Applying the CBP Decision Framework for WQGIT activities

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CBP Decision Framework

- Enhance decision making and manage adaptively by reducing uncertainty
- Endorsed by PSC and EC
- Steps:
  - Articulate goals
  - Describe factors
  - Current management efforts (and gaps)
  - Development management strategy
  - Monitoring program
  - Assess performance
  - Manage adaptively
- Benefits

WQGIT and the Decision Framework

- WQGIT activities for water-quality standards through the TMDL
- Integrated approach for assessing and communicating progress
- NAS recommendations
- Purpose for today:
  - Provide overview
  - Comments
  - Requested revisions

Step 1: **WQGIT Program Goals**

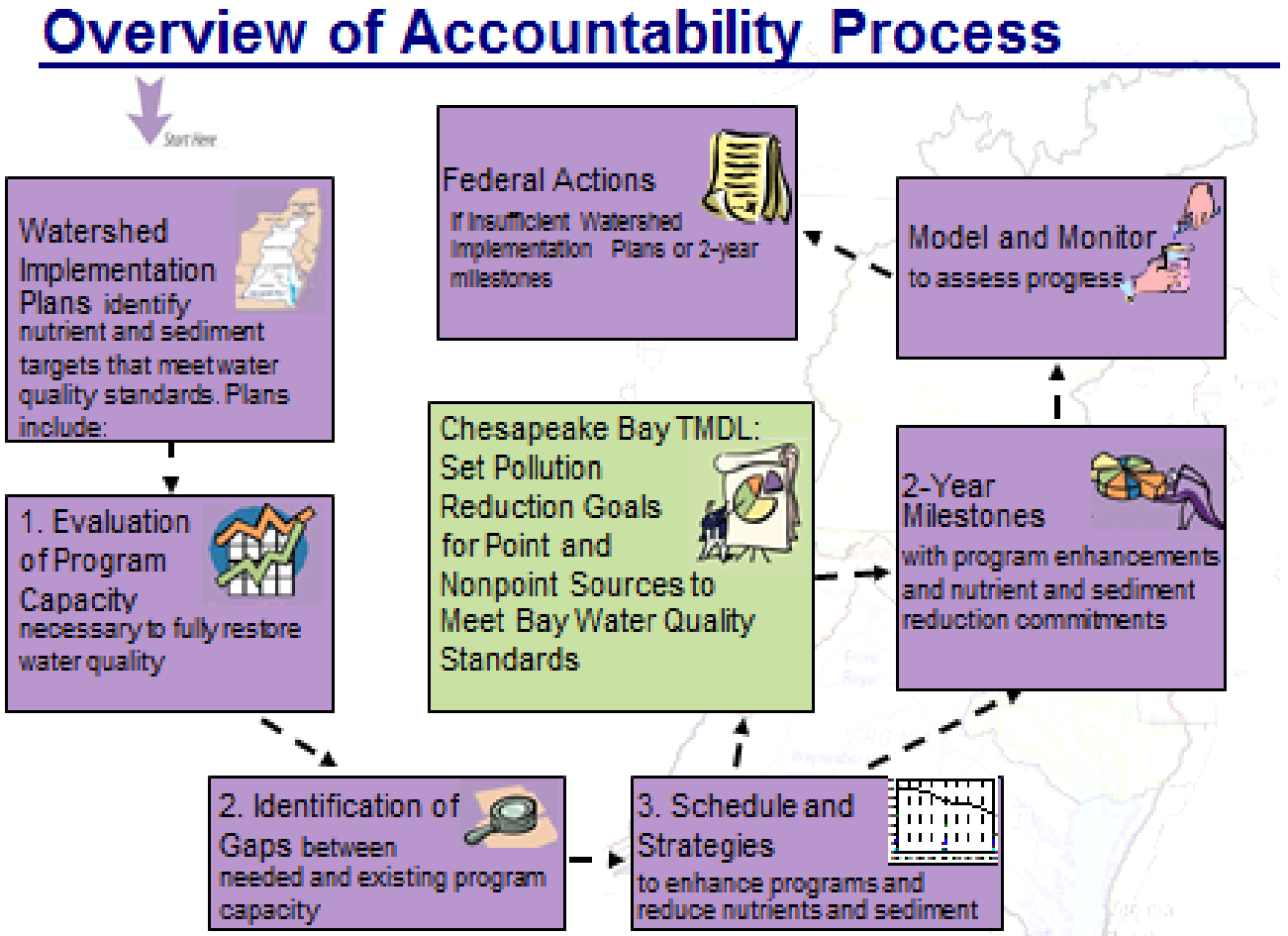
- WQGIT has clear goals
- Achieve water-quality standards
  - DO, clarity/SAV, chlorophyll-a
- Bay TMDL
  - Pollutant load allocations for N, P, and S

Step 2: **Factors Affecting Goals**

- Understanding system response to load reductions
  - DO, clarity/SAV, chlorophyll-a
- Sources and contributions to N,P, and S loads
  - Info summarized and in CBP models
- Describing and quantifying effects of pollution reduction practices
- Capacity to implement practices

Step 3: **Current Efforts**

- WQGIT and TMDL accountability framework



Step 3: **Current Efforts (and Gaps)**

- Understanding system response to load reductions
  - BMP effects on water quality and lag times
- Sources and contributions to N,P, and S loads
  - Source sectors
  - Provide at more local scales
- Describing and quantifying effects of pollution reduction practices
  - Improve verification and reporting
- Capacity to implement practices
  - Funding challenges

Step 4: **Management Strategies**

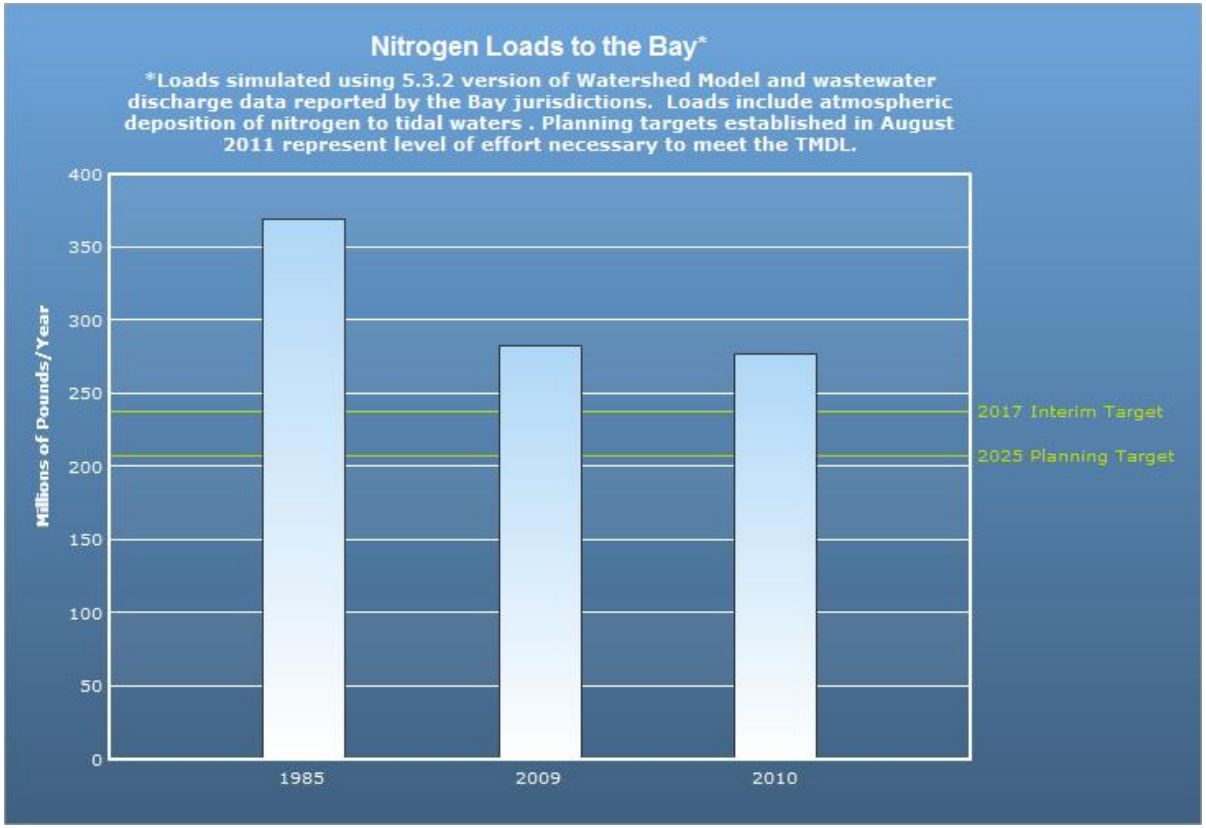
- Opportunities to address gaps
- Understanding system response
  - Lessons learned and trend reports, lag times workshop, living resources, STAR and STAC
- Sources and contributions to N,P, and S loads
  - Phase 2 WIPs, WQGIT workgroups, data and model enhancements (STAR support),
- Effects of pollution reduction practices
  - Improve verification and reporting, monitoring
- Capacity to implement practices
  - 2-year milestones and Phase 3 WIPs

Step 5: **Monitoring Program**

- How are practices being implemented for the TMDL improving water quality?
- Integrated approach:
  - Practices implemented (TMDL)
  - Nutrients/sediment in watershed
  - Attainment of standards
- Reports to explain change
- WQ GIT-STAR interactions
- MB and PSC

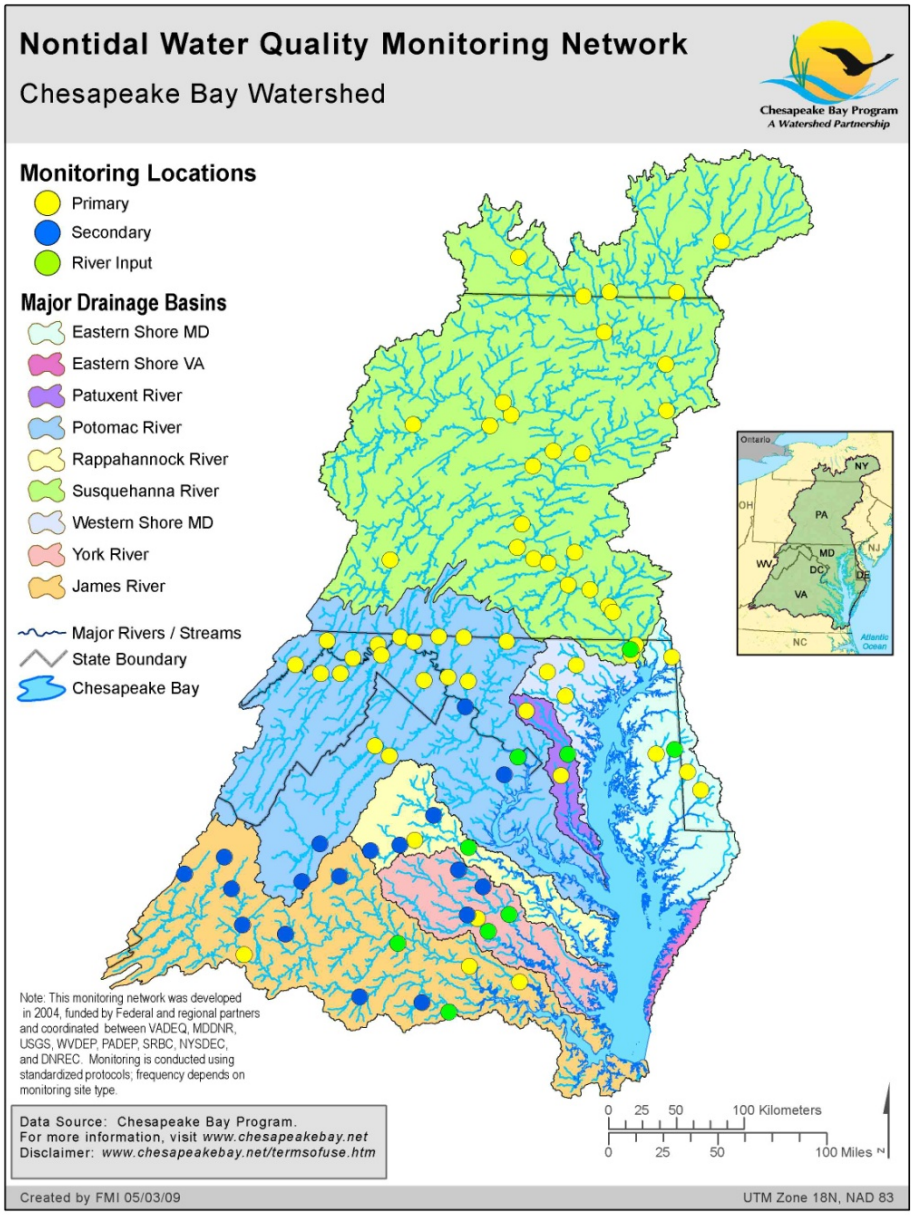
TMDL-Reporting of BMPs

- BMPs implemented
- Projected load reductions (progress runs)
- Annual reporting and 2-year milestones
- Improved BMP reporting and verification

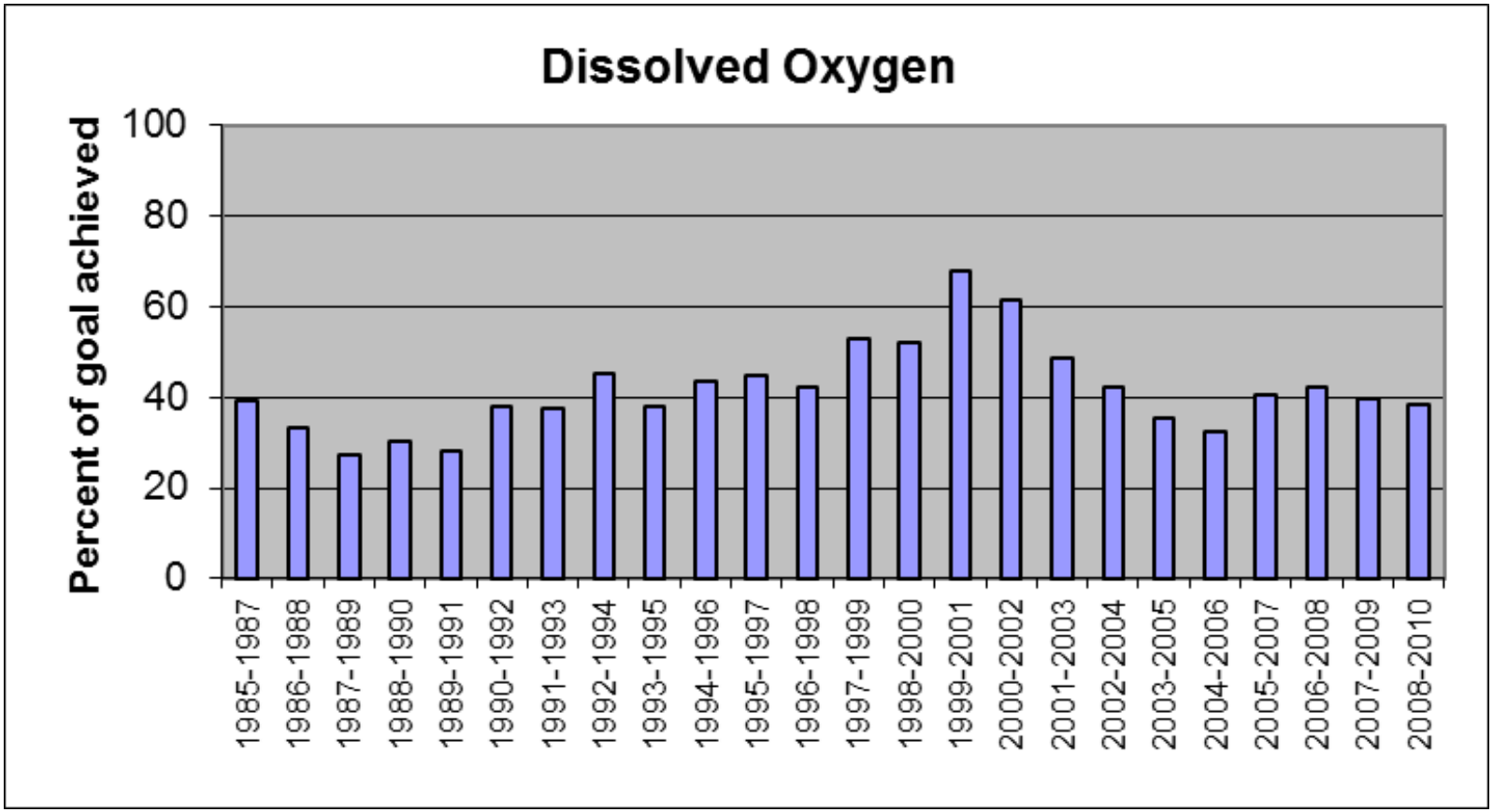


CBP Nontidal Monitoring

- Nutrients and sediment monitoring network
- Trends
  - Long term and 10 year
- Loads
  - To the Bay
  - Yields in watershed
- Reports to explain change



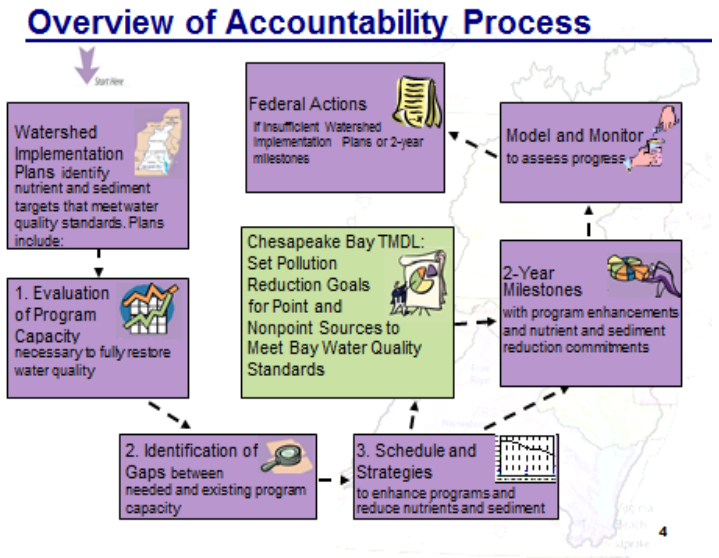
Water-Quality Standards



- DO, clarity, chl-a in progress toward standards
- DO: 38%, Clarity: 18%, Chl-a: 22%
- Enhanced assessments

Step 6: **Assess Performance**

- Use TMDL accountability framework
- Phase 2 WIPs
- 2-year milestones
- 2017 Mid-point assessment
  - Model enhancements
  - Progress toward attainment
  - Explaining change and BMPs
  - Phase 3 WIPs



Step 7: **Management Adaptively**

- TMDL accountability framework
- What progress had been made in implementing practices for the Bay TMDL?
- What are the changes in water quality and progress toward water-quality standards?
- What are we learning about the factors affecting water-quality changes to better implement practices?
- What improvements are needed in modeling, monitoring, and science?
- How do we best consider the combined impacts on land and climate change on nutrient and sediment loading and implications for the TMDL?

Discussion and Next Steps

- Initial reactions to Decision Framework application
- What other pieces of information would you like considered?
- Written comments by June 29
  - Further revisions and discussion
- Use by the WQGIT
  - Use to manage activities
  - Workgroups develop decision frameworks
  - Interaction with other GITs and MB