



**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



BUREAU OF CLEAN WATER

# The State of Pennsylvania's Nutrient Trading Program

Water Resources Advisory Committee

May 16, 2024

Josh Shapiro, Governor

Jessica Shirley, Acting Secretary

# History / Statutory Basis

- DEP's Nutrient Trading Program regulations
  - Final on October 9, 2010 (see [40 Pa.B. 5790](#))
- 25 Pa. Code § 96.8, entitled "Use of offsets and tradable credits from pollution reduction activities in the Chesapeake Bay Watershed"
- Established a 3-Step Process
  - Certification
  - Verification
  - Registration

# 2023 Season At a Glance

<b>CY23</b>	<b>Verified (Generated) Credits</b>	<b>Registered (Traded) Credits</b>	<b>Excess Credits (Nutrient Reductions to Chesapeake Bay)</b>
Nitrogen	513,757	223,646	290,111
Phosphorus	52,680	47,910	4,770

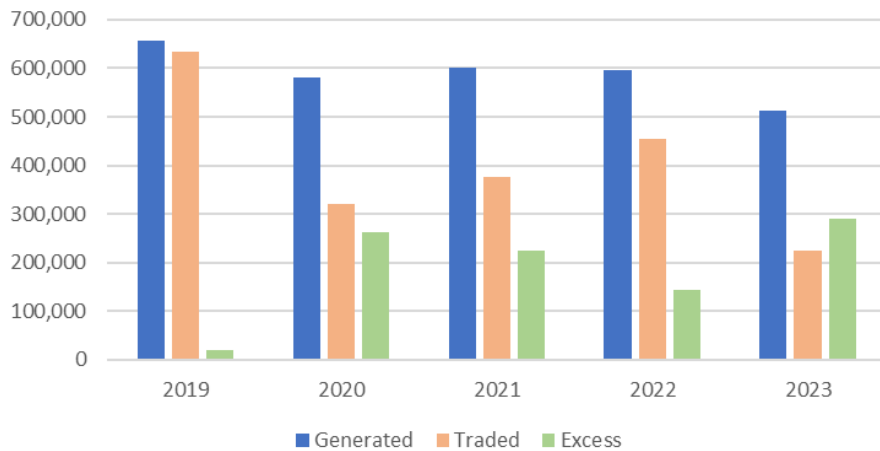
- 45 NPDES wastewater facilities generated credits (sellers)
- 63 NPDES wastewater facilities purchased credits to meet permit nutrient cap loads (buyers)

# Previous 5 Seasons At a Glance

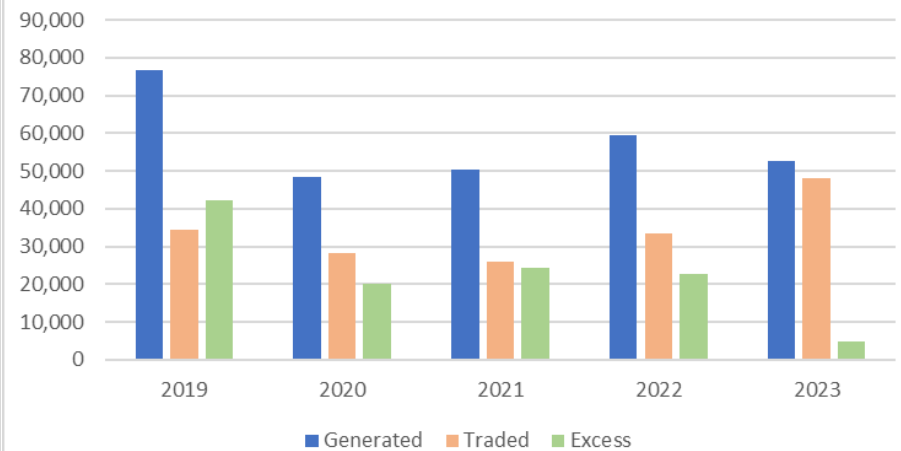
Year	Nutrient	Verified (Generated) Credits	Registered (Traded) Credits	Excess Credits (Nutrient Reductions to Chesapeake Bay)	Credits Generated by NPS Agriculture BMPs	Credits Generated by NPDES Facilities
2023	Nitrogen	513,757	223,646	290,111	0	513,757
	Phosphorus	52,680	47,910	4,770	0	52,680
2022	Nitrogen	597,012	454,635	142,377	0	597,012
	Phosphorus	59,296	33,528	22,768	0	59,296
2021	Nitrogen	601,166	376,104	225,062	27,133	574,033
	Phosphorus	50,242	25,789	24,453	0	50,242
2020	Nitrogen	581,709	319,983	261,726	41,534	540,175
	Phosphorus	48,181 (58)	28,095	20,144	2,487	45,694
2019	Nitrogen	632,125 (23,589)	635,145	20,569	54,074	578,051
	Phosphorus	68,952 (7,724)	34,550	42,126	4,402	64,550

# Previous 5 Seasons At a Glance

### Nitrogen Credits



### Phosphorus Credits

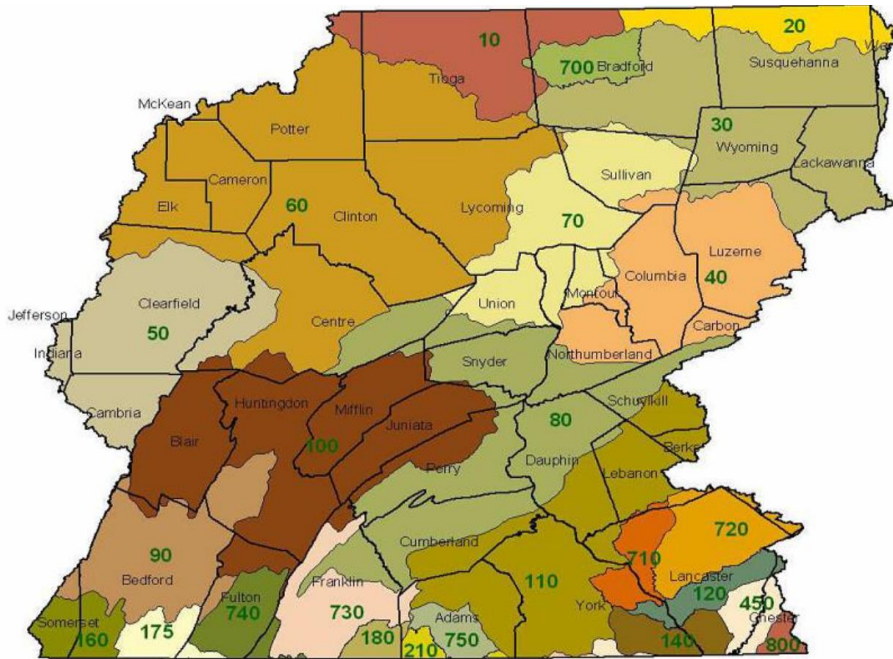


# Recent Nutrient Trading Updates

## Chesapeake Bay Nutrient Trading Tool

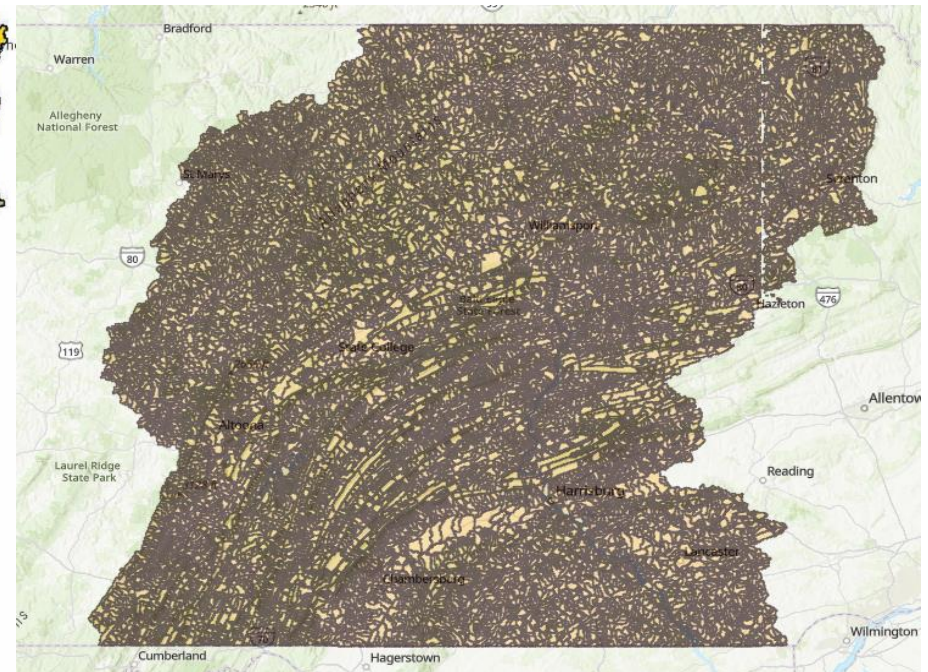
Updated Delivery Ratios:

Phase 4 Delivery Ratio Map




vs.

Phase 6 Delivery Ratio Map





# Future Nutrient Trading Updates

 An official website of the United States government [Here's how you know](#) ▾



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#### About RIBITS

RIBITS (Regulatory In lieu fee and Bank Information Tracking System) was developed by the U.S. Army Corps of Engineers to track mitigation banking and in-lieu fee (ILF) program activities across the United States. RIBITS includes information regarding banks and ILF program sites, associated documents, mitigation credit availability, service areas, and policies and procedures that affect bank and ILF program development and operation.

With support from the U. S. Environmental Protection Agency, U. S. Fish and Wildlife Service, the National Marine Fisheries Service (NMFS), and Federal Highway Administration, RIBITS has grown to include conservation banking and multi-agency banking activities. Support from the U.S. Department of Agriculture allows RIBITS to track water-quality trading activities in multiple states, with pilot projects in the states of Virginia and Iowa, and additional support from NMFS allows RIBITS to track credits for restoration banks recognized under Natural Resource Damage Assessment statutes.

Upcoming modifications include a mitigation banking module for RIBITS newest partner agency, the Bureau of Land Management.



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