

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

REPORT OF EXAMINATION

TO APPROPRIATE PUBLIC WATERS OF THE STATE OF WASHINGTON

- Surface Water (issued in accordance with the provisions of Chapter 117, Laws of Washington for 1917, and amendments thereto, and the rules and regulations of the Department of Ecology.)
- Ground Water (issued in accordance with the provisions of Chapter 263, Laws of Washington for 1945, and amendments thereto, and the rules and regulations of the Department of Ecology.)

PRIORITY DATE November 20, 1991	APPLICATION NUMBER G2-28337	PERMIT NUMBER	CERTIFICATE NUMBER
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NAME Bill Dickson			
ADDRESS (STREET) 35532 SE David Powell Road	(CITY) Fall City	(STATE) Washington	(ZIP CODE) 98024-8803

PUBLIC WATERS TO BE APPROPRIATED

SOURCE Two wells
TRIBUTARY OF (IF SURFACE WATERS)

MAXIMUM CUBIC FEET PER SECOND	MAXIMUM GALLONS PER MINUTE 40	MAXIMUM ACRE-FEET PER YEAR 6.5
QUANTITY, TYPE OF USE, PERIOD OF USE 6.5 acre-feet per year	Multiple domestic supply	Year-round, as needed

LOCATION OF DIVERSION/WITHDRAWAL

APPROXIMATE LOCATION OF DIVERSION/WITHDRAWAL 200 feet south and 900 feet west of the center of Section 10
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LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION) NE 1/4 SW 1/4	SECTION 10	TOWNSHIP N. 18	RANGE, (E. OR W.) W.M. 12W	W.R.I.A. 21	COUNTY Grays Harbor
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RECORDED PLATTED PROPERTY

LOT	BLOCK	OF (GIVE NAME OF PLAT OR ADDITION)
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LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED

Parcel One

That portion of Government Lot 3, Section 10, Township 18 North, Range 12 West of the Willamette Meridian, described as follows:

Beginning at the northwest corner of Lot 1, Block 5, Great Western Beach First Addition according to plat thereof recorded in Volume 6 of Plats, Page 35, records of Grays Harbor County;

Thence south along the westerly line of Lots 1 and 2, a distance of 100.4 feet, more or less, to the southwest corner of said Lot 2;
thence westerly along the southerly line of said Lot 2, Block 5, produced westerly to the intersection of the mean high tide line of the Pacific Ocean;

thence northerly along said mean high tide line 100.04 feet, more or less, to the intersection of the northerly line of said Lot 1, Block 5, produced westerly;
thence easterly along said northerly line produced westerly to the point of beginning;

EXCEPT Seaview Drive;

ALSO EXCEPT therefrom that portion lying west of the "Seashore Conservation Line," as described in Dedication for Public Use recorded march 16, 1970, under Auditor's File No. 231249.

Situate in the County of Grays Harbor, State of Washington.

(Legal Description Continued, Pages 5 & 6)

DESCRIPTION OF PROPOSED WORKS

Well #1: A 6" x 81' well with a 3 horsepower pump

Well #2: A 6" x 65' well with a 3 horsepower pump

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE:

Started

COMPLETE PROJECT BY THIS DATE:

May 1, 1999

WATER PUT TO FULL USE BY THIS DATE:

May 1, 2000

REPORT

I recommend issuance of a permit under Application #G2-28337 based on the following report:

BACKGROUND:

Pursuant to Chapter 90.03 and 90.44 Revised Code of Washington (RCW), Bill Dickson applied for a permit to appropriate public ground water from two wells. A withdrawal rate of 40 gallons per minute (gpm) was requested for multiple domestic supply. The application was assigned a priority date of November 20, 1991.

Legal notice of the proposed appropriation was published on December 12 and 19, 1991, in *The Vidette* of the City of Montesano. No protests were received as a result of this notice.

INVESTIGATIONS:

Jill Van Hulle and I conducted a field investigation of the project site on August 26, 1993. I subsequently reviewed Department of Ecology records of ground-water use and area well logs. Craig Vernon, P.E., was contacted for additional information.

Location and Site Description

The project site is located west of State Route 109, approximately 2.5 miles north of the city of Ocean Shores in Grays Harbor County. The surrounding ocean-front area is moderately developed with single family residences and resort facilities.

Water System Description

The Dickson Water System consists of two wells located approximately 50 feet apart. The wells will be pumped alternately and will serve a maximum of 13 connections.

	<u>Well #1</u>	<u>Well #2</u>
Well depth:	81 feet	65 feet
Casing diameter:	6 inches	6 inches
Static water level:	1 foot	3 feet
Screen depth:	none	55 to 65 feet
Pump size:	3 hp	3 hp
Proposed pumping rate:	40 gpm	40 gpm
Distribution line diameter:	6 inches	

Aquifer Information

Both wells are completed in water-bearing formations consisting of sand and gravel. Well #2 was pump-tested at various rates of up to 112 gpm for one hour and at a constant rate of 68 gpm for the last four hours. Drawdown stabilized at 36.5 feet below the pre-test static level after the first hour.

The Dickson wells are located within a half mile of the ocean, at a surface elevation of approximately 10 feet above mean sea level. Because the wells are completed below sea level, pumping must be managed to prevent the intrusion of seawater into the aquifer.

Report Continued

Chloride levels of 22 mg/L and 24 mg/L were recorded for these wells. Although there is currently no indication of seawater intrusion, I recommend annual monitoring and reporting of conductivity and chloride levels. If chloride levels rise above 100 mg/L, withdrawals may need to be regulated to protect the aquifer.

Effect on Existing Rights

The following records of ground-water use are on file with the Department of Ecology:

- The nearest certificated wells are located approximately 3/4 mile southeast of the subject wells. These water right certificates authorize a combined withdrawal of 107 gpm and 15.2 acre-feet per year. In addition, a water right permit was issued for the Dunes Estates well, located 1/2 mile south.
- Nineteen claims are recorded for Sections 10 and 15.
- Eleven well logs are recorded within a half mile. Wells range in depth from 20 to 340 feet. Some of these wells appear to derive water from the same water-bearing zone as the subject wells.

Due to low well density in this area and the small withdrawal requested under this application, there should be no adverse impacts to neighboring wells as a result of the proposed appropriation.

Water Requirements

The water requirement for domestic supply should not exceed an average of 450 gallons per day per unit or 6.5 acre-feet per year, for 13 homes.

CONCLUSION:

In accordance with Chapters 90.03 and 90.44 RCW, I find there is water available for appropriation from the source in question, that the appropriation as recommended is a beneficial use and should not impair existing rights or be detrimental to public welfare.

RECOMMENDATIONS:

I recommend approval of this application and issuance of a permit to allow appropriation of 40 gpm, 6.5 acre-feet per year, from two wells for multiple domestic supply. The period of use shall be year-round, as needed.

The permit shall be subject to all applicable State laws and regulations and to the following provisions:

Provisions

The water appropriated under this application will be used for public water supply. The State Board of Health rules require public water supply owners to obtain written approval from the Office of Water Supply, Department of Health, Mail Stop 7822, Building 3, Olympia, Washington 98504-7822, prior to any new construction or alterations of a public water supply system.

Installation and maintenance of an access port as described in WAC 173-160-355 is required. An air line and gauge may be installed in addition to the access port.

An approved metering device shall be installed and maintained in accordance with RCW 90.03.360, WAC 508-64-020 through -040 (installation, operation, and maintenance requirements are attached). Meter readings shall be recorded at least monthly.

"Conductivity and chloride concentration analysis shall be performed annually, in the month of August, by a laboratory accredited by the Department of Ecology. The resulting data shall be submitted to the Department of Ecology, Southwest Regional Office. If the chloride concentration exceeds 100 mg/L, the withdrawal rate shall be reduced or the pump setting raised to reduce the chloride level to below 100 mg/L."

This permit is subject to the implementation of the minimum requirements established in the Conservation Planning Requirements, Guideline and Requirements for Public Water Systems Regarding Water Use Reporting, Demand Forecasting Methodology, and Conservation Programs, July 1994, and as revised.

Under RCW 90.03.005 and 90.54.020(6), conservation and improved water use efficiency must be emphasized in the management of the states water resources, and must be considered as a potential new source of water. Accordingly, as part of the terms of this permit, the applicant shall prepare and implement a water conservation plan approved by Department of Health. The standards for such a plan may be obtained from either the Department of Health or the Department of Ecology.

REPORTED BY: Main Peter Date: March 30, 1995

The statutory permit fee for this application is \$20.00.

Report Continued

Parcel Two

That portion of Government Lot 3, Section 10, Township 18 North, Range 12 West of the Willamette Meridian, described as follows:

Beginning at the northwest corner of Lot 6, Block 5, Great Western Beach First Addition according to plat thereof recorded in Volume 6 of Plats, Page 35, records of Grays Harbor County;

thence southerly along the westerly line of said Lot 6, 50.2 feet, more or less, to the southwesterly corner of said Lot 6;

thence westerly along the southerly line of said Lot 6 produced westerly to the intersection of the mean high tide line of the Pacific Ocean;

thence northerly along said mean high tide line, a distance of 50.2 feet, more or less, to the intersection of the northerly line of said Lot 6 produced westerly, thence easterly along said northerly line produced westerly to the Point of Beginning;

EXCEPT Seaview Drive;

ALSO EXCEPT therefrom that portion lying west of the "Seashore Conservation Line," as described in Dedication for Public Use recorded March 16, 1970, under Auditor's File No. 231249.

Situate in the County of Grays Harbor, State of Washington.

Parcel Three

That portion of Government Lot 3, Section 10, Township 18 North, Range 12 West of the Willamette Meridian, described as follows:

Beginning at the northwest corner of Lot 3, Block 5, Great Western Beach First Addition according to plat thereof recorded in Volume 6 of Plats, Page 35, records of Grays Harbor County;

thence south along the westerly line of Lots 3, 4, and 5, a distance of 150.6 feet, more or less, to the southwest corner of said Lot 5;

thence westerly along the southerly line of said Lot 5, Block 5, produced westerly to the intersection of the mean high tide line of the Pacific Ocean;

thence northerly along said mean high tide line, 150.6 feet, more or less, to the intersection of the northerly line of said Lot 3, Block 5, produced westerly;

thence easterly along said northerly line produced westerly to the Point of Beginning;

EXCEPT Seaview Drive;

ALSO EXCEPT therefrom that portion lying west of the "Seashore Conservation Line," as described in Dedication for Public Use recorded March 16, 1970, under Auditor's File No. 231249.

Situate in the County of Grays Harbor, State of Washington.

Parcel Four

That portion of Government Lot 3, Section 10, Township 18 North, Range 12 West of the Willamette Meridian, described as follows:

Beginning at the northwest corner of Lot 7, Block 5, Great Western Beach First Addition according to plat thereof recorded in Volume 6 of Plats, Page 35, records of Grays Harbor County;

thence south along the westerly line of Lots 7, 8, 9, and 10, a distance of 200.8 feet, more or less, to the southwest corner of said Lot 10;

thence westerly along the southerly line of said Lot 10, Block 5, produced westerly to the intersection of the mean high tide line of the Pacific Ocean;

thence northerly along said mean high tide line 200.8 feet, more or less, to the intersection of the northerly line of said Lot 7, Block 5, produced westerly;

thence easterly along said northerly line produced westerly to the point of beginning;

EXCEPT Seaview Drive;

ALSO EXCEPT therefrom that portion lying west of the "Seashore Conservation Line," as described in Dedication for Public Use recorded March 16, 1970, under Auditor's File No. 231249.

Situate in the County of Grays Harbor, State of Washington.

Parcel Five

That portion of Government Lot 3, Section 10, Township 18 North, Range 12 West of the Willamette Meridian, described as follows:

Beginning at the northwest corner of Lot 1, Block 6, Great Western Beach First Addition according to plat thereof recorded in Volume 6 of Plats, Page 35, records of Grays Harbor County;

thence westerly along the northerly line of said Lot 1, Block 6, produced westerly and the south line of Lots 16 and 17, First Addition South to Ocean City, as per plat recorded in Volume 5 of Plats, Page 72, records of Grays Harbor County produced westerly to the intersection of the mean high tide line of the Pacific Ocean;

thence southerly along said mean high time line to the intersection of the northerly line of Lot 1, Block 5, Great Westerly Beach First Addition, as per plat recorded in Volume 6 of Plats, Page 35, records of Grays Harbor County produced westerly;

thence easterly along said northerly line of Lot 1 produced westerly to the northwest corner of said Lot 1;

thence northerly to the southwest corner of Lot 2 of Block 6;

thence continuing northerly along the west line of Lots 1 and 2, Block 6, to the Point of Beginning;

EXCEPT Seaview Drive;

ALSO EXCEPT therefrom that portion lying west of the "Seashore Conservation Line," as described in Dedication for Public Use recorded March 16, 1970, under Auditor's File No. 231249.

Situate in the County of Grays Harbor, State of Washington.