# Sustainability Analysis ON-FARM PRACTICES REPORT 2017

## 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.

**10,420 gallons of fuel** saved in 2017.

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

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

### 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**.

**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

**Average yearly energy use by 450 American homes**

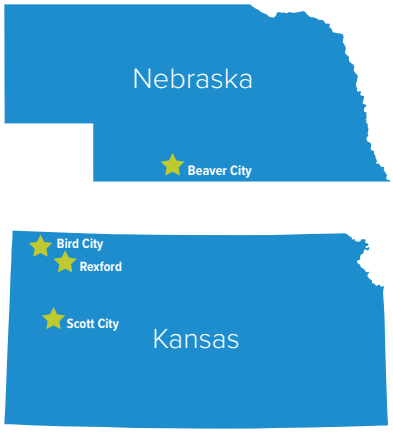
or almost **12 rail cars of coal saved** (2,370 US tons) from being burned

## BENEFITS FROM ANIMAL CARE

**8,400 Dairy cows** producing milk

**9.9 gallons of milk produced** per cow per day

## FARM LOCATIONS

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**An Evaluation of Actual Performance by**
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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.