



**Maryland**  
Department of  
the Environment

# Maryland's Holistic Conowingo Framework

*Presentation by Matthew Rowe*

9/13/2021

STAC Quarterly Meeting



# 3-Pronged Approach

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- Watershed-wide Strategies
- Ecosystem Restoration Strategies
- In-Reservoir Strategies



# Watershed-Wide Strategies

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- [Conowingo Watershed Implementation Plan](#) to Reduce 6-Million lbs. Nitrogen and 260,000 lbs. Phosphorus and Sediment loads
- CBP Partnership Approach
- CBP Approved Agricultural and Urban Practices
- Promotes Innovations in both Restoration Financing and Best Management Practices



# Ecosystem Restoration Strategies

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- Conowingo Water Quality Certification and Related Settlement Agreement
- Ecosystem Approach, that includes
  - Nutrient Pollution Reduction
  - Funding for In-water Climate Resiliency Practices
  - Flow Requirements
  - Fish Lift and Eel Passage Improvements
  - Mussel Restoration
  - Invasive Species, Turtle and Debris Management
  - Waterfowl Nesting and Sturgeon Plans/Reports
  - Dredged material



# In-Reservoir Strategies

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- [Maryland's Innovative and Beneficial Reuse Pilot](#) to re-evaluate potential role dredging in light recent developments and enhanced data.
- Multiple Components:
  - [Sediment Characterization](#)
  - Pilot scale dredging
  - Pilot scale reuse testing
  - Modeled dredging
  - Final Reuse Report and Market Analysis



## In-Reservoir Strategies: what has changed since the 2015 LSRWA?

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- [Maryland Innovative and Beneficial Reuse Guidance \(first version 2017\)](#)
- [Governor Hogan's 2017 Resource Recovery and Waste Reduction Executive Order](#)
- [Maryland's Water Quality Trading Program and Regulations](#)
- [Progress in Maryland's Efforts to Reuse Chesapeake Bay Dredged Material](#)



# In-Reservoir Lessons Learned

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- Conowingo Right of Entry Agreements and Submerged Utility Exclusion Zones
- Lots of coal, likely influencing SVOC levels.
- Higher levels of Arsenic, Manganese, and Thallium.



# Near-Term Next Steps

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- In-Reservoir:
  - Dredging mobilization occurring this week
  - Interim Modeling Approach coordinated with CBP
  - Project complete by spring 2022
- Watershed-Wide:
  - Final Conowingo WIP any day now
  - Development of 2022/2023 Milestones
  - Financing Pilot Implementation with SRBC
- Ecosystem Restoration
  - Mussel Restoration MOU with DNR
  - Received first Exelon payments in April and undergoing a public process to help inform project implementation.





# Future Opportunities

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- BMP efficiencies for Conowingo and Mussels
- Susquehanna-wide (MD, PA, and NY) collaboration on mussel surveys/data collection.
- Use of Exelon/HDR Model
- Alignment of Carbon Accounting, Climate Mitigation and Resiliency with Bay Restoration
- Greater Institutionalization of Innovation in the CBP Partnership