Healthy Watersheds

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Healthy Watersheds Goal:

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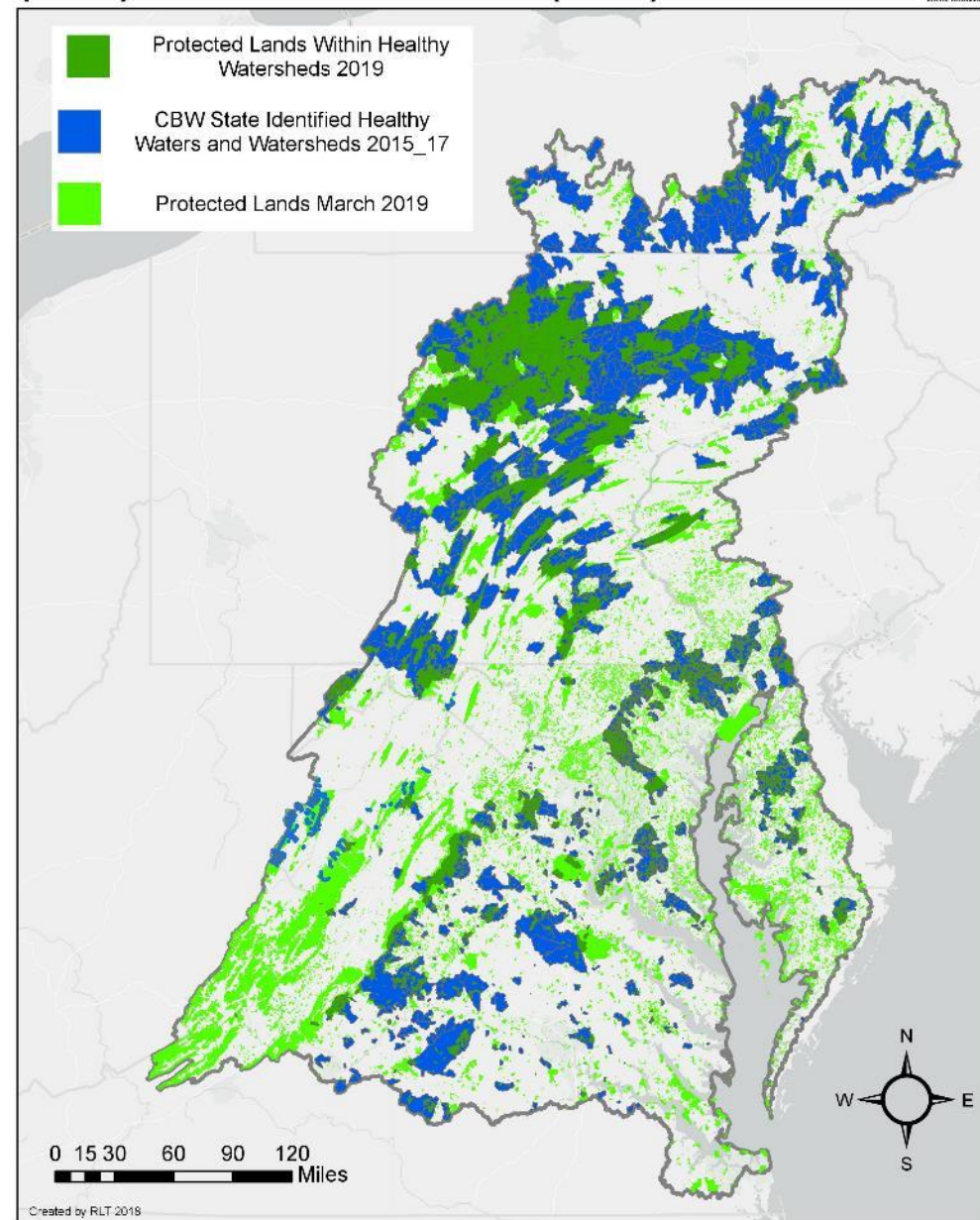
Outcome: *100 percent of state-identified healthy waters and watersheds remain healthy.*

How You Can Help

- Renewed engagement of HWGIT members

- Improved Coordination and Collaboration among GITs and workgroups

- Ensure that related and/or dependent cross-GIT priorities are addressed within the CBP

- Share key information with stakeholders: Communicate results of data, maps, assessment and vulnerability information, messages, and land use policies, incentives and planning tools.

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

Protected Lands Within Healthy Watersheds 2019

CBW State Identified Healthy Waters and Watersheds 2015_17

Protected Lands March 2019

0 15 30   60   90   120
Miles

Created by RLT 2018

Learn
What have we learned in the last two years?

Successes and Challenges

Chesapeake Healthy Watersheds Assessment

- GIT funding project that provided us with the *information* and *data* to fill the *gaps* in the management strategy
- Identified 6 *metrics* for watershed condition in that can be combined to an overall *index*
- Developed vulnerability *metrics (see poster)*
- Lays the groundwork methodology to *track outcome* success
- Informs and helps to visualize a *spectrum of watershed health and vulnerability* watershed-wide

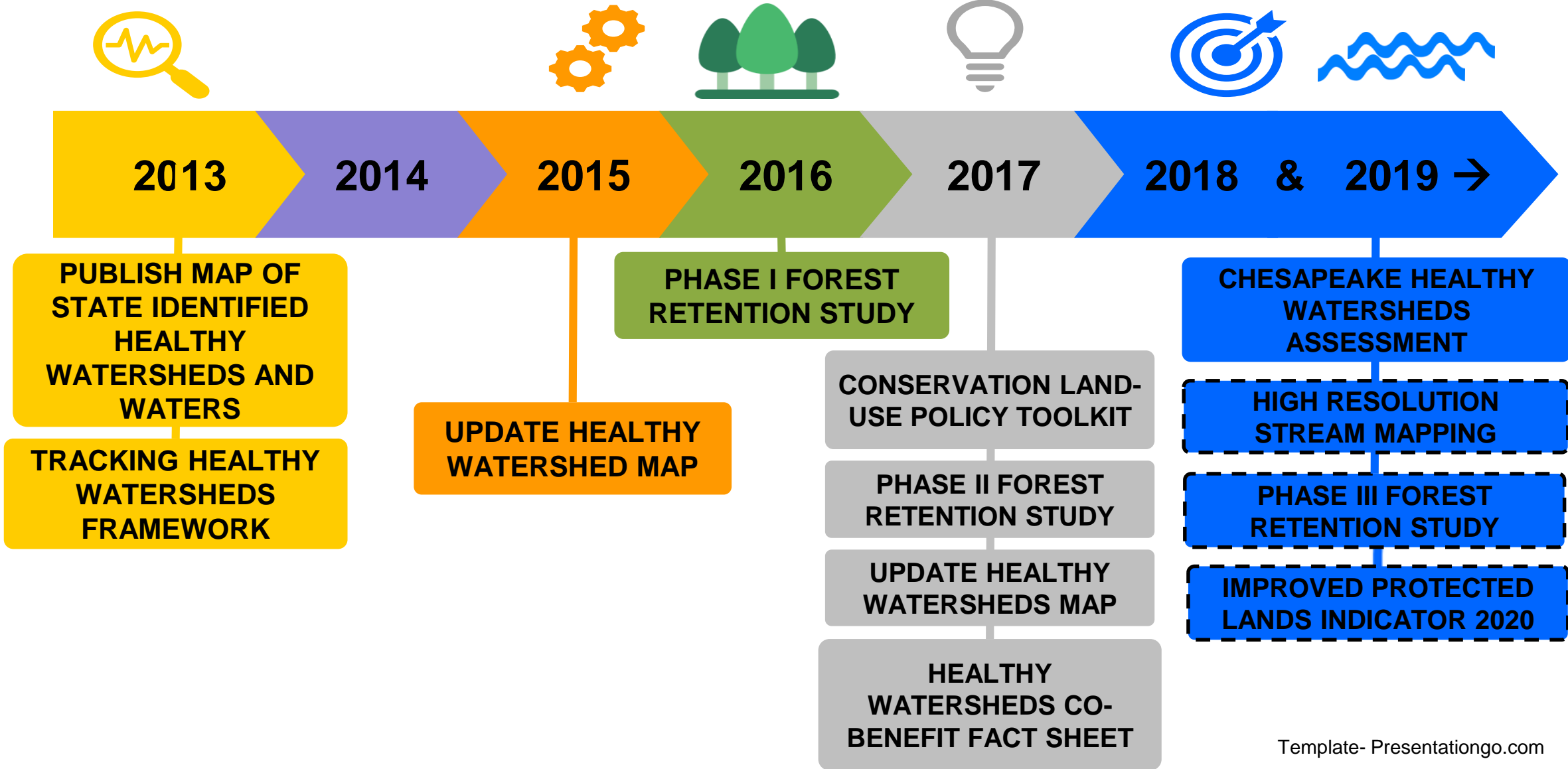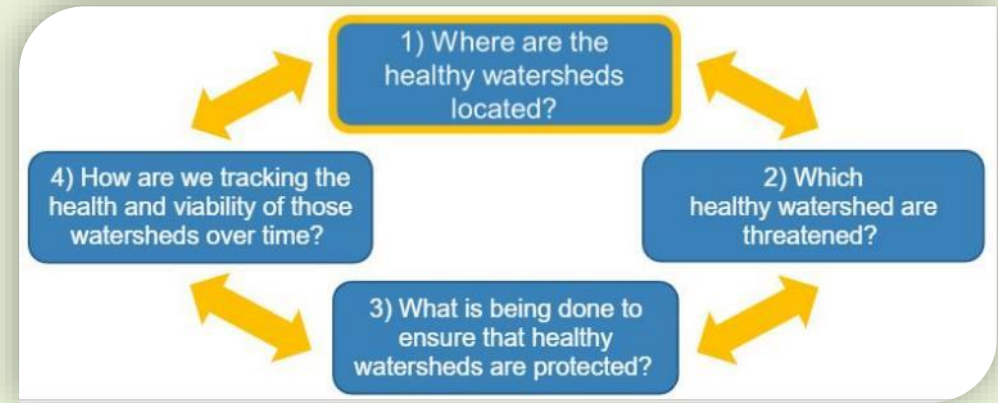**Landscape Condition**

Habitat

Hydrology

Geomorphology

PO_4^{3-} **Water Quality**

Biological Condition

Healthy Watersheds Goal Team Milestones

2013   **2014**   **2015**   **2016**   **2017**   **2018 & 2019** →

PUBLISH MAP OF STATE IDENTIFIED HEALTHY WATERSHEDS AND WATERS

TRACKING HEALTHY WATERSHEDS FRAMEWORK

UPDATE HEALTHY WATERSHED MAP

PHASE I FOREST RETENTION STUDY

CONSERVATION LAND-USE POLICY TOOLKIT

PHASE II FOREST RETENTION STUDY

UPDATE HEALTHY WATERSHEDS MAP

HEALTHY WATERSHEDS CO-BENEFIT FACT SHEET

CHESAPEAKE HEALTHY WATERSHEDS ASSESSMENT

HIGH RESOLUTION STREAM MAPPING

PHASE III FOREST RETENTION STUDY

IMPROVED PROTECTED LANDS INDICATOR 2020

Management Strategy: 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?
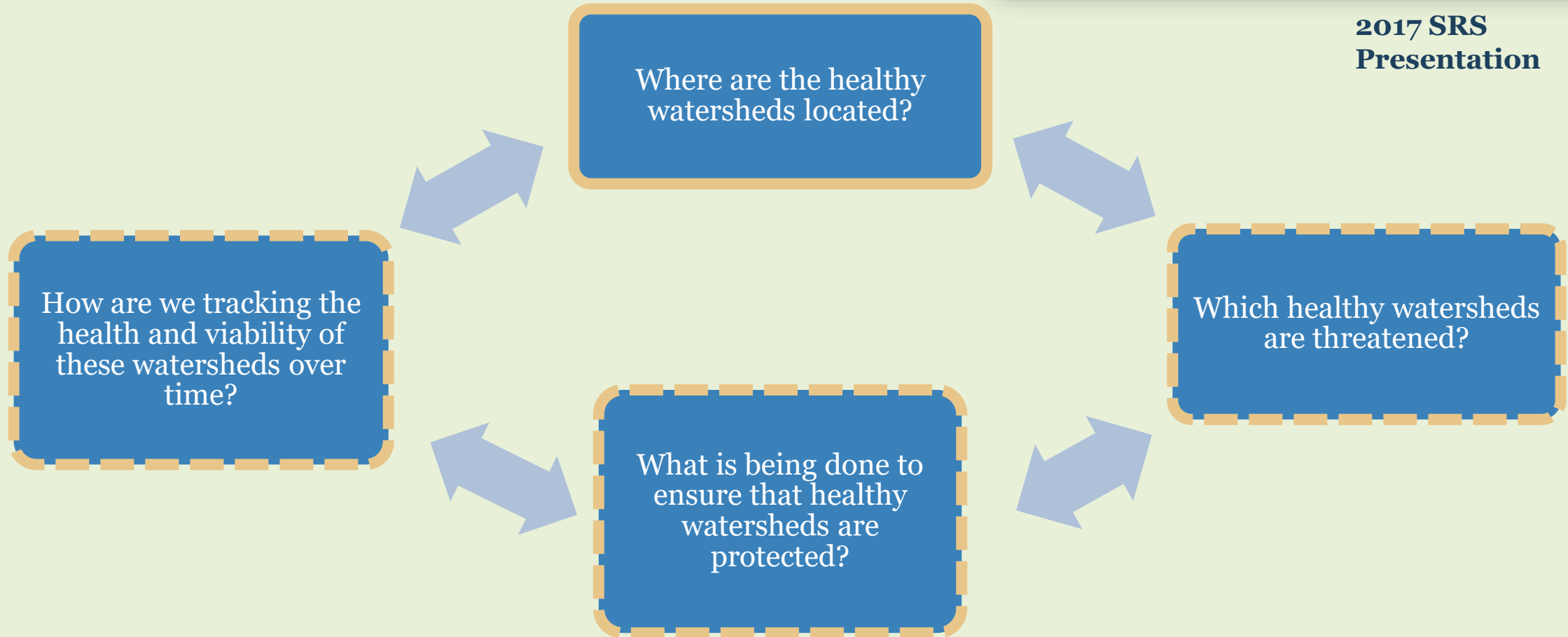
Jurisdictions

Successful jurisdictional actions are key to achieving the Healthy Watersheds Outcome

New York:

"Buffer in a Bag" Program: This program gives landowners native trees and shrubs to plant and maintain a riparian buffer on their property.

Citizens Statewide Lake Assessment Program (CSLAP) This program helps volunteers provide the NY Department of Environmental Conservation with high quality data.

Washington D.C.:

RiverSmart Homeowner Program: The RiverSmart Homeowner Program assists homeowners with stormwater runoff reduction projects.

Maryland:

WIP III: Maryland has included a section called "Water Quality and Aquatic Resource Protection Programs" which identifies protection strategies for Tier II waters and watersheds.

Adapt

How does all of this impact our work?

Based on what we learned, we plan to …

Disseminate Healthy Watershed Assessment Information

- Integrate data & better coordinate within CBP and Bay Partnerships (e.g., stream health, climate, local leadership)
- Improve programs and work with stakeholders
- Identify new funding opportunities to support improvements

Learn from CHWA and integrate new science

- Inform past, present, and future actions
- Develop alternative future land-use scenarios with climate change
- Inform land-use planning and decision-making with new data and visualization products

Pilot State-scale Watershed Assessment

- Support state-specific needs
- Develop methodology to apply to other jurisdictions
- Increase the technical capacity of HWGIT Coordinator & Staffer to ensure long-term maintenance and updates to the CHWA

Watershed Classification

Healthy ← → Unhealthy

Risk Factors
(informed by CHWA and CBP Land Data team)

- Population Density
- Impervious Cover (%)
- Tree Cover (%)
- Hydric Soils (%)
- Road x stream crossing density
- Probability of land conversion

Diagnostic Measures
(informed by USGS Science and geospatial contract work)

- Stream flow
- Stream temperature
- Stream incision/floodplain connectivity
- Aquatic community composition
- Toxics
- Nutrients
- Sediment

Help

How can the Management Board lead the Program to adapt?

Help Needed

Renewed Member Engagement

Prioritizing our outcome in other groups

Healthy Watersheds Outcome

Share key information with stakeholders

Coordination among GITs and workgroups

Discussion