

Office of Resource Conservation
Department of Natural Resources

Grant Agreement

PROJECT NUMBER: T- -P-1

PROJECT TITLE: Office of Resource Conservation (ORC) Management Activities Tracking System (MATS) Phase II – Additional Modules

OBJECTIVES:

This module of the ORC Management Activities Tracking System (MATS) will build on the work previously accomplished in T-3 2003 Statewide Wildlife Grants (SWG) program. Previously, a needs assessment for ORC as well as other offices dealing with Agency property and land use issues was accomplished by Environmental Systems Research Institute, Inc (ESRI). A draft report was submitted by ESRI to IDNR in July of 2004, which included recommendations on how to proceed with a pilot for the MATS project. Throughout the ESRI needs assessment report, a reoccurring theme emerged as the need for an office-wide tracking system. This system would provide both field staff and administrative staff a way to map the exact location, through a GIS component, and track critical information about the mapped locations through a relational database component. This information would need to cover all aspects of habitat restoration, species management, as well as all other activities involving areas of conservation concern deemed important by IDNR staff.

1. Prioritization of need among ORC divisions and / or programs
2. Functional analysis of chosen MATS module
3. Design of logical database structure as well as web-based interfaces
4. Construction, testing, and deployment of MATS module

EXPECTED RESULTS OR BENEFITS:

This project is a “planning grant” to be used to monitor, manage, and coordinate conservation activities for the Illinois Comprehensive Wildlife Conservation Plan (CWCP). This project will benefit the planning and management of on the ground conservation activities for the chosen ORC division and / or program throughout the state. The tracking systems, once developed, will also encourage cross disciplinary discussion and cooperation between divisions and programs within ORC as well as between ORC and outside offices and private partners. The MATS modules will allow everyone interested in conservation management activities within a certain area to have, for the first time, a complete picture of what ORC is doing on the ground at those locations. The system will also provide a way to quickly and accurately understand cost / benefit analysis and the programmatic tracking of time and expenses, projecting performance measurement statistics to aid agency and state governmental reviews on

budget and time expenditure as well as aid in the wise use of public and private funds. Some of the specific deliverables include but are not limited to: 1.) web-based input and output forms for both the GIS and the database portions of the MATS module; 2.) all forms will be exportable to .pdf format for easy printing and distribution; 3.) the ability to directly transmit and review programmatic time and fiscal tracking for each conservation management activity; 4.) design and implement a geo-database to handle the GIS or spatial portion of the monitoring activities; 5.) design and implement a relational database located in Microsoft SQL Server 2000 to handle the non-spatial portion of the monitoring process.

The final grant report will include screen captures and or printed versions of the output for the various reports generated in the new MATS module. The final responsibility for management and maintenance of the system will be divided between the ORC GIS staff, the IDNR IT staff and the division or program within ORC that will gain direct benefit from the module. Database administration will be a shared responsibility of the IT and GIS staff. The daily management of the data such as input, quality control, and content format changes will be the responsibility of the division or program staff.

APPROACH:

The success of the MATS modules will be heavily reliant on complete cooperation between the involved divisions and / or programs, both Springfield staff and field staff. The construction and testing of the actual database and associated web-based interfaces will be the job of a contracted database development firm. The technical specifications and database requirements (i.e. scope of work) will be developed by the IDNR technical project leader in cooperation with other IDNR personnel, including IT staff. The vendor contracted to build the MATS module will follow the guidelines spelled out in the IDNR “System Design Methodology” that has been developed by IDNR systems and licensing staff. The SDM requires sign-offs for the various stages of the design and development process by both the vendor and the IDNR project managers.

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JOB 1. Prioritization of need among ORC divisions and / or programs

Undertake internal IDNR evaluation and prioritization process to determine the programmatic need from which the next MATS module will be chosen for development. All divisions and / or programs within ORC will undergo a self-evaluation to determine the needs and questions to be covered by their customized MATS within the daily workflow of both Springfield management staff and operational field staff from each office unit.

JOB 2. Functional analysis of chosen MATS module

Under the direction of a contracted database development firm, undergo a functional analysis to determine specific needs for the MATS module, chosen in job one, that will be constructed during this phase of the grant process. The functional needs of both management staff and field staff for the division and / or program will be covered. The process will define database needs, input forms, reporting forms, and data viewing and querying options. One or more management and field staff interfaces customized to match specific work tasks at the daily, weekly, monthly, and yearly time frames will be needed.

JOB 3. Design of logical database structure as well as web-based interfaces

From the functional analysis completed in job two, the contracted database firm will construct a logical database design as well as design all needed web-based interfaces for the chosen MATS module. Design of both tabular and spatial (GIS) database components will be completed. Interfaces that allow for multiple means of data entry will be explored and implemented where needed. Remote data collection using Global Positioning Systems (GPS) technology and / or Personal Digital Assistant (PDA) capabilities will be incorporated where deemed feasible and to timesaving advantage.

JOB 4. Construction, testing, and deployment of MATS module

Using the logical database designed in job 3, the chosen MATS module will be completed and implemented in a reiterative testing phase process that will involve increasingly complex developmental versions of the system. Once a final version has been tested and initial training has been accomplished, further training and system support responsibilities will become the responsibility of the ORC division hosting the module.

LOCATION:

The completed MATS modules will be housed at the IDNR Headquarters, One Natural Resources Way, Springfield, IL 62702.

ESTIMATED COST:

Budget Categories	Federal Request	State Cost Share	Total
Personnel	0	0	0
Travel	\$1000.00	0	\$1000.00
Supplies	\$1000.00	0	\$1000.00
Contractual Services	\$148,500.00	\$50,167.00	\$200,667.00
Equipment >\$5000	0	0	0
Total Direct Costs	\$150,500.00	\$50,167.00	\$200,667.00
Indirect Costs			
Total Project Costs	\$150,500.00	\$50,167.00	\$200,667.00
Percentages	75.00%	25.00%	100.00%

PERSONNEL:

Select personnel from all divisions and programs within ORC will participate in Job 1. A contracted vendor will be acquired to design and build the MATS module chosen in Job 1.

GRANT AGREEMENT SUPPORT DOCUMENTATION:

The following documents are attached in support of this grant proposal:

1. Grant Agreement (Standard Form 3-1552)
2. Grant Agreement – Budget Information
3. Federal Aid Section 7 Evaluation Form
4. NEPA Compliance Checklist
5. U.S. Department of Interior, Part E: Certification Regarding Lobbying