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Background

The Nebraska Energy Office (NEO) is a state agency that has a mission to create opportunity through more effective, more efficient, and more customer focused state government. The NEO provides services including home energy efficiency ratings, home weatherization, and energy efficiency improvement project loans.

Project Description

The University of Nebraska-Lincoln is working with the NEO to improve energy efficiency at small wastewater treatment facilities (WWTF) in Nebraska. This summer, the WWTF in the cities of Friend, Randolph, Stanton, and Hartington were visited, assessed, and provided recommendations for energy efficiency improvements.

Pollution Prevention Benefits

Improving the energy efficiency of a WWTF results in a reduction in energy usage, in energy costs, and in the associated greenhouse gas emission of carbon dioxide. Table 1 below shows the total reduction and savings associated with the implementation of the assessment recommendations presented in the report.

Table 1: Pollution Prevention Benefits and Results

Wastewater Treatment Plant	Cost Savings (\$/yr.)	Energy Savings (kWh/yr.)	GHG Reduction (MTCO _{2e} /yr.)
Friend	\$1,730.00	21,100	27
Randolph	\$2,710.00	28,100	30
Stanton	\$2,010.00	20,800	22
Hartington	\$2,750.00	24,220	26
Total	\$9,200	94,200	105