



# The Great Lakes RCAP Connection

The Voice of the Great Lakes Rural Community Assistance Program

Spring 2009

## Fountain Run Receives Its First Computers Through Chance Conversations

Melissa A. Melton, KY RCAP

Sitting in a waiting room making small talk. You learn that the gentlemen sitting next to you works within the same industry as you. You begin talking of common issues, problems, needs, etc. As it turns out, he’s a General Manager of a water district and you’re an Office Manager of one. Small world. You are given a business contact name and phone number. You’re told that “RCAP” can be of assistance. You think it’s worth your time to make a simple phone call. Thank goodness for chance conversations!

That’s how RCAP was introduced to the Fountain Run Water District (FRWD). A comprehensive needs assessment



*FRWD Operator Chris Veach checks out the new computer.*

of the water/sewer district was performed at Kentucky’s Rural Community Assistance Program (RCAP) staff’s initial site visit. Then a wish list was discussed. Computers topped a short list to the surprise of the RCAP technical assistance provider as all customer billing is outsourced. Monthly operating reports and similar tasks aided by computer use are performed by the General Manager and the assistance of the neighboring water district. The TAP understood there was neither immediate necessity nor the budget for computers. However, a few phone calls to sister agencies to explore the purchase of computer hardware and software were made. Proposals were received and it looked as though computers were out of reach due to budgetary restraints.

Another chance conversation occurred between the RCAP State Director Kimberly Padgett and David Shehee of Kentucky-American Water Company while serving together on Division of Water’s Compliance Subcommittee. During a discussion regarding electronic reporting and its effects on small water systems, Mr. Shehee envisioned RCAP distributing Kentucky-American’s older computers to the systems most in need. The State Director confirmed that RCAP would facilitate the distribution should this come to fruition. This potential opportunity stirred much excitement among the RCAP staff and to those communities such as Fountain Run.

*(continued on page 3)*

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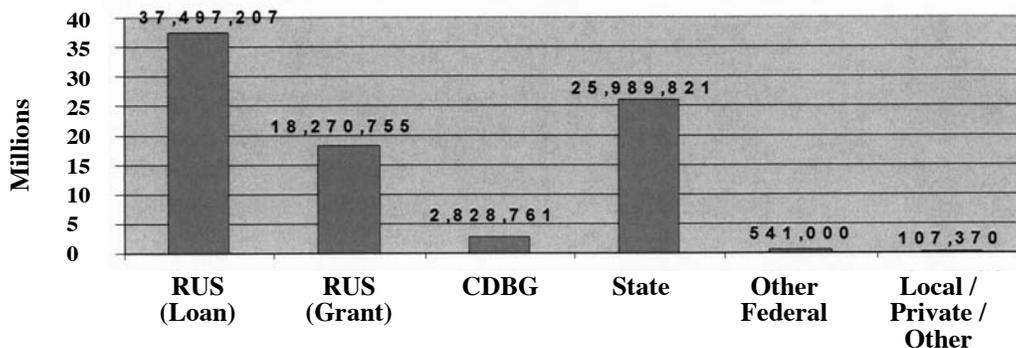
# Great Lakes RCAP 2007 - 2008 Year in Review

The Great Lakes Rural Community Assistance Program (GLRCAP) offers on-site technical assistance for water, wastewater, and community development needs throughout the states of Illinois, Indiana, Kentucky, Michigan, Ohio, West Virginia, and Wisconsin. The majority of services are provided free to eligible rural communities.

## Outcomes and Impacts...

RCAP served 367 communities with a total of 355 projects last year. RCAP focuses on developing affordable systems for rural communities. One strategy is to leverage grant funding for projects thus lowering debt service payments and minimizing user fee impacts on lower income community residents. More than \$85 million was mobilized for 15 new water and wastewater systems and 45 upgrades and line extensions. This means that for every federal dollar invested in our program, we mobilized over \$30 for small community infrastructure projects. The total population impacted in the 367 communities was 504,308, of which 22 percent were low-income individuals. These impacts led to better health and living conditions, stabilized housing stock, and opportunities for community development.

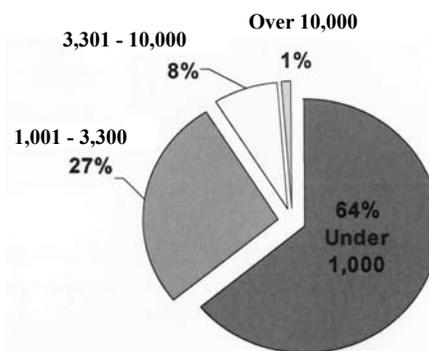
## Project Funds Leveraged



RCAP also works with communities to build their capacity to operate and manage their water and wastewater systems effectively. RCAP achieves this through direct technical assistance and training of community personnel in developing their managerial, financial and technical skills. Forty-seven trainings were conducted throughout the region, with 695 participants attending.

## No community is too small...

Keeping true to our mission, we served primarily rural communities of less than 1,000 residents. The pie chart shows the population sizes of communities we served.



## And the survey says....

A Customer Satisfaction Survey was mailed to each community served and 193 surveys were returned resulting in a 64 percent response rate. The survey, conducted annually, gives community officials an opportunity to provide input on how to improve the services offered by Great Lakes RCAP. When asked to rate from one to five whether the respondent would recommend RCAP services to other communities with similar problems, GLRCAP received an overall rating of 4.86. This is evidence of the invaluable services that RCAP provides.

A sample of comments pulled from the surveys is located on the back page. While some names were included, the surveys were conducted anonymously.

# Chelsea Sanitary District Receives WI Clean Water Fund Hardship Grant

*Carolee Ilminen, Wisconsin RCAP*

Chelsea Sanitary District is located in Taylor County in northern Wisconsin. The District operates a recirculating sand filtration system that was designed to treat 12,000 gallons per day (GPD) in 1994, but with only 41 households the average flow is less than 1,200 GPD, which is not enough for the system to work properly. With a quarter to a third of the users being delinquent in user fees the District could not afford to hire a consultant or do an upgrade. The DNR Basin Engineer, Lonn Franson, was well aware of the dire financial condition of the District and the fact that the Operator, District Board Members, and Business Manager had not been paid in over a year. Thus, the operator was doing minimal maintenance and the system was on the verge of failing. Repeated violations put the District on the brink of being placed in non-compliance.

Wisconsin RCAP has been assisting the District with submitting USDA required reports for their 1994 USDA loan and researching funding options to install a UV filtration system to improve treatment and reduce operating costs. The District did not qualify for conventional funding, so RCAP TAP Carolee Ilminen and DNR Staff Lonn Franson met with WI Representative Mary Williams and explained the needs of the District. With Mary's assistance, special legislation was passed allowing the District to receive an \$80,000 Clean Water Fund Hardship Grant to alleviate the problem.

In addition to helping the district meet its compliance issues, RCAP has also been instrumental with assisting the district in improving its financial and managerial capacity. For years the system had been operating in the red. RCAP was initially requested by USDA to assist the manager with preparing necessary budgets, quarterly reports, and year end reports, which has saved the district in auditing costs. Other cost saving measures that were implemented due to RCAP's assistance were: savings in consultant fees due to the creation of a bid document by RCAP that was used for plant upgrades, the sale of an unused generator and aluminum beams, implementation of two rate increases and late fees for delinquent accounts, and the refinancing of two existing loans. In 2007 the community became directly involved in operations and maintenance by performing hands on tasks and doing duties that were normally hired out. As a result of all of these measures the District has been operating in the black since May 2008. In addition, the District has appointed two new Board Members and hired a new Operator and Business Manager to help ensure that they stay on the right path to maintain capacity within all areas of operations, management, and finance.



Community Work Day in Chelsea

A recent letter received by USDA Rural Development sums up the capacity improvements of the District well. The letter stated that “the District was being released from submitting quarterly reports since they are now funding required accounts, maintaining adequate insurance, submitting all other required financial reports, and managing the facility responsibly”.

## **Fountain Run** *(continued from front cover)*

Kentucky-American Water Company donated two computers for RCAP's distribution. It would be these that would eventually find their way to the Fountain Run Water District.

After much research, RCAP discussed various options with the utility staff and selected a software package to meet the needs of Fountain Run. The FRWD Commission approved a budget of \$800 to secure all software and an all-in-one printer/scanner. RCAP delivered and assisted the FRWD with the installation of the software and is currently providing some basic training on computer software use to the office manager. The two operators will require no assistance for they have been utilizing their own computers at home to create such things as a meter history log and report. The TAP is pleased that these computers will be put to good use by these operators. The Fountain Run Water District is appreciative of the generous donation of Kentucky-American Water Company and the assistance of Kentucky RCAP. To borrow the words of Margaret Mead, “Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has.”

# Ohio RCAP and Other Partners Help Save Cadiz \$480,000

*Bob Allen, Ohio RCAP Field Agent*

In 2004 Ohio RCAP's Bob Allen began working with the Village of Cadiz on wastewater problems that the village was experiencing. The concerns were primarily over large amounts of inflow and infiltration entering Cadiz's wastewater collection system during wet weather events. During wet weather events the village's wastewater treatment plant experiences sewer overflows with some manholes within the wastewater collection system becoming surcharged resulting in raw sewage forcing open the manhole lid and spilling into streets or other areas surrounding the manhole.

One of the first steps Ohio RCAP took in working with Cadiz was to suggest the formation of a committee made up of representatives from the Board of Public Affairs, Village Council, the Mayor, Wastewater Superintendent, and several citizens to represent various segments of Cadiz's population. After the Sewer Committee was organized Ohio RCAP facilitated a meeting with representatives from Ohio Environmental Protection Agency to ensure that the village understood the Ohio Environmental Protection Agency's concerns regarding Cadiz's wastewater system.

With Ohio RCAP assistance, Cadiz then followed the qualification based selection process to hire a consultant to begin work on a preliminary engineering report. The consultant quickly determined that the village had poor maps or in some areas no maps of the wastewater collection system. The consultant began working to map the collection system and to develop a plan to locate and identify sources of inflow and infiltration. During this time period Ohio RCAP facilitated a public meeting to inform residents of work being done to identify deficiencies of the wastewater collection system and probable actions to resolve the deficiencies.

The consultant continued to evaluate Cadiz's wastewater treatment system. At an intermediate point in his evaluation the Sewer Committee opted to hold another public meeting to keep residents informed on the analysis being performed on the wastewater system. At the second public meeting the consultant presented a report which indicated much of the current Cadiz wastewater collection system may have to be replaced to eliminate the inflow and infiltration problem. The consultant went on to suggest total project costs may reach \$18 million.

Shortly thereafter the consultant presented Cadiz with a plan of action, which included the completion of a Sanitary Sewer Evaluation Study for approximately \$700,000. The study would include locating and mapping all manholes in the village collection system, flow data gathering, smoke testing, dye testing, jet washing collection lines, running a camera through collection lines, and data analysis. At this time Pejmaan Fallah (Ohio EPA's Division of Environmental and Financial Assistance) and Ohio RCAP discussed options to permit Cadiz to significantly reduce the engineering evaluation costs. With support from Glenn Enslin (Congressman Zach Space's Dover office) and Mr. Fallah, Ohio RCAP invited Ohio Rural Water Association to meet with Cadiz to determine what "no cost" or "low cost" services they could provide to Cadiz to minimize the data gathering costs required to complete a Sanitary Sewer Evaluation Study.



*Photo of Cadiz public meeting provided by The Harrison News Herald, Cadiz, Ohio.*

Efforts by the Sewer Committee, Mr. Enslin, Mr. Fallah, Ohio Rural Water Association and Ohio RCAP resulted in the formation of a plan of action involving active data gathering by Cadiz' staff, Ohio Rural Water Association and Ohio RCAP. This action plan permitted the gathering of flow data and running cameras along sewer collection lines to determine problem areas in Cadiz's sewer collection system.

By utilizing local village resources, Ohio EPA, Rural Water Association, and RCAP staff the village has gathered much of the data needed to complete the Sanitary Sewer Evaluation Study. Ohio RCAP also completed an Appalachian Regional Commission grant application for the Village of Cadiz which will fund a significant portion of the cost of a jet washer and sewer camera equipment needed to run a camera along sewer collection lines. It is anticipated Cadiz will save in excess of \$436,000 by implementing the action plan developed with Ohio RCAP facilitation.

# Designing a Project; the Owner's Role

*(Part one of a two part article)*

*Kristin Woodall, Great Lakes RCAP; based upon "Project Development - Design" coursework developed by Kurtis Strickland, Ohio RCAP*

An engineer has been hired. The Preliminary Engineering Report is complete. A project schedule is in place. The planning for your project is done. What's the next step in moving a project forward? The answer is Design.

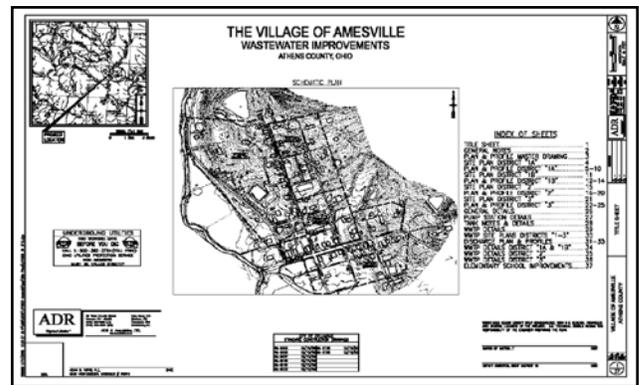
Design is one of the three major phases involved in project development. Project design follows the planning phase and is implemented before the construction phase. As mentioned in previous articles (summer 2008 and winter 2009) a water or wastewater project is a big undertaking for communities. It is critical that the community continues to be aware of it's responsibilities throughout the entire project and all phases.

This article will contain information to help the owner through various aspects of the design phase, including: securing funding for design; obtaining community approval; coordinating with primary agency; and securing construction financing.

As the owner of the project it is your job to ensure that the design of the project meets your needs, is affordable to your customers, involves infrastructure that you can successfully operate and maintain, and intended to exceed its useful life.

Before beginning the design ten important questions need asked:

1. Do we have financing approved to pay for engineering design?
2. Is there construction financing available to pay for the system we're designing, or do we have a financing plan?
3. Have we coordinated with funding agencies to make sure our financing plan and grant expectations are realistic?
4. Can we afford what is being designed?
5. Will Ohio EPA approve and permit what is being designed?
6. Is there more growth or capacity being included in the design than funding agencies will allow?
7. Can we operate and maintain what is being designed?
8. Does the public understand what will be designed and why?
9. Is the land that needs to be acquired for the infrastructure available and affordable?
10. Can the system be constructed within the required time period?



Often times owners will need to acquire financing for the costs to design the project. To obtain the financing necessary the owner will need to have a sufficient revenue stream to pay back the loan. For existing systems current revenue needs to be adequate or an increase in user rates needs implemented to ensure adequate repayment. For new systems a user charge system needs implemented or sponsorship from the county can be obtained.

Regardless of the source it is important to note that there is a certain amount of risk when incurring costs for design without a clear commitment of funds for construction. However, this risk can be minimized by making sure that you have done all of your homework and questions (note the 10 questions above) have been answered to your satisfaction.

Community input during design is inherent in making sure that the design meets the community's needs and abilities. It is also important to explain the need to implement user rates to the public as early as possible. This will

## Designing a Project *(continued)*

help prevent unpleasant surprises that could delay the project. The available financing for design projects varies from state to state. All resources need researched to determine the funding source terms and requirements to see which is the best option for your community needs.

Monitoring the engineer's work and conducting periodic design review meetings and public meetings are the responsibility of the owner. The engineer's cost estimate needs continually monitored to ensure the infrastructure is within the budget at the end of the design period. Review meetings should be held at 30, 60, and 90% completion levels. If you have an existing system, your operator needs utilized for technical opinions and knowledge. The owner of a start up system needs to involve the state's primacy agency for technical expertise and guidance.



At the same time that design is taking place the construction financing plan should be worked upon. Often times water and wastewater projects are very costly and one funding source is not enough. It is typical for projects to be financed by a variety of federal and state agencies that have different fiscal years, accept applications at different times of the year, and make funds available for construction at different times as well. Therefore, timing becomes a critical issue in funding your project and preparing for construction and is something you will need to think through before beginning the application process. It is helpful to consult with RCAP or other organizations knowledgeable of financing sources in order to decide which funding program or programs best fit your project type. Once the design is complete it is important to make any final adjustments in your financing strategy, which includes updating your sources and uses (estimated project cost, itemized operation/maintenance costs, expected financing sources, loan terms and interest rates, annual debt payments, and average user costs).

		FINANCING SCENARIOS						
		Project:				Date:		
		Scenario	Scenario	Scenario	Scenario	Scenario	Scenario	Scenario
		1	2	3	4	5	6	7
<b>CUSTOMERS (EDU)</b>								
<b>TOTAL PROJECT COST</b>		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>TOTAL ANNUAL OMR</b>		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>FINANCING</b>								
ARC Grant		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CDBG W&S Grant		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
CDBG Formula Grant		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
OPWC Grant		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
OPWC Credit Enh (Interest)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
USDA Grant		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
U.S. Army Corp of Engineers		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Local Funds (Cash, Tap Fees, Etc.)		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Bonds/Notes/Bank Loans		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
OEPA Loan	20 0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
OPWC Loan	20 0.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
OWDA Loan	30 2.00%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
USDA Loan	40 4.25%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Financing		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>ANNUAL DEBT</b>								
Annual Bonds/Notes/Bank Loans Payment		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Annual OEPA Payment		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual OPWC Payment		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual OWDA Payment		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual USDA Payment		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
USDA Reserve		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>ANNUAL DEBT &amp; OMR</b>		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Future Av. Mo. Cost Per Customer</b>		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Total Bonds/Notes/Bank Loans Payback		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Total OEPA Payback		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total OPWC Payback		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total OWDA Payback		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total USDA Payback		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Once the design is substantially completed the engineer will submit the permit-to-install application to your primacy agency, who charges a fee, which is a percentage (typically estimated at .0065) of the total estimated project cost. The owner is responsible for this fee, which needs to be included within the total project cost to be financed. Review of the permit takes approximately 3-6 months. The primacy agency will typically have comments and may require changes. You need to make sure that your engineer consults you before making any recommended changes by the primacy agency to your plans and specifications.

After the design is complete and a construction financing plan is developed, the owner needs to hold a public meeting. The meeting's agenda needs to include the following:

- **Project Design** The engineer needs to attend, explain, and answer questions related to the capacity, operation and maintenance requirements, location of infrastructure, and how the project resolves the water or wastewater problem.
- **Land acquisition, user agreements, and required easements** The owner needs to discuss and be prepared to answer questions related to these items (more detail will be provided in part 2 of our design series within the next RCAP Connections Newsletter).
- **Project financing and customer costs** The owner should discuss the sources and uses of funds and be prepared to answer questions about project costs, financing, customer costs (i.e. hookup fees, assessments, and estimated user rate impact).
- **Project schedule** The owner needs to provide an estimated schedule on when the project is expected to be completed, financing is expected to be approved, the project will be advertised to bid, contracts will be signed, construction will begin and end, and customer connections will occur.



This concludes the first of two articles related to the design phase of project development. Stay tuned for the next issue of the Great Lakes RCAP Connection, where we will conclude our two part series with land acquisition, user agreements, permits, bidding, and pre-construction activities as the topics.

RCAP has been assisting rural communities with project development over twenty five years through our technical assistance providers. For more information on the RCAP nearest you visit our website [www.glrcap.org](http://www.glrcap.org) and click on your applicable state or contact our regional office @ 1-800-775-9767.

### **Cadiz** *(continued from page 4)*

Ohio RCAP also trained village officials within Cadiz on the efficient operation of a public water and wastewater system. The training's focus was on setting rates and ensuring that governing ordinances clearly state user charges and that these ordinances are being enforced by village staff. As a result of correcting several deficiencies, the Village of Cadiz was able to increase revenues for their water and wastewater systems by approximately \$80,000.

With the cost conscientious team of Ohio partners and RCAP's facilitation, Cadiz is well on its way to determining the cause of its inflow and infiltration problems as well as planning to serve an additional 50-100 houses just outside of the village. RCAP plans to continue to assist the village with various items (including the design of the most optimal funding package) until the project is constructed.



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### **Communities Give Praise to RCAP** (See the full report on page 2)

*“The RCAP staff was very quick in responding to our call for help. They were very helpful and very business-like when dealing with our community. Would recommend everyone to use them.”*

**S. Henderson; Mason, IL**

*“RCAP has been great in keeping us informed about different perspectives that might come up if it would be of help to us. She keeps us focused and working towards improving our town.”*

**S. Kixmiller; Freelandville, IN**

*“RCAP has a very good organization and are very professional. I would recommend RCAP to any community.”*

**D. Crick; White Plains, KY**

*“Because of your knowledge, which the ordinary person would not have, your services are invaluable to other communities.”*

**B. Hypes; Mt Lookout, WV**

*“Christie Cook has made herself available to this village, coming to meetings and doing the pre-work to get our sewer and now water project going forward. She gave us the insight into what other communities are doing. She also works to see that those in need receive every assistance available.”*

**H. Douglas; Waldon, MI**

*“John (Rauch) and his associates treated our community as if they lived in it and was just as concerned as we were. Great Leadership!”*

**Anonymous; OH**

*“RCAP’s grant management was competent and responsive. We found them to be effective and pleasant to work with. It was a good project, well managed with good outcomes.”*

**J. Wichita; Lincoln, WI**