EXHIBIT 4

SPIC Response to UTC Staff Data Request 10 (excerpts)

SPIC Water System Plan – 2011 (excerpts)

UTC STAFF DATA REQUEST NO. 10:

Please provide a copy of the most recent water system plan filed by Sandy Point Improvement Company with the state Department of Health.

RESPONSE:

Please see attached Documents Produced in Response to Data Request No. 10.

Witnesses knowledgeable about and who can respond to questions concerning the response may include Douglas Campbell, Associated Project Consultants, Inc., P.S., those witnesses identified in response to Data Request No. 21.4, individuals identified in the responses provided and documents produced, and others to be determined.

Prepared by: Joseph A. Rehberger
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Dated: February 1, 2013

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SANDY POINT
IMPROVEMENT COMPANY

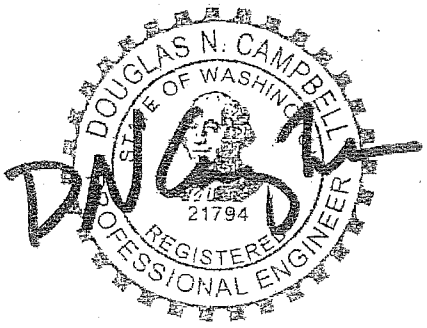
Water System Plan 2011

Water System ID # 76105

Sandy Point Improvement Company
Whatcom County, Washington

ISSUE DATE: July 11, 2011

DRAFT



Prepared by:

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Table of Contents

Section 1. Introduction

Purpose

The purpose of this Water System Plan is to provide a comprehensive water plan for Sandy Point, with a 20-year planning period, to document the system's operational, technical, managerial, and financial capability to achieve and maintain compliance with relevant local, state, and federal plans and regulations, and to demonstrate how the system will address present and future needs in a manner consistent with other relevant plans and regulations. This Water System Plan (WSP) for the Sandy Point Water System will update and replace the previous plan as approved by the Washington State Department of Health (WSDOH).

This Plan complies with WSDOH regulations under WAC 246-290-100, which requires water purveyors to update their water system plans every six years.

Summary Statement

The Sandy Point Water System is a privately owned and managed Group A Public Water System owned by the Sandy Point Improvement Company, located in Whatcom County, WA (See Figure 1, Vicinity Map). The system serves an estimated population of 1,415 full and part-time residents, as well as many recreational users seasonally.

Sandy Point has invested substantial resources in recent years to improving the water system capacity and reliability, including source improvements, water storage management, leak repairs, and service meter replacement. Additionally, Sandy Point has implemented long-term system management procedures to actively monitor and record water use and production, prevent and detect service leaks, reduce water wastage, and track water use trends. These significant improvements to the system's physical and managerial capacity to reliably provide water service have resolved or eliminated many of the issues that in the past have limited the ability of the system to meet the needs for new service connections within the service area.

This Plan provides a description and evaluation of the existing water system, an analysis of current system demands and physical capacity, and planning

estimates of future water demands. The basic findings of the analysis contained in this Plan are summarized as follows:

- The water system has sufficient water supply capacity to meet the demands of existing and future customers at the projected 6-year service demand level, with current water rights and no substantial improvements required.

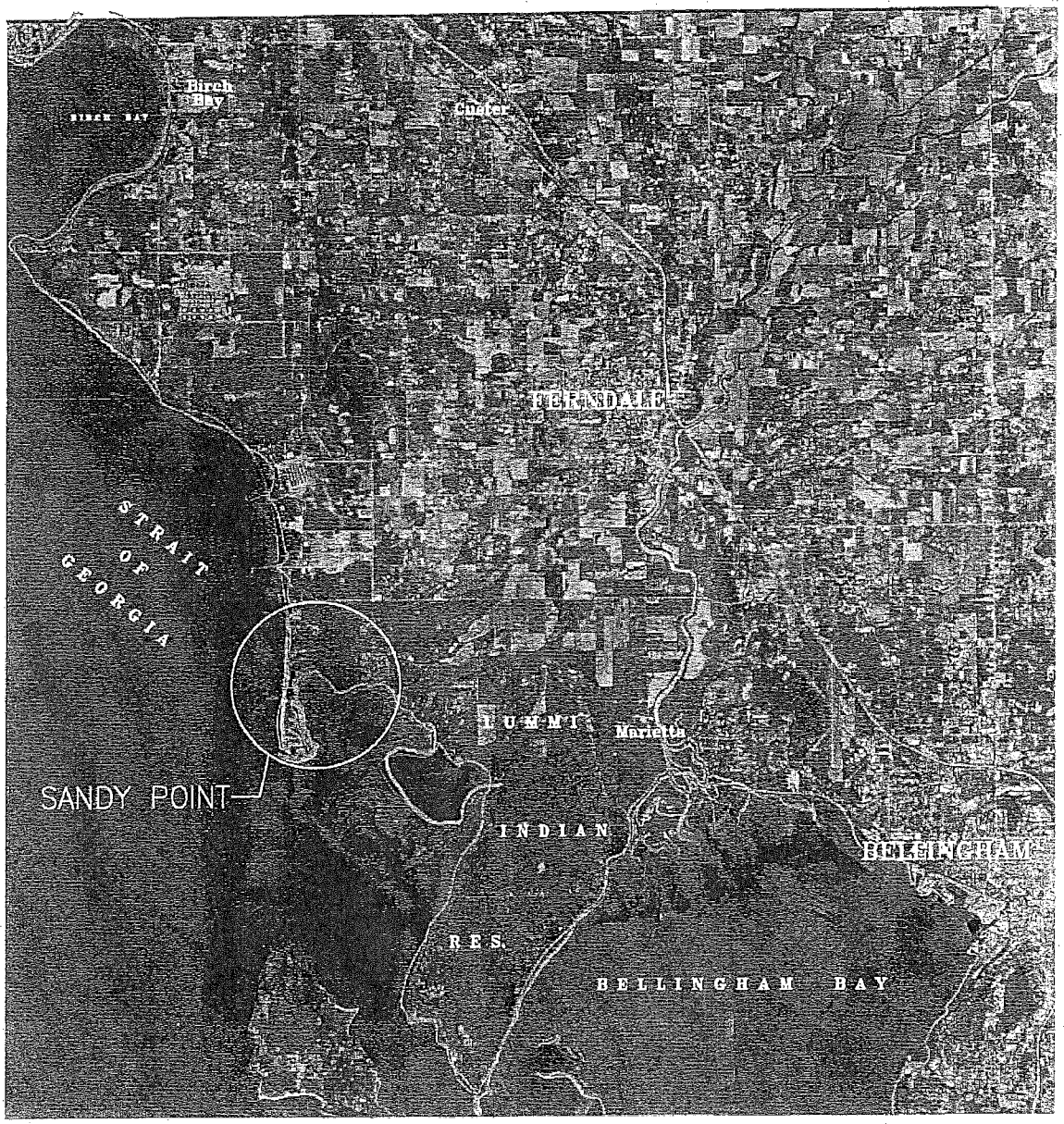
- For the 20-year projected service level, additional water rights or sources would be required for full build-out of the existing residential lots of record within the service area.

The Whatcom County Coordinated Water System Plan requires water systems in its jurisdiction to plan for full service within their designated service areas, and this Plan recommends that the Sandy Point system continue to actively pursue additional water rights or supplemental sources of water for the long-term planning horizon.

This Water System Plan also includes a Water Use Efficiency Plan, Operation and Maintenance Program, a demonstration of financial viability, and a plan for future potential improvements to the water system infrastructure, as well as other required elements of system management.

Associated Project Consultants prepared the previous Sandy Point Improvement Company WSP beginning in 1995 and finally approved in 2002 and again in 2005. This WSP represents the six-year update of the WSP in accordance with WSDOH regulations.

Figure 1



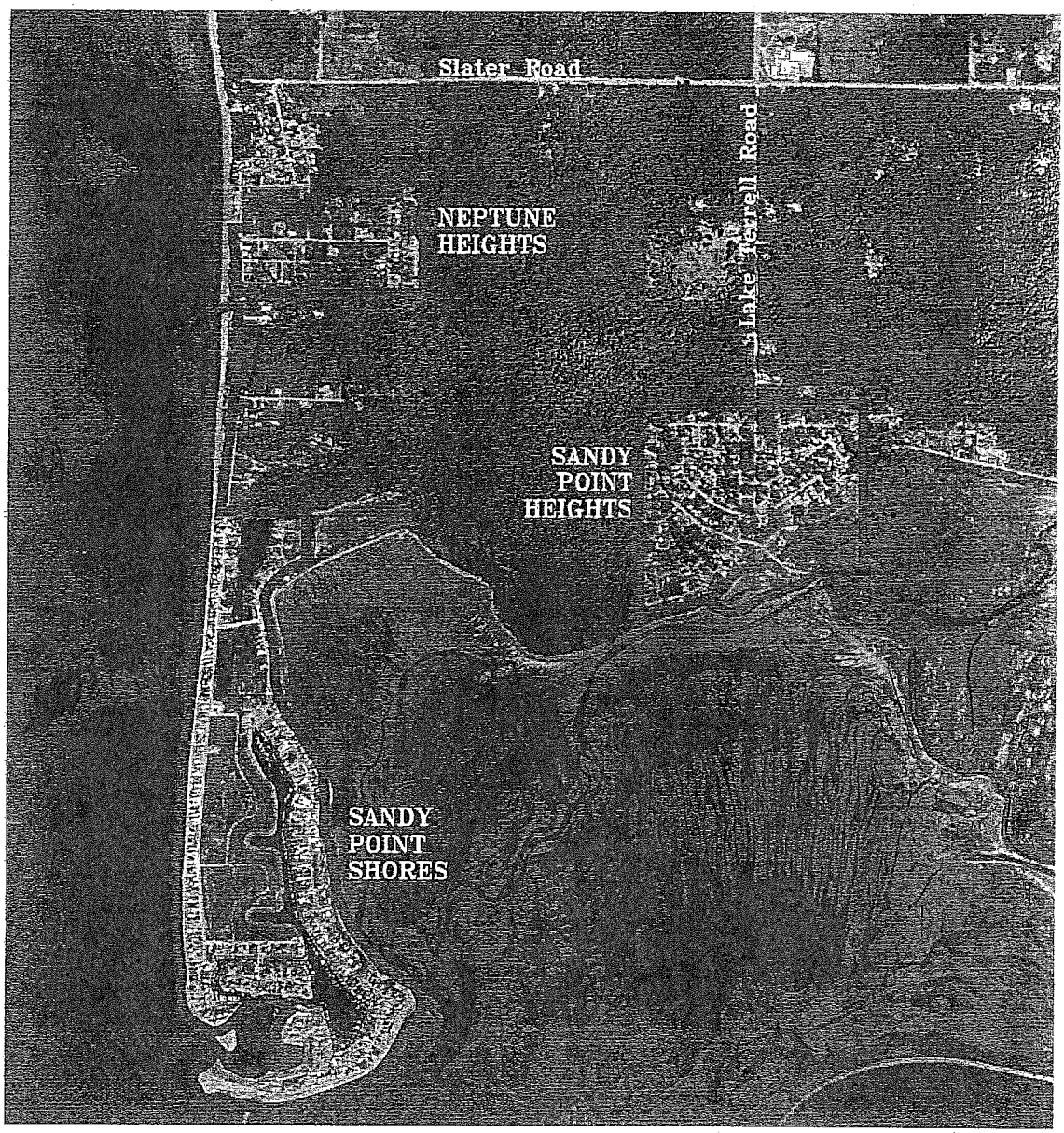
A·P·C
INCORPORATED

VICINITY MAP

NOT TO SCALE

WHATCOM COUNTY, WASHINGTON

Figure 2



AERIAL OVERVIEW MAP

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NORTH

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Section 2. Description of Water System

Sandy Point is a primarily residential and recreational community located in Whatcom County, Washington, approximately 13 miles northwest of the City of Bellingham. Sandy Point borders Lummi Bay to the south and the Strait of Georgia to the west. The residential areas at Sandy Point were subdivided and developed largely in the period from 1950 through 1980 and for the most part ownership is fee land within the Lummi Indian Reservation.

The Sandy Point Water System is a privately owned and managed Group A system, serving a unique mixture of seasonal, recreational, and year-round residents. The system presently serves 602 single-family homes (both full and part-time occupancy), 5 multi-family buildings of 4 dwelling units each, 9 non-residential services, and 131 vacant lots which consume a small amount of water annually for recreational use.

Ownership and Management

The water system is privately owned and managed by the Sandy Point Improvement Company. The system currently keeps a certified water system operator on staff to oversee management and operation of the system.

Sandy Point Board: Jim Kolbo, President

System Operator: Brad Ferris
DOH Certified Operator #6768
8618 Tilbury Rd.
Maple Falls, WA 98266
(360) 961-0562

The water system is financially separate from the other company activities, other than a shared portion of administrative costs for office management, and is financially viable as demonstrated in Section 10 of this WSP.

System History

The Sandy Point Water System and service area was originally organized in the 1960s and early 1970s to serve the plats of record at that time, based on the water availability requirements of Whatcom County.

In the 1970s, agreements with the Indian Health Services and the Lummi Tribe established conditions for service to a limited number of Indian residential service connections along Sucia Drive, and from water main extensions along Lake Terrell Road and Red River Road. These service extensions were disconnected from the system in 2006 when the Lummi Water and Sewer District took over water service to those connections.

A water service moratorium, imposed by the WSDOH and the Department of Ecology (DOE), has essentially been in place from 1993 through the present time. In 1996 the WSDOH approved 39 single-family water connections through an expansion of the capital facilities plan, and in 2005 WSDOH approved 8 additional connections pending the collection of new water use meter data and an updated WSP.

In 2003, Sandy Point completed capital improvements to make Well S05, located on Walltine Road outside the Lummi Reservation area, the primary source well for the water system. This improvement eliminated the source capacity limitations inherent in the wells located in Neptune Heights, which had previously served the system, and substantially increased the service capacity and reliability of the water system.

In 2001 the water system completed a capital improvement project to replace all the valves and service saddles in the system, in addition to replacing defective service meters and locating and repairing distribution system leaks. This improvement has succeeded in a reduction of total distribution leakage (DSL) to less than 3% of the annual water right.

The replacement of all water service meters in 2003, and installation of a system monitoring and meter data collection system completed in 2008, has allowed the collection of daily service meter readings, rapid leak detection, detailed analysis of system usage, prediction of water use trends, and implementation of key water use efficiency measures.

Summary of Completed Capital Improvements

The following list summarizes the major capital improvements made to the water system over the past 15 years:

Year	Description	Cost
1996	Walltine Road Property Acquisition	$ 65,000
2001	190,000 gallon Storage Tank	$ 150,000
2001	Valve and Service Saddle Replacement	$ 600,000
2003	Water Meter Replacement	$ 100,000
2003	Production Well SO5	$ 250,000
2004	Well building facility	$ 250,000

Soft Costs	$ 165,000
Equipment Costs	$ 30,000
Total	**$1,610,000**

Related Plans and Adjacent Water Service

The Whatcom County Coordinated Water System Plan, approved and adopted by Whatcom County in ~~2002~~2000, establishes the procedures for defining service areas, utility service review, and establishes minimum design standards for water systems within Whatcom County. The current Whatcom County Comprehensive Plan as adopted in June 2011 also establishes long-term goals, land use, and planning designations.

The Neptune Beach Water Association, a Group A system serving 81 homes, is adjacent to Sandy Point. There is no physical connection between this system and the Sandy Point Water System.

The Lummi Tribe also owns private wells east of and within Neptune Heights that serve some adjacent tribal lands through separate water system facilities.

Existing Service Area

The Sandy Point service area contains three subareas: Sandy Point Shores (SPS), Neptune Heights (NH), and Sandy Point Heights (SPH). The West Beach area is included in Sandy Point Shores. These areas are further described in Section 3 of this water system plan.

There are approximately 5 existing services located outside the service area, as shown in the water service maps (Appendix A). Sandy Point's policy is to continue providing service to these residences until requested to disconnect based on service provision by the adjacent water providers, either Neptune Beach Water Association or the Lummi Tribe.

At this time, the water system has no plans for expansion of the service area beyond its present boundaries.

Retail Service Area and Duty to Provide Service

The Retail Service Area for the Sandy Point Improvement Company, as defined in WAC 246-290, is the same as the Existing Service Area boundary, and both are referred to in this WSP as the "Service Area."

As required by WAC 246-290-106, Sandy Point has a duty as a municipal purveyor to provide water service within the Retail Service Area if:

(a) It can be available in a timely and reasonable manner;
(b) There are sufficient water rights to provide water service;
(c) There is sufficient capacity to serve the water in a safe and reliable manner as determined by WSDOH;
(d) It is consistent with the requirements of local plans and regulations.

The present Service Area accepted by the Sandy Point Board of Directors is consistent with the Whatcom County Coordinated Water System Plan, and includes only areas currently served by the system (see Figure 3).

Service Policies

Sandy Point has the following policies regarding provision of water service:

- Sandy Point will plan for provision of water service to all legal lots of record, and known planned subdivisions, within the Service Area, and will provide service upon request when permitted by the system capacity and regulatory approvals.

- Provision of water service within the Service Area will be prioritized based on the current water shareholders agreements with Sandy Point.

- New water service connections will not be available to lots outside the Service Area.

- Existing services outside the service area will be disconnected upon request, when those lots are served by another water provider.

- Existing homes within the Service Area that are currently served by exempt private wells will be served by the Sandy Point system upon approval by Ecology of the transfer of a proportionate water right amount to the Sandy Point water rights, and decommissioning of the exempt well.

Sandy Point does not have a service policy in place that currently supports the creation of new lots within the Service Area. Any new subdivision would require a letter of water service availability from Sandy Point, which would not be available at this time. Sandy Point Improvement Company does encourage lot consolidations within the Service Area.

Section 4. Water System Analysis

System Design Standards

The design standards for system analysis and design and construction of improvements for the Sandy Point System are the WSDOH Water System Design Manual, the regulations under WAC 246-290, and applicable standards and regulations of Whatcom County for construction and maintenance of water distribution facilities within public rights-of-way.

Sandy Point has also developed standards for design and construction of water distribution main improvements, which are included in Appendix B.

Water Quality Analysis

Well S05, AKY970, is the permanent primary water source for Sandy Point, and is in full compliance with all state regulatory water quality standards. A copy of the 2010 Consumer Confidence Report is included in Appendix C.

Water quality monitoring is conducted monthly for coliform bacteria and as specified in the WSDOH Water Quality Monitoring Report for other source and distribution system parameters. The well source is disinfected by chlorine injection at the Walltine Road facility, and chlorine residual levels are monitored to maintain a consistent level, as described in Section 8 of this WSP.

Sandy Point has implemented a Wellhead Protection Program, and maintains restrictive use covenants and sanitary control areas around the wells. The water quality and level of protection and monitoring are considered to be excellent.

System Inventory

Primary Source

The primary water source well S05, was drilled in 2003 at the Walltine Road facility owned by Sandy Point. The well was connected to the water system in 2005, under WSDOH Project #76105A along with construction of a building

which houses metering, chlorination, control equipment, and a back-up power generator.

Detailed well construction information, aquifer characteristics, and testing results are included in the *Sandy Point Production Well Construction and Testing Report*, prepared by Robinson and Noble, Inc., in September 2003. This report was considered and accepted by the Department of Ecology in their approval of Well S05 as a additional point of withdrawal under the water rights for Sandy Point (see Section 6),

The well is equipped with a submersible pump sized for a future capacity of 300-gpm, based on the 2003 Robinson and Noble report. However, the flow rate from the well is controlled with a variable-frequency drive (VFD) which limits the pump speed, and limits the production to within the allowable pumping rate of 230.62-gpm based on the existing water rights. The well discharge piping is routed through the well house building for metering and chlorination, and is then connected directly to the top of the 190,000 gallon storage reservoir, located adjacent to the well house on the site.

The well pump is controlled on an "on demand" basis, by water level float switches in the storage reservoir, and by the VFD (set manually) which effectively controls the production flow rate from the well. For the past several years, the well has been operating at a flow rate of 100-gpm during winter months and 150-gpm during the summer months. Water levels in S05, and in the monitoring well S04, are monitored and recorded continuously, and show that both the static water levels and pumping levels (drawdown) have remained stable and constant, with no significant seasonal variation. Typical static water levels for S05 are around 152' below ground surface (bgs), and typical drawdown levels are around 196' bgs. Well S04 varies from around 149' bgs when S05 is static, to 153' bgs when S05 is actively pumping.

Based on the groundwater and aquifer analysis, and well development testing conducted in 2003, as well as the recorded data and experience from over 4 years of continuous use, the well is considered to be very reliable as a long-term source for the water system. A Wellhead Protection Program has been implemented for the Sandy Point wells, which is included in Appendix D of this water system plan.

Secondary Sources

Sandy Point also has three wells located in the Neptune Heights area, S01, S02, and S03, which until 2005 were in service as the primary and backup sources for the water system. Due to arsenic contamination, these wells are now physically disconnected and are on standby for emergency backup use only. The procedure for activating an emergency source well is outlined in Section 8 of this Water System Plan.

Well S04, located on the Walltine Road site, is a monitoring well only, and is not equipped for production purposes.

Treatment

The only treatment used by the water system is simple chlorination mixing, controlled by a dosing pump located in the Walltine Road pump house facility. The water system measures the residual chlorine levels in the water daily, and adjusts the dosage rate seasonally, based on water usage and residence time in the storage tank, to maintain a consistent residual concentration allowed by Health standards.

Storage

Water storage for Sandy Point is provided by two separate tanks, that each serve the areas located below them in the water system by gravity flow. For design and analysis, the total storage available is divided into several components:

(a) Dead Storage (DS) is storage that is not available for use within the service parameters required under WAC 246-290 (for instance, the water pressure may be below minimum requirements).

(b) Operating Storage (OS) is typically the difference between the "pump on" and "pump off" levels in the reservoir.

(c) Equalizing Storage (ES) is provided to meet the system water use demands during peak demand periods when the source flow rate is less than the system demand.

(d) Standby Storage (SB) is provided as a backup for emergencies and situations that affect the water source, such as a well pump failure.

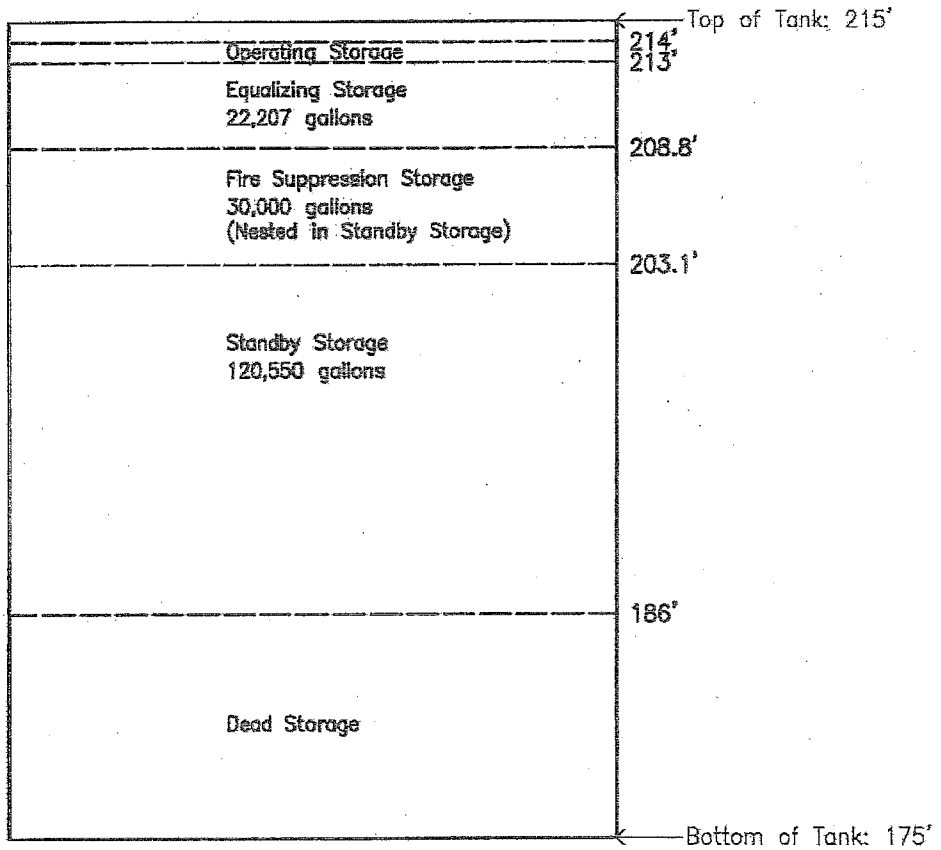
(e) Fire Suppression Storage (FSS) is required to meet fire fighting requirements. For the Sandy Point system, FSS is provided in both of the storage tanks, and is "nested" within the SB storage component of the tanks.

Pressure requirements limiting the elevations of the storage components in the two tanks are considered in the hydraulic analysis (Appendix F), and the volume requirements of the storage for each tank are included in the calculations in Appendix G of this Water System Plan.

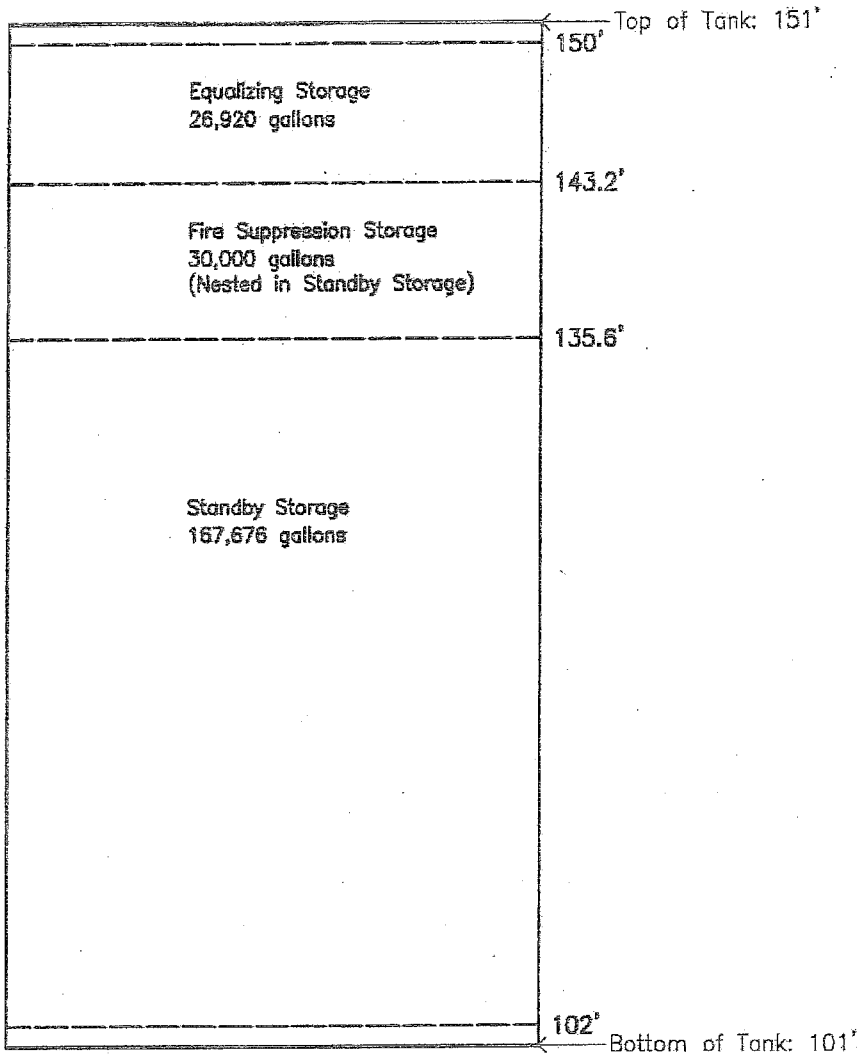
The Upper Tank is a 190,000 gallon concrete storage reservoir located at the Walltine Road facility, adjacent to the primary source Well S05. A 3,300 lineal foot 10-inch diameter transmission main connects the reservoir to the water distribution main system, at the intersection of Lake Terrell Road and Slater Road.

The Lower Tank is a 200,000 gallon concrete storage reservoir located in Neptune Heights, which is filled from the upper pressure zone through a flow regulating valve that continuously feeds the Lower Tank at a controlled rate and keeps it continuously full. The lower tank feeds the Sandy Point Shores area and the lower pressure zone.

The storage component volumes and corresponding tank elevations for each tank are shown in the following schematic diagrams:



Upper Tank Storage Diagram



Lower Tank Storage Diagram

Distribution System

Neptune Heights is gravity fed from the Upper Tank, and is connected to the tank through a 10-inch diameter transmission main. This area has an operating pressure of over 40 psi for all levels of service and can provide fire flows at 500 gpm while maintaining pressures above 20 psi. The distribution mains within Neptune Heights are 4 and 6 inch diameter pipes, sized for the service demands.

Sandy Point Heights is gravity fed from the Upper Tank, through a 10 and 8-inch transmission main in Lake Terrell Road. This area has an operating pressure of over 50 psi for all levels of service and can provide fire flows at 500 gpm while

maintaining pressures above 20 psi. The distribution system is a looped pipe configuration of 4 and 6 inch diameter mains, and 2-inch service lines into the cul-de-sacs.

Sandy Point Shores is gravity fed from the Lower Tank located in Neptune Heights, through 8 and 10 inch diameter transmission and distribution mains. This area has higher static pressures of over 60 psi, and has the highest system pressures and available flow rates in the water system.

The flow balance between the Upper and Lower Zones is maintained by the flow regulating valve that controls the flow rate in the Lower Tank. This control valve is manually set to keep the Lower Tank full, and to allow only a proportionate amount of flow based on the number of service connections in each pressure zone. Depending on build out, adjustments to the valve setting may be needed periodically.

The water system facilities, location of transmission and distribution mains, wells, and storage tanks are shown on the attached Figures 4.1 – 4.5 and a System Schematic is shown on Figure 5.

Summary of System Deficiencies

At this time, no deficiencies are known for the current conditions or for the near future service capacity. However, a number of potential improvements and future projects are discussed in Section 9 of this Water System Plan.

For the long-term, the water system will need approval of additional water rights to meet full service capacity within the service area.

Source Capacity

Water Rights

The limiting factors for the source capacity are the maximum annual and instantaneous water production allowed under the existing water rights through the Department of Ecology. As discussed in the Water Rights Assessment, Section 6 of this WSP, the existing water rights allow withdrawal of up to 143.5 acre-feet of water annually, at a maximum instantaneous rate of 230.62 gallons per minute (gpm).

Capacity Based on Annual Average

The source capacity based on an annual average scenario is as follows:

Reference WSDM Equation 6-3
N = Number of ERUs
V_a = Volume of annual water right
ADD = Average Day Demand (gpd/ERU)

$$N = \frac{V_a}{(365)(ADD)} = \frac{(143.5\ \text{acft})(43560\ \text{cf/acft})(7.48\ \text{gal/cf})}{(365\ \text{days})(156\ \text{gpd/ERU})} = \mathbf{821\ ERUs}$$

Capacity Based on Peak Day Use

The source capacity based on a typical peak day usage is as follows:

Reference WSDM Equation 6-4
N = Number of ERUs
Q_d = Flow rate of source, gpm
t_d = Time that source operates per day, min/day
MDD = Maximum Day Demand, (gpd/ERU)

$$N = \frac{Q_d t_d}{MDD} = \frac{(230.62\ \text{gpm})(1440\ \text{min/day})}{(389\ \text{gpd/ERU})} = \mathbf{854\ ERUs}$$

Treatment Capacity

The primary source well S05 is treated by simple chlorination through a dosing pump system, and does not limit the production capacity of the well. Therefore, the treatment capacity is not a limiting factor for the system physical capacity.

Section 6. Water Rights Assessment

Existing Water Rights

Sandy Point currently holds a water right permit from the Department of Ecology, Permit #G1-25998@2, for Well #S05 (the Walltine Road well) which allows a maximum instantaneous flow rate of 230.62 gpm, and maximum annual withdrawal volume of 143.50 acre-feet per year (ac-ft/yr). This water right also includes Wells #S02 and #S03 (in Neptune Heights) as points of withdrawal; however those wells are currently disconnected from the system and available for emergency use only.

The existing annual consumption for the water system is approximately 79.6 ac-ft/year (for 2010), and the calculated source flow rate required to supply the maximum day demand (MDD) for the current service demand is approximately 144 gpm. Currently, the source well production rate is fixed at 100-gpm in the winter, and 150-gpm in the summer months.

This leaves a remaining 80.6-gpm instantaneous and 63.9 ac-ft/year annual capacity currently remaining in the existing water right, beyond what is currently required to serve the existing connections.

Future Water Right Needs

As discussed in Section 3 of this WSP, based on current demographics and project growth rates, we recommend that Sandy Point should plan for adequate capacity to serve up to 68 additional lots over the next 6 years, based on an assumed 1.8% annually compounded growth rate.

The Whatcom County Coordinated Water System Plan (2000 Update) requires water systems to plan adequate service for the full build-out within their water system boundaries, at the current zoning densities. As discussed in Section 3, full build-out in the Sandy Point service area will encompass a total of approximately 1,036 single and multi-family residential homes. This water system plan recommends planning service for up to a total of 1,036 dwelling units (414 new lots) in the 20-year planning horizon, as well as the non-residential services and other uses.

Based on the physical capacity analysis of the water system (Section 5 of this WSP), the existing water rights will be adequate to serve the 6-year projected growth for the water system. With 68 additional full-time lots, the water system would be using up to 126.6 ac-ft/year annual and 198 gpm instantaneously (about 88% of the existing water right), assuming all full-time use of the single-family connections.

However, the 20-year planning shows that additional water rights will be required for full build out within the service area.

The system should seek approval of new water rights adequate to serve up to a total of 1,036 dwelling units, in addition to the non-residential customers, system leakage, maintenance uses such as flushing, and reserve capacity. Based on current water usage patterns, this would require, at a minimum, total water rights allowing withdrawal of approximately 207.5 ac-ft annually at a maximum rate of 321 gpm.

Pending Water Rights Applications

Sandy Point has two pending applications for additional water rights on file with the Department of Ecology: G1-*12141 for 10 gpm, and G1-*12139 for 100 gpm. Both of these applications have been pending review with Ecology for over 39 years, with a priority date of August 5, 1971.

Approval of these applications would allow an instantaneous withdrawal rate of 340.62 gpm (combined with the existing water right), which would be sufficient to meet the projected future system demands on a peak day basis.

Self Assessment

The water rights and usage information in this section is summarized on the attached water right self assessment Tables 1 – 3; these tables have been updated since the previous assessments that were prepared in 2010. The 2010 assessments were based on the previous WSP approval from WSDOH, and assumed full use of the water right available. The new assessment tables have been revised to use current consumption figures as presented in this WSP. Calculations for the derived future water right needs are included in Appendix G.