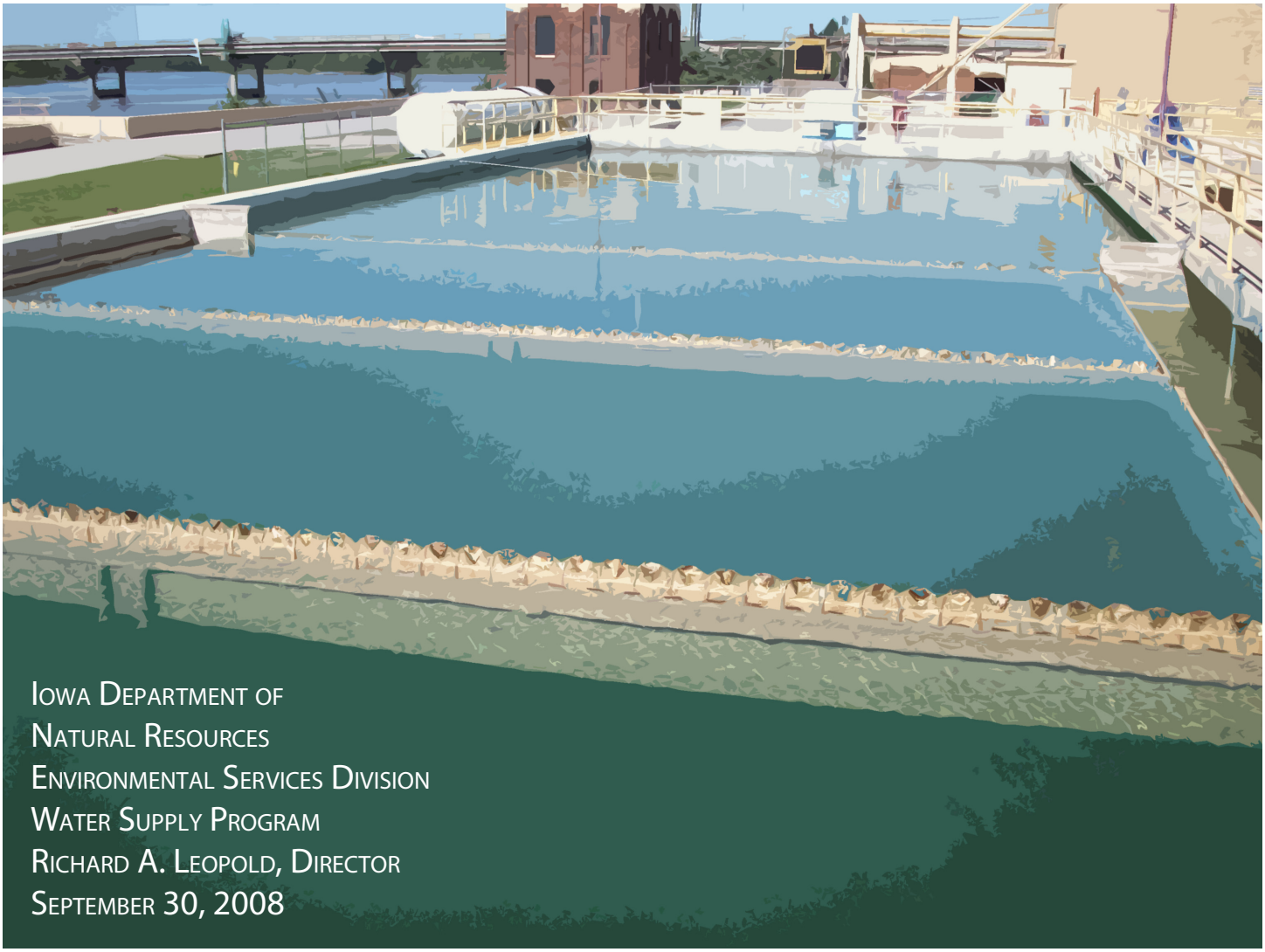
Report to the Governor

Iowa's Capacity Development Program



Iowa Department of
Natural Resources
Environmental Services Division
Water Supply Program
Richard A. Leopold, Director
September 30, 2008

Acknowledgement

The Department would like to thank the following individuals
for their participation in the 2008 viability assessment advisory group:

Robert Dunlevy, U.S. Environmental Protection Agency, Region 7

Jessica Harder, Iowa League of Cities

Megan Hemenway, Environmental Finance Center at Boise State University

Bill Jarocki, Environmental Finance Center at Boise State University

Jess Lillie, Iowa Association of Municipal Utilities

Jon Martens, Atlantic Municipal Utilities

Joel Mohr, Iowa American Water

Karen Oppelt, City of Altoona

Shannon Paseka, Iowa League of Cities

Jill Soenen, Iowa Association of Municipal Utilities

Tom Thorpe, Thorpe Water

Dale Watson, Fox Engineering

Iowa Department of Natural Resources Staff:

Dennis Alt, Water Supply Engineering Supervisor

Jennifer Bunton, Water Supply Engineering

Jeff Vansteenburg, Mason City Field Office Supervisor

Table of Contents

Executive Summary

For the past eight years, the Iowa Department of Natural Resources (IDNR) has worked to implement a strategy to assist public water systems in developing their technical, financial and managerial capacity as required by the federal Safe Drinking Water Act (SDWA) amendments of 1996. Water systems with capacity are able to produce water that meets all SDWA requirements and provide it to consumers for a reasonable cost, while ensuring they are planning for future infrastructure replacement and new regulations. Beginning in 2002, IDNR submitted its first report of progress in implementing the strategy and its effectiveness in improving the capabilities of water systems as required by the SDWA, which requires submittal of these reports to the governors of each state on a three year interval.

This report discusses each of the Advisory Group's recommendations and the elements chosen to implement the recommendations and includes a summary of IDNR activities with respect to each element. Progress has occurred with respect to some of the elements, while others have been addressed to a more limited extent. Since the capacity development strategy is meant to be a "living document" that reflects the changing times, IDNR reconvened the Advisory Group in 2005 year to discuss modifying the strategy to more accurately reflect the capacity development efforts being undertaken in Iowa. The Advisory Group felt that of the recommendations contained in the group's original Report of Findings, the recommendation for water board/city council member education was the most important and that resources dedicated to capacity development in Iowa should be directed toward achieving this goal. With that in mind, the capacity development strategy was modified to focus the group's original recommendations toward board/council member training. In 2008, we reconvened the Advisory Group again to discuss progress and look at areas for improvement.

The recommendations of the group to the department were as follows:

- Continue development of the enhanced sanitary survey program and use data collected during surveys to populate a "score card" for each water system. The score card could be provided to the mayor or water board or city council to show how their system ranked and could potentially be tied to a promotional opportunity like the Great Places initiative to emphasize the impact of good drinking water on community development.
- Continue to focus on water system management (water boards and city council) training to detail the requirements and liabilities of owning a public water system in Iowa, and consider using a new "on demand" training tool that would broadcast the presentation over the internet at the convenience of the session attendees.
- Provide a detailed account of sources and uses of funding for the Drinking Water Program on an annual basis, with publication of the accounting in the State Annual Report. This would allow stakeholders to see how federal funds and operating and construction permitting fees are being spent and would provide them with a basis for supporting or refuting the need for fee increases.
- Prepare or link to educational materials on safe drinking water for children for use by teachers in educating the state's future consumers.
- Work with the Iowa League of Cities to develop an environmental financing curriculum for the annual city clerk workshops coordinated by the League and look for additional training opportunities to expose city clerks to water system management topics.
- Sponsor meetings for technical assistance providers twice annually to discuss future training topics and avoid duplication. Also, provide a list of common water system deficiencies from the enhanced sanitary survey so that future training could address these. Funding for training should also be discussed at these meetings.
- Consider using the Environmental Protection Agency's logic model as a measure of the efficacy of the capacity development program.
- Consider doing a statewide water system rate study and using the data to populate financial models that could be used to look at innovative financing options for water systems and as a means for measuring improvements in water system finances over time.
- Members of the Advisory Group should consider sending letters supporting the drinking water and capacity development programs to the Governor's office to emphasize the importance of safe drinking water and the need for additional resources.

Overall public water system compliance rates remain high and the technical, financial and managerial capabilities of public water systems are improving with the assistance of Drinking Water State Revolving Fund loans, third-party technical assistance, and IDNR staff efforts. The Department will continue to implement the strategy with the ultimate goal of reducing the need for enforcement action and providing overall improvement in the safety of drinking water for the citizens of Iowa.

Overview

In 1996, Congress re-authorized and amended the Safe Drinking Water Act (SDWA). One of the amendments added a new section entitled "Capacity Development Strategy." Capacity is generally defined as a system's ability to provide safe, high-quality drinking water to its customers at a reasonable cost for the foreseeable future, and is referred to as "viability" in the Code of Iowa.

This new section of the SDWA, among other things, required each state to develop and implement a strategy by August of 2000 to assist its public water systems in acquiring and maintaining technical, managerial, and financial capacity. Failure to do so would have resulted in a withholding of up to 20% of federal grant funds for the Drinking Water State Revolving Fund (DWSRF) program. The SDWA required that the state consider, solicit public comment on, and include as appropriate five different elements in developing its strategy. The elements considered were:

- Methods or criteria to prioritize systems [§1420(c)(2)(A)]
- Factors that encourage or impair capacity development [§1420(c)(2)(B)]
- How the State will use the authority and resources of the SDWA [§1420(c)(2)(C)]
- How the State will establish the baseline and measure improvements [§1420(c)(2)(D)]
- Procedures to identify interested persons [§1420(c)(2)(E)]

The SDWA amendments also require each state, within two years of adopting a capacity development strategy and every three years thereafter, to submit to its Governor a report on the efficacy of the strategy and progress made toward improving the technical, managerial, and financial capacity of public water systems in the state. The report must also be made available to the public. The intent of this report is to fulfill the SDWA's statutory requirement.

Development and Implementation of Iowa's Capacity Development Strategy

During 1999 and 2000, IDNR convened a group of stakeholders collectively referred to as the Viability Assessment Advisory Group for a series of ten meetings to discuss the five elements requiring consideration prior to development of the state's capacity development strategy. This group produced a document entitled, "Report of Findings on Improving the Technical, Financial and Managerial Capacity of Iowa's Public Water Systems," attached as Appendix A.

The Report of Findings was made available for public comment in October and November of 1999. The Department notified every public water system of its availability, posted it on the IDNR website, issued a press release highlighting its availability, and held three public meetings across the state to solicit comments. Comments received were placed in an appendix to the Report of Findings and were utilized during preparation of the Capacity Development Strategy. The Report contained eight recommendations for use in the capacity development strategy.

The IDNR reviewed the findings, recommendations, and public comments to determine which recommendations were feasible and would assist Iowa public water systems in improving their technical, managerial and financial skills and enhance their capacity. The resulting recommendations were then incorporated in the Capacity Development Strategy.

The strategy was submitted for EPA review in August of 2000 and was approved in early 2001; it was also reviewed and adopted by the Iowa Environmental Protection Commission at that time.

Implementation of the strategy has been ongoing over the past eight years and a report to the governor was developed in 2002 and again in 2005 to assess the efficacy of strategy during the first five years of implementation. The strategy is a dynamic document that may be modified as the department finds it necessary to make changes to achieve capacity development goals. As a result, the Viability Assessment Advisory Group was reconvened in 2005 when IDNR felt it was time to modify the strategy to include activities that were not part of the strategy but were improving the capacity of systems, and to eliminate activities that were not likely to be implemented. The end result of the 2005 meeting was that the strategy should focus on water board/council member training during the next three year period. The amended strategy is included as Appendix B to this report.

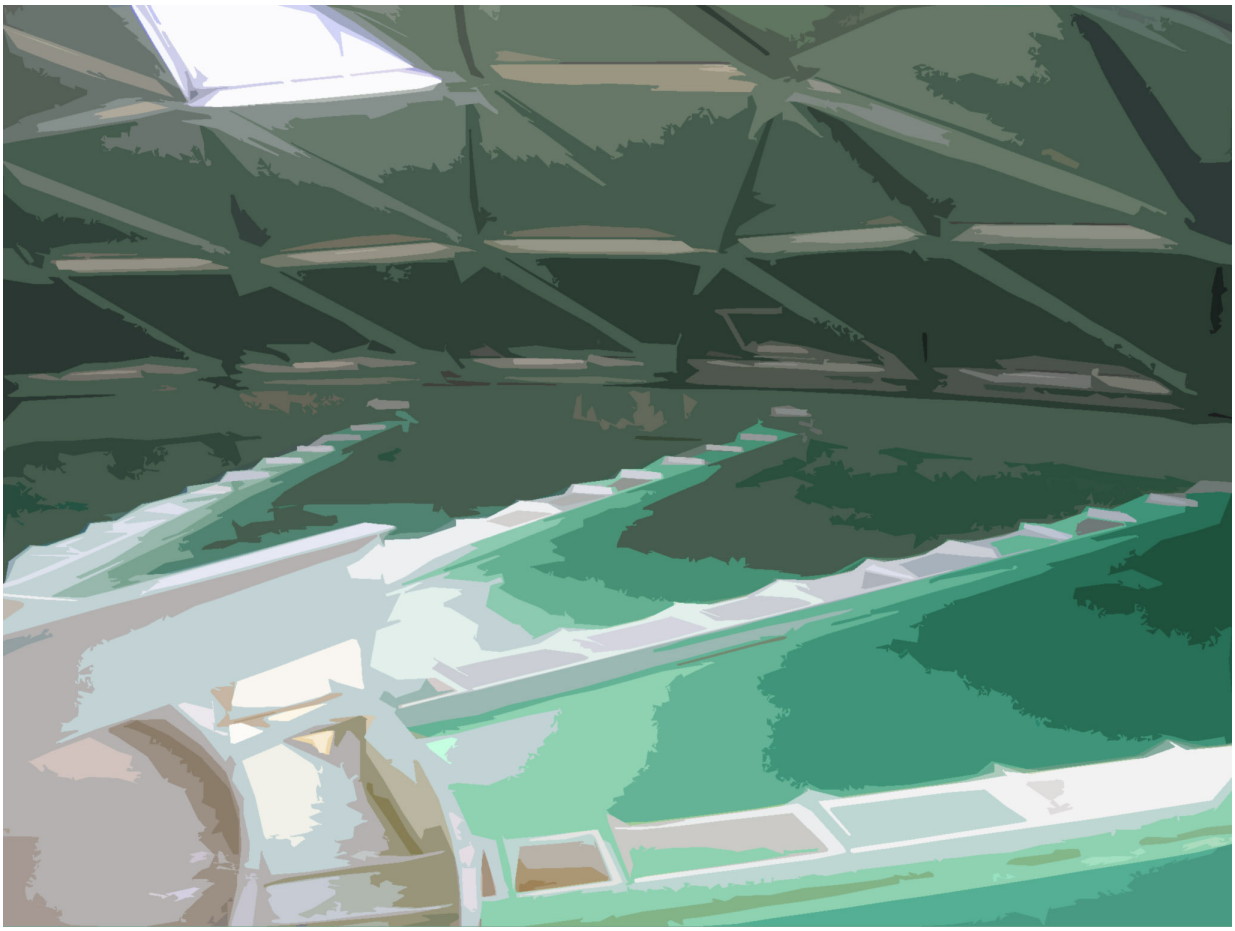
In 2008, the department asked the Advisory Group to come back together to review the accomplishments of the past three years and to look at potential improvements or additions to the strategy; no major revisions resulted from this meeting.

Discussion of Strategy Elements

In preparing for this report, IDNR and the Viability Assessment Advisory Group discussed the efficacy of the program, the progress IDNR has made in improving the technical, financial and managerial capabilities of Iowa water systems, and barriers to the process. Each of the elements listed in the amended strategy was reviewed and the implementation progress discussed. The feasibility of each element was also reviewed in light of the activities undertaken within the last three years and new ideas for implementation were discussed.

The stakeholders noted that the limited resources of the water supply program have prevented the state from reaching all of its capacity development goals. When the original strategy was written in 2000, several of the stakeholders' suggestions were not adopted because of resource constraints. In the two years that followed, the state experienced a budget shortfall and the amount of funding provided by the legislature to the water supply program decreased significantly. During the past six years, the water supply section was able to adopt and collect fees for construction permitting and as a result has been able to take advantage of set aside funds available through the Drinking Water State Revolving Fund (DWSRF). At the same time, the Public Water System Supervision grant that traditionally provided the majority of funding for the drinking water program was re-directed to other priority areas within the department. This has resulted in almost total reliance on the DWSRF set asides for program funding. As past reserves are utilized and capitalization grants shrink, the amount of available funding for the drinking water program has become more limited. This is forcing the department to reduce program efforts in such areas as contracts with technical assistance providers and delay adoption of new federal requirements.

Following is a summary of each strategy element, the activities that have occurred to date, and any modifications suggested by the Advisory Group members.



Recommendation 1:

Collect additional technical, financial, and managerial information from public water systems

Reasoning: The Department currently collects information from water systems once every three to five years via inspections called "sanitary surveys." The primary purpose of the survey is to evaluate the technical aspects of the system. Because of the federal requirement to improve the financial and managerial skills of water systems as well as the technical aspects, it was decided that one of the barriers to capacity development was the lack of financial and managerial data related to water system operations.

Element 1: Develop and use an enhanced sanitary survey to collect technical, financial, and managerial information.

- The IDNR developed and began using an enhanced sanitary survey performed using a Personal Digital Assistant (PDA) during 2005. The enhanced sanitary survey included questions about the managerial and financial aspects of operating a water system, in addition to the technical issues traditionally discussed during surveys. With changes in technology, it was decided to adapt the program for use on a Tablet PC during 2007. The program and database is in the process of being rebuilt to take advantage of the tablet's features and make the database more robust. New enhancements will include the ability to pull real time data from the drinking water database of record (SDWIS) to populate the survey with existing information and also to push data from the current survey back to SDWIS, eliminating data entry. The collection of financial and managerial data is currently required for all surface water systems as part of the eight elements of a sanitary survey, and will be required for all ground water systems beginning with sanitary surveys done after December 1, 2009. The IDNR has been collecting this information for all public water supplies except those transient systems inspected through a contract with county health departments since 2005.

Element 2: Department personnel would attend the water board or city council meeting to go over the sanitary survey report, answer questions, and encourage long-range planning.

- Field office inspectors attend board and city council meetings upon request to discuss sanitary survey results and to encourage planning. Water operators often request the presence of field office staff to explain the inspection reports to their board or council members so that the governing body understands the need for capital improvements. IDNR has been willing to accommodate these requests within time and resource constraints.

Element 3: Develop a "scorecard" approach to evaluating enhanced sanitary survey results. Stakeholders felt that specific scores in the areas of technical, financial and managerial capacity would provide the water system operators with a relative idea of how they were performing, especially if the scores of the neighboring systems were made available.

- In 2005, stakeholders proposed the idea of a technical, financial, and managerial (TMF) scorecard. The idea was to pull questions out of the sanitary survey that indicated viability, give a relative value to each of questions, and come up with a TMF score for each water system. The structure of the database made implementation of the scorecard very difficult, and since the program upgrade was already in its initial stages, it was decided to postpone the use of the scorecard concept until the database was rebuilt. One idea presented at the stakeholder meeting was to tie the scorecard to the Iowa "Great Places" initiative so that communities with excellent drinking water would be recognized as great places to visit, live, or locate a business. The group also felt that the score should be presented or mailed to the city clerk, mayor or city council or water board either during or at the end of the sanitary survey to involve them in the survey process and to apprise them of how their system scores relative to other communities in the area.

Recommendation 2:

Improve the knowledge of public water system operators regarding regulations and improve the knowledge of the public with regard to the production of drinking water

Reasoning: Stakeholders identified the lack of knowledge about drinking water protection rules among operation and management personnel as a significant barrier to capacity. Many times the language and format used for rules and regulations are difficult for the operators to understand. The group felt that operators should be provided with additional information when current rules are modified or new rules are proposed. On the management side, water board and city council members are usually responsible for the financing and management of water systems, but they generally lack the technical knowledge to make good decisions regarding rates and capital improvements.

Element 1: Offer Continuing Education Units (CEUs) for operator attendance at rules hearings or meetings.

- Certified water system operators must earn a specified number of CEUs every two years depending on the level of their certification. The Department has offered CEUs for operator attendance at several meetings and rules hearings and will continue to offer this opportunity for education related to the drinking water rules and regulations when it is feasible. The administrative rules now require certified operators for very small community water supplies such as homeowners' associations and this has encouraged an increased awareness of rules and regulations among all water supply operators.

Element 2: Develop an automatic e-mail service to keep operators updated on rule development or modification.

- The department began using an e-mail service known as a listserv in late 2005. Information on upcoming rules, training, deadlines, and water supply projects is sent out via e-mail at least twice per month to approximately 750 subscribers. This has allowed the department to communicate regularly with certified operators, engineers, and technical assistance providers. Subscription to the listserv is available to anyone who is interested in receiving it through a link on the department's web page at http://www.iowadnr.gov/water/listserv.html.

Element 3: Provide on-site board or council member training, focusing on long-term planning, financial management and full-cost financing

- The Department has access to federal funding for the provision of technical assistance to small water systems through the Drinking Water State Revolving Fund capitalization grant. Up to two percent of each year's federal grant may be used for this assistance, and IDNR has generally used these funds to contract with various organizations to provide different types of technical assistance to systems serving less than 10,000 people. The department currently has a contract focused on providing technical, financial, and managerial information to board/council members in addition to city clerks and certified operators, but the number of board/council members attending has been very limited due to lack of interest. One idea proposed during the Advisory Group meeting was to begin making use of the Training on Demand software that the Environmental Finance Center (EFC) at Boise State University has been using to provide long distance training opportunities via the web. The department's technical assistance provider would be able to use the software to provide training at the convenience of boards and councils. This could be coordinated through the EFC. Incentives discussed for attending the training might include a slightly discounted interest rate for DWSRF loans or a reduced origination or loan servicing fee should the system apply for DWSRF funds.

The department also considered working in conjunction with the State of Kansas on an asset management tool that would use information from EPA's new Checkup for Small Systems (CUPSS) to populate rate study software and allow systems to consider their revenue requirements when making decisions to repair or replace their aging infrastructure. Development of an asset management plan requires the participation of the governing body to establish the minimum level of service for customers and indicates that the system has capacity. Iowa and Kansas requested a proposal from the EFC at New Mexico State on the asset management/rate checkup software during 2007, and will follow up with this if the EFC wants to proceed. The IDNR will continue to work with EPA and technical assistance providers to promote the concept of asset management to water systems.

Element 4: Provide IDNR standard forms for water supplies in electronic form to eliminate paperwork.

- State government has made it a goal to provide information to the public electronically whenever possible. Many forms have been converted to electronic documents, but there remain some difficulties with accepting electronic submittals of some information. Recently, the department began accepting electronic copies of Monthly Operating Reports. The department will continue to look for opportunities to accept documentation in a format that can be uploaded electronically to eliminate paperwork.

Recommendation 3:

Develop more trust in the relationship between IDNR and the water systems it regulates by providing information on activities undertaken each year and accounting for fee expenditures

Reasoning: Mistrust between the EPA, IDNR and water systems was identified as a barrier to the capacity of water systems.

Element 1: Prepare an annual report for the water systems to account for spending of the annual fees paid by the water systems.

- The department has not prepared and distributed reports on the use of fees, but funds expended by the water supply program, including fees, general fund appropriations, and EPA grant funds are well documented on an annual basis through the existing state budget process. Specific water supply staff activities are also tracked and accounted for on an annual staff person basis. The stakeholders are in agreement that an annual budget report would be a valuable tool in obtaining the support of the water systems when additional funds are needed, either from the legislature or through an increase in water system fees. The group suggested that this accounting be incorporated into the State Annual Compliance Report, which is prepared at the end of each state fiscal year. This could be accomplished, but the report is due by June 30th each year and the department accounting staff does not provide final spending numbers for the year until at least September. The report could include an accounting of the previous fiscal year's spending and the project budget for the following fiscal year, but this might be considered outdated information. The other option would be to provide the information for the previous fiscal year after the final numbers are available, but this would have to be done through a vehicle other than the State Annual Report because of the report deadline.

Recommendation 4:

Improve customer knowledge of water system performance and financing

Reasoning: Most Iowans have access to a source of safe drinking water on a consistent basis. Because of this, many people take the provision of this essential service for granted. Customers and elected officials carry the perception that safe drinking water should be enjoyed at little or no cost to consumers, making it difficult for water systems to charge the rates necessary to operate the system over the long term. The stakeholders felt that public education with regard to water supply would be valuable and beneficial.

Element 1: Provide incentives for schools to include water treatment and supply as a curriculum topic.

- Each year, the Department co-sponsors the Children's Water Festival; a one-day event designed to bring fifth-graders from across central Iowa together to learn about water. Teachers are provided with curriculum materials and asked to incorporate them into the classroom prior to the Festival. Because of the benefits associated with impressing the value of safe water on young children, who will in turn tell their parents about it and grow up to be more knowledgeable consumers, the stakeholders felt that IDNR should continue to strive to provide additional resources for the Festival. Since many schools do not have funding to transport the children to the Festival, schools not within close proximity to Ankeny have a lower participation rate in the event. To increase the number of schools that are able to participate, IDNR proposed providing funding to schools to reimburse them for transportation costs to the Festival.

The Advisory Group also suggested that IDNR develop a Power Point presentation that teachers could use for a lesson on water supply and place it on the IDNR web site for download. The group also asked the department to obtain educational materials such as fact sheets and graphics from trade groups like the American Water Works Association and place them on the IDNR web site so that teachers and water systems could download them for educational purposes.

Element 2: Access EPA environmental education grant funding to assist with the implementation of Element 1.

- The Department has not pursued this yet because of resource limitations, but is aware that the Environmental Finance Center at Boise State University has a link to educational grant sources on its website. The department could include a link to the BSU website on its Drinking Water page to encourage systems or stakeholders interested in pursuing educational grants to apply for funding.

Recommendation 5:

Improve partnerships among operators, among regulatory agencies, and among technical assistance providers

Reasoning: Stakeholders identified the need to encourage partnerships between agencies and among systems. They felt that this might result in the sharing of scarce resources and reduce the need for regulatory agency intervention.

Element 1: Use ICN training sessions or peer review forums targeted to operators, board/city council members and city clerks.

- The stakeholders originally felt that training offered via ICN offered the operators in regional areas a networking opportunity. The Department has not conducted any ICN training since the capacity development strategy was written but has encouraged technical assistance providers requesting grant funds to consider offering training via ICN. During the Advisory Group meeting, it was suggested that the Training on Demand software developed by the EFC at Boise State University be used in lieu of the ICN. This would allow training to be delivered directly to a personal computer or laptop, but would not encourage networking among water system operators unless the department set up rooms for viewing the web training and invited operators to attend regional sessions.

In 2008, the department initiated Performance Based Training, an advanced training workshop for surface water system operators. The training consists of

six sessions where optimization concepts and the special studies method are introduced. The operators participate in workshops to show how the concepts apply to real world situations and then return to their plants to apply what they've learned. The operators present their homework from the previous training session each time. Two operators from each of eight plants are participating in the current training series and the format of the sessions allows multiple opportunities for networking. The range of skills among operators has been very beneficial since less experienced operators are given the opportunity to work in groups with operators that have been on the job for many years. The department expects to support the network through continued meetings with participating operators and annual workshops for surface water treatment operators.

The department will continue to look for opportunities to encourage partnerships among water systems.

Element 2: Use the Iowa State University extension as a source of technical assistance for financial issues to operators and city clerks.

- The Department has not contracted with the extension service as a source of technical assistance, but this idea still has merit. Because the department does not have a direct relationship with city clerks, it was thought that this might be a way to reach this audience with financial and managerial topics related to water supply systems. During the Advisory Group meeting, the Iowa League of Cities discussed training they coordinate each year for the city clerks. The annual conference contains an environmental track; training is provided by the Iowa State extension. The EFC at Boise State University volunteered to provide environmental finance training at a future workshop, and the department will work with the League to evaluate the clerk workshop curriculum to look for additional training opportunities.

Element 3: Encourage partnerships between technical assistance providers such as the Iowa Association of Water Agencies, the American Water Works Association, the Iowa Rural Water Association, and the Iowa Association of Municipal Utilities through joint planning meetings with IDNR.

- The department does encourage partnerships among these providers by participating in meetings of the Joint Operator Certification Committee and the Water Utility Council, but would like to participate more directly. Because of concerns about duplicate training efforts, stakeholders suggested that IDNR sponsor meetings for technical assistance providers twice per year to evaluate training needs. The department will provide a summary of the common deficiencies noted during sanitary surveys as a basis for discussion of training needs during the meetings. These meetings will also allow members of the Advisory Group to meet more often than once every three years and provide additional input into the training curriculum.

Element 4: Reimburse these types of activities through the operator certification training program.

- In 2002, Iowa applied for and received a $2.48 million federal grant for operator certification training. These funds have been used for the past six years to assist small water systems serving fewer than 3,300 persons with training new operators and reimbursing operators for their training and certification costs. The grant funds will be fully utilized soon, and this was a topic of discussion for the stakeholders. Some technical assistance providers feel that the operators and systems have become accustomed to free or very low cost training. Without grant funds, training is going to become more expensive, and many operators may not be prepared to pay the full cost. The group discussed whether the department should look for ways to subsidize training or if the operators should be expected to pay for it on their own. This issue will likely be discussed as part of the training planning meetings discussed in Element 3.

Recommendation 6:

Break down barriers to inter- and intra-Departmental communication

Reasoning: Stakeholders recognized the lack of communication among regulatory agencies with authority over similar programs as a barrier to the increased capacity of the water systems.

Element 1: Increase contact with legislators and other agencies by scheduling a regular meeting with interested parties to discuss activities related to drinking water.

- The Department has not pursued this element but was encouraged by the stakeholders to keep working toward this goal in 2005. Even though individual legislators may not have an interest in meeting with the department, IDNR does attempt to provide information and education to legislators whenever it is requested.

Element 2: Increase communication with the Department of Public Health to discuss drinking water program responsibilities and activities.

- While IDNR has primacy for the public drinking water program, the Health Department has jurisdiction over matters such as cross-connection programs and fluoridation, both issues of interest to public water supplies. Coordination between the two agencies is needed to avoid sending a confusing message to drinking water operators. The Department has not made a concerted effort to accomplish this but significant changes in personnel at the Department of Public Health during the past few years have further complicated interagency communication, although Department staff maintain good working relationships with Health Department staff. While it may not be feasible to increase communication between IDNR and the DPH, this is still a goal of the program that should be pursued if the opportunity arises.

Another barrier identified during Advisory Group meetings was the lack of communication and coordination among divisions, bureaus, and sections of IDNR.

Element 1: Establish meaningful organization performance measures to increase public confidence in the Department and foster a higher sense of accountability.

- Various performance objectives have been developed by IDNR and EPA, but these may not be increasing public confidence in the department because of their general nature. Stakeholders in 2005 felt that regulations such as the Consumer Confidence Report requirement, which ensures that every community public water system develops a report to let consumers know what the water was tested for and what the analytical results were each year causes alarm among consumers because of the federally prescribed language that must be used in the report. Although this requirement must be enforced by IDNR, stakeholders asked that additional information be placed on the website to provide an explanation to consumers regarding the relative risks of drinking water in their community. The department may still consider providing this type of information on its web page. Additionally, the development of the listserv has allowed the IDNR to discuss the types of activities being undertaken in the drinking water program and consumers to learn more about how the department and certified operators in the state are working to provide them with safe and reasonably priced drinking water.

Looking to establishing meaningful performance measures, the department has volunteered as one of six states participating in a pilot of the logic model, a new performance measure that EPA hopes to begin using this year. The goal of the pilot is to look at measuring the impacts of violation prevention measures. The IDNR is currently documenting all technical assistance activities for one region of the state and entering the data into the Safe Drinking Water Information System (the database of record for the water supply program) for upload to EPA. The logic model may be able to provide justification for resources to operate the water supply program and keep systems in compliance with the Safe Drinking Water Act, and if this is the case, the department may continue to use it even after the pilot is over. It may also prove useful as a measure of the efficacy of capacity development activities.

Element 2: IDNR management should address the issue of intra-bureau communication since the water supply section should be working closely with wastewater and water resources sections to accomplish their missions.

- The Department has taken a number of steps in the past eight years to promote better intra-bureau communication. Breaking communication barriers

due to "compartmentalized" programs with separate funding sources and enabling legislation is difficult. Water Quality Bureau supervisors generally meet on a weekly basis to discuss issues within each section of the bureau. Additionally, drinking water and wastewater staff communicate on a frequent basis and have scheduled some joint training sessions for topics that involve both sections. The Department will continue to work on developing better cross-program communication through a variety of venues.

Element 3: IDNR management should address the issue of intra-agency communication since the water supply section should be working closely with the Land Quality and Iowa Geological Survey Bureaus to accomplish their missions.

- As mentioned above, the Department has taken a number of steps to promote better intra-departmental communication, such as putting all environmental programs under one division. All managers within the Environmental Services Division meet semi-annually to discuss issues of interest to the division. Field office and central office staff continue to meet three to four times per year to discuss issues and resolve policy and implementation questions. An initiative to work with the Iowa Geologic Survey on digitizing hydrocarbon plumes near potential well sites to avoid future well contamination was very successful, but funding for the employee that digitized the plumes was cut at the end of the fiscal year. Several positions at the IGS have been funded with water supply funds over the past three years, allowing for better communication, but this funding is being reduced as more set aside funds are necessary to fund the day to day costs of the water supply program.

Recommendation 7:

Develop innovative techniques for financing capital improvement projects for small systems

Reasoning: Small systems face the challenge of acquiring capital resources for improving or replacing water system infrastructure. Non-governmental systems do not have access to traditional government-sponsored capital financing programs and even the systems that can qualify for traditional funding programs may have difficulty accessing capital financing.

Element 1: Sponsor a meeting or a series of meetings where capital financing agencies, public finance specialists and public water system stakeholder groups discuss innovative techniques for financing small system capital improvements.

- The department did not implement this element as described, but several changes were made to the Drinking Water State Revolving Fund (DWSRF) in conjunction with the Iowa Finance Authority during the past few years to make it easier for small systems to borrow money for capital improvements. The DWSRF implemented a disadvantaged communities program in 2006, allowing systems serving a low income population to extend their loans up to 30 years. The majority of all DWSRF loans continue to be made available to small systems in the state. Additionally, IDNR has continued to meet on a monthly basis with the Iowa Department of Economic Development and the Rural Development Agency to discuss the joint funding of projects and leveraging of funds to make projects affordable for small systems.

A suggestion during the 2008 stakeholder meeting was to make use of one of the new tools developed by the Environmental Finance Center of Boise State University, the financial dashboard. This tool allows a user to enter financial data for a water system to determine whether financial ratios are in positive or negative ranges. The IDNR could do a statewide survey of rates for community water systems and the dashboard could be used to model innovative financing options. Population of the dashboard would also allow the state to measure improvements in water system finances over time.

Recommendation 8:

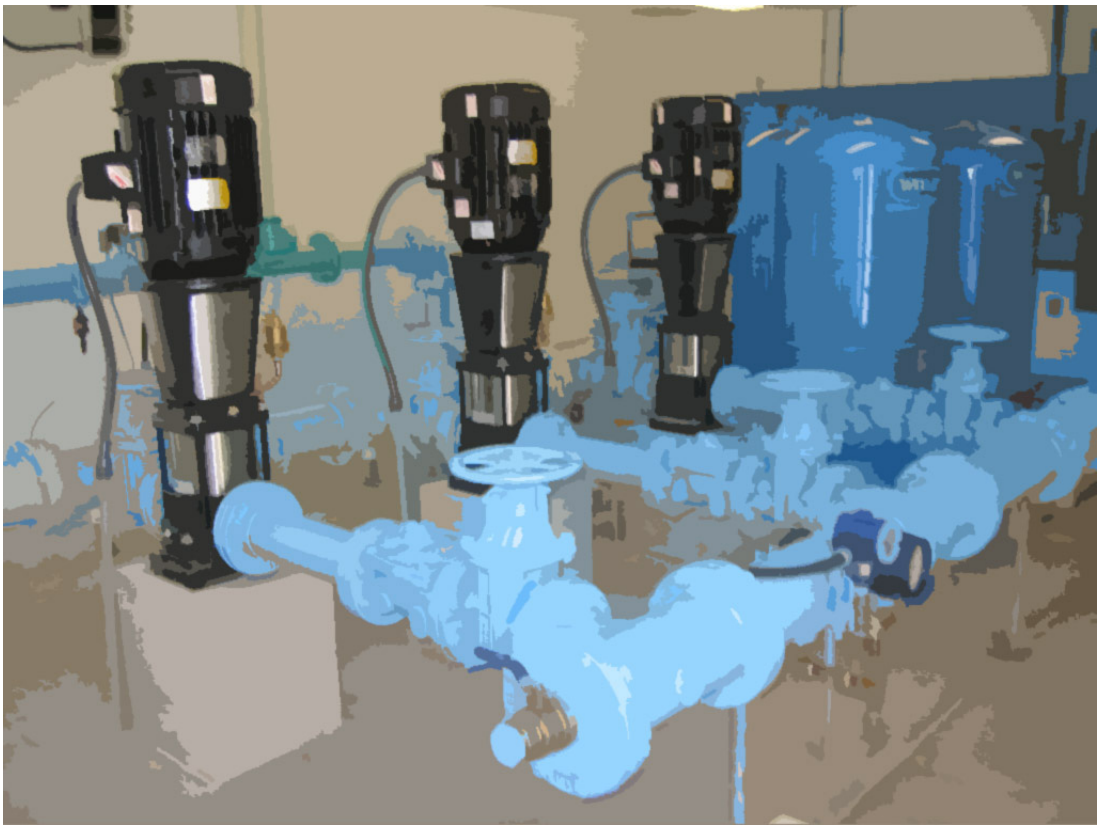
Acquire information on the personnel and financial resources available to the state's drinking water program

Reasoning: The perception of the stakeholders during development of the capacity development strategy was that the personnel resources of the Department had not kept pace with the increasing responsibilities of the drinking water program. Stakeholders felt that an evaluation of program resource needs would provide them with the information they needed to support the financial and staffing resource needs of the program.

Element 1: Commission a third-party assessment of current and future program resource needs.

- A third-party assessment was conducted in 2002 and discussed in the previous report to the governor, but stakeholders felt that the assessment, conducted by an EPA contractor, was not adequate information to allow them to fully support additional requests for financial support of the water supply program in the legislature and among water systems. The group felt in 2005 that the department should be working with stakeholders to assess its performance and perhaps to look at what activities should receive less priority than others, and that this collaboration would provide them with more confidence in how the water supply section was operating and spending the fees that the water systems provide.

As part of the stakeholder meeting in 2008, the shifting of resources from the water supply program to other priority areas of the department for water quality improvements was discussed. The program currently receives funding from water system operating fees, construction permitting fees, an appropriation from the Environment First Fund, and DWSRF set aside funds. Operating fees have been capped at $350,000. The majority of compliance problems and technical assistance is due to small and noncommunity systems, but the fees for these systems are capped at $25 per year and this has proved difficult to change. During the meeting, stakeholders discussed the possibility of writing a preface to this report for presentation to the Governor's staff to emphasize the importance of the capacity development program and the need for additional resources for the drinking water program. Because of the difficulties of obtaining the approval of each stakeholder prior to submitting the preface, the group discussed the possibility of each stakeholder writing their own letter of support to accompany this report. Stakeholders could submit these letters sometime after the submission of this report, or could send the letters during National Drinking Water Week in May to express their support.



Summary

The Iowa Department of Natural Resources is continuing implementation of its capacity development strategy for existing public water supplies. One of the major goals of the strategy is to identify systems in need of assistance to improve their technical, financial, and managerial capacity. The process of identifying these systems through an enhanced sanitary survey is fairly successful; 50 systems have been identified as in need of some technical assistance to improve viability since the enhanced sanitary survey was put in place in 2005.

Limited resources are directed to the capacity development program in Iowa, even though several other states have adopted this program as the cornerstone of their drinking water programs. Given that the department must use scarce resources as efficiently as possible, much of the effort of the capacity development program has been directed to the Area Wide Optimization Program since 2006. The majority of the population receiving water from a public water supply in Iowa is served from a surface water source, so it is imperative that surface water systems remain viable to ensure the provision of safe drinking water. The optimization program includes a status component that allows the state to rank its surface water systems in order of relative risk so that assistance can be targeted to the systems most in need. The program has provided IDNR staff with advanced training in surface water inspection and issues, and has allowed the state to offer Performance Based Training to operators in need of advanced training. It has also offered networking opportunities for surface water operators and administrators. Research is ongoing in the area of ground water optimization, and the concepts may prove helpful in implementing the Ground Water Rule in 2009.

The Environmental Protection Agency has identified billions of dollars of drinking water infrastructure that will be in need of improvement within the next 20 years. With limited state and federal funds available to the water systems, it makes sense to ensure that these systems are financially sustainable and looking to the future before the need for critical infrastructure becomes imminent. The IDNR will be introducing the concept of asset management to water systems over the next few years and talking with systems about how to inventory and assess infrastructure and make informed decisions on maintenance, repair, and replacement to meet the needs of customers.

The Environmental Protection Agency has suggested that the department answer the question, "What is the efficacy of the state's capacity development program?" as part of this report. This is a very difficult thing to measure and must encompass more than compliance rates. Compliance as measured in the state's Annual Compliance Report has not improved measurably over the past eight years, but it has not decreased measurably either. As drinking water regulations become ever more complex, the goal of the capacity development program is to give water supply operators the tools they need to communicate with their customers and administrators about what they do and what they need to do their jobs correctly and provide safe water to the public. The activities detailed in this report support this goal, and with continued implementation of the program, will continue to do so in the future.

Availability of This Report

This report must be made available to the public as required by the amended Safe Drinking Water Act of 1996. It will be placed on the IDNR water supply section web page and a notice of availability of the report will be sent out via the listserv. Copies of the report will also be available from the Iowa Department of Natural Resources, Water Supply Section at 401 SW 7th Street, Suite M, Des Moines, IA 50309-4611.

Appendices

Appendix A:

Report of Findings on Improving the Technical, Financial and Managerial Capacity of Iowa's Public Water Systems

Available at: http://www.iowadnr.com/water/viability/files/reportfinding.pdf

Appendix B:

Capacity Development Strategy for Iowa's Existing Public Water Systems