

SCIENCE NEEDS

OFTHE

WATER-QUALITY IMPLEMENTATION GOAL TEAM

WQ GIT meeting April 9, 2018

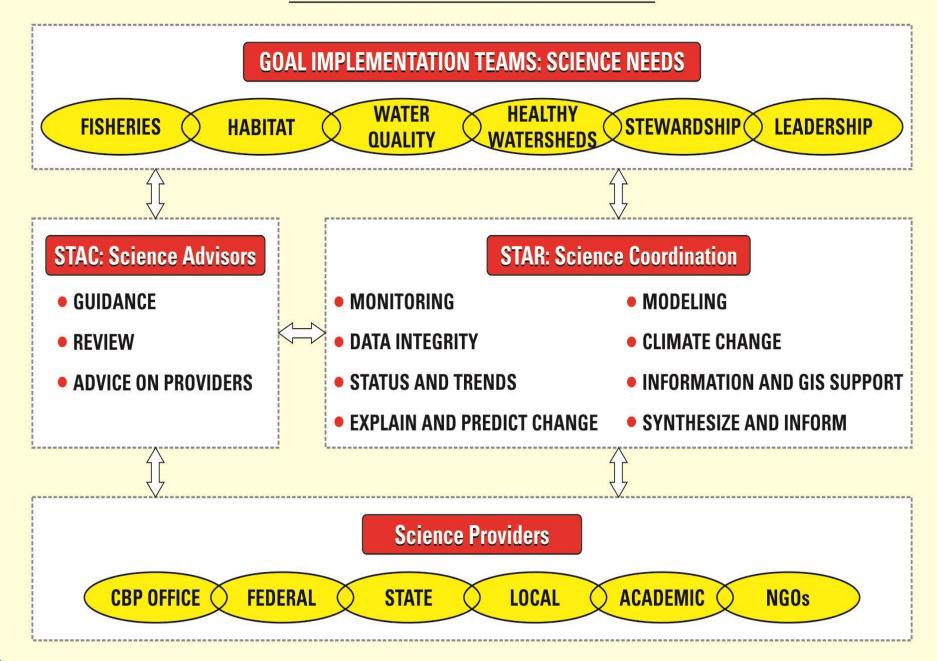
Scientific, Technical Assessment, and Reporting Team Presenters: Scott Phillips and Peter Tango (STAR)

SCIENCE NEEDS HAVE INCREASED FOR THE WATERSHED AGREEMENT

- 10 goals, 31 outcomes
- Increasing needs
- Addressing needs (TODAY)
 - Dialogue
 - Priorities
 - Build capacity
 - Engage more science providers
 - RFPs, contractors
 - Evolve existing efforts



CHESAPEAKE SCIENCE SUPPORT



WATER QUALITY GIT OUTCOMES

TMDLs

- -Assess progress (2019-2025)
- -Climate change impacts

Attainment & Monitoring

- -Tidal Standards
- -Watershed conditions

Forest Buffers

-Implementation

Toxic Contaminant Goal

Policy and Prevention

-PCBs sources, transport, reductions

Research

- -Human consumption (PCBs and Hg)
- -Chemicals of concern
- -Urban, ag, WWTP

STATUS OF CURRENT EFFORTS: UPDATES OF 2016-17 ACTIVITIES

WIPs Outcome: actions mostly complete

- Phase 6 model
- Land Cover
- BMPs
- Supporting WIP development

Attainment and Monitoring Outcome: Complete in 2018

- Attainment techniques and updates
- Explaining trends
 - Synthesis products

STATUS OF CURRENT EFFORTS: UPDATES OF 2016-17 ACTIVITIES

- Toxic Contaminant Policy and Prevention: Progressing
 - PCBs story maps,
 - Indicator updates
 - Source tracking
- Toxic Contaminant Research: Varied progress
 - Mercury summary: lacking
 - Effects of contaminants on fish and wildlife
 - Sources and occurrence
 - Relative Risk: progress on co-benefits but lacking on approach
 - Emerging issues: Microplactics (STAC)

POTENTIAL WQ GOAL SCIENCE NEEDS, 2018-2019: DISCUSSION

WIP Outcome

- Support for WIPs: Scenarios and progress
- BMP verification program implementation, efficiencies
- Climate change and climate resilient BMPs
- Optimization system (BMP co-benefits?)

Attainment and Monitoring Outcome

- Monitoring: nontidal and tidal networks, mapping of soil P conditions, manure data, Land cover updates
- Improved techniques to assess attainment
- Explain trends in the watershed and estuary (implications for milestones)
- Sediment and benthic conditions

POTENTIAL TOXIC CONTAMINANTS GOAL NEEDS, 2018-19

Policy and Prevention

- PCBs: Regional modeling
- Storm water BMP removal effectiveness
- Monitoring in fish, water, sediment

Research

- Mercury synthesis (?) to develop policy and prevention options
- Impacts of EDCs on aquatic life
- Source sectors: sources, occurrence, effects in ag and urban areas
- Risk Assessment: source sector approach?
- Co-benefits of nutrient, sediment, and toxic contaminant reductions



SETTING PRIORITIES: CO-BENEFITS OF OUTCOMES

- Outcomes in WIPs
- MB has identified

Fish and Habitat

- Brook Trout
- Fish Habitat
- Stream Health
- Wetlands
- Forest Buffer
- Tree Canopy
- SAV

Water Quality

Toxic contaminants

Healthy Watersheds

Stewardship

- Protected Lands
- Public Access

Climate Resiliency

BMPs

NEXT STEPS AND WAYS TO ADDRESS

- Further identify priority topics: Water Quality, Toxic Contaminants, Forest Buffers
 - Which on-going efforts need to continue?
 - New efforts
 - Co-benefits
- Interact with Science Providers
 - CBP office: modeling team, monitoring team, land change team
 - Federal agencies
 - States
 - Academic
- Assess additional funding opportunities
 - Grants and develop RFPs Topics
 - GIT funding