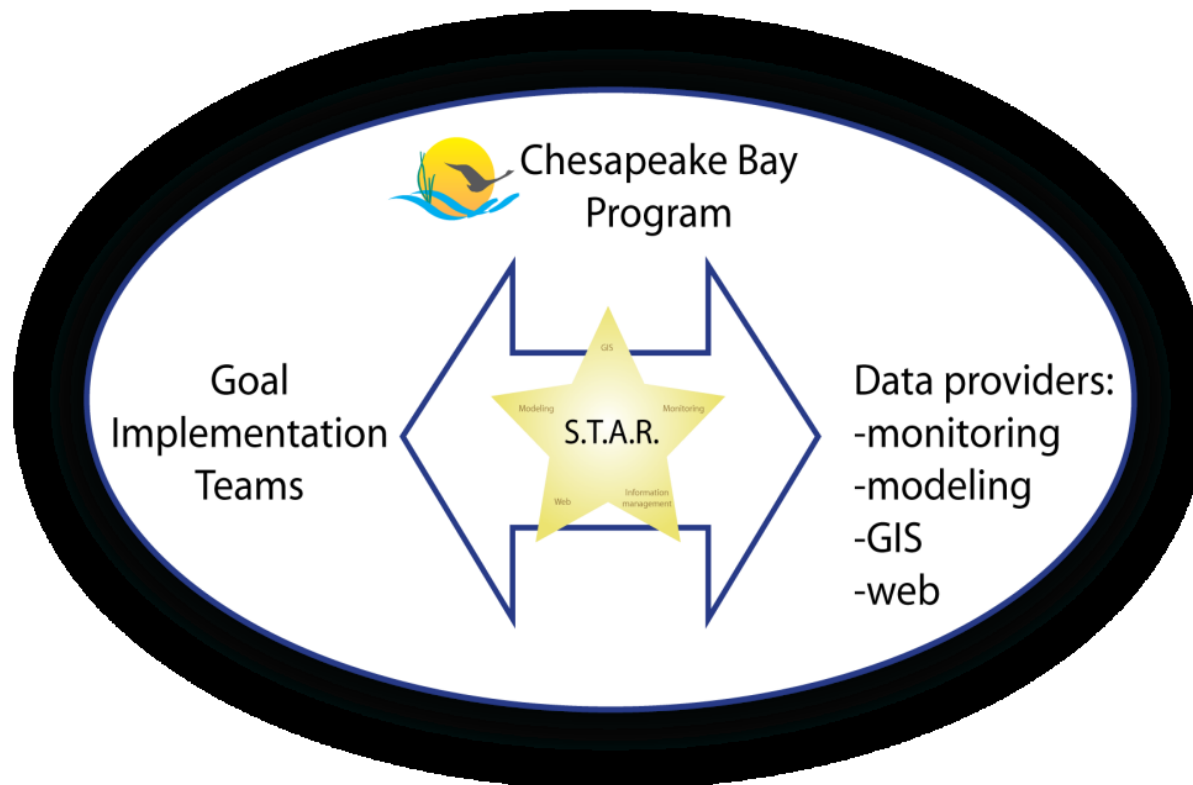# Evolving the Scientific, Technical Assessment, and Reporting (STAR) Team to Better Meet the Science Needs of the Chesapeake Bay Program

Scott Phillips, (USGS) and Mark Bennett (USGS)

On Behalf of the STAR Action Team,

March 1, 2011
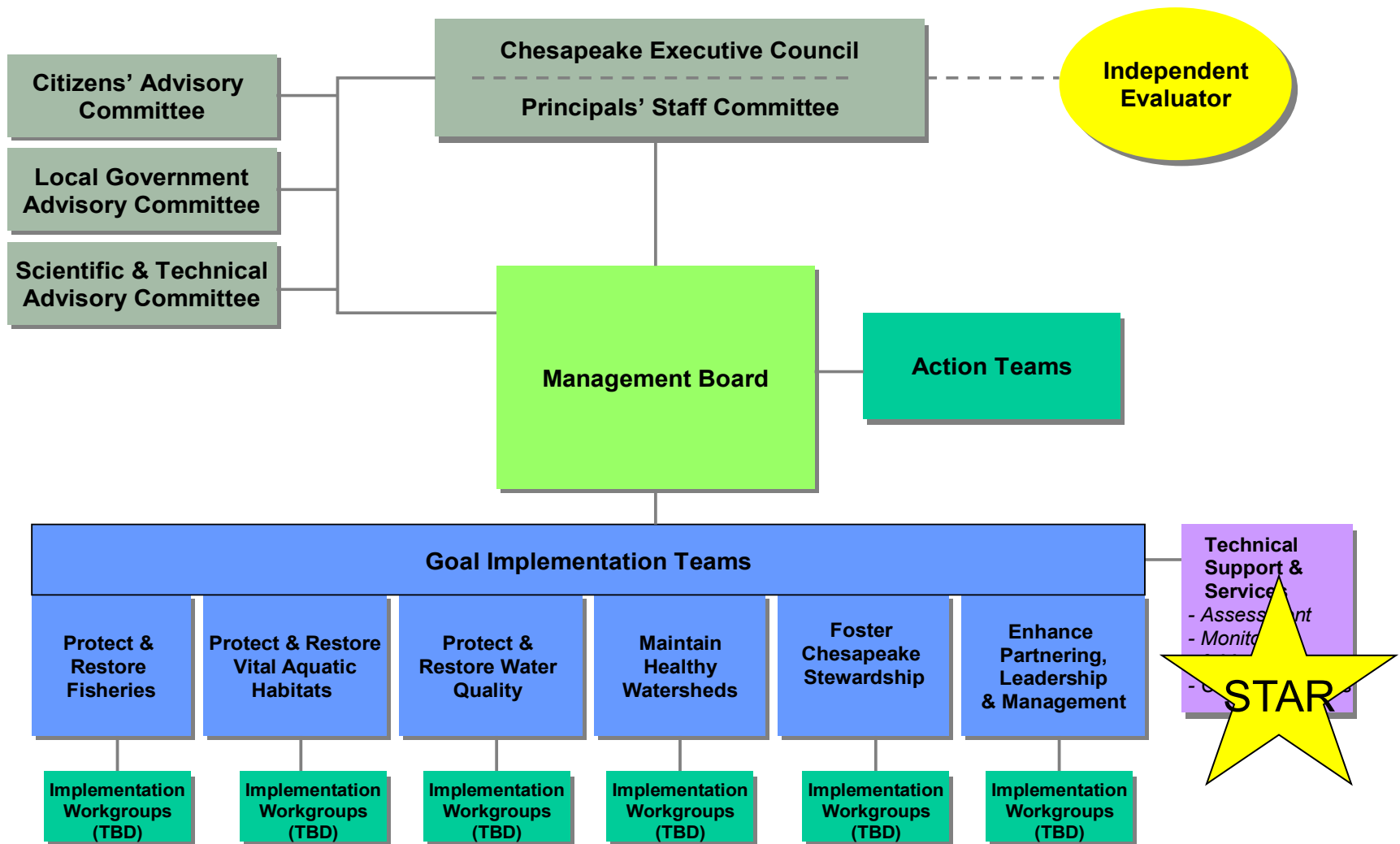
- **Goal and Need:** Increase science support to the CBP Goal Implementation Teams and partners

- **Charge:** Identify ways to increase science capacity to address the needs of CBP Goal Implementation Teams and partners
- Refine priority science needs of Goal Teams
- Revise purpose and functions of STAR
- Opportunities to increase capacity
  - Executive Order Science activities
  - State and academic partners
- Recommendations and actions to evolve STAR
- Report completed Jan, 2011

Chesapeake Bay Program

Chesapeake Executive Council

- - - - - - - - - - - - - - - - - - - -

Principals' Staff Committee

Citizens' Advisory Committee

Local Government Advisory Committee

Scientific & Technical Advisory Committee

Independent Evaluator

Management Board

Action Teams

Goal Implementation Teams

Technical Support & Services
- Assessment
- Monitoring

STAR

Protect & Restore Fisheries	Protect & Restore Vital Aquatic Habitats	Protect & Restore Water Quality	Maintain Healthy Watersheds	Foster Chesapeake Stewardship	Enhance Partnering, Leadership & Management
Implementation Workgroups (TBD)	Implementation Workgroups (TBD)	Implementation Workgroups (TBD)	Implementation Workgroups (TBD)	Implementation Workgroups (TBD)	Implementation Workgroups (TBD)

|	
Fisheries (I)	**Target**: Benthic characterization for oysters/fish **Monitor**: Oysters and fisheries **Evaluate**: valuation of ecological services
Habitat (II)	**Target**: wetlands, priority species, stream restoration **Monitor**: species for fish passage, stream habitat, LIDAR or wetland change **Evaluate**: Bird data, wetland extent, habitat/BMPs, brook trout and black duck indicators
Water Quality (III)	**Target**: BMPs on the landscape **Monitor**: BMP implementation, H2O quality **Evaluate**: Response to management actions
Healthy Watersheds (IV)	**Target**: Update land resource assessments **Monitor**: landscape coverage **Evaluate**: landscape change
Stewardship (V)	**Target:** Societal well being, land conservation **Monitor**: Public access, livable communities **Evaluate**: Watershed experience, citizen actions

- Diverse technical needs
- Need clear goals and outcomes
  - Chesapeake 2000
  - Executive Order
- Varying science capacity
- Annual planning process for GITs and STAR
  - Management Board leadership
- Confusion about STAR vs. STAC

- Science providers for CBP
  - Serve the science needs of the GITs
  - Summarize and communicate information
- Facilitate with science providers to increase
  capac
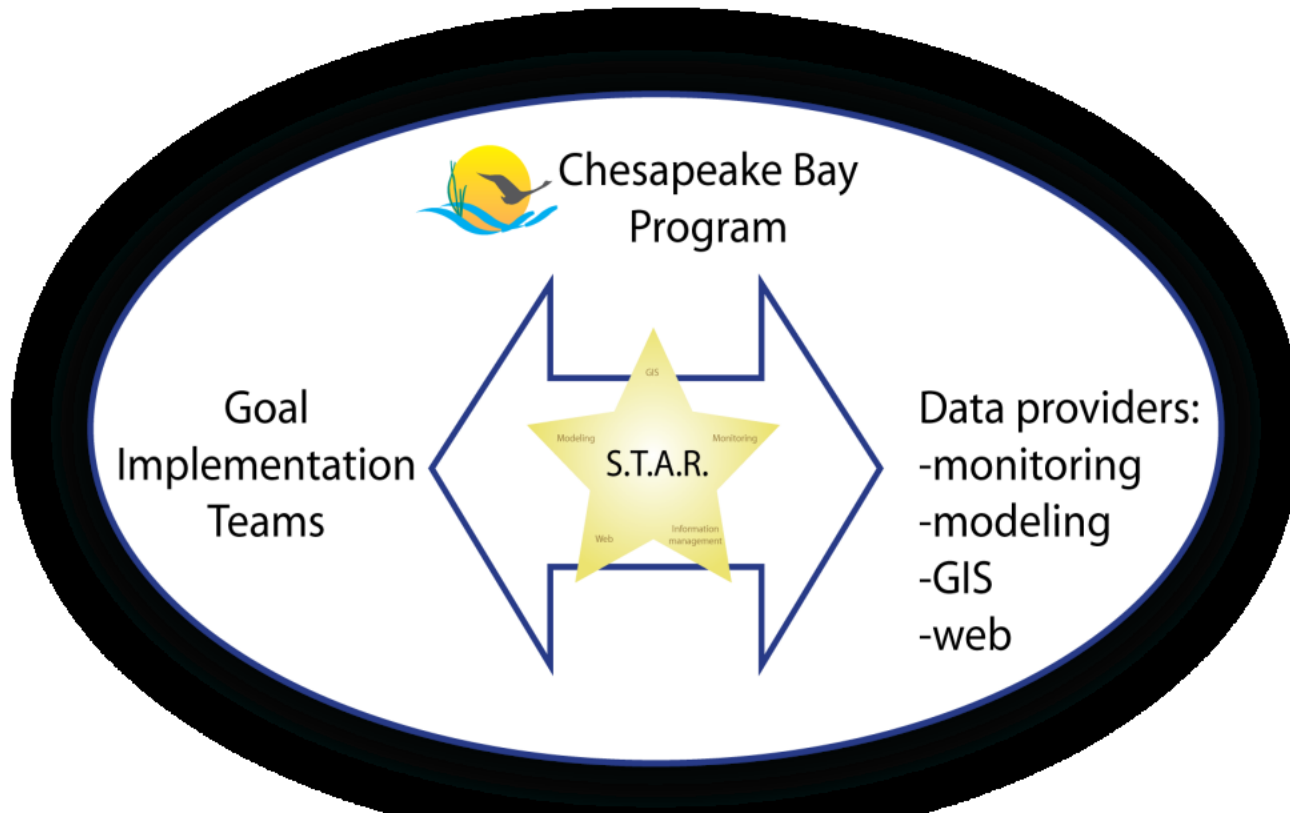
CHESAPEAKE SCIENCE SUPPORT

GOAL IMPLEMENTATION TEAMS

FISHERIES HABITAT WATER QUALITY HEALTHY WATERSHEDS STEWARDSHIP LEADERSHIP

S T A C

Scientific and Technical Analysis and Reporting (STAR)

- MODELING AND PRIORITIZATION TOOLS
- MONITORING, ASSESSMENT, INDICATORS
- EVALUATION
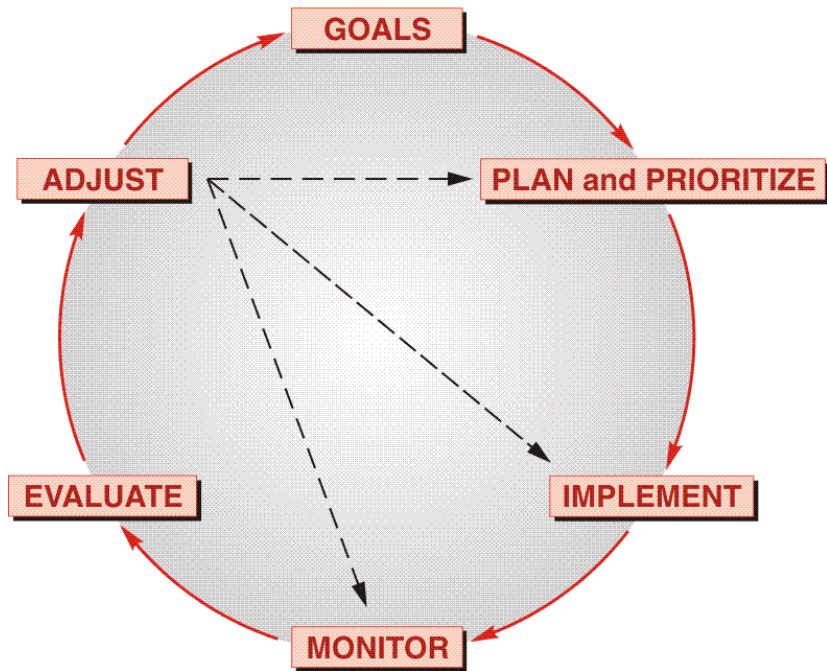- COMMUNICATION
- DATA SHARING

CBP OFFICE FEDERAL STATE ACADEMIC

Chesapeake Bay Program

ADAPTIVE MANAGEMENT FOR ECOSYSTEM DECISION MAKING

[Modified from Williams and others (2007) and Levin and others (2009)]

- Modeling and decision tools
- Monitoring, assessment and indicators
  - Monitoring Alliance
- Evaluation and synthesis
- Communicate results
  - Bay Barometer
  - ChesapeakeStat
- Information sharing and management
  - Data Enterprise
- Liaison to science providers

- Serve Goal Implementation Teams

  - Providers (STAR) vs. Advisors (STAC)

- STAC roles

➢ Review of STAR approaches

  ➢ Modeling

  ➢ Monitoring and indicators

  ➢ Evaluate

➢ Identify new issues and research needs (such as climate change)

➢ CBP bi-annual science meetings

➢ Workshops (some joint with STAR)

- Liaisons with each GIT
- Topical meetings
- Increase science provider
- Evolve STAR workgroups
- Interaction with STAC
- Prepare annual work plan
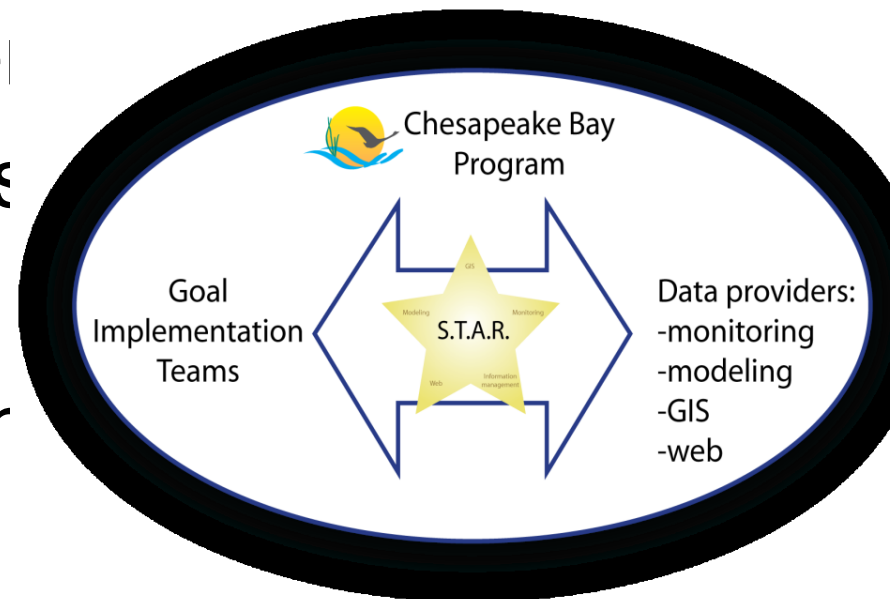
- Conduct Initial topical workshops
  - Integrated monitoring to assess progress toward TMDL and milestones
  - Stream restoration and protection
- Increase science providers
  - Federal Liaisons
    - Id Agency expertise and projects
    - Align with EO action plan and resources
  - States
    - Liaison to STAR and members on workgroups
  - Academic
    - CRC, Potential funds for synthesis

Management Board

- Suggestions for other actions
- ID Federal and State liaisons to STAR
- Issues for topical workshops
- Annual planning for Goal Teams and STAR
- Contacts:
  - Mark Bennett (STAR acting chair)
  - Peter Tango (STAR coordinator)
  - Scott Phillips (USGS, EO Science Coordination)