



Department of
Environmental
Conservation

Chesapeake Bay WIP Evaluation/Progress

USC Retreat
January 30th, 2020

Overview

- EPA WIP Evaluation
- TMDL Legal Actions
- Updated Progress (including 2019 data)
- DEC Program Updates

EPA Final WIP Evaluation

- Final EPA evaluation received December 19, 2019
- Listed strengths/potential enhancements
- Final evaluation from EPA included recommendations for actions that each jurisdiction can take to enhance Phase III WIPs
- Recommendations can be included in 2020-2021 milestones, do not need to be incorporated in WIP document
- Final changes to WIP include adding sediment targets and updated list of non-significant wastewater treatment plants
- Evaluation is available on DEC's website:
<https://www.dec.ny.gov/lands/33279.html>



2020-2021 Milestone Recommendations

EPA recommendations for NY include:

- Develop numeric milestones for underreported/never reported BMPs
- Increase implementation of specific BMPs to close nitrogen gap, focus on high reduction/low cost BMPs
- Milestone for acquiring additional funding for ag. sector implementation
- Link numeric and programmatic milestones together for BMPs NY expects significant reductions
- Potential programmatic milestones (ag. tax credit programs, increased AEM participation, enhanced stormwater permit requirements)



Pending Legal Actions

- January 8, 2020: Gov. Larry Hogan of Maryland directed Attorney General Brian Frosh to pursue two separate legal action against the Pennsylvania and EPA in order to protect Chesapeake Bay restoration efforts.
<https://governor.maryland.gov/wp-content/uploads/2020/01/Letter-to-Attorney-General-Frosh1.pdf>
- January 15, 2020: Gov. Ralph Northam of Virginia weighing legal action against PA/EPA
- January 27, 2020: Chesapeake Bay Foundation announced that it is preparing a lawsuit against EPA
- EPA Response to Congressional Letter:
https://www.epa.gov/sites/production/files/2020-01/documents/response_to_congressional_letter_on_bay_tmdl-1-28-2020.pdf



Updated Progress

Overall 2019 Nitrogen Progress

Sector	2018 Nitrogen Progress	2019 Nitrogen Progress	2025 Nitrogen Target
Agriculture	6.42	6.27	4.92
Developed	2.00	2.00	1.39
Natural	3.09	3.06	2.85
Septic	0.18	0.18	0.18
Wastewater	2.58	2.19	2.19
Total	14.28	13.70	11.53

Millions of lbs delivered to the Chesapeake Bay



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-0.58 -2.17

Millions of lbs delivered to the Chesapeake Bay



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Overall 2019 Phosphorus Progress

Sector	2018 Phosphorus Progress	2019 Phosphorus Progress	2025 Phosphorus Target
Agriculture	0.167	0.163	0.121
Developed	0.073	0.073	0.048
Natural	0.245	0.244	0.216
Wastewater	0.144	0.144	0.115
Total	0.629	0.623	0.496

Millions of lbs delivered to the Chesapeake Bay



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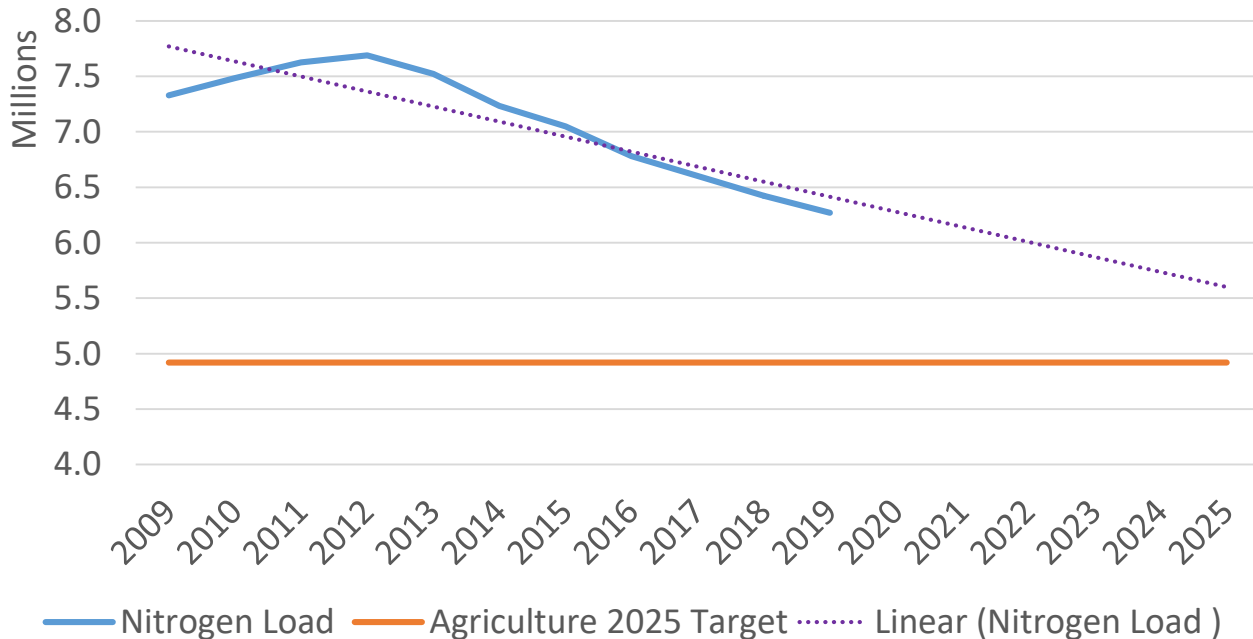
-0.006 -0.127

Millions of lbs delivered to the Chesapeake Bay

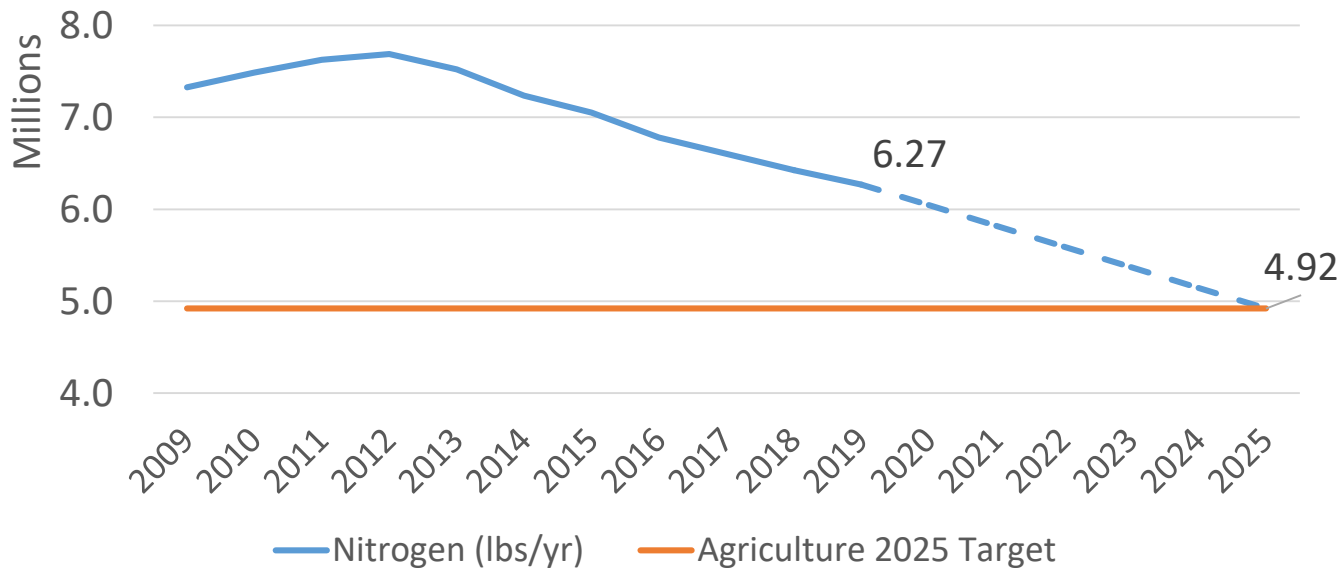


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Agriculture Nitrogen Load 2009-2019



Agriculture Nitrogen Load 2009-2019



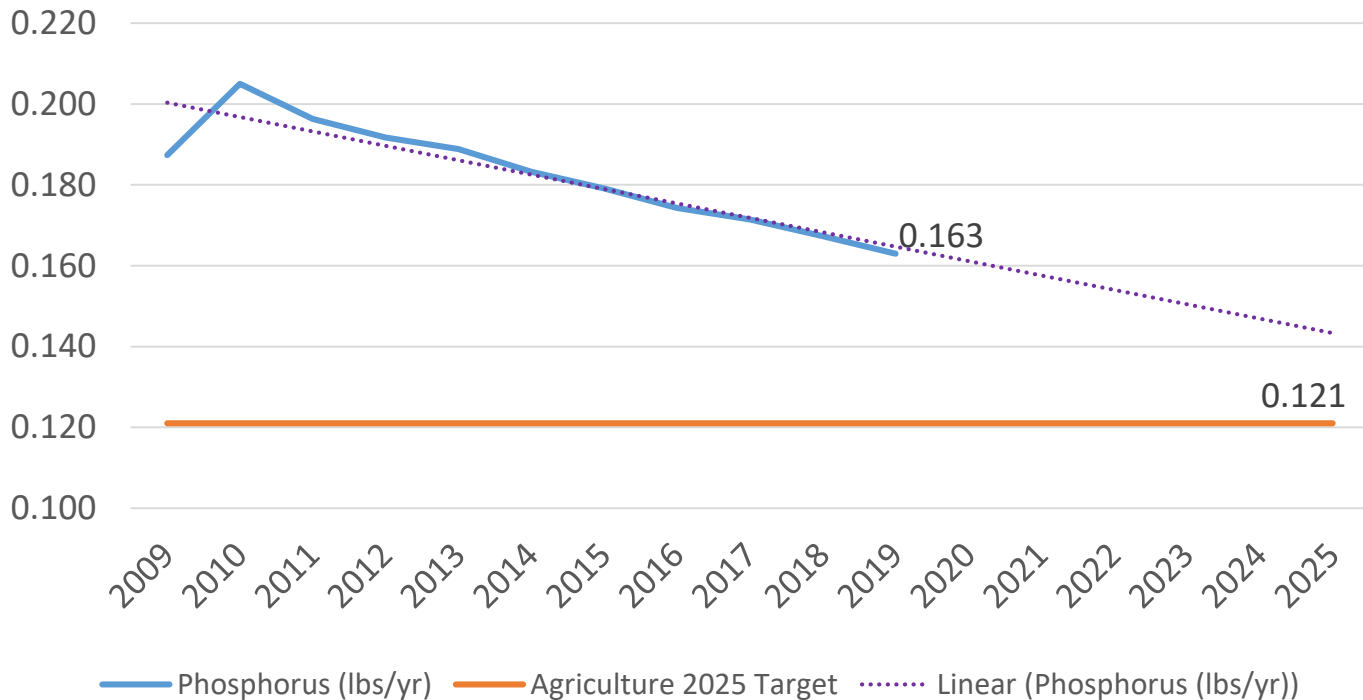
To meet 2025 Nitrogen goal, a consistent reduction of 224,838 lbs/yr is required.

2019 = 154,968 lbs/yr reduction

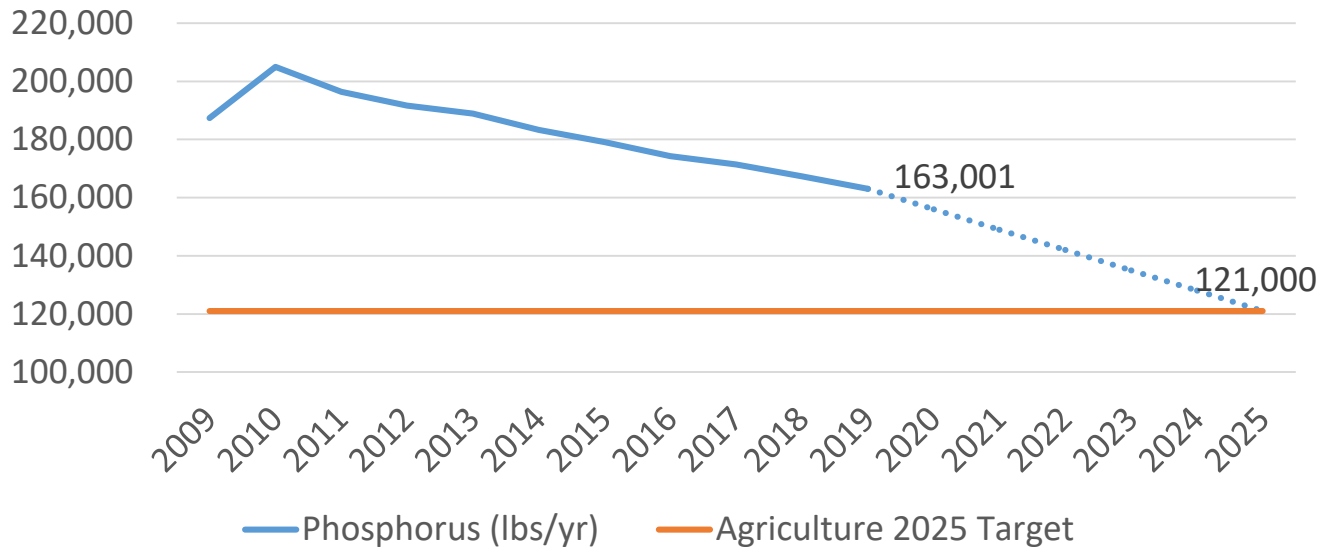
2016 = 268,437 lbs/yr reduction (best year), average is 203,000 lbs/yr



Agriculture Phosphorus Load 2009-2019



Agriculture Phosphorus Load 2009-2019



To meet 2025 Phosphorus goal, a consistent reduction of 7,000 lbs/yr is required.

2019 = 4,358 lbs/yr reduction

2011 = 8,671 lbs/yr reduction (best year), average is 4,700 lbs/yr



WIP III

Current Program Goal - Agricultural implementation scenario built based on BMPs installed during the Phase II implementation period and applied to projected available acres and animal numbers in 2025

2025 Program Goal/Target - Alternative implementation scenario that will meet the agricultural sector targets for nitrogen and phosphorus by 2025.



Manure Incorporation

First reported in 2019

2019 Progress:

- 17,714 acres

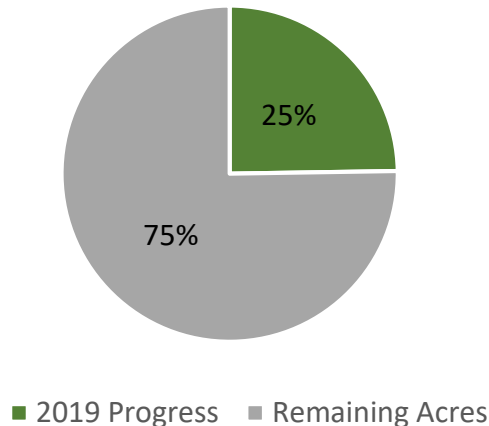
Current Program Goal:

- N/A

2025 Target:

- **71,570** acres
- (9% of available acres)

2025 Target



Non-Urban Stream Restoration

First reported in 2018

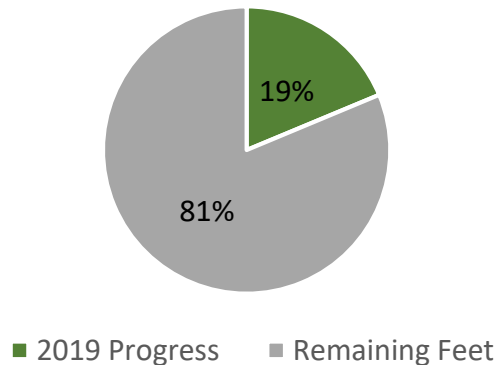
2019 Progress:

- 31,636 ft (6 mi)

Current Program Goal &
2025 Target:

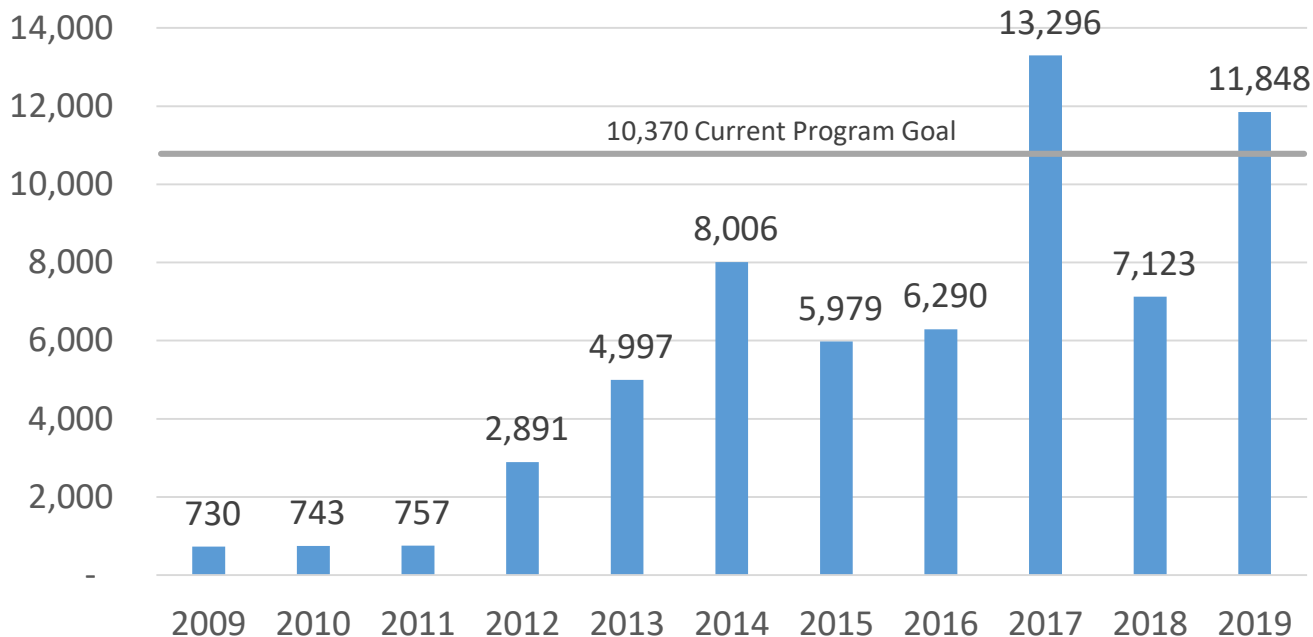
- 169,000 ft (32 mi)
- 0.5% of available acres

2025 Target



Dairy Precision Feeding

Annual animal units



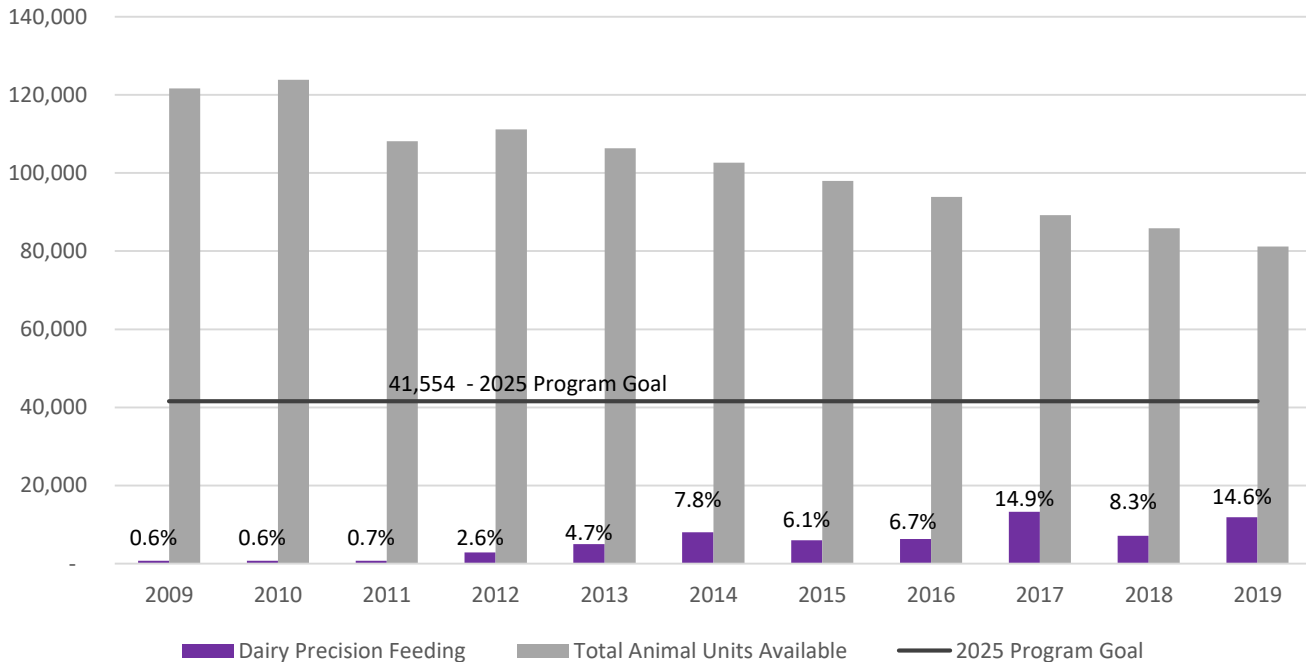
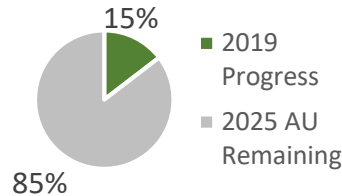
— Current Program Goal



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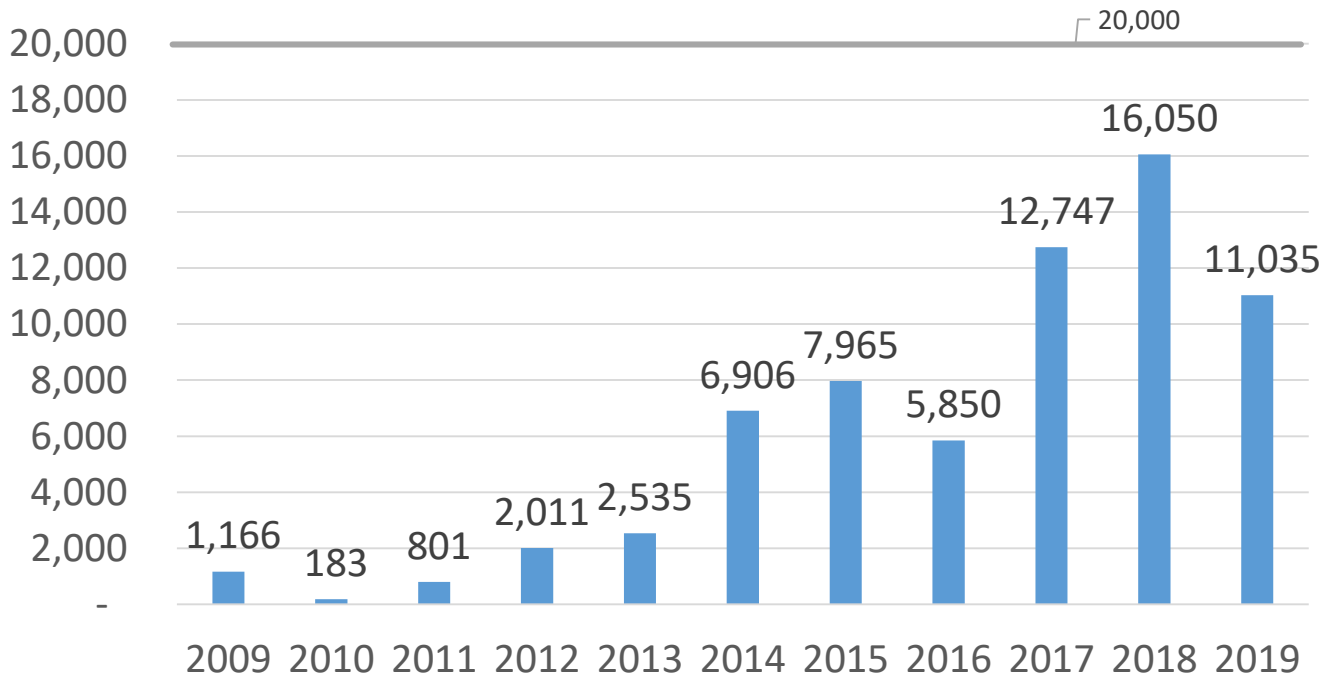
Percent BMP Implemented

Dairy Precision Feeding



Cover Crops

Annual acres

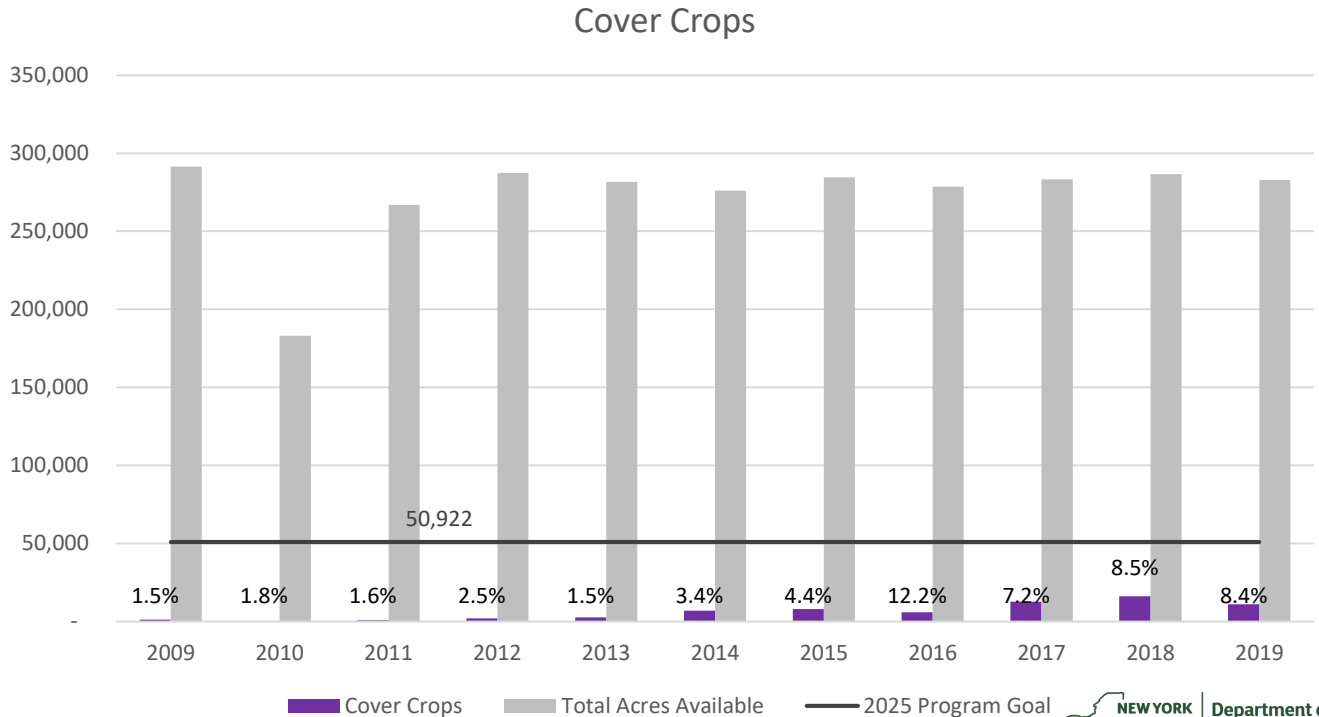


— Current Program Goal



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Percent BMP Implemented



Cover Crops

Total Acres Available

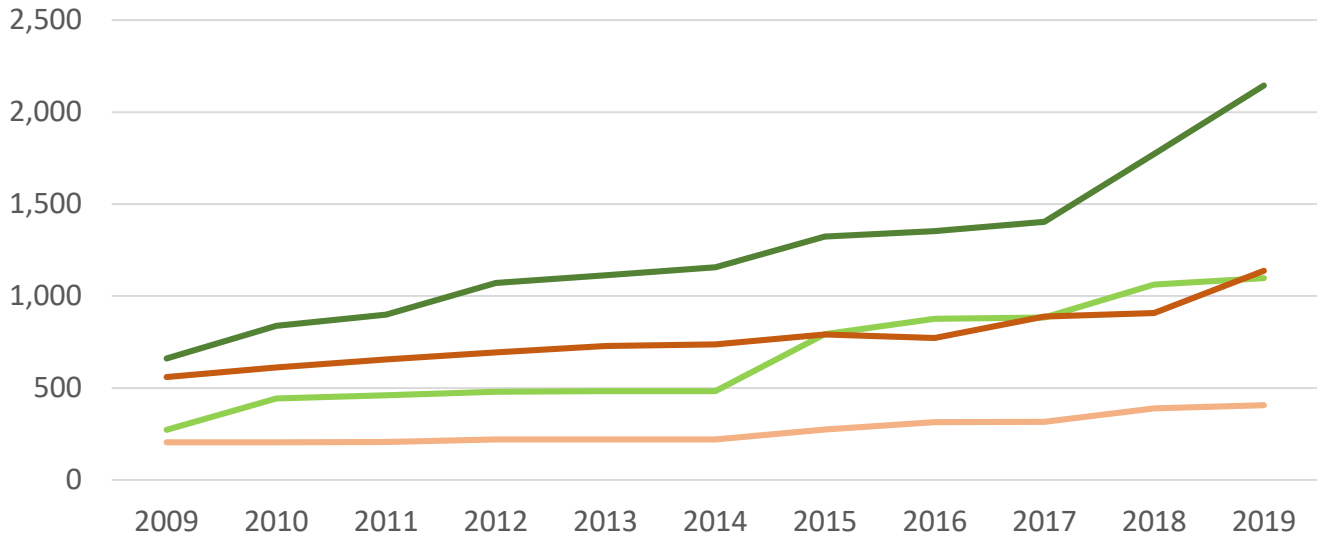
2025 Program Goal



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Buffers

Cumulative acres

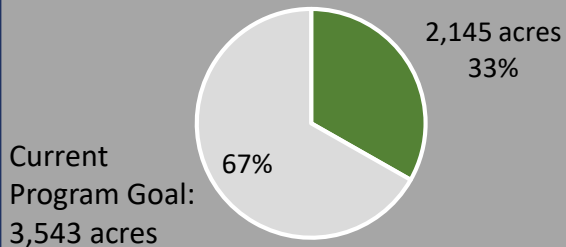


- Forest Buffers on Cropland
- Grass Buffers on Cropland
- Forest Buffers on Fenced Pasture Corridor
- Grass Buffers on Fenced Pasture Corridor

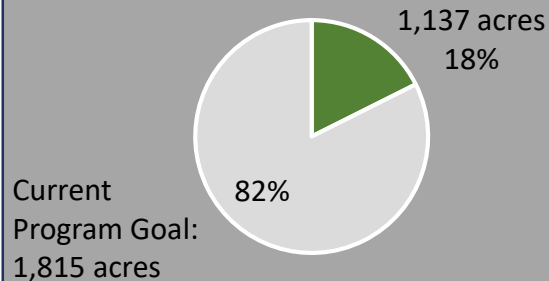


2025 Buffer Target

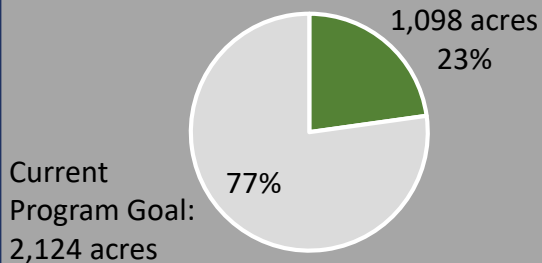
Forest Buffer with Exclusion Fencing



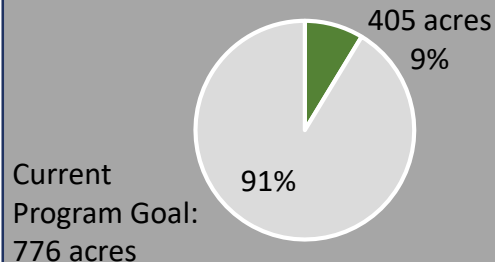
Grass Buffer with Exclusion Fencing



Forest Buffer on Cropland



Grass Buffer on Cropland

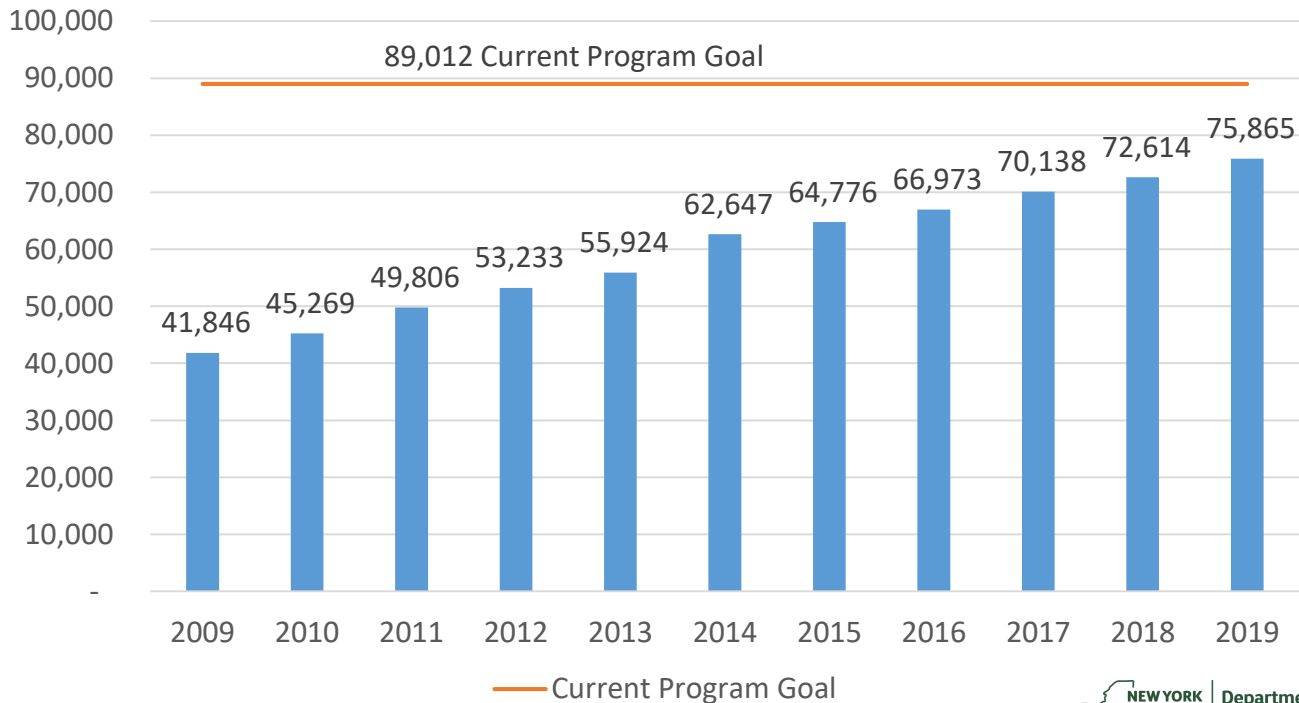


■ 2019 Progress ■ Acres Remaining

Livestock Waste Management Systems

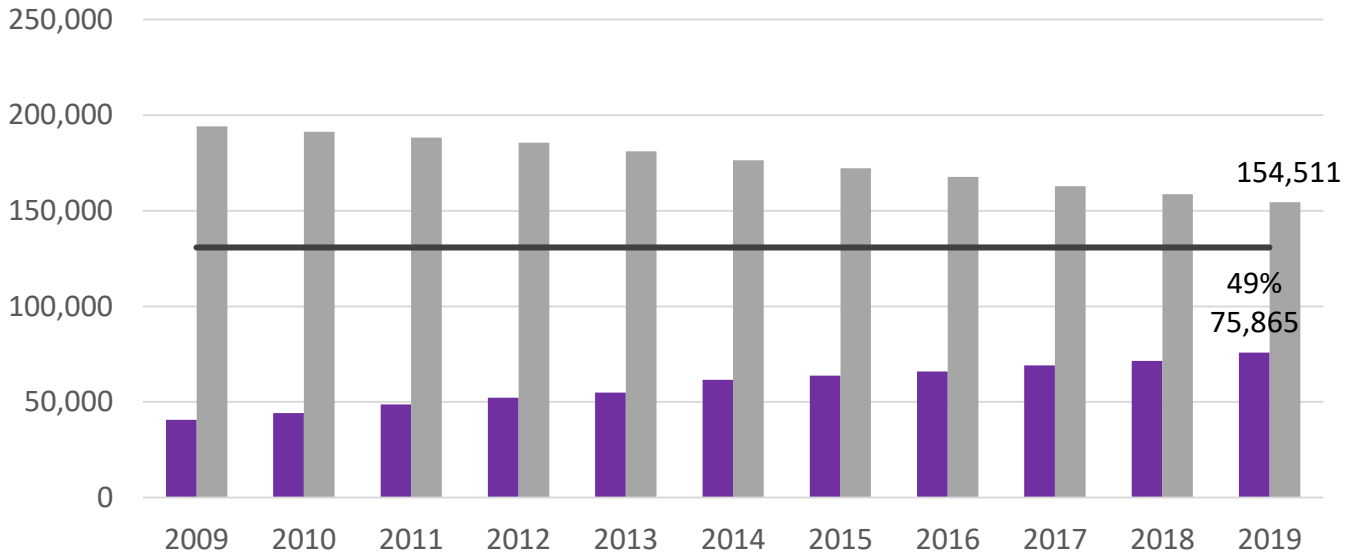


Cumulative animal units



Percent BMP Implemented

Livestock Waste Management Systems



■ Livestock Waste Management Systems
 ■ Total Animal Units Available

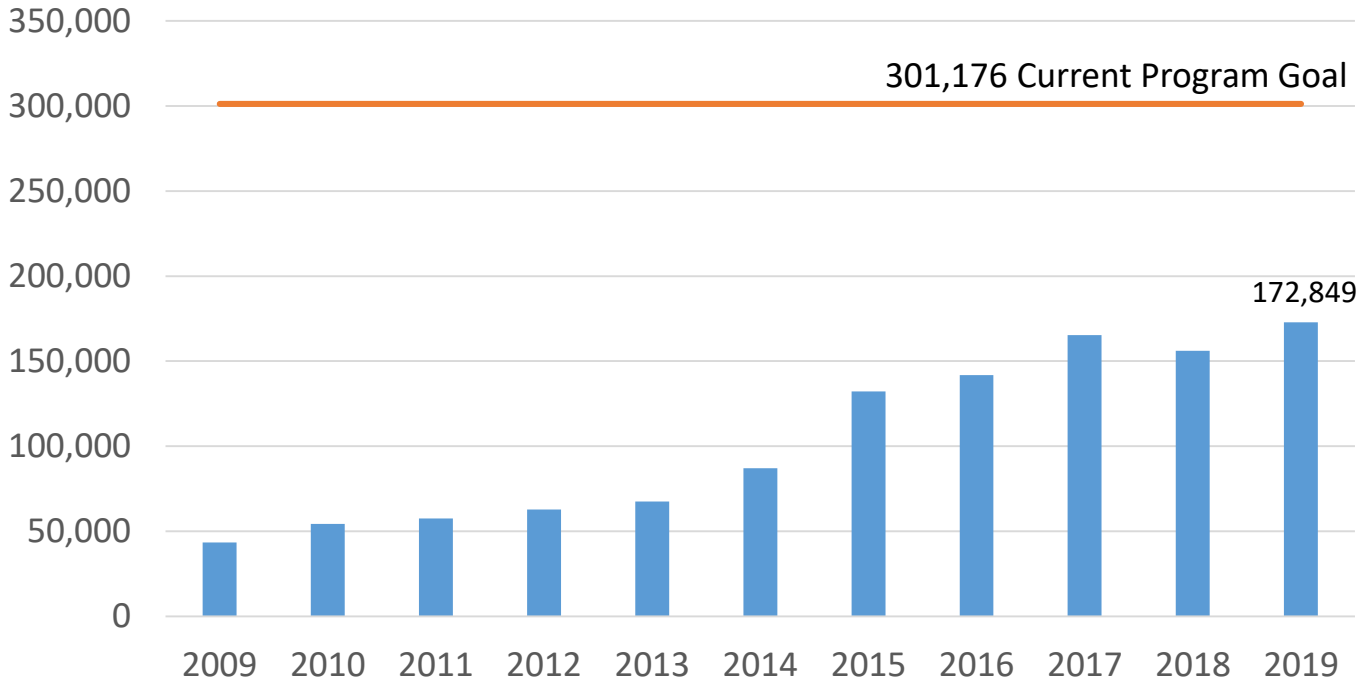
— 2025 Program Goal



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Soil and Water Conservation Plans

Cumulative acres



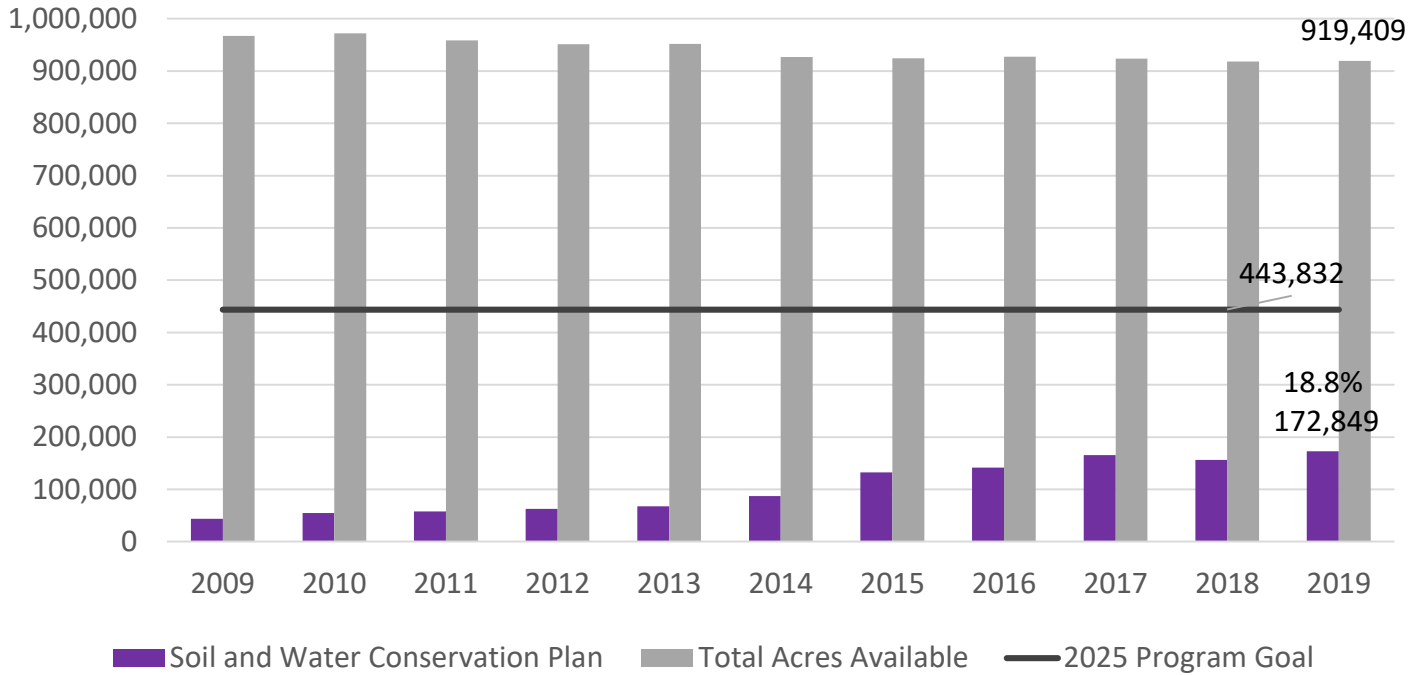
— Current Program Goal



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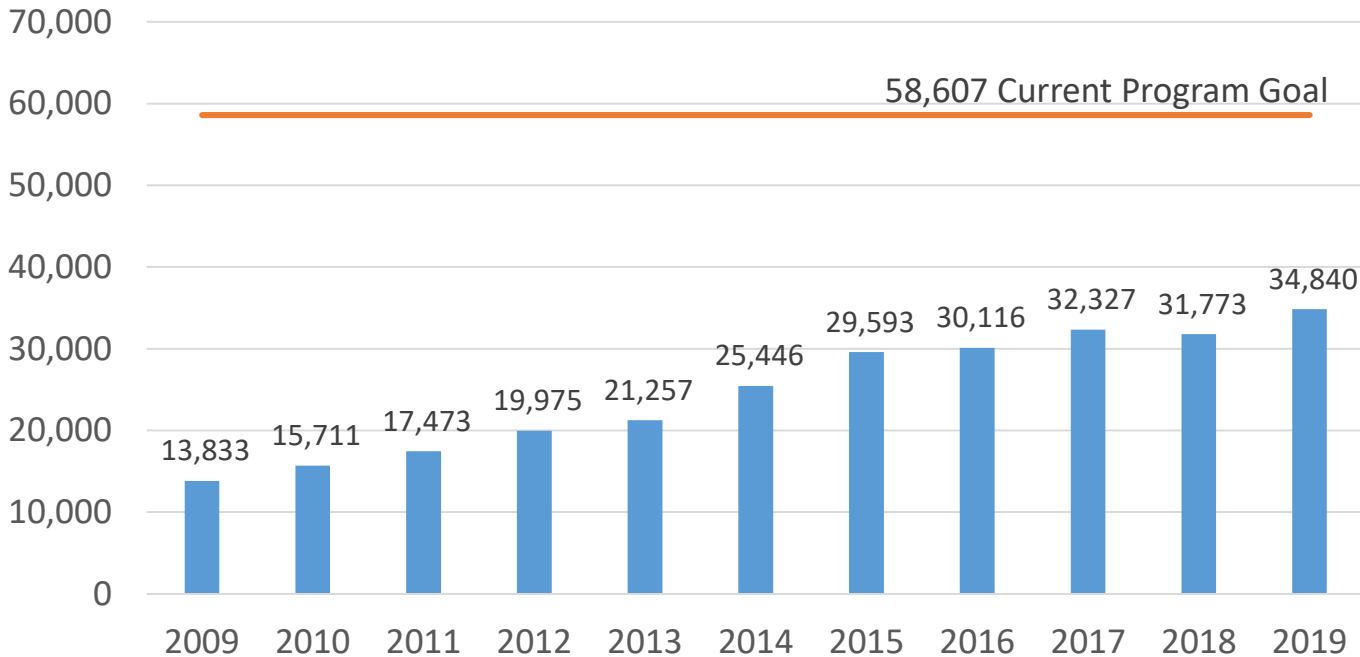
Percent BMP Implemented

Soil and Water Conservation Plans



Prescribed Grazing

Cumulative acres



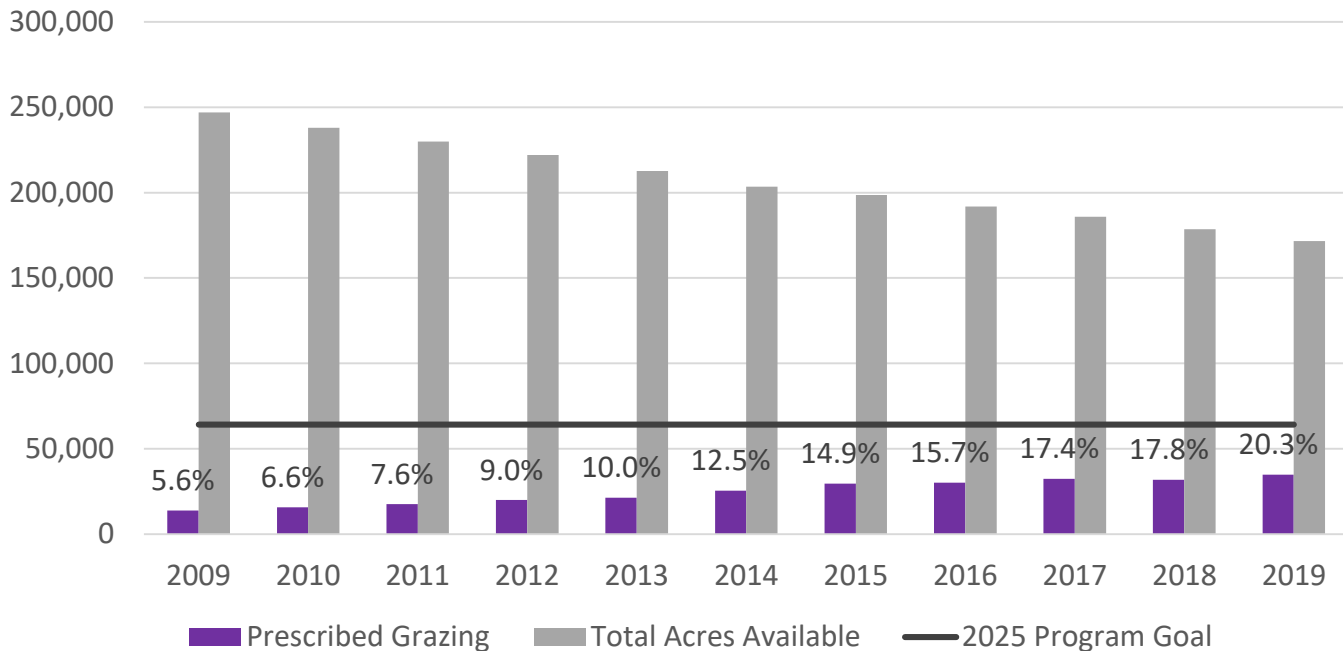
— Current Program Goal



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Percent BMP Implemented

Prescribed Grazing



Land Retirement

2019 Progress:

- 2,938 acres

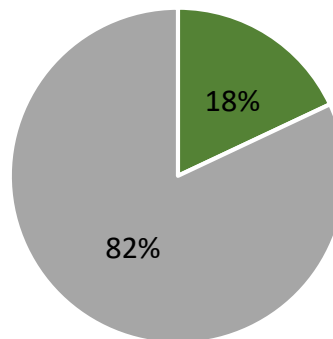
Current Program Goal:

- 1,781 acres

2025 Target:

- 15,767 acres
- (2% of available acres)

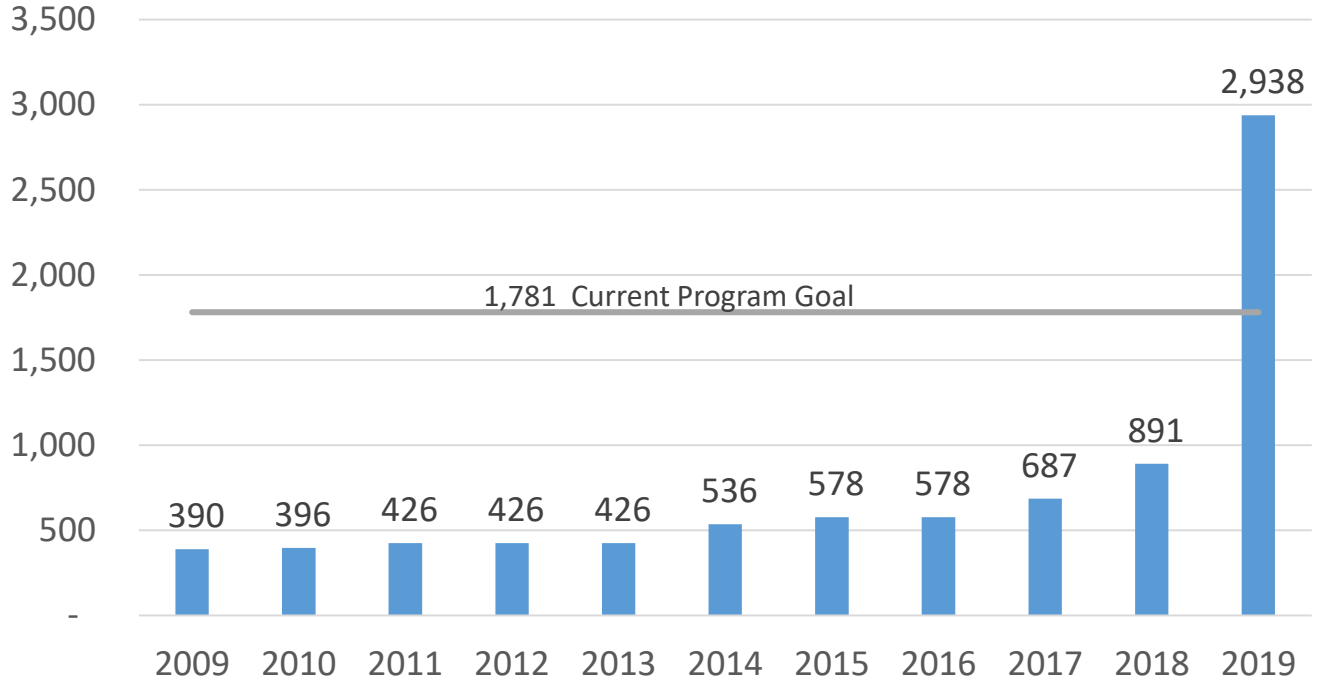
2025 Target Goal



■ 2019 Progress ■ Remaining Acres

Land Retirement

Cumulative acres



Tillage (Conservation, High Residue, Low Residue)

2019 Progress:

- 16,773 acres

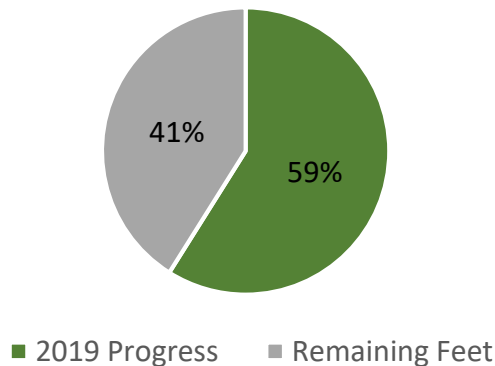
Current Program Goal:

- 14,884 acres/year

2025 Target:

- 28,464 acres/year
- 10% of available acres

2025 Target



Nutrient Management Plans (Core)

2019 Progress:

- 69,631 acres

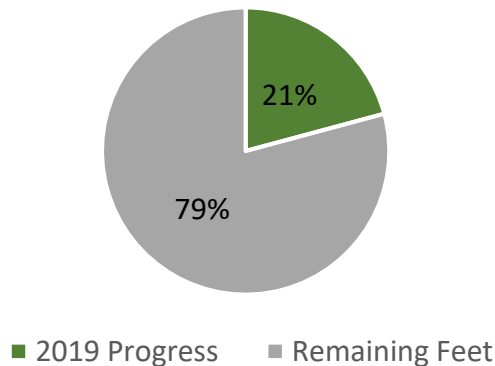
Current Program Goal:

- 151,245 acres/year

2025 Target:

- 334,432 acres/year
- 49% of available acres

2025 Target



Barnyard Runoff Control & Loafing Lot Management

2019 Progress:

- 97 acres

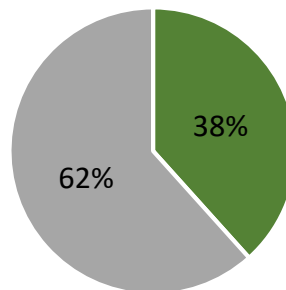
Current Program Goal:

- 115 acres/year

2025 Target:

- 253 acres/year
- 100% of available CAFO acres
- 40% of available AFO acres

2025 Target



■ 2019 Progress ■ Remaining Feet

Wetland Restoration

2019 Progress:

- 637 acres

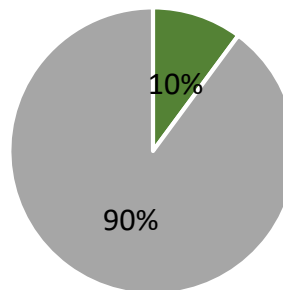
Current Program Goal:

- 1,274 acres/year

2025 Target:

- 6,289 acres/year
- 0.7% of available acres

2025 Target



■ 2019 Progress ■ Remaining Feet

DEC Program Updates

DEC Program Updates

- Cover crop contract amendment
- USC Capacity Contract amendment
 - Additional funding for: verification, pilot road ditch demonstration projects/outreach, Trees for Tribes coordination, pilot cost-share program for AgNPS, database upgrades
- DEC-DAM-USC Buffer Program
 - CREP incentives, CREP re-enrollment activities, assessment, planning, implementation (new sites), evaluation of existing buffers, management activities, new non-CREP incentive for cropland buffers
- Optimization for WWT facilities, permit modifications
- New DEC BMP database
- Round 2 Nonpoint Source Planning Grant
- Regional Planning Board assistance with BMP tracking and reporting
- WIP assistance funding application



Thank You

Lauren Townley

Research Scientist

lauren.townley@dec.ny.gov

(518) 402-8283

Cassandra Davis

Research Support Specialist

cassandra.davis@dec.ny.gov

(518) 402-8152

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