Retreat Recap & Next Steps

Retreat outcomes

Theme 1. Bring attention to lurking issues

Theme 2. Enhance STAC effectiveness

"Lurking" issues identified at retreat

1. Climate change = cross-cutting issue
   - System interactions need to be integrated; cascading effects considered (including human activities)
   - Consider identifying "canaries in the coal mine" (indicator species)
   - Need to be able to communicate risk, uncertainty, impacts
   - Management options need to be identified
2. Adaptive management needs to be fully embedded
   - Lay groundwork, reinforce w/ GITs, Management Board
   - Align monitoring and coordinate/pool data across agencies

"Lurking" issues identified at retreat (cont.)

3. Living resources
   - Critical overarching issues in restoration go **beyond water quality**
   - Need **systems analysis** to understand effects of multiple stressors and evaluate outcomes
     - Does WQ model have what living resources modelers need?
     - Can connections between water quality and other beneficial outcomes be modeled?
   - Potential action steps: **integration** with/across GITs; ecosystem modeling workgroup

"Lurking" issues identified at retreat (cont.)

4. Human dimensions
   - Need to tie TMDL to human concerns
   - We could broaden who we advise (network analysis to identify advisors/advisees)
   - Economic justice, health effects, and other themes need more attention
   - Consider human responses to change that influence management success

"Lurking" issues identified at retreat (cont.)

5. Nutrient & sediment issues
   - **System is changing** – what are the data/research gaps & management implications?
     - Examples: land use, chicken houses, tile drains, irrigation, changing N:P ratios, soluble P
   - Address pollution control through **incentives** for innovation from private sector using markets, offset programs, or other approaches
   - Understanding the relative importance of **extreme events** in sediment delivery (e.g., daily events vs. high-flow scour events)
   - Consider **systemic approaches** to improve nutrient retention and cycling on the landscape (e.g., ditch management, food-water-energy nexus)

Improving STAC Effectiveness Survey

1. Different Products
   - A research brief like the Marcellus one-pager (handout)
   - Clearer report
   - More concise recommendations to avoid diluting key messages
2. Different Process
   - A broader effort to enhance the communication of results to
     - a wide group of individuals
     - the Management Board (via brief presentations)
   - **Improved coordination up front** between the STAC rep and the relevant GIT
   - Follow-up survey to participants

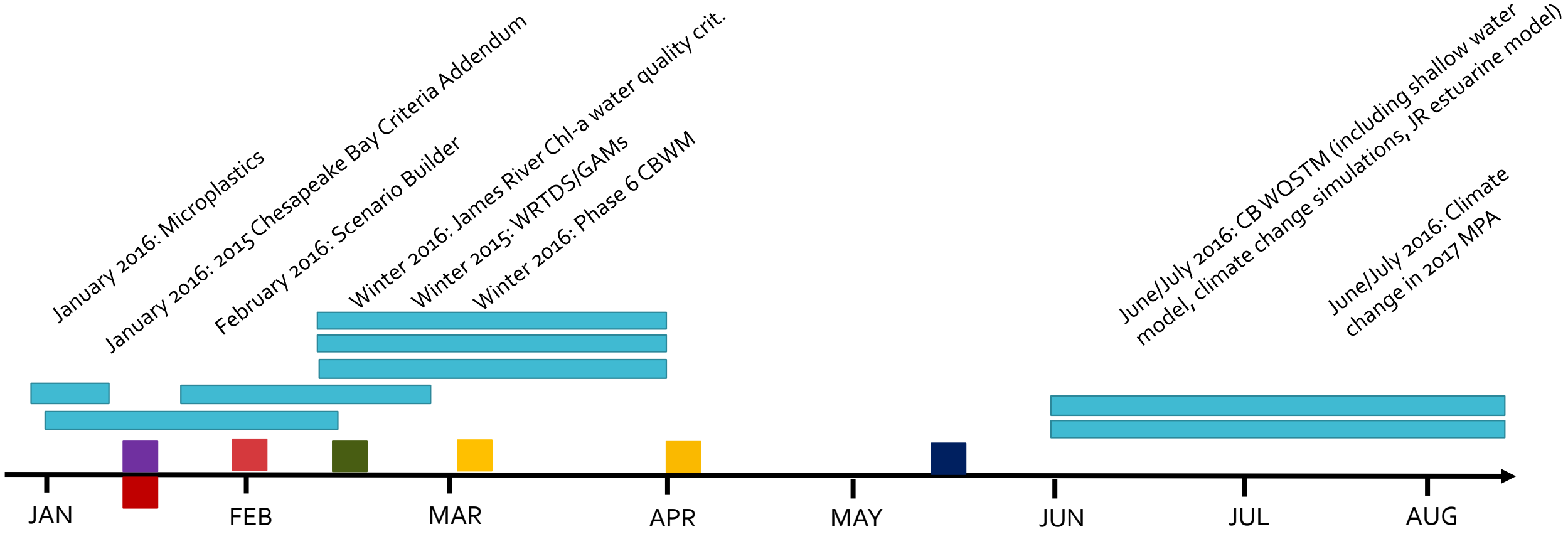
Improving STAC Effectiveness Discussion

- Policy-ready science is what gets attention
- Focus on key issues in products
- Be specific in our recommendations
  - Be selective or weight recommendations by priority
- Use effective product type for audience (white papers, workshops, reports, podcasts, videos & e-communication)
- Model ourselves on the NRC
  - "Our mission is to improve government decision making and public policy, increase public understanding, and promote the acquisition and dissemination of knowledge in matters involving science, engineering, technology, and health." (NRC)

Next Steps

1. Consider current needs
2. How to use themes in quarterly meetings
3. Frame RFP

STAC FY 2015-2016 (January 2016 – August 2016) Timeline



Workshop Key:

- Enhancing Capacity
- Conowingo
- Assessing Uncertainty
- Optimization
- Climate Change
- Integrating Monitoring Networks
- Shallow Water

Timing is approximate