

**Illinois Department of Natural Resources
Office of Resource Conservation**

State Wildlife Grant
Grant **Segment**/Proposal

Field Cod

STATE WILDLIFE GRANT NUMBER:

PROJECT TITLE: Expansion of the Illinois Department of Natural Resources' Owned, Managed, and Leased Properties (OMLP) Database

NEED: This project is an "implementation grant" to be used to track and assess the status of Illinois Department of Natural Resources (IDNR) owned, managed and leased properties (OMLP) necessary to support local coordination and implementation of actions within Conservation Opportunity Areas (COAs) identified in the State Wildlife Action Plan. The OMLP database project is part of the Office of Resource Conservation's (ORC's) Management Activity Tracking System (MATS). MATS is designed to be constructed and deployed as part of twenty-one separate projects or modules. A complete listing of each MATS module, including a detailed system requirements and description, is available on the Illinois Fish and Wildlife Action Team SharePoint/ Project Management Office (PMO) site at: <https://naturalresources.illinois.gov/ifawat/DNRPMO/default.aspx>.

The OMLP project was initiated in the fall of 2003 in response to U.S. Fish and Wildlife Service audit findings. The first phase of the project was initiated under the State Wildlife Grant T-03-P-001 agreement and continued in the second and third phases under the State Wildlife Grant T-02-P-001 and T-17-P-001 agreements, respectively. The main tasks for those phases were to establish procedures and standards for data capture and management into a GIS framework, and to create a geospatial database for IDNR properties acquired with federal and dedicated funds (e.g. Habitat, Pheasant, Migratory Waterfowl Stamp and Furbearer funds). In order to prevent a lapse in funding and to ensure no interruption of work, the project is currently being funded with state funds. The proposed project will expand on previous work by adding properties to the database, focusing on properties purchased with state funds.

Development and enhancement of key data sets is vital to efficiently direct funding and manpower to address agency priorities and to effectively evaluate the success of those efforts. GIS based methods are one of the most cost effective and efficient means for meeting State Wildlife Action Plan requirements at small, regional, and statewide scales. The development and maintenance of the OMLP database with detailed information on boundaries, ownership, funding source, management goals and activities, and restrictions on these lands is important to implementing successful conservation strategies for the state. Utilization of the OMLP database in a GIS environment allows access to descriptive tabular information in a single database, visual display of information on maps, and the capability to conduct spatial analyses with a variety of other databases (e.g. wildlife species distributions, areas of high biodiversity, land cover, surrounding land use, surrounding land ownership) and at a variety of scales, providing scientific and technological information to meet ecosystem based management and protection goals.

The State Wildlife Action Plan identifies 31 specific Conservation Opportunity Areas (COAs) as high priorities for protection and management. One objective of the currently funded State Wildlife Grant T-55-P-1 project is to assess the current status of the COA's and provide coordination among conservation partners to facilitate progress in addressing local COA needs and their role in the State Wildlife Action Plan. Comprehensive, reliable, and accessible information regarding all land holdings by IDNR, not just those acquired with federal funds is essential to the implementation of local coordination and planning at the local level in coordination with the T-55-P-1 project. Accurate and up to date parcel level property information is critical for COA planning efforts because knowing whether on the ground implementation is being done on public or private lands will direct the management responsibility, the funding, and the personnel allocations for each COA-based project.

OBJECTIVE:

1. Record, update, and maintain IDNR owned, managed, and leased properties within the existing OMLP GIS database. During the one year duration of this grant project, the OMLP team will be able to map somewhere in the order of 50 additional sites controlled in some way by IDNR. First priority will be given to sites which fall within the 31 COAs and have not already been completed.
2. Provide access to data for COA planning to internal DNR users.
3. Provide access to data for non-DNR COA planning groups.

EXPECTED RESULTS AND BENEFITS:

COAs, as identified in the State Wildlife Action Plan, represent high-priority conservation areas within the state and thus are critical to species of greatest conservation need (SGCN) and their habitats. Identifying all lands owned, managed, or leased by the state will provide the IDNR with a better idea of how to quantify statewide goals in the State Wildlife Action Plan.

The products, which will be completed by the end of the grant project, are:

- A geodatabase of IDNR owned, managed, and leased properties that can be used for mapping and analysis. Spatial boundaries and data fields with descriptive narrative information will be included and updated as necessary. The current OMLP geodatabase consists of approximately 35 different feature classes.
- User interfaces developed with ArcGIS Server and ArcIMS addressing the needs of the Office of Resource Conservation and the State Wildlife Action Plan, including COA assessment.

- FGDC compliant metadata of all data layers.
- Updated procedure manual documenting data layers and definitions, sources of data layers, and methodology used.

The benefits of having a complete and accurate spatial / mapping inventory of all sites owned, leased, and managed by IDNR are innumerable. Some examples are as follows:

- Quick, accurate responses to ownership / leasing questions for IDNR Executive Staff and Office managers during emergencies and during Governor's Office and Legislative inquires.
- Accurate and complete property information to guide plan of work activities on IDNR sites for ORC and Lands' personnel.
- Accurate and complete property information needed to assure that COA areas surrounding DNR properties are properly indentified and associated concerns met.
- Identification and flagging of legal ownership and managerial problems on IDNR properties, many for the first time, so that solutions may be formulated and the problems cleared up. Some of the existing problems are decades old.
- Quick, accurate responses to day to day questions on property ownership and land use in a pro-active manner. Theses problematic issues currently take up a large amount of several staff persons' time. Staff time can then be freed up for more pressing needs of property management and future land acquisition.
- The OMLP database would facilitate the consolidation and integration of all IDNR property related mapping efforts into one centralized, enterprise level system that would be easily accessible to all Agency employees whether in the Headquarters building or in remote field locations.

APPROACH:

- 1) *Record, update, and maintain IDNR owned, managed, and leased properties within the existing OMLP GIS database.*

The proposed project will expand on previous work by adding properties to the database as well as updating any information on previously completed sites. The Quality Assurance / Quality Control (QA/QC) process will be conducted on the current completed sites before beginning work on additional sites. Ultimately the goal is to include all conservation related properties which IDNR owns, manages, or leases. This would create a comprehensive source of information on property boundaries and descriptive information related to each property (e.g. size, land use, management practices, etc.) in a digital geospatial format.

The IDNR Land and Water Report for June 30, 2007 lists 338 conservation-related properties which the department owns, manages, or leases, including state parks (66), conservation areas (20), fish facilities (4) natural areas (112), fish and wildlife areas (47), wildlife areas (2), trails and greenways (5), memorials (1), boat access areas (7), recreation areas (5), forests (7), game propagation centers (3), tree nurseries (2), habitat areas (36), other departmental properties (17) and museum properties (4). Of the 338 sites controlled by IDNR, 150 have been completed by the OMLP project to date. During the one year duration of this grant project, the OMLP team will be able to map somewhere in the order of 50 additional sites controlled in some way by IDNR for a total of approximately 200 completed sites by the end of the grant project. First priority will be given to sites which fall within the 31 COAs and have not already been completed.

The specific tasks that will be completed, based on the procedure manual for mapping IDNR property, include the following:

- a) Research property boundaries and related information for each site. Research is conducted in Springfield where paper records of boundaries and related data are housed.
- b) Digitize parcel layer information, boundaries, etc. and add descriptive information to the database.
- c) Conduct quality assurance and quality control on each property in the database. This step is important for meeting accuracy and reliability standards. Most of the properties currently in the database and each new property will need to have QA/QC.
- d) Update existing properties to include any new property acquisitions, transfers, or removal of a site from IDNR interest.
- e) Prepare written documentation and metadata.
- f) Prepare reports.

2) *Provide access to data for COA planning to internal DNR users.*

Customized user interfaces will be developed to facilitate access to the data by IDNR staff, especially those staff charged with the mission of implementing, monitoring, and evaluating conservation efforts in relation to COA-based projects. Also, database integration efforts will continue the focus on compatibility with the Office of Resource Conservation Federal Aid program database (to track and manage the use of properties with federal interest) and the Office of Realty and Environmental Planning property database. Integration with these two existing databases will provide critical information to IDNR staff regarding funding restriction compliance on new and existing USFWS grants as well as funding compliance on grants from other agencies and organizations. The OMLP database will also be combined with other conservation activity management tracking systems as they are developed. Demonstrations and training of IDNR staff and other interested parties will be conducted by the end of the grant project.

3) *Provide access to data for non-DNR COA planning groups.*

Customized user interfaces will be developed to facilitate access to the data by outside planning groups, especially those charged with planning projects in conjunction with COA projects by the end of the grant project.

PROJECT SCHEDULE:

Task	07/ 09 – 09/09	10/09 – 12/09	01/10 – 03/10	04/10 – 06/10
Update existing property information	X	X	X	X
Conduct QA/QC of already completed properties	X	X		
Research and digitize additional properties		X	X	
QA/QC of additional properties				X
Update documentation and metadata				X
Develop user interface for internal IDNR users			X	X
Develop user interface for non-IDNR users			X	X
Conduct demonstrations and training			X	X
Prepare annual/final report				X

PROJECT DURATION: July 1, 2009 – June 30, 2010

RELATED GRANTS: Elements of this proposal build upon previous grant projects and enhances planning capabilities for COA-based and other IDNR projects. Related SWG projects include:

- T-02-P-001 (Development of an Illinois Comprehensive Wildlife Conservation Plan and Supporting Information Systems)
- T-03-P-001 (State Wildlife Conservation Plan/Strategy Data Systems)
- T-17-P-001 (Conservation Practice Mapping, Biotics 4 and Owned, Managed and Leased Properties, or OMLP)
- T-55-P-001 (Illinois Conservation Opportunity Areas: Coordination and Planning in Support of the Illinois Wildlife Action Plan)

ESTIMATED COST:

Budget Categories	Federal Request	State Cost Share		Total
		INHS match (staff time)	IDNR match (staff time)	
Salaries and Wages	\$119,829	\$51,493	\$33,257	\$204,578
Fringe Benefits	\$36,957	\$17,024	\$17,431	\$71,412
Travel	\$5,500	\$0	\$0	\$5,500
Supplies	\$1,000	\$0	\$0	\$1,000
Contractual Services	\$3,381	\$0	\$0	\$3,381
Telecommunications	\$0	\$0	\$0	\$0
Equipment > \$5000	\$0	\$0	\$0	\$0
F&A (20% Total Costs)	\$33,333	\$0	\$0	\$33,333
F&A (44.2% Total Costs)		\$30,284		\$30,284
Unrecovered F&A (20% vs 44.2%)		\$40,333		\$40,333
F&A (IDNR Rate 20.08%)			\$10,178	\$10,178
Total Project Costs	\$200,000	\$139,134	\$60,866	\$400,000
Percentages	50%	34.7835%	15.2165%	100%

BUDGET JUSTIFICATION:

Salaries and Wages:

The request includes \$119,892 to support 2.5 full-time equivalent (FTE) staff and 1 hourly staff for 12 months. \$51,493 of state match is provided through INHS staff time and \$33,257 of state match is provided through IDNR Watershed Protection Section (WPS) staff time.

Fringe Benefits:

\$36,957 is requested in accordance with the monies budgeted for salaries and wages above based on current rates of 33.06% for salaries and 8.98% for wages. \$17,024 of state match is provided through INHS staff time and \$17,431 of state match is provided through IDNR Watershed Protection Section (WPS) staff time.

Travel:

\$5,500 is requested for travel from Champaign to IDNR headquarters in Springfield to gather information for mapping, to attend meetings related to this project and GIS, and conduct demonstrations and training sessions, etc.

Supplies:

\$1,000 is requested for general office supplies, printer cartridges, CDs/DVDs, plotting supplies, paper, etc.

Contractual Services:

\$3,381 is requested to purchase software/licenses and to cover costs of training/consulting for mapping and spatial analyses.

PERSONNEL:

The following personnel from IDNR, Office of Resource Conservation, One Natural Resources Way, Springfield, Illinois 62702, and INHS, 1816 South Oak, Champaign, Illinois 61820 will manage this project.

Administrative oversight and project coordination:

Joel Cross
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Technical management and implementation:

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Additional staff involved with this project include, but are not limited to:

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LOCATION:

This project database will be housed in Springfield at the IDNR Headquarters. The majority of the work will take place at INHS offices in Champaign, with frequent coordination trips to IDNR Headquarters in Springfield. Office housing and immediate supervision will be provided by INHS.