

# Grow Your Stewardship

Taking your conservation to the next level with NRCS

## Conservation through the Generations

While there were many tough decisions for Matt Webber to make upon taking over his family's poultry and grain operation in 2006, his decision to continue implementing conservation practices through the Natural Resources Conservation Service's Environmental Quality Incentives Program (EQIP) wasn't one of them. Matt's father Bill instilled in him the importance of taking care of the land, and Matt has worked with the agency to improve the health and productivity of his operation.

"Practicing conservation is a positive for the viability of our farmland and keeping our crops productive," Matt said. "It's important to continue building on our conservation practices because we're learning everyday about new practices and technologies that may be even better than what was used in the past."

Two of the practices Matt implemented that built upon his father's stewardship were a nutrient management plan and an Agricultural Energy Management Plan (AgEMP).

## Nutrient Management

NRCS worked with Matt to develop a nutrient management plan that optimized his plant yields while reducing the amount of nutrients lost to the environment. The plan

considered all conditions on the farm and how they influenced one another. These include the farm location, soil, climate, crops grown, management conditions, and other site-specific factors. Matt has seen a significant savings since implementing this practice, and on average farmers can save nearly \$30 per acre on land currently receiving excess nutrients.

## Agricultural Energy Management Plan

The AgEMP, or energy audit, completed by certified Technical Service Providers (TSPs) provides:

- ◆ Itemized energy use by individual systems to establish a baseline for electricity and other fuel improvements,
- ◆ Recommendations for equipment improvements and upgrades,
- ◆ Potential energy reductions and financial savings for each recommendation
- ◆ Cost estimates of potential improvements, and
- ◆ Length of expected payback for energy efficiency upgrades

Once completed, eligible producers can apply for EQIP assistance for the purchase, installation, or retrofit of certain buildings or equipment to improve energy efficiency.

After receiving his AgEMP, Matt was able to realize a significant cost-savings by changing out incandescent bulbs in his poultry houses with LED and upgrading motors and equipment to more energy-efficient models.



"We're always moving forward with what we're trying to implement on the farm."  
Matt Webber,  
Webber Family Farm

Examples of other items eligible for energy efficiency improvements include:

- ◆ Plate coolers
- ◆ Ventilation and fans
- ◆ Irrigation pumps
- ◆ Grain dryers
- ◆ Greenhouse improvements
- ◆ Heating and refrigeration units
- ◆ Insulation and building envelope sealing

## Looking to the Future

Matt feels that implementing conservation practices is essential for the long-term sustainability of his operation and to ensure that his land remains productive and healthy for the next generation.

"We're always moving forward with what we're trying to implement on the farm," he said. And we'll continue doing that for the foreseeable future."

To find out about other conservation practices you can implement to continue growing your stewardship, turn to the other side of this factsheet.



## CONTINUING CONSERVATION: PRACTICES FOR A SUSTAINABLE FUTURE

| PRACTICE                                            | PURPOSE                                                                                                                                                                                                                 | BENEFITS                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RESIDUE AND TILLAGE MGT, NO TILL/REDUCED TILL       | Limits soil disturbance to manage the amount, orientation and distribution of crop and plant residue on the soil surface year round                                                                                     | Reduces sheet, rill and wind erosion and excessive sediment in surface waters. Maintains or increases soil health and organic matter content.                                                                                                                                            |
| COVER CROP                                          | Grasses, legumes, and forbs planted for seasonal vegetative cover.                                                                                                                                                      | Maintain or increase soil health and organic matter content. Reduce water quality degradation by utilizing excessive soil nutrients.                                                                                                                                                     |
| FIELD BORDER                                        | A strip of permanent vegetation established at the edge or around the perimeter of a field.                                                                                                                             | Reduce excessive sediment to surface waters (soil erosion). Protect water quality and nutrients in surface and ground waters (water quality degradation). A strip or area of herbaceous vegetation that removes contaminants from overland flow.                                         |
| FILTER STRIPS                                       | A strip or area of herbaceous vegetation that removes contaminants from overland flow.                                                                                                                                  | Reduce suspended solids and associated contaminants in runoff and excessive sediment in surface waters; Reduce dissolved contaminant loadings in runoff.                                                                                                                                 |
| NUTRIENT MANAGEMENT                                 | Manage rate, source, placement, and timing of plant nutrients and soil amendments while reducing environmental impacts.                                                                                                 | Improve plant health and productivity; Reduce excess nutrients in surface and ground water. Reduce emissions of greenhouse gases (GHG).                                                                                                                                                  |
| PRESCRIBED GRAZING                                  | Managing the harvest of vegetation with grazing and/or browsing animals with the intent to achieve specific ecological, economic, and management objectives.                                                            | Improve or maintain quantity and/or quality of forage for grazing and browsing animals' health and productivity; Improve or maintain surface and/or subsurface water quality and/or quantity.                                                                                            |
| WINDBREAKS/SHELTERBELT ESTABLISHMENT AND RENOVATION | Establishing, enhancing, or renovating windbreaks, also known as shelterbelts, which are single or multiple rows of trees and/or shrubs in linear or curvilinear configurations.                                        | Reduce soil erosion from wind. Improve air quality by intercepting airborne particulate matter, chemicals, and odors, and/or by reducing airflow across contaminant or dust sources                                                                                                      |
| RIPARIAN HERBACEOUS COVER                           | Grasses, sedges, rushes, ferns, legumes, and forbs tolerant of intermittent flooding or saturated soils, established or managed as the dominant vegetation in the transitional zone between upland and aquatic habitats | Provide or improve food and cover for fish, wildlife and livestock; Improve and maintain water quality.                                                                                                                                                                                  |
| RIPARIAN FOREST BUFFER                              | An area predominantly covered by trees and/or shrubs located adjacent to and up-gradient from a watercourse or water body.                                                                                              | Reduce transport of sediment to surface water, and reduce transport of pathogens, chemicals, pesticides, and nutrients to surface and ground water; Maintain or increase total carbon stored in soils and/or perennial biomass to reduce atmospheric concentrations of greenhouse gasses |
| WILDLIFE HABITAT PLANTING                           | Establishing wildlife habitat by planting herbaceous vegetation or shrubs.                                                                                                                                              | Improve degraded wildlife habitat for the target wildlife species or guild; Establish wildlife habitat that resembles the historic, desired, and reference native plant community.                                                                                                       |
| TREE/SHRUB ESTABLISHMENT                            | Establishing woody plants by planting seedlings or cuttings, by direct seeding, and/or through natural regeneration.                                                                                                    | Maintain or improve desirable plant diversity, productivity, and health by establishing woody plants; Sequester and store carbon.                                                                                                                                                        |
| COMBUSTION SYSTEM IMPROVEMENT                       | Replace, repower, or retrofit an agricultural combustion system and related components or devices.                                                                                                                      | Improve air quality by reducing emissions of oxides of nitrogen (NOx) and of particulate matter (PM); Reduce energy use by increasing the efficiency of the combustion system.                                                                                                           |
| ENERGY EFFICIENT AGRICULTURE OPERATION              | On-farm facilities, equipment, and management strategies that provide increased energy efficiency.                                                                                                                      | Improve energy efficiency for facilities, equipment, and/or processes.                                                                                                                                                                                                                   |
| ENERGY EFFICIENT BUILDING ENVELOPE                  | A boundary between a conditioned space and an unconditioned space that meets or exceeds best practices for energy efficiency.                                                                                           | Improve energy efficiency of an existing agricultural building envelope.                                                                                                                                                                                                                 |
| ENERGY EFFICIENT LIGHTING SYSTEM                    | An agricultural lighting system with increased energy efficiency.                                                                                                                                                       | Improve energy efficiency of an agricultural facility lighting system.                                                                                                                                                                                                                   |
| DRAINAGE WATER MANAGEMENT                           | The process of managing the drainage volume and water table elevation by regulating the flow from a surface or subsurface agricultural drainage system.                                                                 | Reduce nutrient, pathogen, and pesticide loading from drainage systems into downstream receiving waters, and oxidation of organic matter in soils; Improve productivity, health, and vigor of plants.                                                                                    |
| SOIL CARBON AMENDMENT                               | Using carbon-based amendments to increase soil carbon and improve the physical, chemical, and biological properties of the soil.                                                                                        | Improve plant productivity and health, and the efficient use of irrigation water; Maintain, increase, or improve soil organic matter quantity and quality; Maintain or improve soil aggregate stability, and habitat for soil organisms                                                  |

*\*\* Some of these practices qualify as High Priority or Source Water Protection practices, and are eligible for an enhanced payment rate.*



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