

**PUBLIC DRINKING
WATER SUPPLY SYSTEM
BUSINESS PLAN MANUAL**

Prepared for: Pennsylvania Department
of Environmental Protection

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Protection Agency

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HOW TO PREPARE A BUSINESS PLAN

Who Should Prepare A Business Plan?

Any public drinking water system can benefit from a Business Plan. Your system does not need to be a for profit business to have a Business Plan. If you prefer, you can refer to a Business Plan for a governmental or private non-profit organization as an enterprise plan. For consistency, the plan will be referred to as a Business Plan in this manual. Whatever you call it, the purpose of the plan is to put down in black and white the assets of the system, the service area's basic needs, how those needs are to be addressed, and how the system is going to operate and sustain itself over time.

For existing systems, the time when a Business Plan is most needed is when a major change or capital improvement is going to occur, although a system can benefit from a Business Plan at any time.

Beginning October 1, 1996, any new community water system applying for a construction permit under the Safe Drinking Water Act (SDWA) from the Pennsylvania Department of Environmental Protection (DEP) will need to prepare a Business Plan and submit it to DEP as part of the permit application. This is not an option. It is a regulatory requirement. The start up phase is the most important time to have a Business Plan, for it can help prevent investments in systems that may become problems for everyone - owner, operator, customer, community, lender, and regulator - down the line. Before making a significant investment in a new system, it is necessary to identify the risks that exist and provide assurances that the proposed system will be capable of meeting drinking water requirements and of providing a safe and adequate supply of water for human consumption over time. It is important that before a new system commences operation that its owners have given some thought to what it is they intend to do, how they are going to do it, and what the long-term likelihood of success is. The Business Plan is a methodical approach to answering those questions.

A Business Plan is intended to show that a water system can remain viable. The definition of a viable drinking water system is one that is:

- Self sustaining;
- Has the financial and institutional commitment of the system owner and operators,- customers, and local officials; and
- Has the financial, managerial, and technical capability to reliably meet performance requirements over a period of time.

The drinking water system Business Plan will demonstrate:

- That the system is strong enough to remain viable even under the influence of adverse changes in the operating environment, and
- That the proposed plan is, within practical -limits, the best plan - that is the most viable plan - for providing water service to the community.

The Business Plan can be prepared by any individual familiar with the service area and any related existing systems, and the system's finances. The proposed system's owner or operator would be a

likely candidate to develop the plan. Often, the system's engineer, financial advisor, or other consultant will be given the assignment of preparing the Business Plan. Sometimes county or regional planning or development agencies will prepare the plan, or provide assistance in its preparation. However, regardless of who prepares the plan, responsibility for its validity and ultimate implementation remain with the system owner. It is critical that the owner play a role in the Business Plan development, including involvement in all assumptions, understanding how all cost estimates were developed, and identifying and understanding the various risks involved.

Procedures for Development of a Business Plan

The procedure that is described below will assist community drinking water systems in developing a business plan.

The first step is to discuss the proposed Business Plan scope with the DEP regional water supply engineer during a Planning Consultation meeting. It is required that you request this meeting from DEP. This meeting can be held simultaneously with the Planning Consultation Meeting required for potential PENNVEST applicants. If the proposed system is to be an investor-owned system under the jurisdiction of the Public Utility Commission (PUC), staff of that agency should also be contacted at this time. The purpose of the meeting is to identify system needs, perform a pre-feasibility assessment to identify possible alternatives to be explored as part of the Business Plan, and discuss Business Plan scope and procedures. Appendix A lists the DEP Regional Offices and the counties served. Appendix B is a Planning Consultation Request Form. The applicant should complete the form and forward it to the appropriate regional office. Appendix C is a Planning Consultation Meeting Topic Checklist to help you prepare for the conference. It will be helpful if the applicant's engineer is prepared to discuss the water supply problems and possible alternative solutions.

As can be seen from the meeting checklist topics, the Planning Consultation Meeting is designed to be a preliminary meeting to lay out the scope of the Facility Plan, particularly the alternative identification and analysis. It is important to have this meeting before you authorize an engineer to begin a feasibility study or initiate design on any alternative. You may save money and time by consulting with DEP before expending any resources. The appropriate time to schedule this meeting is as soon as it becomes apparent that there is a water supply problem or need and that something must be done. The Planning Consultation Meeting will ensure that the right "somethings" are examined.

The next step is to prepare a draft Business Plan, and bring it with you to the Preliminary Engineering Conference with the DEP regional water supply engineer. This conference is described in Part II, Section 1.12 of the DEP Public Water Supply Manual. The purpose of this meeting is to ensure that the proposed solution is reasonable and addresses the area's water supply problems over a period of time before significant time and money is spent on engineering for that proposed solution. The information developed as a result of preparing the Business Plan will be key in supporting the conclusions and recommendations the applicant and its engineer will present at the Preliminary Engineering Conference. The applicant should be prepared to leave two copies of the draft Business Plan with the DEP regional engineer.

Advice given by the DEP regional water supply engineer at the Planning Consultation Meeting and/or the Preliminary Engineering Conference is not to be construed as representing official approval by DEP. However, discussing the issues with DEP (and PUC where appropriate) in the preliminary

stages may save time in processing your permit application, and may save you money by not expending resources unnecessarily.

Once engineering has been completed, the next step is to update the cost estimates in the Business Plan, note any other changes, and finalize the Business Plan. Two copies of the final Business Plan must accompany your permit application.

Business Plan Format

No matter what format a Business Plan is prepared in, it must contain the same basic information. The Business Plan must:

- Identify the water supply needs of the area;
- Identify alternatives to address those needs;
- Evaluate the alternatives;
- Recommend a specific alternative;
- Identify how the organization which will implement that alternative will be structured and operate, and;
- Demonstrate that the operation of the proposed alternative will be financially viable for a period of at least five years.

DEP has developed a Business Plan Format to capture all of the necessary information. Systems applying to DEP for a new Community Water System Permit should utilize this format. Other systems will also find it useful. The format has three basic components:

- A. **Facilities Plan** - including an assessment of the current and foreseeable water supply needs of the area, a description of alternatives considered (including both construction and operating costs) and the rationale for-the approach selected.
- B. **Management Plan** - including documentation that the applicant has the legal right and authority to construct, operate and maintain the system, a management and administrative plan, and an operation and maintenance plan.
- C. **Financial Plan** - projections and assurances that the system's revenues and cash flow will be sufficient for meeting the costs of construction, operation, and maintenance for at least five full years from initiation of operations.

Each of the three components in turn has sub-parts. The next section of this manual describes these components and their parts in more detail. To assist in completing a Business Plan, this manual also contains a checklist of the information that must be included in each component of the Business Plan. The checklist begins on page 17. In some cases, existing documents can be incorporated by reference to reduce duplication of effort. Some additional documents are to be included with the plan as supplements.

Included in this manual are appendices containing forms to include in the Business Plan. You may modify these forms to reflect the differences in your system and proposed project. However, all of the same basic information should be provided. The more detailed the information is, the less likely that follow-up questions will be necessary.

Applicants should provide additional justification or documentation for the assumptions used in completing schedules and preparing entries for the business plan. Also, if you prepare worksheets or make calculations to develop a number used in one of the forms, please attach a copy of your documentation. Please use narratives to describe how assumptions were made and what factors were considered. The better you support your projections, the less time will be required during the review process.

Be sure that all assumptions are reasonable, and that there is some margin for error if more adverse assumptions are used. The plan should provide the system's owner and operator, DEP, local officials and customers with assurance that the proposed system is strong enough to remain viable even if some of the assumptions and targets are not met. The purpose of preparing a Business Plan is to help you develop a drinking water system that will be viable for a long period of time. The better the basis for decisions, the better the prospect for future success.

COMPONENTS OF A BUSINESS PLAN

There are three basic sections that must be included in a comprehensive effective Business Plan: the Facility Plan, the Management Plan, and the Financial Plan. The three sections work together to provide a picture of the long-term viability of the system and provide assurance that the proposed project is well thought out and has a reasonable chance for ongoing success. Each of the three components is described in more detail below, along with explanations of the corresponding checklist items and forms. Throughout this chapter are boxes, which contain highlights of the checklists for ease of reference (see next section for complete checklist).

Facilities Plan

The purpose of the Facility Plan is to assure that the project has been appropriately planned. It should be demonstrated that the proposed system addresses the water supply needs of the service area, and that it is the most appropriate alternative reasonably available. In order to do that, a Business Plan needs to address several issues. First, what are the needs of the area? What alternatives are available to meet these needs? What rationale was used to determine that the proposed alternative is the best long-term approach? What exactly is the proposed alternative, and what is its true cost to build, operate, and maintain? In order to address these issues, the Facility Plan should consist of two subsections:

1. Potential System Requirements; and
2. Alternative Identification and Evaluation.

Potential System Requirements

An Engineer's Report is prepared as Part of the Water Supply Permit Application process (described in the Public Water Supply Manual). Much of the information that needs to be included in the Business Plan, especially as it relates to potential system requirements, will be already included in this existing report. Do not duplicate the information included in the Engineer's Report. The Engineer's Report can be incorporated by reference. However, since the Engineer's Report will be used as a component of the business plan, you should be certain that it contains information in sufficient detail to allow for accurate forecast of demand and usage, that it supports cost estimates, and that it describes alternatives in sufficient detail to allow for an assessment of their feasibility and cost effectiveness. Because the Engineer's Report often relates only to the facilities that are subject to permit, it is important to assure that the Business Plan covers all of the facilities that will be constructed as part of the proposed system.

- 1. A list of all municipalities to be served by the proposed system, and identification of the county in which the system will be located.
- 2. Projected population information for the service area (based on information from local planning agencies).
- 3. Land use information, including type (e.g. low density residential, high density residential, commercial, industrial, institutional), density, and timing for future development. Please also include information on other planning activities in the proposed service area.
- 4. A description of all nearby drinking water supply systems, including location, service areas, primary facilities, system capabilities, hydraulic profile, and contact person and phone number. This information may be available in a plan prepared for the service area county under the auspices of the County Water Supply Planning And Wellhead Protection Grant Program.
- 5. Identification of current proposed and future service areas, and that of neighboring water systems, on a map. Also provide an explanation of how the boundaries are determined, including legal and regulatory issues such as PUC jurisdiction, capability (available source and system hydraulics) and desire to extend service.
- 6. Comprehensive information on the projected number of customers and demand by customer type for Years I through 5 as well as Years 7, 10, 12, 15, and 20. **Facilities Plan Form 1** may be used for this purpose (see Appendix D for forms).
- 7. A timeline for construction of the system and commencement of operations, clearly specifying any proposed phasing or possible future extensions, including number of customers and average daily production in each year until the year of final build out.

The Facilities Plan Checklist identifies information not normally covered in the Engineer's Report. Answers to the first seven items will demonstrate what the level of need is now and, more importantly, in the future for both the proposed service area and neighboring areas. This is a key ingredient to your projected rate revenue calculations and pro forma financial statements that are part of the Financial Plan. The information also is needed to demonstrate that your proposed project is appropriately sized. In addition, this provides basic information that can help determine if the alternative of connecting to or becoming part of a nearby system warrants further consideration. What is considered as a "nearby water supply system" may be based on topographic issues as well as simple distance. This definition should be discussed with the DEP regional water engineer, and they will provide input as to what alternatives should be considered.

- 8. A description of the required facilities not covered by the Water Supply permit application, such as distribution system, metering, garage and operation facilities, trucks and other vehicles, administrative facilities and equipment, etc. Please provide this information in enough detail so that the basis for cost estimate is clear (i.e. diameter of pipe, linear feet, borings, etc.).
- 9. A description of the proposed emergency service capabilities

Items eight and nine are simply meant to assure that the Business Plan includes all facilities that will be needed, regardless of whether they are covered by the Water Supply Permit application or not.

Alternative Identification and Evaluation

The second part of the Facility Plan is alternative identification and evaluation. The alternatives to be evaluated should be reviewed with the DEP regional water project engineer, and PUC staff as appropriate. The Facility Plan checklist will lead you through a series of questions that will provide a financial rationale for evaluation of the alternatives. This should be done for all Business Plans. Your evaluation of alternatives may also include technical, managerial, operational, and local decision-making rationale in the evaluation of alternatives. If you do not select the alternative that would appear appropriate on the basis of the financial rationale alone, you should describe in detail the rationale used to select the proposed alternative.

Also, if you do not select a regional solution, such as consolidating with an existing system, becoming a consecutive water system, etc., you should explain in detail the rationale for creating a separate system. If you are selecting a regional approach that is the most cost effective alternative, you may provide much less detail on the other rationale(s) used.

Alternative Identification

- 1. A description of available alternatives, including construction of a complete new system, construction of a distribution system with supply coming from another system, and extension of another system to serve the proposed area. Include institutional alternatives, such as incorporating the proposed area into an existing system, creating a separate rate district within an existing system, satellite management, contract operations and/or management, etc. Please be sure to address regional approaches with all systems identified in Item 4 above. If, after discussion with the DEP regional water project engineer, some alternatives did not warrant further consideration, describe those alternatives and provide a brief explanation of your reasoning.

For the first item in the Checklist, you should attempt to list as many available alternatives as possible. Be creative, including institutional alternatives as well as physical alternatives. These institutional alternatives could include consolidation with another system (even if not physically part of that existing system), satellite management, contract management, a circuit rider, etc. These would be the alternatives discussed with DEP at the Planning Consultation Meeting. If

some of the alternatives are not worth pursuing, then identify those alternatives and provide a brief reason why they do not warrant further consideration at this time. An example might be that the distance and topography are such that physical interconnection is several times more costly than constructing a new system. Alternatively, it may be that there is no sufficient source to support an independent system, and thus interconnection with an existing neighboring system is the only remaining option.

It should be clear and obvious from the narrative why an alternative has been abandoned, and what assumptions and information were used to reach that decision.

Throughout the rest of the Business Plan, you need only provide information on those alternatives you and the regional water project engineer agree are worth pursuing. In some rare cases this will result in only one alternative on which to provide detail. In most cases, no more than two or three alternatives will need to be evaluated in detail.

Cost Estimates

- 2. A description of the physical components that comprise the various alternatives. Include both operational and administrative facilities. Also include a cost estimate for each major item of construction. Not all items will be common to all alternatives. **Facilities Plan Form 2** (in Appendix D) may be used to provide this information.

The second item concerns physical components of the alternatives. A standard engineer's cost estimate may be substituted for Facilities Plan Form 2. If another format is used, be sure it is both detailed enough to support the estimate, but concise enough for comprehension. Items should be grouped into major categories. If you use Facilities Plan Form 2, please be aware that not all construction items will be common to all alternatives. For example, treatment facilities may be a cost item in one alternative, while a transmission line is in the other alternative. Sometimes similar but not equal items will be in different alternatives. For example, if the one alternative is to become a consecutive system, a transmission line may be in the cost estimate for that alternative. Even if an independent source is the basis for another alternative, it may also contain a transmission line for emergency or drought purposes, but the size of the transmission line, and thus the resulting cost may be lower than in the other alternative. Please be sure that all cost estimates have a solid quantitative basis, and that assumptions are conservative. Your plan should have enough flexibility to provide assurance of viability even if adverse assumptions are used.

- 3. A summary of the expected Engineering costs associated with each alternative including such costs as planning, pre-design, design, bidding, etc. **Facilities Plan Form 3** details the information to be provided and may be used for this purpose (see Appendix D).

The purpose of the third item is to allow the Department to assess the reasonableness of the Architectural/Engineering Fees cost item estimate. Occasionally, comparing engineering cost estimates from one project to another is like comparing apples and oranges, since the definition of what is included in engineering services varies so much. The purpose of Facilities Plan Form 3 is to use relatively standard definitions to show what is included in developing the engineering cost estimate. If your engineering contract includes non-engineering services or services not directly

related to the construction of the proposed alternative, do not include those costs in this estimate. For example, a user rate study would not be included in this section.

4. Construction cost estimates for each alternative described in Item 1, above. **Facilities Plan Form 4** may be used to provide this information (see Appendix D).

Facilities Plan Form 4 provides a format to summarize the construction budget estimates of the various alternatives. However, additional documentation can also be provided in narrative form, or in the form of supporting worksheets. Since the Department will be reviewing the cost estimates for reasonableness, any information you can provide to show how the budget estimate was developed would be helpful. This is especially important in those areas where you are estimating costs significantly higher or lower than customary. For example, if there is a reason why contingency for a given alternative should be more than 10% of construction, you would want to provide an explanation. It is possible that previous experience has shown unusual subsurface conditions in the project area, and the proposed alternative requires a lot of excavation.

If an alternative includes acquisition of capacity or a capital contribution to another system to construct capacity, please provide the basis for the estimate and include, if available, draft or executed agreements with the other party or parties.

Interest during construction should be expressed as net interest cost that is minus any interest earnings that are anticipated.

The cost of obtaining financing should be included in the category of Financial Accounting Cost. However, the amount borrowed to establish a debt service reserve fund or other long-term asset should not be included since this is not a net outlay of cash.

5. Operating cost estimates for each alternative described in Item 1 above. **Facilities Plan Form 5** may be used to provide this information (see Appendix D).

Operations and maintenance costs. Again, the form allows for a summary presentation of projected O&M costs. Supporting worksheets or narrative explaining how the estimate was developed will be helpful. In particular, documentation of the "Purchased Water Costs" item is important. The documentation should include support for any unaccounted for water assumption used. The cost of water should also be documented with something in writing from the potential seller, preferably a draft or executed purchase agreement.

In calculating the monitoring budget estimate, be sure to consider any increasing monitoring requirements that may be in place by the time the proposed alternative begins operation or in the future.

If services are provided by another fund and reimbursed through an interfund transfer, do not forget to show the actual costs on this form.

- 6. Information on any connection fees, tap in fees, betterment assessments, availability charges, or other special assessments that would be used to help fund construction under any of the alternatives presented. **Facilities Plan Form 6** summarizes the type of information to be provided regarding special assessments. This information should be provided for each alternative (see Appendix D).
- 7. A list of the projected funding sources for construction components of each alternative. If developer contributions are available, include an explanation of how the amount of the contribution was developed, and provide a copy of the agreement (original if available, otherwise draft) with the developer. For any borrowing, please indicate the interest rate and term of the loan or note (see **Facilities Plan Form 7** for example). Be certain to distinguish for which of the cited alternatives funding is available.

Items 6 and 7 identify funding options and their related costs. This information will demonstrate how much outside capital is needed, and what the cost of capital is.

Special fees and other funding sources may vary based on the alternative. Please provide an estimate of each for each alternative.

Selection Of Proposed Alternative

- 8. An identification of the recommended alternative.
- 9. Description of cost comparison analysis, including method used, assumptions, and calculations.
- 10. Description of other rationale(s) used, including factors considered, assumptions made, sources of information used, and weight of each rationale.

For Items 8, 9, and 10, the applicant should identify the alternative they wish to pursue, and provide the rationale for that decision. One rationale that should always be considered is financial.

The applicant can provide a comparison of construction and operation and maintenance costs for the first year of operation, a present worth or net present worth analysis, life cycle cost analysis, or other financial analysis comparing the true costs of the alternatives over time. Please be sure to provide all of the assumptions and calculations used in the analysis. Standard information on assumed discount, inflation, and interest rates can be obtained from the Department for use in the analysis. Please be aware that others may be reviewing or using your business plan. The more detail as to how your analysis was organized and conducted, the quicker and more effective will be the review.

In addition to a comparison of costs, you may also include technical, managerial, operational, and local decision making rationale to support your selection of a particular alternative. If you do not select the alternative that would appear appropriate on the basis of the financial rationale alone,

make sure you describe in detail the rationale used to select the proposed alternative. You should explain which rationale was used, what factors were considered, what assumptions were made, what the source of any information used was, and how you weighted this rationale as compared to the financial analysis. The more empirical and quantitative these other analyses are, the easier they will be for others to understand, and the more assurance they will provide.

Also, remember that if you do not select a regional solution, such as consolidating with an existing system, becoming a subsequent supplier, etc., it is critical that you explain in detail the rationale for creating a separate system. Generally, larger systems have proven to be more viable over time, and have had less environmental enforcement actions. If you are selecting a regional approach that is the most cost effective alternative, it is not as important that the business plan contain as much detail on the other rationale(s) used.

Once the proposed alternative is identified, the rest of the Business Plan relates only to that one alternative.

Management Plan

The purpose of the Management Plan is to provide assurances that both the ability and commitment to provide for effective management and operation of the proposed system are in place. The Management Plan consists of four sections, one where ownership and legal authority to operate the system is documented, one which outlines the management and administrative plan, one which describes operation and maintenance, and one which provides assurance from system ownership that the Management Plan will be implemented by capable individuals or organizations. You may incorporate by reference the Operation and Maintenance Plan developed under the Guidance of Part V of the Public Water Supply Manual. This material does not need to be duplicated within the Business Plan

Ownership

1. Identification of the type of organization who owns or will own the drinking water system. If current ownership will change in the future, please describe, including the proposed timeframe for the change of ownership.

The purpose of the first section of the Management Plan is to document that the applicant has the legal right and authority to take all measures necessary for the construction, operation, and maintenance of the system. Please provide copies of any documents that clearly set forth the applicant's control and authority for the system. Please be sure to disclose any encumbrances, trust indentures, bankruptcy decrees, legal orders or proceedings, or other items that may affect or limit the applicant's control over the system. Please be sure to identify if the applicant, owner(s), officers, parent or affiliated organization currently owns or operates any other public drinking water systems.

Please be sure to disclose if the ownership of the system is expected to change once the system is completed. For example, a municipality may own the drinking water system during planning and construction, with the intent to transfer ownership to an authority once the project is operational.

Likewise, a builder or developer may own the system during planning and construction, with the intent to transfer ownership to a homeowners' association or separate corporation once the project is operational. If this is the case, the Management Plan should clearly spell out who is the current owner, who will be the ultimate owner, the history and abilities of both, and what steps have been taken to ensure that the receiving owner will be able to properly manage, operate and maintain the system. You may want to consider the affect of PUC regulation when considering what form or ownership to select

Items 2 through 7 of the checklist, found on pages 22 and 23, each deal with a different type of ownership. Each applicant should identify and respond to the one question that relates to the appropriate ownership category.

Non-governmental applicants should disclose any affiliated interests with developers of the area to be served by the applicant, including a full explanation of any co-mingling of funds. If an Affiliated Interest Agreement has been prepared for the PUC, and copy should be included in the Business Plan.

Corporations should provide detailed information regarding their initial capital structure, including authorized capital stock and indebtedness, number of shares by category to be issued and outstanding, privileges of each category issued, and the purpose of issue of stock and indebtedness.

If the applicant is a wholly owned subsidiary, please provide all requested ownership information for the parent as well as the subsidiary.

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| <input type="checkbox"/> 8. Identify any other public drinking water systems currently owned or operated by the applicant, owner (s), parent organization or affiliated organization. |
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Item 8 shows if there are any other public drinking water systems with common or affiliated ownership.

Management and Administrative Structure Plan

There are two purposes of the Management and Administrative Plan. First is to catalogue the resources that will be needed to manage and administer the system, so as to support budget cost estimates. The second purpose is to provide assurances that the applicant has in place an organization and people capable of managing the system and responding to unforeseen circumstances.

The model standard tariff supplied by the PUC can serve as an example of the issues that need to be addressed as part of the plan. While the model tariff has the most relevance for systems under the jurisdiction of the PUC, it can provide ideas and input for any system.

The checklist items 1 through 9, found on page 22 of this manual, are straightforward. This portion of the plan allows you to brag about the organization you will put in place, and the people who will execute the plan. Budget estimates do not necessarily have to be provided by position, but can be provided by category. However, the more detail that is supplied, the better support there is for budget estimates.

Operation and Maintenance Plan

P Please provide a copy of the Operation and Maintenance Plan as prepared under Part V of the DEP Public Water Supply Manual. Be sure to use sufficient detail to support the budget estimate for Operations and Maintenance in the facilities and fiscal plans. Please also supply a copy of the Emergency Response Plan.

Again, the purposes of this section are to provide details that support the budget estimates for Operation and Maintenance, and to provide assurance that the applicant has in place a mechanism and structure to properly operate and maintain the system. It is not necessary to create a new document as part of the Business Plan. A copy of the Operation and Maintenance Plan prepared under Part V of the Public Water Supply Manual can be provided. Please be sure to use sufficient detail to support the budget estimate for Operations and Maintenance. Feel free to add an addendum or other additional information on Operation and Maintenance to the Business Plan if you believe it to be appropriate.

Assurances

Assurances that the commitments and resources needed for proper operation and maintenance of the system are available. Include organization and individual qualifications and experience.

These are the assurances from the applicant that the commitments and resources needed for proper operation and management of the system will be carried out. Examples of the types of assurances that should be provided include, but are not limited to, the following:

- Documentation of the past water industry experience of the applicant, and affiliated organizations;
- Credentials of management and operations personnel;
- Cooperative Agreements with other systems or agencies; and
- Management or service contracts along with the credentials of the contractor.

Financial Plan

The Financial Plan is the third and final component of a comprehensive Business Plan. The Financial Plan consists of intended rate revenue projections and pro forma financial statements for a period of at least five years, and a narrative description of assurances that the proposed system will be able to meet its financial obligations and be able to maintain its viability. The pro forma statements should show a positive trend over the five-year period.

The purpose of the Financial Plan is to assure that the system has the financial ability to support the project and operate for at least five years. In preparing your Financial Plan, you should be moderately conservative. Be sure to plan for rate coverage (the generation of revenues above that necessary to cover expenses) and the establishment of reserve funds, even if not directly required by the capital provider. Coverage has proven to be a key indicator of the future viability of small drinking water systems. Please be aware that the Department will be reviewing your assumptions and estimates, and will be conducting sensitivity testing on your projections. Your Business Plan should be strong enough to remain viable even under adverse changes in the operating environment.

Projected Rate Revenue

1. Projected rate revenue for both residential and commercial/industrial customers (see **Financial Plan Form 1** in Appendix F for an example of the requested information).

The Total Projected Rate Revenue can be calculated in a number of ways. If you are using EDUs or a flat rate for all customers, it is not necessary to separate revenues by Residential versus Commercial/industrial. If you are using Financial Plan Form 1, please include in the Commercial/Industrial category any institutional or other large users that might skew the Average Annual Residential User Rate.

The projected rate revenue information is important for two reasons. First, without adequate revenue, the system will eventually not be capable of self-support. The system needs sufficient revenue to cover operating and non-operating expenses, capital improvements, replacements, and emergencies. If there is not sufficient revenue to cover current expenses and fund reserve funds, it is likely that at some point the system will face an emergency or need for new or updated equipment that it cannot face without an extraordinary rate increase or outside assistance.

The second reason this information is important is to provide assurance that the projected user rates are reasonable and have a likelihood of being collectible. The rates also need to have some elasticity in case unforeseen events require an increase in revenue for the system. Research has shown that the strongest systems have rates that are neither too high nor too low.

Pro Forma Financial Statements

- 2. Pro forma income, expense and cash flow statement for at least five years. **Financial Plan Form 2** is an example of a consolidated pro forma income, expense, and cash flow statement for five years of system operation (see Appendix F). You may either use this form directly or provide the same information in your own format whichever is simplest.
- 3. Pro forma balance sheet summary for at least five years. **Financial Plan Form 3** is a sample five-year balance sheet summary (see Appendix F). Again, you may use this form or provide the same information on a separate sheet, but all of the same information should be provided.

The purpose of the pro forma financial statements is to show projections of the finances of the proposed system over the next five years. The statements should provide assurances that income will exceed expenses to such a degree as to allow for the creation and funding of reserve funds and for funding emergencies and equipment replacement. At a minimum, there should be positive cash flow every year, net income for most years, and positive equity. The pro forma statements will also allow many of the traditional financial analyses to be conducted on the proposed system including but not limited to determining the debt to equity ratio, the coverage ratio, the quick liquidity, etc. and will also allow comparison with the indicators and benchmarks for small drinking water systems developed by the Department. Projecting this information for at least five years will allow someone reviewing the plan to see trends and patterns.

The level of detail requested will allow for anyone reviewing the plan to understand the basis for the assumptions used in your pro forma financial statements. Please be sure to explain how the cost and income estimates were developed, and attach any narrative or worksheets that show the calculations. Please provide an explanation for any unusual estimates. If possible, please provide a range of estimates for some of the items most difficult to project. Also, please indicate how conservative or aggressive you believe your estimates to be.

If your projections show changes from year to year that are caused by more than inflation, please be sure to explain your assumption(s) for the variance.

The Income, Expense, and Cash Flow Statement format provided combines the elements of the traditional income and expense statement with that of the traditional cash flow statement into a single form. This eliminates duplication. If, however, you do not use the provided form, please be sure to include both traditional statements for at least five years.

In the provided Income, Expense, and Cash Flow Statement, the terms Extraordinary Income and Extraordinary Expenses refer to cash flow items not normally on an income statement. These are generally non-recurring events and capital adjustments to cash flow rather than normal accrual-based income or expenses.

You do not have to use all the categories provided. However the more detail that is provided, the less likely it is that follow-up questions will be required. Please specify and explain any “Other” entries. For any items not already covered in the Facilities Plan, please include an explanation or supporting worksheets describing how the estimates were developed.

Assurances

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| <input type="checkbox"/> 4. Identification of any appropriate financial assurances, including those being offered to capital providers. |
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For this section, please describe any assurances you feel appropriate that are available to provide comfort for the future viability of the system. Possible assurances should be provided and are not limited to, but include the following:

- A significant coverage ratio;
- Reserve funds, including debt service, emergency, and replacement funds;
- Escrow fund(s);
- A letter of credit;
- Guarantees from parent or affiliated organizations, possibly supported by an escrow fund or letter of credit;
- Evidence that the potential customers are fully informed of the costs and benefits and support the plan,
- Ordinance requiring disconnection of existing wells if the proposed new system is to replace existing private drinking water wells;
- Mandatory tap in ordinance
- The pledge of another asset; and
- Appointment of a trustee, etc.

Some of these assurances may be those offered to capital providers. Some may be in addition to any loan collateral.

This completes the information needed to prepare a comprehensive and effective Business Plan. If you have given thought to the questions raised during the process, and used reasonable assumptions, you should now have a strong basis on which to make decisions regarding the supply of public drinking water in your community. Please remember the importance of contacting DEP early in the process. The two meetings with the DEP regional water supply engineer may be the most important steps to preparing a strong Business Plan. The Department looks forward to working with you to develop the best and most viable possible system for supplying drinking water. We firmly believe that the Business Plan discipline will result in public drinking water systems which will have fewer problems for everyone, including the owners, consumers, regulators, and funding providers.

BUSINESS PLAN CHECKLIST

Following are checklists of information to be included in each of the three sections of the Business Plan. These checklists are meant to be used in combination with the forms in appendices D, E, and F to ensure completeness:

FACILITIES PLAN CHECKLIST

The following is a checklist of items to be covered as part of a comprehensive Facilities Plan. The basis for the Facility Plan is the Engineer's Report, as required by Subsection 109.503 of the SDWA Regulations and described in Section 1.13 of Part II of the Public Water Supply Manual. To allow for a complete and effective Business Plan, the Engineer's Report should consider and provide sufficient detail for each of the following purposes:

1. The report should detail the proposed service area so as to provide for accurate forecast of demand and usage, both at the start of the system and over time.
2. The report should have sufficient detail to support accurate and detailed cost estimates for construction costs and operation and maintenance costs. There should be a direct relationship between the items described in the report and the estimated costs.
3. The report should describe alternatives in sufficient detail to allow for an assessment of their feasibility and for a consideration of cost effectiveness.

In addition to the information provided in the Engineer's Report, the following information should be produced as part of the Business Plan. If any of the required information is already included in the Engineer's Report, please cite page and paragraph numbers for incorporation.

A. POTENTIAL SYSTEM REQUIREMENTS

The first section of the Facilities Plan should provide information on the service area and anticipated demand for the planned system. It should provide the following information as well as any additional information deemed to be of interest to the assessment of service area and demand:

- 1. A list of all municipalities to be served by the proposed system, and identification of the county in which the system will be located.
- 2. Projected population information for the service area (based on information from local planning agencies).
- 3. Land use information, including type (e.g., low density residential, high density residential commercial, industrial, institutional), density, and timing for future development. Please also include information on other planning activities in the proposed service area.

- 4. A description of all nearby drinking water supply systems, including location, service areas, primary facilities, system capabilities, hydraulic profile, and contact person and phone number. This information may be available in a plan prepared for the service area county under the auspices of the County Water Supply Planning And Wellhead Protection Grant Program.
- 5. Identification of current proposed and future service areas, and that of neighboring water systems, on a map. Also provide an explanation of how the boundaries are determined, including legal and regulatory issues such as PUC jurisdiction, capability (available source and system hydraulics) and desire to extend service.
- 6. Comprehensive information on the projected number of customers and demand by customer type for Years 1 through 5 as well as Years 7, 10, 12, 15, and 20. **Facilities Plan Form 1** may be used for this purpose (see Appendix D for forms).
- 7. A timeline for construction of the system and commencement of operations, clearly specifying any proposed phasing or possible future extensions, including number of customers and average daily production in each year until the year of final build out.
- 8. A description of the required facilities not covered by the Water Supply permit application, such as distribution system, metering, garage and operation facilities, trucks and other vehicles, administrative facilities and equipment, etc. Please provide this information in enough detail so that the basis for cost estimate is clear (i.e. diameter of pipe, linear feet, borings, etc.).
- 9. A description of the proposed emergency service capabilities.

B. ALTERNATIVE IDENTIFICATION

This section of the Facilities Plan serves to provide information on the selection of the proposed system from among feasible alternatives. This section should provide the following information, as well as any additional information related to the selection of the proposed system:

- 1. A description of available alternatives, including construction of a complete new system, construction of a distribution system with supply coming from another system, and extension of another system to serve the proposed area. Include institutional alternatives, such as incorporating the proposed area into an existing system, creating a separate rate district within an existing system, satellite management, contract operations and/or management, etc. Please be sure to address regional approaches with all systems identified in Item 4 above. If, after discussion with the DEP regional water project engineer, some alternatives did not warrant further consideration, describe those alternatives and provide a brief explanation of your reasoning.

- 2. A description of the physical components that comprise the various alternatives. Include both operational and administrative facilities. Also include a cost estimate for each major item of construction. Not all items will be common to all alternatives. **Facilities Plan Form 2** (in Appendix D) may be used to provide this information.
- 3. A summary of the expected Engineering costs associated with each alternative including such costs as planning, pre-design, design, bidding, etc. **Facilities Plan Form 3** details the information to be provided and may be used for this purpose (see Appendix D).
- 4. Construction cost estimates for each alternative described in Item 1, above. **Facilities Plan Form 4** may be used to provide this information (see Appendix D).
- 5. Operating cost estimates for each alternative described in Item I, above. **Facilities Plan Form 5** may be used to provide this information (see Appendix D).
- 6. Information on any connection fees, tap in fees, betterment assessments, availability charges, or other special assessments that would be used to help fund construction under any of the alternatives presented. **Facilities Plan Form 6** summarizes the type of information to be provided regarding special assessments. This information should be provided for each alternative (see Appendix D).
- 7. A list of the projected funding sources for construction components of each alternative. If developer contributions are available, include an explanation of how the amount of the contribution was developed, and provide a copy of the agreement (original if available, otherwise draft) with the developer. For any borrowing, please indicate the interest rate and term of the loan or note (see **Facilities Plan Form 7** in Appendix D for example). Be certain to distinguish for which of the cited alternatives funding is available.
- 8. An identification of the recommended alternative.
- 9. Description of cost comparison analysis, including method used, assumptions, and calculations.
- 10. Description of other rationale(s) used, including factors considered, assumptions made, sources of information used, and weight of each rationale.

MANAGEMENT PLAN CHECKLIST

Along with the Facilities Plan, the Management Plan is a key component of a comprehensive Business Plan for any proposed drinking water system. The Management Plan component of the Business Plan should:

1. Identify ownership and system responsibility;

2. Include an operating plan which is comprised of a plan for management and administration as well as a plan for operation and maintenance; and
3. Provide assurances from the prospective system ownership that the Management Plan will be implemented by capable individuals or organizations.

Following is a checklist of information to be provided as part of the Management Plan.

A. OWNERSHIP

This section of the Management Plan is meant to address issues of system ownership. A complete Management Plan must include the following ownership-related information:

1. Identification of the type of organization, which owns or will own the drinking water system. If current ownership will change in the future, please describe, including the proposed timeframe for the change of ownership. Ownership categories include:

<i>MUNICIPALITY</i>	<i>SOLE PROPRIETORSHIP</i>	<i>CORPORATION</i>
<i>MUNICIPAL AUTHORITY</i>	<i>PARTNERSHIP</i>	<i>ASSOCIATION</i>

2. If ownership category is *MUNICIPALITY*, be certain to address questions 2a-c, below:

- 2a. Identify the type of municipality. Municipality types include:

<i>County</i>	<i>City</i>	<i>Borough</i>	<i>Other _____</i>
<i>First Class Township</i>	<i>Second Class Township</i>	<i>Municipality</i>	

- 2b. If the municipality operates under a home rule charter, provide a description of the charter. Also please provide the name of the incorporated municipality and the county in which it is located.

- 2c. If the municipal owner has any inter-municipal agreements relating to the provision of drinking water with other municipalities, include the name of the municipalities and the counties in which they are located. Also attach copies of any inter-municipal agreements.

- 2d. Describe the extent to which the authority provides direct bill service to customers in any municipality not a part of the authority. If such service is provided, identify the municipalities and the counties in which they are located.

3. If ownership category is *MUNICIPAL AUTHORITY*, address questions 3a-d, below:

- 3a. Provide the name and county of each incorporating municipality.

- 3b. Describe the extent to which the authority provides direct bill service to customers in any municipality not a part of the authority. If such service is provided, identify the municipalities and the counties in which they are located.
- 3c. If the municipal authority has any agreement relating to the provision of drinking water with any other municipality or authority, please provide a list of their names and copies of the agreements.
- 3d. If the authority leases the system back to its incorporating municipality for operations, please provide a copy of the lease or agreement, and indicate who is responsible for establishing rates and tariffs.
- 3e. Provide a copy of the charter documents and by-laws of the authority.
- 4. If ownership category is a *SOLE PROPRIETORSHIP*, provide the name, address, and phone number of the individual who owns the system.
- 5. If ownership category is a *PARTNERSHIP*, name the general partner and list all other partners. Also provide a copy of the partnership agreement.
- 6. If ownership category is a *CORPORATION*, please address items 6a-e, below:
 - 6a. Is the corporation Closely Held, Publicly Traded, or a Wholly Owned Subsidiary?
 - 6b. List the officers of the corporation, as well as the major shareholders (see **Management Plan Form 1** in Appendix E for an example of required information).
 - 6c. If the corporation is owned by a parent company, describe the ownership of the parent, including related companies.
 - 6d. Is the corporation for profit or not for profit?
 - 6e. Provide a copy of the corporate charter and by-laws.
 - 6f. Information on initial capital structure.
- 7. If ownership category is an *ASSOCIATION*, address items 7a-c, below:
 - 7a. List the officers of the association and their respective titles.

- 7b. Note whether the association is managed by the members or by a contract management organization. If by contract, please identify the contractor and provide a copy of the contract.
- 7c. Provide a copy of the charter documents and by-laws of the association.
- 8. Identify any other public drinking water systems currently owned or operated by the applicant, owner(s), parent organization or affiliated organization.

B. MANAGEMENT AND ADMINISTRATIVE STRUCTURE

This section of the Management Plan should identify the intended management structure and staffing requirements of the proposed system. The Plan should include the following information, in addition to any other relevant materials related to organizational structure:

- 1. A copy of the organization chart and/or table.
- 2. Whether or not job descriptions and/or job manuals have been prepared. If so, please describe.
- 3. Identification of the certified operator, including certificate number, type, and class.
- 4. The number of employees projected to run the system including operations, administration, and management. Please identify projected employees by number, type, and designate as full or part time. Also provide a budget estimate of the salary and benefits for each position.
- 5. Water system management experience of key personnel and affiliated organizations, including experience in other states.
- 6. Copies of any financial management policies and standards already developed.
- 7. Copies of the system’s general rules and standards, including connection policies, extension policies, standard specifications, records management plan, emergency response plan, and drought response plan.
- 8. A description of any outside services anticipated to be used. How will the selection be made? If there are already contracts for outside services, please identify the providers and attach a copy of any agreements.
- 9. Estimates (by category) of the amount to be expended on outside services for the first full year of regular operations. Outside services include the following:

LEGAL ENGINEERING MONITORING AND LAB WORK

ACCOUNTING BILLING AND COLLECTING FINANCIAL ADVISOR

OTHER SERVICES

(See Management Plan Form 2 in Appendix E for example).

C. OPERATION AND MAINTENANCE PLAN

- Please provide a copy of the Operation and Maintenance Plan as prepared under Part V of the DEP Public Water Supply Manual. Be sure to use sufficient detail to support the budget estimate for Operations and Maintenance in the facilities and fiscal plans.

D. ASSURANCES

- Assurances that the commitments and resources needed for proper operation and maintenance of the system are available. Include organization and individual qualifications and experience.

FINANCIAL PLAN CHECKLIST

The Financial Plan is the third and final component of a comprehensive Business Plan. The Facilities Plan provides a preliminary estimate of capital and operating expenses. The Financial Plan should be built from that base and include the following components:

1. Demonstration of revenue sufficiency;
2. Demonstration of adequate capitalization; and
3. Assurances that the Financial Plan will provide sufficient financial resources to ensure ongoing viability.

In addition to the Engineer's Report that outlines the full costs of the system (also see Facilities Plan), the Financial Plan must include a summary of intended system rate revenue and pro forma financial statements for a period of at least five years. Following is a brief checklist of the required information:

1. Projected rate revenue for both residential and commercial/ industrial customers (see **Financial Plan Form 1** in Appendix F for an example of the requested information).
2. Pro forma income, expense and cash flow statement for at least five years. **Financial Plan Form 2** is an example of a consolidated pro forma income, expense, and cash flow statement for five years of system operation (see Appendix F). You may either use this form directly or provide the same information in your own format, whichever is simplest.
3. Pro forma balance sheet summary for at least five years. **Financial Plan Form 3** is a sample five-year balance sheet summary (see Appendix F). Again, you may use this form or provide the same information on a separate sheet, but all of the same information should be provided.
4. Identification of any appropriate financial assurances, including those being offered to capital providers.

**APPENDIX A:
DEP REGIONAL OFFICES**

DEP REGIONAL OFFICES

Region	Address	Counties Served
Southeast	Suite 6010, Lee Park 555 North Lane Conshohocken, PA 19428 Phone: 610-832-6000	Bucks, Chester, Delaware, Montgomery, Philadelphia
Northeast	2 Public Square Wilkes-Barre, PA 18711-0790 Phone: 570-826-2511	Carbon, Lackawanna, Lehigh, Luzerne, Monroe, Northampton, Pike, Schuylkill, Susquehanna, Wayne, Wyoming
Southcentral	909 Elmerton Avenue Harrisburg, PA 17110 Phone: 717-705-4700	Adams, Bedford, Berks, Blair Cumberland, Dauphin, Franklin, Fulton, Huntingdon, Juniata, Lancaster, Lebanon, Mifflin, Perry, York
Northcentral	208 West Third Street Suite 101 Williamsport, PA 17701 Phone: 570-327-3636	Bradford, Cameron, Centre, Clearfield, Clinton, Columbia, Lycoming, Montour, Northumberland, Potter, Snyder, Sullivan, Tioga, Union
Southwest	400 Waterfront Drive Pittsburgh, PA 15222-4745 Phone: 412-442-4000	Allegheny, Armstrong, Beaver, Cambria, Fayette, Greene, Indiana, Somerset, Washington, Westmoreland
Northwest	230 Chestnut Street Meadville, PA 16335 Phone: 814-332-6945	Butler, Clarion, Crawford, Elk, Erie, Forest, Jefferson, Lawrence, McKean, Mercer, Venango, Warren

**APPENDIX B:
PLANNING CONSULTATION REQUEST FORM**

**DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUSINESS PLAN
REQUEST FOR PLANNING CONSULTATION**

The DEP regional project engineer will contact you within 10 working days of receipt of your completed request to arrange your Business Plan Planning Consultation meeting.

Applicant's Name _____ Date: _____

Address: _____ Phone: _____

City, State & Zip: _____ County: _____

Contact Person: _____ Phone: _____

Address: _____ City, State & Zip: _____

Complete the following by checking the appropriate box(es):

1. Type of ownership

- Municipal Authority Corporation Proprietorship
 Partnership Association Other (specify) _____

2. Population of proposed service area

- 500 or less 501-1,000 1,001-3,300
 3,301-10,000 10,001-75,000 over 75,000

3. Problems you expect to alleviate

- Contaminated private wells No system to support new development
 Insufficient source Insufficient treatment
 Insufficient storage Distribution system deficiencies
 Water supply dam problems Other (specify) _____

4. Are you considering PENNVEST as a funding source?

- Yes No

5. Will the proposed system be regulated by the Public Utility Commission?

- Yes No

**APPENDIX C:
PLANNING CONSULTATION TOPIC CHECKLIST**

**DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUSINESS PLAN
PLANNING CONSULTATION MEETING
TOPIC CHECKLIST**

This Planning Consultation Meeting Checklist is intended to provide you with a list of agenda items that will be discussed with the Department's staff during the planning consultation meeting. This also serves to assist you in assembling all the appropriate information relative to your drinking water supply needs. You do not need to complete any portions of the Business Plan prior to this meeting.

The purpose of the Planning Consultation Meeting is to discuss the scope of the proposed Business Plan. The objective of the meeting is to identify system needs, perform a prefeasibility assessment to identify possible alternatives to be explored as part of the Business Plan, and discuss Business Plan requirements and procedures.

The following items should be discussed at the Planning Consultation Meeting.

- ◇ The existing conditions and identifications of problems in the affected area and neighboring communities.
- ◇ Projected water use for the proposed project area. Are there meters and/or fire hydrants existing and/or proposed?
- ◇ Identify the land use and water use patterns of the proposed service area. Who are the major commercial, industrial and institutional water users? What is the density of land use? What is the timing for future development?
- ◇ A description of all nearby water systems, including location, service areas, primary facilities, system capabilities, and contact person and phone number.
- ◇ An identification of the current proposed and future service areas of the proposed system and that of neighboring water systems. If you have a map available, it would be helpful to bring it to the meeting.
- ◇ Prefeasibility assessment to identify and screen alternative solutions.
- ◇ Business Plan and project implementation schedules.
- ◇ Business Plan formats, requirements, and procedures.
- ◇ Institutional alternatives, including internal structure.

**APPENDIX D:
SAMPLE FACILITIES PLAN FORMS**

Facilities Plan Form 1:

Demand By Customer Group

Customer Type	Year 1		Year 2		Year 3		Year 4		Year 5	
	Number	Water Sold								
Residential										
Commercial										
Industrial										
Fire Protection										
Bulk Sale										
Unaccounted For										
Other										
Total										

Customer Type	Year 7		Year 10		Year 12		Year 15		Year 20	
	Number	Water Sold	Number	Water Sold	Number	Water Sold	Number	Water Sold	Number	Water Sold
Residential										
Commercial										
Industrial										
Fire Protection										
Bulk Sale										
Unaccounted For										
Other										
Total										

Facilities Plan Form 2: Construction Components by Alternative

	Construction Component	Estimated Cost		
		Alternative 1	Alternative 2	Alternative 3
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
TOTAL CONSTRUCTION COST				

Facilities Plan Form 3: Engineering Costs by Alternative

	Engineering Costs	Estimated Cost		
		Alternative 1	Alternative 2	Alternative 3
1	Planning			
2	Pre Design Services			
3	Design			
4	Bidding			
5	Construction Services			
6	Other (specify)			
7				
8				
9				
TOTAL ENGINEERING COST				

Facilities Plan Form 4: Total Construction Cost by Alternative

Budget Item	Estimated Cost		
	Alternative 1	Alternative 2	Alternative 3
1 Administration			
2 Legal fees			
3 Financial/Accounting Cost			
4 Interest During Construction			
5 Engineering			
6 Permits			
7 Land			
8 Acquisition of Capacity/Capital Contribution			
9 Construction			
10 Contingency			
11 Other			
12			
13			
14			
15			
TOTAL CONSTRUCTION COST			

Facilities Plan Form 5: Operating Costs by Alternative

Annual Cost	Estimated Cost		
	Alternative 1	Alternative 2	Alternative 3
1 Salaries and Benefits			
2 Utilities			
3 Chemicals and Treatment			
4 Monitoring			
5 Materials, Supplies, and Parts			
6 Transportation Equipment			
7 Purchased Water Costs			
8 Administrative Costs			
9 Other			
10			
11			
12			
13			
14			
TOTAL CONSTRUCTION COST			

Facilities Plan Form 6: **Special Assessments**

	Alternative 1	Alternative 2	Alternative 3
Amount of Assessment per EDU	\$ _____	\$ _____	\$ _____
Number of EDU's to be Charged	_____	_____	_____
Anticipated collection rate	_____	_____	_____
Total to be generated by assessments	_____	_____	_____

Facilities Plan Form 7: **Alternative Funding Sources**

Source	Amount	Committed?	Applicable to Alternative (1,2, and/or 3)
_____	\$ _____	_____	_____
_____	\$ _____	_____	_____
_____	\$ _____	_____	_____
_____	\$ _____	_____	_____
_____	\$ _____	_____	_____
_____	\$ _____	_____	_____
_____	\$ _____	_____	_____

**APPENDIX E:
SAMPLE MANAGEMENT PLAN FORMS**

Management Plan Form 1: Corporate Officers & Ownership

Officers:	
President	_____
Vice President	_____
Treasurer	_____
Secretary	_____
Other (specify)	_____
Owners/Major Shareholders/Parent	Percent Owned
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %

Management Plan Form 2: Outside Services

	Outside Services	Estimated Annual Cost
1	Legal	
2	Engineering	
3	Monitoring and Lab Work	
4	Accounting	
5	Billing and Collections	
6	Financial Advisor	
7	Other Services	
8		
9		
	TOTAL OUTSIDE SERVICES	

**APPENDIX F:
SAMPLE FINANCIAL PLAN FORMS**

Financial Plan Form 1: **Rate Revenue Summary**

	Last Yr.	Year 1	Year 2	Year 3	Year 4	Year 5
	_____	_____	_____	_____	_____	_____
1 Number of Residential Customers						
2 Average Annual Residential Bill						
3 Total Residential Bills Levied (line 1 times 2)						
4 Amount Uncollected						
5 Total Residential Rates Collected (line 3 less 4)						
6 Total Commercial/ Intdustrial bills Collected						
7 TOTAL PROJECTED RATE REVENUE						

**Financial Plan Form 2:
Income, Expense, and Cash Flow Statement**

INCOME, EXPENSE AND CASH FLOW STATEMENT		Last Yr.	Year 1	Year 2	Year 3	Year 4	Year 5
		_____	_____	_____	_____	_____	_____
1	OPERATING REVENUES						
2	<i>Water Rates</i>						
3	<i>Bulk Water Sales</i>						
4	<i>Fire Protection</i>						
5	<i>Fees and Services</i>						
6	<i>Other</i>						
7	Total (lines 2 through 6)						
8							
9	OPERATING EXPENSES						
10	<i>Operation and Maintenance</i>						
11	Salaries (operators)						
12	Benefits						
13	Utilities						
14	Chemicals & Treatment						
15	Monitoring						
16	Materials, Supplies & Parts						
17	Transportation						
18	Purchased Water costs						
19	Outside Services						
20	Other						
21	TOTAL (lines 11 through 21)						
22	<i>Administrative</i>						
23	Salaries						
24	Benefits						
25	Building Overhead						
26	Office Supplies & Postage						
27	Insurance						
28	Customer Billing & Collection						
29	Accounting						
30	Legal						
31	A/E & Professional Services						
32	Other						
33	TOTAL (lines 23 through 32)						
34	<i>Depreciation Expense</i>						
35	<i>Other</i>						
36	TOTAL (lines 21 plus 33 plus 34 plus 35)						
37	OPERATING INCOME (line 7 less line 36)						

INCOME, EXPENSE, AND CASH FLOW STATEMENT		Last Yr.	Year 1	Year 2	Year 3	Year 4	Year 5
		_____	_____	_____	_____	_____	_____
38	NON-OPERATING REVENUES						
39	<i>Interest Income</i>						
40	<i>Interfund Transfer</i>						
41	<i>Proceeds From the Sale of Assets</i>						
42	<i>Leases and Extraction Fees</i>						
43	<i>Other</i>						
44	TOTAL (lines 39 through 43)						
45							
46	NON-OPERATING EXPENSES						
47	<i>Interest Expense</i>						
48	<i>Interfund Transfers</i>						
49		To General Fund					
50		To Replacement Fund					
51		To Emergency Fund					
52		To Other					
53		TOTAL (lines 49 through 52)					
54	<i>Other</i>						
55	TOTAL (line 47 plus 53 plus 54)						
56	NET INCOME BEFORE TAXES (line 37 plus 44 less 55)						
57							
58	TAXES						
59	<i>Income Taxes</i>						
60	<i>Other than Income Taxes</i>						
61	TOTAL (line 59 plus 60)						
62	NET INCOME AFTER TAXES (line 56 less 61)						
63							
64	EXTRAORDINARY REVENUES						
65	<i>Construction Grants</i>						
66	<i>Proceeds from Borrowing</i>						
67	<i>Equity Contribution</i>						
68	<i>Other</i>						
69	TOTAL (lines 65 through 68)						
70							
71	EXTRAORDINARY EXPENSES						
72	<i>Debt Repayment - Principal</i>						
73	<i>Capital Improvements, Acquisition of Plant & Equipment</i>						
74	<i>Other</i>						
75	TOTAL (lines 72 through 74)						
76	CASH FLOW (line 62 plus 34 plus 69 less 75)						

Financial Plan Form 3: Balance Sheet

BALANCE SHEET		Last Yr.	Year 1	Year 2	Year 3	Year 4	Year 5
		_____	_____	_____	_____	_____	_____
1 ASSETS							
2 <i>Current Assets</i>							
3	Cash						
4	Investments						
5	Accounts Receivable						
6	Inventories						
7	Other						
8	TOTAL (line 3 through 7)						
9 <i>Fixed Assets</i>							
10	Property, Plant & Equip. at Cost						
11	Contributions in Aid of Construction						
12	Construction Work in Progress						
13	Other						
14	Less Accumulated Depreciation						
15	TOTAL (lines 10 through 13 less 14)						
16 <i>Other Long Term Assets</i>							
17	Restricted Assets/Trust Funds						
18	Unrestricted Replacement Fund						
19	Unrestricted Emergency Fund						
20	Other						
21	TOTAL (lines 17 through 20)						
22 TOTAL ASSETS (line 8 plus 15 plus 21)							
23							
24 LIABILITIES							
25 <i>Current Liabilities</i>							
26	Accounts Payable						
27	Accrued Payroll and Withholdings						
28	Current Portion of Long Term Debt						
29	Short Term Debt						
30	Other						
31	TOTAL (line 26 through 30)						
32 <i>Long Term Debt (less Current Portion)</i>							
33 TOTAL LIABILITIES (line 31 plus 32)							
34							
35 FLUID EQUITY							
36 <i>Retained Earnings</i>							
37	Reserved						
38	Unreserved						
39	TOTAL (line 37 through 38)						
40 <i>Capital Stock (corporations only)</i>							
41 <i>Contributed Capital</i>							
42	Government Grants						
43	Other Contributions						
44	TOTAL (line 42 plus 43)						
45 TOTAL FUND EQUITY (line 39 plus 40 plus 44)							
46 TOTAL LIABILITIES AND FUND EQUITY (line 33 plus 45)							