# Scientific, Technical Assessment, & Reporting Team Meeting TOPIC: Citizen Science & Healthy Watersheds and Land Protection



August 20, 2015 10:00AM – 1:30PM

Joe Macknis Memorial Conference Room (Fish Shack)

Conference Line: 1-866-299-3188 Access Code: 410-267-5731
Adobe Connect: <a href="https://epa.connectsolutions.com/star/">https://epa.connectsolutions.com/star/</a>
Event webpage: <a href="http://www.chesapeakebay.net/calendar/event/22936/">http://www.chesapeakebay.net/calendar/event/22936/</a>

#### **GOALS:**

- 1) Update STAR on the Citizen Science Project
- 2) Discuss science needs to support the healthy watersheds outcome and land protection outcomes. STAR will use the findings to prioritize its coordination efforts with STAC to engage additional science providers to help fill those gaps.

#### **AGENDA**

**10:00 AM** Welcome, Introduction, and Announcements (Bill Dennison, Scott Phillips and Mark Bennett – STAR Co-Chairs)

#### **Upcoming Conferences & Meetings**

- Society for Ecological Restoration (SER) August 23-27, 2015, Manchester, England
- Geological Society of America (GSA) November 1-4, 2015, Baltimore, MD
- Coastal & Estuarine Research Federation (CERF) November 8-12, 2015, Portland, OR
- Maryland Water Monitoring Council (MWMC) November 13, 2015, North Linthicum, MD
- National Water Quality Monitoring Council (NWQML) May 2-6, 2016, Tampa, FL
- <u>Citizen Science Association</u> (CitSci2017) February, Raleigh, NC

#### **10:10 AM** Communications (A//)

STAR will notify the communications team of upcoming publications and projects.

#### 10:25 AM STAR Business

- Summary of Action Items from previous STAR meetings
- Highlights from STAR Workgroups

## **10: 40 AM** Update on the Citizen Science Project Efforts and Priorities (Peter Tango and Anna Mathis)

Peter Tango and Anna Mathis will deliver an overview of the progress made on the Citizen Science Project, and a summary of their working session during the Mid-Atlantic Volunteer Monitoring Conference, August 7-8.

#### 11:00 AM Healthy Watersheds Goal Team Science Support Needs

The session will focus on science needed to carry out work plans for the outcomes being addressed by the Healthy Watersheds and Land Protection Outcomes (listed on the next page). The goal team leads will review science needs for each outcome with an emphasis on monitoring needed to measure progress for each outcome. STAR will review what we've learned from previous meeting with outcome leads we will further discuss the two questions listed below. The information will be used to help the STAR Team and STAC work with the Goal Teams to build science capacity to carry out their 2-year work plans.

#### **Discussion Questions:**

- Have you established a sustained capacity to measure, assess, and report on progress towards achieving Watershed Agreement outcomes you are responsible for?
- **2.** What scientific support gaps do you have, beyond currently provided support by partners, to meet your capacity to address your Watershed Agreement outcomes including: research efforts, monitoring, modeling, GIS, trends analysis?

**12:30 PM** Lunch (Bring a lunch or \$10 cash for a Jimmy John's Box Lunch)

### 12:30 PM STAR Seminar Presentation: Citizen Science Success Stories from Virginia

Presenters: Leah Miller (IWL) and Anna Mathis (ACB)

#### **Abstract**

As the Chesapeake Bay Program begins a multi-year effort to increase data available for tracking Bay restoration progress by incorporating citizen science into the CBP monitoring network, this presentation highlights Virginia's example of a similar effort on a state level. In 2003, Virginia Department of Environmental Quality developed a quality assurance program that uses a tiered approach to allow the agency to use non-agency data to assess water quality while meeting both agency and volunteer group needs. The presentation also includes an introduction to two successful statewide volunteer monitoring programs in Virginia: the River Trends program of the Alliance for the Chesapeake Bay and the Virginia Save Our Streams program of the Izaak Walton League of America.

#### **Presenters**

#### Anna Mathis – Alliance for the Chesapeake Bay

Anna is the Program Manager for the Alliance for the Chesapeake Bay's Virginia office, where she manages projects that lead, support, and inspire local action. She coordinates the RiverTrends volunteer water quality monitoring program and provides support on the RiverWise Communities program and volunteer restoration projects. Anna received her Masters of Environmental Management from the Nicholas School of the Environment and Earth Sciences at Duke University. She has experience and knowledge in land conservation for water resource protection, environmental education and outreach, and watershed management.

#### Leah Miller - Izaak Walton League of America

Leah Miller is the Clean Water Program Director at the Izaak Walton of America, where she manages nationwide efforts to engage citizens in stream monitoring, restoration, and stewardship. Leah has a degree in political science and organismal biology from Yale University and 17 years of experience coordinating volunteer monitoring efforts. She manages the Virginia Save Our Streams biological monitoring network of more than 500 volunteers collecting data following a quality assurance plan approved by the Virginia Department of Environmental Quality. Leah also manages the nationwide Save Our Streams volunteer monitoring program that engages adult volunteers in monitoring macroinvertebrates, basic water chemistry, visual assessments, physical measurements of stream channel and banks, and stream corridor assessments.

#### 1:30 PM Adjourn

#### **Outcomes for Discussion**

#### **Healthy Watersheds Outcome**

100 percent of state-identified currently healthy waters and watersheds remain healthy.

#### **Protected Lands Outcome**

By 2025, protect an additional two million acres of lands throughout the watershed—currently identified as high conservation priorities at the federal, state or local level—including 225,000 acres of wetlands and 695,000 acres of forest land of highest value for maintaining water quality. (2010 baseline year)

#### Land Use Methods and Metrics Development Outcome

Continually improve the knowledge of land conversion and the associated impacts throughout the watershed. By 2016, develop a Chesapeake Bay watershed-wide methodology and local level metrics for characterizing the rate of farmland, forest and wetland conversion, measuring the extent and rate of change in impervious surface coverage and quantifying the potential impacts of land conversion to water quality, healthy watersheds and communities. Launch a public awareness campaign to share this information with citizens, local governments, elected officials and stakeholders.

#### **Land Use Options Evaluation Outcome**

By the end of 2017, with the direct involvement of local governments or their representatives, evaluate policy options, incentives and planning tools that could assist them in continually improving their capacity to reduce the rate of conversion of agricultural lands, forests and wetlands as well as the rate of changing landscapes from more natural lands that soak up pollutants to those that are paved over, hardscaped or otherwise impervious. Strategies should be developed for supporting local governments' and others' efforts in reducing these rates by 2025 and beyond.