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ARIZONA DEPARTMENT
OF
ENVIRONMENTAL QUALITY



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CAPACITY DEVELOPMENT APPLICATION
FOR A
NEW PUBLIC WATER SYSTEM
(ELEMENTARY BUSINESS PLAN)

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CAPACITY DEVELOPMENT REQUIREMENTS FOR A NEW PUBLIC DRINKING WATER SYSTEM

Applicability

The requirement for submitting a capacity development elementary business plan applies to **new** community water systems and **new** nontransient noncommunity water systems that **begin operation on or after October 1, 1999**. The owner shall not commence operation of a public water system (PWS) without Department approval of this elementary business plan.

To become a new PWS, the owner must submit an elementary business plan for review and approval by the Department, using this application. If the owner of a new PWS fails to submit a complete application, the Department shall suspend the review process and send a notice of incomplete elementary business plan to the owner. The owner shall submit the missing information to the Department within 60 days of the date of the notice of an incomplete elementary business plan. If the missing information is not received within the 60-day time period, the Department shall deny the elementary business plan and return the elementary business plan to the owner.

Technical Element

An owner of a new PWS shall submit the following to the Department for a determination of technical capacity:

1. Documentation of a drinking water source adequacy minimum of:
 - 50 gallons of water per person per day for a period of 100 years, or
 - A 100 year water availability designation from the Arizona Department of Water Resources (ADWR), or
 - A Certificate of Assured Water Supply from ADWR.
2. Documentation that the drinking water served to the public will meet safe drinking water standards.
3. Documentation that infrastructure, treatment, and storage design meets the requirements of Title 18, Chapter 4 of the Arizona Administrative Code.
4. Documentation that the PWS is operated by a certified operator of the correct classification and grade.

5. Documentation that contains at least the following:
 - a. Day 1 through final build-out technical and engineering needs projections;
 - b. Proposed water system design specification and proposed uses including commercial and domestic use phases;
 - c. Information describing the life of the plant;
 - d. A demonstration that all site-specific components meet nationally recognized standards, such as those established by the American Water Works Association, National Sanitation Foundation, or Underwriter's Laboratory;
 - e. Manufacturers' specifications on components used in the construction of the water system; and
 - f. Corrective action plan to address site-specific component replacement or repair protocols based on manufacturer's recommendations or engineer's specification.
6. Prior to conducting any hydrologic investigation ADEQ recommends contacting the Drinking Water Section (DWS) Hydrologist at 602-771-4597 to determine site specific water sufficiency requirements for your drinking water system.

Managerial Element

An owner of a new PWS shall submit the following to the Department for a determination of managerial capacity:

1. A statement of how the PWS is owned, such as by major stockholders, board of directors, sole proprietor cooperative, governmental agency or district, corporation, limited partnership, or limited liability corporation.
2. Name, address, and phone number of owner.
3. Organizational chart of the new PWS.
4. Staff job descriptions and responsibilities.
5. Water system capital improvement plan up to the proposed full system build-out or for a five-year projection, whichever is greater.
6. Certified operator grade and type that will be required by the new PWS, based upon water system design specifications.
7. A statement of the intent to create a CWS or NTNCWS and any intent to transfer ownership of the PWS as part of the construction plan or project phase build-out.
8. Method to ensure provision of information listed in Appendix B, item 4 to subsequent owners.
9. A disclosure statement signed by the owner setting forth the owner's responsibility to comply with the requirements and to disclose all information relevant to the operation of the PWS upon transfer of ownership as outlined in Appendix B.

Financial Element

An owner of a new PWS must submit one of the following to the Department for a determination of financial capacity:

1. A 5-year financial capacity plan, or a financial capacity plan to the end of the build-out phase, whichever is longer, that demonstrates financial capacity and contains all of the information listed in Appendices A, C, and D.
2. A financial determination made by the Arizona Corporation Commission (ACC).
3. A financial determination as set forth in the certificate of assured water supply from the ADWR, Active Management Area Program.

Review, Approval, Denial Process

The Department shall review and evaluate technical and managerial capacity elements, based upon the requirements outlined above.

The Department will notify an owner of a new PWS in writing of a deficiency in the elementary business plan or approve or deny the elementary business plan within 90 days of a receipt of a complete elementary business plan. The owner has 60 days from the date of a notice of deficiency to submit to the Department the information necessary to correct the deficiency in the elementary business plan. If the owner of the new PWS fails to send the requested information within 60 days of the date of the notice of deficiency, the Department will deny the elementary business plan and return it to the owner with a written explanation for the denial and information on the appeal process.

If an owner modifies technical or managerial specifications at any time between the approval to construct and the approval of construction, the owner must notify the Department of the need to modify the elementary business plan in the technical, managerial, and financial capacity documentation. The Department will revoke approval of the elementary business plan if the owner fails to notify the Department within 30 days of a modification.

Appeals

An owner may appeal denial of an elementary business plan under A.R.S. § 41-1092 et seq.

Appendix A
Elementary Business Plan Checklist

No.	Technical Capacity	Yes	No	N/A
1.	Source Adequacy - Does the documentation demonstrate 50 gallons of water per person per day for 100 years or does the system have an Arizona Department of Water Resources Certificate of assured water supply? Prior to conducting any hydrologic investigation ADEQ recommends contacting the DWS Hydrologist at 602-771-4597 to determine site specific water sufficiency requirements for your drinking water system.			
2.	Source Adequacy - Does the source approval information demonstrate that the source meets drinking water quality standards or have applicable drinking water technologies been described?			
3.	Infrastructure - Does the design criteria meet Article 5 requirements of R18-4-502 through R18-4-509?			
4.	Treatment - Does the design criteria include treatment technologies approved by ADEQ in 18 A.A.C. 4 Articles 2, 3, and 5?			
5.	Does the system have on staff a certified operator of the appropriate grade and type?			
6.	Does the documentation include an elementary business plan containing technical and engineering needs projections for a time period covering day-1 to final build-out or for a 5-year time period, which ever is greater?			
7.	Does the documentation include the proposed water system design specifications and proposed uses including commercial and domestic use phases?			
8.	Does the documentation include an elementary business plan containing the information on the components used in the design and construction of the system along with the components life span based upon manufacturers' specifications?			
9.	Does the documentation include an Operations and Maintenance Plan which contains standards that are nationally recognized on all site specific components, such as American Water Works Association, National Sanitation Foundation or Underwriter's Laboratory?			
10.	Does the documentation include an operations and maintenance plan with the manufacturers specifications on all components used in the construction of the water system?			
11.	Does the documentation include an operations and maintenance plan and emergency operations plan to address site-specific component replacement or repair protocols based on manufacturers' recommendations or engineers' specifications?			

No.	Managerial Capacity	Yes	No	N/A
12.	<p>Does the documentation include Ownership type? Select all that apply.</p> <p style="text-align: center;">Sole Proprietor Major Stockholders Board of Directors Cooperative Government Agency or District Corporation Limited Liability Corporation Partnership Other</p>			
13.	Does the documentation include name, address and telephone number of owner?			
14.	Does the documentation include an organizational chart of owners, management and staff with their position or job titles?			
15.	Does the documentation include staff job descriptions and responsibilities?			
16.	Does the documentation include a capital improvement plan up to the proposed full system build-out or for a 5-year projection which ever is greater?			
17.	Does the documentation identify the grade and type of certified operator that will be needed to operate the system according to site specific components?			
18.	Does the documentation identify the intent to create a CWS or NTNCWS?			
19.	Does the documentation transfer the ownership of the water system as part of the build-out phase of the project?			
20.	Does the documentation identify the policies or mechanisms to ensure that all system-specific technical, managerial and financial information of the water system is transferred to the new owner?			
21.	Does the documentation include the owner's signed disclosure statement agreeing to comply with the requirements of these Articles and a general disclosure statement agreeing to disclose all information relevant to the operation of the water system to any transferee of ownership? (See Appendix B).			

Appendix A

No.	Financial Capacity	Yes	No	N/A
22.	Is the system regulated by the Arizona Corporation Commission (ACC) or ADWR? If "Yes" go to Question 23. If No, go to Question 25.			
23.	Has the system received an approval from the ACC on its fee structure, or ADWR on its financial capacity?			
24.	Systems regulated by the Arizona Corporation Commission or Department of Water Resources shall provide information required in 22 and 23 for the financial capacity determination review by ADEQ.			
25.	For new CWSs and NTNCWS NOT regulated by ACC, is all information listed in Appendices C and D included?			

Appendix B
Drinking Water Capacity Development Statement of
Responsibility

Applicant Information:

Name:

Mailing Address:

Phone Number:

Fax Number:

E-Mail:

Statement Information:

1) Name of Water System: _____ **PWSID#** _____

2) Ownership Type (Please check all that apply):

Sole Proprietor

Major Stockholders

Board of Directors

Cooperative

Government Agency

District

Public Entity

Corporation

Limited Liability Corporation

Other (please explain) _____

3. Name of Owner(s):(Check one) See Below Attach a separate sheet if more space is needed.

Owner 1: _____

Owner 2: _____

Owner 3: _____

4. Agencies with rules applicable to the Water System: (Please check all that apply)

Arizona Department of Environmental Quality

Arizona Corporation Commission

Arizona Department of Water Resources

Arizona Department of Real Estate

Arizona Department of Commerce

Arizona Department of Agriculture

Arizona Department of Corrections

Office of the Fire Marshal

Arizona Land Department

Arizona Department of Revenue

Arizona Department of Transportation

Maricopa County Environmental Services

Pima County Dept of Environmental Quality

Environmental Protection Agency Region IX

Other(s) please specify _____

5) Statement of Intent (Select one):

It **IS** the intent of the owner or developer or the NEW CWS or NEW NTNCWS to transfer ownership of the water system. As part of the ownership transfer, it is understood that the owner or developer has a responsibility to disclose and transfer ALL information relevant to the construction and operation of the water system to the new owner.

It is **NOT** the intent of the owner to transfer ownership of the new CWS or NTNCWS within 1-year of the completion of construction of the water system.

6) Date owner expects to begin operation:

Month _____ Day _____ Year _____

7) Drinking Water Sources used (Select all that apply):

- Groundwater Purchased Groundwater
- Surface Water Purchased Surface Water

8) Table of Contents of Systems Elementary Business Plan (Please check one):

The Table of Contents of the Elementary Business Plan is attached.

The Table of Contents of the Elementary Business Plan is summarized below.

Summary: _____

9) Signature of each current owner: Check if additional signature page is attached.

I agree to comply with the requirements of 18 A.A.C. 4, Article 6.

Print Name: _____ Signature _____ Date _____

Print Name: _____ Signature _____ Date _____

Print Name: _____ Signature _____ Date _____

Appendix C
Financial Capacity For New CWSs and NTNCWSs

Worksheet 1

Owner: _____

Worksheet Completed by: _____ Date: _____

5-Year Financial Projection	Year 1 Projection	Year 2 Projection	Year 3 Projection	Year 4 Projection	Year 5 Projection
Enter Year:					
1. Beginning Cash on Hand					
a. Unmetered Water Revenue					
b. Metered Water Revenue					
c. Other Water Revenue					
d. Total Water Revenue (Add 1a thru 1c)					
e. Connections Fees					
f. Interest and Dividend Income					
g. Other Income					
h. Total Cash Revenues (Add 1d thru 1g)					
i. Additional Revenue Needed					
j. Loans, Grants or other cash injection please specify					
2. Total Cash Balance (1h to 1j)					
3. Total Cash Available (1+2)					
4. Operating Expenses					
a. Salaries and wages					

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b. Employee Pensions and Benefits					
c. Utilities					
d. Chemicals					
e. Materials and Supplies					
f. Laboratory					
g. Contractual Services					
h. Insurance					
i. Miscellaneous					
j. Total Operations and Maintenance Expenses (4a thru 4i)					
k. Replacement Expenditures					
l. Total Operations and Maintenance expenditures plus Replacement expenditures. (4j+4k)					
m. Loan Principal/Capital Lease Payments					
n. Loan Interest Payments					
o. Capital Purchases (specify):					
5. Total Cash Paid Out (4m thru 4o)					
6. Ending Cash Position (3- 5)					
7. Number of Customer Accounts					

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8. Average Annual User Charge per account (1d/7)					
9. Coverage Ratio (1h-4l)/(4m+4n)					
10. Operating Ratio (1d/4l)					
11. End of Year Operating Cash (6-12)					
12. End of Year Reserves					
a. Operating Reserves					
b. Debt Service Reserves					
c. Capital Improvement Reserve					
d. Replacement Reserve					
e. Other					
Total Reserves (12a thru 12e)					

Appendix C: Definitions for Worksheet 1

5-Year Financial Projection	Year 1 Projection	Year 2 Projection	Year 3 Projection	Year 4 Projection	Year 5 Projection
1. Beginning Cash on Hand	For the current year budget, use the actual cash balance. For all other years, cash on hand should equal item #12 from the previous period.				
a) Unmetered Water Revenue	All cash received/estimated for water supplied to residential, commercial, industrial and public customers where the customer charge is not based on quantity, i.e., its based on diameter of service pipe, room, foot of frontage or other types of units.				
b) Metered Water Revenue	All cash received/estimated for water supplied to residential, commercial, industrial, and public customers where the charge is based upon quantity of water delivered.				
c) Other water revenues	Other cash received or estimated from sale of water, sales for irrigation, sales for resale, intermunicipal sales, or advalorum taxes.				
d) Total Water Revenues	Total 1(a) thru 1(c)				
e) Connection Fee	All cash received or estimated for connection of customer service during the year.				
f) Interest and Dividend Income	All cash received or estimated on interest income from securities, loans, notes, and similar instruments, whether the securities are carried as investments or included in sinking or reserve accounts.				
g) Other income	Other revenues collected or estimated during the period (such as disconnection or change in service fees, profit on materials billed to customers, servicing of customer lines, late payment fees, rents, sales of assets or advalorum taxes (infrastructure portion).				
h) Total Cash Revenues	Add 1(d) thru 1(g)				
i) Additional Revenues Needed.	Additional cash needed to cover cash needs.				
j) Loans, Grants or other Cash injections.	Includes loans or grants from financial institutions, inter-municipal loans, state or federal sources.				
2. Total Cash Balance	Add items 1(h) thru 1(j)				
3. Total Cash Available	Add items 1 and 2				

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4. Operating Expenses	Use actual amounts paid when completing the prior year. Estimate the amounts for projected years based on prior year amounts, trends and other known variables.
a) Salaries and wages	Case expenditures made or estimated for salaries, bonuses and other considerations for work related to the Operation and Maintenance of the facility, including administration, and compensation for officers and directors.
b) Employee Pensions and Benefits	Paid vacations, paid sick leave, health insurance, unemployment insurance, pensions plan, and other similar liabilities.
c) Utilities	Amounts paid or estimated for all fuel or electrical power.
d) Chemicals	Amounts paid or estimated for chemicals used in treatment and distribution.
e) Materials and Supplies	Amounts paid or estimated for materials and supplies used for the operation and maintenance of the new public water system other than those under contractual services.
f) Laboratory	Amounts paid or estimated that are associated with laboratory services.
g) Contractual Services	Amounts paid or estimated to outside engineers, accounting, legal, managerial and other services.
h) Insurance	Amounts paid or estimated for vehicle, liability, worker's compensation and other insurance associated with the public water system.
i) Miscellaneous	Amounts paid/estimated for all expenses not included elsewhere, (such as permit fees, training, and certification fees).
j) Total operation and maintenance expenditures.	Add amounts in lines 4(a) thru 4(i).
k) Replacement expenditures	Amounts paid or estimated for replacement of equipment to maintain system integrity (capital improvement plan).
l) Total Operations and Maintenance expenditures plus Replacement expenditures.	Add amounts in 4(j) and 4(k)
m) Loan Principal, Capital Lease or Loan payment.	Include cash payments made or estimated for principal and interest on all loans, including vehicle loans and equipment on time payments, and capital lease payments.
n) Loan Interest payments	Include cash payments made or estimated for interest on all loans, including vehicle loans and equipment on time payments, and capital lease payments.

Appendix C

o) Capital Purchases	Amount of cash outlays or estimates for items such as equipment, building, vehicle purchases and leasehold improvement that were not a part of the initial design of the water system.
5) Total Cash Paid Out	Add amounts in 4(m) thru 4(o)
6) Total Cash Available Minus Expenditures Calculation.	Take Amount in 1 and subtract Amount in 5. If this amount is positive, there is operating cash left over after all calculated expenditure obligations have been met. If the number is negative, then there are more expenses than there are funds available to pay for the expenses to operate the water system.
7) Number of Customer Accounts.	Use most recent system data or expected increases.
8) Average User Charge per Customer.	Take amount listed in 1(d) and divide it by amount listed in 7.
9) Coverage Ratio	Take amount in 1(h) and subtract the amount in 4(l). Then divide that amount with the sum of 4(m) + 4(n). The equation looks like this: $[1(h) - 4(l)] \div [4(m) + 4(n)]$ and measures the sufficiency of net operating profit to cover the debt service requirements of the system. A bond covenant might require this to meet or exceed certain limits.
10) Operating Ratio	Take amount in 1(d) and divide it by the amount in 4(l). The equation looks like this: $1(d) \div 4(l)$. This figure measures of whether operating revenues are sufficient to cover operation and maintenance, replacement expenses. An operating ratio of 1:0 is the minimum for a self-supporting facility. If there are debt service requirements, the operating ratio would have to be higher.
11) End of Year Operating Cash	All non-reserved cash. Add amounts from 6 thru 12.
12) End of Year Reserves	Do not include depreciation as a reserve unless there is actually a designated depreciation reserve containing cash set aside for future expansion.
a) Operating Cash Reserve	Funds set aside to meet cash flow, operating, and seasonal fluctuations.
b) Debt Service Reserve	Funds specifically set aside to retire debt as it is scheduled.
c) Capital Improvement Reserve	Funds specifically set aside to meet long-term objectives for a major facility expansion, improvement, or the construction of a new facility.
d) Replacement Reserves	Funds specifically set aside for the future replacement of equipment needed to maintain the integrity of the facility over the useful life of the equipment.
e) Total End of Year Reserves	Add amounts 12 (a) thru 12 (d).

Appendix D
Water System Financial Viability Tests

Test 1: Will the proposed water system collect sufficient revenues to meet all of its projected expenses ?

Measurements:

- a. Total Revenues - Total Expenses = Net Income > 0
- b. Total Revenues - One-Time Revenues - Interest Income - Other Income = Operating Revenues.
- c. Total Expenses - One-Time Expenditures - Debt Service - Capital Outlays = Operating Expenditures.
- d. Operating Revenues - Operating Expenses = Net Revenues > 0 e.

$$\text{Operating Ratio} = \text{Operating Expenses} \div \text{Operating Revenues} \leq 1$$

Test 2: Will the proposed water system generate reserves ?

The following measurements shall be > 0 at the time submitted:

- a. Operating Cash Reserves = \$ _____
- b. Replacement Reserve = \$ _____
- c. Working Capital = Current Assets - Current Liabilities

Test 3: Are the proposed rates reasonable compared to the median household income of the area to be served ?

The following measurements shall be:

$$\text{Average Annual Rates} < \text{Median Household Income}^3 \times 2.5 \%$$

³ The sources of median household income data includes the most recent United States Census Bureau (USCB) data collected by the Department or generated by an impartial third party experienced in collecting income data and supplied to the Department by the applicant seeking viability determinations. Acceptable sources of income data, other than USCB data includes feasibility studies, engineering reports, market studies, income surveys, or another source or collection methodology approved by the Department