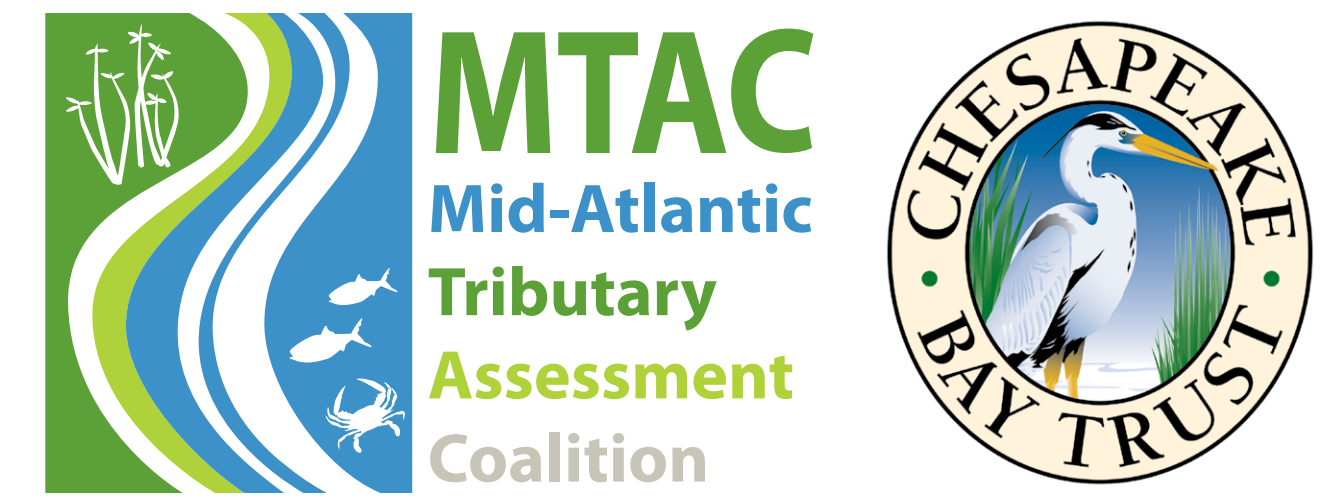


Expanding the diversity of the Mid-Atlantic Tributary Assessment Coalition

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Since the 2006 release of the first EcoCheck Chesapeake Bay report card, **environmental report cards** have gained increasing popularity and recognition as a public-friendly and scientifically sound method for reporting the health of a waterway. Recently, a number of watershed organizations in the Mid-Atlantic region have begun producing their own tributary-specific report cards. In 2009, the **Mid-Atlantic Tributary Assessment Coalition (MTAC)** was formed to foster collaboration among watershed organizations and to fully develop the potential of region-specific environmental report cards. This can be accomplished through the standardization of indicators, monitoring & sampling protocols, data analysis methods, and science communication techniques.

The Mid-Atlantic Tributary Assessment Coalition (MTAC)

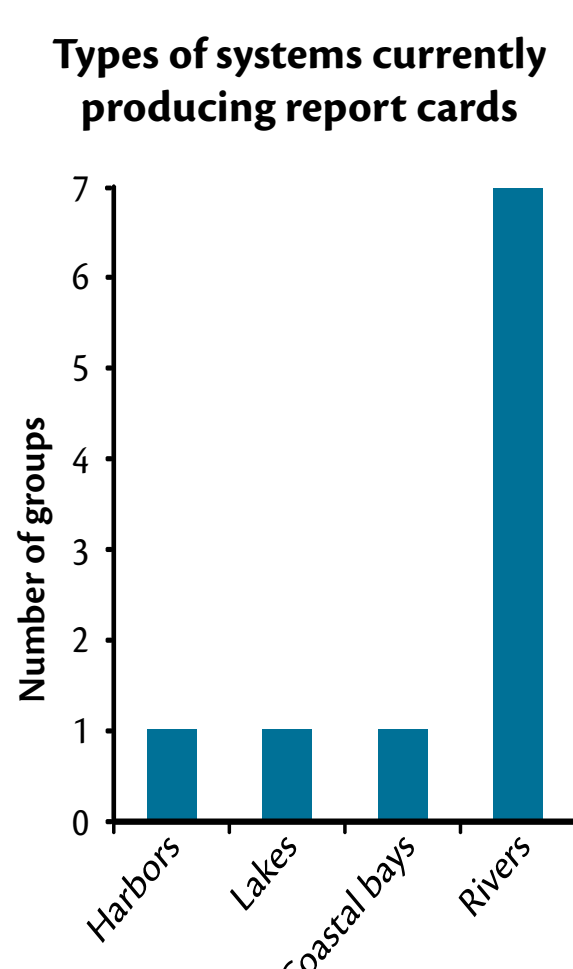
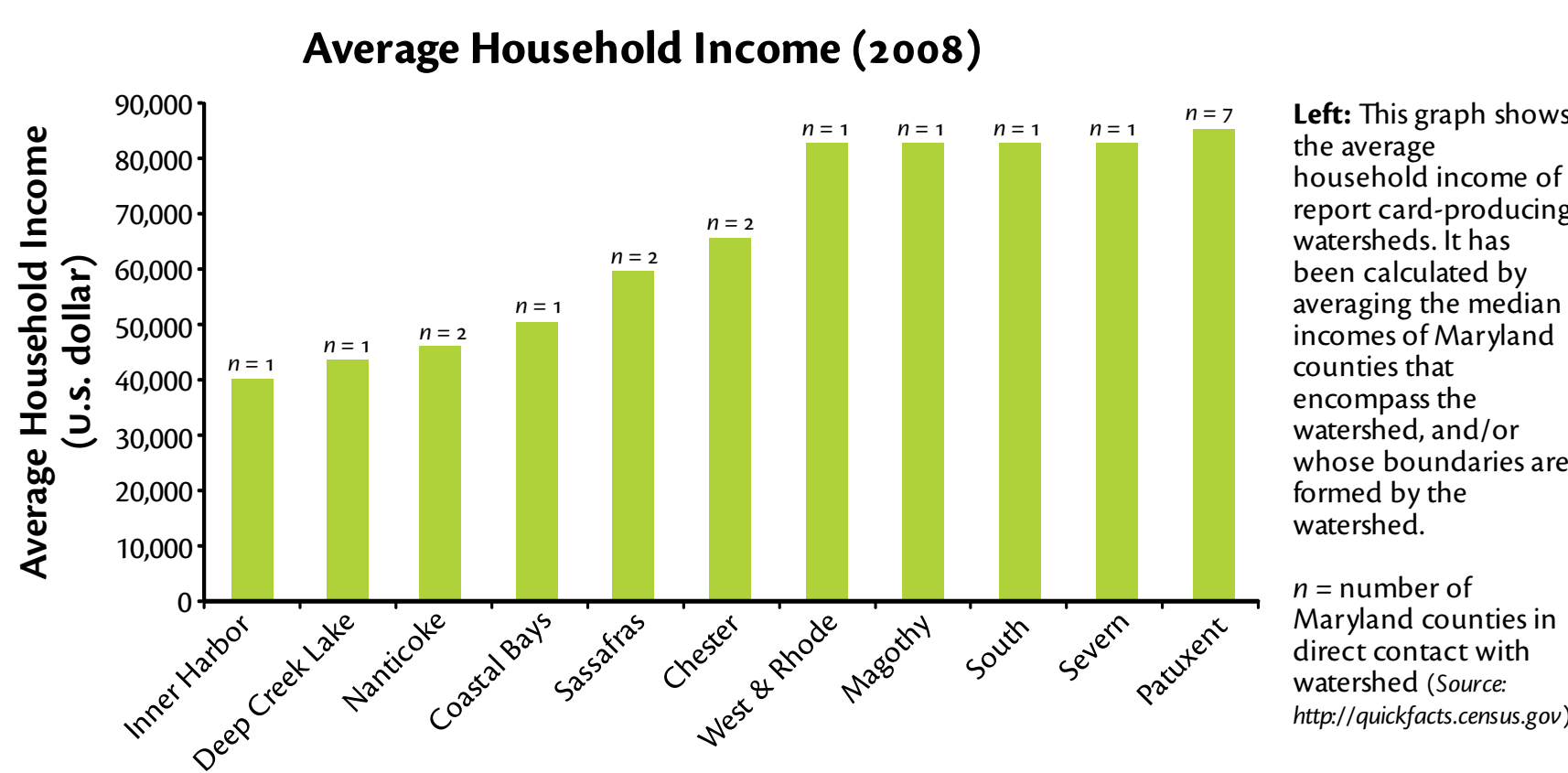
Based on the success of the EcoCheck Chesapeake Bay report card, watershed organizations in the Mid-Atlantic region have begun producing their own tributary-specific environmental report cards with assistance from EcoCheck. These groups often use data collected by state agencies for their report cards, but also often rely on volunteer **citizen scientists** to collect water quality data on a finer scale—which is crucial for comprehensive monitoring and protection of their watersheds.

Report cards have been shown to successfully generate **community interest and understanding** of ecosystem health, water quality, and watershed issues. However, these tributary-specific report cards are based on varied and inconsistent indicators, making comparisons from one region to another difficult. To fully develop the potential of volunteer-based monitoring programs, the data they collect, and the report cards they produce, **MTAC** was formed to support collaboration among member groups through the following objectives:

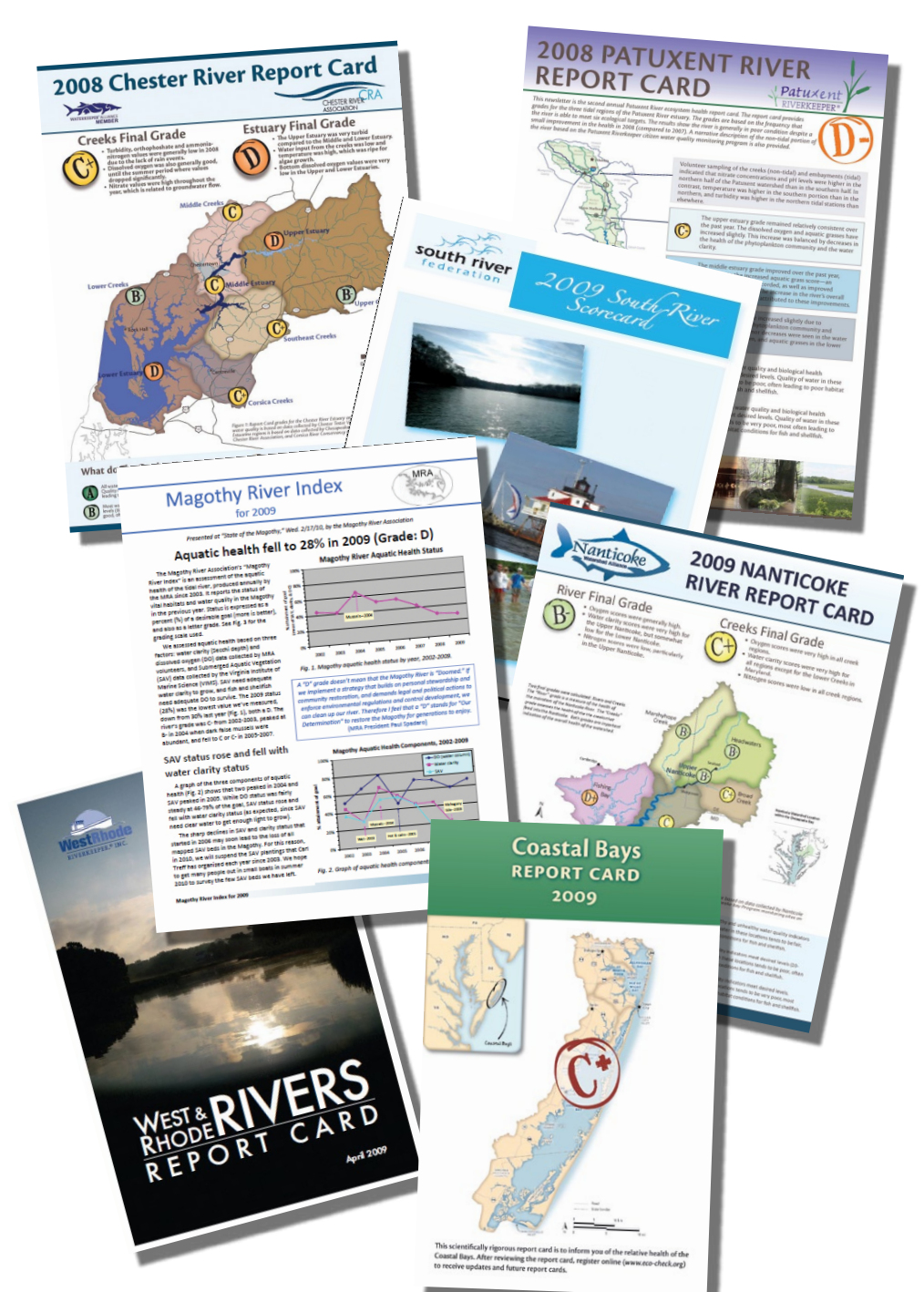
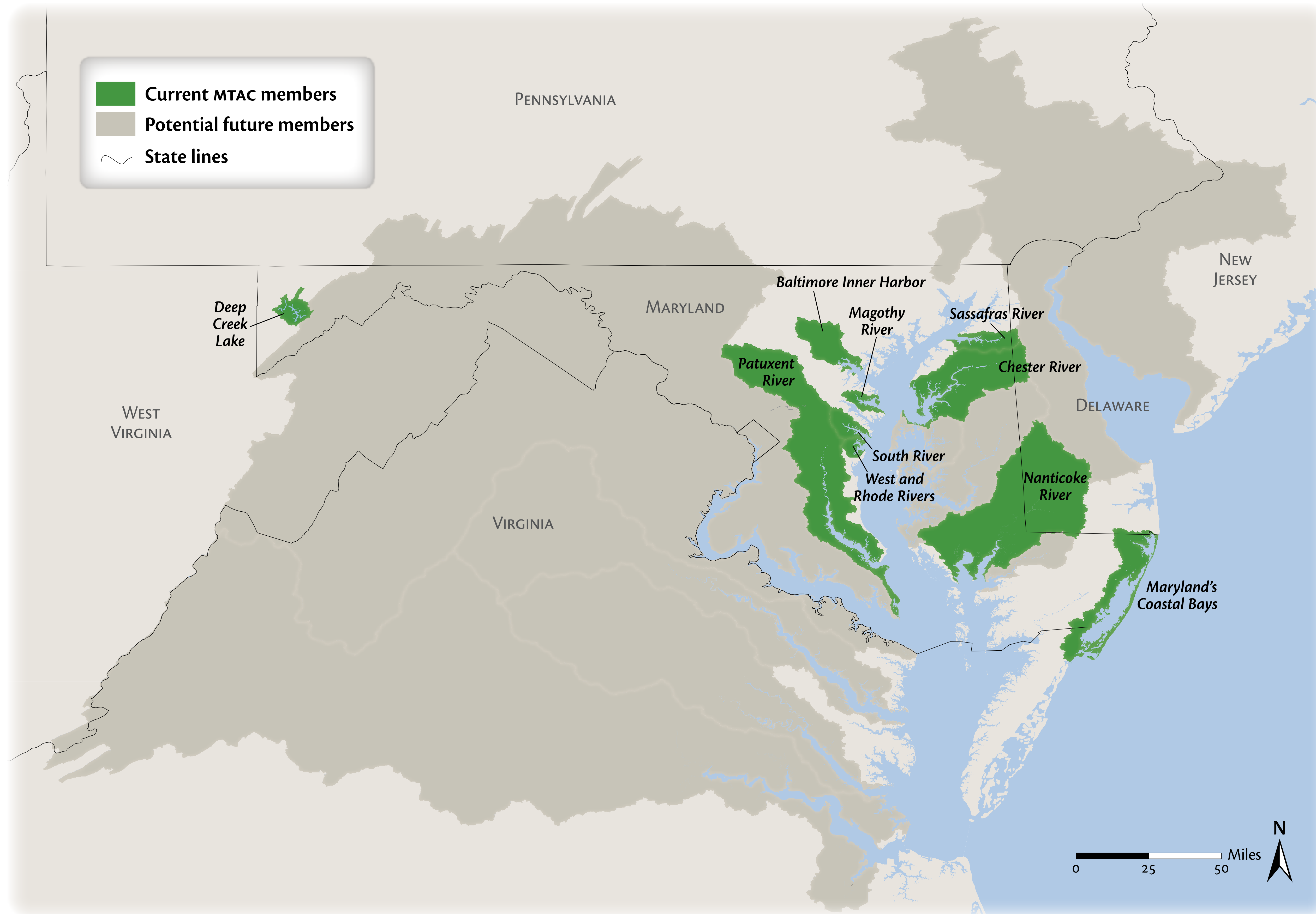
- **Reach consensus** on realistic and meaningful ecosystem health indicators for tidal & non-tidal areas, standard monitoring protocols, and methodologies to calculate index scores & report card grades.
- **Establish written guidelines** for sampling & monitoring design and data analysis for use by existing and future report card projects, as well as by other organizations that use community-based monitoring.
- **Hold regular meetings** for watershed organizations and other interested groups to establish common best practices for the engagement of citizen scientists and development of report cards.

Member diversity

Current **MTAC** members represent a **diverse range** of systems and economic & social groups, but **further expansion** to include a larger range of groups is desired. For example, all current members are primarily based in Maryland, with many located in Anne Arundel County, one of the wealthiest counties in the state. Less wealthy counties are represented, but



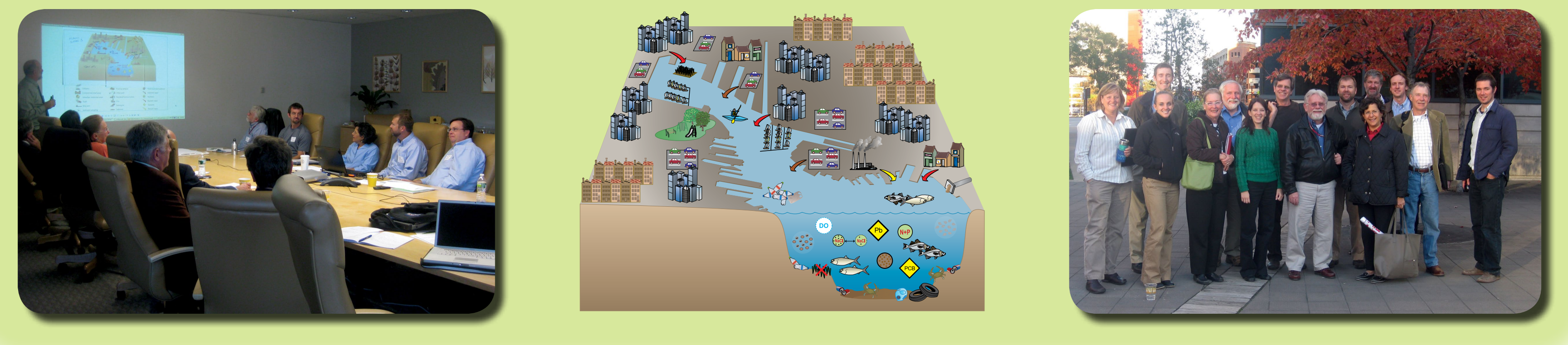
not to the same degree. The types of systems represented are also uneven: **MTAC** currently encompasses numerous river systems, one coastal bays system, one lake, and one harbor. The planned expansion of **MTAC** to include groups in Virginia, Pennsylvania, and Delaware would increase the variety of systems represented and also allow for increased collaboration and knowledge-sharing pertinent to the region.



Tributary groups present their final report cards in different ways. Above, examples of the various styles of current report cards.

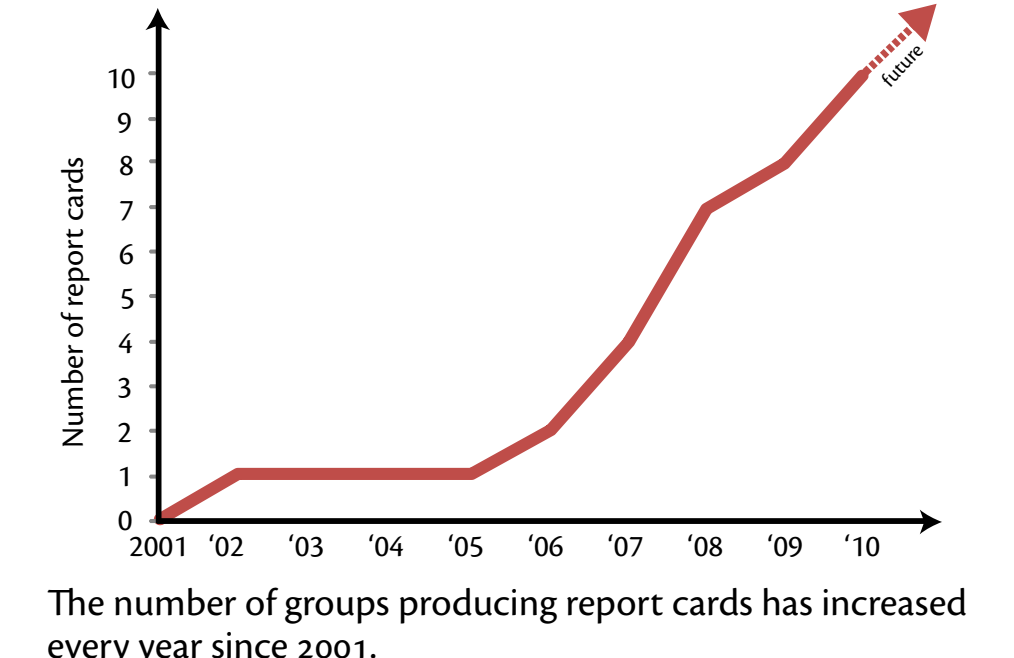
New to MTAC – Assessment of Baltimore’s Inner Harbor

The Waterfront Partnership of Baltimore, in collaboration with City government, nonprofit organizations, local businesses, and the public, has recently launched the **Healthy Harbor Initiative**, which will develop a health assessment of Baltimore’s Inner Harbor with EcoCheck and other partners. The Inner Harbor watershed is different from other **MTAC** groups’ watersheds for various reasons, including its large urban footprint. There are agricultural and forest lands in the upper watershed, but downstream, many streams are paved over and piped underground through stormwater drains that outfall directly into the Inner Harbor, meaning many residents may not even know they exist! The impacts of legacy pollutants from industry and shipbuilding, as well as the passion and commitment of local businesses and attractions to clean up the Inner Harbor in an accelerated time frame, also make the Inner Harbor unique. A baseline conditions report will provide the foundation for an annual report card assessing the ecological health of Baltimore’s Inner Harbor. The annual report card will help track progress toward the Waterfront Partnership’s goal of a **fishable, swimmable Harbor** by 2020. The methods used in the report card will include indicators and sampling & analysis guidelines established by the **MTAC** protocol document.



Expansion of MTAC

The first tributary to produce an annual report card was the Magothy River in 2002, followed by the Chester and Patuxent Rivers in 2007. Since then, the number of groups producing report cards has expanded steadily, increasing on average by one or two groups per year.



Currently, there are ten groups producing report cards and participating in **MTAC**. The group would like to continue growing by adding one or two organizations each year and would also like to expand to include more tributary organizations in the greater Mid-Atlantic region, including Virginia, Pennsylvania, and Delaware.

The gray regions on the map at left are either groups that are being targeted specifically to increase the geographic scope of the group and/or groups that have expressed interest in joining **MTAC** efforts. However, it should be noted that **MTAC** is not exclusive—anyone that wants to participate or attend meetings is welcome.

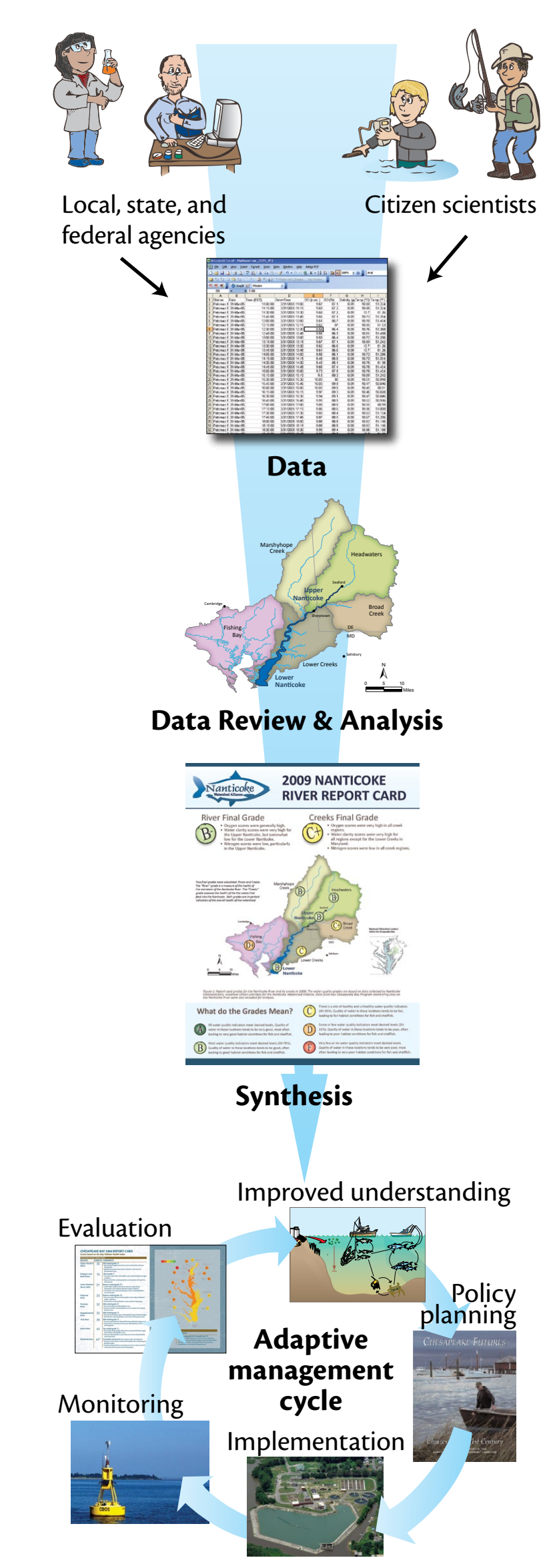
Standardization of indicators and methods

Different watershed organizations collect, analyze, and report their data differently, resulting in data utility that has so far been limited to individual watershed assessments. **Greater consistency** of data collection and analysis is necessary for information to be used in larger-scale analyses (e.g., the Chesapeake Bay report card and other Bay-wide assessments). Analyses at this scale allow comparative assessments between tributaries and evaluation of the effectiveness of restoration and management actions.

MTAC was formed to improve the consistency of data collection and analysis among participating organizations. Its goal is to reach consensus on ecosystem health indicators, monitoring protocols, and synthesis methodologies. **MTAC** participants are currently working to produce **written protocols** that will help ensure uniform and scientifically rigorous monitoring, sample analysis, quality control, and data management for all tidal indicators among current and future groups. A similar protocol document will then be drafted for non-tidal indicators.

The **MTAC** group meets once per month to work on developing these protocols, which are scheduled to be completed by January 2011. Although the protocols are still in development, many watershed organizations are already adjusting their methods to be consistent with the group.

A seminar series has also been established, and a **MTAC** website is in the works. For now, more information about **MTAC** is available at www.eco-check.org.



Acknowledgements

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