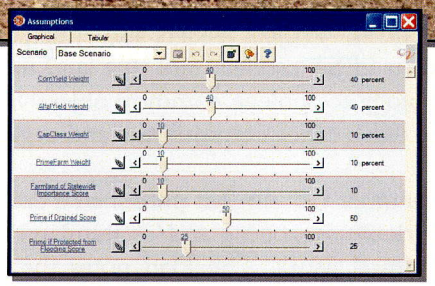
Planning for Agriculture

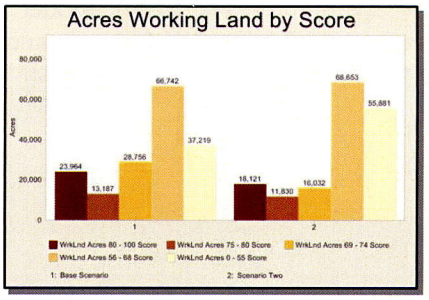
Targeting working lands using LESA

Location: Calumet County, Wisconsin
Partners: Calumet County; University of Wisconsin; US Department of Agriculture; Wisconsin Department of Agriculture

Context: Wisconsin takes great pride in its agricultural landscape. In addition to providing valuable food and forestry products, agricultural lands also attract tourism and help maintain the state's quality of life, environment, and water quality. But Wisconsin is losing farmland at an alarming rate. The State has proposed a number of strategies to protect its working lands, and a consortium at the University of Wisconsin is addressing agricultural land issues through research, training, and outreach. The consortium undertook the Targeting Working Lands and Operations (TWLO) pilot project to help local decision-makers with tools and training needed to identify "important farms and farmlands where protection efforts are desirable and help attain community goals and objectives." Calumet County and La Crosse County served as the two pilot communities.

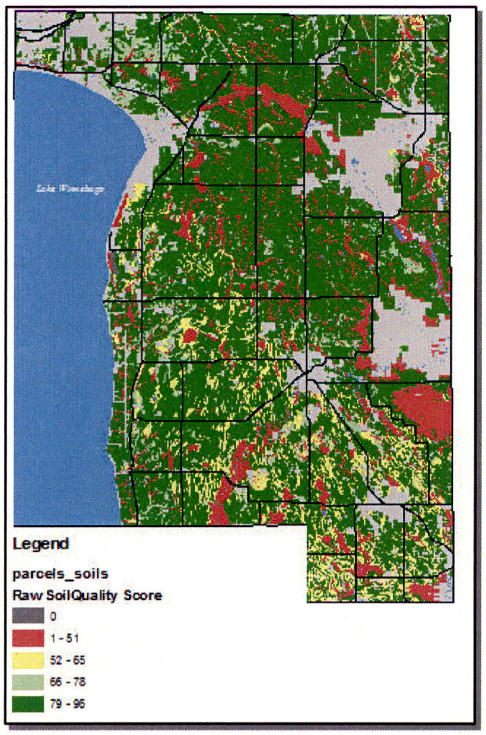


Project Description: The pilot is intended to help local decision-makers with research, tools, and educational materials to prioritize agricultural lands worthy of protection, and to be able to communicate the results to others. In addition, the University of Wisconsin wanted to test the capabilities of CommunityViz® to consider and weigh local priorities and values in assessing agricultural lands.



> *"The nice thing about the CommunityViz LESA model is that you can adjust it. It is not static, so you can see mapped results based on variable assumptions and values."*
>
> –Dena Mleziva, Calumet County Planner

Recognizing that local people know their communities the best, the project engaged a committee of local volunteers to inform a Land Evaluation and Site Assessment (LESA). The LESA used seven suitability layers, including characteristics such as quality of soil, compatibility with surrounding land uses, distance from urban features, proximity to protected working lands, and more. The analysis included some 50 assumptions and 55 dynamic attributes that calculated suitability scores for each non-developed parcel in the county. The LESA Committee assigned weights, or values, to the characteristics so that important characteristics have more influence over the final result than less important ones. After the analysis results were reviewed and tested in comparison to committee member field



observations and personal knowledge, the LESA Committee formally recommended the Calumet County LESA system for use.

Technology and Tools: CommunityViz Version 3.3 and ArcGIS® Version 9.3 were used to perform the LESA analyses. Within CommunityViz, the suitability calculations were done using a combination of the Suitability Wizard and standard Scenario 360™ dynamic analysis functions. The Land Evaluation and Site Assessment (LESA) system developed by the USDA was used as the framework for the CommunityViz analysis. A LESA Committee was formed to guide the project and to design and recommend a LESA system appropriate for Calumet County.

Outcomes: The pilot project has given local professionals the capability to make effective use of GIS and CommunityViz to build LESA models that can be understood by citizens and policy-makers. In Calumet County, the pilot has built a coalition of local citizen advocates that are encouraging the County (and State) to utilize the technology to help establish areas for protection. In the long term, project partners anticipate that the technology, coupled with public participation, will help facilitate public support for farmland protection policies. Project leaders also anticipate that more communities will invest in the technology to build their own LESA models, and that land trusts will become active partners with local counties in using the technology to achieve common objectives. To that end, the University of Wisconsin is developing a workshop to teach other communities and organizations to use CommunityViz in LESA modeling projects.

Calumet County has published a draft "2009-2019 Calumet County Farmland Preservation Plan" to guide agricultural zoning and/or farmland preservation agreements and to heighten public awareness about agricultural issues. The Plan notes the value of the CommunityViz LESA model and encourages its further development and use.

KEY LINKS

CommunityViz
http://www.communityviz.com
Calumet County
http://www.co.calumet.wi.us
University of Wisconsin, Center for Land Use Education
http://www.uwsp.edu/CNR/landcenter
University of Wisconsin, Land Information and Computer Graphics Facility
http://www.lic.wisc.edu
University of Wisconsin, Extension, Cooperative Extension
http://www.uwex.edu/CES
US Department of Agriculture
http://www.usda.gov/wps/portal/usdahome
Wisconsin Department of Agriculture, Trade and Consumer Protection
http://www.datcp.state.wi.us

Sources: University of Wisconsin, "Targeting Working Lands and Operations Pilot Project," January 2009; Calumet County; 2009 – 2010 Calumet County Farmland Preservation Plan: http://www.co.calumet.wi.us/uploads/document/PUBLIC_HEARING_DRAFT_0209.pdf; Wisconsin Department of Agriculture, Trade and Consumer Protection; The Wisconsin Working Lands Initiative, Questions and Answers, February 2009: http://www.datcp.state.wi.us/workinglands/pdf/QuestionsAndAnswers2-13-09.pdf. CommunityViz is a registered trademark of the Orton Family Foundation.