Stream Health Workgroup
DRAFT Meeting Minutes
December 9, 2014
10:00AM-12:00PM
Chesapeake Bay Program Office, Fish Shack

Participants:
Rich Starr, FWS (Co-Chair)
Neely Law, CWP/CBP Coordinator (Co-Chair)
Hannah Martin, CRC (Staff)
Jennifer Greiner, FWS (Habitat GIT Coordinator)
Carrie Decker, MD DNR
Bettina Sullivan, VA DEQ
Bill Stack, CWP/CBP Coordinator
Kevin Smith, MD DNR
Fred Kelly, Severn River Keeper
Sara Caldes, Severn River Keeper
Alison Armocida, MD DNR
Scott Stranko, MD DNR
Claire Buchanan, ICPRB
Julie Winters, USEPA/CBPO
Marian Norris, NPS
Steve Stewart, Baltimore County
Chris Spaur, USACE
Bill Seiger, MDE

Joe Berg, Biohabitats
Louise Finger, VADGIF
Josh Burch, DDOE

Actions:

- Contact H. Martin if you want a copy of the scope of work of the stream health workgroup
- Contact Law/Starr/Martin if you would like to help draft the Stream Health Management Strategy
    - Schedule a drafting team meeting (Thursday, Dec 18th 9:30-11:00AM)

Minutes:

1. **Welcome/Introductions (Rich Starr)**
    a. The scope and purpose of this workgroup is to serve as an interdisciplinary forum for experts to help resolve issues and find common ground to improve the physical, chemical, biological and habitat value of stream and maintain high quality streams and habitat. The workgroup complements activities underway by the Chesapeake Bay Program Partnership and serves to coordinate input and make recommendations that

advance a holistic approach to stream restoration projects and protection of high quality streams and habitat.

b. The scope and purpose of this workgroup aligns with the current effort to develop a management strategy to support the Stream Health outcome that was included in the Chesapeake Bay Program's new Watershed agreement that was signed by the governors in June 2014. This workgroup can provide input and Neely Law is leading the effort to develop the strategy.

2. Overview of the Stream Health Management Strategy (MS) (Neely Law)

a. Law sent email out in preparation for this meeting with background information about the Stream Health management strategy.

i. Management strategy documents are being developed by the Chesapeake Bay Program's Goal Implementation Teams and workgroups to support the outcomes included in the Watershed Agreement (signed June 2014 by the governors). The strategy document for stream health is to serve as a guiding outline to define key management actions to improve stream health and function, how stream health will be monitored and assessed, and how to report progress as these actions are implemented.

ii. Stream Health Outcome: "Continually improve stream health and function throughout the watershed. Improve health and function of ten percent of stream miles above the 2008 baseline for the Chesapeake Bay watershed."

b. Input received via email as of 12/5/14

i. Input received as of 12/5/14 distributed, additional input includes:

ii. Executive Order FY14 Action Plan Progress Report. Download from http://executiveorder.chesapeakebay.net/file.axd?file=2014%2f7%2fChes_Bay_FY14AP_FY13PR_2014-07-25.pdf.

1. Stream restoration is covered under several sections of the 214-15 milestones and other key actions for:
2. TMDL/WIPs (p. 19), TMDL/WIP EPA Grant Support (p.22);
3. Stream Restoration Outcome (p. 36), 2014-2015 Milestone (p. 37, all 7 bulleted points) and the Other Key 2014 Actions (p. 38)
4. Appendix (p. 77, 83, 87)

iii. Review the mid-point assessment analysis for the stream restoration pieces

iv. Review recommendations from Stream Restoration Expert Panel report

v. Value efforts that influence forest retention that is conserving existing forestland to insure that the percent forest cover in a given watershed is optimized.

Discussion:

- This strategy should include the Executive Order milestones that relate to stream health as well as the WIP mid-point assessment numbers that show miles of streams restored.
- This strategy could be an opportunity to offer incentives to embrace new technology and attempt new restoration methods and work with permitting agencies to recognize/accept the new technology/methods for stream restoration. (This can be something to include in the factors influencing)

- Recognize the differences in the regulatory processes across the watershed states & effect on project implementation

3. **Overview of the Chessie BIBI (Claire Buchanan)**
    - **a.** The Chessie BIBI has been adopted by Chesapeake Bay Program and is included on their website and used in the Bay Barometer annual report.
    - **b.** Currently, there is a backlog of data that need to be updated in the database, which is the first step to reassessing the baseline. Looking into incorporating genus level metrics, which might be more sensitive than family level metrics. Also trying to simplify the procedure for calculating the index with the overall goal to develop a baseline against which progress in improving stream health can be measured.

Discussion:

- This is just one of several potential measures that can be used for the stream health outcome. Other options that can work together as ecosystem indicators: water quality, fish IBI, Brook trout.
- These data for the BIBI are fixed stations and random. Maps should only use random data, but the index can use both.

4. **Group Discussion: What should be included in the Stream Health MS?**
    a. There is GIS support available to the GITs and workgroups; analysis to support the MStrat development
    b. Drafting process: identify 2-3 most significant management actions vs long wish list
    c. Incentive to embrace and use new technologies – suggestion to include as objective
    d. Scope and purpose of WG to resolve issues of which permitting is one; MS may not be the mechanism to define a solution for permitting issue; identify which 2-3 management approaches/actions may be effective to affect permitting issue
    e. Targeting effort may consider local government prioritization schemes (e.g. impaired streams, TMDLs) and overlay with BIBI jurisdictions
    f. Other tools available: EPA Recovery Potential Screening Tool (physical, chemical, biological information on streams and watersheds for HUC-12); Brook Trout Prioritization Tool to look at biological support in headwater streams; Watershed Resources Inventory
    g. MSt address balance between restoration and protection and strike a balance with prioritization (biology, water quality and areas for intersection); protection. Review "Maintain Healthy Watersheds outcome MStrat"; potential brook trout as a fish indicator
    h. Need for stream restoration given opportunities for upland BMP implementation limited and varies throughout watershed, urban watersheds specifically
        i. Urban watersheds concerns go beyond N, P and sediment—includes mercury and other contaminants
    i. Stressors and Functions
        i. To improve stream health and function need to identify stressor (i.e., EPA stressor identification) and functions are impaired

j. Use of multiple indicators and measure progress along multiple lines to address different functions
k. Stream functions discussed include:
    i. Identify physical and chemical processs to recreate ecosystem services that aren't captured by biological monitoring;
    ii. sediment nutrient storage and transport;
    iii. (Re)connection to floodplain, C, residence time; riparian condition
    iv. Flow regime, stream hydraulics
    v. Impact from lag times, varying timeframe to document recovery (immediate vs sustained response). Big Spring Run as example for restoration approach to remove legacy sediment (source) & observed biological response (to stream restoration and watershed condition)
l. Defining restoration potential for streams; recognize unique solutions to each stream restoration vs one standard solution; how we define floodplain connectivity different approaches; success is applying the right solution to the right streams; alternatives analysis as part of the strategy to implement stream restoration projects; restoration potential from toe-valley
m. Understand challenge to get biological lift; biological and water quality not enough, need to address: hydromodification, attenuating peak discharge, time of concentration etc
n. Important to look at streams as part of a system with floodplains and wetlands.
o. Outcome address potential vs actual (measured) improvement.
p. EPA Recovery Tool may help to define reference conditions to differentiate urban vs rural; reference condition does not need to reflect pristine conditions
q. Targeting restoration & marginally degraded systems, definition of reference conditions and endpoints. Incremental lift may be less for suburban vs urban but can't reach same high level of biological function (sensitive macros never being able to be in the urban streams). Recommendation to develop an Urban Reference metric.

5. Group updates

- Starr: Pooled monitoring approach for stream restoration projects has been initiated by Jana Davis CBT. A RFP will be released in Dec with the goal to advance science and provide information to regulators on benefits to stream restoration. Funding from CBT and MDNR and will fund a number of RFPs to answer questions about stream restoration. Monitoring takes a back seat to funding and MD wanted to put a group together to get monitoring data to advance the science and provide info to regulators about different innovative methods.
    - MD only. Not Baywide.
- Starr: Stream restoration guidelines/tools being put together for MDE (by FWS). MDE asked for tools to help review stream restoration projects. This will include a Rapid Function based stream assessment and Design Review Checklist.
- Law: STAC Workshopfinal draft submitted to STAC Dec 2014; received over 80 comments from Steering committee and workshop participants. Common themes about how we defined stream restoration and potential, permitting process aligning with definitions, benefits/functions would be part of stream restoration projects.

- Marian Norris: we have a national park service stream health monitoring the CBW but probably not reported to CBP. Problem running into in MD and VA and larger CBW, the states don't know about our data collection efforts and we have not done good job getting data to other agencies for use.
    - Winters: There is a federal facility strategy under the 2 year milestones for TMDL and NPS as part of DOI, may have reduction commitments to meet TMDL requirements and may be useful reporting.
    - Norris participates federal facility strategy as NPS rep
- Scott Stranko: Mid-Atlantic Coastal Resource Funding Announcement to be released soon (MD Only)