BUSINESS PLAN TEMPLATE

FOR
PROPOSED

COMMUNITY

PUBLIC WATER SUPPLY SYSTEMS

New Hampshire Department of Environmental Services
Water Supply Engineering Bureau
Public Water System Capacity Development

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INTRODUCTION AND INSTRUCTIONS

The 1996 amendments to the federal Safe Drinking Water Act (SDWA) included provisions that required each State to establish a program to *"...ensure that all new community water systems and new nontransient, noncommunity water systems commencing operations after October 1, 1999 demonstrate technical, managerial, and financial capacity with respect to each national primary drinking water regulation in effect, or likely to be in effect, on the date of commencement of operations"*. (42 U.S.C.300g-9 section 1420a.) To satisfy this federal requirement, New Hampshire adopted administrative rule Env-Ws 371*, "Capacity Assurance for Proposed Public Water Systems"* effective September 23, 1999. Most of this rule describes how to prepare a business plan, which is the document that will be used to demonstrate a proposed water system has adequate technical, managerial and financial capacity.

All proposed community public water systems in New Hampshire therefore need to submit a business plan, defined in Env-Ws 371.03 (a) as:

"...a multifaceted assessment of a water utility's projected managerial and financial condition as it affects future economic viability, compliance with the NH Safe Drinking Water Act, and effective and efficient services to customers."

The purpose of this template is to assist the owners / governing bodies of a proposed community public water system prepare a business plan as required by the new rule. The completed business plan will help the system's owners better understand the short and long term managerial and financial responsibilities involved in operating and maintaining a well-run water system. The planning horizon for the business plan is five years and the water system owners should update the plan each year.

This business plan template categorizes information into the technical, managerial, and financial aspects of a water system. Part A concerns the technical aspects of the proposed water system, part B addresses the managerial issues, and Part C covers water system finances. The system owner needs to work closely with the water system's book keeper/accountant, certified operator, and/or engineering consultant to complete the business plan. Not all proposed water systems will be subject to every category in this business plan template. Please complete any section that is not applicable to your water system with " N/A".

The business plan approval process entails three steps consisting of the submission of three versions of the Business Plan, namely 1) Preliminary, 2) Revised and 3) Final. (see Env-Ws 371.05) Not all sections of this template, therefore, will need to completed for the first and second submissions. The business plan is part of the over-all new water system approval process, which is described in Env-Ws 371.04. The Preliminary Business Plan should be completed as described in Env-Ws 371.05 (c). Steps 8 through 13 inclusive in part B, therefore, can be left blank. Following source water development and approval, the revised Business Plan is to be submitted with updated treatment capital costs and operational costs, as per Env-Ws 371.05 (d). Lastly, the final Business Plan is to be submitted prior to construction of the pump station, distribution pipe or water storage components as per Env-Ws 371.05 (e). The main difference between the initial business plan and the revised and final business plans is that the latter two plans should incorporate successively more refined construction and operation cost data.

PART A. TECHNICAL

1) Technical Description (ref. Env-Ws 371.10)

Use the space below to describe the technical components of the water system.

a) Water system start-up date or approximate age……..……..……._____

b) Number of Service Connections……._____

c) Approximate Population Served…….……_____

d) System Treatment Classification (I, II, III or IV)……..……_____

e) System Distribution Classification (I,II,III or IV)…….……_____

f) Water Source (check all that apply)

( ) Groundwater
( ) Surface Water
( ) Water purchased from wholesaler

g) If the water source is from on-site groundwater, describe the following well characteristics for each well:

	Well Name: _____	Well Name: _____	Well Name: _____
a)	diameter_____inches	_____in.	_____in.
b)	depth _____feet	_____ft.	_____ft.
c)	yield _____gpm	_____gpm	_____gpm
d)	age _____yrs	_____yrs	_____yrs

e) location (For each well, note the distance and a compass bearing from a fixed location in the space below)_____

h) Land use types served by water system (check all that apply)

( ) Residential
( ) Commercial
( ) Industrial
( ) Other - please describe_____

i) Average Daily demand……..…….._____gals/day

j)Peak Daily Demand…….……...._____gals/day

k)Treatment (check all that apply)

a. Disinfection with chlorine…….……..…( )
b. Disinfection with ozone……..…( )
c. Disinfection with ultraviolet light……..….( )
d. Softening for iron /manganese removal……....…… …..…....( )
e. Softening for hardness…….……....…( )
f. Oxidation / Filtration for iron / manganese removal……..…….( )
g. pH adjustment for corrosion control…….……..…( )
h. Aeration for radon removal…….…….…..( )
i. Aeration for VOC removal …….……( )
j. Granular Activated Carbon……..……...…….. …….( )
k. Activated alumina for arsenic / flouride……..…….……..…( )
l. Cartridge / bag filter…….……( )
m. Surface water treatment ……..…….……( )
n. None……..……..( )

l) Atmospheric Storage Tanks - Number and Volume

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m) Hydro-pneumatic Tanks - Number, Volume & Operating Pressure

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n) Distribution System

Please fill in the type, length and diameter of distribution piping

Type	Length	Diameter

Include in the description any special features of the distribution system (pumps, hydrants, metering, cross-connection prevention, booster stations, for example).

PART B. MANAGEMENT: Section I

Ownership and Authority (Env-Ws 371-21)

The purpose of Part B is to define the proposed type of ownership during the establishment of the water system, and the proposed plans for transfer (if any) of ownership of the system. Part B also requires documentation of the ownership's legal authority to maintain the water system and requiring that customers maintain connection to the system.

1. Name of System: _____

2. Location: (Town)_____

3. Contact information of Initial Owner:

Name_____

Mailing Address: _____

_____

Telephone:_____Fax_____E-mail_____

4. Type of Ownership (check all that apply)

____ Public (municipal, village district, water precinct, etc.)
____ Private
____ Cooperative
____ Other (explain)_____

_____

Please explain why a type of public ownership is not planned for the water system_____

_____

If a district-type of ownership is planned, please attach a description of the rationale for this type of ownership, along with informational documents (Env-Ws 371-21 (c) & RSA Title III Chapter 52)

Will the Ownership change once the system is operational?

____ Yes If "Yes", please attach narrative describing the process. Identify the ultimate owner with contact information, as in 1 through 3 above. Please describe the trigger point of ownership change; i.e., system ownership changes when (x) percent of development is sold, or (x) number of lots are sold.

____ No

5. Assuring Payment for Water Service: (Env-Ws 371.22)

Describe procedures to be used to insure payment for water services.

_____

_____

_____

_____

_____

Please attach a copy of the certification from a New Hampshire attorney that the method used to ensure payment is legal and enforceable in New Hampshire.

6. Maintaining a Connection to the Water System: (Env-Ws 371.23)

Is there a deed covenant for each property intended to be served by the water system requiring that the water service connection be maintained for domestic use, and that the customer shall be liable for payment for domestic water service?

____Yes ____ No

Please attach a copy of the certification from a New Hampshire attorney that the method for maintaining and using the connection to the central system is legal and enforceable in New Hampshire.

7. Governing Body (indicate number of Board Members, if applicable)
Name of Governing Body _____

Please attach a description of the type of Governing Body (including how many, how selected, and replacement procedure for vacancies).

Please provide the following information regarding members of the Governing Body:

Name/Title	**Address**	**Telephone**	**Term (expires)**

Please describe the Governing Body meeting schedule:_____

_____

Please describe how the Governing Body is elected or appointed. _____

_____

8. Legal Documents:

Please attach a copy of the Governing Body's Bylaws (Env-Ws 371.25 (a))

Please attach a projected fee schedule including the following items: water use charges; disconnect or activation charges; availability charges; hydrant and fire sprinkler charges; late fees and fees for lost billing; and backflow device permits and testing charges (Env-Ws 371-25(b)).

Part B. MANAGEMENT: Section II

Organization, Operation and Compliance

Section II of Management defines the proposed organizational structure of the water system, including identification of the certified operator, the relationship between the operator and the system (employee or contract operator), scheduling, definition of responsibilities for day-to-day functions, specialized contractors, emergency planning, and SDWA compliance. The purpose of this section is to clearly identify the individuals responsible for the specific managerial and operational activities of running the water system.

9. Organizational Chart: (Env-Ws-371.20 (6))

Please attach a chart showing the organizational structure of the system (i.e., in terms of personnel).

10. Operation:

Grade of System (Env-Ws 367)_____

Certified Operator(s)

Name/Title	Address	Telephone #	Grade	Certification #

Please attach copies of operator's certificate(s)

Are the operators employees of the public water system, or are they contract operators?

____ Employee Name(s)_____
____ Contract Name(s)_____

Explain rationale for choice (employee vs. contract) (Env-Ws 371-20 (b)(4))

_____

_____

_____

If a certified operator is to be under contract (non-employee), attach copy of the agreement between the proposed water system and the proposed contract operator.

11. Operator Coverage

Please describe operator coverage schedule (i.e., give name of operator, and whether the operator is on duty or on call):
Weekdays_____
Shifts_____
Weekends_____

12. Responsibilities

Identify the person responsible for the following functions:

Function Name Telephone

Routine System Operation_____
Emergency Operations (Incl. Planning)_____
Liaison with NHDES-WSEB_____
Customer Communications_____
Media Contact_____
Hiring/Firing/Personnel Matters_____
Billing/Debt Collection_____
Consumer Confidence Report_____
Sampling/Monitoring/Record Keeping/SDWA-Compliance_____
Long-Term Capital Planning_____
Maintaining Material Inventory_____
Legal Affairs_____
User Rate Setting_____

Please attach letters of intent from specialized contractors indicating their availability and interest in repairing the water system for the following specialties: (Env-Ws 371.25(c))

(1) Electrical/mechanical repair, as required by Env-Ws 360.08; and

(2) Repair of the distribution piping or other construction repair to the building

and storage facilities as required by Env-Ws 360.08.

13. Emergency Plan (Env-Ws 371.20(5))

Please attach a copy of the water system's Emergency Plan as specified in Env-Ws 360.14

PART C. FINANCIAL

Initial Capital Costs (Env-Ws 371.31)

	Projected Total Cost
1. Construction Costs	
Water Source Development	
Hydrogeological Investigation…….....	$_____
Source Construction……..	$_____
Water Treatment Equipment……..	$_____
Control Building…….	$_____
Water Storage Tankage……...…	$_____
Water Distribution System…….	$_____
Customer Connection to System…(per unit)….	$_____
2. Engineering Costs	
Design Engineering…….….	$_____
Field Engineering, including inspection…….	$_____
3. Legal Costs in Establishing Water System…….	$_____
4. Miscellaneous Costs (please list)	
_____……......	$_____
_____……......	$_____
Total Initial Capital Costs	$_____

5. Schedule of Useful Life of Water System Components (Env-Ws 371-32).

Please attach a tabular schedule of facilities and equipment, showing the average life expectancy and retail replacement price of items costing over $500. Include such categories as: mechanical and electrical equipment, water source, water treatment equipment, water storage facilities (atmospheric tankage, pressure tankage) and water distribution facilities.

Projected Operational Expenditures (Env-Ws 371.34)

6. Name and Location of Public Water System:

_____Town_____

7. Initial Year of Budget Calculation _____

8. Consumer Price Index (C.P.I.) used in projections: _____%

9. Operating Expenses	Year 1	Year 3	Year 5
Year	20____	20____	20____
Power			
Electrical	$_____	$_____	$_____
Propane	$_____	$_____	$_____
Subtotal	$_____	$_____	$_____
Water Treatment *Include any increase in costs due to regulatory changes			
Repairs	$_____	$_____	$_____
Chemicals	$_____	$_____	$_____
Test equip.	$_____	$_____	$_____
Subtotal	$_____	$_____	$_____
Maintenance and Repairs			
Distribution system Repair	$_____	$_____	$_____
Water storage Repair	$_____	$_____	$_____
Mechanical, Electrical, & Control Repair	$_____	$_____	$_____
Flushing & Valve Exercise	$_____	$_____	$_____
Subtotal	$_____	$_____	$_____
Personnel and Administrative Costs			
Employee(s)	$_____	$_____	$_____
Contract Operator	$_____	$_____	$_____
Insurance	$_____	$_____	$_____
Permits & Licenses	$_____	$_____	$_____

Management, Contractual, Legal, Admin.	$_____	$_____	$_____
Water Quality Compliance Testing	$_____	$_____	$_____
Other Costs	$_____	$_____	$_____
Subtotal	$_____	$_____	$_____

Please describe other costs:

_____

_____

_____

Debt Service

The water system's debt is identified as:

$_____for_____years at _____%

Payment	$_____	$____	$_____

Taxes

Real Estate	$_____	$_____	$_____
Business Profits Taxes	$_____	$_____	$_____
Other	$_____	$_____	$_____
Subtotal	$_____	$_____	$_____

Additional Expenditures

Capital Reserve Accounts

Supply	$_____	$_____	$_____
Treatment	$_____	$_____	$_____

Storage	$_____	$_____	$_____
Distribution	$_____	$_____	$_____
Other	$_____	$_____	$_____
Sub Total	$_____	$_____	$_____

Grand Total: Operating Expenses

Year 1	Year 3	Year 5
$_____	$_____	$_____

10. Operating Revenue (Water Rate) (Env-Ws 371.34 (f)).

Please provide a brief description of the water rate concept used to calculate the projected user fees. Include the user categories (residential, commercial, industrial, other, etc.), rate structure (flat rate, block rate, increasing block rate, decreasing block rate), whether meters are to be used, billing period (monthly, quarterly, etc.), other projected fees (hook-up, sprinkler, etc.)

_____

_____

_____

_____

_____

	Year 1	Year 3	Year 5
Number of Connections By Category			
Residential	_____	_____	_____
Commercial	_____	_____	_____
Industrial	_____	_____	_____
Other	_____	_____	_____

	Year 1	Year 3	Year 5
Projected User Fees* by Category			
Residential	$_____	$_____	$_____
Commercial	$_____	$_____	$_____
Industrial	$_____	$_____	$_____
Other	$_____	$_____	$_____
Revenues:			
Water sales	$_____	$_____	$_____
Connection Fees	$_____	$_____	$_____
Other Revenues**	$_____	$_____	$_____

Grand Total: Operating Revenue

Year 1	Year 3	Year 5
$_____	$_____	$_____

* Calculated for a residential 100,000 gallon per year user, using the rate structure developed for the system (Refer to attachment to Part C, Section 10).

** List any other sources of revenue: _____
_____
_____

11. Operating Balance

	Year 1	Year 3	Year 5
Total Operating Revenue	$_____	$_____	$_____
Total Operating Expenditure			

Year 1	Year 3	Year 5
$_____	$_____	$_____

(Total Annual Operating Revenue - Total Annual Operating Expenditure) =

Year 1	Year 3	Year 5
$_____	$_____	$_____

Operating Ratio (Total Operating Revenue / Total Operating Expenditure)

Year 1	Year 3	Year 5
_____	_____	_____

12. Customer Water Rate Notice: (Env-Ws 371-40)

Please attach an example copy of a rate notification document, to be signed by each initial purchaser of real estate to be served by the community water system. Sample language could be as follows:

"The projected water use for this home is _____ gallons per day. Based on this usage, the projected water rates for the next five years are:

Year 1	$_____per year
Year 2	$_____per year
Year 3	$_____per year
Year 4	$_____per year
Year 5	$_____per year

If water customers are not billed individually, these costs will be reflected in the condominium association fee."

Use the results from the calculation of operating expenditures, Part C, Section 9 to project a water rate for an average user (i.e., a residential customer using 100,000 gallons per year) using the rate structure developed for the system (Refer to attachment to Part C, Section 10).

If the initial purchaser refuses to sign the rate notification document, the water system owner shall include the following statement in the deed:

"This property is served by a public water system. As a public water system it is subject to the USEPA and New Hampshire Safe Drinking Water Acts. Compliance with the Act can have significant expense. Revenue to these expenses is derived entirely form the users."