

Project Overview

Industrial Placement

Intern: Gregory Arthur

Major: Civil Engineering

School: University of Nebraska-Lincoln



Company Background



The Lincoln Water System (LWS) is located in Lincoln, Nebraska. The purpose of this city entity is to provide clean, high quality water to its residents and maintain this ability into the future through proper planning. LWS houses the Mayor's Water Conservation Task Force, a voluntary organization whose purpose is to promote water conservation practices in the community through education.

Project Description

A variety of projects were completed to encourage water conservation. The chief project involved completing irrigation assessments for Lincoln businesses by:



- Examining water usage versus need
- Examining the irrigation system for conservation opportunities and deficiencies
- Providing suggestions and ideas for conserving water

In addition to irrigation assessments, many smaller projects were completed working with water conservation and other pollution prevention practices. These projects included conducting a lighting assessment, development of a policy for handling water usage complaints, general education of LWS employees, and conducting research for the development of sprinkler irrigation specifications, a project which has the potential of impacting water conservation for the entire city of Lincoln.

Results and Benefits

Each irrigation assessment explained the benefits of water conservation to the business and detailed how much water could be saved each year by improving the irrigation system. Through the education of employees and citizens, a new interest in pollution prevention and each person's "environmental impact" is established. By completing the important task of educating the public, pollution prevention will become a subject of general knowledge and more easily implemented.

Through the work completed in the summer of 2007, the following results are possible:

Table O1. Summary of Benefits

| Water Saved (gallons) | Energy Saved (kWh) | Cost Savings (\$) | Citizens Educated |
|-----------------------|--------------------|-------------------|-------------------|
| 2,065,000 | 30,275 | 9,237 | 40-50 |