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2024 Progress Overview

Modeled Load Reduction Indicator

WQGIT July, 2025

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Crucial Context:

- **The targets for annual progress towards meeting the TMDL are now called the Interim Targets with Changing Environmental Conditions (CEC).**
  - The 2025 Interim Targets with CEC are the 2025 planning targets that incorporate both the Unaccounted Additional Loads and CEC. **Unaccounted Additional Loads (UALs) are from facts on the ground changing since partnership made the commitment.**
  - 2024 targets achieve >=95% of the Interim Targets with CEC reductions since the 2009 baseline.
  - A value of 0% indicates that increased loads outpace current implementation efforts; in some of these cases these implementation efforts were offset by growth impacts.
  - Conowingo progress is currently at 0%, with 25% achievement is planned for 2025. This year these goals are separate from the above Interim Targets with CEC.

- **Interim Sector Targets with CEC are based on progress towards Phase III WIPs with CEC, based on 2009 baseline.**
  - These Interim Sector Targets with CEC are **NOT** the same as the 2025 Interim Targets with CEC.
  - For example, the Phase III WIPs call for ~2.5M more pounds of nitrogen to be reduced across the watershed than the Interim Targets with CEC.

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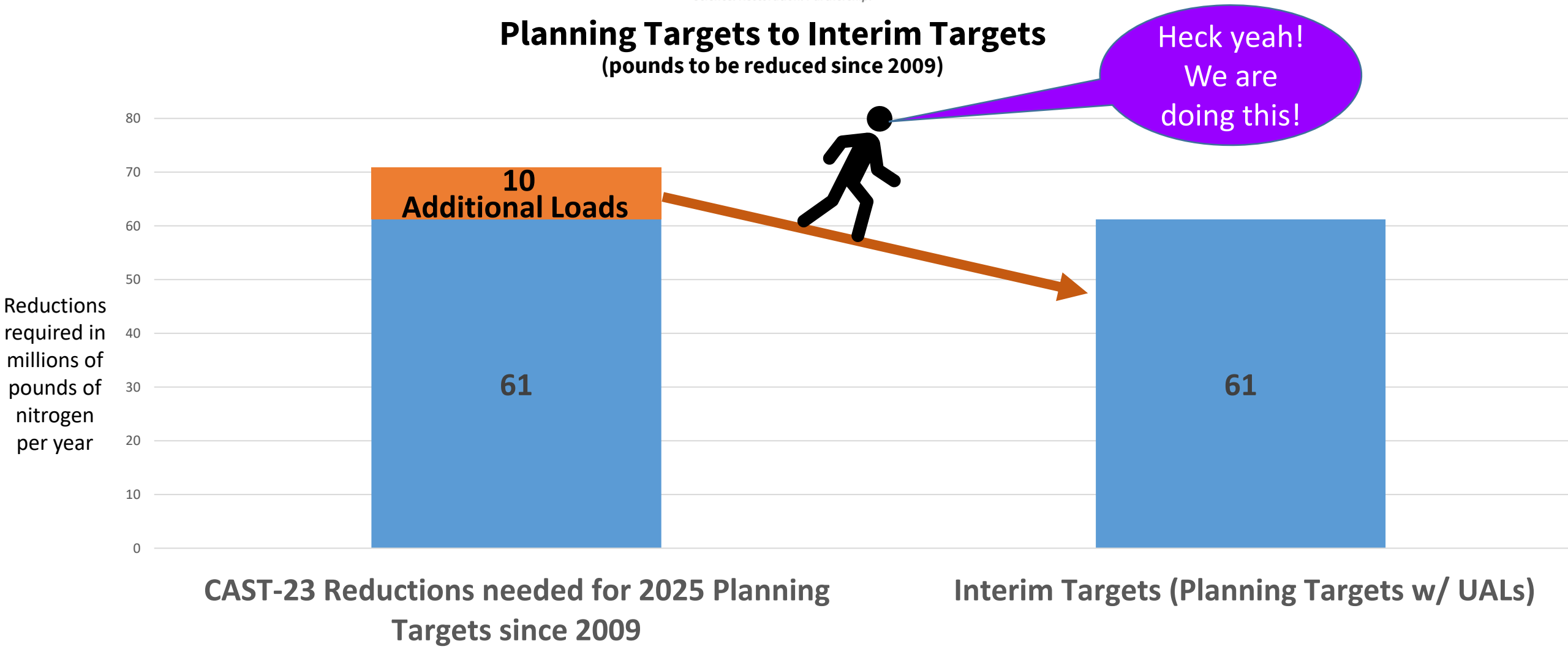
Planning Targets to Interim Targets

(pounds to be reduced since 2009)



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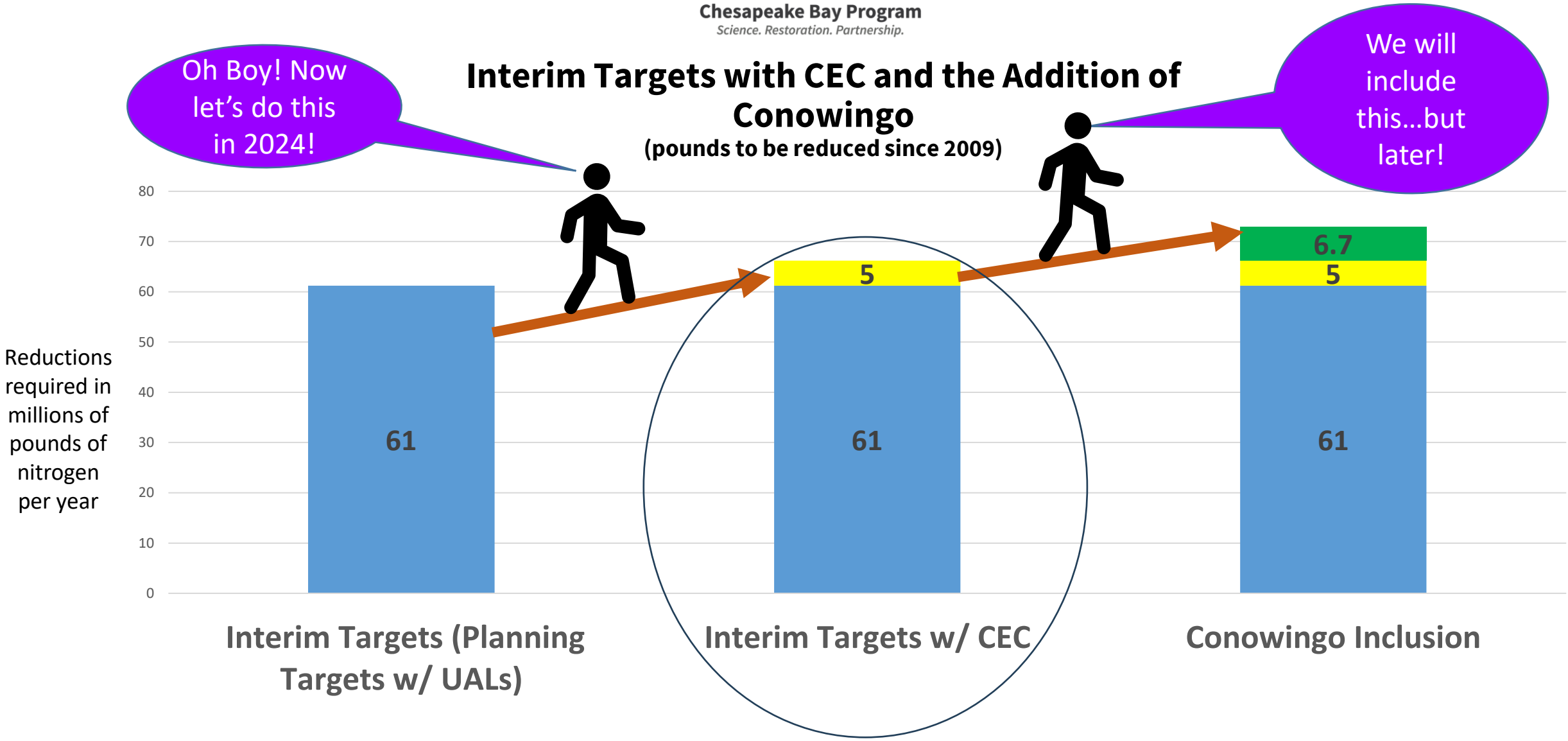
Interim Targets with CEC and the Addition of Conowingo

(pounds to be reduced since 2009)



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Nitrogen Total Load

	million lbs/yr	million lbs/yr	million lbs/yr	million lbs/yr	million lbs/yr	million lbs/yr	(2009-2024)/(2009-2025 Interim)
By Jurisdiction	**1985**	**2009**	**2023**	**2024**	**2024 Target**	**2025 Interim Target w/ CEC**	**% Completion of 2025 Interim Targets w/ CEC**
New York	18.64	14.42	13.45	13.29	12.28	12.17	50%
Pennsylvania	122.43	112.44	105.76	104.53	78.85	77.08	22%
Maryland	85.19	57.92	48.47	46.56	46.78	46.20	97%
Virginia	84.44	67.96	55.13	54.54	52.83	52.03	84%
West Virginia	8.72	8.03	7.78	7.79	8.42	8.45	100%
Delaware	7.42	6.61	7.28	7.14	5.66	5.61	0%
District of Columbia	6.48	2.76	1.56	1.81	2.44	2.42	100%
EPA: Atmospheric Deposition to Watershed (to be reduced under Clean Air Act)	15.92	7.17	0.43	0.22	0.36	0.00	97%
EPA: Atmospheric Deposition to Tidal Water (to be reduced to 15.6 million lbs/yr under Clean Air Act)	21.52	19.80	15.90	15.75	15.81	15.60	96%
Total Simulated N Load to the Bay	**370.77**	**297.11**	**255.77**	**251.64**	**223.42**	**219.55**	**59%**

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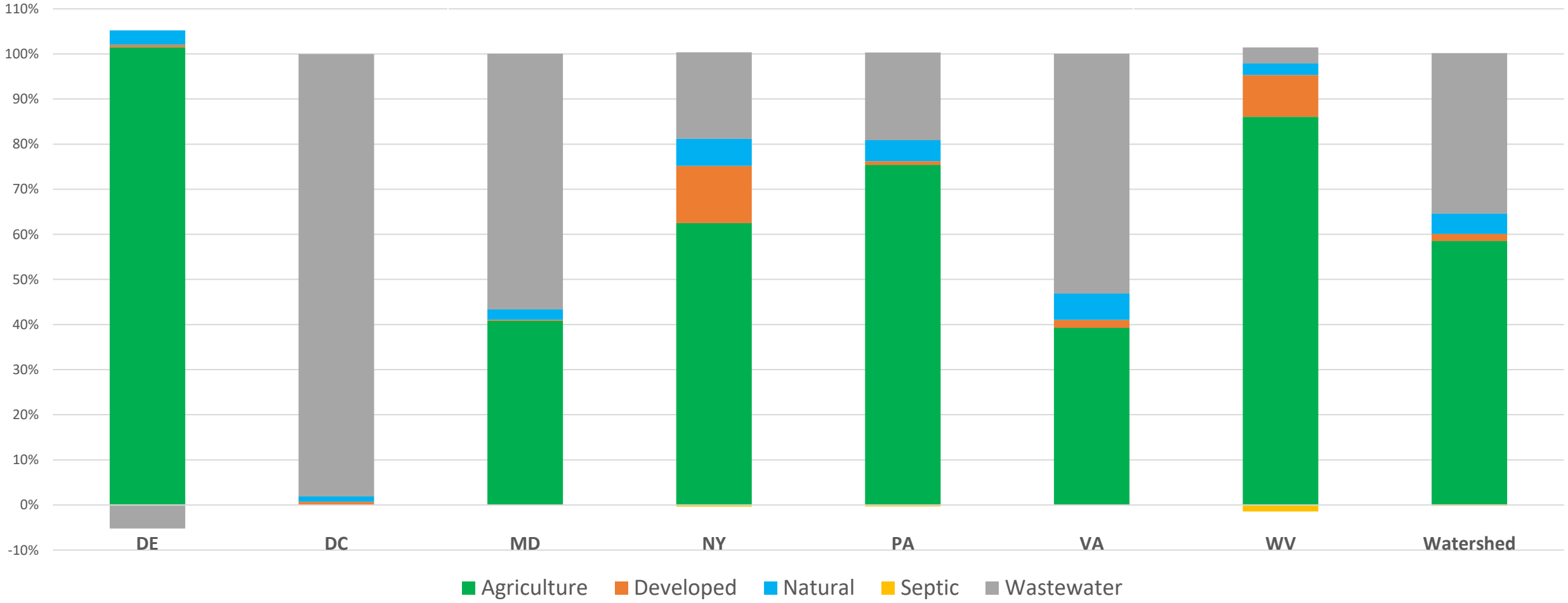
Nitrogen Reductions (%) to Meet 2025 Sector Interim Targets with CEC, based on 2009



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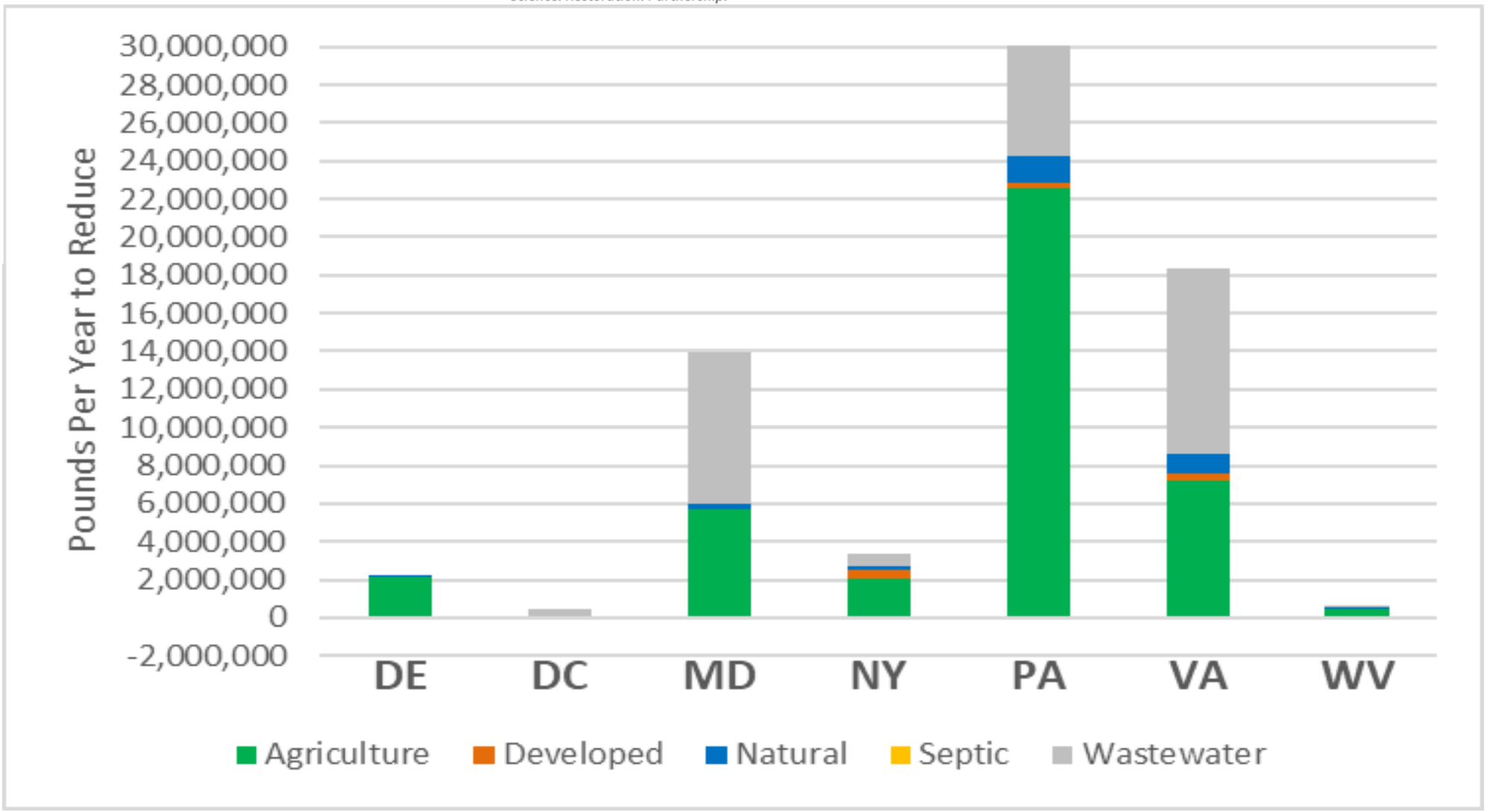
Nitrogen Sector Breakout of Jurisdictional Interim Sector Targets with CEC (pounds/year)



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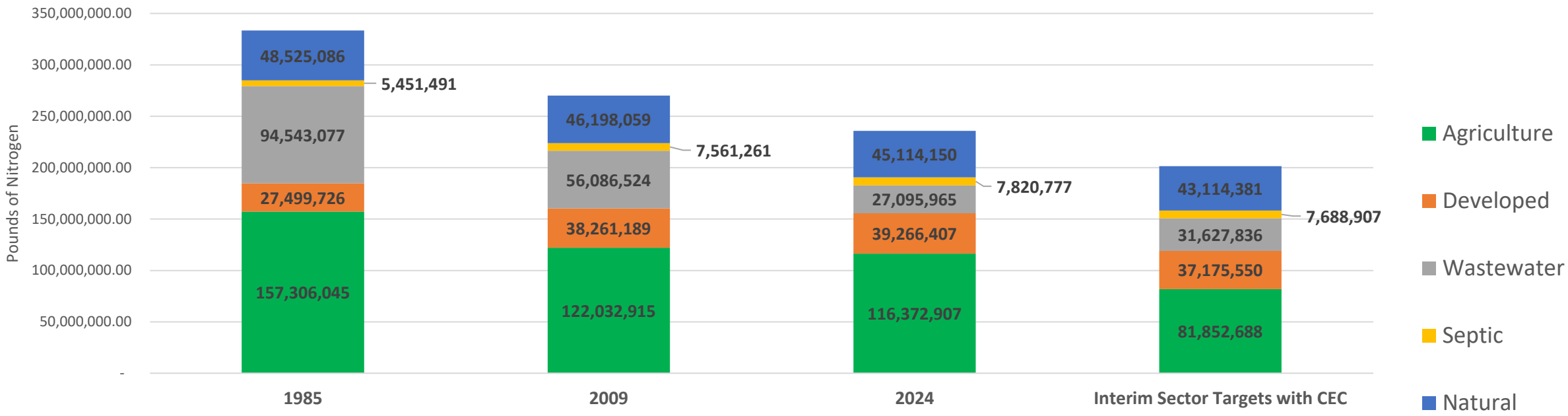
Nitrogen Sector Progress towards Interim Sector Targets with CEC



Jurisdiction	Phase III WIPs with CEC	Interim Targets with CEC	Difference
Delaware (CBWS Portion Only)	4,462,134	5608795.883	(1,146,661)
District of Columbia (CBWS Portion Only)	2,306,955	2417977.576	(111,022)
Maryland (CBWS Portion Only)	44,021,935	46195902.27	(2,173,967)
New York (CBWS Portion Only)	11,114,277	12169495.95	(1,055,219)
Pennsylvania (CBWS Portion Only)	82,484,729	77077716.38	5,407,013
Virginia (CBWS Portion Only)	49,573,264	52030494.55	(2,457,231)
West Virginia (CBWS Portion Only)	7,496,067	8,445,145	(949,078)
Watershed	**201,459,362**	**203,945,528**	**(2,486,165)**

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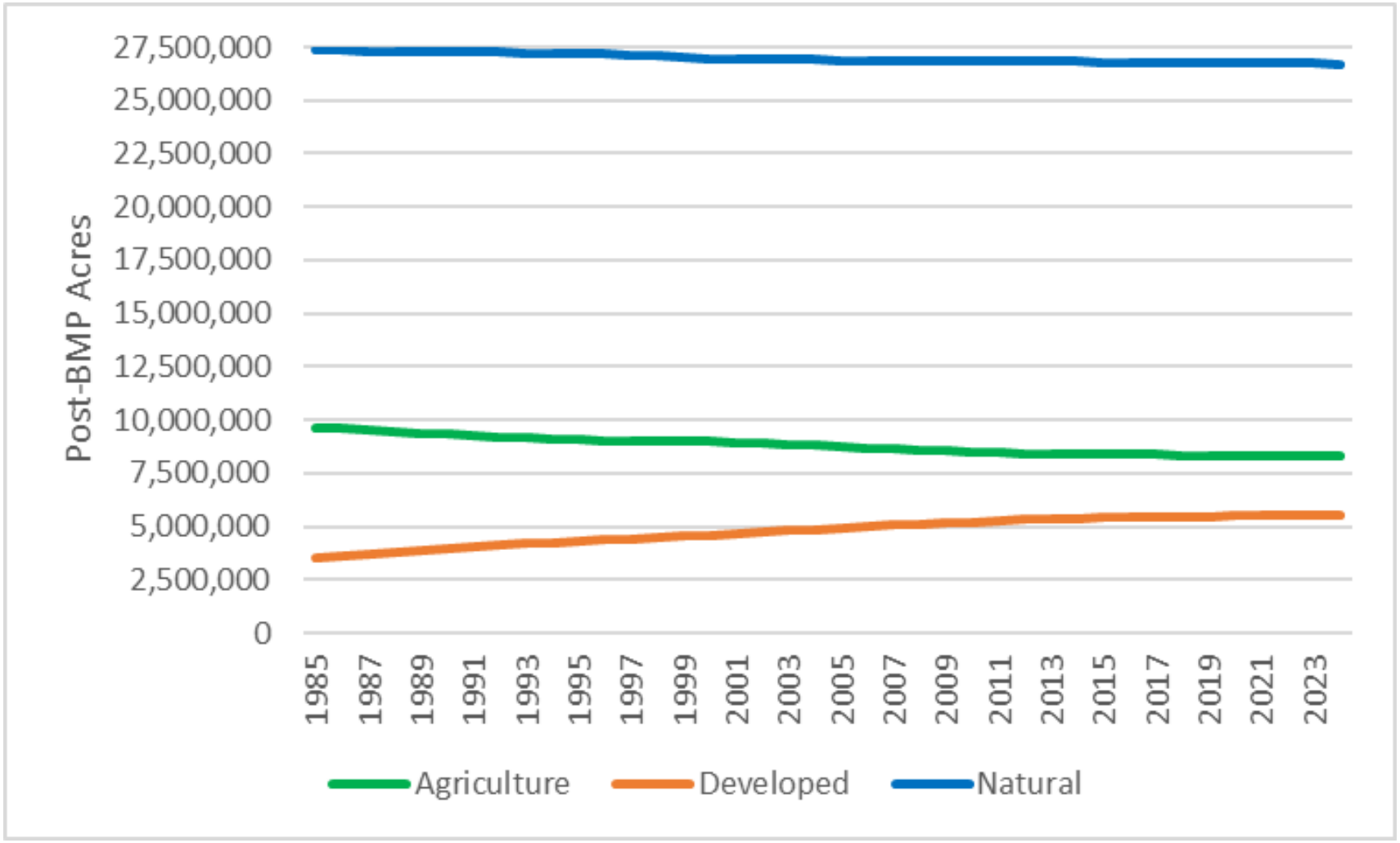
Watershed-Wide Sector Change (1985-2024)

- Developed Sector grows ~2M acres, and Agriculture+Natural goes down ~2M acres.
- The Decrease of, so Agriculture to Natural is at a 2:1 ratio is more affected by this shift.



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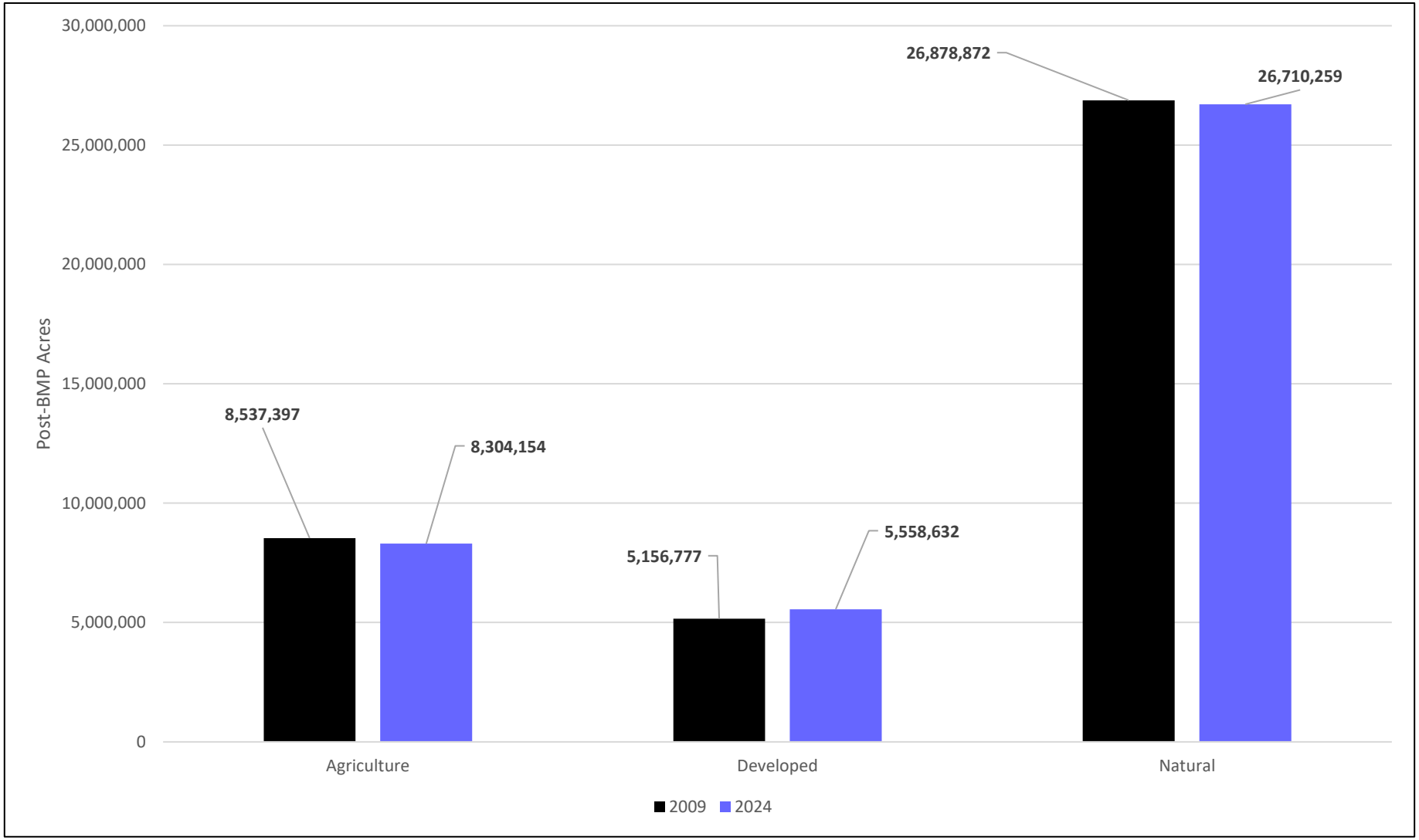
Watershed-Wide Sector Change (2009-2024)

- Developed Sector grows ~400k acres, and Agriculture+Natural goes down ~400k acres.
- The Decrease of Agriculture to Natural is at a 3:2 ratio, so Agriculture is more affected by this shift.



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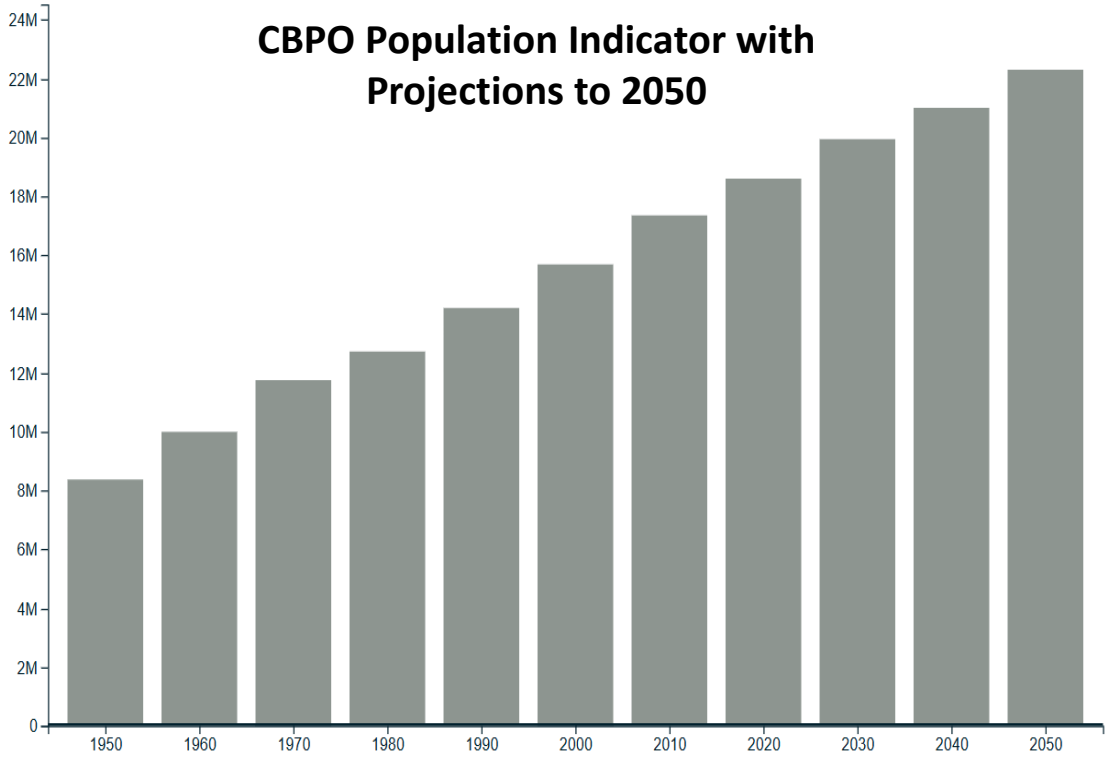
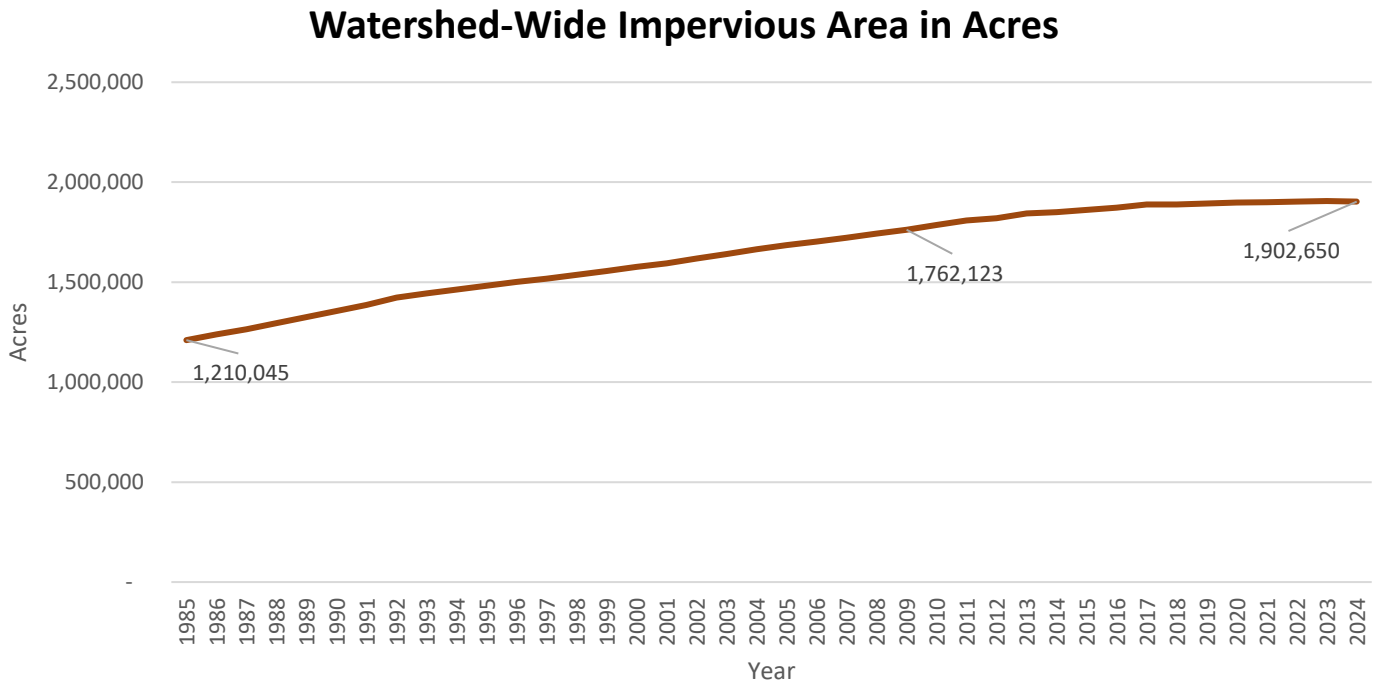
Population and Impervious Area Growth Graphics





https://www.chesapeakeprogress.com/charts/human-population-by-year

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Phosphorus Total Load

	million lbs/yr	million lbs/yr	million lbs/yr	million lbs/yr	million lbs/yr	million lbs/yr	(2009-2024)/(2009-2025 Interim)
By Jurisdiction	**1985**	**2009**	**2023**	**2024**	**2024 Target**	**2025 Interim Target w/ CEC**	**% Completion of 2025 Interim Targets w/ CEC**
New York	1.17	0.75	0.56	0.56	0.47	0.46	66%
Pennsylvania	5.95	4.47	3.58	3.66	2.92	2.84	50%
Maryland	7.45	3.95	3.03	2.91	3.59	3.57	100%
Virginia	13.54	6.76	5.39	5.38	5.32	5.25	91%
West Virginia	0.75	0.63	0.42	0.42	0.44	0.43	100%
Delaware	0.22	0.12	0.11	0.12	0.11	0.11	43%
District of Columbia	0.09	0.07	0.06	0.05	0.13	0.13	100%
Total Simulated P Load to the Bay	**29.17**	**16.75**	**13.17**	**13.09**	**12.98**	**12.78**	**92%**

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Sediment Total Load

	million lbs/yr	million lbs/yr	million lbs/yr	million lbs/yr	million lbs/yr	million lbs/yr	(2009-2024)/(2009-2025 Interim)
By Jurisdiction	**1985**	**2009**	**2023**	**2024**	**2024 Target**	**2025 Interim Target w/ CEC**	**% Completion of 2025 Interim Targets w/ CEC**
New York	798	697	636	628	541	533	42%
Pennsylvania	3,641	3,270	2,610	2,636	2,217	2,161	57%
Maryland	8,277	7,612	7,481	7,271	8,306	8,343	100%
Virginia	6,762	6,561	6,300	6,252	6,857	6,872	100%
West Virginia	733	598	538	534	608	609	100%
Delaware	63	48	33	34	28	27	65%
District of Columbia	43	44	36	35	42	42	100%
Total Simulated S Load to the Bay	**20,318**	**18,830**	**17,635**	**17,390**	**18,599**	**18,587**	**100%**

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2024 Jurisdictionally-Specific Sector Progress towards Interim Sector Targets

	Agriculture			Developed			Natural			Septic			Wastewater		
	N	P	S	N	P	S	N	P	S	N	P	S	N	P	S
Delaware	0%	20%	62%	0%	0%	0%	0%	17%	55%	100%	100%	N/A	100%	100%	100%
District of Columbia	N/A	N/A	N/A	93%	100%	78%	100%	95%	76%	100%	N/A	N/A	100%	100%	100%
Maryland	28%	57%	68%	100%	100%	100%	67%	100%	97%	0%	0%	N/A	100%	100%	100%
New York	20%	8%	78%	0%	23%	8%	27%	57%	37%	100%	N/A	N/A	100%	100%	100%
Pennsylvania	7%	24%	59%	0%	100%	52%	17%	48%	53%	100%	N/A	N/A	100%	98%	59%
Virginia	33%	50%	74%	0%	100%	0%	55%	88%	35%	0%	0%	N/A	100%	100%	100%
West Virginia	15%	50%	70%	0%	32%	0%	0%	62%	67%	0%	0%	N/A	100%	100%	100%

	>=95% progress achieved
	65-94% progress achieved
	40-64% progress achieved
	<40% progress achieved
N/A	Data Not Available

- Interim Sector Targets are based on progress towards Phase III WIPs with CEC, based on 2009 baseline.
- Septic sector progress is achieved through the implementation of septic systems, rapid infiltration basins (RIBs), and urban spray irrigation.
- The natural sector includes, in part, forests, streambanks and wetlands which are preferable land use types with the lowest loading rates among sources.

Thank you!

Any questions?
You can contact me at smith.auston@epa.gov

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