

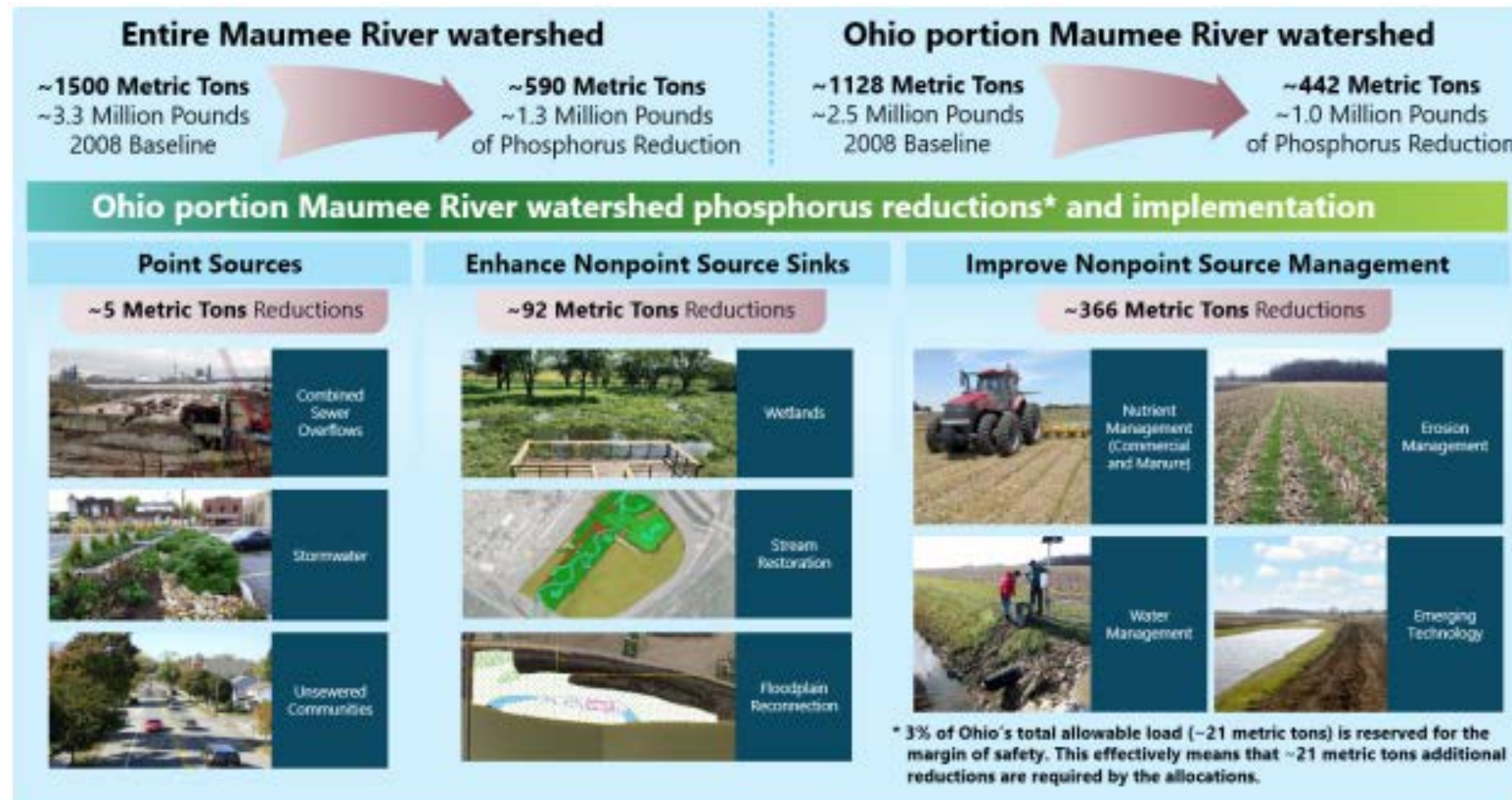


# Ohio Department of Agriculture

**OLEC H2Ohio Update**  
**December 7, 2022**

# Ohio's Phosphorus Reduction Goals

- 40% Phosphorus reduction in annual loads in WLEB
- Ohio's baseline load is approx. 2.5 million pounds annually
- Ohio's 40% reduction results in a reduction of roughly 1 million pounds
- Load reduction assigned to agriculture NPS is approximately **800,000 pounds annually**

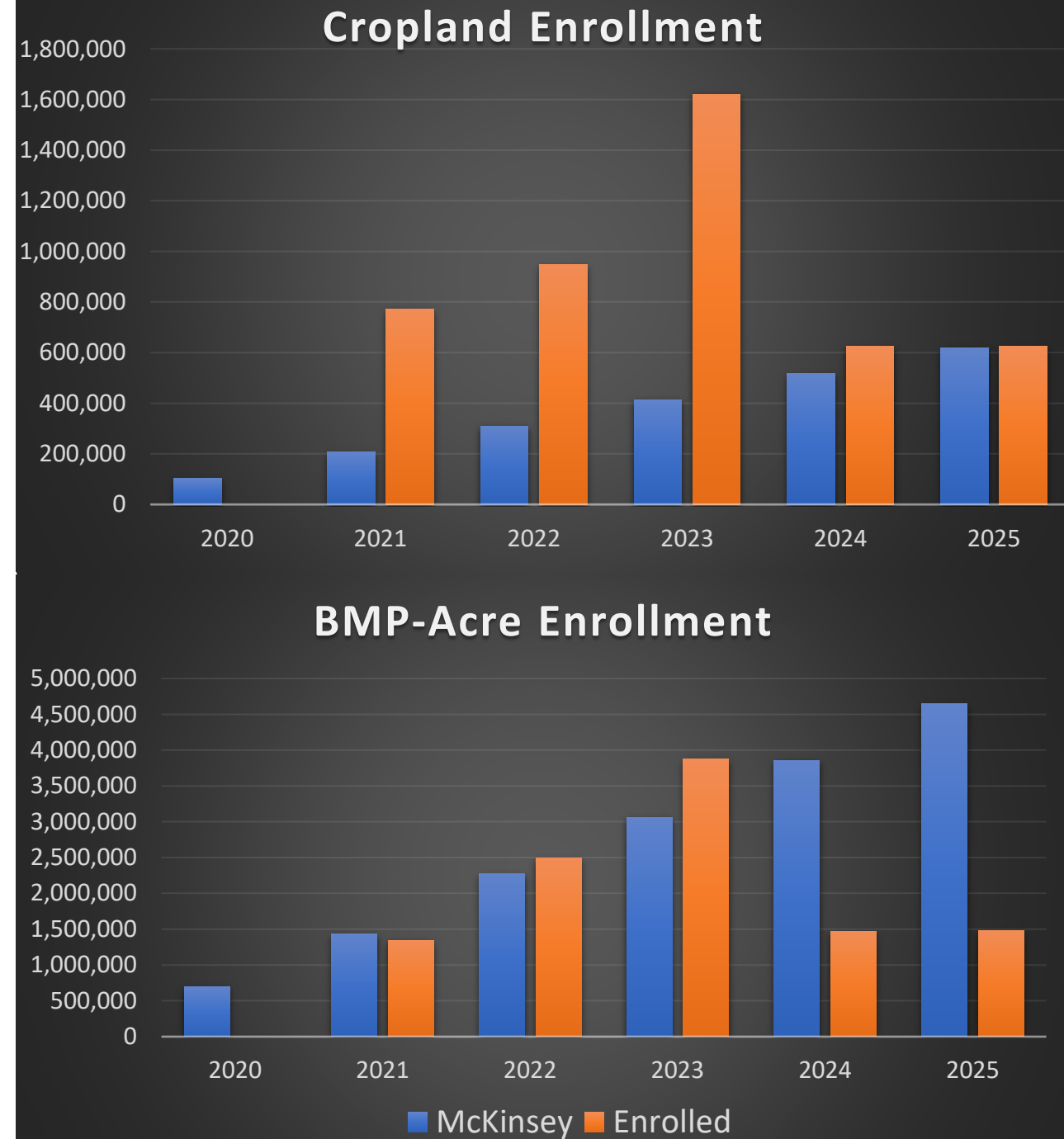


Source: Ohio EPA



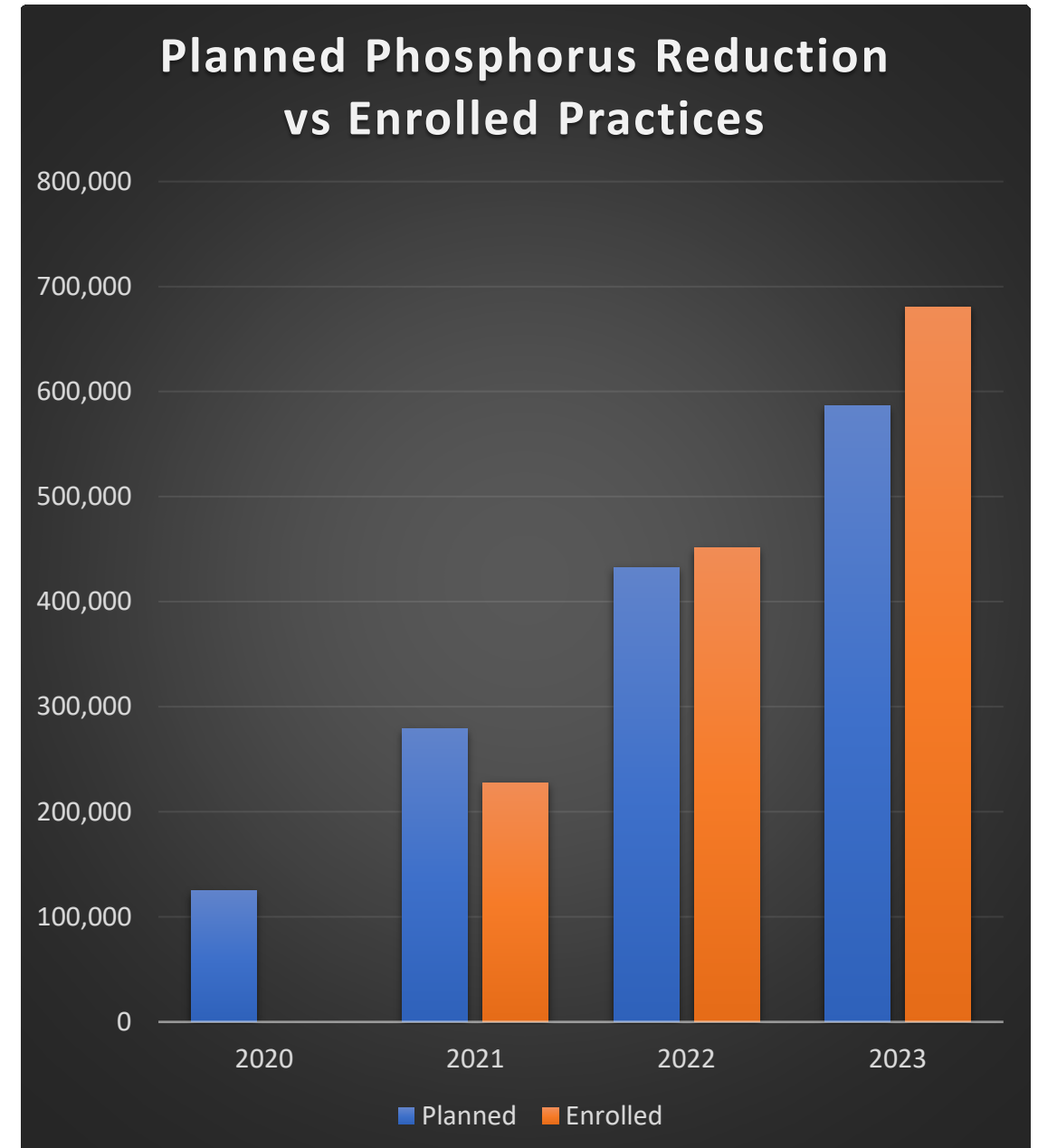
# Cropland Enrollment & Participation

- A comparison of current enrollment vs targets established in the McKinsey plan indicate reduction goals are attainable
- Targets for some practices are exceeded while others are just short of established program goals

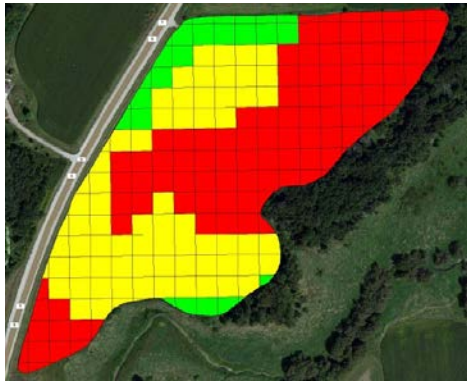


# Program Nutrient Reduction Potential

- Current enrollment includes adequate practices to meet original P reduction targets
- Practice implementation is the key to achieving goals set within our original plans for H2Ohio
- Evaluation of current practice standards is underway to acknowledge alternative methods to achieve practice goals and increase adoption



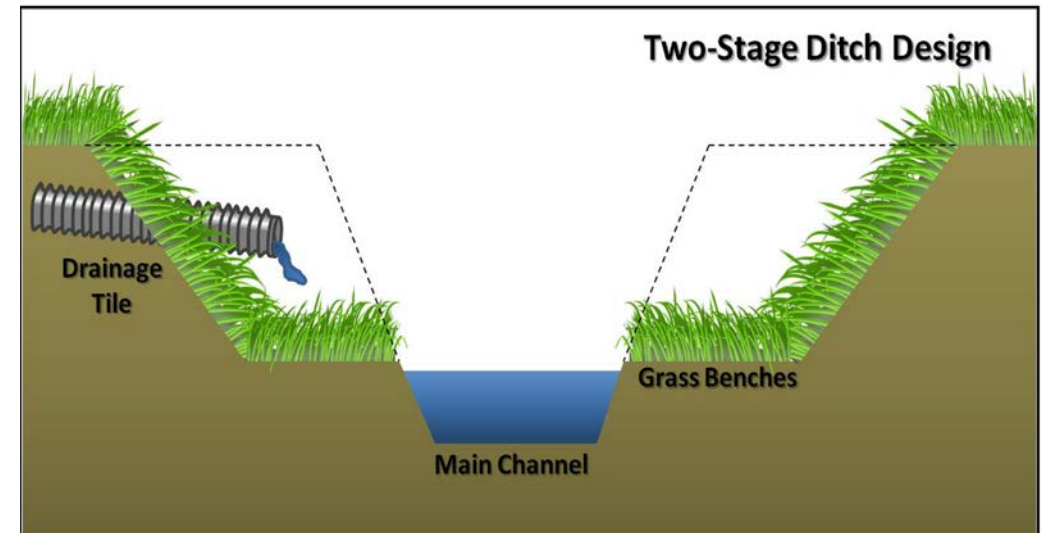
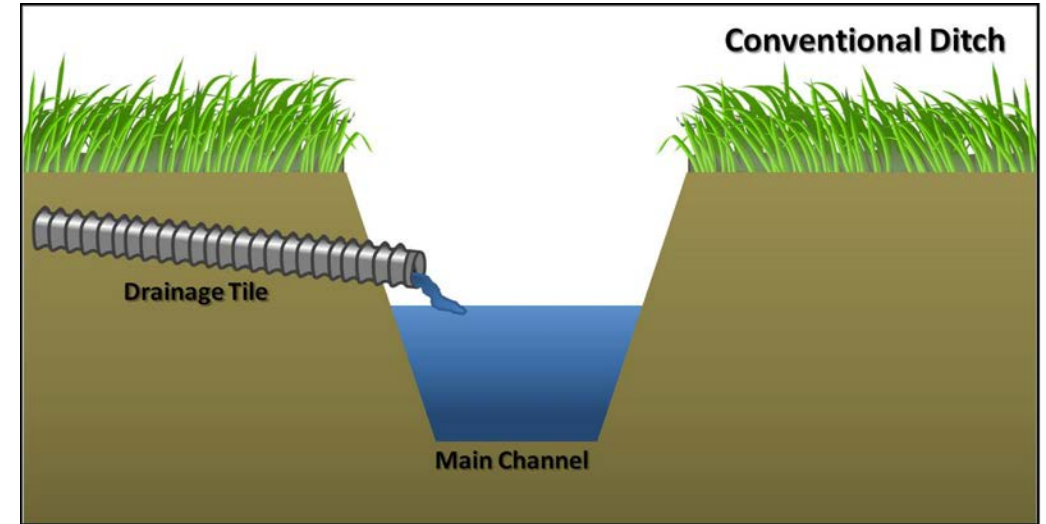
# Load Reduction by Better Nutrient Management



- **VNMPs** – Eliminate Phosphorus applications not required to maintain crop production
- **Placement & Manure Incorp** – Reduce losses through better application & timing methods
- **Cover Crops & Conservation Crops** - Keep nutrients on the landscape and reduce erosion with winter cover

# 2023 H2Ohio Initiatives

- 2-Stage Ditch Program
- Demonstration Sites & Field Days
- Equipment Purchase Assistance Funds
- H2Ohio Program Software Integration
- Program Incentives for Ag Retailers for Program Support





# ODA H2Ohio Program Funding

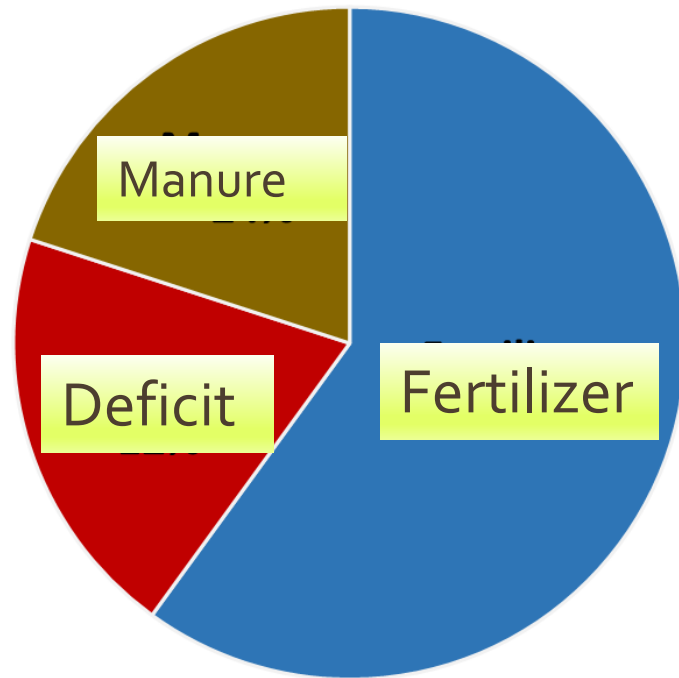
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- H2Ohio funds for the current budget are obligated to funding practices in the WLEB project area
- Funding levels and program plans are being developed in the next biennium budget for FY 24 & 25
- Actual program offering will be dependent on funding established in new budget effective July 2023



# Fertilizer and Manure Contribution to Crop Needs - WLEB

Estimated Crop Removal P<sub>2</sub>O<sub>5</sub>  
2008-2020

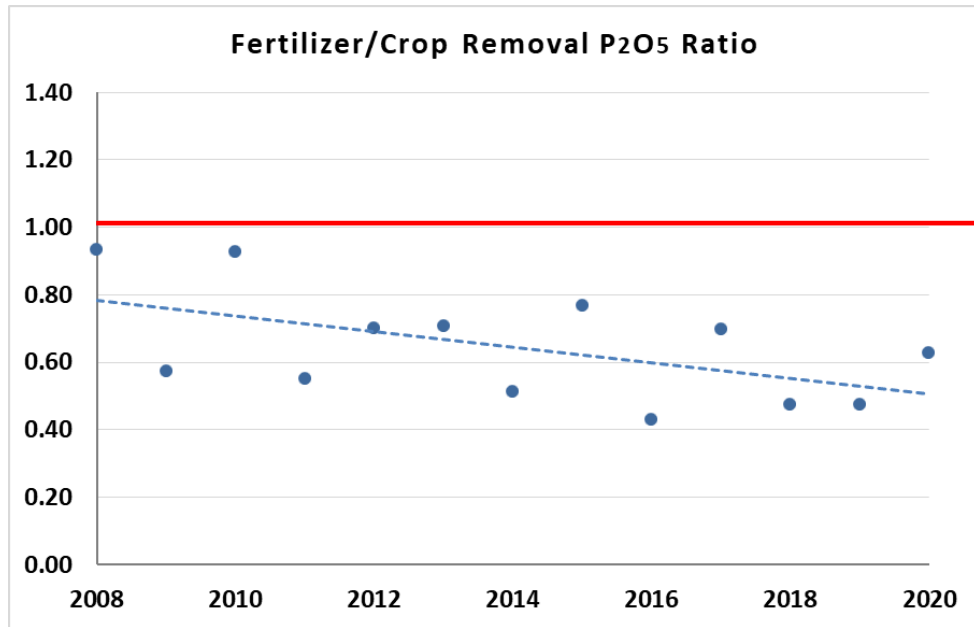


Manure and fertilizer applications combined are less than crop removal.

The input deficit will lower Soil Test Phosphorus over time.

**12-15 years of continuous 200-bushel corn needed to lower a 100+ PPM Phosphorus field to the agronomic range.**





| Year | Number of Soil Samples | Soil Test Phosphorus |
|------|------------------------|----------------------|
| 2005 | 85,777                 | 34                   |
| 2010 | 248,760                | 32                   |
| 2015 | 327,982                | 28                   |
| 2020 | 273,753                | 26                   |

## ODA - Supporting Reduced Phosphorus Applications

- A study from Ohio State University shows a trend of lower fertilizer phosphorus applications since 2008 in Northwest Ohio
- Fertilizer Institute study shows decreasing phosphorus soil test results since 2005
- These studies and others show a long-term trend of lower fertilizer phosphorus applications in Northwest Ohio

## One Way to Evaluate Success

- ☐ Fertilizer application of N and Phosphorus trending down
- ☐ Manure and fertilizer nutrients combined applications are below crop removal
- ☐ Soil P levels drawing down over time
- ☐ This indicates that producer practices are moving in the right direction

**Still a long way to go to get all acres under best nutrient management practices and to recommended soil test levels.**



# Thank You!

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