A Discussion of Approaches for Revising the Chesapeake Bay Nontidal Network to Meet Long-Term Fiscal Realities

Three Pillars of Evaluation

-and key responsible parties

- Network technical requirements
  - *STAR (NT workgroup), STAC? (panel or workshop)*
- Jurisdictional Priorities for Monitoring information
  - *States (DE, MD, PA, NY, VA, WV) and DC*
- EPA Chesapeake Bay Program's Commitment to individual partners.
  - *EPACBPO*

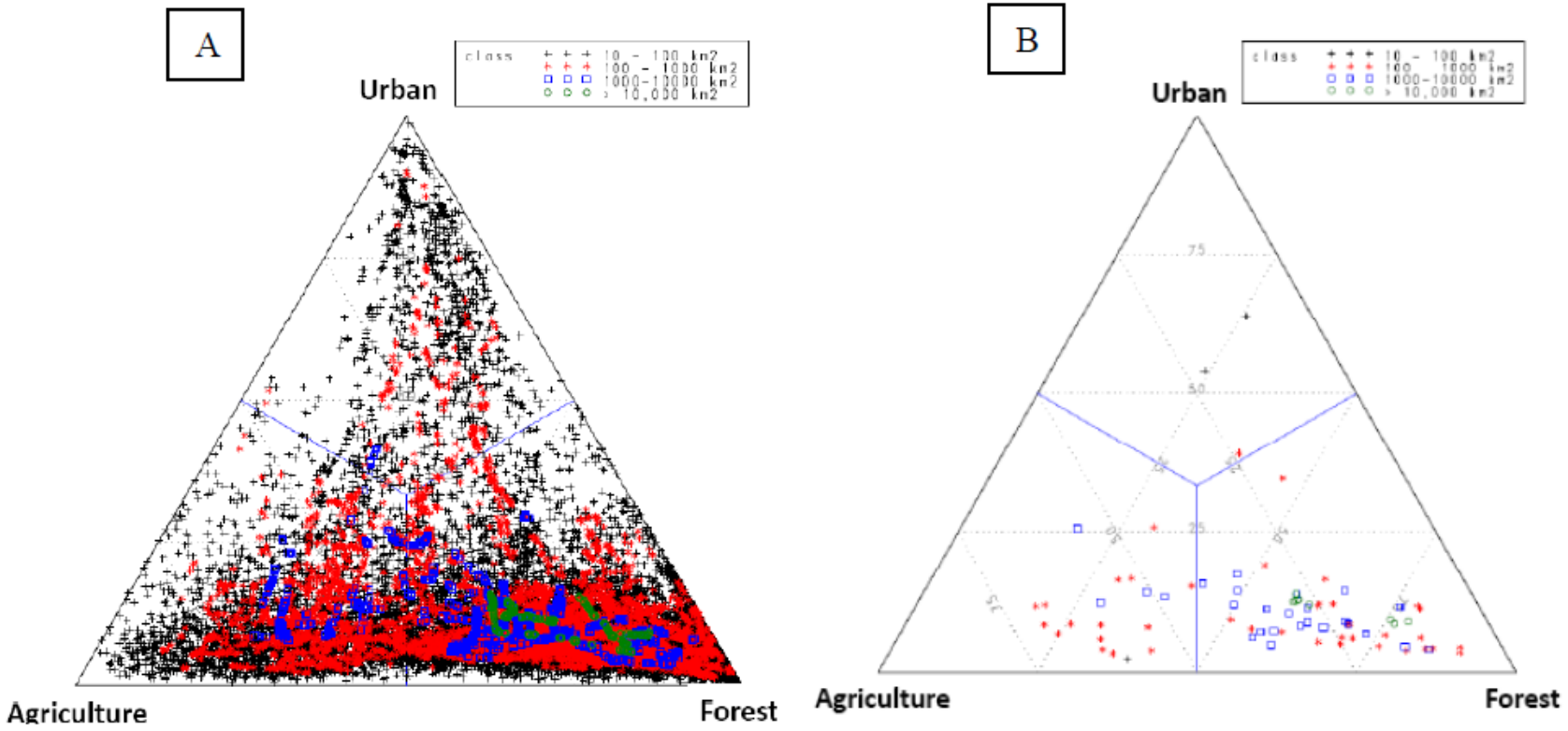
Large Periods of History omitted for the sake of brevity

Revised Monitoring Objectives (FROM MRAT 2009)

The objectives of the NTN must be significantly revised in order to accommodate priorities of partner organizations as identified in the 2009 STAC report. The following revised objectives reflect a balance between the long-term monitoring goals of CBP partners and the increased need for tracking of changes that may result from management actions (restoration) and other changes occurring within the watershed.

- Measure and assess the status and trends of nutrient and sediment concentrations
- and loads in:
  - Major tributaries and sub watersheds
  - Selected tributary strategy basins;
- Provide data suitable for the assessment of factors affecting nutrient and sediment
- status and trends from major pollutant source sectors;
- Measure and assess the effects of targeted management and land-use change;
- Improve calibration and verification of partners' watershed models;
- Support spatial and topical prioritization of restoration and preservation;

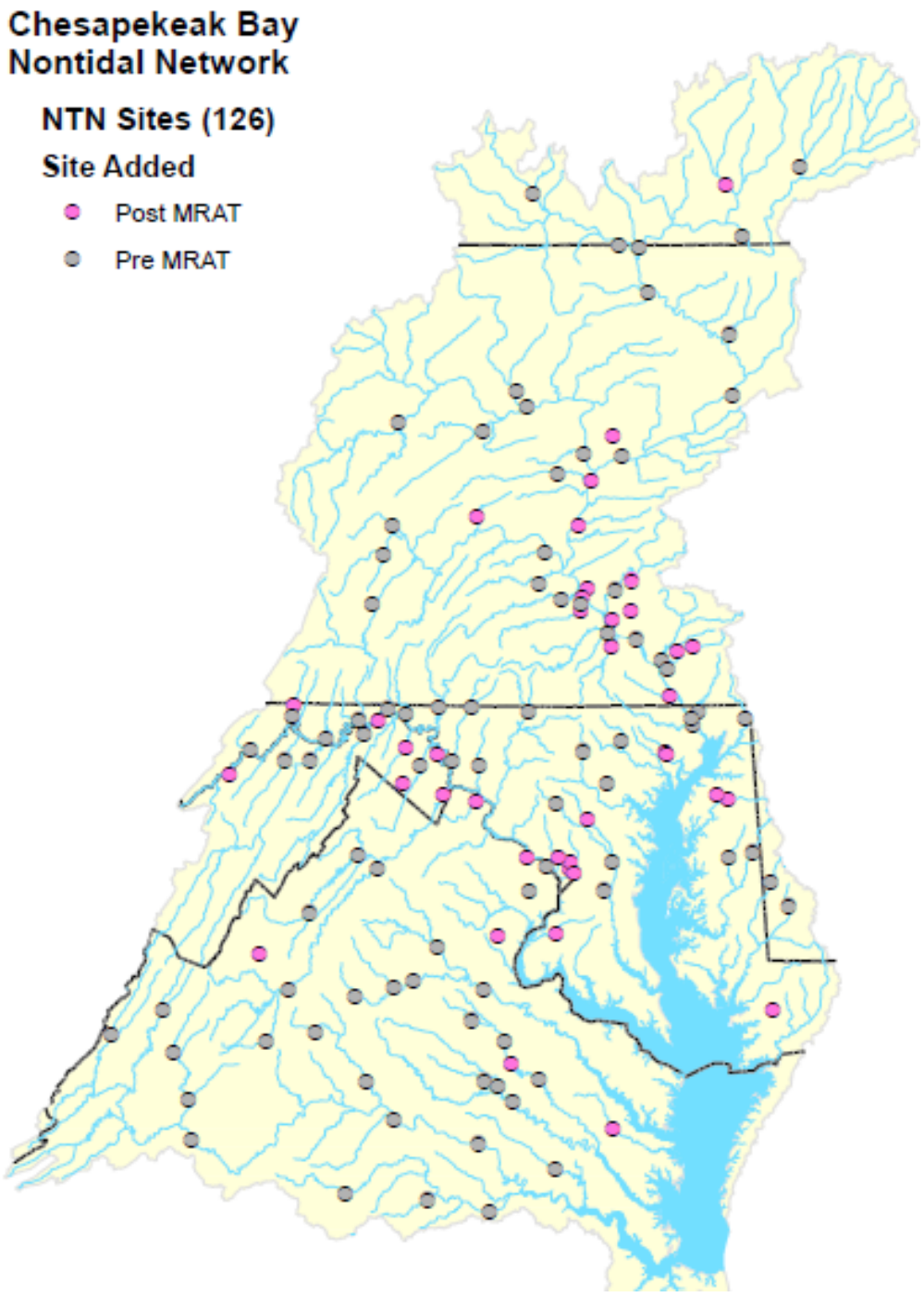
MRAT NETWORK EVALUATION



MRAT Recommendations

- Add more monitoring sites to address selected under-represented source sectors: urban and suburban
  - more analysis of other under-represented land uses and source sectors may be needed (long-term need)
- Add more monitoring sites to address small watersheds
  - add these sites based on existing or proposed intensive small watershed investigations, or if possible, based on focused BMPs or point source controls. Possible intensive small watershed investigations to partner with include the studies in watersheds identified by STAC that will have increased implementation funded through the Farm Bill (STAC 2009b).
  - consider different sampling frequency and load estimation techniques for smaller watershed sizes. Use of real-time water-quality surrogates is likely to be very useful here. Link directly with water pollution abatement actions.
- Add more monitoring sites to coastal plain physiographic region to improve load estimates and integrate with tidal monitoring.
  - consider designing systems of ground-water observations in the coastal plain that can be used to provide quantitative estimates of nitrate fluxes into segments of the tidal system.

Pre and Post Expansion



Considerations (1)

- Technical merit (Strategic)
- Balance / equity
- Short-term goals vs. long-term
- Current status (problem sites?)

Considerations(2)

- Should this network evaluation focus on meeting the midpoint or 2025 assessment?
  - Is it more important to keep a long-term station because of the historical investment?
    - or
  - Is it better to focus on targeted watersheds with new monitoring because the information will be necessary in 2025?

Considerations(3)

- Is it possible to reallocate funding from long-term sites to newer stations?
  - Many sites are operated based on pooled resources

Discussion of Proposed Actions

- States can tap into their Chesapeake Bay Implementation Grant funds
- Cut back the number of stations in the non-tidal network based on decision rules which reflect the objectives for the network overall and not state specific considerations
- Cut back on data analysis support
- Unsure if there are any cuts possible to the mainstem monitoring program given the changes to the scope of the program already enacted as a result of the 2009 Monitoring Realignment
- Consider reinstating all or some of CBP funds for monitoring in 2013.