

TWO-COUNTY INITIATIVE CAPTURES GEOGRAPHIC ENVIRONMENT HEALTH DATA



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In 2008, Genesee and Orleans counties were the fortunate recipients of a grant to create The Genesee/Orleans Rural Environmental Health GIS Initiative. The three-year project, funded with the grant from The Greater Rochester Health Foundation (GRHF) and administered by Lake Plains Community Health Network, developed common software applications that could be used independently by each county to build a GIS (Geographic Information System) for use by each county's Environmental Health Units.

This is the direction taken by Genesee County Health Department.

The generosity of GRHF has allowed for the acquisition of six Panasonic CF-19 toughbooks with touch-screen technology, Wi-Fi and Bluetooth. These are paired with Trimble Pro-XT GPS receivers and each licensed to run ESRI ArcGIS Engine Runtime. Additionally, contracted services were purchased to develop the user interfaces, web applications and the database architecture.

A database has been created to capture and store geographic location of key components of individual home sanitary sewage disposal systems and individual wells. This database allows for the storage and graphic representation of enhanced data, thus creating a GIS (Geographic Information System). The project has allowed for the storage of digitalized historic records and has enhanced customer service for the County Environmental Health Unit.

The capture of new and existing septic and well data points continues as it has become the standard operating procedure of the Department. The historical files are 66 percent digitalized and will be complete as manpower permits; the Department has committed infrastructure and resources to this on-going process.

Speaking from Genesee County Health Department's point of view, the project and the advances in technology that the project introduced to the Unit have proven a real difference maker for us and our small rural Health Department.

The data gathered, and continuing to be gathered, have and will make surveillance, monitoring and planning for the safe development and delivery of potable water to the citizens of Genesee County easier and more efficient.

The hardware the grant monies secured, along with the technical skills gained by the environmental staff as a direct result of the project, has been leveraged to develop further advancement to the daily operations.

Having been put in the position of having quality tools at no cost to the taxpayers, the Genesee County Environmental Health Unit has worked to maximize the benefit these technologies allow.

Using hardware secured by the grant, some productivity purchased off the shelf (Adobe Acrobat Pro X), exploiting the talents and skills of staff members, along with some grant funded expertise, Genesee County has been able to develop an application to digitally capture inspection records for all the programs that we do and report to the New York State Department of Health.

We have succeeded in becoming paperless. The digital fill-able pdf inspection forms are sent to New York State via Silent Fax™. The grant has led us to a "green" transformation, allowed for significant time savings in record keeping and record retrieval. The reports are captured by the State's Environmental Health Information Permitting System (eHIPS) in minutes rather than the days the accepted method required, no paper or ink is expended, and the entire system allows for superior supervisor oversight of all activities. There have been observable economies of material and manpower.

GIS technology is being applied to this data as well, allowing for a logical filing system and transparency in government. Citizens will be able to see these records and reports by visiting the Genesee County's GIS Map on the county web site and locating the property or business the records are tied to. Savings of time, paper and postage will be realized.

All these things are directly linked to the grant opportunity provided to us by GRHF. I do not overstate, when I say that these things will allow the Genesee County Health Department Environmental Division to maintain historic levels of service with a contracting workforce. The applications developed for use in both the Residential Sanitation Program and the Community Environmental Health and Food Protection Inspection Programs allow the field staff: to carry the County's entire historic database into the field; file program work activities; report to supervision; and correspond with the public with a minimum of clerical support. 

