



SUMMARY

Project Benefits

- Reduced energy costs
- Better regulated air and water temperatures
- More comfortable humidity levels

Equipment Installed

- Nine high-efficiency pool pumps
- Two condensing boilers
- Heat exchangers
- Heat recovery for the locker rooms
- Direct digital control system
- Variable-speed pumping and airflow
- Solar water heating system with 80 roof-top collectors
- 40 T5 fluorescent lamp fixtures

Financial Analysis

- \$681,729 project cost
- \$173,508 cash incentive from Energy Trust
- \$159,806 Business Energy Tax Credit pass-through from Oregon Department of Energy
- \$86,000 estimated annual energy cost savings
- 470,448 estimated annual kWh energy savings
- 45,942 estimated annual therm savings

ENERGY SAVINGS MAKE A BIG SPLASH

Dallas Dives Into Energy Efficiency

With five different pools attracting 130,000 patrons a year, the Dallas Aquatic Center consumes enormous amounts of energy to keep the air and water temperatures just right. Jason Locke, the city's community development director, was looking for ways to maintain the center's appeal while managing costs for electricity and natural gas. "Prior to making any upgrades, we were spending more than a quarter of our budget, or \$250,000 a year, on natural gas and electricity," said Locke. "Our small, local government operates on a tight budget so these costs were not sustainable."

The aquatic center contracted with Willdan to conduct an energy audit and recommend conservation and facility improvements. Willdan was hired to implement the extensive modifications, manage incentives and tax credits and guarantee the energy savings. The contractor also monitored and reported monthly energy use during the first year after completion. After 10 months, the aquatic center realized energy savings of \$75,300, which exceeded the annual guaranteed energy savings of \$56,800.

Estimated Annual Utility Cost Savings:

\$86,000

Total Utility Incentive Rebate/Tax Credit:

\$333,314

Energy Savings:

470,448 kWh

45,942 therms

Project Implementation Costs:

\$681,729

Project Simple Payback:

4 years

That success will shorten the estimated payback period from six years to around four years.

“The fact that we can reduce our operational costs and improve service to our patrons is a benefit all the way around.”

**- Jason Locke
Community development director
City of Dallas**

The facility installed two condensing boilers, variable-speed pumping and airflow, a building automation system, high-efficiency lighting, heat reclaim for the locker room and a solar heating system. "We've had nothing but positive feedback from patrons and staff," said Locke. "Next year, we're proposing to budget \$150,000 for all utilities, \$100,000 less than in previous years."