

Millennium Countdown: **What's in store for small systems?**

by Brian L. Hoellein, Bartlett & West Engineers,
and Ellen G. Miller, Ellen Miller Group

V-J Day

Neil Armstrong's first step on the moon Mark McGwire's home run record

Where were you on those landmark days? Depending on their age, virtually all Americans know where they were when those news stories broke. But, do you recall the day in 1974 when Congress passed the first Safe Drinking Water Act (SDWA)? Until that time, states set the industry's rules and regulations.

Small Systems Come Into Focus

The small system landscape was a very different place 25 years ago: there were thousands of privately-owned mom and pop public water supplies; state rules and regulations varied widely, as did enforcement of them; there was little regulation of small system operator certification; and, being "the silent service" meant never wasting money on customer communications.

Congress selected the U.S. Environmental Protection Agency (EPA) to implement the SDWA. The law permitted many waivers and exemptions for small systems. In those early years, EPA had a full plate just working with state primacy agencies as well as writing rules and regulations. The focus then was on mid-size and larger public water supplies.

Fast forward to the reauthorized SDWA of 1996. It is chock full of items for small systems (those serving 10,000 or fewer people), such as:

- Source water protection,

Water Sense

- Consumer Confidence Reports,
- Operator certification,
- Proving "technical, managerial and financial capacity," for example, when seeking state revolving funds.

Today, one size doesn't fit all. The SDWA treats small systems differently than the big guys. What's the price for this flexibility? Small systems, along with their counterparts in larger areas, have to deliver quality water that protects the public health while meeting SDWA standards.

"The best decisions for a local community are made at the community level," National Rural Water Association (NRWA) CEO Robert Johnson, wrote, speaking of the lengthy SDWA reauthorization process. "We have achieved much of that. Now the responsibility falls on us as local areas of government to do what we said that we would do." (See *Rural Water*, 4th Quarter issue, p. 34.) If you're a council or board member, the spotlight is now on you.

It's Hard to See the Forest for the Trees

Reports, memos, recommendations, statistics: It's easy for governance bodies to drown in the details. Instead, they need to keep their eyes on the big picture. Use the seven-part utility management model POSCERV (pronounced "pos-curve"):

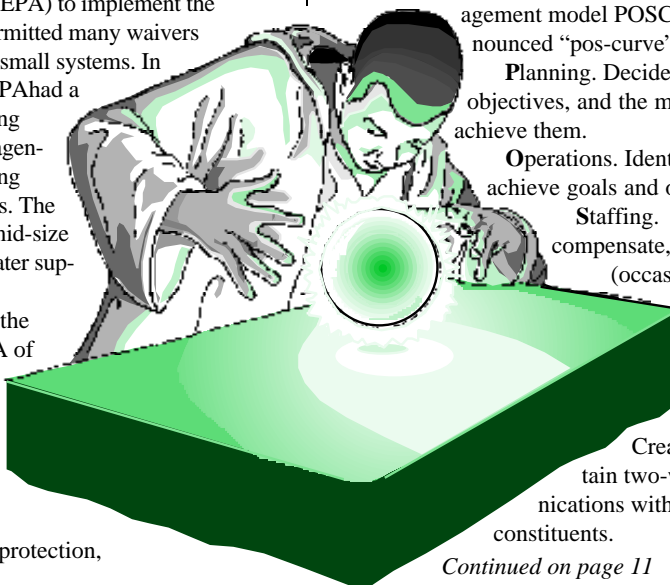
Planning. Decide goals and objectives, and the major ways to achieve them.

Operations. Identify tasks that achieve goals and objectives.

Staffing. Recruit, hire, compensate, nurture, and (occasionally) terminate employees and experts.

Communications.

Create and maintain two-way communications with all your constituents.



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Water Sense

Sponsored by
Rural Utilities Service

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National Drinking Water Clearinghouse

The National Drinking Water Clearinghouse (NDWC) assists small communities by collecting, developing, and providing timely information relevant to drinking water issues. Established in 1991, the NDWC is funded by the Rural Utilities Service and is located at West Virginia University.

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RUS Assistant Administrator Retires

Dick Mansfield, assistant administrator for water and environmental programs with the U.S. Department of Agriculture's Rural Utilities Service (RUS), retired from the federal government on February 1, 1999, after 33 years of service.

A native of Brattleboro, Vermont, Mansfield is a civil engineer with degrees from Tufts University and the University of Vermont. After a tour as a naval aviator, he began his career in rural development with the Vermont Department of Water Resources. He was then an engineer for the Farmers Home Administration (FmHA)—now RUS—for the states of Vermont, New Hampshire, Massachusetts, Connecticut, and Rhode Island.

Mansfield ran the FmHACommunity Programs operations in New York for more than a decade and then directed the Northeast Regional Office of the Rural Development Administration. He was instrumental in the formation of the New York Rural Development Council and served as executive director.

Since retiring from RUS, Mansfield is again living in Vermont where he serves as executive director of the Vermont Community Loan Fund.

Gary Morgan is now the acting assistant administrator for water and environmental programs. \$

Partnership Launches Environmental Clearinghouse

The Local Government Environmental Assistance Network (LGEAN) was launched in October 1998 to "help local governments meet challenges they face in protecting the environment, public health, and our quality of life."

Designed to serve as a "first stop shop," LGEAN is an information clearinghouse that provides "clear, concise, and relevant environmental management, planning, and regulatory information for local government officials and their staffs."

Managed by the International City/County Management Association, LGEAN is the outcome of a partnership that unites several organizations, including the U.S. Environmental Protection Agency, the American Water Works Association, the Air and Waste Management Association, the Environmental Council of the

States, the National Association of Counties, the Solid Waste Association of North America, and the Water Environment Federation.

Services provided free-of-charge to communities include a research service, forums for discussion, and 24 hour access to a schedule of conferences and training opportunities. Information about regulatory information and "hot topics," such as environmental finance and drinking water, is provided through a quarterly newsletter, SCAN (Small Communities Advisory Network), a Web site, and a toll-free phone number.

To learn more about LGEAN, visit their Web site at <http://www.lgean.org> or call their toll-free phone number (877) 865-4326. To be added to the SCAN mailing list, call the number above or e-mail lgean@icma.org. \$

No Change in RUS Interest Rates This Quarter

Interest rates for Rural Utilities Service (RUS) water and wastewater loans remain unchanged this quarter. This marks the third consecutive quarter with no movement in these rates.

RUS interest rates are set at three different levels, which have specific qualification criteria. The rates for the third quarter of fiscal year 1999 apply to all loans issued from April 1 through June 30, 1999.

The current rates are:
poverty line rate: 4.5 percent;

intermediate rate: 4.75 percent; and
market rate: 5.0 percent.

RUS loans are administered through state Rural Development offices. These offices can provide specific information concerning RUS loan requirements and applications procedures.

For the phone number of your state Rural Development office, contact the National Drinking Water Clearinghouse at (800) 624-8301. The list is also available on the RUS Web site at <http://www.usda.gov/rus/water/states/usamap.htm>.

Protect Your Best Interests! Choose the Right Consulting Engineer for the Job

by Kathy Jespersen
NDWC Staff Writer

Choosing a consulting engineer can be a difficult job for any community. But it can be a particularly complex chore for small communities. Often small town officials may have little or no experience in hiring or working with consultants. However, knowing what to do before hiring a consultant could save small communities money and heartaches.

"Few clients are likely to select a firm based on price alone," noted the International Federation of Consulting Engineers' (FIDIC) Selection by Ability guidelines. "While saving money may be one goal of the community, hiring an engineering firm according to its ability to handle the project protects the community's best interests."



Remember Two Things

According to the Small Towns Environment Program's (STEP) "Hints for Selecting an Engineer," during the search for an engineer, community leaders should keep two basic points in mind:

- Be prepared to spend whatever times it takes to find the right engineer. While this process may take longer than you like, the wrong choice may be far more painful; and
- Insist on meeting the project engineer—the person you will actually be working with—not just those who are skilled at selling their firm.

It's also important to consider that your community's needs may be different from those of your neighbor. "Every problem or project is unique, with its own technical challenges," noted the American Consulting Engineers Council (ACEC) in *A Guide to Qualification Based Selection of Design Professionals*. Therefore, because of their special needs, small communities should look for engineering firms that have experience handling their water and wastewater projects.

Get the Quality You Deserve

Quality-based selection means selecting an engineering firm based on its experience with your type of problem. "Consultants are selected first on competence, creativity, and performance

and second on negotiation of a fair and reasonable price," according to the Kentucky Engineering Center, adding that "cheap design is expensive."

STEP noted that the best way to solicit an engineer who is experienced with your community's needs is to first issue a Request for

Proposals (RFP) or a Request for Qualifications (RFQ).

RFPs and RFQs are formal announcements of your search, which are sent to a number of firms in the community's area or published in newspapers, journals, or other public forums.

"Make sure that you're getting it out to as many firms as possible and not just one or two," said

Ellen Miller, president of the Ellen Miller Group. "All too often small communities skip this part. They will call up their neighbor and ask them who they used for the project they just finished. And then whoever it happened to be is good enough for them, whether this firm has the experience they require or not."

It's Between an RFP and a RFQ

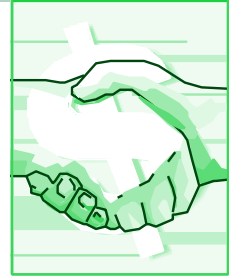
The difference between an RFQ and RFP is fairly simple. An RFQ is usually a short document inviting consultants to submit information about their qualifications. According to *Getting Results From Your Experts* by Ellen Miller and Elmer Ronnebaum, the typical RFQ includes:

- one or two sentences about your project and the likely source of funding;
- a request for the engineer's qualifications, experience, and references;
- the project's calendar or dates when the work is expected to be completed;
- the date applications are due, along with the address where they should be sent; and
- who the contact person for the project is.

On the other hand, an RFP is a much longer, and more detailed document. They provide enough information about the project so that consultants can develop preliminary proposals about what services they offer and how they will manage the project.

The best way to develop an effective RFP is to include as much detail and information about the community's water or wastewater needs as

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"Be prepared to spend whatever times it takes to find the right engineer. While this process may take longer than you like, the wrong choice may be far more painful."

Small Town Environment Program's "Hints for Selecting an Engineer."

Choose the Right Consulting Engineer for the Job

Continued from page 3

possible, such as a thorough explanation of the problem and any ideas or goals that the community may have for the project. "Be prepared to take a lot of time writing and revising an RFP," wrote Miller and Ronnebaum. "You must provide as detailed a scope of work as possible, if you expect respondents to provide a realistic project plan and fees."

According to Miller and Ronnebaum, an RFP should include:

- details about the project's location;
- the project's work schedule;
- details of existing surveys and geotechnical information;
- scope of the services sought, such as design, building, permits, easements, and right-of-ways;
- types of drawings expected, such as title sheet with project location, project plan and profiles, and construction phasing;
- list of expected construction contract documents, such as drawings that meet municipality, county, or state standards;
- a deadline for proposals; and
- where proposals should be sent and to whom.

Let's Tally the Score

"If this procedure results in a large number of proposals, the normal solution is to eliminate all but three or four of the strongest of them," noted STEP. To ensure fairness to all the candidates, a selection committee should evaluate proposals using some type of uniform scoring system. A list of questions should be developed along with a rating structure based on criteria provided in the RFP.

For example, committee members could fill out a tally sheet that includes RFP criteria. Each section could carry equal weight and the same range of points (from one to five, for example). Or sections that are considered more important could be weighted more heavily, and, thus, receive more points. After the proposals are reviewed, the committee can then tally the points for each proposal, thereby aiding in the decision.

However, it is also important to keep a written record of your rating procedure as well as other important parts of the selection procedure just in case any questions arise about the committee's decision. "Whatever process you're using, follow it," said Miller. "The losing engineering firms are very unlikely to sue, but they can and will come back to ask questions about why they weren't the successful bidder. If you say that proposals are due at a certain time on a certain day, you have to mean it.

"If you allow a proposal to come in at 4:30 when you've clearly stated that they were due at 3:00, then you're not following your own procedure," she explained. "And pretty soon the firm that slid in after the deadline is going to start talking. Then you're going to have problems."

Narrow to the Top Picks

After you've narrowed the applicants to the top picks, it's time to begin the interviewing process. One of the best ways to get background information about the candidates is to interview their references from recent and ongoing projects. According to STEP and Miller and Ronnebaum, some specific questions that could be asked of the references include:

- Were there problems with the management, budget, or design of the previous project?
- Were there any expensive changes or deviations from the original proposal?
- Were there problems with construction?
- Does the facility operate properly now?
- What was the working relationship like with the consultant?
- Was the consultant available and easy to contact?
- Would they hire this firm again? If not, why?

Be Sure To Check References

Also, it would probably be a good idea to get references from all small community projects completed within the last two years. This would give the community the best idea of what kind of services the consultants offer and how well they stand behind their work.

After checking references, it's time to invite the candidates to make an oral presentation to the town council or the water/sewer committee—with the same questions asked of each applicant, noted STEP.

Before you interview the candidates, however, you should prepare detailed questions or topics for discussion, stated STEP. "These should include questions of a more general nature to be asked of all interviewees, and specific questions for each firm, such as clarification of unclear points in the proposal," explained the STEP manual, *How to Select a Consulting Engineer for Small Community Water and Wastewater Projects*.

Remember, you are attempting to hire the best consultant for your project. "Through face-to-face contact, you are also getting a feel for which engineer is best able to work closely and comfortably with your community," noted STEP.

Continued on next page

WATER FACT



The average cost for water supplied to a home in the U.S. is about \$2.00 for 1,000 gallons, which equals about five gallons for a penny.

The American Water Works Association

Continued from previous page

Ask the Right Questions

Once you're in the interview, ask questions that will generate the greatest amount of information, explained STEP. For example, if the firm favors a particular technology, find out why. Also, find out what each firm's attitude is toward community involvement. And try to clarify any points that may be causing confusion, such as any ambiguities in the proposed cost or scope of work.

Some suggestions that STEP and ACEC agree on when conducting the interviews include:

- The physical set-up for the interview should be comfortable, with good acoustics and ample room.
- If possible, a blackboard or flip chart pad and markers should be provided.
- Interviews should take from 45 to 75 minutes each, so allow sufficient time for their scheduling.
- A separate waiting room should be provided for other firms to be interviewed.
- All interviews should be conducted on the same day, if possible. This allows the committee to compare all interviewed firms while the information is still fresh, and it ensures that consistent scoring will be used.
- Take good notes during all the interviews as this will help you with further evaluations.

Once the screening and interviewing process is completed, the top candidate should be easy to identify. The runners up should also have a ranked order. It is now time to meet with the top candidate to discuss the needs and objectives of the project more fully, noted ACEC.

Meet the Winner

This phase, explained ACEC, will give you the chance to decide if this firm will make a good team member. You will also have access to this firm's advice and expertise, which will aid in developing the proposed project's scope. ACEC also cautioned that at this phase, you may find that you cannot reach an agreement with the top-ranking firm. If this is the case, you then have the opportunity to call in the second highest ranking firm.

Once you decide which firm will best meet your needs, it is time to negotiate a contract. Contract negotiations should lead to an agreement that satisfies both parties, said STEP. For example, the contract should include a detailed description of the proposed project, a timeline, a schedule for reports and meetings, personnel and management responsibilities, the total cost of the

consultant's fees, and the method of payment and the payment schedule.

Different Payment Options Are Available

There are several ways to pay a consultant. One way is a cost plus fixed fees contract, which means that the consultant is paid only for the actual costs of completing the work, plus a fixed amount of profit, which has been agreed on in advance. This payment method determines a cost ceiling and a fixed dollar profit that may only be changed by a formal amendment to which both parties must agree.

Another payment method is a lump sum contract. Here the engineer and community settle on a total figure that comprises the price of service, including costs and profit. According to STEP, this type of agreement works well for small-scale projects that have few uncertainties. And it's imperative that both parties understand the scope of services.

In a percentage of project cost contract, the consultant is paid a percentage of the total cost of the project's construction. One thing to remember about this payment method is that it leaves little incentive for cost savings, noted STEP.

And finally, a per diem agreement, or hourly fee, may be applied when the work is only expected to last a limited time or may be somewhat irregular. This may include appraisals, feasibility studies, and court or public hearing testimony.

For more information about the documents mentioned in this article, call the numbers listed below:

The Small Towns Environment Program's (STEP) document titled "On Selection of an Engineer ... How To Find the Best Consultant for Small Water and Wastewater Projects" costs \$15. Contact STEP at (518) 797-3783 for more information.

A Guide to Qualifications-Based Selection of Design Professionals: A Key to Quality is available through the American Consulting Engineers Council. Call them at (202) 347-7474 and request publication #354. The price is \$10 plus \$3 shipping handling.

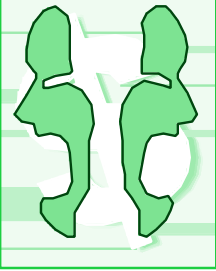
Getting Results From Your Experts: Engineers, Attorneys, and More, by Ellen Miller and Elmer Ronnebaum is available through Kansas Rural Water Association (KRWA). The price is \$12.50 plus \$3.20 shipping and handling. Contact KRWA at (785) 336-3760 for more information.

The Winter 1997 Pipeline issue, "Choose the Right Consultant for Your Wastewater Project" is available for 20 cents plus shipping and handling from the NSFC at (800) 624-8301. \$

What should you consider?

When choosing a consulting engineer, it's important to remember that you are the boss. The following checklist may help you in making your decision.

- Take your time and do the research first.
- Make your choice based on quality—not price.
- Know the difference between a Request for Proposal (RFP) and a Request for Qualifications (RFQ).
- Use some type of uniform system to evaluate proposals.
- Narrow your choices to the top three to five candidates.
- Check references carefully!
- Schedule interviews with the finalists.
- Ask questions that relate to your project.
- Invite the top choice back to make sure this firm fits in with your team.
- Negotiate the contract.
- Know how you will pay for the project.



Why Median Household Income Is Used To Set RUS Funding

by Laurence G. Bowman
 Chief, Policies and Initiatives Branch, Water and Environmental Programs, Rural Utilities Service

The Water and Waste Disposal (WWD) loan and grant programs of the Rural Utilities Service (RUS) are a major source of funding for rural communities. These programs are administered by U.S. Department of Agriculture's Rural Development offices located throughout the country.

WWD funds are available to fund water and waste disposal projects in rural areas and in cities and towns with a population up to 10,000. Applicants may be public bodies, such as municipalities, counties, and special purpose districts; not-for-profit corporations; and Indian tribes that are unable to obtain the credit they need from their own resources or from commercial sources. In addition, applicants for WWD loan and grant funds must have the legal authority to own and operate the financed facilities.

Historically there has been more need for WWD loan and grant funds than RUS and its predecessor agencies have been able to fund. RUS grant funds are used to help applicants reduce user rates and charges to a reasonable level. Having sufficient grant funds from RUS or other sources is the limiting factor in many proposed projects.

RUS uses median household income (MHI) data to determine interest rates and maximum grant level. MHI data from the U.S. Census Bureau is available on a consistent basis throughout the country. Median family income and per capita income figures are also available, but RUS uses the MHI figures because generally it is households that receive water and waste disposal services. Data from the most recent decennial Census are ordinarily used. However, if there is reason to believe that the Census data are not an accurate representation of the MHI within the area to be served, the reasons are documented and the applicant may furnish, or RUS may obtain, additional information. Information must consist of reliable data from local, regional, state, or federal sources or from a survey conducted by a reliable impartial source.

Interest rates on loans are set by RUS each quarter. All loans are fixed rate loans. The rate actually charged is the lower of the rate in effect at the time of loan approval or the rate in effect at the time of loan closing. There are three interest rate levels established by regulation: poverty, market, and intermediate.

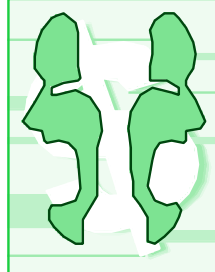
The "poverty" interest rate can not exceed 5 percent-it is currently fixed at 4.5 percent. All poverty rate loans must comply with the following conditions: the primary purpose of the loan is to upgrade existing facilities or construct new facilities required to meet applicable health or sanitary standards; and, the MHI of the service area is either (a) below the poverty line or, (b) 80 percent of the statewide nonmetropolitan MHI, whichever is higher. The "market" interest rate-currently 4.75 percent-is set using a "bond buyer" index. The market rate applies to all loans where the MHI is above the statewide nonmetropolitan MHI. The "intermediate" interest rate-currently 5 percent-is set at the poverty rate plus one-half of the difference between the poverty rate and the market rate, not to exceed 7 percent. It applies to loans that do not meet the requirements for the poverty rate and do not have to pay the market rate.

MHI figures are also used to set the maximum grant that RUS will consider. No grant is allowed when the MHI of the service area is above the statewide nonmetropolitan MHI. A maximum 75 percent grant may be considered when the applicant meets all the conditions for a "poverty" interest rate loan. A maximum 45 percent grant is considered for other communities. RUS grant funds are also limited to an amount necessary to permit the user charges and fees to be reasonable, compared to similar communities. This is often the limiting factor.

The goal of the RUS WWD loan and grant programs is to help rural communities construct necessary facilities at a cost that the residents can afford. Loans and grants are structured so that user rates and charges are in line with what similar communities with similar facilities are paying. While it can be argued that factors other than household income can be used to determine ability or willingness to pay, U.S. Census information seems to be the only information available on a consistent basis throughout the country. Of the various Census income figures, RUS believes that MHI is most appropriate to set interest rates and maximum grant levels.

Information about RUS loans and grants is available through state Rural Development offices. For the phone number of your state Rural Development office, contact the National Drinking Water Clearinghouse at (800) 624-8301 or (304) 293-4191. The list is also available on the RUS Web site at <http://www.usda.gov/rus/water/states/usamap.htm>. \$

"While it can be argued that factors other than household income can be used to determine ability or willingness to pay, U.S. Census information seems to be the only information available on a consistent basis throughout the country."



Evaluating Communities' Financial Capacity

by Raymond J. Supalla
 Professor of Agricultural Economics, University of Nebraska-Lincoln

Current federal loan and grant programs usually assess financial capacity using median household income data, supplemented by income-based poverty measures. This approach may be inadequate, because it does not consider income distribution or wealth as an indicator of ability to pay user fees or as an indicator of community taxing capacity, both of which should be a consideration in defining financial capacity. The primary purpose of this analysis was to evaluate alternative measures of financial capacity in terms of both equity and allocative efficiency.

In our analysis of 439 Nebraska communities with a population of 5,000 or less, we first examined the correlation between household income and wealth to decide if different measures of financial capacity were likely to result in a different ranking of communities in terms of financial need. It was found that the correlation between median household income and real property valuation per household was 0.65, which means that there were many communities with low incomes and high wealth, or high income and low wealth (Figure 1).

A community's financial capacity in dollars per household per year was defined as 0.05 (1/2 of one percent) of average household valuation, plus a variable share of household income that ranged from zero percent for those households with an income of less than \$5,000 per year to 1.0 percent for those with incomes of \$50,000 or higher. Variable shares were used because higher income households could afford to pay a higher percentage of their income for sewer and water.

The resulting estimates of community financial capacity ranged from \$9 to \$110 per month. Twenty-five percent of the communities had a capacity of less than \$22 per month and 50 percent had a capacity greater than \$75 per month.

The estimated financial capacity values reflect a weighting of income by class and a weighting between income and wealth. The relative weights assigned to each component address the issue of equity between communities. Policy makers who believe that this definition unfairly measures the ability to pay of different communities may wish to change the variables or the weights.

The most significant policy implication resulting from the analysis concerns

the need for appropriate targeting criteria to insure that the available loan and grant resources go to the communities with the least financial capacity relative to expected sewer and water costs.

Our analysis of the Nebraska case suggests that the widespread use of median household income as a targeting criterion may be inadequate. When the 439 Nebraska communities were ranked from most needy to least needy, the rankings were very different for the alternative criteria. The nine communities listed in Figure 1 illustrate the significance of alternative criteria. Note, for example, that the community of Burr was the 25th most needy community using median household income, but the 279th most needy using both income and wealth as reflected in the estimated financial capacity value. Conversely, the city of Nemaha rises from the 313th most needy using median household income to the 154th most needy using financial capacity.

The overall implication of these findings is that if the trend toward fewer federal transfers to state and local government continues, more complex measures of community need than are commonly used today will be necessary to meet community sewer and water needs efficiently and equitably.

The research reported here was supported in part by the Partnership for Rural Nebraska through the University Center for Rural Community Revitalization and Development. Readers interested in more detail are invited to write for a copy of Supalla, Raymond J. and S. Ahmad, "Defining the Financial Capacity of Rural Communities to Meet Sewer and Water Needs," Report No. 175, Department of Agricultural Economics, University of Nebraska - Lincoln, Lincoln, Nebraska 68583-0922. \$

"Our analysis of the Nebraska case suggests that the widespread use of median household income as a targeting criterion may be inadequate."

Community Rank by Alternative Measures of Ability to Pay for Sewer and Water Services

Community	Population	Median HH Income	Average HH Income	Median Income \$ Property Value Weighted Equally	Financial Capacity Value
Rank, 1 is Poorest and 439 is Richest Community					
Alda	540	296	188	366	426
Burr	75	25	45	222	281
Carleton	144	29	100	193	279
Garland	247	427	378	285	286
Gordon	1,803	171	256	230	264
Nemaha	188	313	295	190	154
Primrose	69	58	31	217	241
Salem	160	7	49	5	11
Trenton	656	30	118	21	62



“Water districts should establish corporate policy through their bylaws to protect their board and staff. Additionally, D&O insurance should be purchased to back up their corporate policy of protecting directors and officers.”

■
Steve Levy,
Maine/Atlantic State
Rural Water
Association

Directors and Officers Liability Insurance: Can you afford to be without it?

by Margaret Caigan McKenzie
NDWC Contributing Writer

Editor's Note: This article is the second in a series on liability insurance coverage for small drinking water plants. The first article, "Liability Insurance: Does Your System Have Adequate Coverage?" appeared in the Winter 1999 issue of Water Sense. It is important to remember that insurance requirements and coverages vary from state to state.

You've worked long, hard hours for many years to acquire your personal possessions: a comfortable home, two cars in the driveway, yearly vacations, and even a little money in a retirement fund. Life is going just as you planned. Then, *bang!* Someone files a lawsuit. And why? It could be for any number of reasons, including a decision you made in good faith based upon the information you had available at the time.

Every day the dozens of decisions water plant managers make carry the possible price tag of litigation, not only against the company, but also against its managers. Fortunately, you do have protection, that is, if you have the foresight to purchase directors and officers (D&O) liability insurance.

Clint Deiley, vice-president of sales/program manager for Grundy Insurance in Glenside, Pennsylvania, says, "Before the Clean Water Act [CWA] of 1974, insurance companies branded water companies as high-risk clients because the commodity (water) was unknown. Water companies were unregulated, so lawsuits claiming failure to supply and product contamination pervaded the industry. But with passage of the CWA and the 1996 Safe Drinking Water Act (SDWA), insurance companies were able to view water companies in a more positive light."

There Are Misconceptions about Coverage

Although passage of the CWA and the SDWA has made liability insurance for water companies easier to get, many water plant managers don't view its cost as a necessary expense. For example, some managers hold on to the false security that smaller companies are insulated from lawsuits. But Deiley can cite cases where suits have been successfully pursued against small water companies.

For example, if an offer to buy a water company was refused by the operators, directors, and

officers of the water company, shareholders might sue, concluding that the decision not to sell was based on the interests of the employees and not on the interests of the company. In addition, customers might file a lawsuit claiming they were denied the opportunity to receive better services that would have been offered by the new water company.

Still other managers believe that they are well protected from lawsuits because their company has purchased employment practices liability insurance. While employment practices lawsuits are a common liability claim against directors and officers, this classification of lawsuits comprises less than half of all liability claims filed against directors and officers, according to various industry sources. The remaining claims are filed for a variety of other reasons including: breach of fiduciary duties, conflict of interest, discrimination in providing goods and services, and negligence.

One of the most common misconceptions about liability insurance is the mistaken belief that the company's bylaws or charter protects managers by limiting their liability. However, Steve Levy, executive director of the Maine/Atlantic State Rural Water Association says "The role of D&O insurance [for non-profit corporations] is to protect the director and officers from liability as the result of their acts or the acts of others while doing their job. Water districts should establish corporate policy through their bylaws to protect their board and staff. Additionally, D&O insurance should be purchased to back up their corporate policy of protecting directors and officers." Levy points out, though, that the level of protection that a D&O policy can provide might be limited by state and federal statutes and regulations that restrict protection.

Other managers may think that the fight is over once the company is bankrupt. But a lawsuit can live long beyond the life (solvency) of a company. Daniel Fellerman, assistant vice president of CNA Financial Insurance Middle Markets Division says "Personal liability continues whether or not a director or officer is still affiliated with the company that is sued or if the company is no longer solvent." This could mean that a court could force you to sell those personal assets you worked so hard to attain so that the money can be used to pay a plaintiff's damages.

Continued on next page

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Settlement Costs Are High

A water company's costs for compensatory and out-of-court settlement costs caused by lawsuits could devastate the financial stability of a water company. For example, a 1997 D&O liability survey by Watson Wyatt Worldwide found that D&O claims in 1997 averaged nearly one-million dollars.

Some managers think the cost of D&O liability insurance is too great a drain on the company budget, but the extra layer of protection D&O insurance can afford the company could prove to be money well spent should a lawsuit ever arise.

Who files lawsuits and why?

Fellerman explains that lawsuits can and have been successfully filed by employees, shareholders and investors, competitors, and third parties. Other than employment practices, some of the most common sources of litigation stem from alleged (or actual) breaches of the following corporate duties:

- Duty of care—the obligation to perform your duties with care and diligence.
- Duty of loyalty—not making personal gain through the use of your position, for example, a conflict of interest; and
- Duty of obedience—the obligation to abide by all corporate statutes, regulations, company bylaws and charters.

Some lawsuits might be handled quickly and inexpensively, but other lawsuits could be costly, such as in the case of suits filed by shareholders or investors against directors and officers in closely-held companies for breach of fiduciary duties. Watson Wyatt Worldwide Survey points out that in 1997, almost 33 percent of all claims were filed by shareholders.

Insurance Protects Against Year 2000 (Y2K) Problems

Insurance companies expect many of the lawsuits involving Y2K problems to be based on alleged mismanagement or waste of assets and to be laid at the doorstep of officers and directors. "These lawsuits will assert that officers and directors knew that the company had a big problem and didn't reveal it or that they mismanaged the situation," says Bill Brown, executive vice president of claims, CNA's Financial Insurance. (See the Summer 1998 issue of *Water Sense* for an in-depth feature on Y2K and water systems.)

Deiley says that many water companies are handling the Y2K problem by upgrading their

computer systems. "Computers are relatively cheap, so it's not a big expense to put in new systems. I don't see Y2K being a problem in supplying water. As long as we have electricity, pumps, and water, there shouldn't be a disruption in service. The primary problem I see will be in billing customers."

Many insurance companies are playing it safe, though, and as policies come up for renewal, are excluding D&O coverage that relate to Y2K problems. Other insurance companies are placing a limit on Y2K-related coverage. This means that the amount of coverage the water plant can buy will be proportional to the amount of effort it expends in becoming Y2K compliant. This protects insurance companies from footing the bill for claims that could have been prevented in the first place had the company taken some precautionary steps.

Are you a gambler?

You may never need your D&O liability insurance, but the statistics gathered by the insurance industry about D&O claims don't support that choice. Choosing to exclude D&O insurance from your insurance coverage could

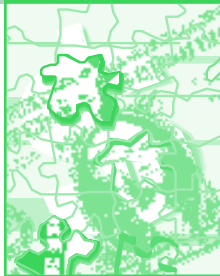
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Key Points of D&O Explained

Clinton Deiley, vice-president of Grundy Insurance, suggests water companies insist that the following key areas be included in their D&O insurance policies:

- Entity Coverage—if the entity (water company) is not covered and it is named in a lawsuit along with directors and officers, the water company might be required to pay half of the legal costs. If the entity is covered along with the directors and officers, then the insurance company picks up all legal costs.
- Prior Acts Coverage (with no retroactive date)—protects the current board of directors from lawsuits that result from decisions made by a previous board of directors for which the current board of directors had no knowledge.
- Duty to Defend—insurance company must have the consent of those being insured prior to settling a claim. Even with D&O liability insurance, though, you generally are not protected from claims based upon criminal, fraudulent, or dishonest conduct.



EPA Releases Y2K Policy

The U.S. Environmental Protection Agency (EPA) recently released the Y2K (Year 2000) Enforcement Policy designed to encourage prompt testing of computer-related equipment used in wastewater and drinking water operations.

Under this policy, EPA will waive 100 percent of the civil penalties that might otherwise apply and will recommend against criminal prosecution for environmental violations caused during specific tests that are designed to identify and eliminate Y2K-related malfunctions.

Facilities must design and conduct the tests well in advance of 1-1-00, conduct the tests for

the shortest possible time necessary, immediately correct any testing-related violations, and meet other specified conditions that ensure that human health and the environment are not compromised.

The policy can be found on EPA's site at <http://es.epa.gov/oeca/eptdd/ocy2k.html>.

Comments may be directed to Gary A. Jonesi, Office of Regulatory Enforcement, at 202-564-4002. His e-mail is jonesi.gary@epa.gov.

Additional information about the Y2K issue may be found on the NDWC's Web site located at <http://www.ndwc.wvu.edu>. \$

Public Relations Kit Available for Systems

Public relations is often the cornerstone of building public awareness and support for small drinking water system projects. And to help systems improve their awareness with customers, the National Rural Water Association (NRWA) has developed a public relations kit.

The "Quality On Tap!" kit features examples with instructions for tried and true public relations tools that systems can personalize and use. The package includes sample press releases, newsletters, bill stuffers, water quizzes, logos,

school exercises, door hangers, and designs for decals and stickers. Together, these tools can help small systems educate customers about the quality drinking water they provide.

The Quality On Tap! kit is available free to NRWA members by contacting state affiliates or the NRWA's national office. State affiliate contact information can be found by accessing the NRWA's Web site at www.nrwa.org or by calling Wendy Quarles at (580) 251-9081. \$

Can you afford to be without it?

Continued from page 9
very well be a costly gamble in today's litigious society.

For more information about D&O liability insurance for small drinking water plants, contact Clint Deiley (Grundy Insurance) toll free at (877) 338-4004, extension 15. You may also contact your local insurance agent or broker.

Grundy Worldwide Insurance is affiliated with, though not endorsed by, the National Association of Water Companies (NAWC). The NAWC is the only national trade association that exclusively represents the private and investor-owned water utility industry. The NAWC Web site address is: <http://www.nawc.org>.

The opinion presented here does not represent the opinion of any CNA company. \$

Did you know?

The plaintiff's bar in California has filed mass tort lawsuits against a number of public and private California water suppliers for allegedly delivering contaminated water? And, in some cases, claims seek damages for contaminants that could not be detected at the time of the alleged damage.

According to various members of the water industry, these new tort cases could present the following problems for them as well as for state and federal regulators:

- Having 12 jurors in a state courtroom setting national drinking water standards that may differ from those set by the federal and state agencies under the regulatory process;
- Sudden and huge increases in water costs to cover the substantial costs for defense and, if the suits are successful, the catastrophic judgments against utilities and public agencies.

The U.S. Environmental Protection Agency has stepped in and asked its general counsel to look into the lawsuits. Water companies have asked the California Public Utility Commission to find these lawsuits invalid since the systems met water standards that were established at the time of the alleged events.

What's in store for small systems?

Continued from page 1

Evaluation. Define your system's performance, from income and expenses to cost of production per 1000/gallons.

Resources. Plan for, obtain, manage, and safeguard dollars that get you the other resources you must have: People, facilities, equipment, capital improvements, etc.

Vision. Define your system's future.

How do you tell if your system is addressing all POSCERV elements? Just look at your monthly board meeting agendas for the past 18 to 24 months. They should have included all seven elements.

Modern water utilities have one primary job: protecting public health. You do that by providing high quality water in the quantities your customers need. POSCERV's payoff? Your utility will be doing what it must to produce water today, tomorrow, and in the next century.

Ratings From the Trenches

In print, at conferences, and on the Internet, many issues deserve attention as the millennium comes to a close. Seven small system experts were asked about their opinions on several national issues. (See sidebar on page 13.) The informal survey isn't scientific . . . but it is illuminating.

Adequate funding is always everyone's top need. So, funding was removed from the discussion list.

What remained? Seven issues that cross the spectrum of management topics. Each expert was asked to assign a rating: (1) very important; (2) important; (3) somewhat important; and (4) not important. Figure 1 (below) shows the seven issues and the ratings they received from these experts.

Issue 1: Educate customers and the public about needs and costs.

"We have a product in the water industry," said Kasey Monroe, Kemp Construction, Sherrills Ford, North Carolina. "We have to start treating it as such. If the public doesn't understand the importance of quality and associated costs, then the public won't support the cost of additional facilities, operators, and maintenance. More and more people are spending a lot of money on a bottle of water, but they don't understand why they need to spend more money for tap water."

While media attention has made consumers more aware of water quality, some small systems haven't kept up in informing the public. "We have to convince people that we are doing a good job but need to hire a professional operator," commented Liz Grove, general manager, Clarence Cannon Wholesale Water Commission in Missouri. The upcoming SDWA-required Consumer Confidence Report (CCR) might confuse some people. While CCRs will contain needed information, there is concern about how to present the facts.

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"When you're dealing with public funds, you have to be very conscious of how and why you are spending money."

Brad Mears, City Administrator, City of Holton, Kansas

Fig. 1 Ratings by seven small system experts

Issue	Very Important (1)	Important (2)	Somewhat Important (3)	Not Important (4)	Single most important?
1. Educating customers and the public about needs, costs	4	1	2	0	3
2. Writing and using a long-range plan	4	1	2	0	3
3. Owners understanding major do's and don'ts of big construction projects	2	4	1	0	0
4. Enabling employees to solve more problems on their own	4	1	1	0	0
5. Improved productivity through computerized methods, e.g., customer billing, SCADA 3	3	4	0	0	0
6. Cooperative arrangements with nearby systems that stretch dollars	5	2	0	0	0
7. Expansion or consolidation in surrounding areas	4	1	1	0	0

(May total to less than 7 due to no response)

What's in store for small systems?

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Worried about preparing your first CCR (due between April and October, 1999)? Both the National Rural Water Association (NRWA) and the American Water Works Association (AWWA) have templates that small systems can use (see the end of this article for more information on NRWA and AWWA CCR templates).

Issue 2: Write and use a long-range plan.

"Being proactive is key," said Kent Watson, general manager, Wickson Creek, Texas, Special Utility District. "Planning is at the top of the list; without that plan you're in trouble."

John Baerg, Red Rock, Minnesota, Rural Water System, agreed. "We must do more long-range planning and paying attention to what our customers say they want: quality and dependability."

Other points include:

- Planning is impractical due to the rapid rate of change.
- Some small systems don't have the know-how to plan but could be forced out of business without it.
- The 1996 SDWA's requirement for technical, managerial, and financial capacity means having a plan to demonstrate capacity.

- "Planning for any entity is important," said Holton, Kansas, City Administrator Brad Mears. "You need to have a direction and sense of where you are going, whether you do it formally or informally."

Issue 3: Owners need to understand the major do's and don'ts of big construction projects.

The consulting engineer is a key player. Most small systems rely on their engineer or another consultant to understand the ins and outs of the contract process. The key element is trust between the owner and the engineering firm. (For more information on selecting a consulting engineer, see page 3.)

Board understanding helps get the best use of money and the best design. "The board should be educated on every aspect of the project," said Nathan Anderson, general manager, Rural Water District 2 of Wabaunsee County, Kansas. "My job as manager is to do the close scrutiny of the project. If the board isn't informed, it can't make good decisions."

However, governance body over-involvement is to be avoided. Daily visits by the mayor to the construction site or calls to the contractor can

Continued on next page

Countdown quiz

If your system ready for 2000? Assign grades to find out your system's score.

A B C D F

- | | |
|-------|--|
| _____ | 1. Tests are underway for Year 2000 computer/software problems. |
| _____ | 2. Our Consumer Confidence Report will meet the April-October, 1999 deadline. |
| _____ | 3. We use our master plan's priorities when making annual budgets. |
| _____ | 4. Our vision statement covers at least 10 years. |
| _____ | 5. We have refinanced and/or repay the maximum debt possible. |
| _____ | 6. The system pays for each employee to attend training annually. |
| _____ | 7. Each employee gets evaluated annually in writing. |
| _____ | 8. The media is our partner in keeping customers informed. |
| _____ | 9. We use productivity tools such as pagers, computerized accounting systems, etc. |
| _____ | 10. We use the Internet to keep up-to-date and reduce long-distance phone bills. |
| _____ | 11. Our cash flow covers operations, debt service and reserves. |
| _____ | 12. Our customers understand the costs of producing quality water. |

Scoring A=15, B=10 C=5, D=1, F=-5

- 170+** Home run! Your board/council should be giving workshops at annual conferences.
- 140-169** It's a double, but your system can do better. Mr./Mrs. Manager, make recommendations to your board on ways to improve.
- 100-139** Just average. Schedule needed topics for upcoming board meetings.
- <100** Back to basics! Your board/council needs to pay attention to all elements of POSCERV.

Warning: Micromanagement may be just around the corner.

Continued from previous page

lead to big problems, or even lawsuits. "All of those things [concerning construction projects] are issues that don't need to be micromanaged," Watson noted.

Mears summed it up: "When you're dealing with public funds, you have to be very conscious of how and why you are spending money."

Issue 4: Enable employees to solve more problems on their own.

People learn through solving problems. Sometimes they'll be successful, other times not. "Many are solving problems the best they can, given the resources they have available," stated Dennis Knipmeyer, operations manager, Consolidated Public Water District Number 2, Lafayette, Johnson, and Saline Counties, Missouri.

Managers should offer guidance while letting employees take the lead. "I love for an employee to say 'Why don't we do it that way?' Especially when younger employees look at things differently," commented Watson.

"As demonstrated by Disney and Ford, if you give employees an ownership feeling, their performance is enhanced" said Monroe. "Therefore, the product is better."

Other experts stressed the link between training and solving problems. Sometimes boards/councils just send employees to free training, whether or not it applies to them. That can be of special concern in states with mandatory continuing education credit (CEU) for operators. "If you're going to keep professional staff for professional operations, you have to spend the needed money on training," Grove said.

Issue 5: Improved productivity through computerized methods.

"It depends" was a common response to this issue. If a small system has 15 customers, it isn't effective to spend \$2,000 on a billing program.

For others, though, computerized productivity tools are a "must have." Regardless of size, a utility must operate efficiently. The lowered cost of today's computing power put them within reach of even very small systems. "There's no sense in putting information down on paper when you can put it on a computer and push a button," Anderson said.

And, there may be benefits to computers that you haven't considered.

What, there's also a PR benefit to telemetry? Yes, because it does more than permit mon-

itoring and manipulating a far-flung system.

It improves reliable service to customers.

"Telemetry responds before there is a problem,"

Watson said. That gives the manager time to make decisions. Watson's district has used telemetry for three years. "It's unbelievable how much it has helped. It has saved me in water outages and water loss," he noted. The outcome? Improved customer relations due to a more reliable system.

Knipmeyer observed about systems who don't take advantage of technology: "It's like using horses, not cars. You can still get there, but it takes a lot longer and is harder."

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Meet the Experts

Seven people were asked to discuss major national trends as the millennium comes to an end. All are professionals who work daily in small systems, as well as playing a larger role in their state or nationally.

Nathan Anderson, general manager, Rural Water District 2, Wabaunsee County, Kansas. It has 479 connections. He is also Kansas Rural Water Association's 1998 Rural Water Manager of the Year.

John Baerg, board member, Red Rock, Minnesota, Rural Water System, which serves approximately 350 connections and several small towns. He is also director, National Rural Water Association.

Liz Grove, general manager, Clarence Cannon, Missouri, Wholesale Water Commission, which serves 3.6 million gallons/day to 16 communities in northeast Missouri. She is also a member of the Missouri Safe Drinking Water Commission.

Dennis Knipmeyer, operations manager, Consolidated Public Water Supply District No. 2, Lafayette, Johnson, and Saline Counties, Missouri. The district serves 2,070 connections and three small towns. He is also a board member of the Missouri Rural Water Association.

Brad Mears, city administrator, Holton, Kansas. Population served is about 3,200 with an annual 5.5 percent growth rate in water sold. He is also a board member of the Kansas Association of City Managers

Karen M. "Kasey" Monroe, general manager, Kemp Construction, Sherrills Ford, North Carolina. Her firm provides maintenance, repairs and upgrade services to small water/wastewater utilities. She is also a member of the American Water Works Association's Small System Policy Committee.

Kent Watson, general manager, Wickson Creek, Texas, Special Utility District. Located about 100 miles northwest of Houston, it serves about 2,000 connections over 165,000 acres. He is also president of the Texas Rural Water Association.

"Cooperative arrangements are a cost-effective way to deliver water that protects the public's health while supporting your community's quality of life."

What's in store for small systems?

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Issue 6: Cooperative arrangements with nearby systems.

For some, the term "cooperative arrangements" needed to be clarified. They liked the idea of sharing technology, costs, and tasks. However, mergers with other systems were much less appealing (see issue #7). The potential for loss of identity and independence made all the difference.

SDWA requirements will make a difference, too. Operator certification; technical, managerial and financial capacity to maintain compliance with drinking water standards; annual CCR; and surface/groundwater treatment rules are just a few must-do's that may start a new train of thought.

Where smaller systems don't have the financial base or numbers of customers, shared arrangements with neighbors could help. In some cases, systems might even need to study mergers in order to provide safe drinking water. "A child who lives in a 25-vehicle trailer court deserves the same high quality of water as a child who lives in Charlotte, North Carolina," Monroe said.

"We are sharing supplies to keep low inventory," John Baerg reported. His rural water system shares construction equipment with the local electric co-op.

On a larger scale, utilities across the country are working together to build new treatment plants, buy and sell water from each other, or create wholesale water districts (see sidebar below). Within counties, across county lines, throughout watersheds, and even across state lines, voluntary efforts grow steadily. Districts, associations, municipalities, and other entities increasingly work together. Cooperative arrangements are a cost-effective way to deliver water that protects the public's health while supporting your community's quality of life.

Issue 7: Expansion or consolidation in surrounding areas.

This issue is controversial due to the feared loss of local independence and initiative. However, several experts saw expansion or consolidation as inevitable for some small systems.

Continued on next page

Cooperation + New Technology = Benefits

Three rural water districts and a small community in Pottawatomie, Wabaunsee, and Jackson counties in northeastern Kansas, share more than common borders. All plan membrane filtration plants—rare in Kansas. All use Bartlett & West Engineers, Inc., as their consulting firm.

Newly formed Rural Water District 4 of Pottawatomie will serve approximately 350 rural homes and farms. It will sell water wholesale to two municipalities, a private company, and one rural water district. The proposed \$3.5 million reverse osmosis (RO) plant will reduce hardness levels from nearly 470 parts per million (ppm) to approximately 150 ppm. "Our goal is to be operating in mid-2000," said Board President Eldon "Bud" Crouch.

Nearby, Wabaunsee Rural Water District (RWD) 2 is studying nano-filtration, a membrane process in which pores are slightly larger than in reverse osmosis (RO). Currently the district uses 115,000 gallons a day for its 479 connections. The new plant would only treat 70 percent of its hard well water with the remainder bypassing the membrane process to provide a resulting blended hardness level acceptable for potable use. "We are looking forward to less hardness for people and animals," said General Manager Nathan Anderson.

He noted that dairy cattle research shows that water lacking high hardness levels is beneficial.

In Jackson County, a municipality and RWD are developing a joint treatment plant in which membrane filtration may be used. "We hope to be selling water in 2000," City Administrator Mears said. The City of Holton and Rural Water District 3, Jackson County have formed Public Wholesale Water Supply District #18. Currently, they are the only two customers. Members from the city and from the rural water district will make up the five-person wholesale district board.

How do these water utilities benefit from their proximity and having the same engineer?

1. They keep in close communication concerning costs, plans, and options.
2. They may do joint purchasing of treatment equipment.
3. Their engineers share studies for one system with the other, saving both time and money.
4. They benefit from an engineer with considerable experience with membrane treatment processes.
5. They may be able to share operators, supplies, and repair of equipment.

Continued from previous page

Why? One reason is meeting the technical, managerial, and financial (TMF) capacity provisions of the 1996 SDWA. "You have to know what you are doing," said Watson. "It's not a mom and pop industry anymore. There will be some consolidation and mergers within most states. I'm not advocating one central utility, but there will be a smaller number of systems."

Others saw the discussion of expansion or consolidation increasing as the need for regional water sources grows. Aging systems plus SDWA requirements will mean that two or three systems will go together. "Showing capacity will be crucial when systems put in a loan application for SDWA state revolving funds," noted Knipmeyer.

How to keep up on this issue? Start with your engineering firm and the primacy agency's regional office.

What's the top pick?

Which of the seven major issues was the single most important one? It was a tie. Three people chose issue #1 (educate customers and the public about needs, costs); three selected issue #2 (writing and using a long-range plan); and one opted not to vote.

One expert, when commenting on educating customers, said "Don't forget to educate the board/council and office holders. They are the ones who have the final say and control purse strings."

Another expert, remarking on long-range planning, said "a long-range plan will address the technical and training aspect as well as business and financial areas. Those are absolutely necessary to make our product and make sure it's good." Another added, "Long-range planning lays out a plan to use limited resources wisely. It helps us deal with our neighbors, neighboring systems and in setting up how we work together."

Tips for New Managers

Feeling overwhelmed about the big industry issues? The experts have the following tips for new managers:

"Contact your state drinking water authority, especially the state employee within your region. Pick that person's brain. Make him/her your friend and advisor; this person will be the best friend you can make in the industry," advised Kasey Monroe.

"Stay informed and stay on top of the issues, whether regulatory or operational. Stay in contact with associations and regulatory agencies. Maintain those communications lines," said Brad Mears.

"Build positive relationships [with the state rural water association; also the local regional primacy agency office.] They are the grassroots regulators and you need to get to know them," stated Liz Grove.

"Get involved with professional organizations [such as your state's rural water association or AWWA section]. Those organizations strive to get information out to people who are responsible. Subscribe to publications and read them," Dennis Knipmeyer recommended.

"Keep up with regs from EPA. Try to educate yourself on new regs and be ready for anything," said Nathan Anderson.

"Always surround yourself with good people. Hire good employees, engineers, attorneys, and bond counsel. All of these people that you hire make you look good and the utility look good. You'll get the job done right," Kent Watson said.

"Water and wastewater are becoming more important. Quality water resources are becoming so limited that we will have to learn how to allocate," observed John Baerg.

And the Final Word Is

The past 25 years have seen drastic changes in the drinking water industry. From regulations to computers to public expectations, it's a very different world today.

As the millennium winds down, drinking water boards and councils have the chance to step back, to look at the larger picture. Put these major issues on upcoming monthly agendas:

- Educate customers and the public about needs and costs,
- Write and use a long-range plan,
- Owners must understand the major do's and don'ts of big construction projects,
- Enable employees to solve more problems on their own,
- Improve productivity through computerized methods such as bookkeeping, customer billing and accounts, telemetry, SCADA,
- Use cooperative arrangements with nearby systems, and
- Consider expansion or consolidation in surrounding areas.

Talk about how these issues might affect your system over the next several years.

Yes, most of us yearn for things to stay the same. But if we don't take charge of our utility's destiny, someone else will. Discussing the larger issues helps the board/council see its options. That's how your system can deliver quality water today, while planning for tomorrow. \$

For more information about CCR, both the NRWA and the AWWA have templates that small systems can use. The NRWA may be reached at (405) 252-0629 or on the Web at www.nrwa.org. The AWWA may be reached at (303) 794-7711 or at www.awwa.org.

Brian Hoellein may be reached at (785) 272-2252 or via e-mail at B_Hoellein@bartwest.com.

Ellen G. Miller may be reached at (913) 888-9029 or via e-mail at emiller@unicom.net.

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Management Products Available From the NDWC

Note: The free items listed below are limited to one of each per order. Call (800) 624-8301 or (304) 293-4191 to order products. Please allow three to four weeks for delivery. Actual shipping charges are added to each order. NDWC products also may be ordered via e-mail at ndwc_orders@ndwc.wvu.edu. Products are subject to availability. Please verify price when ordering.

■ Regionalization Options for Small Water Systems

Item # DWBKDM08

This 1983 book describes many forms of regionalization and analyzes the associated benefits; costs; and financial, legal, organizational, and political aspects. Case studies illustrate the kinds of regionalization options available. Also included are methods to help communities evaluate and tailor options for their particular situation.

Cost: \$0.00

■ Utility Manager's Guide to Water and Wastewater Budgeting

Item # FDBLFN13

This 1994 user-friendly booklet presents financial concepts that are helpful to water or wastewater utility managers when developing their annual budgets. Offered are sources of possible revenue, expenses to consider, suggestions on gaining public support, and examples to assist with developing revenue and expense trends information.

Cost: \$0.00

■ Looking at User Charges: A State Survey and Report

Item # FDBLGN04

This 1987 document provides information on conducting community survey to structure appropriate user charge systems. It includes a survey form, instructions, and a data analysis worksheet.

Cost: \$5.20

■ Management of a Construction Project: An Opportunity and a Challenge

Item # FDBRMG06

This brochure offers tips to help municipal officials hire project managers, develop management plans, and apply a team approach to project management.

Cost: \$0.00

■ Alternative Funding Study: Water Quality Fees and Debt Financing Issues

Item # DWBKFN08

This 1996 study evaluates specific revenue sources to increase capital investment in local drinking water and wastewater related projects. It focuses on funding from federal, state, or local fees to supplement existing subsidies. It also looks at the expanded use of debt financing.

Cost: \$19.55

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