



## News Release

FOR IMMEDIATE RELEASE

### **Waste Not: New Cogeneration System Enables Wastewater Treatment Plant to Use Treatment Byproducts as Fuel**

*-- Combined with Blower Retrofit, Upgrades Expected to Save More than \$228,000 a Year --*

**Olympia, Wash., May 3, 2010** – A new cogeneration system installed at the Budd Inlet Treatment Plant by the LOTT (Lacey, Olympia, Tumwater, and Thurston County) Alliance late last year has substantially reduced the amount of energy needed for treatment processes and buildings at the plant by using treatment by-products as fuel. This renewable energy system, combined with an aeration blower retrofit currently underway at the Budd Inlet Treatment Plant, is expected to save LOTT more than \$228,000 per year in utility costs.

Because of their commitment to environmental responsibility and to optimizing the wastewater treatment process, leaders at the LOTT Alliance will receive the Trane **“Energy Efficiency Leader Award”** for their sustainable energy and operational efficiency improvements.

Details of the award presentation:

- Vince Canino, director of service and contracting sales, west territory, Trane, will present the award to Michael D. Strub, executive director, LOTT Alliance
- The awards presentation will be at noon on May 6, outside the cogeneration building at the Budd Inlet Treatment Plant, 500 Adams St. NE, Olympia, Wash. 98501. An open house at 11:30 a.m. will precede the award ceremony.

Puget Sound Energy (PSE) provided a \$1.7 million Energy Conservation Grant to install the cogeneration system. PSE is Washington State’s oldest and largest energy utility, with a 6,000-square-mile service area stretching across 11 counties. They serve more than 1 million electric customers and nearly 750,000 natural gas customers. The PSE grant represents 70 percent of an estimated total project cost of \$2.4 million for the cogeneration system project. The estimated PSE grant for the aeration blower upgrade is more than \$300,000, which represents 70 percent of the total project cost. The combined projects are expected to result in an energy savings of more than 2.8 million kilowatt-hours (kWh) per year, enough to power more than 210 Thurston County homes.

LOTT’s cogeneration system converts methane gas to heat and energy for use in LOTT’s Regional Services Center which will be completed in July, and for future use in the new Hands On Children’s Museum which will be located next to the plant. The Regional Services Center houses the Water Education and Technology (WET) Center, an educational center for ages 10 and older, a water quality laboratory, and offices. The new Hands On Children’s Museum, scheduled to break ground this summer, is an independent non-profit organization that provides interactive educational experiences for children ages 10 and younger.

The cogeneration system, expected to save nearly \$180,000 a year in utility costs, enables the cogeneration plant to provide all of the heating required at the site as a “district heating” plant, eliminating the need to burn off excess digester gas and greatly reducing the emissions of the site. The blower retrofit, scheduled for completion in August, 2010, is expected to save more than \$48,000 in utility costs for the LOTT Alliance. As an innovative, renewable energy technology, the cogeneration system supports plans to earn LEED certification for the LOTT Regional Services Center and the new Hands On Children’s Museum.

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A Washington State Department of General Administration Energy Performance Contract was used to procure services associated with the design and installation of the two projects. An option that provides a method for organizations to manage and optimize their energy use, a performance contract, allows them to leverage the energy use and operational savings to support strategic business objectives.

“As a public wastewater treatment facility, responsible use of community resources represents the core of our work,” said Doug Mah, president of the LOTT Alliance board of directors and mayor of the City of Olympia. “We’re pleased that we can further our commitment to environmental stewardship with these improvements and that these upgrades will also benefit our new neighbors at the museum. Even better, we’ll achieve it all with minimal costs to the utility.”

### **Solutions Tailored to LOTT’s Needs**

LOTT staff considered several technologies prior to selecting the blower retrofit and cogeneration system. They conducted a thorough evaluation of several energy conservation upgrades and, based on the findings, selected the two that best met their needs. Staff chose the cogeneration system because it is expected to produce the most usable energy per pound of CO<sub>2</sub> released in comparison to the other alternatives studied. Employing the cogeneration process includes adherence to strict emissions standards as well as combusting approximately 99.9 percent of the methane, dramatically reducing LOTT’s greenhouse gas emissions.

The aeration blower retrofit will replace one of the large existing blowers with a smaller, high-efficiency, high-speed turbine blower. The new blower will become the primary operating unit, serving approximately 95 percent of the plant’s aeration system needs. This will allow the plant to increase overall aeration system efficiency and meet future aeration process demands.

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### **About the LOTT Alliance**

The mission of the LOTT Alliance is to preserve and protect public health and the environment by cleaning and restoring water resources for our communities. The LOTT Alliance is a non-profit corporation formed by the Cities of Lacey, Olympia, and Tumwater, and Thurston County and is governed by a board of directors consisting of one elected official from each of the four partner governments. LOTT provides wastewater treatment and reclaimed water production services for approximately 90,000 people. LOTT owns and operates facilities in all four partner jurisdictions, including the centralized Budd Inlet Treatment Plant, Budd Inlet Reclaimed Water Plant, Martin Way Reclaimed Water Plant, Hawks Prairie Reclaimed Water Ponds/Recharge Basins, three pump stations, and 28 miles of sewer interceptor pipelines. For more information, visit [www.lottonline.org](http://www.lottonline.org).

### **About Trane**

Trane, a business of Ingersoll Rand - the world leader in creating and sustaining safe, comfortable and energy efficient environments - improves the performance of homes and buildings around the world. Trane solutions optimize indoor environments with a broad portfolio of energy efficient heating, ventilating and air conditioning systems, building and contracting services, parts support and advanced controls for homes and commercial buildings. For more information, visit [www.Trane.com](http://www.Trane.com).

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