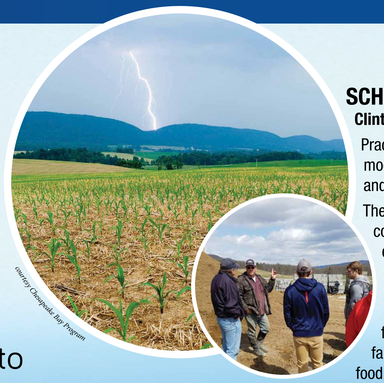
Dairy Farmers' Commitment to a Clean Chesapeake Bay

Dairy farmers live on or near the land they farm. They understand that practicing environmental stewardship is not only good for their farms, their communities and their bottom line—it's the right thing to do. Here are just a few examples of what dairy farmers are doing for local streams, rivers, and the Chesapeake Bay.



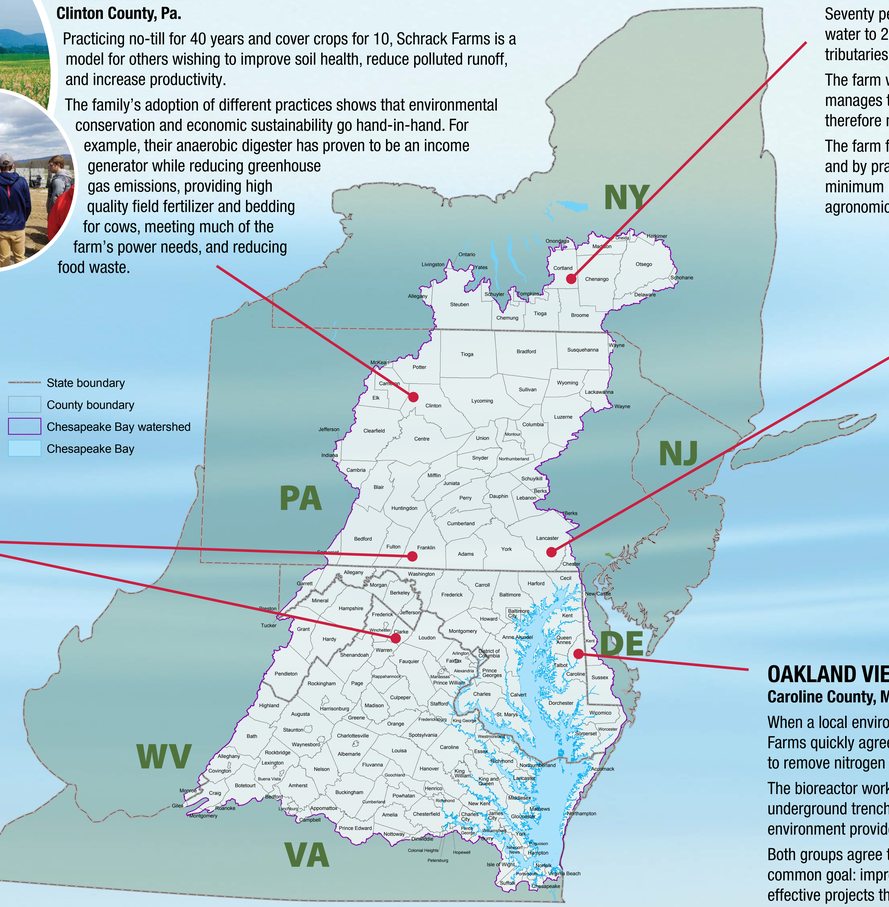
courtesy Chesapeake Bay Program

SCHRACK FARMS

Clinton County, Pa.

Practicing no-till for 40 years and cover crops for 10, Schrack Farms is a model for others wishing to improve soil health, reduce polluted runoff, and increase productivity.

The family's adoption of different practices shows that environmental conservation and economic sustainability go hand-in-hand. For example, their anaerobic digester has proven to be an income generator while reducing greenhouse gas emissions, providing high quality field fertilizer and bedding for cows, meeting much of the farm's power needs, and reducing food waste.



Map used with permission from Chesapeake Bay Program

E-Z ACRES

Cortland County, N.Y.

Seventy percent of the McMahon family farm sits over an aquifer which provides water to 23,000 people. In addition, surface runoff from part of the farm ends up in tributaries to the Susquehanna River and eventually the Chesapeake Bay.

The farm was among the first in the U.S. to practice precision feeding, which manages the quantity and form of nitrogen and phosphorous fed to livestock and therefore minimizes the amount of those nutrients excreted in manure.

The farm further protects local water supplies with a network of riparian buffers and by practicing soil conservation. Their manure storage system goes well beyond minimum requirements. The farm monitors multiple wells on the property to evaluate agronomic practices and assure the public that their water supply is being safeguarded.

OREGON DAIRY

Lancaster County, Pa.

The Hurst family engages in numerous sustainable practices, which include composting food waste and cow manure to produce a rich source of nutrients sold to gardeners, running solar panels on the family-owned grocery store's roof, and operating an anaerobic digester that captures methane gas from manure to make electricity and heat for hot water.

Oregon Dairy practices no-till farming, improving soil conditions and reducing sediment runoff into creeks and streams. Native trees and perennials also are placed near the stream to reduce runoff, provide habitat, and cool the water for aquatic life.

courtesy Chesapeake Bay Program

courtesy Chesapeake Bay Program

MERCER VU FARMS

Franklin County, Pa. and Clarke County, Va.

The Hissong family maintains a high standard of cow comfort while protecting local waterways. First, recycled waste water forces sand (used for cow bedding) and manure through a separator; this process makes up to 95% of the sand available for reuse. The manure then goes through a series of screens, screw presses, and a centrifuge to separate liquids and solids.

The centrifuge removes 40% of the phosphorus—a potential source of water pollution—from liquid manure, allowing Mercer Vu to not only keep phosphorus out of local waterways but to better target its application to crops. The manure solids are used for cow bedding and compost.

Mercer Vu utilizes cover-cropping and no-till to improve soil health and allow stormwater to soak into the ground instead of causing erosion. The farm also planted riparian buffers around some of their fields to absorb runoff.

courtesy Chesapeake Bay Program

OAKLAND VIEW FARMS

Caroline County, Md.

When a local environmental organization proposed partnering on a project, Oakland View Farms quickly agreed. The result was a woodchip bioreactor, the first of its kind in Maryland to remove nitrogen from agricultural drainage water.

The bioreactor works much like a wetland. Drainage is diverted into an underground trench filled with woodchips. The woodchips and low oxygen environment provide the perfect conditions for bacteria to remove nitrogen.

Both groups agree the partnership works because they identified a common goal: improve the community's water quality through cost-effective projects that could be replicated on other sites.

Visit **AmericanDairy.com** to learn more.