

CHESAPEAKE BAY PROGRAM UPDATES

Heidi Bonnaffon, COG staff

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Bay Program Topics

- CAST-21 model issues
- Conowingo Dam permitting uncertainty
- Status of Bay TMDL pollutant load reductions
- Development of new tributary water quality models

Ongoing CAST Issues

- CAST (Bay Program watershed model) is accounting framework for Bay TMDL
- Latest version of CAST (CAST 21) had load increases unanticipated by Bay partnership
 - Largely about loads from fertilizer, not wastewater or urban runoff
- Makes achieving 2025 WIP target reductions more difficult
 - Most parties want to postpone addressing these loads until after 2025
- Still no consensus on what to do or how accurate the new CAST loads are

Conowingo Dam Legal Uncertainty

- State of Maryland reached agreement in 2019 with Constellation Energy on its request for water quality certification, clearing the way for the Federal Energy Regulatory Commission (FERC) to relicense the dam for 50 years
 - Agreement included millions of dollars for various restoration actions by Constellation, but did not force the company to pay for removing the sediment that has built up behind the dam
- In response to outside litigation, the DC Court of Appeals recently revoked Constellation's FERC license
 - Unless decision is reversed, FERC will need to issue licenses on annual basis
- Environmental groups are applauding the court decision, but unclear what this will mean for the Conowingo Watershed Implementation Plan (WIP)

Status of Bay TMDL

- CAST model issues aside, restoration efforts are not on track to meet the Bay Program's 2025 pollution reduction targets
 - Agricultural sector load reductions especially challenging
 - Climate change and dynamic equilibrium in Conowingo make attainment harder to achieve
- New accounting, new WIP targets are likely in 2025-2027
 - Postponement of additional CAST loads likely to be addressed then
 - Revised set of Bay Program models expected to be in use by then
 - Will be used to assess 2035 climate change impact
- Local impact may include pressure to increase reductions from wastewater sector and continuing pressure to reduce urban loads.

Tributary Models

- Bay Program intends to develop new models for assessing water quality in Bay tributaries, including Potomac
 - Part of overall upgrade to modeling suite scheduled for completion in 2026 to be used for new WIP or updated reduction targets in 2027
- Reflects new emphasis on shallow waters of the Bay
 - Most important part of the Bay for living resources such as SAV beds and fish spawning
 - May be especially sensitive to climate change impacts such as rising water temperatures
- Potential for new regulatory measures based on results

What's Happening with Ag?

- Ag BMPs have had an impact, but reductions have been offset by **increased intensity** of ag production
- Ag acres declining across entire Bay watershed
 - Down 14.3 % from 1985 to 2021
- Manure inputs declined until about 2010, but have increased slightly since then
 - Total pounds of manure down 6.1 % from 1985 - 2021
 - But pounds of manure/acre up 10%
- Fertilizer input/acre has increased as yields have increased