

## LCMR Proposal 2003

**Title:** Lakeshore Parcel Mapping to Assist Local Water Planning

**Total Biennial Project Budget:** \$ 480,000

**Funding Priority:** Water (C-1)

**Project Manager:** William J. Craig

**Affiliation:** Center for Urban & Regional Affairs, University of Minnesota

**Mailing Address:** 301 – 19<sup>th</sup> Ave. S., #330; Minneapolis MN 55455

**Telephone Number:** 612-625-3321

**E-Mail:** wcraig@umn.edu

**Fax:** 612-626-0273

**Web Address:** <http://www.cura.umn.edu/>

**Location:** 86 (of 87) counties across the state, any with 1 or more lakes

**I. PROJECT SUMMARY AND RESULTS:** Provides \$5/parcel cost share for counties to create digital maps of lakeshore parcels. This data is crucial to Local Water Planning, but not yet available in most counties.

### II. DESCRIPTION OF PROJECT RESULTS:

No more than 1/3 of Minnesota counties have digital parcel maps and this is one of the highest priority items for local planners, assessors, and managers. Parcel maps are especially critical to Local Water Planning. According to the LCMR funded *Sustainable Lakes Planning Workbook* of the Minnesota Lakes Association:

“Without a database and maps containing information for every parcel, it would be hard to implement practices that would reduce land use impacts to the lake because most problems around the lake are solved one parcel at a time.”

Counties want and need parcel data for the full extent of their territory for normal administrative and planning needs. Few have undertaken that effort because of lack incentive to change from existing ways and lack of guidelines on how to proceed. Lakeshore parcels are one of their most critical needs, but also the most daunting. This project addresses that issue by providing \$5/parcel incentive and technical guidelines that will direct the county in its work and provide compatible maps across county boundaries. Despite the full cost of \$12-25/parcel, most counties we've talked to believe the \$5 match would provide them with the incentive they need to begin mapping lakeshore parcels. We estimate 150,000 lakeshore parcels statewide; a state investment of \$480,000 will prompt the creation of maps for 96,000 parcels, 64 percent of the state.

Once committed to parcel mapping, counties will maintain the lakeshore parcels as lots are added or modified. Furthermore, most will expand their mapping program to include other land across the county. Farm and forest parcels are much easier to map, being square and defined by the Public Land Survey System. This expansion will further assist water planning by providing land use and ownership information for other parcels in the watershed. Additional environmental issues, such as sustainable forestry, can make good use of such county-wide parcel maps.

The project creates a program of state incentives to counties for local lakeshore parcel mapping efforts. It will be administered by the state Board of Water and Soil Resources as a logical extension of its Local Water Planning program. This project can be viewed a complementary to BWSR's Local Water Quality Matching Challenge Grant program. Here are the components of the proposed program:

- Counties submit proposals for the mapping work they wish to complete.
- \$5 of state money may be awarded per lakeshore parcel, county covers remainder.
- Guidelines will be developed by the Minnesota Governor's Council on Geographic Information.
  - Technical guidelines, with assistance from the Minnesota Association of County Surveyors.
  - Policy guidelines with assistance from the Minnesota Lakes Association.
- Counties with limited staff resources for creating, maintaining, and using their maps are encouraged to partner with a neighboring county or engage a qualified vendor.
- A separate, smaller component of this project serves counties that have already developed parcel maps of their lakeshore. Grants up to \$8000 are available to assist counties in improving their parcel maps, if the improvement leads to better lakeshore management.

**Result 1** Develop digital lakeshore parcel maps.

**Budget:** \$ 480,000

Lakeshore parcel maps will be created or enhanced for nearly 2/3 of the state, maybe more. These maps will accelerate "the implementation of best management practices through delivery of technical information/resources at the local level," by supporting local water planning.

At the same time, these maps will support administrative and management functions of local government. For example, such maps are useful for tax administration, posting public notice, zoning administration, 911 emergency response, and responding to information requests from local businesses and citizens.

**Personnel: \$0**

**Equipment: \$0**

**Development : \$0**

**Acquisition : \$0**

**Other (Specify): \$ 480,000** (Money to be award to counties as a \$5/parcel incentive to create digital maps of lakeshore parcels. A portion of this money may be awarded to counties needing to upgrade their existing digital lakeshore parcel maps.)

### **III. TOTAL PROJECT REQUEST BUDGET**

**All Results: Personnel: \$0**

**All Results: Equipment: \$0**

**All Results: Development: \$0**

**All Results: Acquisition: \$0**

**All Results: Other: \$ 480,000** (Incentive to counties as described above.)

**TOTAL BUDGET: \$ 480,000**

### **IV. PAST AND CONCURRENT SPENDING:**

#### **A. Past Spending:**

- MnDOT, 2002 statewide inventory of local digital parcel activities: \$9500.
- Sustainable Lakes Project \$270,000
- Estimated \$40 million by the few counties having parcel maps (e.g. \$2.2 million in Dakota County).

#### **B. Concurrent Spending for the Project Period:**

NA

#### **C. Project Partners:** no funding required for any of the partners

- Board of Water and Soil Resources
- Minnesota Governor's Council on Geographic Information
- Minnesota Lakes Association
- Minnesota Association of County Surveyors

**D. Time:** Unknown at this point. Much depends on how successful this project is leveraging county activity and how much is already done. The worse case is a need to continue into a 2<sup>nd</sup> biennium.

## **Project Manager Qualifications and Organization Description**

William J. Craig is associate director of the Center for Urban & Regional Affairs at the University of Minnesota. CURA is an all-University center that connects faculty and students with public and nonprofit organizations in Minnesota and was the R&D home of this nation's first GIS – MLMIS, which became the state's Land Management Information Center in 1977. Dr. Craig was systems director of that project and continues to be one the nation's leading GIS scholars – serving nationally on the Mapping Science Committee of the National Academy of Science and serving locally as vice chair of the Governor's Council on Geographic Information and chair of the MetroGIS Coordinating Committee. At CURA, he has administrative responsibility for some 125 projects per year. He would lead the implementation of this project.

Jay Wittstock is a member of the Governor's Council on Geographic Information and co-chairs the Land Records Modernizaion (LRM) Committee of the Council. The LRM Committee researches statewide issues surrounding the automation and mapping of land record transactions. Mr. Wittstock has 15 years of experience mapping parcels for county GIS applications. Jay is a licensed land surveyor in the State of Minnesota and is the Wright County Surveyor. His LRM Committee has responsibility for developing technical and policy guidelines for this project.