

Plans for CBLCM Run #3

Modeling the Effects of Population, Employment, and Renewable Energy on Land Use Change

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Land Use Workgroup Meeting
August 27, 2026

Review Schedule

~~August 11th Post Run #2 results~~

~~August 12th Office Hours – discuss Run #2, share draft solar results for Virginia~~

August 27th LUWG review of Run #2 and proposed changes for Run #3

September 9th Post Run #3 results (aka “Final version” including solar)

September 16th Office Hours – discuss Run #3 (fatal flaw check)

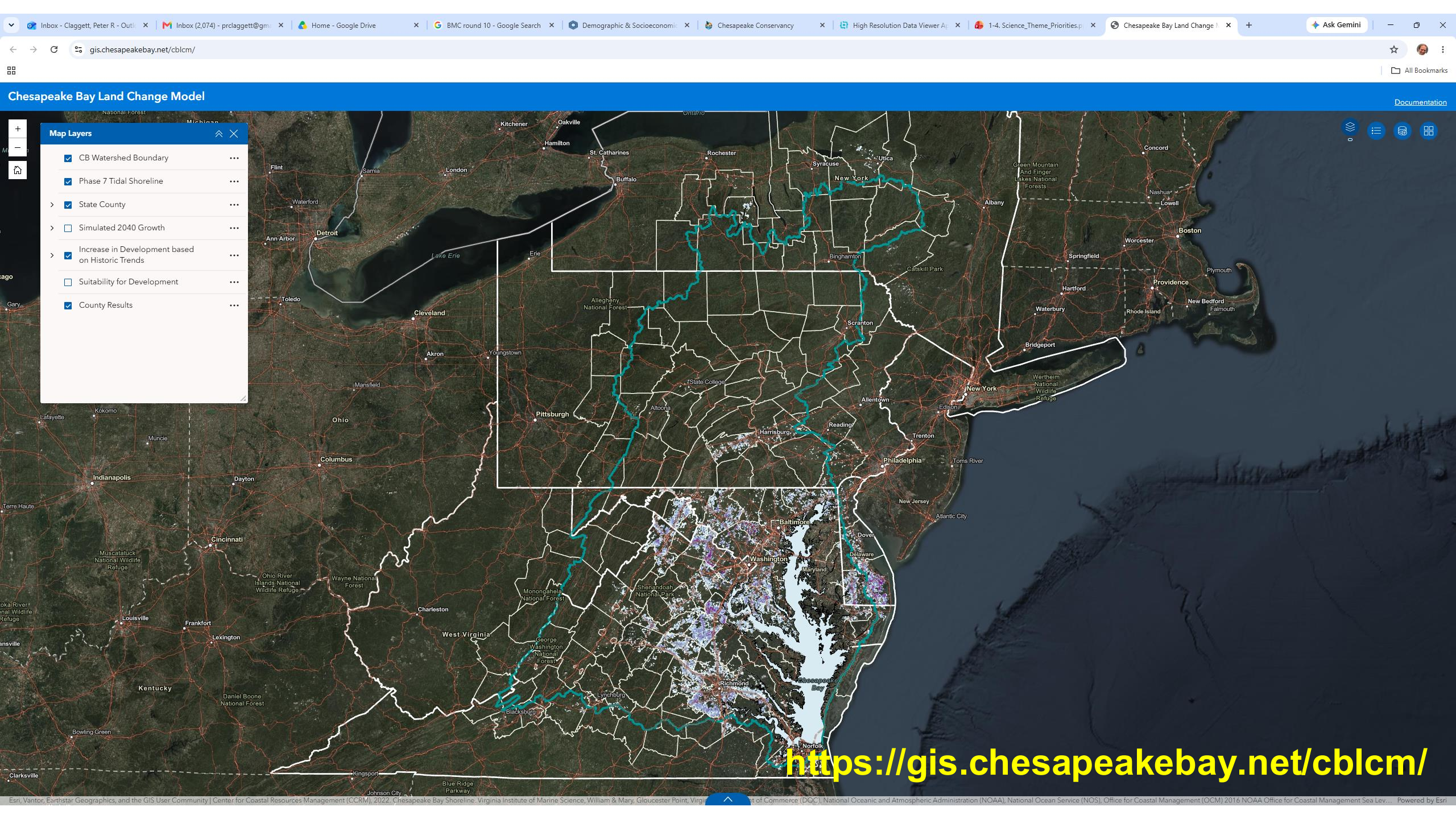
September 23rd Joint LUWG/USWG review

- recommend BAU scenario specifications and results for approval

September 28th Clean Water Goal Team review and approval

Updates for Run #3

- ✓ Develop separate residential and commercial suitability layers
- ✓ Exclude 2026 BMC Traffic Analysis Zone housing and employment “no growth” areas from residential and commercial suitability respectively
- ✓ Update housing and employment demand with new BMC forecasts and keeping population in group housing constant at 2020 levels (rather than extrapolate based on trends)
- ✓ Update solar probability layer with data from 2023-2026 and simulate utility-scale solar field growth for all states
- ✓ Update planned and proposed solar database with Energy Information Agency data and allocate state demand to counties weighted based on current + proposed megawatts per county
- ✓ Update average solar acreage/MW empirically using data from the National Photovoltaic Database
- ✓ Incorporate planned/proposed data centers
- ✓ Reduce job density estimates to align with observed high-resolution commercial development trends and Phase 6 model runs (decrease densities by 63%)



Addressing Utility-Scale Solar Fields and Data Centers

Future USS Fields (**recently built**, planned, proposed)

Jurisdiction	% USS_MW	% ChesBay	Acres/MW	SOL_25	SOL_30	SOL_35	SOL_40	Total	% Total Acres
DE	27%	100%	6.14	295	1,078	747	1,082	3,203	2.0%
DC	4%	100%	2.75	31	36	35	50	152	0.1%
MD	20%	100%	4.81	708	2,466	2,471	3,580	9,225	5.7%
NY	33%	36%	6.30	11,398	9,180	6,848	9,923	37,350	23.2%
PA	31%	84%	5.14	3,208	6,888	5,034	7,294	22,425	13.9%
VA	60%	64%	6.24	16,875	21,839	18,212	26,389	83,314	51.8%
WV	66%	90%	2.24	423	2,026	1,140	1,651	5,240	3.3%

Data Centers (recently built, planned, proposed)

Jurisdiction	Acres	Percent of Total
Delaware	138	1%
Maryland	130	1%
New York	-	0%
Pennsylvania	1,233	12%
Virginia	8,446	85%
West Virginia	44	0%

New and Proposed Data Centers Loudoun County, VA

USS constructed in 2024
Isle of Wight County, VA



CBLCM Review Resources

CBLCM Frequently Asked Questions (a must read): available on LUWG 8/27 meeting page

CBLCM Output Viewer: <https://gis.chesapeakebay.net/cblcm/>

Peer-reviewed Journal Article:

<https://onlinelibrary.wiley.com/doi/10.1111/1752-1688.13131>

available for free on CWGT 7/27 meeting page

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