

## SECTION IV

### ASSESSMENT OF EXISTING WATER SUPPLY SYSTEMS

#### 1. INTRODUCTION

In 1985, the Island County Health Department (ICHHD) prepared a detailed Preliminary Assessment of Water System Issues in Island County prior to declaring the County a Critical Water Supply Service Area (CWSSA) and beginning the coordinated planning process. Table IV-1 is taken from the preliminary assessment. It is included to "highlight" the large number of water systems in the County and the degree to which these systems fail to meet current regulations and standards. (Note: the subareas referred to in Table IV-1 are not in precisely the same locations as those given in Section III. This discrepancy does not materially affect any of the conclusions herein.)

This section summarizes the findings of the Preliminary Assessment. It also presents a further evaluation of Class 1 systems (100 or more service connections) conducted as a first step in the planning process.

Information was obtained from various sources, including the Department of Health (DOH), the Department of Ecology (Ecology) and the ICHHD. Individuals responsible for the existing water systems were contacted by mail to collect information on service, future plans, usage history, system facilities, and various other items. In addition, key personnel for Class 1 water systems were interviewed. This was done to become familiar with the water system, to verify existing information, and to obtain information not available from other sources. When available, engineering reports, plans and specifications, water system plans, and other information were reviewed.

#### 2. WATER SYSTEM INVENTORY

The Class 1 water systems within Island County were studied using the sources of information listed above. Information collected on system operations, the capabilities of existing facilities, and the planning status of these systems is tabulated in Appendix D. The following is a discussion of information provided in Appendix D.

##### A. Approved Comprehensive Water System Plan

The year when the most recent Comprehensive Water System was approved by DOH is provided in the Appendix. Chapter 248-54 WAC requires any system with one thousand or more services to prepare and to obtain approval of a water system plan from DOH. Currently, only one

water system in Island County, Oak Harbor, falls into this category. Oak Harbor has an approved water system plan and recently updated its plan. Chapter 248-54 WAC also requires that approved water system plans be updated at least every 5 years, or sooner, if required by DOH.

Coupeville, the City of Langley, and the Clinton Water District (CWD) are currently in the process of updating their water system plans. Coupeville has filed revisions to its water plan. A few systems, such as the Camano Water Association, have prepared water system plans for their own benefit, but have not submitted them to DOH for approval. Some of the remaining systems expressing interest in expansion need to prepare a water system plan or to update their plans in order to be in compliance with DOH planning requirements.

Most of the small Class 1 water systems have indicated they have no interest in future expansion. Therefore, although a water system plan would be beneficial, there is no requirement that it be prepared.

#### **B. Service Information**

Appendix D includes information on the number of services or connections to a system, an estimate of the respective population served, and the potential services if the system's service area were fully developed. When possible, the number of seasonal and full-time connections are shown as estimated by the person interviewed.

The column "Potential Services" contains several types of information. In some instances, the system serves a platted subdivision(s) and the total number of platted lots is shown as the future growth potential. Where information on source capacity is available, the number of connections that can be served by the source using the criterion of 800 gallons/day of supply per connection (DOH "Sizing Guidelines") is estimated. Caution is suggested in using this potential number of connections because the current capacity of the well source(s) may be different than shown. The ability to actually deliver water also depends upon the capacity of the distribution system, storage, and other factors.

#### **C. System Facilities**

Appendix D lists information collected on the source of supply, the capacity of these sources, the storage facilities, and the typical distribution pipeline sizes. Provisions to supply water for fire flow are also indicated. This does not necessarily mean that County fire flow standards (minimum of 500 gpm for 30 minutes) are met. Rather, it is an indication as to whether there are minimum 6-inch-diameter pipelines with source

and/or storage capability to provide a degree of fire protection. Hydrants and/or standpipes are provided, but may not give full coverage of the service area. See the comment column for additional information.

**D. Certified Operator**

All Class 1 water systems are required to have at least one certified operator. Some systems, depending on size, may be required to have more than one. In some cases, DOH has issued a temporary certification. This allows the system 1 year to train or hire a certified operator. Most of the Class 1 systems have certified operators or temporary certification.

**E. Water Quality**

Water quality is a problem for many of the water systems. Many systems regularly have water samples with iron and manganese concentrations in excess of the Maximum Contaminant Level (MCL) set forth in the State/U.S. Environmental Protection Agency (EPA) drinking water standards. Various techniques can be employed to reduce concentration of these minerals. Rolling Hills/Glenncairn uses an aeration process. Penn Cove Water District uses large quantities of water softening salts. Some groundwater sources are chlorinated for disinfection. The majority of the groundwater supplies, however, do not have any treatment.

Salt water intrusion is a problem facing many water systems. In some areas of Island County, such as Central Whidbey Island and southern and northeastern Camano Island, the occurrence of salt water intrusion is a serious risk for both existing supplies and future groundwater development. Other areas have historically provided groundwater development with relatively low incidence of salt water intrusion.

A number of comprehensive studies, especially by the U.S. Geological Survey (USGS), have explored the native conditions and withdrawal factors which are conducive to salt water intrusion. Although these studies have provided a greater understanding of the problem, it is still difficult to predict the risk of salt water intrusion for any given well.

Each purveyor is required to regularly monitor both sodium and chloride, plus conductivity, in water supplies. Any observed increasing trend in these components is indicative of salt water intrusion. In addition, each new groundwater source must be evaluated for risk of salt water intrusion.

Appendix K, Groundwater Resource Evaluation, presents a detailed discussion of salt water intrusion incidents in Island County.

**F. Future Expansion**

A discussion of the process of service area designation for future expansion is given in Section VI. As previously mentioned, few water systems in Island County have expressed intentions to expand. Many of the systems were developed to serve platted subdivisions and some of these systems anticipate considerable growth within their service areas. A few systems are actively planning to extend service as it becomes economically feasible. In some instances, these future service areas will envelop other systems.

**G. Comments**

Comments containing additional information on the systems and their operation are included in Appendix D. This information was gathered during visits to the systems and from other interviews and background information. Some generalizations can be made about the system operations and future expansion which are particularly relevant to their participation in the Coordinated Water System Plan (CWSP).

A concern for management of the water systems in the future was a recurring comment in the correspondence and in the interviews. Most systems are operated by residents of the respective communities, often on a volunteer basis. Many of these volunteers were also involved in the installation of the systems. Finding qualified help is becoming increasingly difficult. Additionally, many of the operators are retired and their ability or desire to continue working is not long-term.

The feelings about service area expansion relate back to management and also to protection of the source of supply, the aquifer. The systems contacted are "managing" at the current water use levels. It is a perception that if the service area and demand are expanded, depletion of the aquifer or saltwater intrusion might jeopardize the supply to the existing customers. There is also concern about being forced to expand or relinquish control of the system. Water rates are currently low and use of water is typically unrestricted. For some, resistance to expanding the water system is expressed in terms of resistance to any growth which may detract from the quality of life.

The systems that did anticipate future expansion usually made several assumptions. If the new expansion was for a development, the burden of cost would be on the developer and the new facilities would be built to the current standards of the system. The existing customers would not bear the cost. The person or developer financing the expansion would usually be entitled to collect latecomer fees. In this way, future customers served by the improvement would reimburse the developer that paid the

original cost of the improvement a prorata share of this cost. If the expansion encompassed an existing system, the system being taken over would finance any improvements required to bring the system up to the standards of the parent system.

The majority of systems contacted would be able to accommodate only limited expansion. Usually, systems serving platted subdivisions would not be able to provide adequate service if the remaining lots in the development were built upon. This is based on current supply and storage capabilities. Many of the systems face major system rehabilitation before considering expansion.

#### H. Water Rights

All sources providing a total of more than 5,000 gallons/day of water are required to apply to Ecology to obtain a water right.

Ecology records for Island County were reviewed in an effort to determine the water rights of the existing systems. The quantities of current water rights for the Class 1 systems that could be identified are summarized in Appendix D. The table also shows the status of the rights, i.e., application, or if a permit or certificate has been issued. The total annual volume that may be withdrawn has been converted from acre-feet/year to average gpd. This allows the current municipal water consumption to be compared with the water right. A more detailed analysis of water rights is presented in Section V and in Appendix E.

#### I. Water Use

Systems were asked for historical water use information for the past 5 years. Only a few of the largest Class 1 systems provided this information, which is summarized in Appendix D. For those systems which did not have any historical water use information, we have listed the average and maximum daily water use for the most recent year as reported by the system or as obtained from the DOH records. If a system did not have any reliable estimate of water use, we have prepared our own estimate of this usage, assuming 2.67 persons per household (1980 U.S. Census) and a per capita average daily use of 100 gallons. Maximum daily usage is estimated at 250 gallons per capita per day. These average and maximum daily water use figures were developed as part of the CWSP to standardize estimates of future water requirements. (See Section III.)

### 3. DISCUSSION OF MAJOR WATER SYSTEMS

Oak Harbor, Coupeville, and Langley each provide water service within their incorporated limits and to some adjacent areas. The CWD is another large system with approximately 500 customers. Since the District is projecting considerable future expansion of its service area, it is also discussed. The following is a summary assessment of these major water systems.

#### A. Oak Harbor

The City of Oak Harbor operates the largest municipal water supply system in Island County which serves the incorporated limits and some adjacent area. The City has recently updated its comprehensive water plan.

The primary source of supply for Oak Harbor is from Anacortes through two parallel pipe lines (10-inch and 24-inch). The pipelines are owned by Oak Harbor and supply the U.S. Naval Air Station as well as Oak Harbor. The Navy installation actually consists of two separate facilities, Ault Field and the Seaplane Base. To supplement this source, the City still operates three deep wells, each with a yield of 180 gpm.

The system has limited delivery capabilities in some portions of its service area because of small-diameter distribution mains, which inhibit fire flow capabilities in these areas. The City has analyzed the system capabilities by computer as part of the update to its comprehensive water plan. This analysis has identified proposed construction to correct existing system deficiencies and to plan for future expansion.

The City's future service boundaries encompass several other water systems. It is not known whether these systems will continue to operate independently or if they will merge with Oak Harbor as the City expands its service area. Some of the systems have expressed interest in annexing to Oak Harbor and then receiving water supply from the City. The City will also consider serving additional customers along the supply pipelines from Anacortes.

Anacortes has applied to Ecology for a change of point of diversion to allow the withdrawal of up to 117 cubic feet per second (cfs) directly from the Skagit River. At this time, plans to expand the water supply lines from Anacortes to Oak Harbor are in a preliminary stage.

Oak Harbor is taking steps to protect the aquifer recharge area for its wells. Recently, the City purchased some land in order to retain it as "open space" in the interest of protecting the recharge area.

There are indications that Oak Harbor is interested in becoming more of a water purveyor for North Whidbey. This includes possible connections along the supply lines from Anacortes. If a new development expresses interest in supply, the extension would be financed by the developer but be built to the standards of the City and served through a master meter.

**B. Clinton Water District**

CWD serves approximately 500 customers in the area in the immediate vicinity of the Washington State ferry terminal at the south end of Whidbey Island. Currently, the service is primarily residential with some commercial customers including restaurants, banks, and other small businesses.

Five wells supply water to the system. One of these has high concentrations of manganese and is only used during periods of high demand. The remaining wells provide good quality water.

The system has two 100,000 gallon covered redwood reservoirs. There are plans to construct a new reservoir at the top of a hill on the west side of the current service area. An existing well in this merged development has been acquired by the CWD and would supply the reservoir. CWD has several pressure zones in order to be able to serve customers at higher elevations.

Annexation of the proposed new area would increase the CWD service area by nearly 400 percent. Requests for service have already been received from areas north and south of the existing service area. Construction of the proposed reservoir would provide excellent expansion capabilities to areas west and south of the existing service area.

Other planned capital improvements include upgrading the existing system. Various areas, including some beach front property, are served by 2-1/2 inch or 4-inch mains. This pipe has also been subjected to the corrosive effects of saltwater. Replacement of this pipe and other inadequate lines is proposed. Replacement with minimum 6-inch diameter lines would improve fire flows.

At present, there are no interties with neighboring systems. The CWD appears willing to become a water purveyor to other systems, provided it would not restrict service to current customers. CWD will consider acquisition and merging of adjacent systems, provided the system is upgraded to the standards of the CWD, if necessary. If the merging system has useful facilities such as a productive well or a reservoir in a

strategic location, this also may be an incentive for consolidation. For line extensions, the new customer requesting the extension is required to finance the project with possible reimbursement from latecomer fees.

The Comprehensive Water System Plan for CWD is currently being updated. When it is completed, it should provide additional information regarding specific plans for future system improvements.

**C. Town of Coupeville**

The Town of Coupeville operates a municipal water system which serves 670 customers including some areas outside the town. The Town is supplied by two wells located within the incorporated limits and by a well field several miles to the southwest of the Town. The two wells in town have water that is high in total dissolved solids so the Town has installed an electro-dialysis plant to treat the water.

The area currently served by the Town includes shoreline development along Penn Cove to the west of the Town, Camp Casey on the west shore of Whidbey Island, and miscellaneous customers between the well field, Camp Casey, and the Town.

The Town of Coupeville has a current comprehensive water plan which has been approved by the Washington State DOH. The Town has recently completed improvements to its distribution pipeline network within the Town to improve fire protection capabilities, has further developed the capacity of the well field, and improved the delivery capability from that source to the Town.

Coupeville's ability to supply water to new customers and/or to expand its service area is limited by its available source of supply. After completing the improvements mentioned above, Coupeville will be able to serve its present customers with some capacity for growth. Any significant expansion of the system would require the development of new sources. Prospecting for additional groundwater of good quality in the vicinity of Coupeville has not been particularly productive. Therefore, significant expansion of the customer base may require a supply from outside the service area.

**D. Town of Langley**

The Town of Langley operates a municipal water supply system which serves primarily the incorporated limits. Currently, the system has in excess of 600 connections, both commercial and residential services. Like other areas of the Island, there is a high seasonal population.

The supply is from four wells. This includes a new high-production well which was recently developed. It is estimated that the new well has a capacity in the neighborhood of 500 gpm. The water is chlorinated. One of the other wells yields water with high levels of manganese and is presently used as a backup. The total supply from all wells is in excess of 800 gpm. The water system has 275,000 gallons of storage capacity.

The Town of Langley has an approved comprehensive water plan, prepared in 1980, which is in the process of being updated. Future improvements include a line extension to the east which would create a loop for the Sandy Point area and would extend service to the east and southeast within the proposed service area. Additional storage has also been identified as a possible future improvement. The Town's policy is to require annexation of an area as a prerequisite for water service.

4. **SYSTEM CAPABILITIES TO MEET EXISTING AND PROJECTED SERVICE NEEDS**

The water service provided by the Class 1 water systems in Island County can be assessed in relation to local, state, and federal requirements; by comparison with usual standards and practices of water utilities; and by the satisfaction of the water system customers. At the federal level, the Safe Drinking Water Act sets forth standards for water quality in public water systems, and to a limited degree, establishes certain operating responsibilities of the purveyor to its customers. The Safe Drinking Water Act was extensively amended in 1986. Implementation of these requirements will have a significant impact on all public water systems. The Washington State DOH has issued recommendations, rules, and regulations governing public water supply systems which incorporate the Safe Drinking Water Act provisions and expand upon them with specific requirements for the planning, design, construction, and operation of the systems. The following are the principal DOH publications guiding public water supply:

- o Rules and Regulations, Chapter 248-54 WAC detail the requirements of planning, design, water quality, and operations;
- o Sizing Guidelines for Public Water Supplies - an aid for water system design;
- o Planning Handbook - a guide for preparing water system plans.

Island County has adopted ordinances governing new water systems within the County (Chapter 11.01 and 13.03 ICC). In addition, water system standards are being developed and will be adopted by the County and water purveyors as part of this CWSP.

The water supply industry has established standards and practices, with leadership from the American Water Works Association. Unfortunately, much of this information is developed for water systems larger than most of those existing in Island County with professional, full-time staff.

Customer satisfaction is a less clearly defined measure of water service. The Preliminary Assessment of Water System Issues in Island County, prepared by the ICHD as part of the justification for this CWSP includes information on the system operator's perception of their water supply. The ICHD receives frequent complaints regarding water service which is evidence of system problems.

The assessment of the existing water systems can be organized into the general categories: (1) water quality, (2) water quantity, (3) operations and management, and (4) planning. The following is a discussion of the Class 1 water systems in Island County with regard to the above criteria. These are summary comments and do not analyze each system in detail. Some conclusions for the individual Class 1 systems can be drawn by reviewing the information presented in Appendix D.

#### A. Water Quality

The Class 1 systems generally sample the bacteriological and chemical quality of their water supply at the frequency required by the standards. It appears that most systems meet the primary drinking water standards. The Groundwater Resource Evaluation (Appendix K) identifies that iron and manganese are pervasive problems throughout Island County, with 30 percent or more of the systems inventoried exceeding the drinking water guidelines.

The 1986 Amendments to the Safe Drinking Water Act requires EPA to set maximum contaminant levels for a total of 83 substances. When these regulations are issued, the burden of water systems for monitoring and treatment of water supplies may be significantly increased. The 83 listed contaminants include synthetic and volatile organic chemicals, which were not previously regulated in water supplies. The Safe Drinking Water Act will also result in a requirement for disinfection (e.g. chlorination) of groundwater supplies which could also significantly affect the cost of delivering water.

Saltwater intrusion is a central water quality issue in Island County and is the most likely limiting factor in increasing groundwater development. Groundwater in areas of north and central Whidbey is relatively hard. Color and taste are also problems with some supplies related either to the above contaminants or to decomposed organic matter.

The majority of the Class 1 systems do not have chlorination. In addition, a number do not provide the 100-foot radius of protection from potential sources of pollution.

Each system is required to have a backflow prevention policy and to inspect its customers to identify and require correction of any potential cross-connection between sources of pollution and the potable water system. Many water systems have no backflow prevention plans.

#### B. Water Quantity

As shown in Appendix D, it appears that most systems have adequate supply to meet their present requirements and some additional capacity to meet future growth. It should be cautioned, however, that the well capacities are not verified and were either taken from DOH records, or reported by the system operators in the questionnaires or interviews conducted as part of this study. Most wells have been in service for a number of years and since the majority of the systems do not record the water consumption, the true capacity of the well sources is largely unknown.

Oak Harbor overcame its groundwater shortage some years ago by importing water from Anacortes. Coupeville has experienced both shortages and water quality problems and has implemented a water improvement project to try to keep ahead of its demands. Coupeville has experienced difficulty locating a reliable source of good quality groundwater supply. A number of other Class 1 systems have experienced difficulties obtaining an adequate source of supply, particularly those in areas affected by saltwater intrusion.

Many of the water systems in Island County were developed to serve platted subdivisions. Since the platting activity reached its peak during the 1950s and 1960s, the systems date largely from this period. At that time, neither Island County nor DOH had definitive requirements for sizing water system facilities. Both have since adopted standards to ensure that water systems can provide municipal supply and a measure of fire protection. Where subdivisions were platted in phases, the water facilities in each phase are generally adequate only for the phase and additional capacity would be required for subsequent phases.

Most of the rural Class 1 systems in Island County are able to deliver the water demands of the customers but are not adequately sized to provide fire protection. Generally, a looped grid of 6-inch pipeline is necessary in order to deliver minimum fire flows (500 gpm). Even systems with some

6-inch and larger lines have large quantities of smaller diameter pipelines. Some rural customers are therefore minimally protected from the risk of fire.

Storage is necessary for a system to meet extreme peak demands which exceed the source capacity and to furnish fire flows since most sources cannot deliver at the fire flow rate. Storage is also needed to give the system the ability to maintain service if the source of supply is contaminated or damaged, or in case of a power outage. The DOH sizing guidelines require 800 gallons of storage for each service connection in the system.

A precise evaluation of the ability of the source, storage, and distribution system to meet future demands is beyond the scope of this task. It should be addressed by the systems in their individual water system plans.

### C. System Operation and Management

Only a few of the largest water systems have a full-time water system staff. The other systems have either part-time paid staff or, in most instances, volunteer personnel who look after the water system. As shown in Appendix D, most of the Class 1 water systems either have or are in the process of, getting their operators certified.

Most of the Class 1 systems in Island County have no documented operation and maintenance program or emergency response plan. In some systems, maintenance is limited to response to line breaks or other problems with the systems. Where there are no regular maintenance and renewal/replacement programs, and where facilities are aged 20 years or more, it is likely that deterioration is significant.

Another important part of water system operations is financial planning for water system operations and capital improvements. Where water rates have been kept relatively low, and sufficient only to pay for the continued system operation, there may be a financial crisis for the system and its customers in some cases when rehabilitation or repairs are required. Few systems meter individual connections. This would give better information about usage and lend itself to establishing equitable rates.

For the most part, the smaller Class 1 systems in Island County have not expanded in recent years except to add new customers within their service area. Most do not have any interest or intention of expanding their service area. The existing system facilities were installed many years ago by the developer or, in some instances, the property owners shared the

cost. New improvements are limited primarily to repairs and necessary replacements. These are paid either from the rates or through one-time assessments against the customers.

The need for capital improvements can be expected to increase over the next few years as growth continues, as older water system facilities wear out, and as source shortages and water quality problems require significant expenditures. One of the problems facing these systems will be financing the necessary capital improvements. The non-municipal systems have little or no access to state or federal grant monies or low interest loans. Also, because of their small size and the fact that they have no established financial credit, it is doubtful that individually they will have access to the normal channels for borrowing money. In any case, the improvements may require an increase in water rates or merger of a system in order to finance necessary source and storage improvements. Section VI of the CWSP will address a County management support system for water systems in Island County.

#### D. Planning

All expanding water systems within a CWSSA being addressed by a CWSP must prepare a comprehensive water plan, with some exceptions as indicated in the footnote of Exhibit II-1, page II-9. The individual system comprehensive water plans become an element of the CWSP. Plan Content Guidelines are described in Appendix B.

Planning requirements of water systems in Island County are addressed in Section II. As part of the survey of Class 1 water systems, a check was made on which systems had approved comprehensive water system plans. Oak Harbor, Coupeville, and Langley all have approved water system plans. All are in the process of revising and updating their plans. In addition, the Freeland Water District and CWD are involved in preparing comprehensive water system plans. As shown in Table IV-1, few of the other Class 1 water systems have current comprehensive water plans.

One of the purposes of the CWSP is to integrate water system planning with comprehensive land use planning. This is being done within the incorporated cities since they have jurisdiction both over their utilities and land use. At the present time, water system planning in unincorporated areas is coordinated with land use to the extent that the proposed water system is in a proposed subdivision. Here the water system is approved as one of the prerequisites for approving the plat. Engineering plans or comprehensive plans of existing water systems are normally

submitted to DOH for approval and would not necessarily be reviewed by the County. This could be inconsistent with land use planning as there would be no check that future service area extensions follow County land use criteria.

**TABLE IV-1**  
**ISLAND COUNTY**  
**CHARACTERISTICS OF WATER SYSTEMS**  
 (see note below)

<u>Class</u>	<u>No. of Water Systems</u>	<u>No. of Systems with Approved Plans</u>	<u>Population Served</u>	<u>No. of Systems Not Meeting Water Quality Standards</u>	<u>No. of Systems with Inadequate Fire Flow</u>
<b>Area 1-No. Whidbey Is.</b>					
Class 1	6	5	12,988	3	1
Class 2	42	27	3,844	17	31
Class 3	10	1	762	2	7
Class 4	<u>35</u>	<u>16</u>	<u>483</u>	<u>6</u>	<u>26</u>
Subtotal	93	49	18,077	28	65
<b>Area 2 - Central Whidbey</b>					
Class 1	9	7	19,104	4	4
Class 2	35	22	3,993	12	22
Class 3	9	2	673	4	6
Class 4	<u>38</u>	<u>15</u>	<u>417</u>	<u>17</u>	<u>35</u>
Subtotal	91	46	24,187	37	67
<b>Area 3 - So. Whidbey Is.</b>					
Class 1	11	9	8,880	7	4
Class 2	45	25	5,167	23	31
Class 3	19	4	1,565	5	19
Class 4	<u>84</u>	<u>41</u>	<u>1,162</u>	<u>19</u>	<u>76</u>
Subtotal	159	79	16,774	54	130
<b>Total Whidbey Island</b>	<b>343</b>	<b>174</b>	<b>59,038</b>	<b>119</b>	<b>262</b>
<b>Area 4 - Camano Island</b>					
Class 1	6	4	4,025	2	2
Class 2	50	34	4,683	24	24
Class 3	8	3	674	3	4
Class 4	<u>44</u>	<u>23</u>	<u>458</u>	<u>17</u>	<u>34</u>
<b>Total Camano Island</b>	<b>108</b>	<b>64</b>	<b>9,840</b>	<b>46</b>	<b>64</b>
<b>TOTAL ISLAND COUNTY</b>	<b>451</b>	<b>238</b>	<b>68,878</b>	<b>165</b>	<b>326</b>

Source: Preliminary Assessment of Water System Issues in Island County, January, 1985.

Note: The "areas" in this Table are not the same as subareas described elsewhere. The City of Oak Harbor is divided between the North and Central Whidbey areas.

