

PROJECT SPOTLIGHT | **CAMP CREEK WATERSHED ASSESSMENT & GIS/GPS DATA COLLECTION - GROWING GREEN COMMUNITIES - DES MOINES, IOWA**

SCOPE OF PROJECT

BARKER LEMAR was retained by Growing Green Communities, Inc. (a non-profit organization in Des Moines, Iowa with a mission to improve the physical environment of communities in central Iowa) to research and write a Natural Resources Conservation Service (NRCS) grant. The grant was to assist in the physical assessment of Camp Creek, a 6.2 mile creek that feeds directly into the 19,000-acre Lake Red Rock. The NRCS grant funds assisted **BARKER LEMAR** develop a geographic information system (GIS)/global positioning system (GPS) touchscreen-enabled tablet computer, program a system to tie digital pictures to specific GPS coordinates, capture GPS coordinates of identified impairments, and record illegal dumping, animal access points, storm water discharge points, vegetative cover, stream bank conditions, and land use field data.



IMPLEMENTATION

The use of **BARKER LEMAR'S** GIS and GPS data collection technologies allowed increased data collection options, provided in-field data error checking, decreased post-collection data management time and entry errors, and decreased the time and labor costs necessary for collection of the comprehensive assessment data. The utilized data collection technologies allowed for specific characteristics of Camp Creek (e.g. illegal dump sites, severe erosion, poor creek bank vegetation, etc.) to be analyzed and prioritized for the entire length of Camp Creek for future improvement projects.

The collected assessment data, including various GIS data sources, were linked to a project website that allows users to see and interact with the data. This website provides users the ability to "see, touch, and feel" the assessment data or explore a specific assessment characteristic of interest.

BARKER LEMAR presented the Camp Creek assessment results to watershed coordinators and continues to host the assessment information on the project's website.

SERVICES

Grant research; grant writing; research and communication of acceptable assessment topics and terminology; GIS/GPS tablet computer programming; rapid field data collection; programming of inter-related web-based GIS Internet site; grant management; project management.

TIMELINE

Project Start Date: Fall 2005

Project Completed: Spring 2006