

INCORPORATING CONSERVATION PLUS CBLCM INTO CAST

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Watershed Technical Workgroup

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MULTIPLE BASE CONDITION OPTIONS

- Multiple projections of land use from 2013 becoming available (developed by the Land Data Team, led by Peter Claggett)

- Historic Trends**-continuation of land use patterns and rates of change
- Current Zoning**-projection of historic trends using environmentally-optimistic zoning regulations
- Conservation Plus**-represents a family of CBLCM scenarios. Implemented as Land Policy BMPs.

The screenshot displays the 'ADD SCENARIO' interface of the Chesapeake Assessment Scenario Tool (CAST). The page includes a navigation menu with options like HOME, SCENARIOS, RESULTS, COST PROFILES, HOW TO, ABOUT, ADMIN, and CONTACT US. The main form contains several required fields: Scenario Name (filled with 'Evaluating Effects of land use planning'), Scenario Description (filled with 'Includes plausible actions for growth management'), Base Year (set to 2025), Base Condition (highlighted with a red circle and showing a dropdown menu with options: 'Select Base Condition', 'Historic Trends', 'Current Zoning', and 'Projection of historic trends using environmentally optimistic zoning regulations'), BMPs Available (set to 'Planning BMPs'), Geographic Scale (set to 'County'), and Geographic Area (with a search box and a list of counties including Kent, DE, New Castle, DE, Sussex, DE, Washington, DC, Allegany, MD, Anne Arundel, MD, Baltimore, MD, Calvert, MD, Caroline, MD, Carroll, MD, and Cecil, MD). Other fields include 'Share This Scenario With' and 'Notes'. The page also features buttons for 'Save', 'Copy Existing Scenario Without BMPs', and 'Cancel', along with a 'View Documentation' link and a version indicator 'Version: CAST-2017'.

“CONSERVATION PLUS” FAMILY OF CBLCM SCENARIOS: 2025

The “Conservation Plus” family of CBLCM scenarios represents a variety of land conservation, land use planning, and policy actions that will directly or indirectly affect future patterns of development.

Three themes emerged from the list of plausible actions of interest to CBP jurisdictions that can be simulated consistently throughout the Chesapeake Bay watershed:

1. Forest Conservation
2. Growth Management
3. Agriculture and Soil Conservation

LAND USE DESIGN SPECIFICATIONS

1. Forest Conservation (FC) (1st Priority)

- Conserve riparian zones (100-ft)
- Conserve wetlands (NWI, State Designated Wetlands, and Potential Conservable Wetlands(PA only))
- Conserve areas subject to a 1m-rise in sea levels by 2100 and within 1-mile of National Wildlife Refuges
- Conserve large forest tracts (250+ acres)
- Conserve shoreline forests (all contiguous tracts within 1000-ft of the shoreline)
- Conserve all high-value conservation lands identified by the Chesapeake Conservation Partnership

2. Growth Management (GM) (2nd Priority)

- Increase percent of infill/redevelopment by 10% for 2025 and per decade thereafter
- Increase urban densities by 10% for 2025 and per decade thereafter
- Increase proportion of urban vs rural growth by 10% for 2025 and per decade thereafter
- Expand sewer service areas by 1-mile for 2025 and hold static thereafter
- Avoid growth on soils unsuitable for septic systems


3. Agriculture and Soil Conservation (ASC) (3rd Priority)

- Conserve all designated Agricultural Districts and areas zoned rural agricultural
- Conserve 100-year floodplain and frequently-flooded soils
- Conserve prime farmlands and farmland of state importance
- Conserve potential restorable wetlands (PA only)

From Peter Claggett's presentation to the Land Use Workgroup

CONSERVATION PLUS LAND USES IMPLEMENTED AS *LAND POLICY BMPs*

← → ↻ cast.chesapeakebay.net/Scenario/EditScenario?scenarioId=3606

 **Chesapeake Assessment Scenario Tool** olivia@devereuxconsulting.com
Manage Profile
Log Off

HOME SCENARIOS RESULTS COST PROFILES HOW TO ABOUT ADMIN CONTACT US

EDIT SCENARIO **Land Policy BMPs** and use planning

Scenario Metadata Invalid BMPs **Developed BMPs** Septic BMPs Natural BMPs Agriculture BMPs Animal BMPs Manure Transport BMPs

* Required field Version: CAST-2017 ?

Scenario Name * ?

Scenario Description *

(Max. characters 500)

BMPs Available * ?

Geographic Scale * ?

Geographic Area *

Base Year * ?

Base Condition * ?

Wastewater Data Set * ?

Cost Profile * ?

Share This Scenario With ?

Notes

LAND POLICY BMPS

- When creating a scenario, the user selects Base Year and Base Condition. Base Condition options are either
 - Historic Trends
 - Current Zoning
- When user edits scenario, there is the option to edit Land Policy BMPs for 2025, in addition to all the other source sector BMPs.
- Land Policy BMPs
 - Available for all the conservation plus options that the Land Data Team provide.
 - User adds by county or state. Different counties may have different Land Policy BMPs.
 - Land Policy BMPs are mutually exclusive for the same geography. No county may have more than one selected.
- Users may then move on to add/edit any source sector BMPs. This includes land use change BMPs like forest and grass buffers, agricultural land retirement and wetland creation.

IMPACTS AND TIMING

- Impacts
 - Land use acres change
 - Animal numbers and feeding space acres are the same for a county, but may change within a modeling segment
 - Septic systems change
 - Loads may increase or decrease.
- March 31, 2018
 - Land Policy BMP functionality available
 - New Historic Trends for all years
 - Current Conservation Zoning with updated Construction and Harvested Forest acres for 2014 forward

QUESTIONS?

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