Lower Susquehanna River Integrated Sediment & Nutrient Monitoring Program

July 25, 2017

Modeling Workgroup Quarterly Meeting

Exelon Generation®

LSR Reservoir System Modeling

Status Update

- Lower Susquehanna River Reservoir System Modeling and Chesapeake Research Consortium-led Peer Review have been completed
  - ✓ Lake Clarke and Lake Aldred HEC-RAS Model (WEST Consultants)
  - ✓ Conowingo Pond Mass Balance Model (CPMBM) (HDR)
- Model results were delivered to the Bay Program
  - ✓ March 2016 (Lake Clarke and Lake Aldred)
  - ✓ December 2016 (CPMBM)
- Draft reports were provided to the CRC Peer Reviewers
- Reviewers provided comments, WEST and HDR reports were then finalized
- Three deliverables from this effort
  - ✓ Final WEST report and Peer Review Responsiveness Summary – Lake Clarke and Lake Aldred HEC-RAS modeling
  - ✓ Final HDR reports and Peer Review Responsiveness Summary – CPMBM
  - ✓ Final CRC report – Peer Reviewer comments, HDR & WEST Responsiveness Summaries, and CRC Process document to be posted to the CRC website in early August
- WEST and HDR Reports and Responsiveness Summaries delivered to CBP on July 24, 2017

UMCES

Status Update

- UMCES investigators have concluded their portion of the Lower Susquehanna River Integrated Sediment and Nutrient Monitoring Program
- Data from portions of this program were provided to HDR and the Bay Program for use in their suite of models
- Draft final reports have been prepared, including:
  - ✓ *The Impact of Conowingo Particles on the Chesapeake Bay: Assessing the Biogeochemistry of Nitrogen and Phosphorus in Reservoirs and the Chesapeake Bay* (J. Cornwell)
  - ✓ *Modeling sediment nutrient and oxygen cycling in the Conowingo Reservoir and Upper Chesapeake Bay* (J. Testa)
  - ✓ *The Impact of Conowingo Particles on the Chesapeake Bay: Suspended Particle Size, Settling, and Transport* (L. Sanford)
  - ✓ *The Impacts of Conowingo Particulates on the Chesapeake Bay* (C. Palinkas)
  - ✓ *The Impacts of Conowingo Particulates on the Chesapeake Bay: Sediment Transport Modeling* (M. Li)
- Anticipated distribution of final reports to Bay Program in early August 2017