

How Calgary's Livestock Water Recycling is helping farmers reduce emissions with Google AI



**LIVESTOCK
WATER
RECYCLING**

Challenge

For Calgary-based CEO & co-founder, Karen Schuett, manure was never just waste—it was a missed opportunity. Since 2014, Livestock Water Recycling (LWR), has manufactured hardware systems to help farmers treat liquid manure. Traditionally, waste was housed in a lagoon, which is easy to install but the costs to the farmers' bottom line and to the environment were substantial. Left untreated, livestock waste can pollute nearby waterways and generate significant greenhouse gas emissions and is a growing challenge across the industry. Karen set out to deliver a modern solution, to help farmers manage and capitalize on this waste using Google AI.

Solution

LWR invented a made-in-Calgary solution: a water treatment plant that processes liquid waste around the clock, turning part of it into fertilizer and treating the rest until it comes out as clean water that farmers can reuse around the farm. All the while, Google AI tools such as Gemini Enterprise Agent Platform and Vertex AI, measure millions of data points, enabling farmers to understand the precise nutrient value in their waste-turned-resource. LWR's on-farm system also helps farmers cut management costs, and lets farmers increase their herd size using the land they already have.

Impact

With the help of Google AI, Livestock Water Recycling is helping cut agricultural emissions at scale. While a single farm sees a massive reduction, LWR's connected network has already eliminated more than 1.5 million tons of greenhouse gases. That's like taking nearly 350,000 cars off the road. LWR also uses real-time AI process automation to turn livestock waste into clean water, creating a closed-loop solution for one of Canada's largest freshwater-consuming industries. For Karen, these technological advancements and environmental impact have accelerated international expansion into markets like Lebanon, the UK, and Japan. Ultimately, Google's AI tools are helping LWR prove that sound environmental stewardship and high farm profitability can go hand in hand.

“As we look ahead, we're excited to see how Google AI will help us scale our impact worldwide and make a difference to farmers for generations to come.”

Karen Schuett, CEO and Co-founder



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