

CAST Updates

CAST-21

Originally planned to release December 2021

- BMPs submitted, including in the TMDL critical period, are updated. This update impacts multiple estimates including the BMPs credited through the 2017 land use (except for forest buffers, tree and forest planting, which is 2002), the amount of nutrients applied to meet crop needs, and the historic manure transport of total phosphorus through 2016.
- The agricultural land use total acres are now determined by the Land Data Team's change product from 2013 rather than the USDA Agricultural Census total acres.
- Agricultural and urban fertilizer sales data are updated to include data reported to American Plant Food Control Officials (AAPFCO) through 2016. The missing fertilizer for 2013 and 2014 was corrected.
- New fertilizer sales data results in new urban fertilizer application rates for the years 2013 through 2025.
- The 2013 – 2025 land use acres, septic systems, and sewer service areas are updated.
- Maryland biosolids are updated. The amount for other jurisdictions is simply carried forward for all future years.
- Pennsylvania updated their combined sewer overflow reductions.
- Virginia's insignificant facilities wastewater data was updated for 2014-2020.
- WV found errors in their 2020 wastewater data and corrected those, leading to an increase in loads.
- Virginia and West Virginia's harvested forest acres are updated for 2021. Maryland's 2013 to 2021 harvested forest acres are updated.
- Construction acres are updated for 2021 in all states except Maryland. New York updated construction acres for 2016-2021.
- The split between Pennsylvania's permitted and nonpermitted feeding space has been updated.
- The amount credited for tree BMPs that are credited in the land use rather than credited in the submitted BMPs is changed. The tree BMPs are now credited 15 years prior to the date of the aerial imagery in the land use. These BMPs include forest buffers, tree planting, and forest planting.
- The urban stream restoration protocol #5 is available.
- The urban stream restoration default value is not available for annual reporting after 6/30/2022.
- The credit duration for tree planting, forest planting, and forest buffers was changed from 10 to 15 years. The credit duration indicates the time frame that a BMP is considered valid without inspections. With inspection, a BMP is credited indefinitely.
- The impervious disconnection BMP was corrected so that it can be applied only on impervious land. Previously it was available on pervious land.
- The agricultural ditch BMPs will become available for annual reporting. The water control structures BMP efficiency is updated to be zero now that the ditch BMPs are available.
- The abandoned mine land reclamation BMP is now credited as a land use change to forest.
- The wetland BMPs creation and rehabilitate are updated per the expert panel report. The wetland enhancement BMP is removed.
- The grey infrastructure nutrient discharge elimination BMP was added to CAST-21.

CAST-23

- All of the updates planned for CAST-21 plus
 - Updated BMP history (as of June 2023)
 - 1985-2016 updated AAPFCO fertilizer for Ag and Urban
 - State-supplied fertilizer data for 2017-2020
 - Urban fertilizer methodology and data change
 - Oyster BMPs
 - Mortality BMPs

Updates that Improve Functionality since November 2021

- "News" page added for access to the most recent copy of the CAST newsletter.
- Added a search function on the CAST website that searches for key words and phrases throughout the application.
- New filter to select CBWS only when choosing geographies to run scenarios and reports.
- Faster run times: CAST has a new architecture and design that will greatly speed up scenario runs. Users will not see anything new in terms of the interface or data. The part that will be noticeable is the increase in scenario run speed.
- New application on Trends Over Time page to show manure transport trends.
- Drop down list added to select Load Source, Agency, and Animal aggregations when creating BMP Submitted vs. Credited reports.
- The Conowingo WIP and Conowingo WIP Baseline are now available on CAST.
- Ecosystem Benefits Browser added, which is an interactive tool which visualizes and summarizes the Goals, Outcomes, and Co-Benefits associated with CAST BMPs.
- New drop-down-list in Compare Planning Targets tool for users to select the type of planning target (2025 Planning Target or 2025 Planning Target plus Climate Change) for comparison.



More details?

<https://cast.chesapeakebay.net/About/UpgradeHistory>