



2024 National CAFO Roundtable

Working With Partner Agencies on Nitrate Reduction in Groundwater

Presented By: WSDA Dairy Nutrient Management Team NW Inspector Amanda Hendrix, LG



Washington
State Department of
Agriculture



Agenda

- Dairy Nutrient Management Act/MOU with Ecology
- Nitrate Priority Areas in Washington State
- Yakima Agricultural Nitrate Source Reduction Project/WSDA Non-Permit Related Efforts to Reduce Nitrates in Groundwater

Washington State Dairy Nutrient Management Act

- RCW 90.64
- Dual mission



Memorandum of Understanding WSDA and Ecology

- WSDA is responsible for compliance and inspections on all dairies in Washington State.
- WSDA is responsible for inspecting CAFOs.
- Ecology is responsible for compliance for AFOs, CAFOs and non-dairy livestock operations.



See Washington Nitrate Prioritization report (May 2016) Publication No. 16-10-011 at <https://fortress.wa.gov/ecy/publications/documents/1610011.pdf> for more information.

Nitrate Priority Areas in Washington State

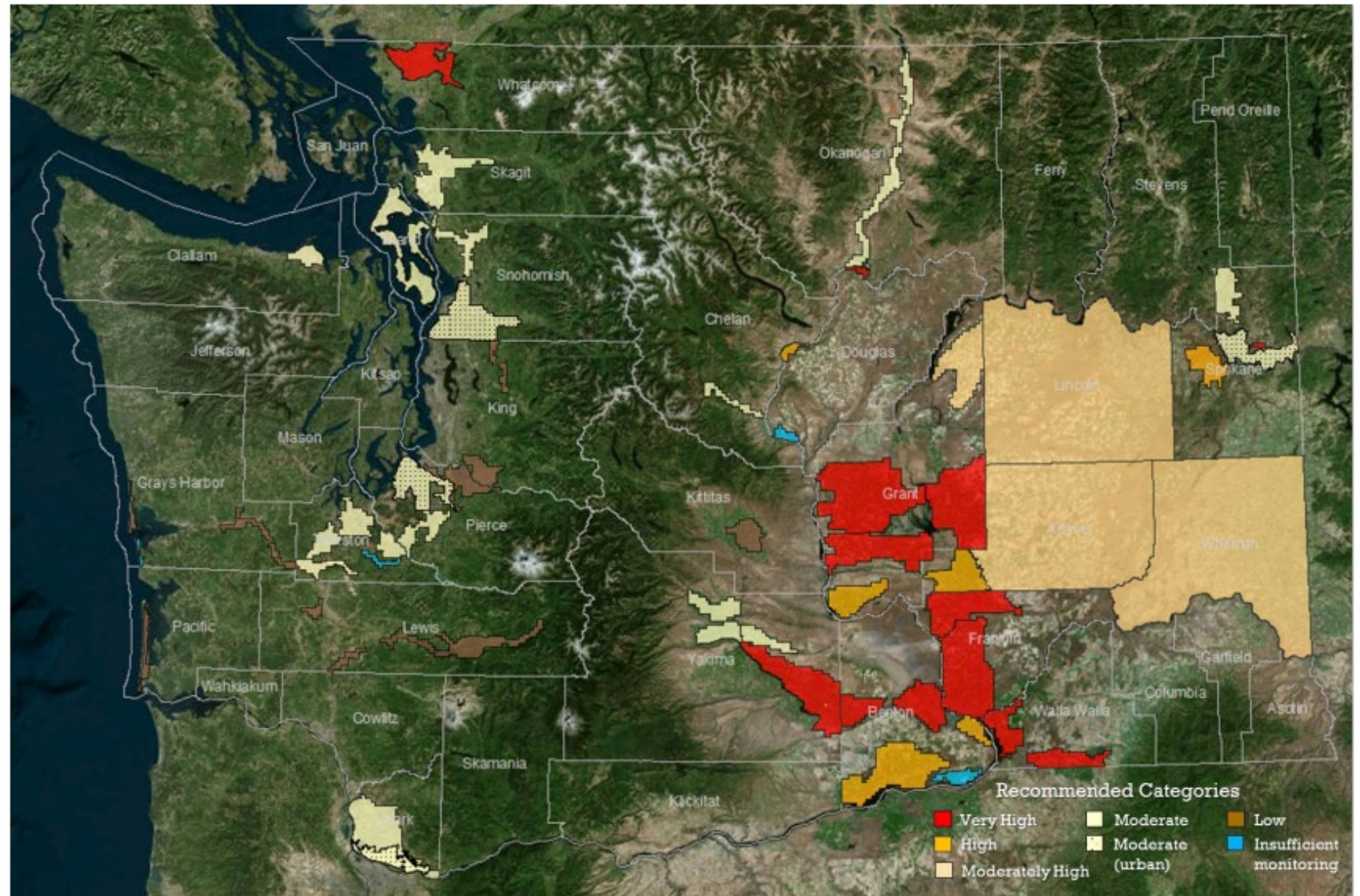


Figure 26: Recommended draft Nitrate Priority Areas and Categories

Number of Dairies in Nitrate Priority Areas and Estimated Total N

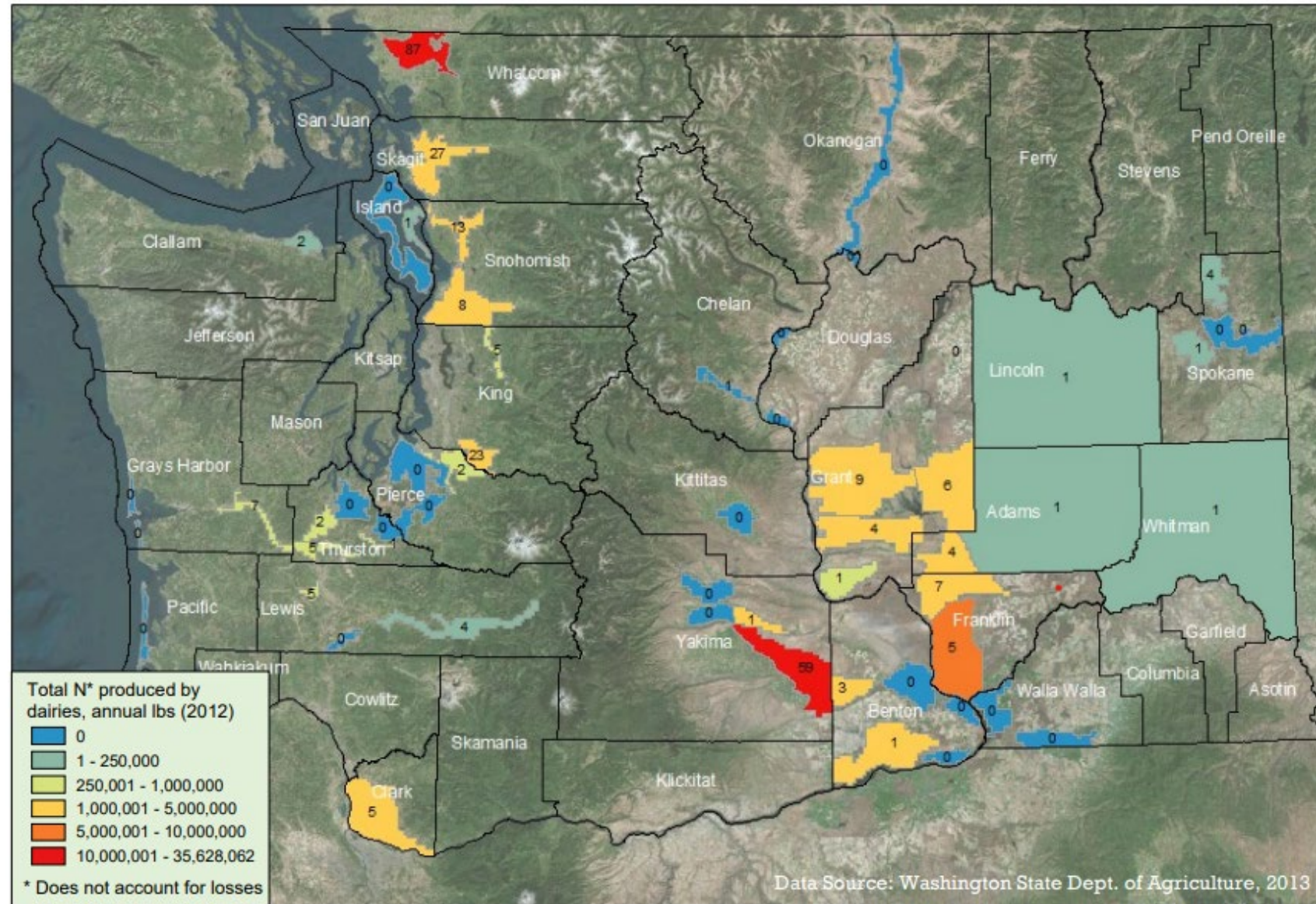
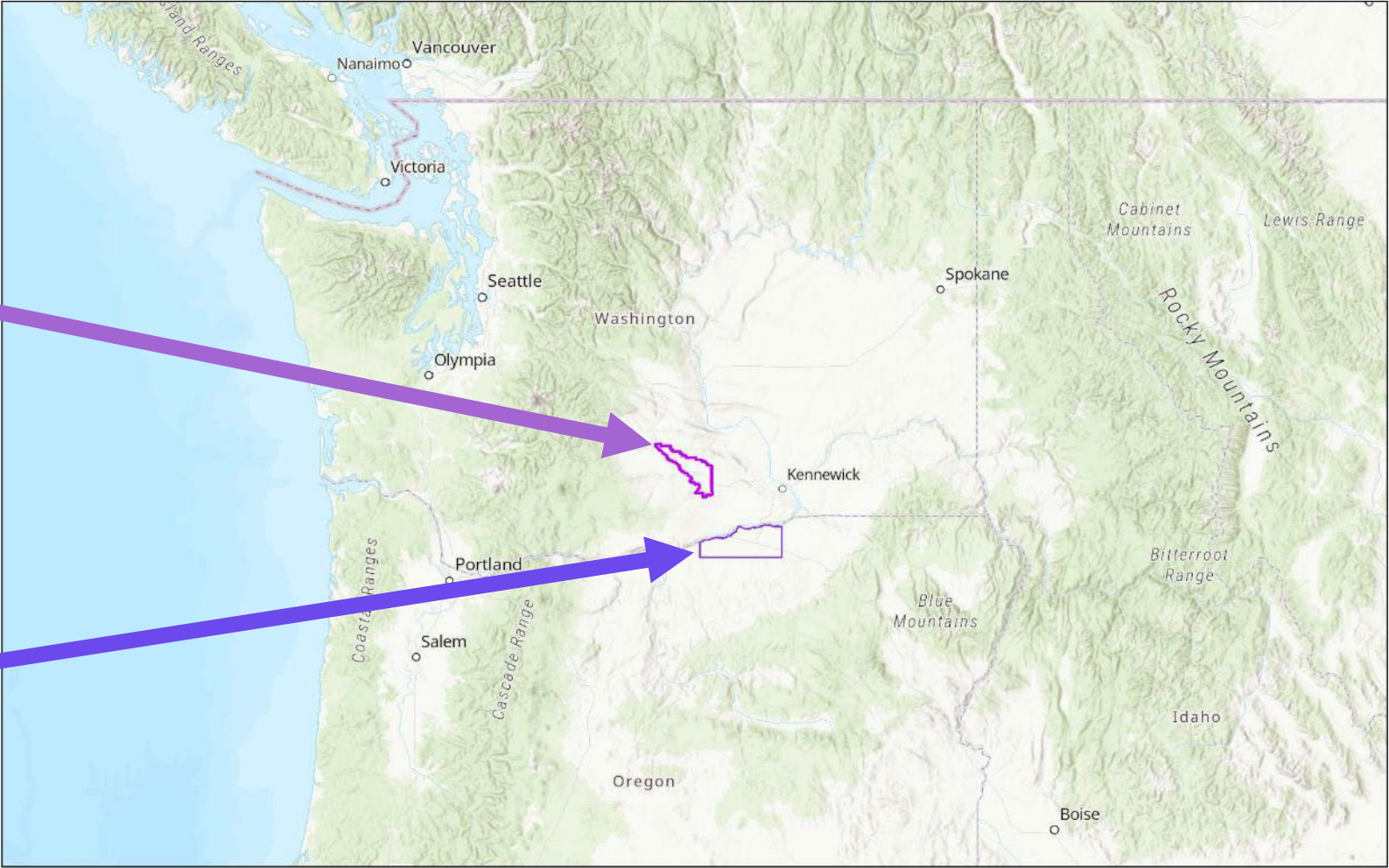


Figure 34: Number of Dairies and Estimated Dairy Total N Produced (not accounting for losses of N), 2010 (WSDA 2012)



OR-WA GWMA

Lower Yakima Valley
Groundwater
Management Area
(LYVGWA)

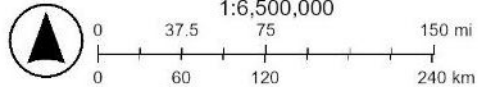
Lower Umatilla Basin
Groundwater
Management Area
(LUBGWMA)



4/23/2024

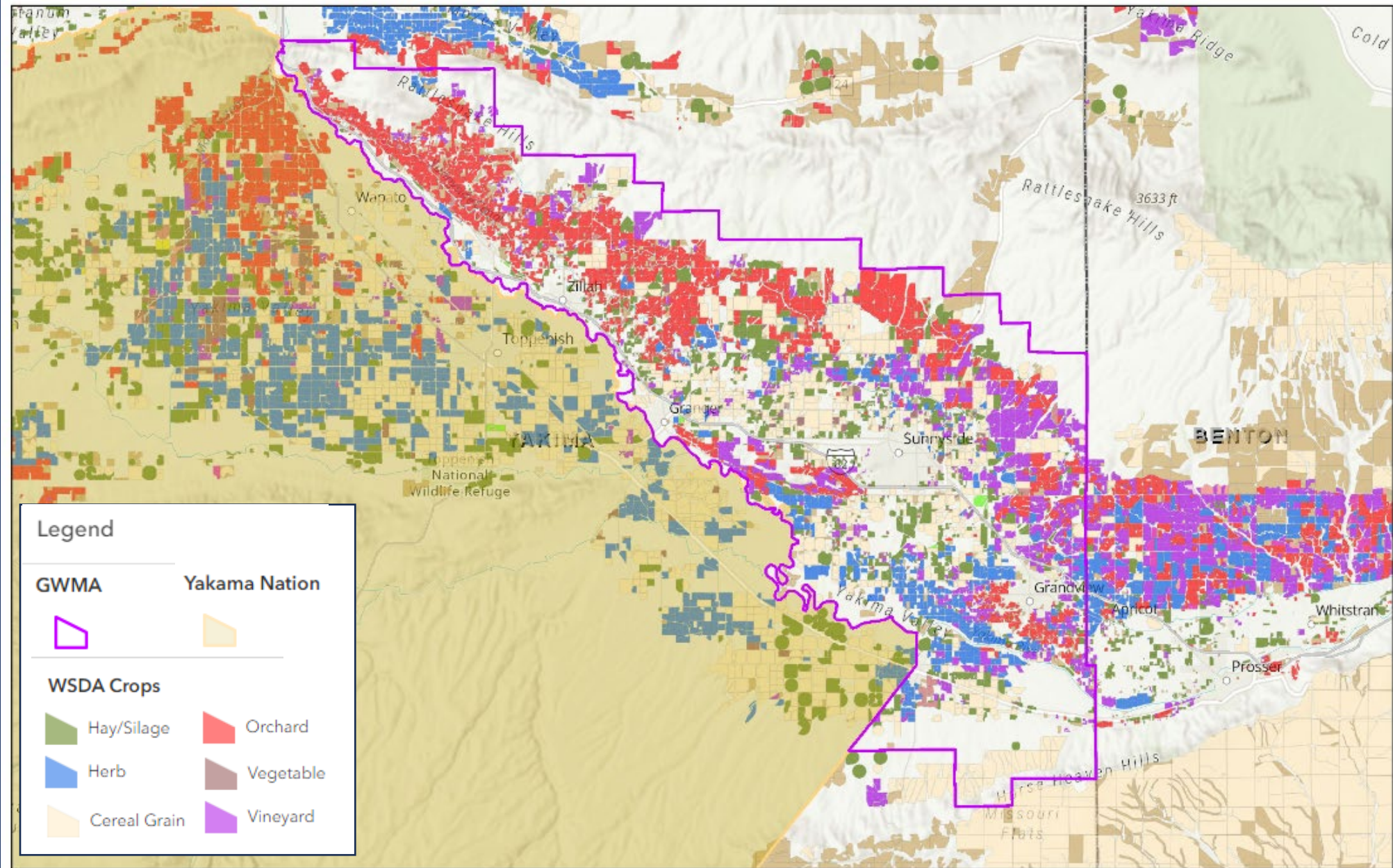
-  Lower_Umatilla_GWMA
-  GWMA

World Hillshade



City of Yakima, WA State Parks GIS, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, USFWS, Esri, USGS

Lower Yakima Valley Agriculture



Lower Yakima Valley Nitrate Reduction Project



New continuous funding by the legislature, 2023-2025 Biennium: \$1,490,000



Based on recommendations of the Lower Yakima Valley Groundwater Management Area advisory committee in 2018.



Positions funded in Dairy Nutrient Management Program (DNMP) and Natural Resource Assessment Section (NRAS)



Pass-through funding for South Yakima Conservation District (SYCD)



Project Objectives



Partnerships



Research



Decision Support Tools



Technical Assistance



Education



Partnerships

DNMP

NRAS

WSU
Extension

SYCD



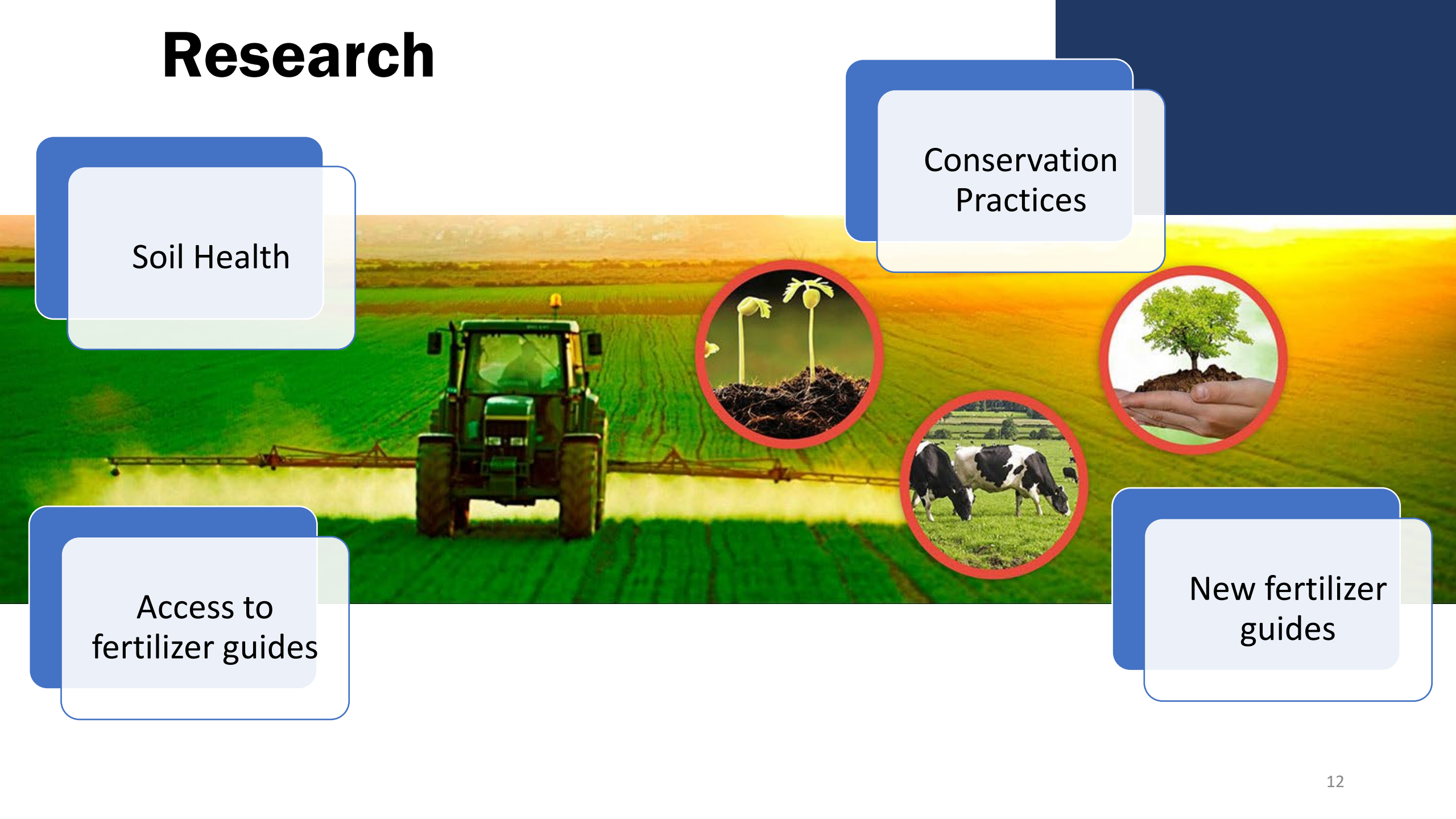
Research

Soil Health

Conservation Practices

Access to fertilizer guides

New fertilizer guides



Decision Support Tools

Irrigation water management planning

Nutrient management planning

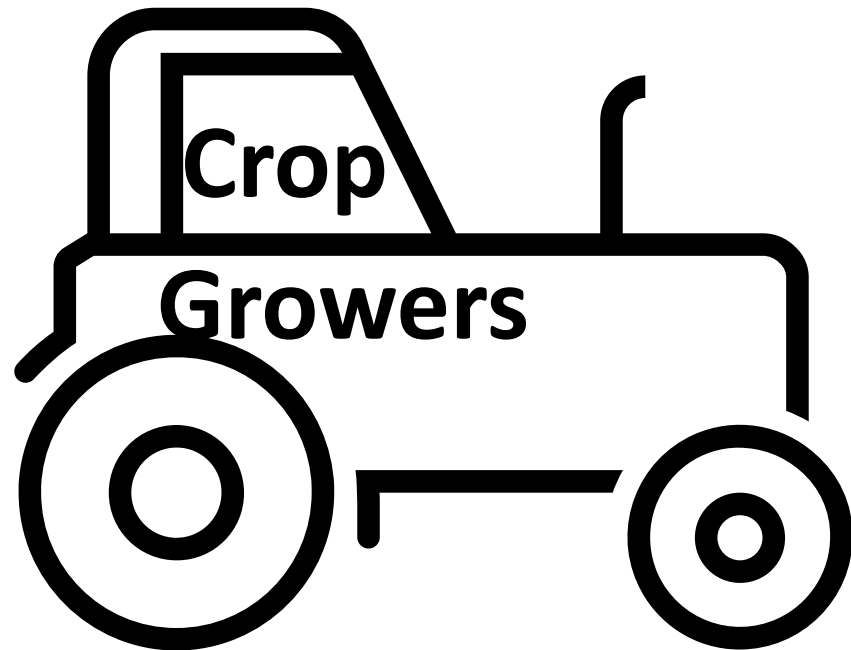
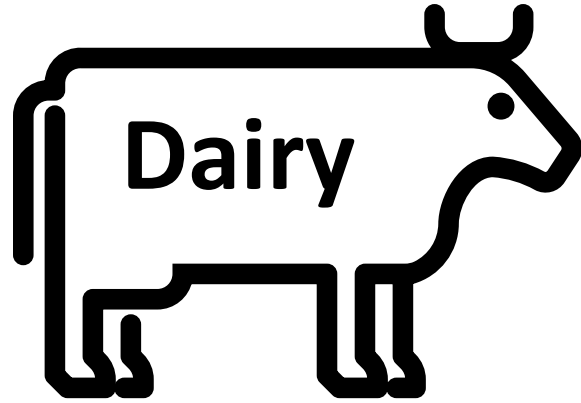
Scheduling and in-season decision support

Deep soil sampling

Soil moisture monitoring



Technical Assistance

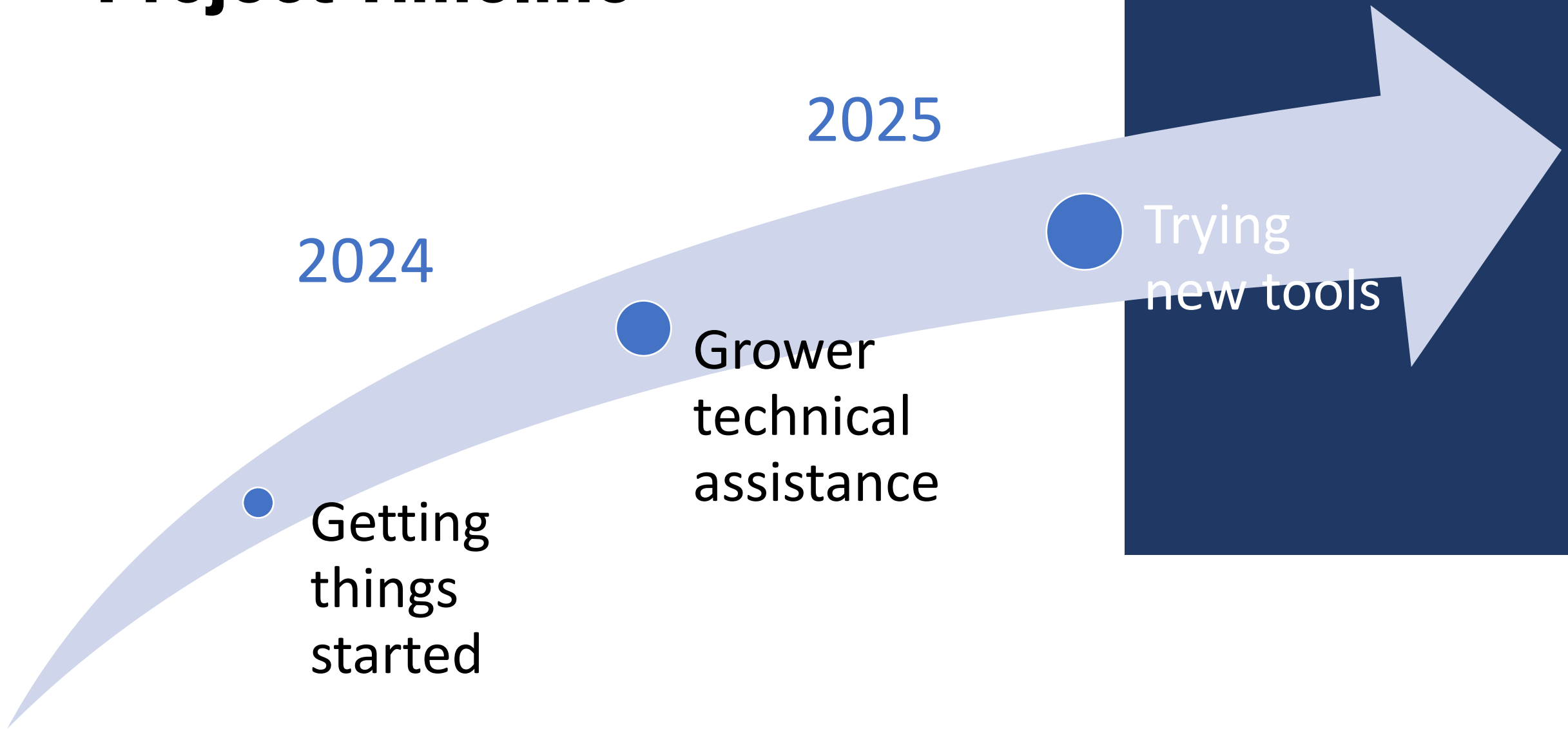


Education

- Field days
- Nutrient management training events
- Online fertilizer guides
- Brochures and handouts



Project Timeline



Contact Us



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