

SOLUTION AT A GLANCE: SHARI'S CAFE & PIES: UPGRADING DIPPERWELLS TO SAVE WATER AND ENERGY

SECTOR

Commercial

BARRIER

Identifying or evaluating energy-saving technologies

TOOL TYPE

Case Study

BUILDING TYPE

Food sales & service, Restaurant

BUILDING SIZE

Less than 25,000 square feet

TECHNOLOGY

Water Heating and Water Efficiency

OVERVIEW

During an equipment audit in 2010, Shari's Café & Pies identified the potential for substantial water and energy savings through upgrades to the dipperwells at their 24-hour restaurants. At the time, each restaurant had five dipperwells—which are used to sanitize utensils between uses via a constant flow of water—and collectively they produced millions of gallons of water waste per year. With the installation of new dipperwells across 93 restaurant locations throughout the Pacific Northwest, Shari's will save 20-25 million gallons of water each year.

In order to reduce water and energy waste from dipperwell use, Shari's installed heated dipperwells that did not require continuously flowing water in order to properly sanitize utensils. To ensure staff were using them effectively, Shari's also installed push-button metering faucets on the new wells that required staff to refill them manually only when needed. Shari's was also able to reduce the number of wells at each location from five to four since the new dipperwells were more efficient and easier to use, further amplifying the water and energy savings across their portfolio.



The heated dipperwell installed at Shari's.

Shari's applied for custom utility rebates from their local utilities, and after completing equipment testing were granted a rebate from Avista and PSE Utilities for the dipperwell installation at the majority of their Washington restaurants. Shari's chose locations to pilot the new equipment based on costs, rebate availability, and best rate of return. After three years Shari's rolled out the new heated wells at all locations. Shari's also took special care to train staff to turn off the dipperwells or run them at their lowest flow rate during non-busy hours.

The new dipperwells resulted in an average of 35 percent reduction in total water use. Some restaurants even realized reductions as high as 50 percent! At the Shari's of Lynnwood location, for example, the equipment is expected to result in over 290,000 gallons of water savings, and will pay for itself in 0.2 years when factoring in applicable utility rebates. This new equipment is also adding convenience for store employees.

look for



Putting WaterSense® to Work

Family Dining Chain Scoops Up a Big Dip in Water Use

Sector: Restaurants and Other Commercial Kitchens; Focus: Commercial Kitchen Equipment

Project Summary

High water costs in the Pacific Northwest have made water efficiency an important strategy for restaurants in the region seeking to reduce operational costs. For Shari's Café and Pies, a 24-hour restaurant chain with 95 locations in the Pacific Northwest, implementing water-efficient equipment and practices helped reduce water use without detracting from the customer dining experience.

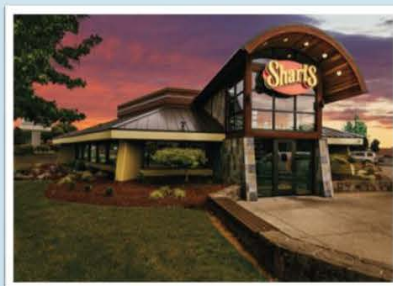
Working with Ecova®, an energy and sustainability management company, Shari's underwent water audits in 2010 to identify cost reduction opportunities across its locations. The audits revealed that water represented 20 percent of the company's utility costs. Using a holistic approach to implementing water efficiency measures, Shari's initially redesigned its dipper wells and installed high-efficiency equipment at all locations. The chain also found it was critical to engage employees in its water efficiency efforts. Between 2008 and 2016, Shari's reduced its annual water consumption by approximately 72 million gallons.

Redesigning Dipper Wells

During Ecova's equipment audit, dipper wells stood out as having the greatest potential for water savings. Dipper wells typically clean and sanitize utensils (e.g., ice cream scoops) between uses by flowing water continuously through a spigot into a receiving well. Each Shari's location has five dipper wells, and Ecova's audit revealed that the wells were running heated water 24 hours per day, seven days a week—wasting 8 million gallons of water per year.

To curb this water waste, Shari's began by turning the fixtures off during slow service periods and running the wells at their minimum flow rate. Shari's also replaced broken faucets that would not turn off with ball valve faucets featuring a homegrown design. To further reduce dipper well water use, Shari's assessed the feasibility of installing heated dipper wells, which sanitize utensils while removing the need for continuously flowing water. During this feasibility analysis, it was noted that staff were operating the new, heated dipper wells in the same way as the older version that required continuously flowing water. To ensure that staff at all sites did not run water continuously with the heated dipper wells, Shari's added a push-button metering faucet on the wells, so they were refilled with fresh

Highlights



- **Facility Name:** Shari's Café & Pies
- **Location:** Beaverton, Oregon (headquarters)
- **Facilities updated:** 95
- **Water savings:** 330 million gallons of water between 2008 and 2016
- **Energy savings:** [7%]
- **Cost savings:** \$615,000 in annual water and sewer costs



Ecova's equipment audit identified dipper wells as having the greatest potential for water savings.

