

Capacity Assessment Worksheets
for
Public Water Systems

Utah
Department of
Environmental Quality
Division of Drinking Water

October 2007

Introduction

Because you are in the process of applying for a State Revolving Fund (SRF) loan, it is necessary for you to complete the following worksheets. The Safe Drinking Water Act requires that a system applying for a SRF loan must demonstrate that it has financial, managerial, and technical capacity. What exactly does that mean ?

Technical Capacity - the physical infrastructure of the water system, including but not limited to the source water adequacy, infrastructure adequacy, and technical knowledge. In other words, does your treatment system work the way it is supposed to ? Are you providing the safest and cleanest water possible and required by law to your customers right now, and will you be able to in the future ?

Managerial capacity - the management structure of the water system, including but not limited to ownership accountability, staffing and organization, and effective linkages. In simpler terms, do you have a capable and trained staff ? Do you have an effective management structure ?

Financial capacity - the financial resources of the water system, including but not limited to the revenue sufficiency, credit worthiness, and fiscal controls. Basically, does your system have a budget and enough revenue coming in to cover costs, repairs and replacements ?

If it is determined that your system does NOT have the required capacity, you may still qualify for a SRF loan if it is going to be used to ensure that your system will have the necessary capacity. If you have questions while completing the following worksheets, please call our office at (801) 536-4200, and we will be happy to help.

We will be studying these worksheets and information located in our files to make a determination whether or not your public water system has the technical, financial and managerial capacity to be eligible to apply for a SRF loan. A final report will be available upon completion of the analysis.

Applicant:

Prepared By:

Date:

The Technical Portion of your System

Please mark () the appropriate box: *Yes, No, or Unknown* for each section. Please try to determine the answer to every question. ***If a section or question does not apply to your system, please write NA for not applicable.***

Water Supply and Existing Demands

Yes No Unknown

Do you know how much water you pump on an average day ?

Amount

Do you know how much water you pump on a peak day ?

Amount

Have you been able to provide adequate volumes of water during drought cycles ?

Do you have an Emergency Response Plan that will allow you to meet system demand during a drought or shortage, such as the loss of the largest source ?

If Yes, please attach.

Do you have a contract to purchase water?

If yes, with who ?

Do you know the terms affecting your supply during drought conditions ?

System Maintenance

Are locations, size, and type of mains and service lines detailed on records ?

Unaccounted-for Water

Is unaccounted-for water in the water system monitored and analyzed ?

Is unaccounted-for water less than 15 percent of the total water delivered to the mains ?

List percentage of unaccounted-for water:

Do you have a routine leak detection and repair program ?

Are all sources of supply and customers metered ?

Are the meters calibrated and tested to ensure their accuracy and reliability ?

Water Quality in Distribution System

Is an annual inspection for cross-connections performed ?

Is there a program for installing and testing backflow prevention devices where potential contamination is present ?

Distribution System Problems

Can you maintain adequate pressure in the distribution system under all conditions of flow ?

The Management Portion of your System

Please mark () the appropriate box: *Yes, No, or Unknown* for each section. Please try to determine the answer to every question. ***If a section or question does not apply to your system, please write NA for not applicable.***

Operations Staff

Yes No Unknown

Does the person operating your system have current water treatment plant and water distribution operator certification credentials from DEQ/DDW?

If Yes, list classification:

Does your operator receive additional training on an ongoing basis to keep current on new developments in the field ?

Future Operational Demands

Does your water system obtain any regular or occasional technical assistance from outside sources, such as DDW, your engineer, other utilities or organizations specifically dedicated to providing technical assistance ?

If yes, who:

Management & Administration

Is there a clear plan of organization and control among the people responsible for management and operation of the system ?

Are the limits of the operators authority clearly known ?

Are all the specific functional areas of operations and management assigned ?

Does everyone involved in operations know who is responsible for each area ?

Is someone responsible for scheduling work ?

Rules and Standards

Do you have explicit rules and standards for system modifications ?

Do you have rules governing hook-ups ?

Do you have a water main extension policy ?

Do you have standard construction specifications to be followed ?

Do you have measures to assure cross-connection control and backflow prevention ?

Do you have policies or rules describing customer rights and responsibilities ?

Regulatory Compliance Program

Do you fully understand monitoring requirements and have a scheduling mechanism to assure compliance ?

Do you have a mechanism to obtain the most recent information on regulatory requirements ?

Do you know how to obtain clarification or explanation of requirements ?

Do you know what to do in the event of a violation ?

Emergencies

- Do you have an Emergency Response Plan ?
- Is there a contingency for making emergency interconnections to neighboring systems, and do you know they will work if needed ?
- Does everyone involved in operations know what they are to do in the event of contamination from a toxic hazardous waste spill in your source water or a main break or a tank failure ?
- Do you have a clear chain-of-command protocol for emergency action ?
- Is someone responsible for emergency operations, for communications with state regulators, for customer relations, for media relations ?

If yes, who (title):

Safety

- Do you have a safety program defining measures to be taken if someone is injured ?
- Does everyone understand the risks and safety measures involved in system operations ?
- Do you have written operating procedures for both routine and emergency system operations ?
- Are you fully aware of Occupational Safety and Health Administration (OSHA) confined space (such as trenches/manholes) regulations ?

Maintenance

- Do you have a planned maintenance management system - a system for scheduling routine preventative maintenance ?
- Do you have a system for assuring adequate inventory of essential spare parts and back-up equipment ?
- Do you have records and data management systems for system operating and maintenance data, for regulatory compliance data, and for system management and administration ?

Management Capability

- Are you getting the outside services and technical assistance you need ?
- Do you have adequate legal counsel, insurance, engineering advice, technical / operations assistance, rate case preparation, and financial advice ?

The Financial Portion of your System

Please mark () the appropriate box: *Yes, No, or Unknown* for each section. Please try to determine the answer to every question. ***If a section or question does not apply to your system, please write NA for not applicable.***

Financial Planning Mechanisms

	Yes	No	Unknown
Do you have an annual budget ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you have within the annual budget a separate reserve account for equipment replacement and/or capital improvement ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you have a capital budget or capital improvement plan that projects future capital investment needs some distance (at least five years) into the future ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you have a process for scheduling and committing to capital projects ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Do you have a capital improvement plan that covers at least the next ten years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does your planning process take account of all the potential capital needs suggested by all of the preceding questions in these worksheets?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does your long-term planning analysis of alternative strategies that might offer cost saving to customers, such as consolidation with other nearby systems or sharing of operations and management expenses with other nearby systems ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Rates/Billing - Are they Adequate ?

Do you regularly review your rates ?

How often ?

Do you have a plan in place for periodic increases in rates ?

Is the rate structure based on metered water use ?

List water rates per 1000 gallons:

Do users pay the same or higher rate per 1000 gallons as they use more water ?

Do you have procedures for billing and collection ?

Is your billing collection rate greater than 95 % ?

Do you have collection procedures specifically for delinquent accounts ?

Financial Planning Mechanisms - Are they Adequate ?

Do you have audited financial statements ?

Does your water system presently operate on a break-even basis ?

Does your water system keep all the water revenues (i.e., water revenue does not support other municipal departments or unrelated activities)?

Do you employ standardized accounting and tracking systems ?

Do you track budget performance ?

Do you keep records to substantiate depreciation of fixed assets and accounting for reserve funds ?

Are financial management record keeping systems organized ?

Are controls exercised over expenditures ?

Are controls exercised to keep from exceeding your budget ?

Are there purchasing procedures ?

Financial Spreadsheet

Please complete the financial spreadsheet on the following page using the guidance presented on the reverse side of the form.

Guidelines:

This cash flow projection form provides a systematic method of estimating cash receipts, disbursements and balances. The entries listed on the form will not necessarily apply to every PWS, and some entries may not be included which would be pertinent to each PWS. It is suggested, therefore, that the form be adapted to each particular PWS, with appropriate changes in the entries as may be required.

Procedure: Most of the entries on the form are self-explanatory; however, the following suggestions are offered to simplify the procedure :

- (1) First gather the audited financial statements, internally prepared statements or budgets and other information for the current year and the two prior years. Please include the most recent audit financial statement with your self-assessment report.
- (2) Complete the columns for the prior two years using actual data from your audited financial statements, if available, or your internally prepared financial statements. Keeping in mind that, for purposes of this analysis, it is important to use **cash** receipts and disbursements. **Suggestion: Round the amounts at least to the nearest dollar.**
- (3) Complete the current year's column using the most recent budget information. Include all expenditures incurred by the utility.
- (4) Complete the form using the suggestions in the partial form below for each entry. Be sure to include any expenditures resulting from planned plant improvement and estimate the impact of inflation on all expenditures.
- (5) Item #1 (Beginning Cash on Hand) plus Item #3 (Total Cash Receipts) minus Item #6 (Total Cash Paid Out) should equal Item #7 (Ending Cash Position).
- (6) Item # 13 (Total Reserves) plus Item #12 (Operating Cash) should equal Item #7 (Ending Cash Position).
- (7) item #1 (Beginning Cash on Hand) should equal Item #7 (Ending Cash Position) from the prior financial period.
- (8) Items # 8& 9 are used together to determine the impact of the rate structure on the equivalent residential user, If industrial or business customers contribute a significant portion of the revenues, these amounts should be looked at separately. Consideration should be given to design a rate structure so that each category of user pays its proportional share of the costs of operating and maintaining the PWS.
- (10) Item #11 is used to determine to what extent a PWS's rate structure produces revenues sufficient to cover operating expenses.
- (11) Item #12 is the operating cash balance at year end. The operating cash balance at the end of any financial period should be adequate to meet the cash requirements for a minimum of one month. If there is too little cash, additional cash may have to be injected or expenditures may have to be reduced. If there is excessive cash on hand, the money should be invested or otherwise deposited into interest bearing accounts (e.g.. set up reserves for replacement or capital improvements, etc.)

Putting it all together: Do you have Technical, Managerial, and Financial Capacity ?

The Division of Drinking Water will be reviewing these worksheets, and information we have in our files, in order to make a determination whether you have the technical, managerial, and financial capacity to qualify for a Drinking Water State Revolving Fund loan. Remember, even if you do not have the required capacity right now, you may still qualify if the loan is going to be used to obtain capacity. Keep in mind that certain other changes may also have to be made, such as managerial and financial changes, in order to qualify. If you need more information or assistance in using and completing these worksheets, please contact:

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