## Stream Health Workgroup: December Meeting 12/15/2023

Beyond 2025 Shallow Water Habitats

Discussion

## What are we doing well that we should keep doing or strengthen? How does the Bay Program help with this effort?

The GITs/WGs have provided a focal place for partnerships/guidance/needs to be built & documented and a framework (goals/needs) to be addressed.

Improved NFHP assessment and development of additional indicators of stream condition (e.g., geomorph, temp) will improve understanding of key stressors

supporting LGAC members with resources & info to be able to limit development along shorelines

Keep developing and improving diverse indicators of ecosystem health. Keep implementing strong stormwater controls in new developments. Retrofit/improve stormwater controls in older developments.

Keep preserving forests & controlling emissions. Forest regrowth and mitigation of AMD/acid rain supports good/improving stream macroinverts.

Keep planting and protecting riparian stream buffers, even in urban areas.

The joint pilot project focused on the Patuxent has advanced our ability to provide a seamless assessment of fish habitat for non-tidal and tidal (estuarine) ecosystems.

Keep encouraging data sharing in readily accessible formats.

## What do we need to do differently? What do we need for infrstructure to make this happen?

Better prioritizing practices/programs that will benefit shallow water habitats

Breaking down silos and teams with overlapping topic areas make a more
concerted effort with
FEMA buy-back
programs or the like,
to get shorelines out
of developed land use
as the properties age
and are no longer
good investments

Include more of the direct stressors (e.g., temperature, geomorphology, salinity, etc) affecting habitat. Better synergy across GITs and WGs.

Consider Liebig's Law of the Minimum when performing BSIDs. To paraphrase: biological improvement only occurs at the rate permitted by the most limiting stressor(s).

Better integrating stream health and watershed health considerations/work

Help from funders with NHPA requirements Re-organize the
Healthy Watersheds
GIT to include
stream health, land
use, forestry,
(wetlands?), and
protected lands
workgroups.

More focus on creating/maintaining thermal refugia in shallow water habitats

Adopt River
Continuum Concept
as a geographic
organizing principle
to cross our silos of
SAV, stream health,
wetlands, and
healthy watersheds.

## What vanguard idea could change the way we move forward?

Greater focus on addressing pollution via management of roadside and agricultural ditches, stream headcuts, and seeps.

Larger focus on socio-ecological research that integrates both people and nature's science needs.

Make an explicit goal that management efforts for one outcome minimize negative effects, and ideally maximize positive effects, on other outcomes.

meet with big shoreline developers to find out what it would take for them to leave more shoreline as habitat

Relate to answer to #2 better link direct stressor to habitat condition and fishes

Is there other shallow water research/information we need to cite/review for these ecommendations (other than CESR, Reaching 2025, Biennial SRS Report, Rising Wate Temperatures Report)?

Multiple Stressor research in shallow waters, including streams, e.g., https://link.springer.c om/article/10.1007/s00 267-022-01723-7

GIT funding project on SAV showing that we need to go "above and beyond" on wq improvements (beyond the TMDL) to get to SAV goals