Urban Landscape Trees: Spatial Patterns of Water Use

Anne Thomas, Brigham Young University
Research Mentor: Richard A. Gill, Brigham Young University

Goals

• Characterize the patterns of landscape tree diversity, density, and size in Heber Valley, a developing urban area, according to neighborhood type

• Relate species-specific tree water-use data to neighborhood planting patterns

Methods

• Create a stratified, georeferenced survey of landscape trees in four dominant neighborhood types in Heber City and Midway

• Collect species and size data using accepted forestry techniques for each tree in randomly selected lots

Impact

• Landscape trees are an important factor in urban water use, especially where water conservation is an objective.

• Species diversity and size, and consequently water use, are expected to vary by neighborhood type - planting patterns may have significant implications for water use in a developing area

Figure 1. Location of Heber Valley, UT

Figure 2. Map of stratified survey design in Heber City and Midway

Figure 3. A row of trees in a commercial lot

1Fellows Undergraduate Research Program

aet4612@studentbody.byu.edu

http://iutahepscor.org