



Alternative Future Land Use Scenarios and Production Timeline

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**Land Use Workgroup
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Chesapeake Bay Future Land Use Scenario Domain

7 States and DC
367 Counties/Cities
191,300 mi²



Goals:

1. Identify a main suite of alternative future scenarios to inform CBP Partner decisions:
 - setting the Phase III WIPs on a 2025 land use.
 - crediting land conservation and land use planning as “BMPs”.
 - identifying forests and farms at risk from development.
2. Scope out plausible narratives describing each scenario.
 - Identify drivers, policies, and associated institutional controls influencing each scenario.
3. Identify the technical and data issues that must be resolved in order to simulate all scenarios.

Alternative Futures Production Schedule

Schedule	Deliverable / Decision
End of April 2017	“Historical Trends” Scenario results available. LUWG works to develop Alternative Future Scenarios.
April – May 31 2017	Open collection period for local zoning, planning, and/or permit data to be incorporated into the “Current Policy” Scenario. Resolution of technical issues.
June 7, 2017 LUWG Meeting	(Proposed) Joint LUWG-LGAC forum on future scenarios. Finalization of Alternative Future Scenarios.
July 5, 2017 ? LUWG Meeting	Results of “Historical Trends”, “Current Policy”, and alternative future scenarios presented to LUWG.
July 2017	LUWG and WQGIT review scenarios. Issues identified during the review are resolved.
Mid-August 2017	Draft final future scenario results available.
September 6, 2017	LUWG approves draft final future scenarios.
September 11, 2017	WQGIT approves draft final future scenarios.
Early October 2017	Management Board approves draft final future scenarios.
Late October 2017	Principal’s Staff Committee approves draft final future scenarios.

Alternative Scenario Design Considerations

Time intervals (2013 - 2025 & 2025 – 2040)

Use zoning surrogates such as sewer service areas or proximity measures

Change proportions of urban vs rural growth

Change housing and employment densities

Change rates and locations of infill & redevelopment

Increase rate and magnitude of protection of farmland, forests, streams,
and wetlands

Sea-level rise

Proposed Alternative Future Scenarios

“Historical Trends”: growth follows patterns prevalent over previous decade.

“Current Policy”: (with zoning): direct growth to areas either zoned for it and/or with necessary infrastructure and capacity to support it.

“Land Conservation”: protect state and local priority conservation areas.

“Rural Character”: up-zone urban areas and down-zone rural areas.

“Sustainable Chesapeake”: combine the “land conservation” and “rural character” scenarios with protective buffers around all streams, shorelines, and wetlands.

“Infill and Redevelopment”: direct more growth into urban areas.

Approved by Land Use Workgroup

Discussed in Alternative Futures Workshop:

Alternative Futures: Accounting for Growth in the Chesapeake Bay Watershed USGS sponsored workshop on September 15, 2011, <https://pubs.usgs.gov/of/2012/1216/OFR2012-1216.pdf>

“Historical Trend” Scenario Assumptions

(the future will be like the previous decade)

Fixed proportions of “urban” vs “rural” growth based on 2000-2010 trends.

Fixed infill/redevelopment rates based on 2000-2010 trends

All projected population and employment accommodated within each county/city

Urban development patch sizes over 2000’s fixed into the future

Housing and Employment density distributions fixed based on densities of change over 2000’s.

“Current Policy” Scenario Assumptions

(inclusive of zoning, comprehensive plans, and permitted areas)

Recent and expected new policies and institutional controls will influence the magnitude and location of future growth more than past trends.

Policies and institutional controls will be enforced and achieve intended results.

Effects of current and expected policies and institutional controls will be realized before 2025.

The majority of development occurring between 2015 – 2025 has already been planned and/or permitted

“Current Policy” Scenario Data

(inclusive of zoning, comprehensive plans, and permitted areas)

1. Zoning polygons attributed with allowable or achievable densities and separation of commercial from residential zones.
2. Comprehensive Plan polygons with desired land uses and/or densities.
3. Permitted development polygons with densities and residential vs commercial designations.

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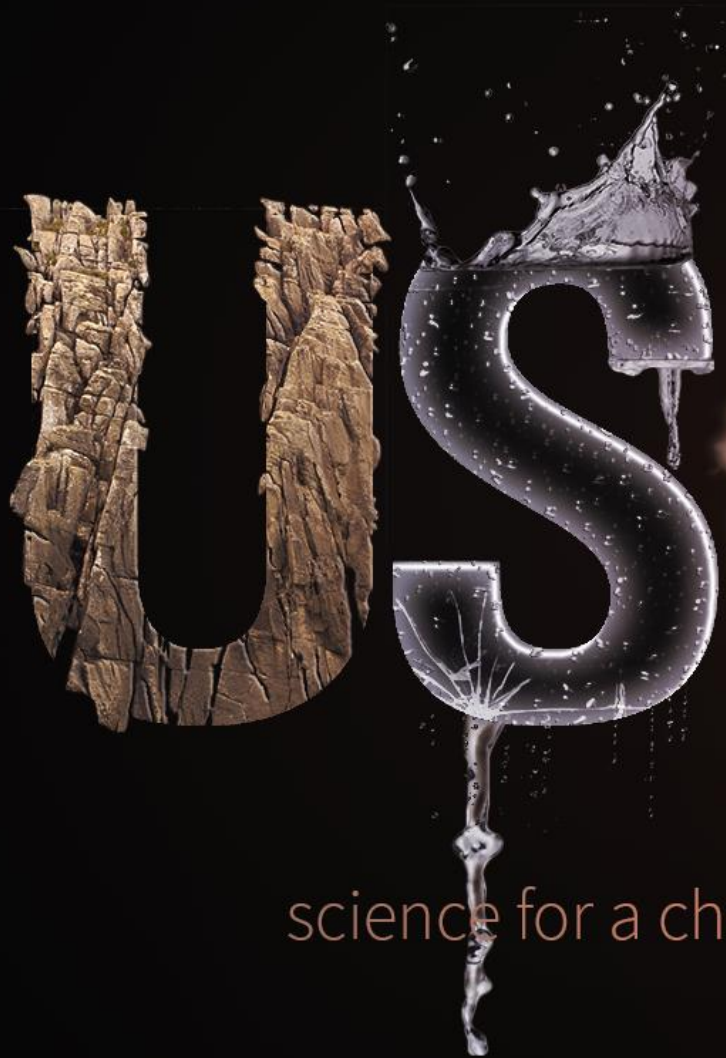
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Chesapeake Bay Land Change Model v3a

