

REEZ GRANT

The City of Hailey received a grant of \$30,000 to help fund a \$60,000 Feasibility Study (study) for the creation of a Renewable Energy Enterprise Zone. Our partners, Whole Water Systems (with sister company Whole Energy Solar) of Ketchum, Idaho, have agreed to provide their services for \$30,000 and have offered an additional \$10,000 in matching funds for their services. The City of Hailey will match the grant with \$20,000 of city employee time.

The specific proven technologies that we propose to explore for the study are capable of recovering naturally occurring renewable energy – as well as clean water and fertilizer – from proven wastewater treatment processes. The study will assess the viability of a Resource Recovery Center (RRC) which will receive and process sewage treatment plant sludge, septage from onsite septic systems within Blaine County, grease from restaurants and a wide variety of other potential biosolids wastes (e.g. agriculture animal waste, food waste from restaurants, grocery stores and homes). The core of the technology is known as a Vertical-shaft Biological Reactor (VBR) and since 1975 has been proven in over 65 installations throughout Canada, Europe and Asia to be approximately 50% more energy efficient than conventional activated sludge technologies presently used in the U.S. VBR technology also creates higher quality treated water suitable for non-potable reuse and pathogen free, Class A biosolids. A positive study will show that the RRC could be a major economic benefit to the City of Hailey.

The direct correlation between energy (production and use) and water (treatment and transportation) has become known as the Water/Energy Nexus. Tremendous amounts of energy are consumed treating and transporting water and massive amounts of water are required to generate our nation's energy. The proposed study will assess the viability of technology that addresses both sides of the Water/Energy Nexus by treating wastewater biosolids using 50% less electricity than conventional technology and by producing significant renewable thermal energy in the process.

Hailey's Renewable Energy Enterprise Zone Feasibility Study will examine the viability of three major components.

- 1) A Resource Recovery Center (RRC) waste to energy project that uses municipal sludge, septage, and food and agricultural wastes, to produce renewable thermal energy as well as clean water and pathogen-free (EPA Class A biosolids) fertilizer products.
- 2) The connection of the RRC to an existing or future complex where the RRC would provide heat for the buildings, water and fertilizer.
- 3) The economic potential for the existing and growing market for the services and byproducts of the RRC.