



Chesapeake Bay Program
A Watershed Partnership

The Chesapeake Bay Program's Scientific, Technical Assessment and Reporting (STAR) Team, in coordination with the Goal Implementation Teams (GITs), identified the following as high priority science needs to be addressed. We are sharing this list to help identify additional science providers who would be interested on collaborating on these issues. All science needs can be found on the STAR website:

http://www.chesapeakebay.net/groups/group/cbp_science_needs.

Oyster:

1. Monitoring success of reef restoration sites
2. Identification of metrics to assess reefs before attaining 'restored' status

Blue Crab:

3. Update stock assessment
4. Compare gear efficiency between MD and VA
5. Studies of recreational harvests (needed in VA)
6. Account for population changes between winter and summer surveys

Fish Habitat:

7. Monitoring species in spawning, nursery, and forage areas
8. Develop indicators of fish habitat (fresh and tidal waters)
9. Understand habitat requirements of fish and how habitat conditions affect productivity, health, and function

Forage Fish:

10. Increased sampling of forage fish in their habitats
11. Zooplankton and phytoplankton monitoring

All Fisheries:

12. Survey of fish species in shallow waters

Wetlands:

13. Improve mapping tidal and non-tidal wetlands

SAV:

14. Funding to continue aerial surveying of SAV

Brook Trout:

15. Continue sampling of brook trout patches
16. Translation of sampling data into an indicator depicting progress toward the 8% increase in occupied patch area

Stream Health:

17. Expand metrics of stream health beyond benthic indices (Chessie BIBI)
18. Support for annual update of the stream health indicator

Black Duck:

19. Guidance on developing a habitat-based indicator

Water Quality:

20. Select primary indicators of progress toward the TMDL and attainment
21. Conduct Mid-Point Assessment (enhance models and explain trends)

Toxic Contaminants:

22. Toxic concentration sampling, especially PCBs in fish tissue
23. Sources and loadings of PCBs to the Bay and in watershed
24. Guidance on displaying changing status PCBs in the system
25. How can we integrate toxic contaminant reductions through multi-benefits of water-quality BMPs for TMDL?

Healthy Watersheds:

26. Formation of a cross-GIT tracking workgroup to track health of the state-identified healthy watersheds in future: identify metrics

Land Use:

27. Guidance on the best use of review/study determining the range of policy options and tools to reduce land conversion & repository of these results
28. Assessing the impacts of land conversion on water quality, healthy watersheds and communities

Citizen Stewardship:

29. Funding for continued surveying for the newly developed citizen stewardship index

Environmental Literacy:

30. Analysis and statistical support with completed school district survey results

Local Leadership:

31. Guidance on establishing a baseline of local leadership knowledge of water resources.