

Holsum Dairies

Reducing Wastewater Volume with U-drain



PROJECT OVERVIEW

Holsum Dairies is a large dairy operation in Wisconsin, committed to environmental sustainability. As part of designing a new feed storage pad for corn silage and haylage, Holsum Dairies required a drainage system capable of managing both clean stormwater and nutrient-rich leachate runoff, without corroding or compromising the integrity of the concrete pad over time.

Holsum selected U-drain's stainless steel industrial system to support a new regulatory-approved strategy that allows the dairy to divert clean water as stormwater while collecting only high-nutrient leachate for proper handling.

THE NEED

Feed storage areas generate two types of runoff:

- » Stormwater (rain and snowmelt) that is clean and safe to divert
- » Leachate, a highly acidic liquid produced as silage ferments, with a pH of 3–4

Because of nutrient concentration regulations, dairies must traditionally collect all precipitation and runoff, treating it the same as manure. This process requires significant handling, storage, and land application – creating both cost and operational strain. Holsum Dairies needed a drainage solution that could:

- » Withstand long-term exposure to acidic runoff
- » Improve separation of clean water vs. nutrient-rich water
- » Reduce the total volume of material requiring collection and land application
- » Fit a tight construction window for the new feed pad

THE U-DRAIN SOLUTION

Engineers working on the project recommended U-drain based on material durability and design suitability. The dairy selected U-drain's stainless steel system, ensuring corrosion resistance and long service life even under harsh acidic conditions.

U-DRAIN PROVIDED:

- » **Stainless steel drainage for maximum corrosion resistance**
- » **A custom 1½" slot opening – a first for U-drain – designed to meet site-specific requirements**
- » **Responsive service and timeline support, ensuring the system was delivered in time for a critical five-day construction window**

This strategic system design allows Holsum Dairies to open or close sections of the drain to selectively capture only the high-nutrient leachate while diverting clean stormwater away from the waste stream.



"The leachate from silage is acidic. If it sits on concrete or rebar, it will eat away at it. We needed a drain that could handle that environment and protect the longevity of our feed pad."

— Brent Cousin, General Manager, Holsum Dairies

Holsum Dairies

Reducing Wastewater Volume with U-drain



RESULTS & IMPACT

The new drainage strategy, enabled by U-drain, is poised to deliver substantial environmental and financial benefits. While this is the first project of this type for them, Holsum Dairies projects they will see:

- » A 70% reduction in water collected for waste handling
- » Approximately 1 million fewer gallons of liquid waste managed each year
- » Estimated savings of over \$250,000 annually in storage, hauling, and land application
- » Extended concrete pad life due to improved drainage and reduced acid exposure



“We project a 70% reduction in the water we collect—and that water becomes a waste product. This approach should save us about a million gallons a year.”

THE EXPERIENCE WITH U-DRAIN

Holsum Dairies had a tight construction schedule and required phased product delivery to keep the project moving. U-drain’s responsiveness and flexibility were key to the project’s success.

Brent Cousin at Holsum Dairies would confidently recommend U-drain to other operations requiring corrosion-resistant drainage solutions or custom specifications.

By installing U-drain’s custom stainless steel drainage system, Holsum Dairies implemented a modern, compliant runoff management approach that significantly reduces waste handling costs, protects infrastructure, and supports the operation’s long-term sustainability goals. U-drain’s ability to provide durable materials, custom engineering, and responsive support made the system a strong fit for Holsum Dairies’ feed pad project.

