FY02 State Innovation Pilot Grant Program - Final Proposal and Workplan

Project Title:

"Smart NOIs:" Development of an Automated Decision Matrix for Managing AZPDES Storm Water NOIs.

Grant Award Recipient:

Arizona Department of Environmental Quality, Phoenix, Arizona

Summary of Specific Objectives:

The overall goal of the "Smart NOIs" project is to design, construct, test and implement a "smart" Internet application, that includes a decision-making matrix to rapidly identify those applicants with construction projects that need attention from those that don't need special attention. The "Smart NOIs" system will provide applicants the ability to file with ADEQ a construction storm water general permit NOI online.

One specific objective of "Smart NOIs" is to identify and notify within 48 hours after receipt, those facilities requiring individual review. Other facilities will receive automatic authorization to discharge or notification that they qualify for a waiver. Another objective is to have an automated process for storing NOIs into an appropriate agency database system without the need for additional manual data entry.

Major Deliverables and Outcomes

The major deliverable is a "smart" web-based storm water NOI application form comprised of a decision-making matrix associated with a geographic information system to rapidly identify those applicants that need to file a storm water NOI from those that do not. Of those applicants that are required to file an NOI, the decision matrix will automatically determine if they are eligible for a waiver or if they require special attention. The online NOI form will be structured in a question and answer format providing users with the capability of printing out blank or completed NOI application forms. An easy-to-use GIS mapping and analysis tool will be available to assist applicants in determining the latitude and longitude coordinates of proposed construction sites and their proximity to surface waters. Online receipts will be generated for applicants confirming transactions and determinations.

The decision matrix will automatically determine whether an NOI is needed by using the location of a construction project in relation to waters of the U.S. and other factors. Proposed construction activity start and end dates along with geographic location, and soils and climatological factors, will allow calculation of associated erosivity factors or identify relevant TMDL exclusions that will determine if a waiver for an NOI is appropriate. The decision-matrix

will also examine those elements of the NOI that would suggest a closer review for consideration that a more comprehensive individual storm water permit might be more appropriate. For example, if information on the NOI suggests storm water discharges might occur near an impaired water, or a unique water, the applicant may require an individual permit. This would alert ADEQ to contact applicants for additional review during the 48 hour notice of intent to discharge period, and at the beginning of the construction period.

Finally, "Smart NOIs" will have an automatic data storage capability for those applicants who qualify for waivers, or are sorted for individual permits, or are subject to the terms of the general NOI permit. The data can then be electronically loaded into the appropriate ADEQ Oracle database. This capability will allow queries on the number, locations and reasons for NOIs and waivers granted, and enables the loading of the NOIs to a database without the need for manual data entry.

The business processes to handle storm water NOIs via the "Smart NOI" system will save ADEQ considerable costs reducing the need for additional staff. The online decision matrix and NOI application represents significant customer service improvements including rapid responses regarding requirements at reduced customer and agency expense. Overall, agency performance and productivity will significantly improve due to automated permitting at the customer level, reduced labor demands, increased accuracy of results, and improved availability of information.

The project's measurable benefits will be measured through quantitative and qualitative factors. The short-term indicator of success - At least 90 percent of users of the "Smart NOI" system are notified within 48 hours of receipt of their status based on storm water program requirements. The long-term indicator of success - At least 50 percent of applicants file NOIs using the "Smart NOI" process within five years of deploying the system.

Preliminary Project Plan, Schedule and Milestones

The project tasks include preparation of a detailed project plan, requirements analysis and design, programming and equipment configurations, web module testing and deployment. The project began on September 1, 2002 and will conclude on September 30, 2003.

Selected milestones are listed in the following table.

Project Milestone	Date
Detailed Project Plan	12/09/02
Specify Solution Requirements and Architecture Model	12/31/02
Create System Prototype and Initiate Programming	01/15/03
Initiate Development and System Testing	02/15/03
Move System to Production	03/10/03
Final Documentation and Completed System Adjustments as Needed	09/30/03

Participant Roles and Responsibilities

The solution design of the "Smart NOI" system will leverage Arizona Portal resources and infrastructure (IBM Global Services under contract with Arizona's Government Information Technology Agency) in order to improve speed of execution and minimize project cost. The system user interface will conform to GITA's Arizona Portal user interface guidelines and standards. Also, ADEQ expertise will be leveraged, particularly in defining, developing and testing the GIS and erosivity calculation components as well as the data management solution at ADEQ.

The IBM team roles and responsibilities will require more that 1600 total hours and include:

- Project Executive - Executive Leadership and engagement management (includes office and administration support).
- Project Manager - Overall responsibility for project (cost, quality, schedule, customer satisfaction). Works with ADEQ and others to monitor/report project status, manage changes in project scope.
- IT Architect - Technical design responsibility and technical team lead.
- Web Design Specialist - Develops web site information architecture. Defines navigation, layout, assures site usability.
- IT Specialist - Performs web application coding and GIS component integration. Assists with detailed web site design.

The ADEQ team roles and responsibilities will require more that 400 total hours and include:

- Project Executive (Water Quality Division Director) - Executive leadership, sponsorship,

and oversight.

- Project Manager (WQD IT Coordinator) - Overall responsibility for ensuring availability and timely, responsive participation by ADEQ personnel and resources as well as coordination with other state and federal agencies. Works with IBM, GITA and others to manage changes in project scope.
- WQD IT Technical Resources - Lead ADEQ prototyping and requirements definition effort. Lead development of GIS tool and data management solutions.
- CIO and Central IT Technical Support - Works with IBM, GITA and ADEQ to ensure operational readiness and conformance to policies and practices.
- WQD Program Liaisons - Program office coordination and expertise to define system specifications and participate in system testing. Primary customers of final product.

Public Involvement Plan

The "Smart NOI" project will be posted on EPA's web site that describes the Innovation Pilot Grant Program. Project information will also be placed on the ADEQ and GITA web sites, and pertinent publications to promote the product and educate the general public. At a minimum, a few external ADEQ customers will be recruited to participate in selected product development and testing stages. Finally, the "Smart NOI" system will include the capability to capture user feedback for review and monitoring by ADEQ.

Quality Assurance

A Quality Assurance plan is not required for this project. There will be no environmental sampling or laboratory work involved.

Reporting

ADEQ reports on the status of deliverables through its Quarterly Exception Report and Year-End Report. All reports are submitted to the Region IX Project Officer.

Budget

Federal:	Professional and Outside Expenses		$ 79,000
State:	Match		$ 18,439
		Total Grant	$ 97,439

Additional Funding to complete project:

Arizona Government Information Technology Agency (GITA) (Estimated costs) $103,000