



SWCD
SOIL AND WATER CONSERVATION DEPARTMENT

A LOOK AT SUSTAINABLE AGRICULTURE IN OUR COUNTY

Manitowoc County

of
Farms



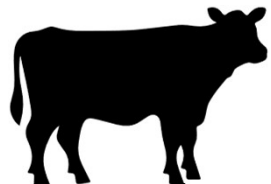
Average Cropland
per farm



% of the County
being farmed



Ave. Value of land
& buildings



Livestock

1964

2,610

120.7 Acres

83.6%

\$24,848.00
(\$205.72/acre)

47,415 dairy cattle

2022

1092

216 Acres

62.7%

\$1,677,679.00
(\$7,751.00/acre)

110,000 dairy
cattle

Manitowoc Co. Agriculture
generates:

- Provides 5,105 jobs
- Generates \$1.5 billion in economic activity
- contributes 360 million to county's income annually
- pays \$16.3 million in taxes annually

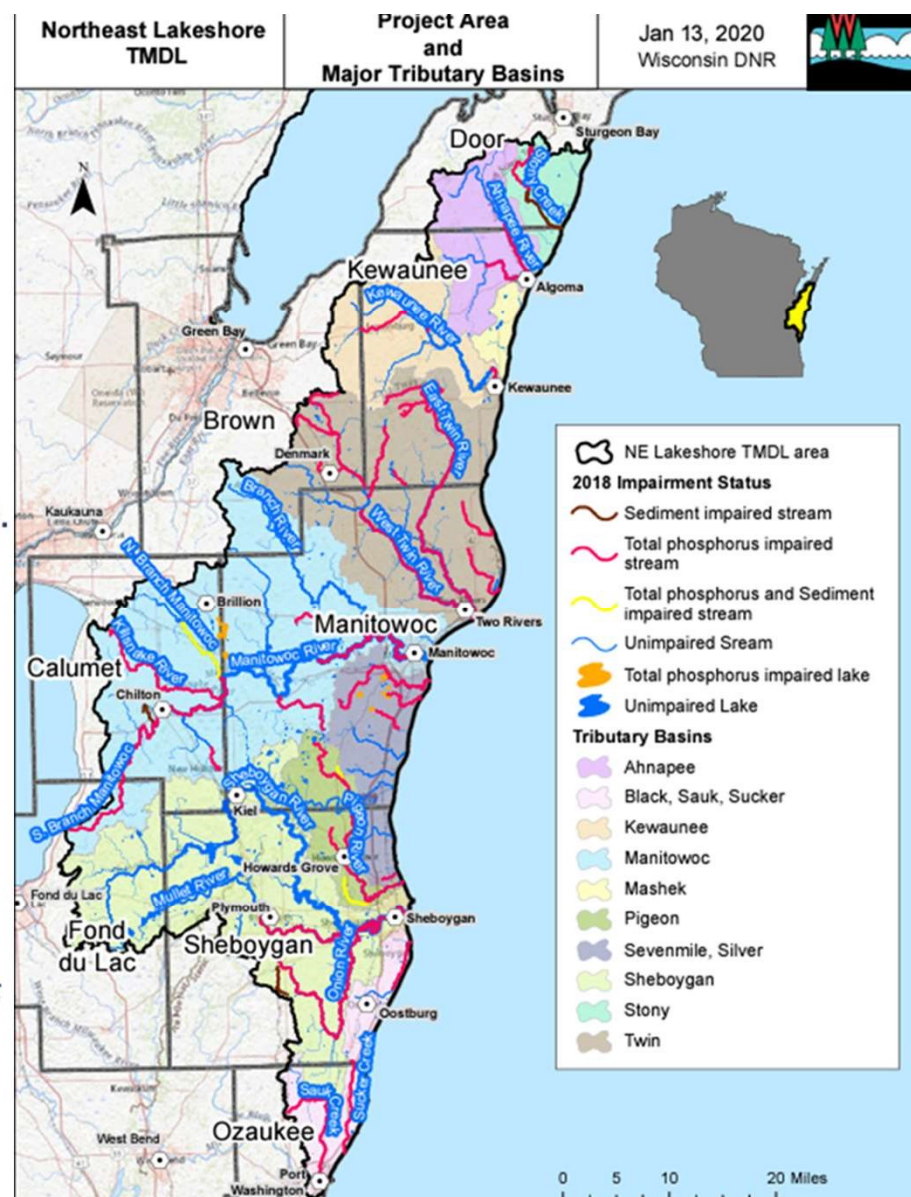


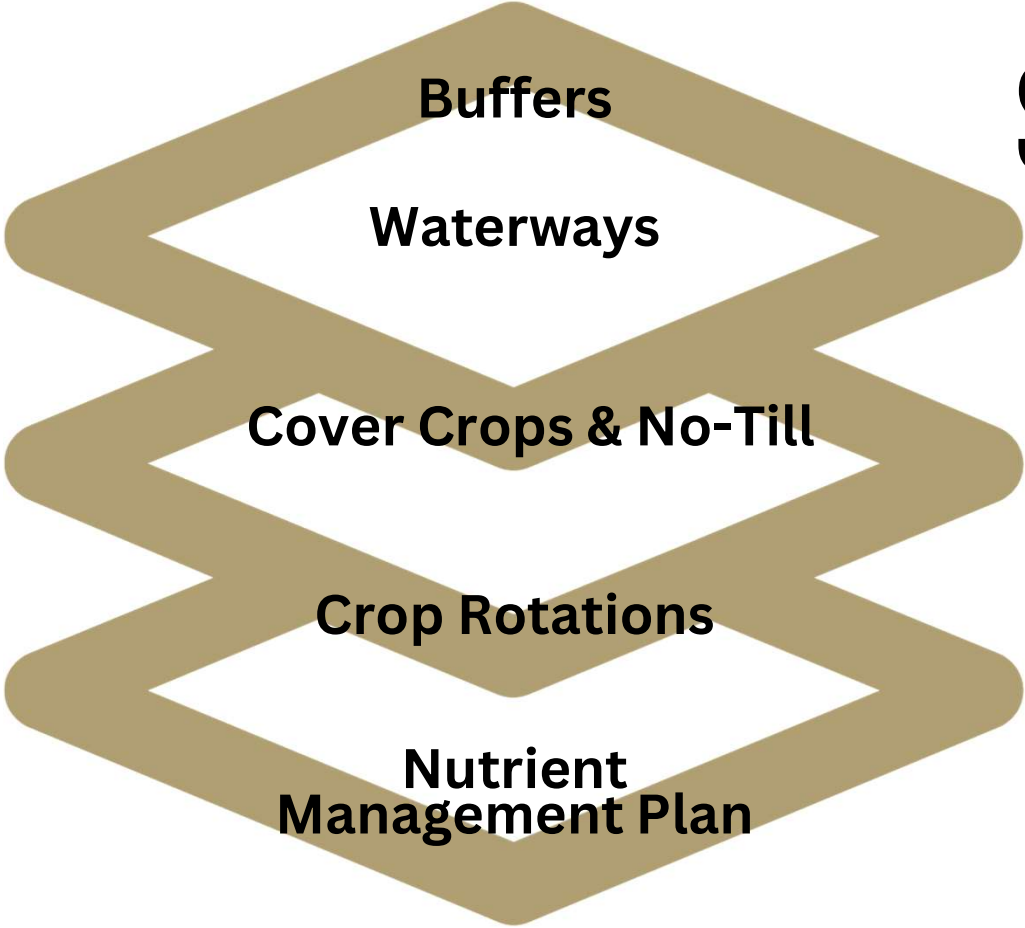
<https://youtu.be/yUcQ6FNz7Tk?si=OMld6-INlif8Yv56>

It starts with planning!

NORTHEAST LAKESHORE TMDL

- The TMDL is focused on addressing surface water quality impairments from phosphorus and total suspended solids.
- The TMDL study and implementation plan will provide a strategic framework and prioritize resources for surface water quality improvement across the basins that make up Wisconsin's northeast lakeshore.
- The study area spans a portion of the Lake Michigan watershed from just south of Sturgeon Bay to Port Washington and reaches west towards Lake Winnebago, covering 1,964 square miles, approximately 3.5 percent of the state.





Buffers

Waterways

Cover Crops & No-Till

Crop Rotations

**Nutrient
Management Plan**

**STACKING PRACTICES
IS KEY!**

**TO IMPROVE SOIL &
WATER QUALITY**

COVER CROPS

- Plants that are planted after the grain or forage crop
 - May be a plant that winterkills or one that overwinters and is terminated in spring
- Improves soil health, improves soil structure, increases organic matter, manages excess nutrients in the soil, minimizes soil compaction, promotes nitrogen fixation, and reduces erosion.



NO-TILL

- No-till farming, also known as zero tillage or direct drilling, is an agricultural technique that involves growing crops or pasture without disturbing the soil through tillage. Instead of tilling the soil before planting, farmers use specialized equipment to create a channel just spacious enough for seeds, minimizing soil disturbance.





GRASSED WATERWAYS & WASCBS

- Look for areas of gully erosion in fields
- Work with landowners or operators to fix the problem by shaping the areas and leaving it in permanent vegetation
- Grassed waterways are shaped like a trapezoid and seeded with grasses in areas of concentrated
- Water and sediment control basins (WASCBs) use a berm and tile to hold back water, let sediment settle out and then flow underground to an outlet

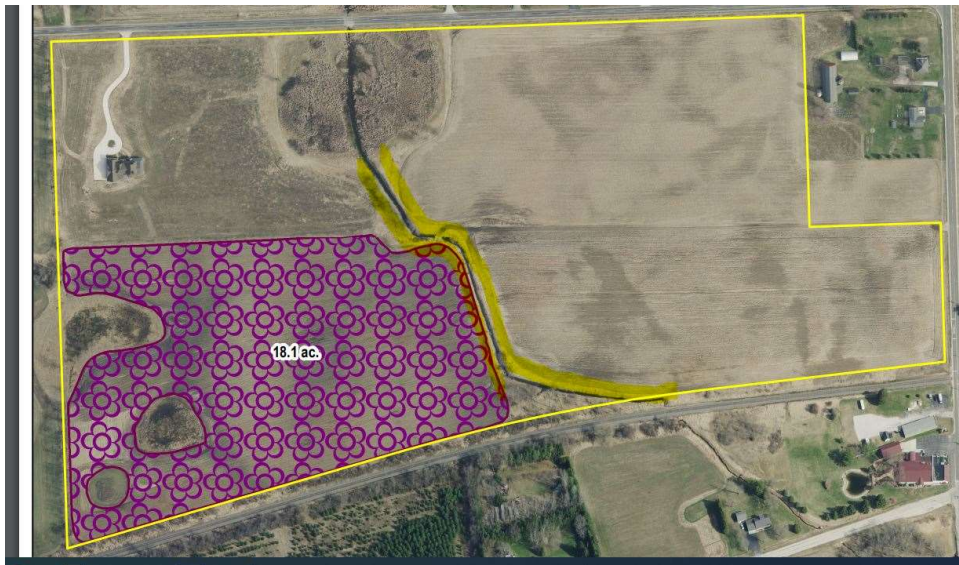




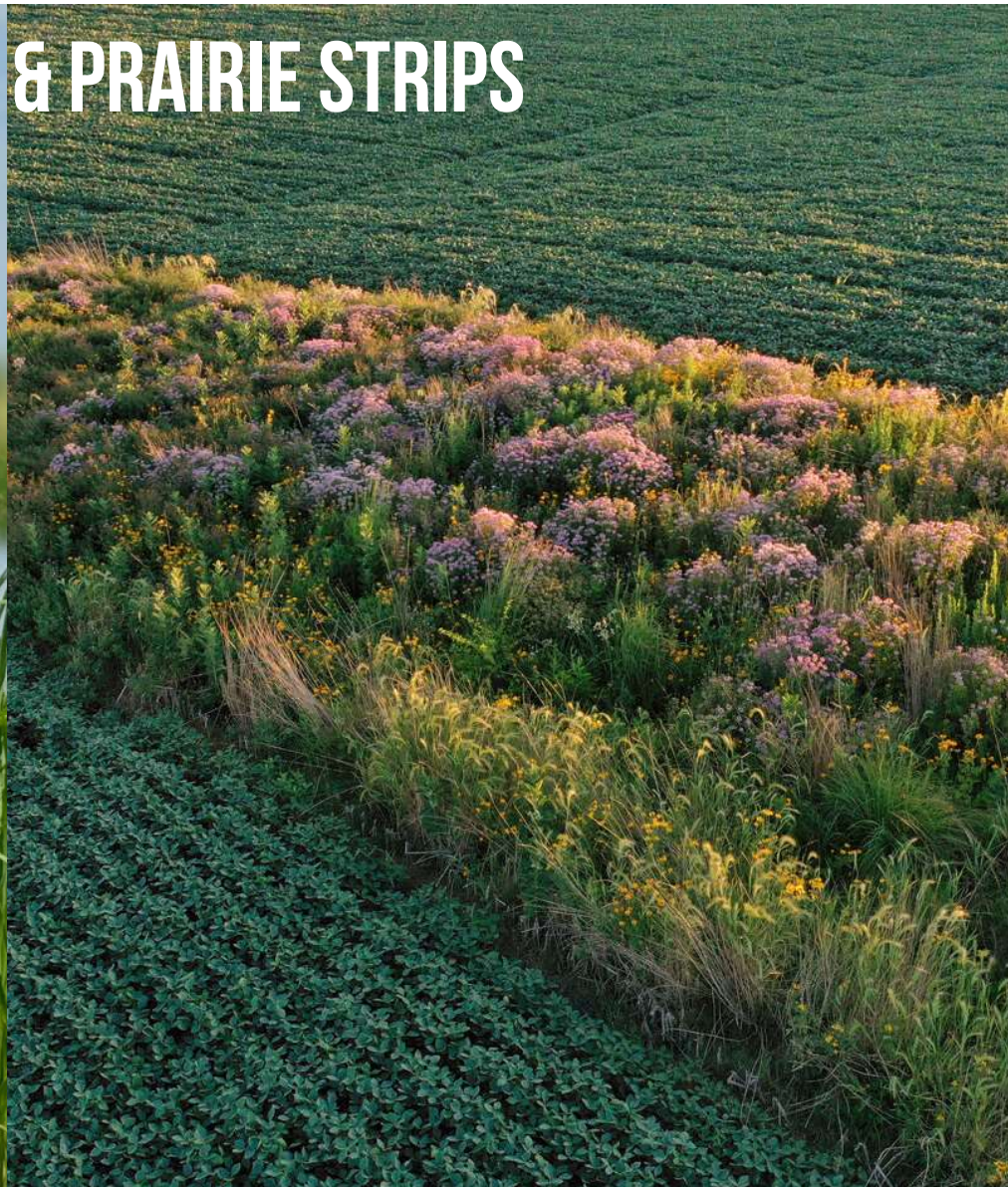
- Generally located at the lower edge of a field and are designed to serve as a buffer between a field and environmentally sensitive areas such as streams, lakes, wetlands, and other areas susceptible to damage by sediment and waterborne pollutants
- In addition to serving as a buffer, with proper plant selection and management, harvestable buffers can provide additional benefits such as:
 - Improved fish and wildlife habitat
 - Improved field access
 - Increased livestock forage

HARVESTABLE BUFFERS



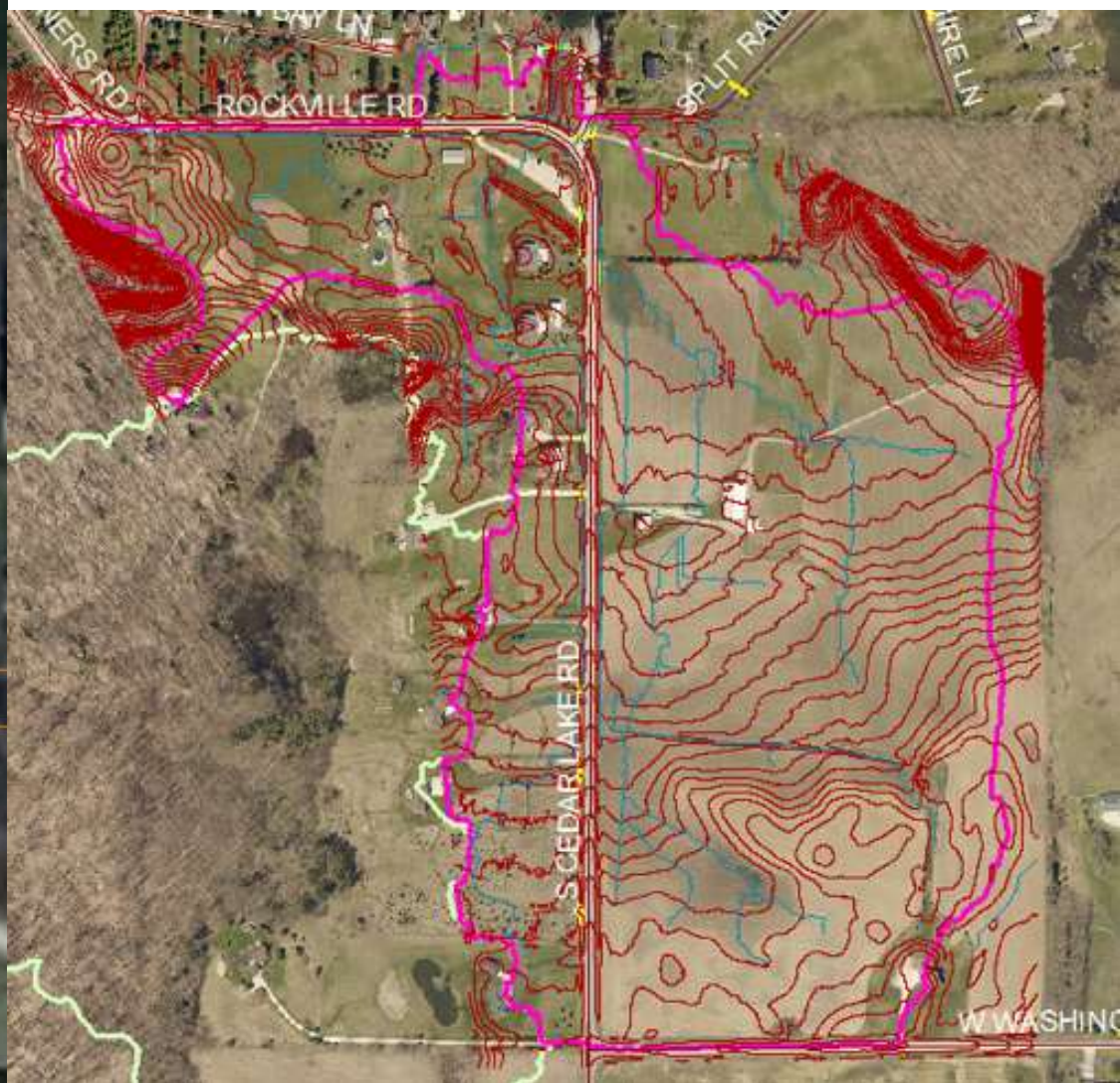
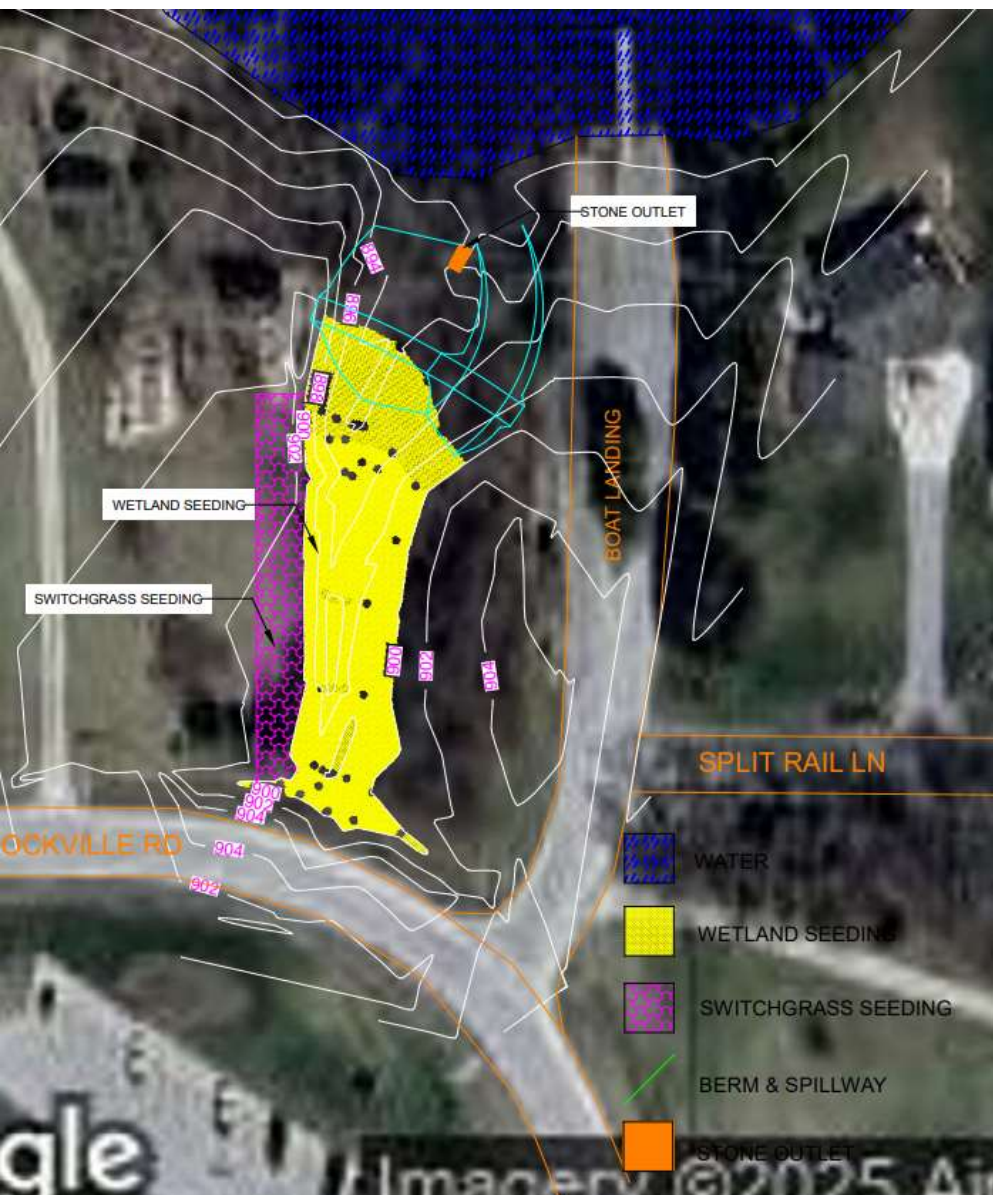


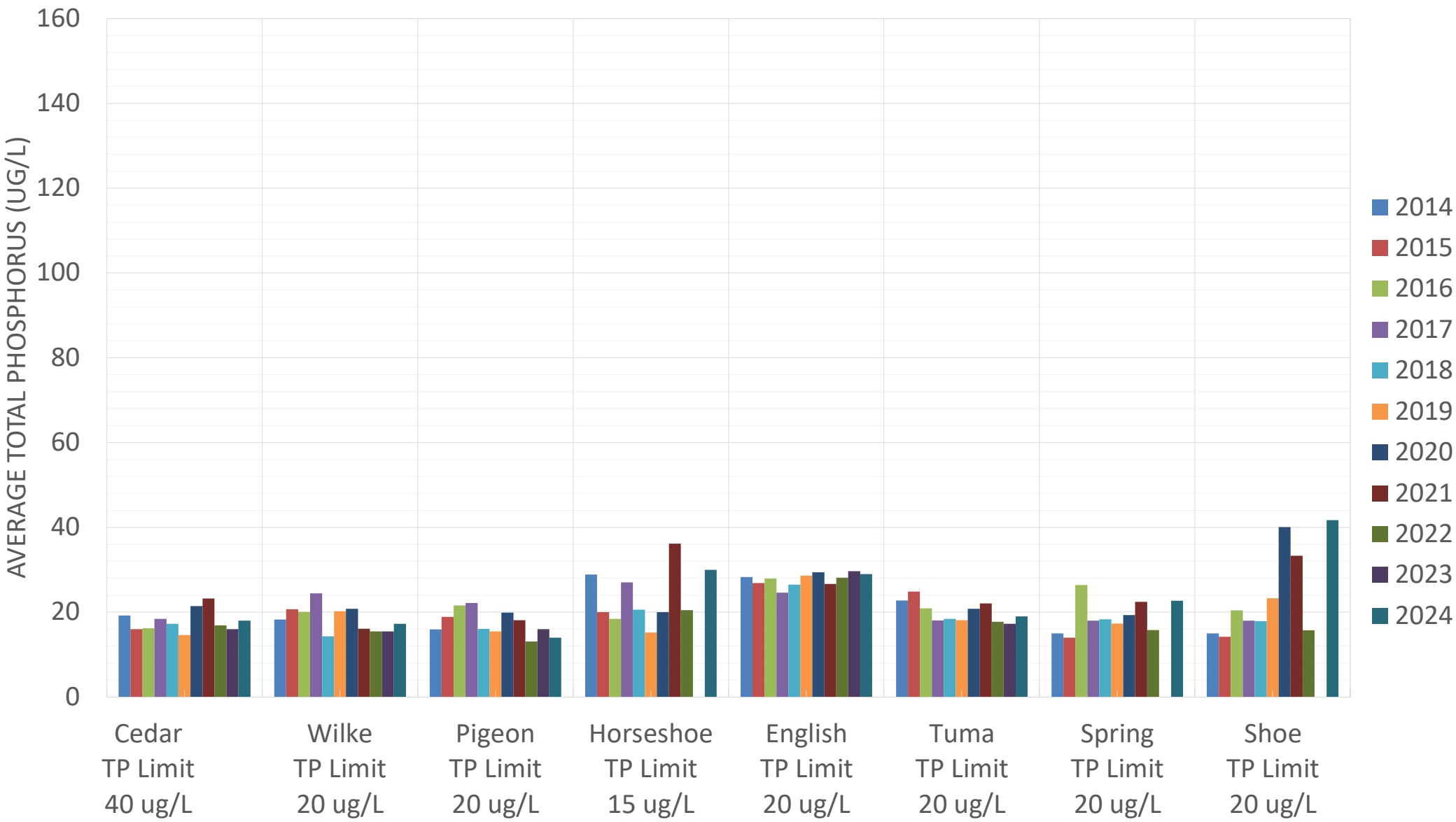
WETLAND RESTORATION & PRAIRIE STRIPS

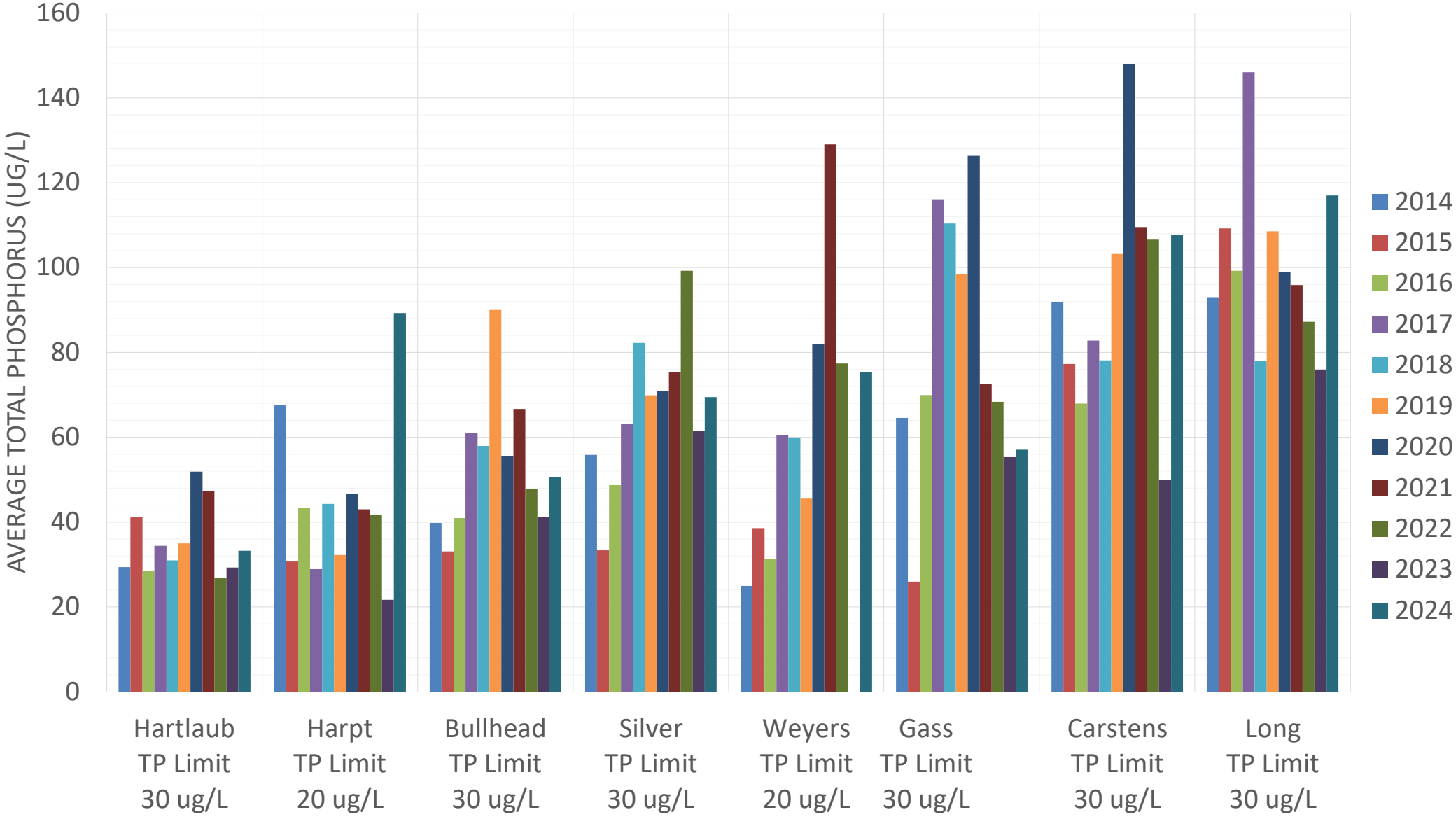














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THANK YOU!