

## Custom Efficiency

for Complex Projects



### City of Nampa

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“It was great working with Idaho Power. They provided us with meaningful data that helped us look at and evaluate our energy usage before we did the project.”  
– Michael Fuss, City of Nampa  
Public Works Director

# Nampa Upgrades its Wastewater Treatment Facility and Discovers Improved Efficiency

## The Business

With a population of 81,000, Nampa is the second largest city in Idaho. Their recently upgraded wastewater treatment facility, which serves residents and industrial businesses within the area, is one of the most sophisticated plants of its kind.

## The Challenge

The existing jet-aeration system of Nampa’s wastewater treatment facility was installed more than 20 years ago. It was considered a medium-efficiency oxygen-transfer system and included two treatment basins. Reliable operation procedures recommended that one treatment basin operate regularly, while the second basin would be used as backup. Due to

population growth, the jet-aeration system was providing insufficient oxygen for the process, creating the need for both basins to be operated, simultaneously, four to six months each year.

## The Solution

MWH, a Boise consulting company, worked with the City of Nampa for the new system design. Through this project, the jet-aeration system was replaced with a more efficient, fine-bubble aeration system. The new system includes additional treatment capacity aimed at allowing one basin to serve strictly as backup throughout the year. The fine-bubble aeration system does not have pumps in the treatment basins, like the jet-aeration process required, and the existing 350 horsepower (HP)

blowers were replaced with more efficient 500 HP blowers. The larger blowers were installed in anticipation of future loads.

## The Outcome

“Our new system improved the ammonia removal by approximately 50 percent. It also improved the reliability of services to all our customers in Nampa,” said Michael Fuss, City of Nampa Public Works Director.

## The Savings

The final project energy savings was 2,279,891 kilowatt-hours (kWh) per year. The project’s energy savings are the equivalent to the total average annual energy use of 172 typical Idaho homes.

## The Bottom Line

Idaho Power's Custom Efficiency program provided the City of Nampa with a \$228,000 incentive check for the energy efficiency upgrades. "We are evaluating conservation alternatives and how it fits into Idaho Power's program; the project was a tremendous success," Fuss said.

If you are looking for similar energy-saving success for your business, Idaho Power can help. Idaho Power offers a complete suite of energy efficiency programs for commercial and industrial businesses. The **Custom Efficiency** program assists large

commercial and industrial customers in identifying and paying for energy efficiency improvements. **Easy Upgrades** offers incentives of up to \$100,000 for energy-saving retrofits within existing commercial and industrial buildings. The **Building Efficiency** program offers incentives of up to \$100,000 per project to offset part of additional capital expenses for more efficient lighting designs, cooling systems, controls, and building shells in new commercial and industrial construction projects. **FlexPeak Management**, a demand response program, offers commercial and industrial customers recurring

payments for reducing a set amount of electricity consumption in response to Idaho Power's peak demand and other system needs.

Go to [www.idahopower.com/business](http://www.idahopower.com/business) or call 208-388-5624 for more information on how Idaho Power can help you save energy and money.

This success story was produced in cooperation with, and approval from, Idaho Power Company customer, the City of Nampa.