

RURAL matters



2013
Issue 1

The magazine of the Rural Community Assistance Partnership



RCAP Turns 40!

Inside: A window to RCAP's past

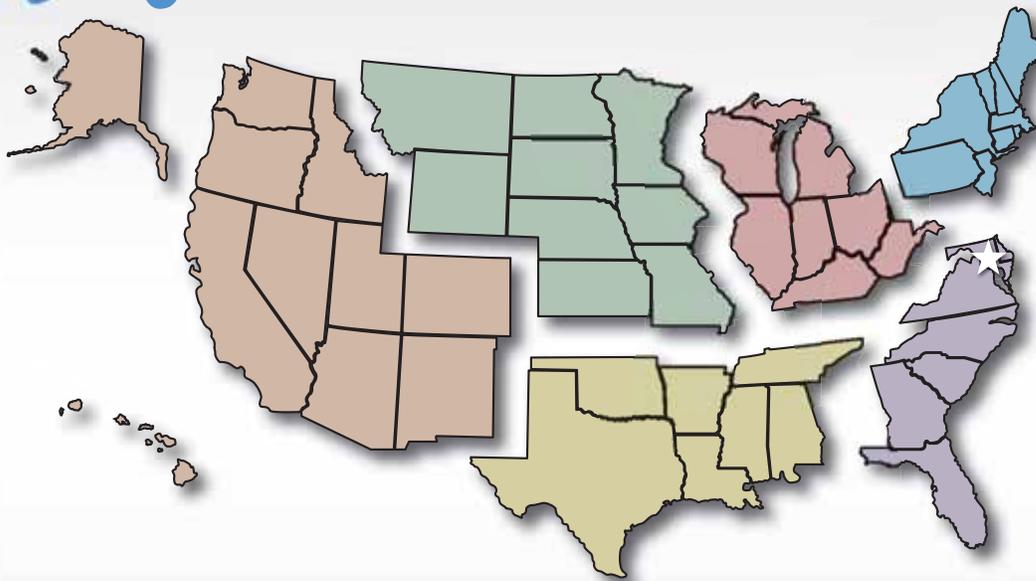
Need help with your community's water or wastewater system?

The Rural Community Assistance Partnership (RCAP) is a national network of nonprofit organizations working to ensure that rural and small communities throughout the United States have access to safe drinking water and sanitary wastewater disposal. The six regional RCAPs provide a variety of programs to accomplish this goal, such as direct training and technical assistance, leveraging millions of dollars to assist communities develop and improve their water and wastewater systems.

If you are seeking assistance in your community, contact the office for the RCAP region that your state is in, according to the map below. Work in individual communities is coordinated by these regional offices.



Rural Community Assistance Partnership



Western RCAP

Rural Community Assistance Corporation
3120 Freeboard Drive, Suite 201
West Sacramento, CA 95691
(916) 447-2854
www.rcac.org

Northeast RCAP

RCAP Solutions
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Gardner, MA 01440
(800) 488-1969
www.rcapsolutions.org



Puerto Rico
(Northeast RCAP)

Midwest RCAP

Midwest Assistance Program
P.O. Box 81
212 Lady Slipper Avenue NE
New Prague, MN 56071
(952) 758-4334
www.map-inc.org

Great Lakes RCAP

WSOS Community Action Commission
P.O. Box 590
219 S. Front St., 2nd Floor
Fremont, OH 43420
(800) 775-9767
www.glracap.org

Southern RCAP

Community Resource Group
3 East Colt Square Drive
Fayetteville, AR 72703
(479) 443-2700
www.crg.org

Southeast RCAP

Southeast Rural Community Assistance Project
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Roanoke, VA 24016
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www.southeastrcap.org

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Practical
solutions for
improving rural
communities

photo by Stephen Padre

RURAL
matters

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RCAP

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Director's letter



Robert Stewart
RCAP Executive Director

Anniversaries are usually a time to celebrate, reflect, reconnect and even recommit to something that has been important to us. This year marks our 40th anniversary, and we have devoted part of this issue to recount the history and development of RCAP.

As we look back on these four decades, there are countless accomplishments we can point to that were the result of our work, such as: hundreds of thousands of rural residents who now have community water or wastewater services; billions leveraged in infrastructure investment; tens of thousands of community leaders trained on management and financial responsibilities; utilities brought into compliance with drinking and clean water regulations; and hundreds of training and educational resources produced and distributed nationwide.

To a large extent, we have been fulfilling our mission of providing practical solutions for improving rural communities. Yet from my vantage point, there is still so much left to be accomplished. While 40 years ago I was just a college freshman, my direct association with rural community and infrastructure development goes back 26 years to when I started work with Community Resource Group, the Southern RCAP. A lot of my time in those years was spent working to bring water services to the colonias in south Texas. While most of the colonias now have water services, there are still far too many families there and in rural areas across America without adequate water and wastewater services, basic necessities that are required to protect public health and provide a foundation for economic growth.

Over the past 40 years, RCAP's work has been supported by federal agencies, such as the Department of Health and Human Services, the Department of Agriculture's Rural Development, and the Environmental Protection Agency, as well as a large number of state programs. Our regional partners have developed expertise in such diverse areas as environmental assessments; energy audits; rate-setting; operator certification courses; community-based economic development; small-utility GIS applications; on-site wastewater systems; web-based training platforms; and other areas targeted to meet the needs of small, rural communities.

As I reflect on what RCAP has accomplished in 40 years, what strikes me first is the enduring excellence of our staff in every state. Their commitment, dedication, expertise and resourcefulness are truly remarkable. Working through issues many would say are intractable, countless nights away from home and family, and learning and adopting new approaches to our work are just some of the aspects of their work. Yet the rewards are boundless. RCAP works with rural community and utility members and staff who possess the same level of dedication and commitment to improving the quality of life for their families and their communities. There are few rewards as satisfying as seeing families receive first-time community water or wastewater service or just knowing that your collaboration with a community has provided a foundation for their future prosperity.

Much of our success is also attributable to the tireless contributions of the dozens of professionals who have served as RCAP board members. Their leadership and vision has ensured that RCAP is always looking forward to what still needs to be done and how our work can have the greatest impact on improving rural communities while using the most effective and efficient means possible.

So while as an organization we celebrate our 40 years of service, we look forward to new challenges and opportunities to assist rural communities with their infrastructure, housing and development needs. ■

rural developments



News and resources from the Environmental Protection Agency

Consumer confidence reports may now be delivered electronically

EPA has announced that drinking water utilities may provide reports about water quality to customers via email or on the internet instead of mailing a copy of the report. The agency made this conclusion following a review of the Consumer Confidence Report (CCR) Rule, which requires utilities to provide reports to their customers each year under the Safe Drinking Water Act. The change is expected to help utilities improve transparency and save resources. For more information on the review, visit <http://water.epa.gov/lawsregs/rulesregs/sdwa/ccr/regulations.cfm>

Read the January interpretive memo announcing the change at <http://water.epa.gov/lawsregs/rulesregs/sdwa/ccr/upload/ccrdeliveryoptionsmemo.pdf>

An attachment to the January memo, *Consumer Confidence Report Electronic Delivery Options and Considerations*, provides an overview of electronic delivery methods and describes approaches for community water systems that may want to implement electronic delivery. It is important to note that the attachment provides a framework of information, recommendations and interpretations of existing CCR Rule provisions. It is not a rulemaking action and does not add to or replace any existing CCR Rule requirements. It also

does not supersede any additional primary agency or tribal requirements for content or delivery of CCRs.

EPA releases state enforcement performance information and comparative maps

EPA announced on Feb. 7 the release of state dashboards and comparative maps that provide the public with information about the performance of state and EPA enforcement and compliance programs across the country.

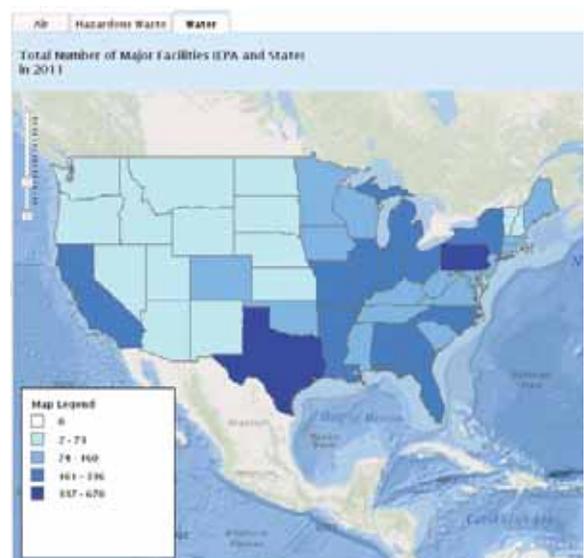
“Transparency and access to information at all levels helps to drive improvements in environmental performance,” said Cynthia Giles, assistant administrator for EPA’s Office of Enforcement and Compliance Assurance. “Today’s release of state enforcement information highlights the important work going on at the state level to address serious pollution problems and also underscores areas where states and EPA may need to strengthen enforcement and compliance efforts.”

Most states and tribes in the United States have the authority to implement and enforce many of the nation’s air, water and waste

laws. The dashboards and maps include state-level data from the last five years and provide information including the number of completed inspections, types of violations found, enforcement actions taken, and penalties assessed by state.

Users can customize the dashboards to view state activity, EPA activity, or combined activity. Where available, the site also allows users to view national averages and display state enforcement trends over time.

The interactive state performance dashboards are located on EPA’s Enforcement and Compliance History Online (ECHO) website (www.epa-echo.gov). ECHO is an EPA transparency tool that allows the user to map federal and state inspection, vio-



lation, and enforcement information for more than 800,000 regulated facilities. The state dashboards and comparative maps that are available in ECHO are part of EPA's commitment to increasing transparency and providing data to the public in a format that is easy to understand and use.

www.epa-echo.gov/echo/stateperformance/comparative_maps.html

EPA launches green infrastructure listserv

EPA's green infrastructure program has launched a green infrastructure listserv, called GreenStream, to share training opportunities, newsletters, and publications. To join, send a blank email with "Subscribe" in the subject line to [join-greenstream@lists.epa.gov](mailto:greenstream@lists.epa.gov)



Green infrastructure is an approach that communities can choose to maintain healthy waters, provide multiple environmental benefits and support their sustainability. Unlike single-purpose gray stormwater infrastructure, which uses pipes to dispose of rainwater, green infrastructure uses vegetation and soil to manage rainwater where it falls. By weaving natural processes into the built environment, green infrastructure provides not only stormwater management, but also flood mitigation, air-quality management, and much more.

At a time when so much of our infrastructure is in need of replacement or repair and so few communities can foot the bill, we need resilient and affordable solutions that meet many objectives at once. Green infrastructure is one solution.

More information on EPA's green infrastructure program: <http://water.epa.gov/infrastructure/greeninfrastructure/index.cfm>



Updated Climate-Resilience Evaluation and Awareness Tool available

An updated version of EPA's Climate-Resilience Evaluation and Awareness Tool (CREAT) is now available for download at www.epa.gov/climatereadyutilities. The tool assists drinking water, wastewater, and stormwater utilities in identifying climate-change threats, assessing potential consequences, and evaluating adaptation options. Increasing climate readiness can help build resilience to extreme weather events. Developed under EPA's Climate-Ready Water Utilities initiative, CREAT 2.0 builds on the capabilities of the first version of the tool by providing local historical climate data as well as more comprehensive downscaled climate-change projections. This new version uses a flexible framework, which allows utilities, regardless of size or type, to consider climate impacts at multiple locations and to assess multiple climate scenarios.

Updated version of Consequence Analysis Software Tool available

An updated version of the Water Health and Economic Analysis Tool (WHEAT),



which now estimates consequences for both drinking water and wastewater utilities, is now available. Developed in collaboration with water sector partners, the release of WHEAT 2.0 will provide utilities of all sizes with the capability to assess, plan for, and better respond to man-made threats and natural disasters. WHEAT is an intuitive, generalized, desktop software tool that assists utility owners and operators in quantifying public health impacts, utility financial costs and regional economic impacts of an accidental or adverse event. WHEAT can now generate consequence results for both wastewater utilities and drinking water utilities based on two scenarios: 1) release of a hazardous gas and 2) loss of operating assets.

WHEAT is available for download: <http://water.epa.gov/infrastructure/watersecurity/techttools/wheat.cfm>

A series of WHEAT training webinars are being offered, click on the "training" tab to register.

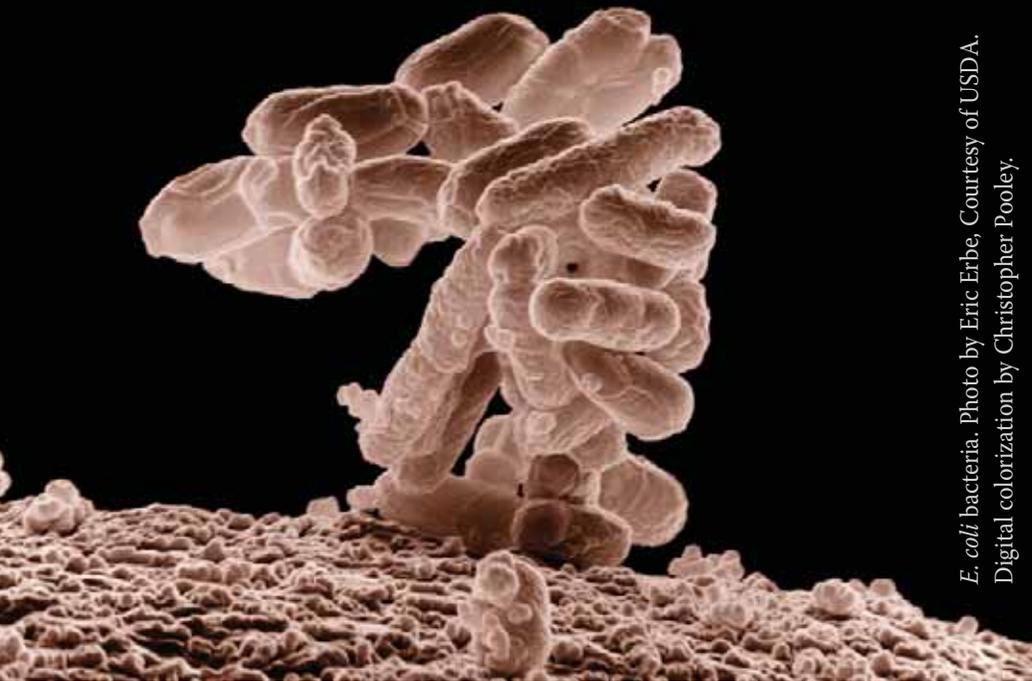
Contact WHEATHELP@epa.gov for more information.

EPA updates rule for pathogens in drinking water, sets limit for *E. coli*

EPA has updated the rule for pathogens in drinking water, including setting a limit for the bacteria *E. coli* to better protect public health.

The Revised Total Coliform Rule (RTCR) ensures that all of the approximately

continued on next page



E. coli bacteria. Photo by Eric Erbe, Courtesy of USDA.
Digital colorization by Christopher Pooley.

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155,000 public water systems in the United States take steps to prevent exposure to pathogens like *E. coli*. Pathogens like *E. coli* can cause a variety of illnesses with symptoms such as acute abdominal discomfort or, in more extreme cases, kidney failure or hepatitis.

Under the revised rule, public drinking water systems are required to notify the public if a test exceeds the maximum contaminant level (MCL) for *E. coli* in drinking water. If *E. coli* or other indications of drinking water contamination are detected above a certain level, drinking water facilities must assess the system and fix potential sources and pathways of contamination. High-risk drinking water systems with a history of non-compliance must perform more frequent monitoring. The revised rule provides incentives for small drinking water systems that consistently meet certain measures of water quality and system performance.

Public water systems and the state and local agencies that oversee them must comply with the requirements of the RTRC beginning April 1, 2016. Until then, public water systems and primacy agencies must continue to comply with the 1989 version of the rule.

The Safe Drinking Water Act requires that EPA review each National Primary Drinking Water Regulation, such as the Total Coliform Rule (TCR), at least once every six years. The outcome of the review of the 1989 TCR determined that there was an opportunity to reduce the implementation burden and improve rule effectiveness while at the same time increasing protection of the public's health against pathogens in drinking water distribution systems. EPA's revised rule incorporates recommendations from a federal advisory committee comprised of a broad range of stakeholders and considers public comments received during a public comment period held in fall 2010.

More information: <http://water.epa.gov/lawsregs/rulesregs/sdwa/tcr/regulation.cfm>

Update on ongoing fracking study

WASHINGTON (EPA) – EPA provided on Dec. 21, 2012, an update on its ongoing national study currently underway to better understand any potential impacts of hydraulic fracturing on drinking water resources. Results of the study, which Congress requested EPA to complete, are expected to be released in a draft for public and peer review in 2014. The update

outlines work currently underway, including the status of research projects that will inform the final study. It is important to note that while this progress report outlines the framework for the final study, it does not draw conclusions about the potential impacts of hydraulic fracturing on drinking water resources, which will be made in the final study.

As the Obama administration and EPA has made clear, natural gas has a central role to play in the country's energy future, and this important domestic fuel source has extensive economic, energy security, and environmental benefits. The study is part of EPA's focus to ensure that the administration continues to work to expand production of this important domestic resource safely and responsibly.

Among the information released in December are updates on 18 research projects and details on the agency's research approach as well as next steps for these ongoing projects and analyses. The update follows the public release, in November 2011, of the agency's final study plan, which underwent scientific peer review and public comment.

EPA has engaged stakeholders, including industry, to ensure that the study reflects current practices in hydraulic fracturing. EPA continues to request data and information from the public and stakeholders and has put out a formal request for information which can be accessed through the federal register at: <https://www.federalregister.gov/articles/2012/11/09/2012-27452/request-for-information-to-inform-hydraulic-fracturing-research-related-to-drinking-water-resources>

EPA also expects to release a draft report of results from the study in late 2014. The study has been designated a Highly Influential Scientific Assessment, meaning it will receive the highest level of peer review in accordance with EPA's peer-review handbook before it is finalized. The 2014 draft report will synthesize the results from the ongoing projects together

with the scientific literature to answer the study's main research questions.

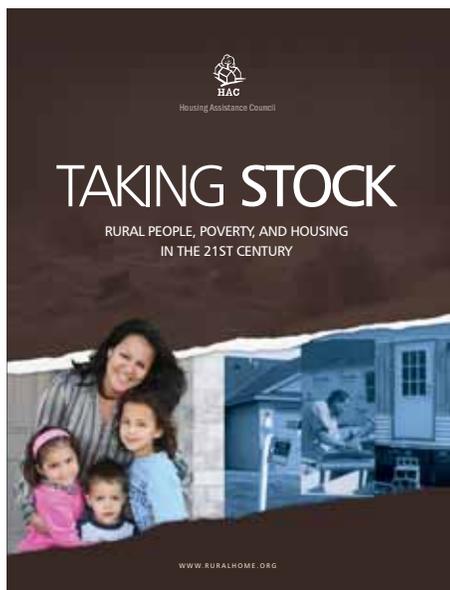
EPA's Science Advisory Board (SAB) is forming a panel of independent experts who will review and provide their individual input on the ongoing study to EPA. The SAB will provide an opportunity for the public to offer comments for consideration by the individual panel members. For more information on the SAB process, please visit: <http://yosemite.epa.gov/sab/sabpeople.nsf/WebCommittees/BOARD>

More information: www.epa.gov/hfstudy

OTHER NEWS AND RESOURCES

Poverty and housing needs persist in rural America as population changes

For decades before the current recession, rural Americans struggled with poverty and housing problems. In fact, a Housing Assistance Council (HAC) study released in late 2012 reports that rural America encompasses 86 percent of the U.S. counties where poverty rates have remained at 20 percent or higher since at least 1990.



"As Congress and the administration determine the future of federal spending, ensuring adequate housing for all Americans must be a priority," said Moises Loza, HAC's executive director. "The U.S. must find the political will and dedication to ensure every American has a decent, affordable place to live."

HAC is a long-time RCAP partner, and some of RCAP's regional affiliates have housing programs. HAC and RCAP believe their areas of work complement each other and that affordable housing requires clean, safe drinking water and vice versa.

HAC's report – *Taking Stock: Rural People, Poverty, and Housing in the 21st Century* – describes demographic changes such as growth in the elderly and Hispanic populations, economic challenges like the foreclosure crisis, and ongoing housing problems including high housing costs, homelessness, and housing quality issues. HAC also looked in-depth at five high-needs regions and populations including the colonias near the U.S.-Mexico border, Central Appalachia, the Mississippi Delta, Native American lands, and farmworkers.

HAC also published a map titled "Poverty in the United States," dramatically illustrating the concentrations of poverty and persistent poverty in the high needs areas.

The report and the poverty map can be downloaded free from HAC's website. Printed copies of the report are available from HAC for \$30, and poster-sized copies of the poverty map are \$5. Both prices include postage and handling.

A national nonprofit corporation headquartered in Washington, D.C., and founded in 1971, the Housing Assistance Council publishes numerous reports, program manuals, and other materials on rural housing topics. HAC helps local organizations build affordable homes in rural America by providing below-market financing, technical assistance, research, training, and information services. HAC's

programs focus on local solutions, empowerment of the poor, reduced dependency, and self-help strategies. HAC is an equal opportunity lender.

Report: www.ruralhome.org/component/content/article/587-taking-stock-2010

Map: www.ruralhome.org/component/content/article/500-poverty-map-2012

Website and app make it easy to find a public drinking fountain

One reason people like bottled water is because it is easy to have a drink on the go. If you're not at home or near a faucet, you can still quench your thirst with a bottle of water.

But what if you're opposed to bottled water but still want the convenience of water on the go? WeTap and its associated app make it easy to find clean, safe public drinking water.

The site provides a world map showing pins where public drinking fountains are located. Thirsty patrons of the site are invited to use the crowd-sourcing app on their smart phones to add locations of drinking fountains as well as their condition, quality and even comments and a photo.

The site invites users to "make bottled water a thing of the past." According to the site, "the average American now drinks nearly 30 gallons of commercial bottled water per year, up from 1 gallon in 1980." A reason for the popularity of bottled water, the site says, is the disappearance of public drinking water fountains. The site promotes tap water as a bargain and a safe commodity that is provided as a public service.

www.wetap.org



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Atlas of Rural and Small-Town America available

The U.S. Department of Agriculture's Economic Research Service has produced an updated version of the Atlas of Rural and Small-Town America. It assembles statistics on four broad categories of socioeconomic factors:

- **People:** Demographic data from the latest American Community Survey, including age, race and ethnicity, migration and immigration, education, household size and family composition. Data have been added on veterans, including service period, education, unemployment, income, and demographic characteristics.
- **Jobs:** Economic data from the Bureau of Labor Statistics and other sources, including information on employment trends, unemployment, industrial composition, and household income.
- **Agriculture:** Indicators from the latest Census of Agriculture, including number and size of farms, operator characteristics, off-farm income, and government payments.
- **County classifications:** The rural-urban continuum, economic dependence, persistent poverty, population loss, and other ERS county codes.

What can you do with the atlas?

- View county-level maps for more than 60 socioeconomic indicators
- View the entire country or zoom into specific regions, states, or county areas
- View a selected socioeconomic indicator just for counties of a certain type (such as non-metro, farming-dependent, persistent poverty); counties that fall outside of the selected county type are grayed out
- For any county, view a pop-up window showing all the indicators for that county
- Print a version of the map or save the image in a graphics-file format that may be added to documents or presentations
- Download a spreadsheet containing all the data for a selected county or for all U.S. counties.

www.ers.usda.gov/data-products/atlas-of-rural-and-small-town-america/go-to-the-atlas.aspx



New member on RCAP's national board of directors

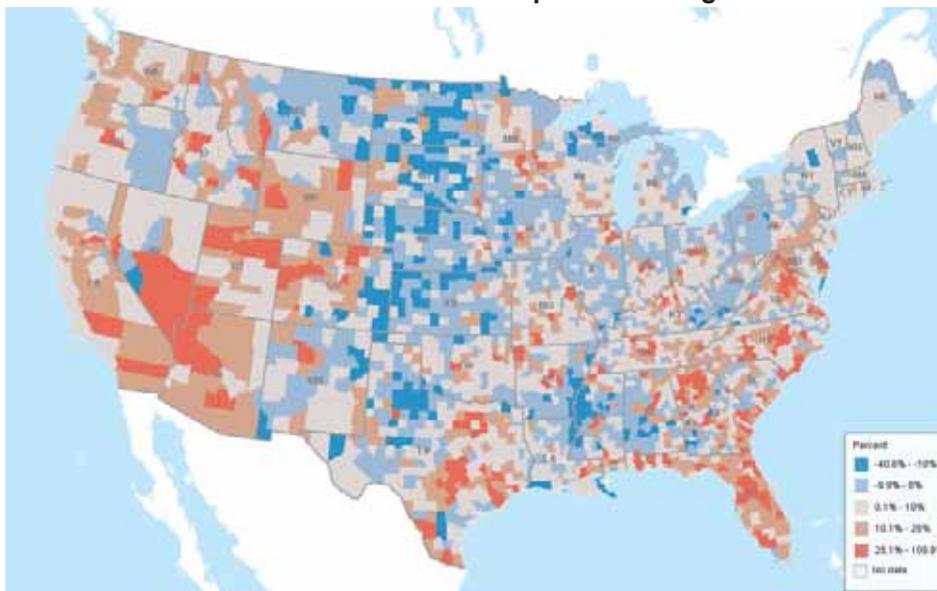
Jennifer McLaughlin was elected to RCAP's national board of directors in May 2012. Her focus is on creating equitable solutions to environmental and social challenges. As president and co-founder of Nalu Energy, a solar design and engineering firm, she works to develop sustainable energy systems.

After graduating from the U.S. Air Force Academy in 2002 with a B.S. in engineering, McLaughlin served five years of active-duty military service, working as a developmental engineer and project manager on space systems for the Air Force and NASA Jet Propulsion Laboratory. She then earned her MBA and M.S. in natural resources and environment through the University of Michigan's Erb Institute for Global Sustainable Enterprise. Her summer internship and master's project work, which were in conjunction with Ford Motor Company's Sustainable Business Strategies division, resulted in the creation of practical tools to help Ford improve the social and environmental conditions experienced by those living in urban slums throughout the developing world.

McLaughlin lives in Columbus, Ohio.

Anish Jantrania is another new board member. He will be profiled in the next issue of *Rural Matters*. ■

Atlas of Rural and Small-Town America. Population change rate: 2000-2010



Civil engineering group's study warns of economic consequences of underinvestment in infrastructure

Improving the condition of our nation's aging infrastructure is critical to protecting 3.5 million jobs, according to the new American Society of Civil Engineers (ASCE) report, *Failure to Act: The Impact of Current Infrastructure Investment on America's Economic Future*. Between now and 2020, investment needs across key infrastructure sectors total \$2.75 trillion, while planned expenditures are about \$1.66 trillion, leaving a total investment gap of \$1.1 trillion.

"Infrastructure is the lifeblood of our economy and provides the foundation for assuring a high quality of life for all Americans," said Gregory E. DiLoreto, P.E., P.L.S., D.WRE, president of ASCE. "Our culminating *Failure to Act* report shows that deteriorating infrastructure has a cascading impact on our nation's economy, yet we have a real opportunity to make crucial investments in America's infrastructure that will pay off in huge economic dividends."

ASCE found that with an additional investment of \$157 billion a year between now and 2020, the U.S. can eliminate this drag on economic growth and protect:

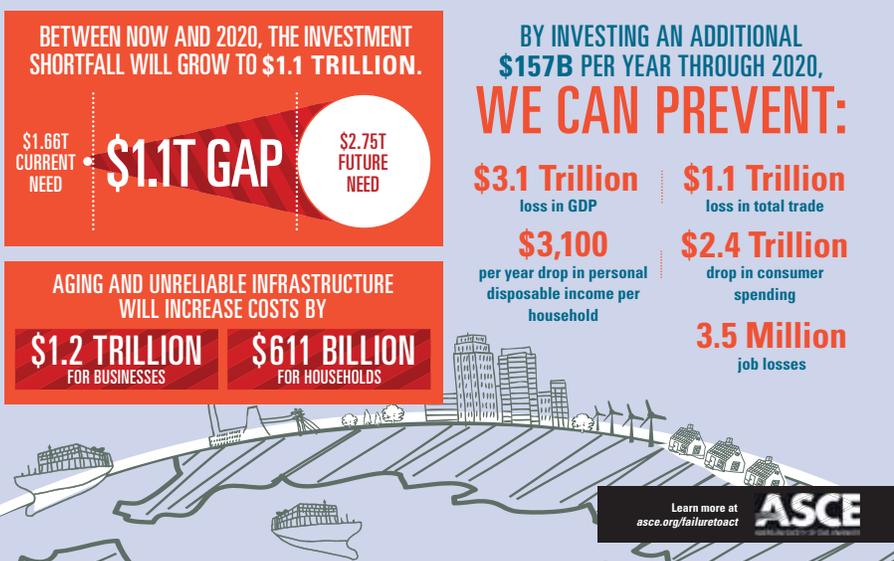
- \$3.1 trillion in GDP, more than the 2011 GDP of France
- \$1.1 trillion in U.S. trade value, equivalent to Mexico's GDP
- 3.5 million jobs, more than the jobs created in the U.S. over the previous 22 months
- \$2.4 trillion in consumer spending, comparable to Brazil's GDP
- \$3,100 in annual household income

The newest report, part of a series, analyzes the interactive effect between investment gaps in the infrastructure sectors, including water and wastewater, addressed in each of the preceding four *Failure to Act* studies and presents an overall picture of the economic opportunity associated with infrastructure investment and the cost of failing to fill the investment gap.

The newest report includes a subsection on water and wastewater infrastructure in the section that reviews infrastructure sectors. "By 2020, the predicted deficit for sustaining water delivery and wastewater treatment infrastructure will be \$84 billion," the study says. "This may lead to \$206 billion in increased costs for businesses and households between now and 2020. In a worst-case scenario, the U.S. will lose nearly 700,000 jobs by 2020. Unless the infrastructure deficit is addressed by 2040, 1.4 million jobs will be at risk in addition to what is otherwise anticipated for that year."

Full report: www.asce.org/uploadedFiles/Infrastructure/Failure_to_Act/Failure_to_Act_Report.pdf ■

INVESTING IN INFRASTRUCTURE - OUR NATION'S ECONOMIC ENGINE

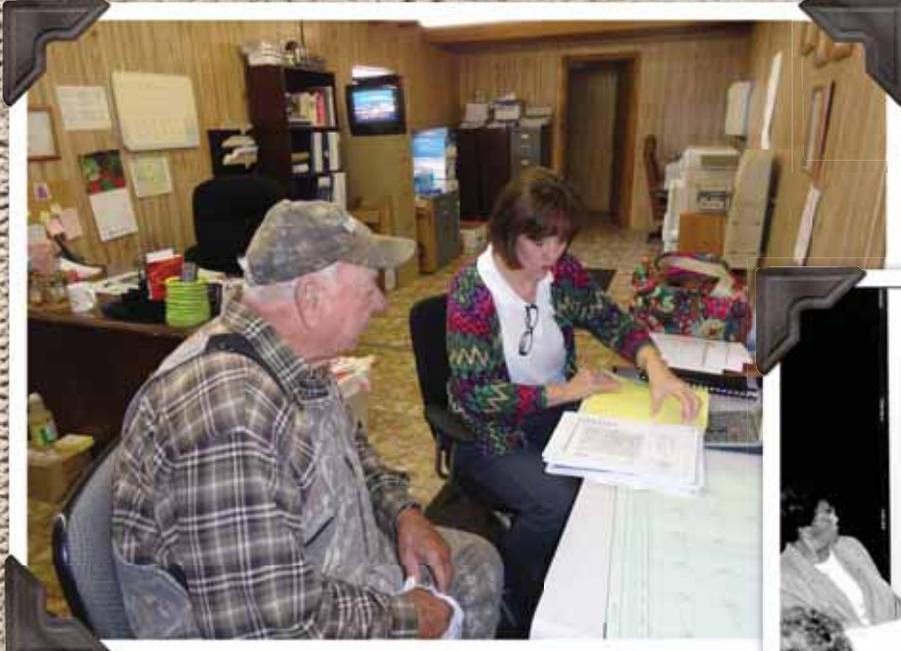




Common Misconception on Rural Water

WATER IS FREE

The idea that water is free is a common misconception. In fact, water is a valuable resource that costs money to produce and deliver. The cost of water is often hidden in the price of goods and services that use water. For example, the cost of water is included in the price of electricity, gas, and other energy sources. The cost of water is also included in the price of food, clothing, and other consumer goods. The cost of water is a significant part of the cost of living in many areas, especially in rural areas where water is often more expensive than in urban areas.



Happy 40th birthday, RCAP!

This year, 2013, marks RCAP's 40th year of existence. In 1973, the first formal organizing event, a legal incorporation, took place in the series of events that make up RCAP's early origins. This article is the first of occasional ways we will be looking back at the history of RCAP and its predecessor programs.

The ideas that started it all

In the late 1960s, a local rural initiative, called the Demonstration Water Project, in Roanoke, Va., was started for low-income people. One of its leaders was Cabell Brand, a former shoe-business owner who founded various programs and organizations to assist low-income people in the Roanoke Valley. "There were 278,000 families in Virginia without indoor plumbing, and so we developed a technique for doing that," Brand explained to *The Roanoke Times*.

The project was based on the idea of self-sufficiency and sustainability. Its goal was to train and organize communities to run, operate and maintain their water systems independently. The project's efforts included board training, technical training for those who operated the systems, and assistance in obtaining financial assistance.

This project was organized by the Roanoke Valley community action agency, Total Action Against Poverty, with funds from the U.S. Office of Economic Opportunity (OEO).

OEO was the agency responsible for administering most of the War on Poverty programs created as part of President Lyndon B. Johnson's Great Society agenda. In 1975, the agency's name was changed to the Community Services Administration, and in 1981, some of its functions were transferred to the Office of Community Services (OCS) in the Department of Health and Human Services (HHS). OCS has continued an uninterrupted funding stream to RCAP regions for their water

and wastewater assistance to the present day.

By 1972 the Demonstration Water Project had become the core of a coalition called the National Demonstration Water Project (NDWP). Funded by OEO with a \$6 million grant, the NDWP was a unique experiment in accelerating the process of social change in rural areas for the benefit of low-income families and communities. Primarily a reform effort, NDWP sought to improve the means by which rural residents, especially those in the low-income bracket, received water and wastewater disposal services. The overall objective of the program was to push for the provision of more and better water and wastewater disposal services nationwide to low-income people at prices they could afford.

The NDWP was incorporated in 1973, the event whose anniversary we mark this year. At the time, the NDWP consisted of the original Virginia project plus projects developed by another community-action agency (in West Virginia), two health centers (in Arkansas and South Carolina), a rural electric cooperative (in Florida), and a Chicano uplift/empowerment organization (in New Mexico). By 1976, two additional projects had joined NDWP—a Chicano-controlled nonprofit water company with an ethnic uplift agenda (in Texas) and a self-help housing program (in California).

The early activities of the NDWP included: field demonstration projects; research and publications; serving as an information clearinghouse; management and tech-

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nical assistance; and building awareness through the Commission on Rural Water. From 1974 to 1978, NDWP spent over \$9 million through its affiliates, which had grown to 16 statewide affiliates and 35 special program agency partners, to improve or create water and wastewater systems in rural America, primarily for direct construction related costs.

The RCAP model

In 1977, the immediate successor of the OEO, the Community Services Administration (CSA), made a planning grant to NDWP to develop a demonstration program aimed at using community-action agencies to provide water-supply and sanitation assistance to low-income, rural communities. NDWP's proposal for a Rural Community Assistance Project called for the creation of "intermediate organizations" that would serve as sources of technical support to rural community-action agencies interested in becoming involved in water supply and sanitation activities. CSA first funded the program in 1979.

Two geographic areas were chosen for the initial demonstration effort—the Northeast and the Midwest.

In the Northeast, an organization called Rural Housing Improvement, Inc. (RHI), in Winchendon, Mass., was selected as one project. RHI had been founded in 1969 as the major low-income housing-development agency in New England. As a Rural Community Assistance Project, RHI would add water and sanitation development to its portfolio and would develop staff capability that would enable it to become the center of competence in this sector in the Northeast.

Today, RHI is known as RCAP Solutions and is the Northeast affiliate of the current network. Its continued work in housing is one of its major programs.

In the Midwest, a different model for the demonstration was used. A highly regarded organization devoted to sustainable agriculture—the Center for Rural Affairs (also established in 1973) in Walthill, Neb.—had been involved in the conceptual development of the RCAP program but did not want to be the project itself. It spun off a new organization, the Midwest

Assistance Program (MAP), for that purpose. Today, MAP still exists as the Midwest affiliate of the RCAP network.

Over the next two years, CSA designated four additional projects:

- Virginia Water Project (VWP), Roanoke, Va., the successor agency to the local demonstration project that began NDWP (Southeast Rural Community Assistance Project, the Southeast RCAP, today)
- Rural Community Assistance Corporation (RCAC), Sacramento, Calif., a 1978 spin-off from Self-Help Enterprises, a leading housing-development agency in California's San Joaquin Valley (still RCAC, RCAP's Western affiliate, today)
- Great Lakes Rural Network (GRLN), Fremont, Ohio, a consortium of state community-action agencies, managed by WSOS, a full-service community action agency serving four northwest Ohio counties (Wood, Seneca, Ottawa and Sandusky) since 1965 (WSOS and Great Lakes RCAP still exist today)
- Community Resource Group (CRG), Springdale, Ark., founded in 1975 by three community action agencies in Northwest Arkansas, which was part of the original NDWP Arkansas project (CRG, based in Fayetteville, Ark., is RCAP's Southern affiliate)

With these additional initiatives, the project achieved nationwide coverage. As they were formed, each of the projects joined the NDWP network as full-fledged affiliates.

The network in transition

By 1981, NDWP consisted of 36 affiliate organizations and was truly a nationwide network. This was the same year the Community Services Administration, the primary funding source for both NDWP and many of its affiliated organizations, was abolished and moved into the Department



of Health and Human Services. NDWP expanded its funding base to include a variety of federal agencies and foundations.

Although the 1980s was a difficult decade for social programs, both NDWP and most of its affiliates were able to weather the changes. By the late 80s, NDWP had achieved many of its goals. The NDWP's trial efforts had been successful not only at widening and improving service delivery but also at achieving policy reform at the state and federal agency and legislative levels. In the field, NDWP pioneered the use of cluster well systems, fostered the involvement of rural electric cooperatives in water supply and sanitation facilities development, developed the concept of regional support companies for small rural systems, and was instrumental in obtaining state funding for rural water programs.

At the policy level, NDWP was able to achieve significant changes in key funding and regulatory agencies, including a new method of figuring loan-to-grant ratios by the Farmers Home Administration. In 1985, the Farm Bill provided for a technical assistance set-aside that led to actual appropriated funding for RCAP a few years later. This was the first such program in that agency's history. The Farmers Home Administration eventually became Rural Development in the U.S. Department of Agriculture, and today a grant from that agency funds RCAP's Techni-train Program for technical assistance to small water utilities.

The NDWP started to receive innovative and alternative technology set-aside funding from the Environmental Protection Agency (EPA) in 1988. EPA currently provides funding to RCAP for its annual budget.

In late 1988 and early 1989, the board of directors of NDWP undertook a careful consideration of the future of the organization. After 20 years of successful operation as a demonstration project, the effort was in need of revitalization and a new, more

permanent focus. The decision was made to bring NDWP to an end and to rename the corporation and change its structure to formalize the network of permanent RCAP service institutions that NDWP had spawned.

The permanent RCAP network

The formal transition from NDWP to RCAP culminated in February 1989 with adoption of a revised set of bylaws and approval of a resolution to change the corporate name to Rural Community Assistance Program, Inc. The core of the restructured organization was the six regional RCAPs. RCAP, Inc. is governed by a board of directors composed of 12 members, six of whom—the regional RCAPs—are permanent members. The remaining six are selected annually from the RCAP network and the interested public.

The board decided to retain the NDWP staff as the RCAP national staff. RCAP's activities thus became managed by an executive director and a small headquarters staff under the oversight of the board.

By the end of fiscal year 1989, most aspects of the transition from NDWP to RCAP,

Inc. were completed, and the permanent corporate structure was in place. In 2001, the national office was moved from Leesburg, Va., to downtown Washington, D.C., in order to give its staff easier access to the funding agencies and to carry out advocacy on Capitol Hill.

In 2004, the organization changed its name slightly from the Rural Community Assistance Program to the Rural Community Assistance Partnership. This change was made to more accurately describe in the organization's name a partnership-type arrangement rather than a uniform, nationwide program. In other words, RCAP, Inc. is an umbrella organization that links the individual water and wastewater programs of six distinct and autonomous organizations within the network. Today the organization is often also referred to as a network (the "RCAP network")—the connected collection (i.e., partnership) of the regional RCAPs or partners and the national office.

Together, the regional affiliates of RCAP employ nearly 130 technical assistance providers and managers in the field. A small staff of six works at the national office in Washington, D.C. ■



Worldwide spending on protecting watersheds growing rapidly

WASHINGTON (Forest Trends)—The number of initiatives worldwide that protect and restore forests, wetlands, and other water-rich ecosystems has nearly doubled in just four years as governments urgently seek sustainable alternatives to costly industrial infrastructure, according to a new report from Forest Trends' Ecosystem Marketplace.

"Whether you need to save water-starved China from economic ruin or protect drinking water for New York City, investing in natural resources is emerging as the most cost-efficient and effective way to secure clean water and recharge our dangerously depleted streams and aquifers," said Michael Jenkins, Forest Trends president and CEO. "80 percent of the world is now facing significant threats to water security. We are witnessing the early stages of a global response that could transform the way we value and manage the world's watersheds."

The report, "Charting New Waters: State of Watershed Payments 2012," is the second installment of an inventory of initiatives around the world that are paying individuals and communities to revive or preserve water-friendly features of the landscape. Such features include wetlands, streams, and forests that can capture, filter, and store freshwater.

Experts at Forest Trends' Ecosystem Marketplace, which tracks a variety of programs that provide "payments for environmental services" or PES, find investments in watershed services emerging in both the developed and developing world as a "powerful new source for financing conservation"—and also a way to provide new "green" income opportunities for rural communities.

The report counts at least 205 programs—up from 103 in 2008—that in 2011 collectively generated \$8.17 billion in investments, an increase of nearly \$2 billion above 2008 levels. The report also identifies a raft of new programs gearing up for launch in the next year.

For the most part, the watershed investment programs documented in the report involve relatively simple exchanges, but the return on investment can be considerable.

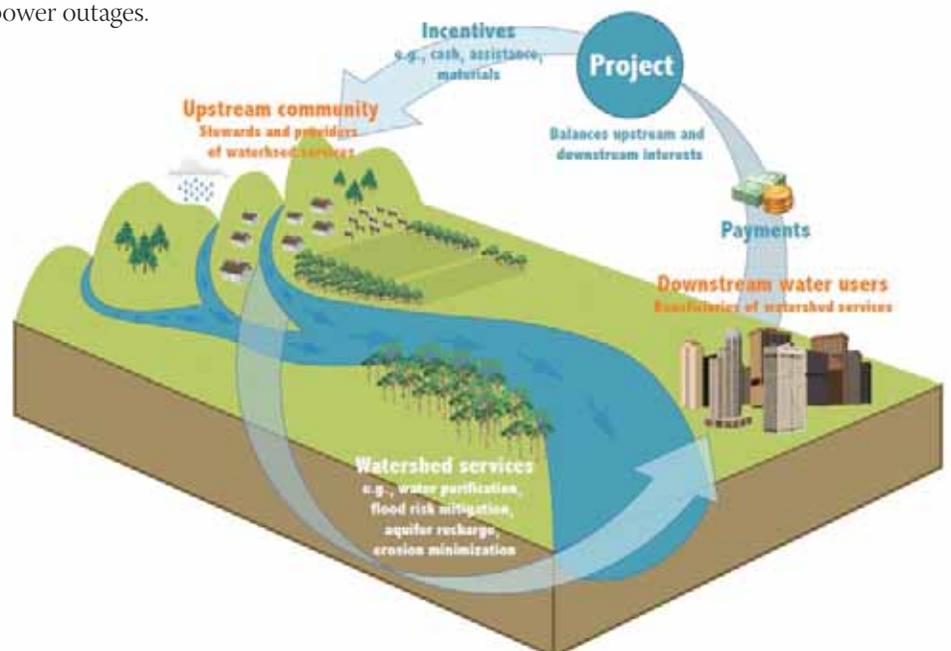
For example, officials in New York City were faced with the prospect of spending billions of dollars on new water-treatment infrastructure. They opted instead for a much cheaper program that compensates farmers in the Catskills for reducing pollution in the lakes and streams that provide the city with its drinking water. The effort has been credited with, among other things, keeping safe drinking water flowing from city taps throughout Hurricane Sandy and its aftermath—filtration plants and water infrastructure require electricity to function, while natural ecosystems function throughout even the longest power outages.

The Environmental Protection Agency reports that in the last five years almost every region in the U.S. has experienced water deficits and at least 36 states will face some type of water shortage in 2013. Ecosystem Marketplace documents 68 watershed payment programs in North America and 18 more in development that respond to these challenges. Leading the charge are Oregon, Washington state and Minnesota.

Analysts at Ecosystem Marketplace note that devoting even a small fraction of water system investments to "green" solutions that protect water at its source—compared to "gray" solutions like water-treatment facilities—could generate huge returns by simultaneously providing water security along with a host of environmental and social benefits.

Genevieve Bennett, lead author of the report and a research analyst with Ecosystem Marketplace, said work is already underway to make conservation even more lucrative by combining investments in watershed services with payments for other types of ecosystem services. For example, in Georgia, the Carroll County government has created stream-bank mitigation credits on land that was originally acquired to protect key water source areas.

Find the report at www.forest-trends.org/publication_details.php?publicationID=3308 ■





Five things you can do to improve your utility's financial health

Editor's note:

This is one in a series of articles on "Five things you can do to improve..." Earlier articles have appeared in previous issues of Rural Matters and can be found at www.rcap.org/RMissues

There are five basic things that must be accomplished to ensure that your utility is financially healthy. Successfully addressing all of these is essential to your system's financial sustainability.

The board and management of utilities have very important responsibilities and duties to perform in the financial area. Chief among these responsibilities are:

1. developing and maintaining the rules governing the utility's financial system
2. planning for the utility's financial future
3. preparing, adopting and adjusting annual budgets
4. monitoring and oversight of financial performance
5. ensuring accountability and integrity of the financial system

continued on next page

1 Establishing a framework: Policies and procedures for managing finances

Financial-management policies are rules that are developed and enacted by the governing body and management of the utility. These rules spell out the basic framework for how the financial functions of the utility will be carried out. Examples of what should be in financial policies are:

- statement of applicability—that policies will conform to all applicable laws
- whether the accounting system will be run on an accrual or cash basis
- that the utility will be operated on an enterprise basis
- revenues shall be used solely for the system's operations
- revenues shall cover the full cost of operations
- definition of the fiscal year of the entity
- that financial affairs will be based on generally accepted accounting principles
- how/when the utility will be audited
- definition of financial conflicts of interest
- definition of financial risk mitigation such as insurance coverage and bonding
- user rates: when and how rates will be reviewed/adjusted
- what financial reserves will be required and purposes of each reserve fund

Your financial-management policies – and all policies, for that matter – should be in writing. Any “policy” that is not written down is not really a policy. Many small organizations and businesses operate on an assumption that “this is the way we’ve always done it” or “everybody knows the rules.” Policies that are written are thus official and can then be enforced, and they let everybody know what is expected of them. Putting policies in writing also contributes to an institutional memory for times that board or staff members are replaced.



Financial procedures

If policies are the rules defining how the financial system will function, then financial procedures are the routine, often day-to-day tasks that must be carried out for the system to function. As with policies, putting procedures in writing in a financial procedures manual is recommended for every utility (or even a folder with a series of documents on your computer may suffice). The procedures manual details *how* specific financial functions and transactions of the utility will be carried out, *by whom*, and *when*. The manual should outline the specific process for how general categories of financial tasks will be carried out and which personnel are responsible for their completion. For example:

Accounts receivable: How are monthly billings accomplished, by whom, and by when?

Accounts payable: Who receives and tracks invoices from vendors?

Reconciliation procedures: How are billings, receipts and payments reconciled with ledgers and accounts of the system?

Financial reporting: How will financial reporting (income statements, balance sheets, etc.) be accomplished, by whom and by when?

2 Planning for the utility's financial future

In the same way that individuals plan for their retirement years and parents plan for their children's college education, utilities should plan for the future. Most small utilities do not plan ahead. Planning for future needs includes:

- Forecasting the utility's future financial needs (operating and capital needs)
- Determining how those future financial needs will be met

A capital-improvements plan (sometimes called a long-range plan) is a written document that specifies:

- what improvements to the facility will be needed in the future

- when certain projects will be needed and when they will be undertaken
- how much those improvements will cost

In preparing capital-improvements plans, a number of considerations are taken into account, such as:

- Will current facilities reach their design capacity in the near future?
- What current components of the system will require major repair, rehabilitation or replacement?
- Will failure to upgrade existing facilities result in regulatory violations or enforcement actions?



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Sustaining essential utility services in the face of federal budget cuts

With all of the uncertainty about the federal budget and the threat of budget cuts because of the deficit, it seems that local governments will be affected. What should small communities do to sustain their essential utility services?

The federal deficit affects all of us, and the president and Congress are giving their attention to this problem. Financial instability at the federal and state level need not prevent your community from setting a course toward financially sustainable water and wastewater services. While these budget and deficit issues will affect governments for the foreseeable future, your community can take steps to plan for your future and move toward sustainability.

The key is taking a long-term view of financing utility services. This involves looking beyond this year's budget to understand the long-term costs of providing safe drinking water and effective wastewater service.

Start with your water and wastewater budgets. Look at your history of revenues and expenditures for these operations. Are your user fees sufficient to meet expenses—not just this year, but into the near future? Take the long-term view to decide now if gradual increases in revenues will be needed in future years to meet your expenses. Raising rates is a strategic decision based primarily on your need for revenues.

Next, look at the replacement costs of long-term assets, and plan to reserve monies for replacing key assets in the future. If the federal deficit requires federal grant and loan programs to be cut back, the cheapest alternative for funding replace-

ment is to save money, earn interest, and replace assets on your schedule.

Think about what you're buying. Ask yourself, "What are the future replacement costs?" and "Can we really afford this?" After that, consider the external events that may or may not affect the community. For example, learn about upcoming changes in regulations, the forecast for the local economy and jobs, and other local factors. These will affect the costs of your system's operations or the ability of customers to pay their user fees. External factors can have a big effect on the water and wastewater budgets. Pay attention to these signs over the long-term, or meet with people who can provide this information and advice to you.

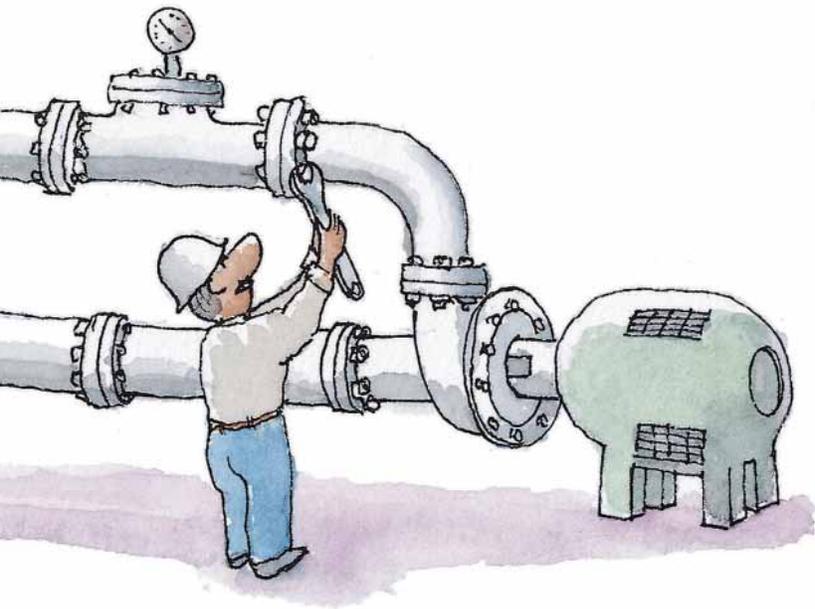
Finally, stick to it. Planning for sustainability is a continuous process, not something you do to meet another government's legal requirement. Remember, each year of history becomes the basis for more accurate forecasting of revenues and expenditures. Nobody really knows your community or the services you provide better than you do. Put that historic information to good use to keep your system up-to-date and ahead of the curve.

Spend a little time before the budget cycle begins to review the history of your utility (both internal and external factors). The good habits you develop for long-term management of services will be passed on to generations of leaders in your community for years to come.

— *Midwest Assistance Program, the Midwest RCAP*

- What are the most critical improvement needs and what is the urgency of meeting those needs?
- Which capital projects can be financed through the system's own resources, and which projects will require outside financing?
- How do financing options for improvements relate to the annual budgeting process?

A capital-improvements plan should cover at least a ten-year period into the future. The plan is of great importance in helping the utility's board and management make informed decisions about rate setting, future debt-service requirements and future revenue requirements.



3 Preparing, adopting and adjusting annual budgets

An annual operating budget is a short-term, twelve-month financial plan that coincides with the fiscal year of the utility. An operating budget is simply a one-year forecast of expected revenues and expenses. The budget helps the decision-makers of the utility keep adequate control of its finances and provides adequate funding to the highest-priority areas of system's operations.

The operating budget may be a separate document, but it should be compatible with the utility's long-range financial plans for planned repair/replacement and major capital improvements.

The annual budget should be realistic, and it should be balanced. If annual revenues appear to be insufficient to meet projected expenses, a full rate review and adjustment should be considered.

Ideally, the final annual operating budget should be adopted by the governing body no later than 30 days prior to the start of the fiscal year. Financial records of the utility are critical for creating a budget. Utility management should take into consideration:

- previous expenses from the past 2 to 3 fiscal years
- current debt-service requirements
- any unplanned, emergency expenses that occurred within the past several years
- revenues from customer billings and other sources of income for the past several years

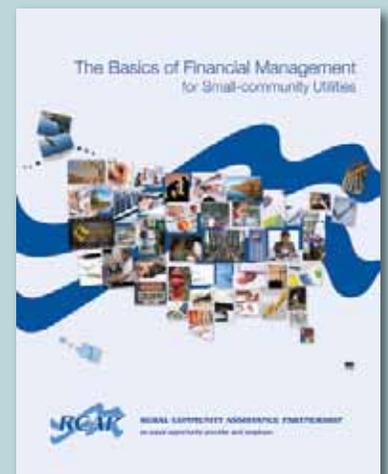
Get the full guide on financial management for small utilities

The Basics of Financial Management for Small-Community Utilities is an easy-to-understand how-to guide for water utilities in small, rural communities. Produced by the Rural Community Assistance Partnership (RCAP), this primer and its tools are an ideal orientation for new board members or background for experienced board members on this topic.

The Basics guide covers the key financial statements—balance sheets, income statements and cash-flow statements—and a lot more. It discusses the importance of solid, effective financial management of a utility—developing a system that is financially sustainable.

The guide is available in print from RCAP staff in the field or as PDF, which you can view and print yourself on your own computer at www.rcap.org/finmgmtguide

There are also multimedia supplements to the guide that can be accessed through the URL above.



- required reserve levels necessary for the coming year

In addition to previous years' records of revenues received and expenses incurred, consideration must be given to anticipated changes to those revenues/expenses during the coming year, including:

- changes in operating expenses, such as wage/salary increases, new hires, changes in costs of materials, transportation, utilities, as well as adjustments for inflation
- changes in debt-service expenses, including anticipated new debt
- changes in revenues due to expected rate and fee adjustments, growth or decline in the customer base, etc.
- transfers to/from financial reserves

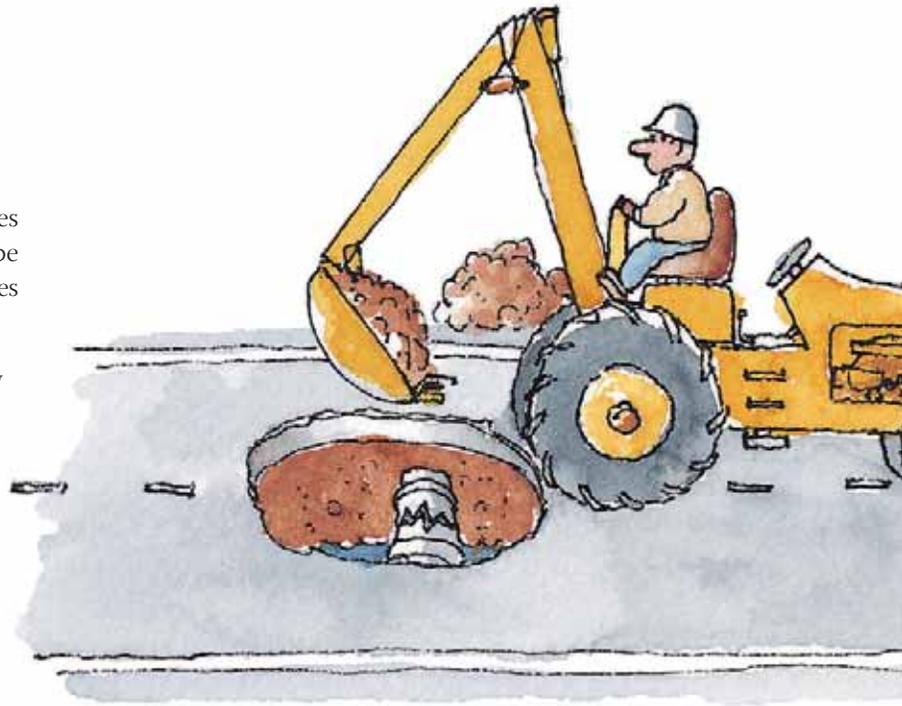
The annual operating budget should contain budget categories that match the same categories of revenue or expense contained in the utility's chart of accounts. Once the final budget plan has been completed, a projected cash-flow statement should be prepared in order to make sure that monies will be available when needed, that is, the budget should "cash flow."

4 Monitoring and oversight of financial performance

Once budgets have been prepared, the job of oversight and monitoring the financial performance of the utility begins. The purpose of monitoring financial performance is to make sure that everything is proceeding according to plan, and that, financially speaking, the system is on the right track.

Providing effective financial oversight means not only monitoring and adjusting the current operating budget, but also understanding common financial statements (like the balance sheet, the annual income statement and audit reports) and making informed decisions about the future based upon this important information.

The governing board should receive and review financial reports on a monthly basis. A standard, monthly and year-to-date budget report measures actual revenues and expenditures vs. budgeted revenues and expenses on a line-item basis. Budget adjustments should be made during the fiscal year if necessary.



Financial ratios

Some good methods for monitoring a utility's financial performance over time are financial ratios. They can be computed from two important financial statements: the balance sheet and the income statement.

Balance-sheet ratios

The **liquidity ratio (or current ratio)** measures the system's ability to pay off current liabilities. Systems with less than a 1.5 liquidity ratio are considered to be in financial distress. To calculate the liquidity ratio, simply divide the balance sheet's current assets by the current liabilities:

$$\text{Current assets} \div \text{Current liabilities} = \text{LIQUIDITY RATIO}$$

The **leverage ratio** measures how much the system relies on debt. A leverage ratio below 0.30 indicates the system may be in financial distress. The leverage ratio is determined by dividing the equity by total assets:

$$\text{Equity} \div \text{Total assets} = \text{LEVERAGE RATIO}$$

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Income-statement ratios

The **operating ratio** is a simple calculation used to measure the profitability of the system. Normally, a utility that has an operating ratio of less than 1.0 is considered financially distressed. The operating ratio is determined by dividing the operating revenues by operating expenses:

$$\frac{\text{Operating revenues}}{\text{Operating expenses}} = \text{OPERATING RATIO}$$

The **debt-service coverage ratio** will vary from system to system, depending upon the requirements of each lender, or in some cases, state statute. The Rural Utilities Service (of the U.S. Department of Agriculture Rural Development) Water and Waste Disposal loan program is a major federal lender for small and rural utilities. RUS prefers a minimum debt-service coverage ratio of 1.1 or higher, as calculated by the following formula:

$$\frac{(\text{Net Operating Income} + \text{Depreciation})}{\text{Total Debt Service}} = \text{DEBT SERVICE COVERAGE RATIO}$$

Financial ratios can be computed from year to year in order to establish financial trends and to determine whether the financial direction of the utility is positive or negative.

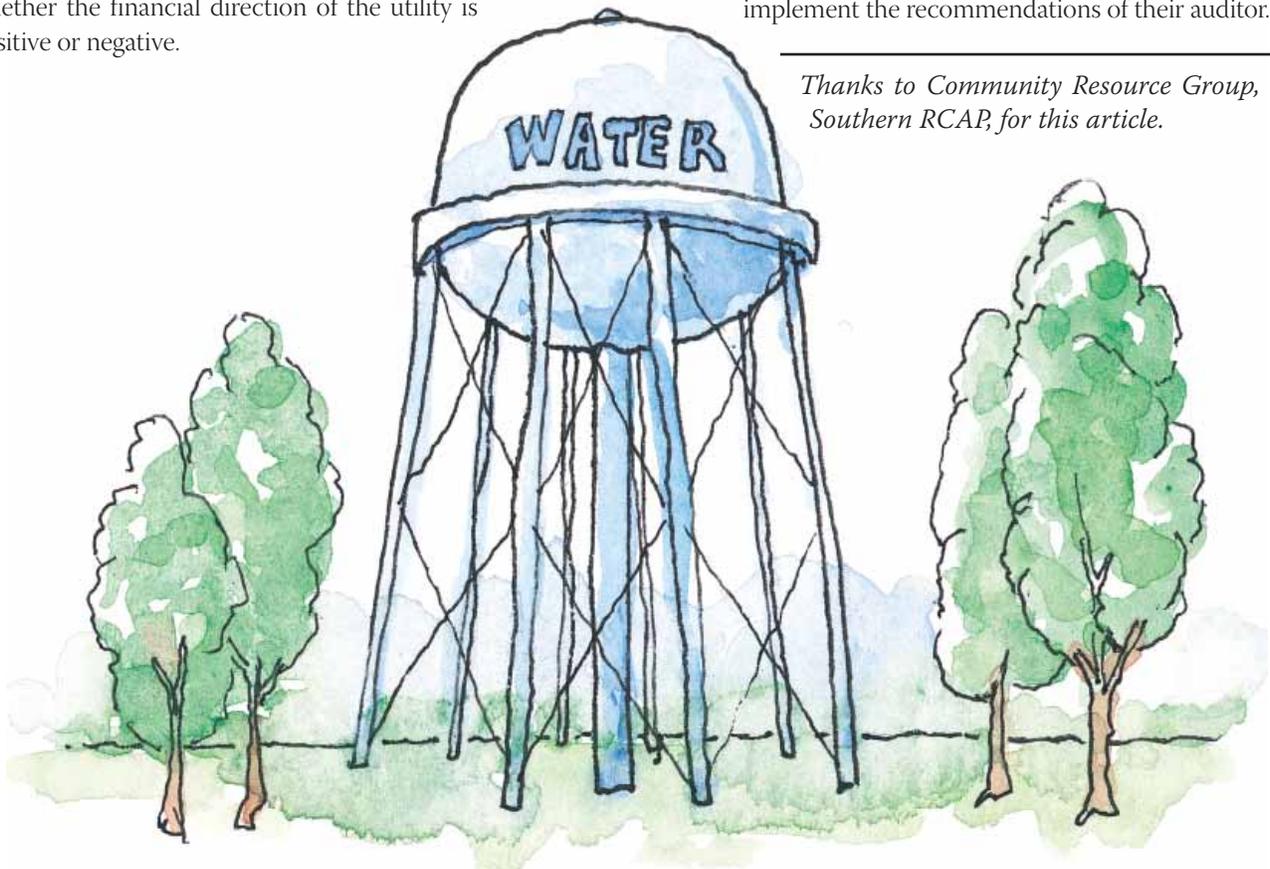
5 Insuring accountability and integrity of the financial system

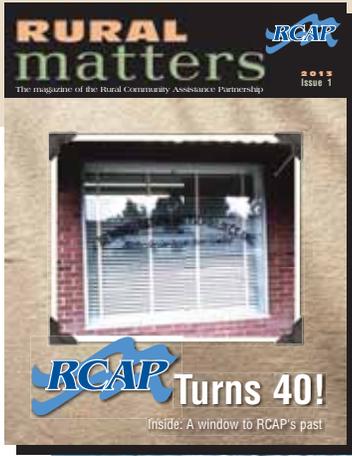
The best method of insuring the accountability and integrity of a utility's financial system is to have an annual audit prepared by an independent accounting firm. In an audit, the auditor's opinion letter is usually the first page of the audit report. An unqualified opinion or clean opinion is the best an organization can receive. It means the auditor did not find any material misstatements in the system's financial records.

The report will also include the primary financial statements: the balance sheet, the income statement and the cash-flow statement. The next major item is the notes to the financial statements. The notes provide valuable information regarding the nature of operations and in-depth information about various balances in the financial statements, such as notes payable and property, plant and equipment. The notes will contain a lot of other pertinent information and should be read carefully.

The audit report may also contain useful recommendations from the audit firm for making improvements within the financial system that will provide better safeguards for financial assets, improve efficiency or both. The governing board and management of the utility should strongly consider taking the actions necessary to implement the recommendations of their auditor. ■

Thanks to Community Resource Group, the Southern RCAP, for this article.





RURAL matters

is going digital!

In an effort to reduce postage costs and respect the environment by having to print fewer copies of the magazine to mail, *Rural Matters* is now officially offering an electronic-only subscription. When you sign up, you will be sent an email with a preview of each new issue's contents, and you will be able to click through to read the article or the full issue online at www.rcap.org

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