Manure Management

H2Ohio

To be eligible for H2Ohio's Manure Incorporation and Utilization practice, fields receiving a manure application must have soil test phosphorus levels at or below 50 ppm and application rates must follow Tri-State and NRCS 590 standards. H2Ohio's manure practices are developed with assistance from an SWCD technician and encourage farmers to assess their farms prior to application. This results in optimizing nutrient usage and lowers the chances of nutrients moving offsite.

Why Manure Application Rates Vary

- Soil test phosphorus (STP) levels
- Tri-State Fertilizer recommendations
- NRCS 590 Standards
- Phosphorus Risk Assessment

The Ohio Phosphorus (P) Risk Assessment process is based on classifying fields by soil test P, implementing higher levels of conservation with higher soil test P levels, and implementing strategies that will drawdown STP if it is greater than the Tri-State Guide maintenance limit.

Risk Level	**STP** (Mehlich III)	**P Application**	**Management Strategy**
Lower Risk	<50 ppm	**≤ P recommendation** 250 lb P2O5/ac annual application limit	Build-up & maintenance Follow Tri-State
Moderate Risk	50-120 ppm	**≤ P removal (annual or multiple year crop rotation)** 250 lb P2O5/ac annual application limit	Adaptive P management: Drawdown STP over time
Higher Risk	120-200 ppm	**≤ 50% P removal (annual or multiple year crop rotation)** 125 lb P2O5/ac annual application limit	Short term P application to facilitate change
Very High Risk	200+ ppm	**No P application**	Drawdown STP over time

Manure applications made to fields with STP results greater than 50 ppm Mehlich III should only happen on operations producing manure with a CNMP and on a short-term basis while other management changes are made.

Adaptive P Management

Manure application rates may not exceed the next crop year's N requirement or the most limiting factor (Table 3, Ohio CPS 590), regardless of P rate.

Implement drawdown strategies to reduce STP over time.

Keep sample timing, depth, and frequency consistent.

If STP isn't trending downward, reduce or stop P applications until it does.