

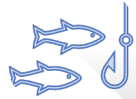
# Strategic Science & Research Framework (SSRF) – Next Generation Stewards' Science Needs



**Breck Sullivan, STAR Coordinator (USGS), Shannon  
Sprague (NOAA)**

STAC Quarterly Meeting  
9/13/2022

# 10 Watershed Agreement Goals



Sustainable Fisheries



Climate Resiliency



Vital Habitats



Land Conservation



Water Quality



Stewardship



Toxic Contaminants



Public Access



Healthy Watersheds



Environmental Literacy

## 31 Outcomes:

specific, time-bound, **measurable targets**  
that directly contribute to  
achieving the Goals

# A vast amount of science is required to achieve the goals and outcomes.

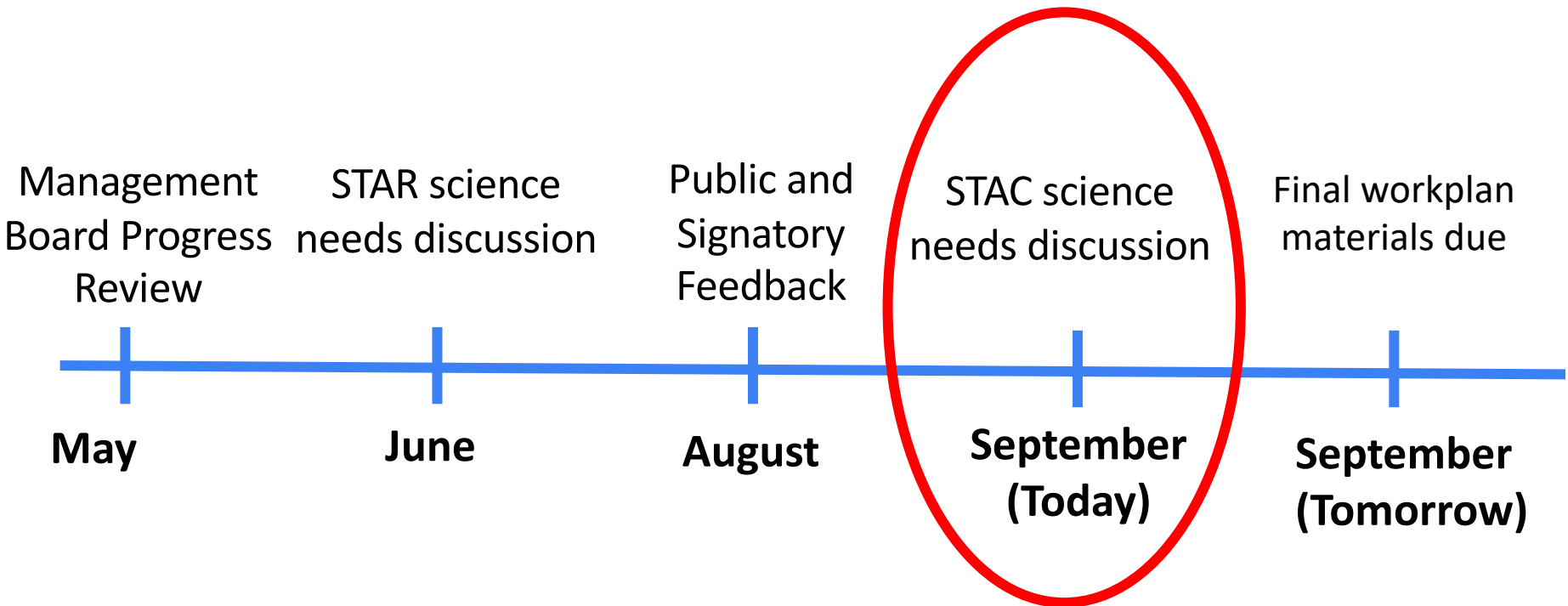
*The Strategic Science & Research Framework was developed to  
increase the amount of science for the CBP*



# SSRF provides a strategic approach to:

- 1.) **Gather, track, and maintain** science needs for each outcome
- 2.) Focus **existing resources** to help address the science needs
- 3.) Identify priorities for **new resources**
- 4.) **Expand CBP science capacity** through more partnerships

# Next Generation Stewards Cohort Schedule



# Next Generation Stewards Cohort



## Feedback requested from STAC:

- Do you or any of your colleagues have interest in contributing to addressing one of these needs?
- Do you or any of your colleagues know of existing efforts to support one of these needs?
- Do you want more information to come back to STAC from any groups on specific needs/projects?
- Are these needs appropriate? Do you see something missing?



Chesapeake Bay Program  
*Science. Restoration. Partnership.*

# STAC Science Needs: Next Generation Stewards

Shannon Sprague, NOAA



# Environmental Literacy Planning

Each participating Bay jurisdiction should develop a comprehensive and systemic approach to environmental literacy for all students in the region that includes policies, practices and voluntary metrics that support the environmental literacy Goals and Outcomes of this Agreement.

# New and Emerging Science Needs - High Priority

- Need: **Better articulation of the green career/workforce pathways**
  - What interventions can increase awareness of green jobs?
  - Which populations of students are underrepresented in green jobs? How can we increase diversity and representation?
  - Which skills and competencies are helpful for green jobs and CBP jobs?
- Why Needed: Significant workforce opportunities in the environmental and climate fields are emerging; we need to ensure a strong and diverse candidate pool. This will support the proposed Workforce Action Team.
- Current resources:
  - NPS conducted preliminary research on green career interventions
  - Compilation of green career resources (i.e. [Green Learning Agenda](#), Brookings.edu)

Status of the resource

- Full resources
- Partial resources
- **No resources**

# Student

Continually increase students' age-appropriate understanding of the watershed through participation in teacher-supported, meaningful watershed educational experiences and rigorous, inquiry-based instruction, with a target of at least one meaningful watershed educational experience in elementary, middle and high school depending on available resources.

# New and Emerging Science Needs - High Priority

- Need: **Determining evidence-based criteria to highlight how MWEEs are advancing K-12 student outcomes (with an emphasis on academic achievement and 21st century skills)**
- Why Needed: State departments of education are increasingly relying on evidence-based practices to support decision making. For environmental literacy to be prioritized, we need to be able to demonstrate how they support goals for learning (student achievement, 21st century skills, social emotional learning, etc)
- Current resources:
  - [NAAEE's benefits of EE for K-12 students literature review](#)
  - [NOAA B-WET MWEE research list](#)
  - NOAA B-WET evaluator

Status of the resource

- Full resources
- **Partial resources**
- No resources

# Sustainable Schools

Continually increase the number of schools in the region that reduce the impact of their buildings and grounds on their local watershed, environment and human health through best practices, including student-led protection and restoration projects.

# Recurring Science Needs

- **Need: Number and distribution of certified sustainable public and charter schools that have been recognized by the following programs: U.S. Green Ribbon Schools, NWF Eco-Schools, MD Green Schools, PA Pathways to Green Schools and VA Naturally Schools. (every 2 years)**
- **Description: Every two years data is collected from the programs listed above and entered into a database maintained by the Chesapeake Bay Program. Data collection effort supported by EPA contractor. Collect data and create a visualization that shows "feeder" programs that support sustainable schools efforts; this supports the 2023-2024 action plan management approach to create a more intentional pathway of increasingly sophisticated programs.**

Status of the resource

- **Why Needed: Sustainable Schools Indicator**

- **Full resources**
- Partial resources
- No resources

# Questions?



*Shannon Sprague*  
*shannon.sprague@noaa.gov*