

**2010 NASCIO Recognition Awards  
State of Minnesota**

Title of Nomination: "What's in My Neighborhood" Website Redesign Project

Nomination Category: Open Government Initiatives

Agency: Minnesota Pollution Control Agency

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## **Executive Summary**

In 2009, the Minnesota Pollution Control Agency (MPCA) launched a redesigned and vastly expanded “What’s in My Neighborhood” (WIMN), a portal to all to the regulatory environmental activity in the state. This is a huge advance in transparency about the environment in Minnesota, putting environmental information into the hands of local people so they can learn and act locally. This project significantly advances us toward achieving our strategic objective of providing “Access to Usable Data”. This project also freed up resources at the MPCA to do other work.

Citizens, businesses, environmental organizations, local governments and others are able to directly access information about air, water and waste permits on more than 150,000 facilities all over the state of Minnesota. Users can search using an easy-to-use map interface or a text-based interface and find out information about all of the permits, projects, and registrations at a site, along with inspections, enforcement activities, MPCA contacts, and links to related information. If a user doesn’t know what environmental issues are in the neighborhood, s/he can do a radius search just to see what sites might be nearby and what the environmental status is for those sites. Users also have multiple ways to download raw data.

The WIMN site also enables input from anyone. A feedback form allows users to suggest changes to the location of a site on the map, or provide other information about a site. This helps the MPCA achieve even greater data quality. Training videos for the new website are posted on YouTube and embedded into our help page. The site may be accessed at <http://www.pca.state.mn.us/wimn>

## **Description of the Business Problem and Solution**

Since 2003, the MPCA has operated a website called “What’s In My Neighborhood” (WIMN). This website was originally designed to allow businesses and citizens to determine where contaminated or potentially contaminated sites were located. The primary audience for this site was businesses and individuals involved in real estate transactions, since lenders often require an environmental audit of a property before they are willing to commit financial support to a land sale.

While the WIMN website was effective at meeting this purpose, it fell short in several respects:

- It did not contain information about a wide range of regulated activities that are of interest to the public, including air emissions, wastewater discharges, or solid or hazardous waste activities.
- The amount of information provided about each site was minimal, typically including name, address and site type.
- The website required the maintenance of its own database and was therefore often out of date or not in sync with data in other agency databases.

The MPCA is committed to making all of its public data easily available, and saw the WIMN application as a way to do that. They carried out a project that would:

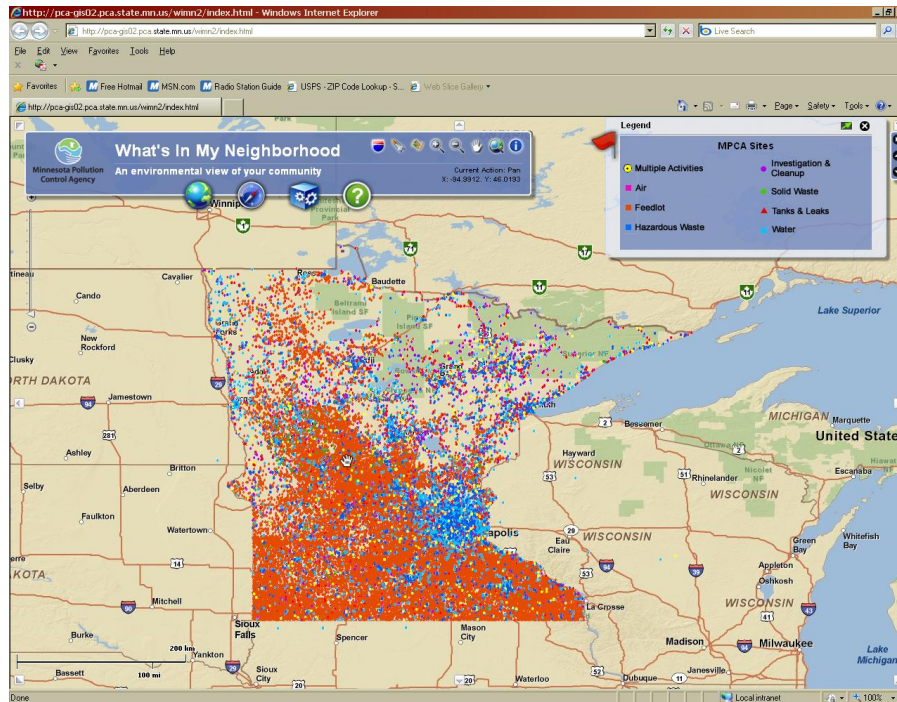
- Include all of the facilities and activities regulated by the MPCA, increasing the facilities included in the system from approximately 5,000 to over 150,000.
- Eliminate the need for a dedicated WIMN database, but instead use the data from a mirror of the agency’s enterprise facility management data system.
- Provide more data about each facility, including about information about all of the permits, projects, and registrations at a site, along with inspections, enforcement activities, MPCA contacts, and links to detailed reports that are specific to the activities at a given facility.

In order to accomplish this goal, the MPCA needed to improve its data architecture to allow the WIMN web interface access to data about all of the types of activities that are regulated. This improvement also allows the MPCA to ensure that only public data is available through the website.

The WIMN redesign leveraged existing technology implemented at the MPCA, while providing a new platform to continue to increase the quantity of data that the public will be able to access. By providing both a map interface (using ESRI’s Arc Server) and an ad hoc query tool (using Adobe’s ColdFusion), users

are able to choose the method that makes the most sense to them in finding and filtering the data that is most important to them.

The project was completed using existing staff resources and expertise. The team took 2 years to work with external stakeholders to understand the requirements, to redesign the system, and to build, test and deploy the solution. Approximately 4000 hours of staff time went into the project. The project was overseen by an executive sponsor and monitored by the MPCA project management office and the Information Systems Management Team.



Since its launch in August 2009, the WIMN website has fulfilled thousands of information requests from MPCA customers each month. The MPCA has seen a significant and sustained increase in web traffic to the redesigned WIMN website.

The new site allows users to submit comments or data improvement suggestions to the MPCA on facility specific comment pages. This provides a way for the MPCA to improve its data using citizen participation, and provides the agency with access to information that it could never afford to gather on its own.

The system is designed so that the data is available to other agencies or to the public as web services. For instance, the WIMN site data was used as an input to a Statewide Flood Response Common Operating Picture web application, which allowed first responders to determine, for instance, whether any hazardous waste generators were located in flood impacted areas.

Although the system is simple to use and reasonably self-explanatory, the depth and quantity of data available is sometimes not immediately evident to users. Screen cast videos showing various features of the site and methods that can be used to find the right data were developed by MPCA staff and are posted on the website.

## Significance

This project is a major element in fulfilling the MPCA's and the State of Minnesota's commitment to data transparency. Regulatory data makes up a significant proportion of the data holdings of the MPCA, and the redesigned WIMN provides a new platform that will allow the Agency to make all of this data available to the public.

Environmental consultants are one of the major business user groups of the WIMN system; they use it to gather data as part of a site audit for a property transfer transaction. The redesigned WIMN website provides a much more complete and timely data set for this purpose than the MPCA was able to provide before. This allows property buyers, sellers and lenders to make better decisions.

The WIMN website provides data in a format that allows inspection and discovery on-line, and also in downloadable formats that allow users to analyze the data in their own ways using their own tools, and even combine it with other datasets to develop new knowledge and insight.

By making all of this data available and viewable by the public, the MPCA is afforded many opportunities to improve their data, which increases the value of the data by making it usable for more purposes. This data availability also increases public understanding of the work done by the MPCA and can facilitate more productive discussions about strategies and priorities as we continue to evolve in the way we work to protect the citizens of Minnesota.

## Benefit of the Project

### Benefits to the MPCA:

- **Transparency:** Completion of the project in 2009 is a major step toward the Agency's goal of making 100 percent of their public data available to the public.
- **Operational Effectiveness and Efficiency:** Using the original WIMN in the early 2000s, the MPCA had 2 staff dedicated to maintaining the data base and answering data requests about locations and activities of facilities. Currently, less than 0.25 of a full-time equivalent is dedicated to similar activities.

- **Better Quality of Service:** When information requests come to MPCA staff via phone or email, the WIMN website provides a much more efficient way to obtain and provide answers to questions.
- **Data Quality:** By making the data easily available to the public, the MPCA is able to utilize local knowledge to improve the quality of its data. For instance, occasionally the location of a facility is not precisely known by the agency, and facility personnel or neighbors who do know the precise location of the facility are able to provide this information to the MPCA using the facility feedback form.
- **IT Architecture:** Completion of this project eliminated the use of a duplicative database that required extensive maintenance and that was the source of much data error and lack of timeliness. In addition, the redesigned WIMN website provides an application platform that will allow the MPCA to continue to add to the quantity of data publicly available for very little additional incremental cost.

### **Benefits to the Public:**

- **Self Service:** Members of the public who are interested in learning more about facilities that are regulated by the MPCA are able to access a wide variety of information whenever and wherever they want. The ability to browse and query the information themselves allows them to discover and build knowledge in ways that would not be possible using a manual information request process. The enhance ability to download data or link to data provides many more options for analysis.
- **More Data and More Accurate Data:** Members of the public have access to data about 30 times more facilities than they had previous to the completion of this project. That data is more timely and more accurate, because the WIMN site accesses daily updated mirrors of the same data bases that the MPCA uses to manage its operations.

Questions about this project can be directed to Tad Schindler, 651-757-2695 or [tad.schindler@state.mn.us](mailto:tad.schindler@state.mn.us), at the MPCA in St. Paul, Minnesota.