

Project Overview

Industrial Placement Intern: Brent Hanson
Major: Biological Systems Engineering
School: University of Nebraska-Lincoln



Company Background



The Lincoln Water System (LWS) is in charge of providing safe, potable water for residential and commercial use in Lincoln, Nebraska. LWS facilities are designed to meet peak daily water usage demands and maintain a constant supply of water. To assure an adequate supply for future generations, LWS promotes appropriate water conservation practices.

Project Description

The object of all projects was to encourage water conservation. The primary focus involved conducting landscape irrigation assessments of local businesses in Lincoln by:

- Examining the irrigation system for conservation opportunities and system deficiencies, and
- Providing suggestions and ideas for future water conservation practices.

In addition to irrigation assessments, other projects included an assessment of water analyzer usage, reassessments of previous irrigation audits, NPDES permit compliance research, and research for the Mayor's Environmental Task Force on water conservation projects that would provide the greatest benefit for the City of Lincoln.

Results and Benefits

Each of the assessments provided information on the benefits of water conservation to the businesses and determined how much water and money could be saved each year by improving the irrigation system. Each assessment also provided a life cycle analysis that determined the potential energy and carbon emission reductions possible from the water conservation practices. By educating local businesses on the value of water conservation a new interest in pollution prevention will hopefully be established.

From all the work in the summer of 2008, the following potential results are possible:

Table 1. Summary of Benefits

Number of Projects	Water Saved (gallons)	Energy Saved (kWh)	Annual Cost Savings (\$)	Citizens Educated
5	4,905,150	5,612	6,273	60-70