EXECUTIVE SUMMARY

About McCarty Family Farms

More than 100 years ago, the McCarty family started and ended every day milking cows by hand in a small barn without electricity in northeast Pennsylvania. Four generations later, there are four dairies comprising McCarty Family Farms, three in Kansas and one in Nebraska. In 2012, the McCartys entered into a business partnership with Danone North America to directly supply milk to make some of its Dannon yogurts. This relationship allows the McCartys to target conservation practices on their farms to meet the specific needs of Danone’s customers. This executive summary is a consolidation of findings for all four farm locations.

Quantifying the Impact of Actual Farm Practices

The benefits were determined through EcoPractices’ unique process that is able to pinpoint the influence of specific agricultural practices. While agricultural practices have progressed to better care for natural resources, the ability to quantify the influence these practices have on sustainability has not kept pace. The McCarty family seeks to put evidence-based measurements to its farm practices. Having such data brings more depth to decision-making. Short- and long-term goals can be based upon more meaningful information.

MCCARTY FAMILY FARMS MILK PROCESSING INPUTS AND OUTPUTS

Daily production stats:

Over 29 million gallons of raw milk is processed from the four McCarty dairy farms.

Raw milk from the Rexford dairy is piped 100 feet from the milking parlor to the plant. For the three additional McCarty dairies, raw milk is trucked to the Rexford plant for processing.

Three end products from processing annually:

- 6.7 million gallons of condensed skim milk which are trucked to the Dannon yogurt plants.
- 2.3 million gallons of pasteurized heavy cream which are trucked to a plant and made into butter.
- 20.7 million gallons of water from the condensing plant for reuse on the Rexford farm.

ENVIRONMENTAL BENEFITS FROM WATER MANAGEMENT

During 2017, McCarty Family Farms saved and reused:

- 157 million gallons of water enabling the family to reuse it again and again.
- This equates to 430,000 gallons every day.
- This is the amount of water in almost 4,300 average-sized bathtubs filled to the brim everyday.

The farm’s water conservation efforts saved 342.9 million gallons of Ogallala Aquifer ground water, which equates to 518 Olympic-sized swimming pools.


McCarty’s average haul to its processing plant is 63 miles.

The national average distance to a processing plant is 275 miles.

26 bird boxes protect susceptible species

25 acres of native plants for biodiversity and pollinators
ENVIRONMENTAL BENEFITS FROM SOIL PRACTICES

Because of the soil practices at all four McCarty Family Farms as well as neighboring fields that received manure fertilizer and/or sourced feed to the dairies during 2017, totaling over 12,300 acres, significant environmental benefits resulted.

- **21,808** US tons reduction of carbon dioxide equivalent, which is the same as
  - **4,235** fewer passenger cars on the road each year
  - or almost **59** rail cars of coal saved from being burned
- **6,922** US tons of carbon sequestration, which is the same as
  - **7,364** acres of US forest that sequester carbon a year
- **48,723** US tons of soil saved instead of being lost to erosion, which is the same as
  - **3,045** dump trucks of soil
- **566** US tons of nitrogen fertilizer saved from runoff into waterways

CARBON DIOXIDE REDUCTION BENEFITS

During 2017, everyday operations at all four McCarty’s Family Farms*:

- Reduced its carbon dioxide output by **4,595** US tons which is equivalent to
  - **892** average passenger cars off the road for a year
  - **450** American homes
  - or almost **12** rail cars of coal saved (2,370 US tons) from being burned

Data Collection and Verification plus Statement of Accuracy completed and on file. This summary report is a collection of results from multiple Sustainability Analysis On-Farm Practices Reports. This summary must not be edited or altered in any way without the involvement and consent of EcoPractices.

* EcoPractices estimates an environmental impact value for reducing greenhouse gas emissions, reducing soil erosion, and reducing nutrient loss due to reduced leaching. These estimates adhere to processes that are documented by the National Resource Conservation Service Technical Guides and publications from the Environmental Protection Agency. These environmental impact values are tailored to a specific location and participant’s operation or project. Models used are supported by USDA, NRCS, other government agencies, and major universities.