BIENNIAL STRATEGY REVIEW SYSTEM
Chesapeake Bay Program

Narrative Analysis

STREAM HEALTH AUGUST 15, 2019

The narrative analysis summarizes the findings of the logic and action plan and serves as the bridge between the logic and action plan and the quarterly progress meeting presentation. Based on what you learned over the past two years from your successes and challenges, you will describe whether the partnership should make adaptations or change course.

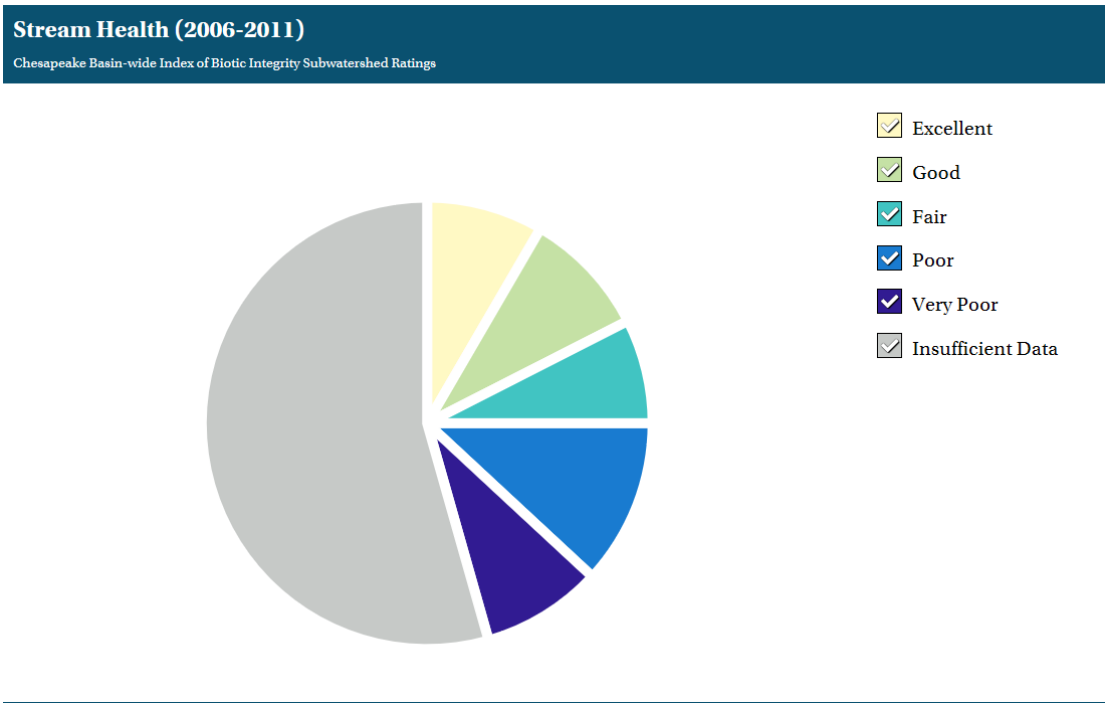
Use your completed pre-quarterly logic and action plan to answer the questions below. After the quarterly progress meeting, your responses to these questions will guide your updates to your logic and action plan. Additional guidance can be found on ChesapeakeDecisions.

1. Examine your red/yellow/green analysis of your management actions. What lessons have you learned over the past two years of implementation?

Leveraging existing efforts to integrate workplan actions provides an effective avenue to make progress, or complete the work. The SHWG was very appreciative of the opportunity to work with the Urban Stormwater Work Group to review the stream restoration protocols and tie into the SHWG workplan Action 1.3. The recommendations from the Stream Restoration Verification Guidance advances this action, but there remains work to address other stream functions beyond water quality and stream stability (Actions 1.3.1 and 4.1). Stream health is an integrative topic from the multiple fields of science along with government – local, state and federal. The SHWG provides a forum to bring the broad-based community together, but limited in any specific directive with resources to support more in-depth discussions. Consequently, the SHWG relies upon member participation in other organizations such the Maryland Water Monitoring Council and its committees, conference planning committees such as the Mid-Atlantic Stream Restoration Conference and Chesapeake Bay Trust Restoration Research Program. Such discussions and forums are critical to implement an adaptive management approach – that is to make progress acknowledging the incomplete science (we don't know everything)– adaptive management. The 'red' actions are heavily dependent on a science-based approach and synthesis of data that requires peer input in a multi-disciplinary forum. The SHWG could have better utilized the staff liaison to advance work with improved coordination.

2. Regardless of how successful your short-term progress has been over the past two years, indicate whether we are making progress at a rate that is necessary to achieve the outcome you are working toward.

The graphic illustrates an update to the Stream Health Outcome, the Chessie BIBI. During this baseline period, the Chessie BIBI ranked 25 percent of the Bay watershed with fair, good or excellent stream conditions and 21 percent with poor or very poor conditions. Fifty-four percent of the watershed was not included in this baseline assessment, due to insufficient or absent data. Refer to https://www.chesapeakeprogress.com/abundant-life/stream-health for more information. Future data analysis is required to determine trends and the direction of change (progress).



3. What scientific, fiscal and policy-related developments will influence your work over the next two years?

   - *The **Phase 3 WIP implementation** where jurisdictions have identified stream restoration as a major part of their nutrient and sediment reduction strategies. The driver for these projects is water quality improvement and there remains a need to more holistically approach and understand the effects of stream restoration Baywide.*
   - The representative of stream miles in the Chesapeake Bay watershed model effects the analysis, tracking and reporting of the Chessie BIBI along with nutrient and sediment reductions associated with stream restoration as a BMP.
   - *There is a wide-range of knowledge and practice about stream restoration – from selection of project sites, selecting design approach/techniques to credit. Dissemination of information through **training** is needed.*
   - *The need to **synthesize the science and identify gaps** to improve the linkage between stream restoration to improve biological stream health, **and** incremental functional improvements in stream health. Not all streams may have the capacity to restore biological health due to stressors that cannot be addressed/removed/mitigated. However, improvements can me made nonetheless*
   - *Chesapeake Bay Trust Restoration Research Grant program may **accelerate the rate of scientific developments and integration with the regulatory program***
   - ***Emerging issues and water quality impairments.** For example, chloride and PCB TMDLs and the need to work across GITs to evaluate expectations on stream recovery.*

4. Based on your response to the questions above, how will your work change over the next two years?

- *Set a regular meeting schedule and acknowledge resource limitations when setting timeline to implement action plan. Improve utilization of staff liaison; Request number of hours available from staff liaison assigned to work group to better plan work.*
- *Identify GITs, such as the Toxics Work Group for joint work efforts*
- *Seek funding sources to support work such as GIT funding and other sources (NFWF, CBT). Describe the adaptations that will be necessary to more efficiently achieve your outcome and explain how these changes will lead you to adjust your management strategy or the actions described in column four of your logic and action plan. Changes that the workgroup, GIT or Management Board consider significant should be reflected in your management strategy.*

5. What, if any, actions can the Management Board take to help ensure success in achieving your outcome?
    - Support for SHWG to work with USGS, ICPRB and other experts to evaluate how to best report the Chessie BIBI. Recommendations from current analysis identify significant analytical issues that may limit reporting on current stream health outcome metric of stream miles. A standardized stream map layer is an example issue that may be addressed, while data availability to support analytical methods is a limiting factor.
    - Staff support to initiate White Paper on stressor analysis related to function lift for stream restoration projects
    - Technical support on stream health and function lift.
    - Continued support to ensure representation on the SHWG remains active
    - Integrate participation on the SHWG as part of job performance
    - Limit and simplify work group reporting to focus on implementing work plan