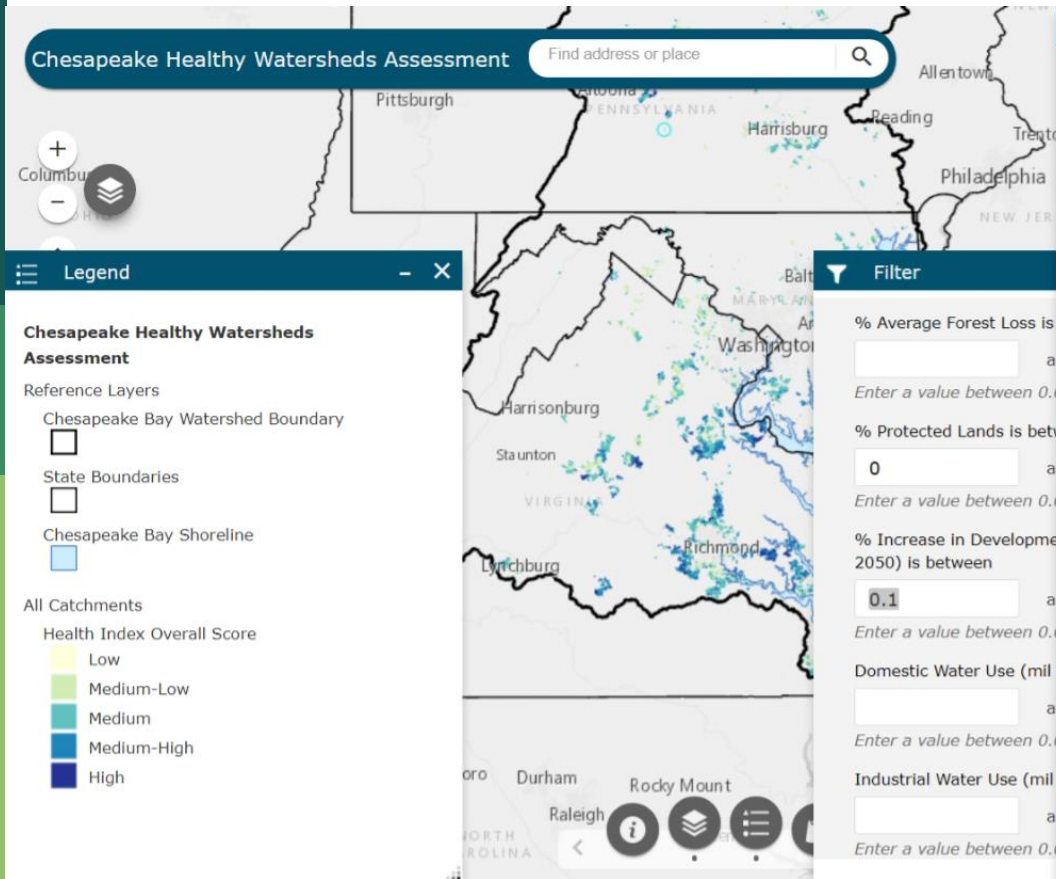
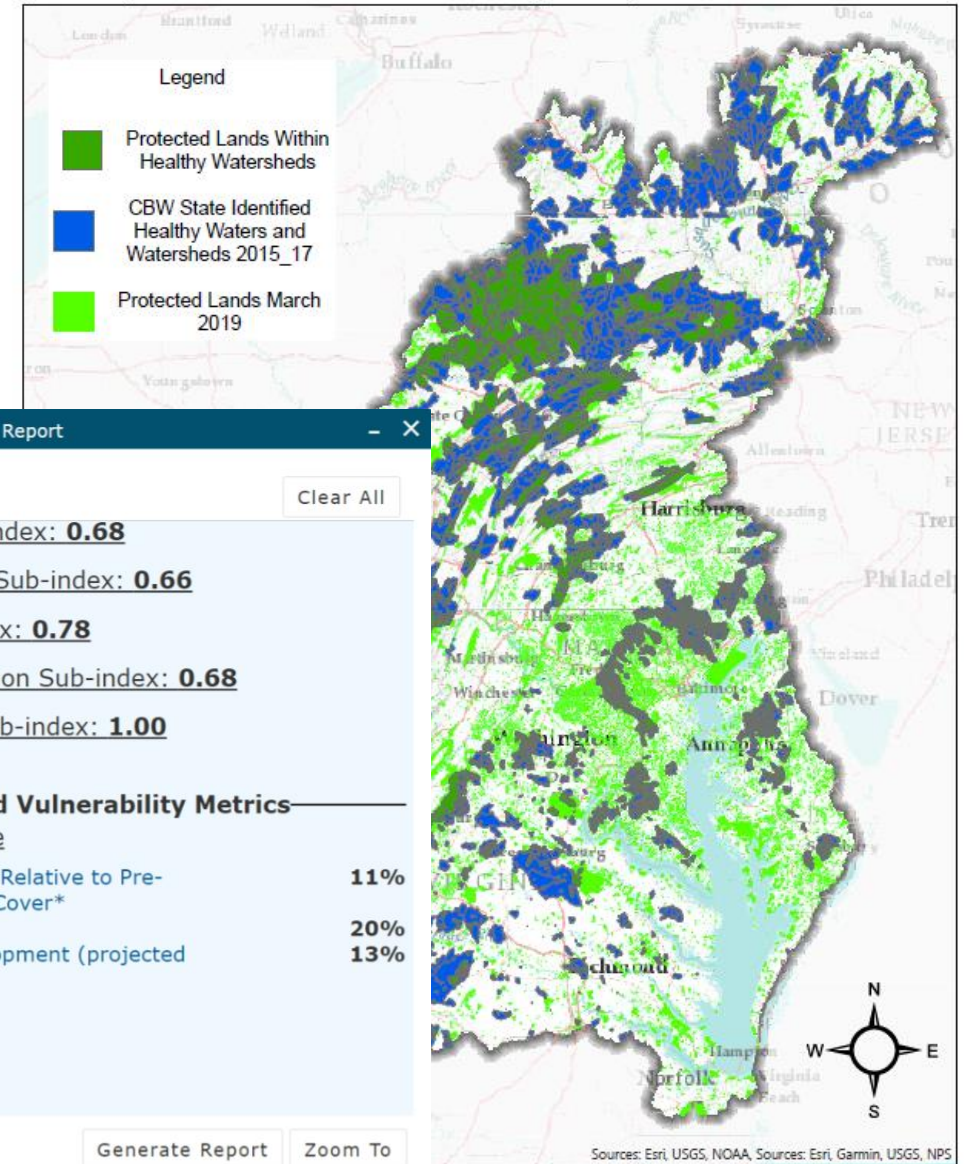
2022

- Oversee implementation of the Chesapeake Healthy Watersheds Assessment.
- Assess CHWA results and next steps for measuring progress towards achieving the Healthy
- Relate CHWA information to impaired waters and pollution information
- Assess changing conditions for all land cover metrics included in the CHWA
- Investigate best methods for keeping the CHWA updated
- Completion of GIT Funding project: Implementation of Chesapeake Healthy Watersheds Assessment in Maryland's Tier II watersheds
- Investigate the potential to harness community-based monitoring to target monitoring in watersheds identified as "threatened" through the CHWA.
- Work with STAR to determine current and future monitoring needs and outline gaps
- Investigate specific tracking questions outlined by GIT members and interested parties
- Explore the develop new watershed characteristics (thresholds) of health and vulnerability using high resolution imagery and track them over time

Interim Indicators

■ Prioritize protection (Action 1.3)

State Identified Healthy Waters and Watersheds (2017) and Protected Lands (2019)

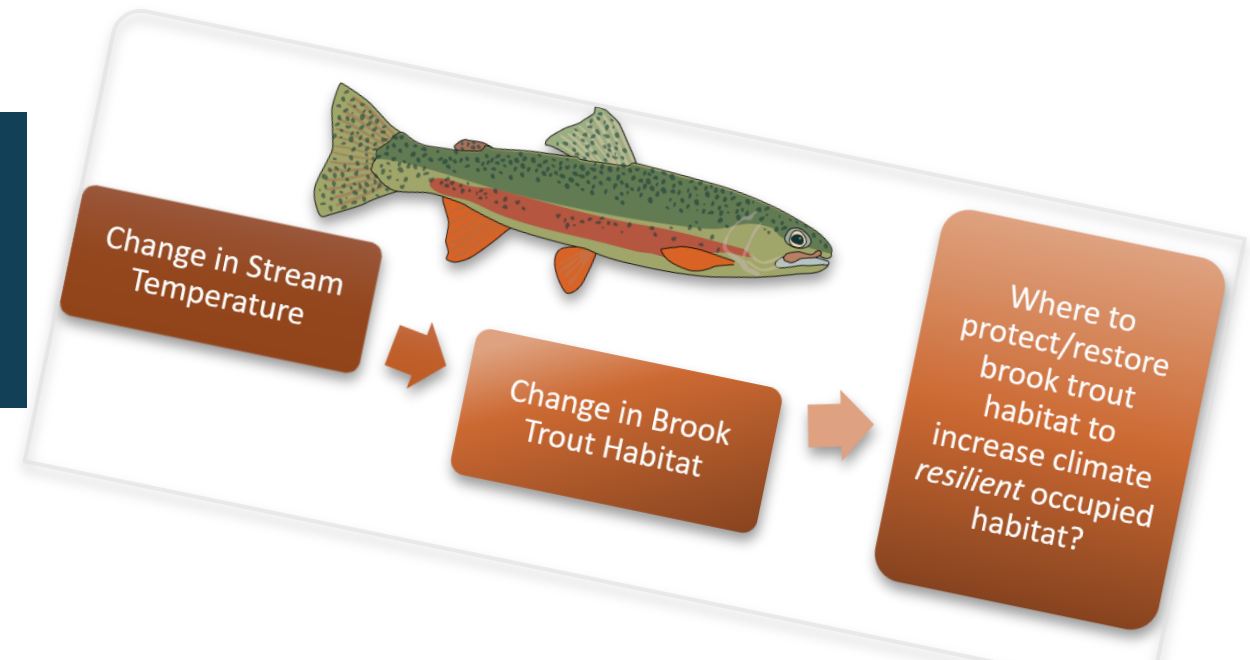


interim indicators

Proportion of state identified HW that are not protected and under threat of development. / Pristine watersheds vulnerable to land use change

Presence of brooktrout despite changing climate conditions/ Brook trout watersheds resilient to climate change (conservation potential)/signal of “sustained”

DEIJ – watershed health and vulnerability as related to high risk, underserved, low income or percent non-white.



Management Approach 2: Local Leadership – strengthen local commitment and capacity to protect their healthy watersheds

- Work collectively to improve outreach strategies, and better get the word out across multiple Management Strategies to determine the best approaches
 - Coordinate with others on how to effectively compile and package resources for use in CBP outreach materials.
 - **Incorporate Healthy Watersheds TMDL Forest/Conserved Lands Retention Study Phase III and other related Land Use Options Evaluation Products (completed GIT funding project)**
 - Participation and coordination with webinars, conferences and other trusted sources to share data, information and resources related to watershed health, vulnerability, land use change and resources as well as cross outcome materials for local elected officials and other stakeholder audiences to convey policies, planning incentives and tools to reduce land conversion and sustain watershed health
 - **Identify 1-2 case pilot jurisdictions where healthy watersheds are present, and they have demonstrated**
 - transfer of knowledge to locals, existing studies and reports on the costs, benefits and effectiveness of both local and state level land use policy options, incentives and planning tools
 - Oversee, serve on steering committees, workshop planning teams, small groups and action teams to facilitate cross outcome coordination and assurance that healthy watershed resources and considerations are included.
- *Outreach, including: effectively conveying information on the status of healthy watersheds to local stakeholders.*
 - *Identify the various tools that may be used, primarily by local governments, to protect healthy watersheds*
 - *Advancing the DEIJ Strategy by integrating equity into our work*

Management Approach 3: Federal and State Leadership

Leverage Funding

Implement new or improve existing policy/programs/research

- Cooperation with other partners on how CBP and CHWA efforts can inform other federal programs and initiatives
 - America the Beautiful/30x30
 - America Outdoor Act
 - FEMA Hazard Mitigation
 - Global Sustainability measures
 - Chesapeake WILD
- Implementation of Chesapeake Healthy Watersheds Assessment in MD
 - Work with other Jurisdictions to identify other state specific datasets that can/should be incorporated into future assessments
- Investigate how to incorporate SIHW or CHWA into NRCS source water protection funding and efforts by Chesapeake Conservation Partnership to protect drinking water. (coordination with 1.3)
- Present CHWA to NOAA's North Atlantic Regional Team.
- Engage with federal agencies other than EPA (such as FERC and DOT) to leverage opportunities within those agencies so that they can set the stage for state and local governments to further healthy watershed protection
- Continue integrating healthy watershed protection into EPA water programs.

Management Approach 4: Support State-based Efforts

- *Provide a valued forum for mutual learning and exploration*
 - *Develop information resources and support communications*
 - *Promote the science*
-
- Continue meeting 5-6 times a year and at meetings continue hosting case study presentations related to healthy watershed protection/tracking
 - Share presentations, slides, pictures, graphics, storymaps to help partner agency staff prepare presentations, reports, etc. with effective healthy watersheds messages.
 - Investigate determine how best to incorporate DEIJ considerations into our CHWA framework.
 - Develop maps and resources investigating the relationships between watershed health and vulnerability as related to high risk, underserved, low income or percent non-white communities.
 - Continue to work with the Chesapeake Bay Program and partners to quantify and incorporate conservation practices into the Chesapeake watershed modeling efforts and to explore how land use protections might be used to quantify future pollutant load reduction incentives for land conservation

Management Approach 5: Improved cooperation, coordination and integration

*Improved Cross Outcome Coordination:
Committed coordination and cooperation with
key CBP workgroups to assure shared
resources, information and priorities while
reducing duplication of efforts*

Key complementary groups include: Stream Health, Fish Habitat, Brook Trout, Climate Resiliency, Protected Lands, Land Use, Forestry, Diversity, Wetlands, Local leadership, LGAC, Communications

- HWGIT staff to attend meetings of “sibling” groups to facilitate coordination.
- Work with CRWG to develop and improved climate vulnerability metrics in the CHWA
- Track forest cover and provide regular updates on forest gain/loss (FWG)
- Conduct GIS assessments to identify key high value brook trout habitat to conserve and those areas that are considered marginal and in need of restoration (HGIT, FHWG) (utilizing Cross GIT mapping and other CBP resources).
- Expand assessment activities and information for forests and forest conservation (with input and cooperation with Forestry and Land use work groups).
- Work with Stream Health and Fish Habitat workgroups directly to identify shared data and assessment needs
- Facilitate the sharing of information related to conservation finance mechanisms with CCP and Healthy Waters/Forest Retention Project-Phase III: Final Report for Chesapeake Bay Trust (See Action 2.1 task 2 above)
- Host occasional shared meeting with central cross-coordination topic for discussion.

Priorities

- To be populated during discussion

HWGIT 2022 Meeting Schedule and Proposed Themes

- February 14th – State Identified Healthy Waters and Watershed Definitions and Updates (Approach 1); Interim Indicators (Land use and protection, brook trout/climate, DEIJ) (Approach 1)
- April 11th – Local Leadership, stakeholders and messaging (Incorporate Healthy Watersheds TMDL Forest/Conserved Lands Retention Study Phase III and other related land use outcome products)
- June 13th- Maryland Healthy Watersheds Assessment (Report out, next steps, how to apply to other jurisdictions)
- August 8th – Improved Cross Outcome Coordination (stream health, brook trout, climate) (Approach 5)
- October 11th (Tuesday)
- December 12th



Discussion



Renee Thompson, Geographer
Lower-Mississippi Gulf WSC, USGS,
Chesapeake Bay Program, MD
Coordinator Maintain Healthy
Watersheds

Goal Implementation Team

Rthompso@chesapeakebay.net

Rthompson1@usgs.gov