



[HOME](#) [ABOUT US](#) [CURRENT ISSUE](#) [RECENT ISSUES](#) [SUBSCRIBE/RENEW](#) [SEARCH](#)

SEARCH

Whole Site

 Advanced Search

- [Home](#)
- [About Us](#)
- [Current Issue](#)
- [Recent Issues](#)
- [Online News](#)
- [Event Calendar](#)
- [New Products](#)
- [Reader Resources](#)
- [Article Index](#)
- [Buyers Guide](#)
- [Corporate Profiles](#)
- [Glossary](#)
- [Applications Contest](#)
- [Executive Viewpoints](#)
- [Survey Says](#)
- [Reader Service](#)
- [Early Edition Archives](#)
- [Advertiser Resources](#)
- [Media Kit](#)
- [Editorial Calendar](#)
- [Contact Sales](#)
- [Classifieds](#)
- [Careers](#)
- [Products & Services](#)
- [Affiliated Publications](#)
- [Geointelligence](#)
- [Elevation](#)
- [GPS World](#)
- [Subscription Services](#)
- [Subscribe / Renew](#)
- [Change of Address](#)
- [Talk To Us](#)
- [Contact Sales](#)
- [Contact Editors](#)

2005 Geospatial Solutions Applications Contest — Innovation at Hand

Readers Share Their Geospatial Applications

Aug 1, 2005
 Geospatial Solutions

Pages | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | more

Honorable Mention

West Nile Virus Data Collection

By using the object-oriented programming approach with Visual Basic and embedded Visual Basic, a GIS solution has been developed in the City of Hamilton's (Ontario, Canada) GIS Services Section to support that city's West Nile Virus (WNV) monitoring program. The solution comprises a Water Complaint Correlation Application (desktop), a Larval Surveillance Application (mobile), and an Upload Synchronization Application. Combined, these programs help the city's WNV group collect, correlate, review, integrate, analyze, and use all data associated with the WNV program.



The Water Complaint Correlation Application is a modeless application that is complex to develop. The "Find" command in Microsoft Word is an example of a modeless application that uses a dialog box to collect users' search criteria and allows users to move around in the document while the "Find" command is active. Similarly, the Water Complaint Correlation Application enables users to interact within one of the application windows during such commands as zoom, pan, or insert feature.

The modeless application resides in a proprietary desktop GIS with two interactive user interfaces (review interface and summary interface) that are right-side docked to the map window frame. When a user opens the WNV workspace file and clicks the Custom/WNV menu, the first review interface comes up by the right side, and the valid non-correlated water-complaints data are connected with the application and displayed. The << and >> buttons are used to loop through each valid non-correlated call complaint to facilitate its review and modification.

When a user clicks the button, the second summary interface displays the correlation with standing water sites and property parcel data. Users can also click on the button to zoom to the water site or property and simultaneously click any button from the tool bar to pan, zoom, or insert a feature. Users can click the "Return" button from the right bottom to revert to the first interface. Click the button and the georeferenced call complaint is saved into the database and removed from the interface. Users can also loop through the rest of the complaints to continue with correlations. The button is used to enter new complaint calls, which can be correlated or saved in the database for future correlations.

In general, this application assists with geo-referencing each call complaint. All calls regarding standing water are taken by the city's call center, which transfers information

GEOSPATIAL SOLUTION NEWSLETTER



Sign up for *Geospatial Solutions* Early Edition and get a jump start on the latest articles featured in our monthly magazine.

Company:
 Email Address:
 Confirm Email Address:
 Name:

SURVEY SAYS

For what types of tasks you use 3D modeling tools?

- Natural resource management/analysis activities 2
- Infrastructure engineering, planning, analysis, and/or management
- Transportation network engineering, planning, analysis, and/or management
- As a visualization tool for collaborative decision support 2
- A combination of the above 3

Results are published in t magazine and online.



[WWW.ERDAS.COM](http://www.erdas.com)



into the master database. Then the team performs a follow-up, using the application to correlate the water-complaints dataset with the existing standing-water dataset and property parcel data.

The Larval Surveillance Application is an embedded Visual Basic application that resides in a mobile GIS, which is built on top of a proprietary handheld platform. This application logs surveillance data and consists of four pages for navigation and data entry. After completing the fieldwork, workers put the handheld into a cradle. The application then updates the master database, streamlining the data-capture process, eliminating redundant input, and reducing paper use.

All georeferenced water complaints and gathered larval-surveillance information are displayed on an intranet Web GIS site, where individuals involved in the WNV project can complete such tasks as risk-assessment analysis and hot-spot trending.

We used **Microsoft** Visual Basic and Embedded Visual Basic to build the Water Complaint Correlation application that resides in **Inter-graph Security, Government & Infrastructure's** GeoMedia 5.2, the Larval Surveillance application that resides in Intergraph's IntelliWhere OnDemand 5.2 mobile GIS, and the Upload Synchronization Application. IntelliWhere OnDemand runs on **HP's** iPAQ Pocket PCs in the field. SQL (structure query language) is employed in all of the applications to access the corporate GIS data center repository, which is configured with **Oracle** Spatial 8i. The applications also utilize Microsoft Access. The intranet was built with GeoMedia Web Map 5.0 and GeoMedia WebMap Publisher 5.0.

Jin Y. Xie, City of Hamilton (Ontario, Canada), GIS Services Section

« back Pages | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 more »

 [E-mail This Page](#)

 [Print-friendly Version](#)

Ads by Goooooogle

[GIS Mapping Component](#)

Map Suite For .NET Developers Try Free No Risk Demo Today www.spatiallyaware.com

[West Nile Virus Symptoms](#)

myDNA West Nile Channel Recognise the Symptoms Early myDNA.com

[MapDotNet GIS Suite](#)

Drag and drop GIS solutions for ESRI ArcG using ASP.NET MapDotNet.com

[StreetSmart Base Map Data](#)

MapInfo & ArcView Quality Streets, Roads, Base Features & Boundaries. www.meridiangeo.com

[Global Mapper](#)

View, edit, merge, rectify convert Download a free demo today. www.globalmapper.com



[Subscribe to Geospatial Solutions](#) | [About Questex](#) | [Privacy Policy](#)

© 2005 Questex Media Group, Inc.. All rights reserved. Reproduction in whole or in part is prohibited.

Please send any technical comments or questions to our [webmaster](#).