Proposed STAC 2021 Workshop “Temperature Rise: Implications for Chesapeake Bay Region Water Quality and Living Resource Management”

PROJECT DEVELOPMENT TEAM:

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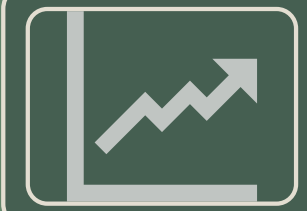
We know that temperature is rising, and this affects both nontidal and tidal living resources.

But we have water quality standards, water quality and habitat restoration strategies, and fisheries management plans based on a constant temperature regime.

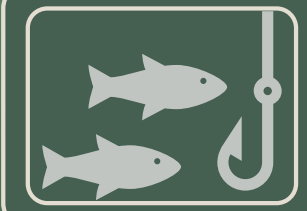
We know that temperature is rising, and this affects both nontidal and tidal living resources.

Thus, we need a workshop to understand how…



potentially to modify WQS

BMPs affect water temperature



to factor the new knowledge into our restoration strategies and fisheries management plans.

Water temperature rises in the Bay already affect eelgrass, and NOAA is studying fisheries impacts.

USGS monitoring of nontidal waters shows alarming ratio of water to air temperature increase.

Water temperature affects all chemical and biological processes of aquatic organisms, and how pollutants behave.

Preparation over the next nine months will build on the growing body of Bay Program climate studies and lay the groundwork for a successful workshop.

Information to be Assessed

- Results of modeling and monitoring temperature
- Temperature effects on watershed living resources

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Tools to be Assessed

- Tidal Water Quality Standards
- BMPs in Phase III WIPs
- Fisheries Management
- Habitat Restoration Strategies

Climate Resiliency: New Bay Temperature Indicator is needed

Phase 1

- Ask CBP workgroups to synthesize their work relating to temperature effects and tools. Pre-workshop summaries of key topics to be presented in short YouTube videos.

Phase 2

- One- day STAC workshop, with concurrent tracks addressing tidal and nontidal issues and tools respectively.

Phase 3

- After workshop, project steering committee to develop draft synopsis...leading to one-day virtual community workshop to complete findings and recommendations.

Emphasis will be on Program management actions.

Rising water temperatures will be a continuing challenge.

The workshop will organize the Program's understanding of the ecological impacts of temperature increases…

And show how we can adapt tools for water quality, habitat and fisheries management to face this challenge and meet the Program's goals.