

LESSON 3

Dairy in Our Environment

Going Round and Round
Grades PreK-2nd

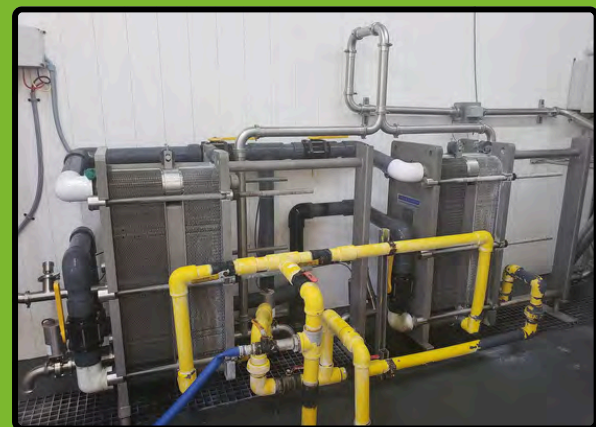
DISCOVER Dairy



»» Introduction

HOW DO FARMERS RECYCLE AND CONSERVE?

We will learn the importance of farmers and consumers recycling and conserving water on farms and in homes to help protect our environment.



»» Activating Strategy

DAIRY: GOOD FOR YOU, GOOD FOR THE PLANET

Let's look at how dairy is good for you and the planet



»» Words to Learn



DAIRY DEFINITIONS

Conserve: To use less of something

Crops: What a farmer plants in a field and grows into food for people and feed for the animals

Environment: The surroundings in which a person, plant or animal lives

Field: A piece of land where a farmer plants crops

Milker: A person who guides cows through the milking process on a dairy farm

Recycle: To use something again

»» Vocabulary



CONSERVE

Definition: to use less of something



Turn off facet when brushing
your teeth



Turn the hose off between
uses

»» Vocabulary



CROPS

Definition: What a farmer plants in a field and grows into food for people and feed for the animals



Wheat



Corn

»» Vocabulary



ENVIRONMENT

Definition: the surroundings in which a person, plant or animal lives



Winter Barn



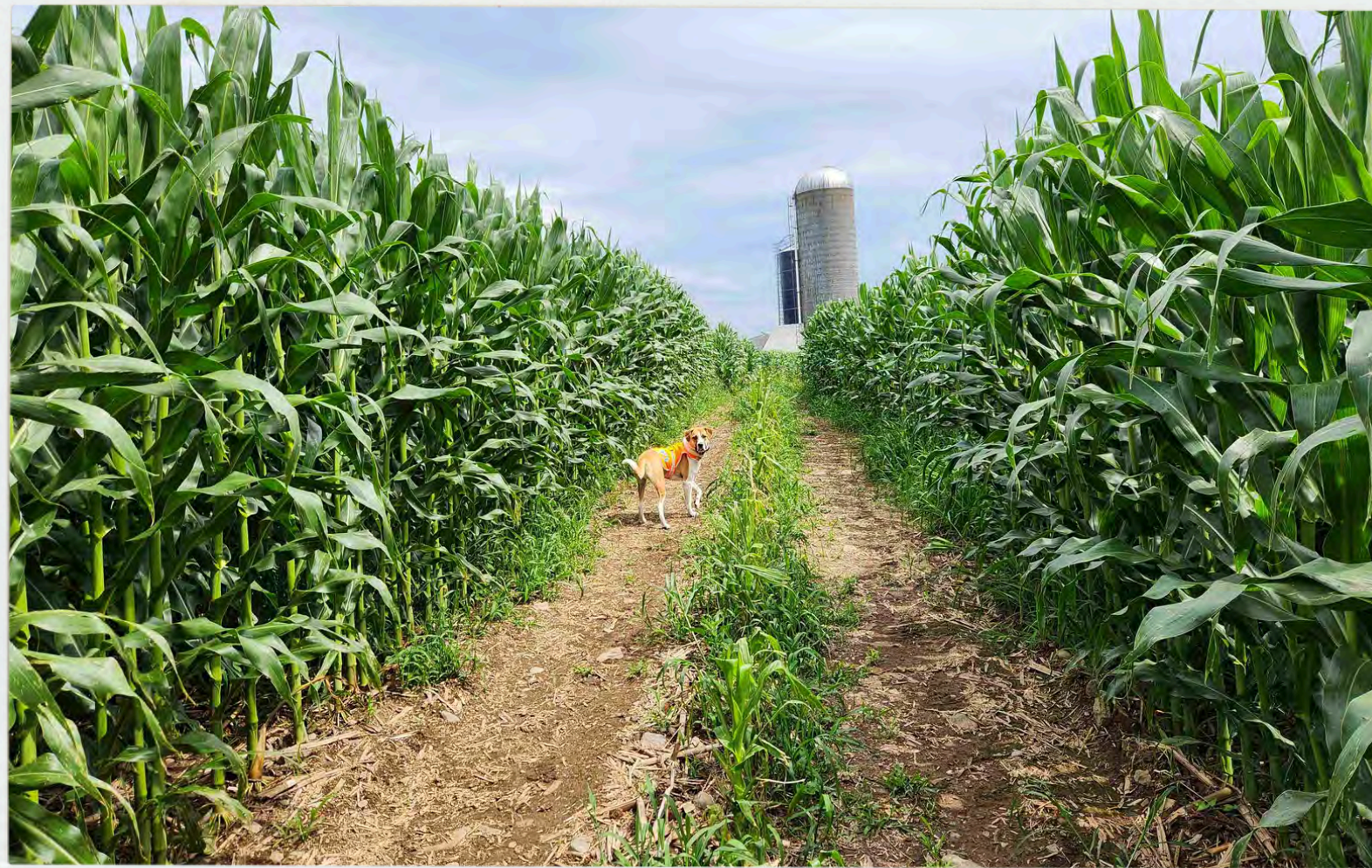
Summer Pasture

»» Vocabulary



FIELD

Definition: a piece of land where a farmer plants crops



Corn Field



Rye Field

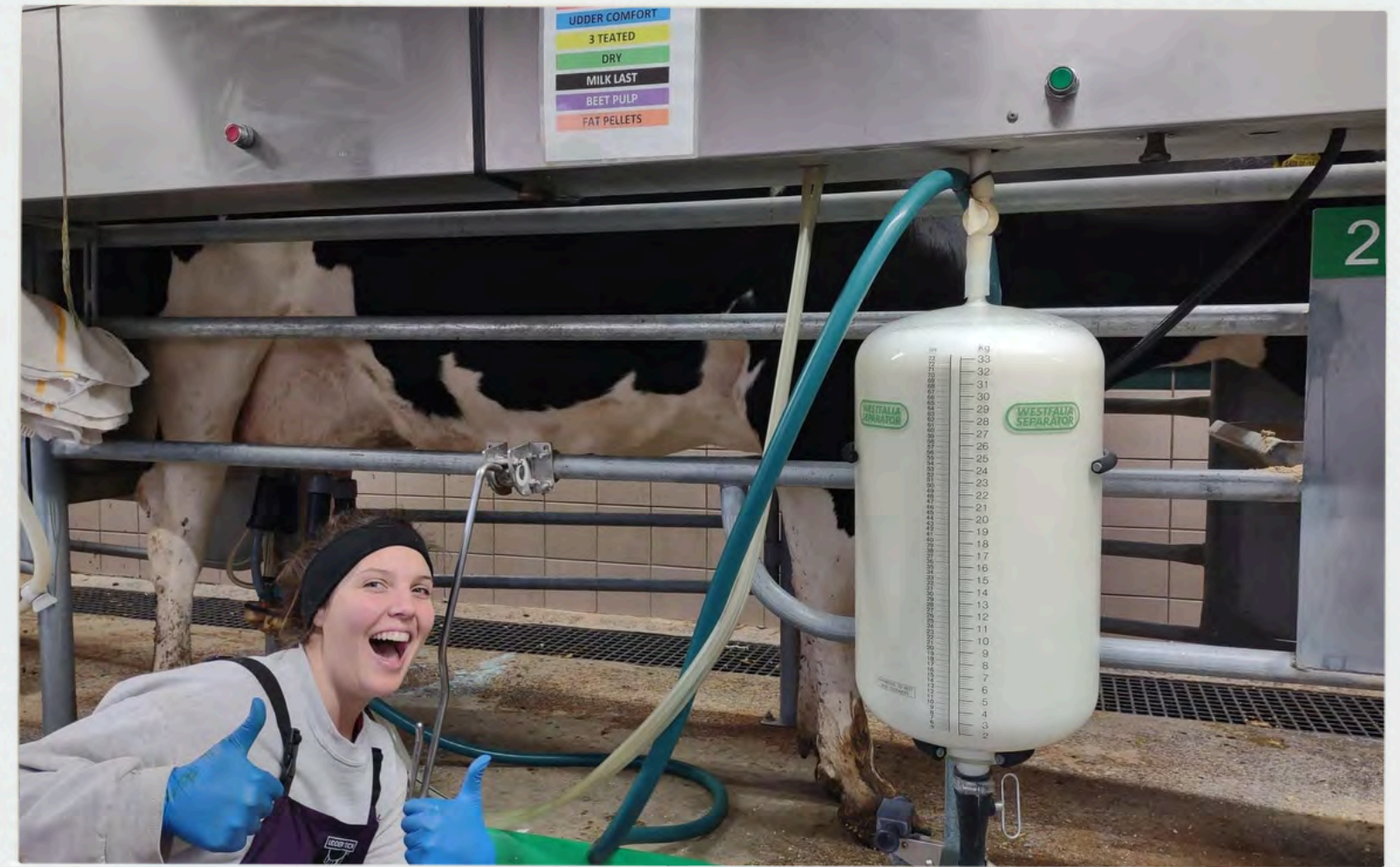
»» Vocabulary

MILKER

Definition: a person who guides cows through the milking process on a dairy farm



Full-time Milker



Student Milker

»» Vocabulary

RECYCLE

Definition: to use again



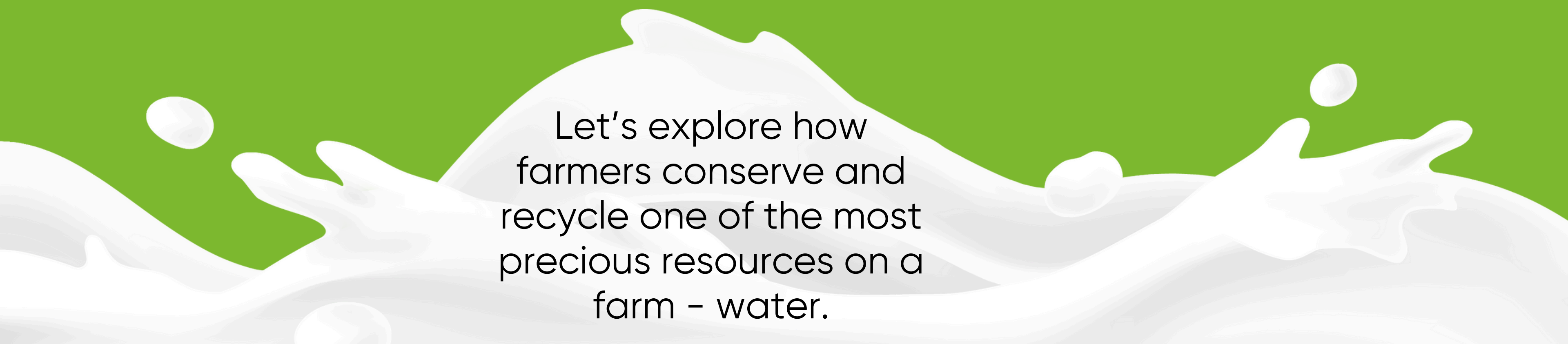
Capturing rain water to fertilize



Water used to cool down milk is then drinking water for the cows

INTRODUCTION

How do dairy farmers recycle water?

A stylized illustration of a white milk splash against a green background. The splash is composed of several white, rounded shapes that suggest movement and liquid. The text is centered within the splash.

Let's explore how
farmers conserve and
recycle one of the most
precious resources on a
farm - water.

»» Farmers Recycle and Conserve Water



CLEAN BARN



Water runs through the milk lines to clean and sanitize.



That water is used again to flush and clean the barn floors.



All clean!

» Farmers Recycle and Conserve Water



COOL DOWN MILK



Milk comes out of the udder at 101.5°F and travels through the pipes.



The plate cooler cools the milk down to about 60°F with cold water.



Now it will take less energy to cool the milk to 34°F for storage.

»» Farmers Recycle and Conserve Water



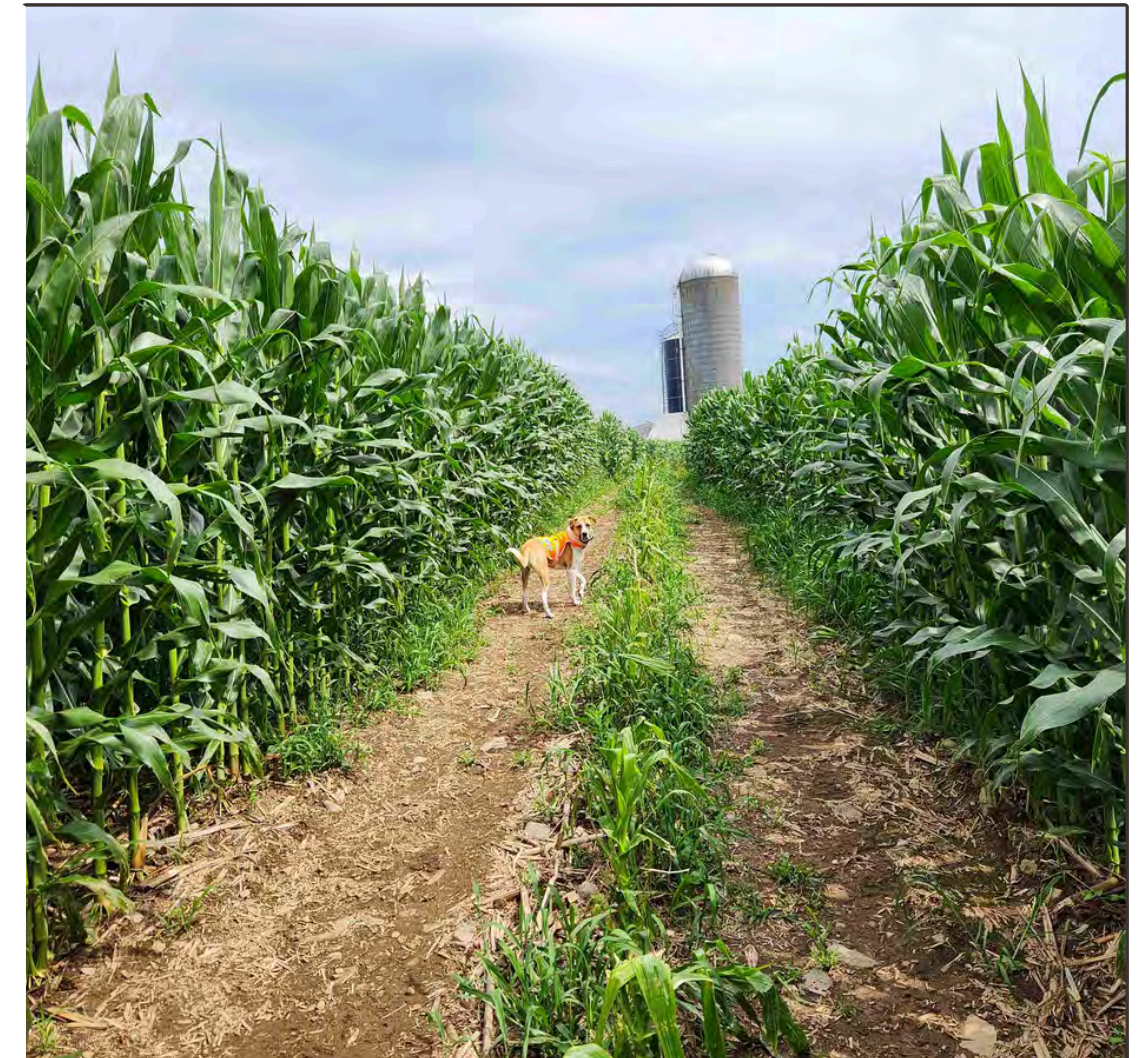
WATER THE CROPS



Recycled water is stored in the water towers and used to wash the barns.



The waste water is stored in a lagoon until it can be spread on a field.



The crops grow thanks to the nutrient-rich, recycled water!

» Farmers Recycle and Conserve Water



GIVE WATER TO COWS TO DRINK



Water first cools down the milk in the plate cooler.



Then the clean water is used to fill the water tubs.

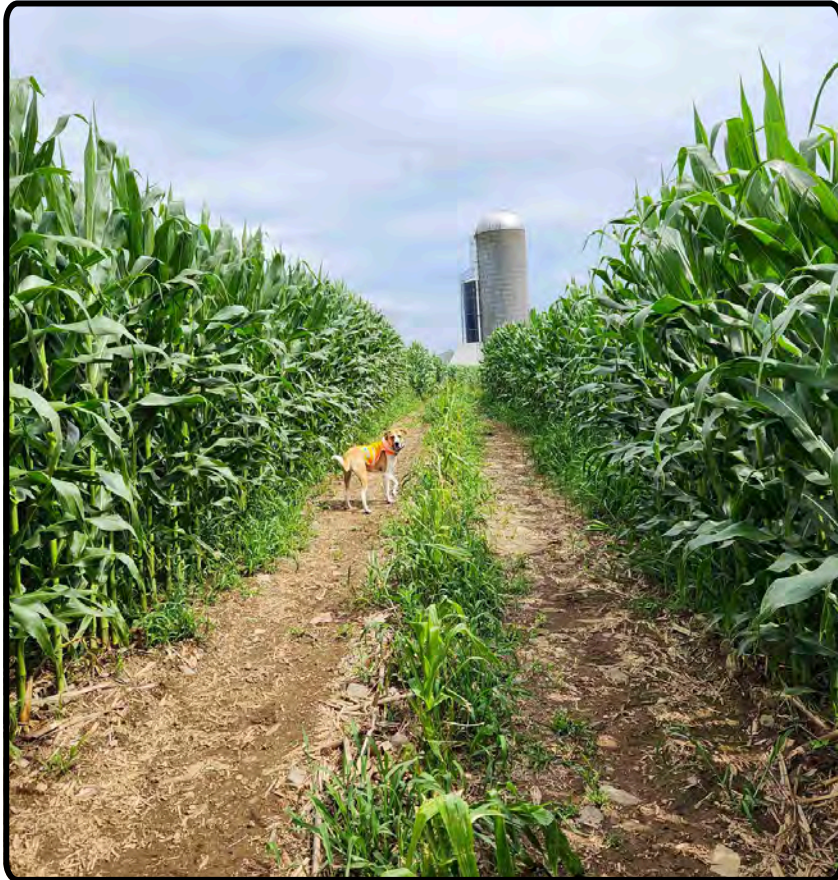


Cows drink 40 gallons of water every day!

»» Farmers Recycle and Conserve Water



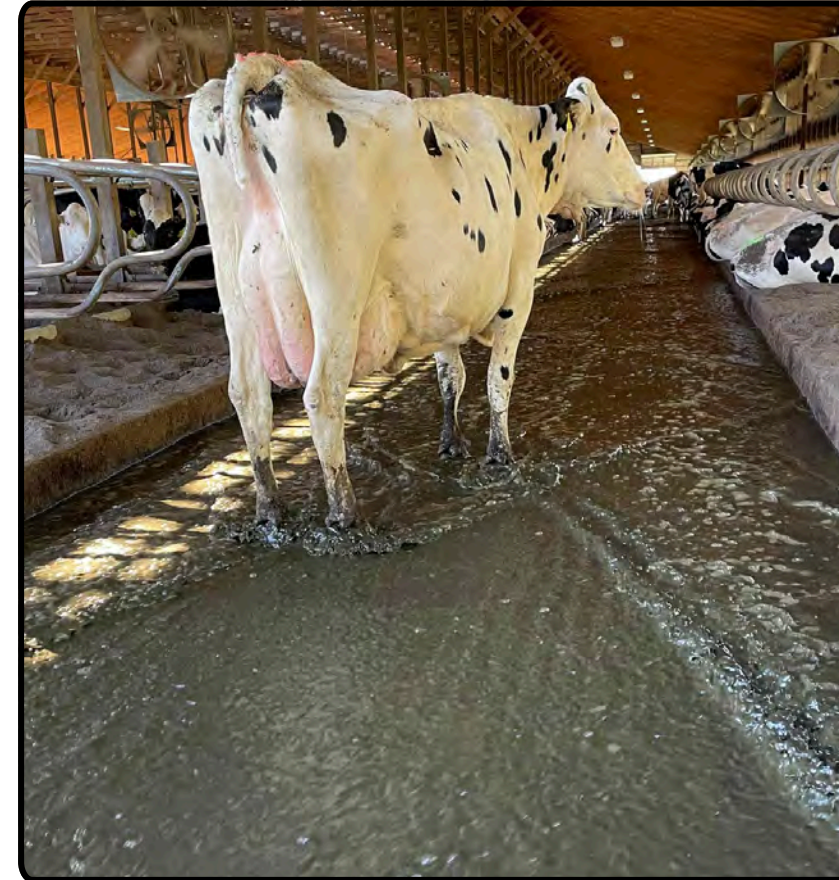
REVIEW



Recycle rainwater to water crops, wash cows, and keep cows cool (sprinklers).



Recycle the cold water that cools down the milk into drinking water for cows.



Recycle the water used when milking the cows to clean the barn and alleys with a flush system.



Recycle the water used to clean the alleys to water the crops with nutrient-rich water.

CONSUMERS RECYCLE

How can you recycle and conserve water?

A stylized white illustration of a water splash or milk splashing upwards, with several droplets frozen in mid-air, set against a solid green background.

Let's explore how you
can help recycle water
in your home.

»» Consumers Recycle and Conserve Water



RECYCLE RAINWATER



Recycle rainwater by using a drain system connected to the roof.



Collect the water in a barrel.



Use the recycled water to water your flowers and garden.

»» Consumers Recycle and Conserve Water



CONSERVE WATER



Turn off the facet while scrubbing your hands.



Turn off the water while brushing your teeth



Try taking shorter showers.

»» Recycle and Conserve Water



CLOSURE

Share one way you know
how to recycle and conserve
water.



»» Career Spotlight: Milker

INTRODUCTION

Milkers have an important job on the farm to make sure we get milk and dairy products at the store.



»» Career Spotlight: Milker



ACTIVATING STRATEGY

Let's discover the career of a milker



»» Career Spotlight: Milker

WHO IS THE MILKER

The milkers guide the cows through the milking process. They get milk from the cows to the milk tank two to three times each day.



» Career Spotlight: Milker



MILKER RESPONSIBILITIES

1. Move the cows into the milking parlor.
2. Prepare the cows to be milked while checking the cow's health.
3. Milk the cows with a milking unit.
4. Clean the milk parlor and equipment.



CLOSURE

- Tell us one responsibility of the milker.
- Are you interested in being a dairy cow milker when you grow up?



Share one way that dairy farmers recycle water on their farms.

