

17938

Appendix D  
**Water System Plan Contents Checklist**

## SMALL WATER SYSTEM PLAN CONTENTS

Water system plans may be required for public water systems with less than 1,000 service connections (WAC 246-290-100). Please consult Department of Health (DOH) staff for specific plan requirements for your water system.

The following outline is intended to provide a summary of key elements that should be addressed in small water system plans for utilities subject to Federal Drinking Water requirements. In general, the larger the system the more complex the water system plan will be. The plan should be developed for a 20 year planning period with identification of specific improvements and a financial program for the first 6 years. For additional information about each of the elements in this outline, refer to Planning Handbook for Water System Plans; Interim Guidelines for Public Water System Regarding Water Use Forecasting Methodology, and Conservation Programs; and Financial Viability Program for Small Water Systems.

- I. Description of Water System
  - A. Identification of Water System Ownership & Management
  - B. History of Water System Development
  - C. Map and Description of Existing Service Area
  - D. Description of existing facilities including map and pressure zones
  - E. Future Service Area Map and Agreement (If Required)
  - F. Identification of Service Area Policies
- II. Basic Planning Data
  - A. Existing Population and Current Number of Service Connections
  - B. Water Usage by Customer class including peak day, peak month, total annual production, and unaccounted water
  - C. Future Population and Service Connection Projections based on Growth Management Act and County Projections
  - D. Existing and Future Land Use Considerations

**III. System Analysis****A. Identification of Water System Design Criteria****B. Evaluation of Existing System**

1. Source
2. Storage
3. Hydraulics
4. Fire Flow
5. Treatment
6. Water Rights

**C. Water Quality Analysis**

1. History of monitoring and test results
2. Analysis of Safe Drinking Water Act Requirements

**D. Summary of Facility and O&M System Deficiencies related to growth and replacement****IV. Improvement Program****A. Identification of Improvements including Justification (20 years)****B. Improvement Schedule (6 years)****V. Financial Program (6 years)****A. Identification of cost of improvements****B. Identification of Annual Operation and Maintenance Expenses****C. Revenue Plan for all expenses****D. Approved Financial Viability Test (Investor Owned Utilities should contact DOH and UTC for specific requirement)****E. Discussion of Water Rates including proposed increases and rate structure**

VI. Water Conservation Program

- A. Identification of Goals and Objectives of Water conservation Program
- B. Description of Water Conservation Public Education Program
- C. Description of Other Water Conservation Measures Being Implemented
- D. Estimated savings attributed to conservation (incorporated into Water Demand Projection)

VII. Operation and Maintenance Program

- A. Name, Phone numbers, and responsibilities of person(s) involved in water system operation (Including who is certified and at what level)
- B. Description of Routine Operation Procedures
- C. Description of Water Quality Sampling Procedures including response when sample results exceed state standards
- D. Description of Emergency Response Procedure
- E. Identification of most vulnerable facilities

VIII. Relationship With Other Plans

- A. Compatibility with other related plans including adjacent water systems, land use plans, and water resource planning efforts
- B. Compatibility with Regional Supplement of Coordinated Water System Plan
- C. County Response on compatibility with land use plans and growth policies

NOTE: Water System Plans need to be prepared by a professional engineer (WAC 246-290-240)

# PLAN CONTENT CHECKLIST

The following checklist summarizes the topics which are discussed in each section of this handbook. It is intended to function as a checklist for the utility, assuring that key topics are in the draft water system plan. DSHS will use this checklist during the plan review process. Another copy of this checklist is included at the end of the handbook so it can be torn out for easy reference.

Section	Topic
<input type="checkbox"/> Future Service Area	
	Map of Existing Service Area Criteria for Future Service Area Map of Future Service Area Explanation of Boundaries Shown on Map
	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> Service Area Characteristics	
	History of Growth and Water Service Inventory and Summary of Related Plans Geography of the Service Area Other Items Affecting the Service Area
	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> Service Area Policies	
	Summary of Applicable Policies Discussion on Effect of Applicable Policies
	<input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> Future Growth	
	Existing Land Use Patterns Map of Future Land Use Patterns Methodology and/or Source of Land Use Projections Population Forecasts Methodology and/or Source of Population Forecasts Map of Future Population Distribution
	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> Future Water Demand	
	Amount of Water Used by Category Evaluation of Existing Water Use Conservation Assumptions for Future Water Demand Calculations
	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Future Water Demand Projections Justification of Future Water Demand Map Showing High Demand Areas	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> Performance and Design Criteria	<input type="checkbox"/> <input type="checkbox"/>
List of Applicable Criteria How Criteria will be Applied	
<input type="checkbox"/> Inventory of Existing System	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
List of Facilities in Each Grouping Functions and Relationships of Facilities Evaluation of Effectiveness of Facilities Relationship of Groupings Evaluation of Recent Improvements Map of Facilities and Pressure Zones	
<input type="checkbox"/> Fireflow	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Identification of Standards Source of Fireflow Standards Map of Development Classifications (or the Utility's Own Categories) Summary of Future Fireflow Needs	
<input type="checkbox"/> Hydraulic Analysis	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Methodology and/or Description of Program Pressure Limitations and Justification Description of Scenarios How Input Data was Derived Summary of Results	
<input type="checkbox"/> Water Resources	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Description and Evaluation of Existing Source Inventory and Summary of Water Resource Studies Evaluation of Potential for Contamination Water Rights Assessment (Chart)	
<input type="checkbox"/> Water Quality	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Assessment of Source Water Quality Assessment of Distribution System Water Quality How Identified Problems will be Addressed	
<input type="checkbox"/> Summary of System Deficiencies	<input type="checkbox"/> <input type="checkbox"/>
List of Documented Deficiencies Discussion of Deficiencies not Previously Documented	

Identification of Improvements

- List of Alternative Packages
- Evaluation Criteria
- Assessment of Alternatives
- Description and Justification of Selected Alternatives
- Map of Improvements


Scheduling of Improvements

- Five-Year Definite Schedule
- Schedule for Remaining System Needs Improvement Program (Chart)


Financial Program

- Past and Present Financial Status
- Available Revenue Sources
- Allocation of Revenue Sources
- Ability to Secure Needed Revenue
- Assessment of Impact Upon Rates


Operations Program

- Organizational Chart
- Responsibilities of Positions
- Certification Status
- Identification of System Components
- Routine Operation
- Preventive Maintenance Program
- Inventory of Chemicals, Equipment and Supplies
- Sampling Procedure
- Violation Response Procedure
- Emergency Call-up List
- Vulnerability Analysis
- Contingency Plans
- Cross-Connection Control Program


Miscellaneous Supportive Documents

- Environmental Impact Statement or Determination of Non-Significance
- Satellite System Management Program
- Text of Appropriate Agreements
- Response from Affected Entities
- Standard Construction Specifications (Chart)
- Watershed Control Program
