File NR CG2-111759CL
WR Doc ID 5441065

DEPARTMENT OF ECOLOGY
State of Washington

State of Washington
REPORT OF EXAMINATION
FOR CHANGE TO A WATER CLAIM

Added or Changed Point of Withdrawal/Diversion

PRIORITY DATE	WATER RIGHT NUMBER
1906	CG2-111759CL

MAILING ADDRESS	SITE ADDRESS (IF DIFFERENT)
YMCA CAMP SEYMOUR 9725 CRAMER RD KPN GIG HARBOR WA 98329	

Total Quantity Authorized for Withdrawal or Diversion

WITHDRAWAL OR DIVERSION RATE	UNITS	ANNUAL QUANTITY (AF/YR)
30	GPM	11.5

Total withdrawals or diversions from all sources must not exceed the total quantity authorized for withdrawal or diversion listed above.

Purpose

PURPOSE	WITHDRAWAL OR DIVERSION RATE ADDITIVE	WITHDRAWAL OR DIVERSION RATE NON-ADDITIVE	UNITS	ANNUAL QUANTITY (AF/YR) ADDITIVE	ANNUAL QUANTITY (AF/YR) NON-ADDITIVE	PERIOD OF USE (mm/dd)
Domestic multiple	30		GPM	11.5		01/01 - 12/31

IRRIGATED ACRES ADDITIVE	IRRIGATED ACRES NON-ADDITIVE	PUBLIC WATER SYSTEM INFORMATION WATER SYSTEM ID	PUBLIC WATER SYSTEM INFORMATION CONNECTIONS
		10953	

Source Location

COUNTY	WATERBODY	TRIBUTARY TO	WATER RESOURCE INVENTORY AREA
PIERCE	GROUNDWATER	N/A	15-KITSAP
PIERCE	GROUNDWATER	N/A	15-KITSAP

SOURCE FACILITY/DEVICE	PARCEL	WELL TAG	TWP	RNG	SEC	QQ Q	LATITUDE	LONGITUDE
Well 1	0121061002	AEF246	21N	01E	06	NE NW	47.3425	-122.7281
Well 2A	0121061002	BCA395	21N	01E	06	NE NW	47.3446	-122.7290

Datum: NAD83/WGS84

Place of Use (See Attached Map)

PARCELS (NOT LISTED FOR SERVICE AREAS)

0121061002

LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE

Beginning at the intersection of Government meander line with line between Government Lots 4 & 5,

thence along meander line 41'/2° west to intersect a line parallel with a 432 feet south of north line of section, thence east to a point 1199.88 feet east of west line of Government Lot 4, thence north 432 feet to north line of Section, thence east to corner of Government Lot 3; thence north 26° west to a point north 48° 30' east 6.58 chains to beginning. Together with tidelands abutting south 4.84 chains of Government lot 3 except roads. Easement of record: Section 6 Township 21 North Range 1 EWM.

Proposed Works

Well 1: 6 inches in diameter and 90 feet deep
Well 2A: 6 inches in diameter and 159 feet deep

Development Schedule

BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
Started	Completed	In Full Use

Measurement of Water Use

How often must water use be measured?	Monthly
How often must water use data be reported to Ecology?	Upon Request by Ecology
What volume should be reported?	Total Annual Volume
What rate should be reported?	Annual Peak Rate of Withdrawal (gpm)

Provisions

Wells, Well Logs and Well Construction Standards
All wells constructed in the state must meet the construction requirements of WAC 173-160 titled "Minimum Standards for the Construction and Maintenance of Wells" and RCW 18.104 titled "Water Well Construction". Any well which is unusable, abandoned, or whose use has been permanently discontinued, or which is in such disrepair that its continued use is impractical or is an environmental, safety or public health hazard must be decommissioned.

All wells must be tagged with a Department of Ecology unique well identification number. If you have an existing well and it does not have a tag, please contact the well-drilling coordinator at the regional Department of Ecology office issuing this decision. This tag must remain attached to the well. If you are required to submit water measuring reports, reference this tag number.

Installation and maintenance of an access port as described in WAC 173-160- 291(3) is required.

Measurements, Monitoring, Metering and Reporting
An approved measuring device must be installed and maintained for each of the sources identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use", WAC 173-173, which describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology for modifications to some of the requirements.

Chloride Monitoring
Ecology recommends that Camp Seymour test for chlorides and conductivity in April and September each year. This information will help manage withdrawals from your wells to reduce the likelihood that

seawater intrusion will occur in the area. The chemical analysis must be performed by a state-accredited laboratory. If chloride concentrations show an increasing trend, preventative actions may be needed.

If Camp Seymour elects to do routine sampling, the following protocol is recommended. This information must be gathered at the same time to be of value.

- Samples should be tested for both chloride and conductivity.
- Depth to static water level in the well must be recorded. Please make sure the pump isn't actively pumping and the water level has stabilized. This will establish the water level in the well relative to marine water.
- Time when data is collected and whether it corresponds to high tide or low tide.

If Camp Seymour elects to collect this data, submit the annual monitoring reports to Ecology by January 31st of each year. This information is important to us as it contributes to data that measures the overall health of near-shore aquifers.

Department of Health Requirements
Prior to any new construction or alterations of a public water supply system, the State Board of Health rules require public water supply owners to obtain written approval from the Office of Drinking Water of the Washington State Department of Health. Please contact the Office of Drinking Water at Southwest Drinking Water Operations, 243 Israel Road S.E., PO Box 47823, Tumwater, WA 98504-7823, (360) 236-3030.

Water Use Efficiency
The water right holder is required to maintain efficient water delivery systems and use of up-to-date water conservation practices consistent with RCW 90.03.005.

Issuance of a Certificate of Change
Ecology will issue a Certificate of Change for the proposed change to this Water Right Claim following the 30-day appeal period for this ROE has passed.

Schedule and Inspections
Department of Ecology personnel, upon presentation of proper credentials, will have access at reasonable times, to the project location, and to inspect at reasonable times, records of water use, wells, diversions, measuring devices and associated distribution systems for compliance with water law.

Findings of Facts
Upon reviewing the investigator's report, I find all facts, relevant and material to the subject application, have been thoroughly investigated. Furthermore, I concur with the investigator that water is available from the source in question; that there will be no impairment of existing rights; that the purpose(s) of use are beneficial; and that there will be no detriment to the public interest.

Therefore, I ORDER approval of Application No. CG2-111759CL, subject to existing rights and the provisions specified above.

Your Right To Appeal

You have a right to appeal this Order to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of the Order.

File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.

- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.
- You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	**Department of Ecology** Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel RD SW Ste 301 Tumwater, WA 98501	**Pollution Control Hearings Board** PO Box 40903 Olympia, WA 98504-0903

Signed at Olympia, Washington, this 19th day of September 2013.

Michael J. Gallagher

Michael J. Gallagher, Section Manager

For additional information visit the Environmental Hearings Office Website: http://www.eho.wa.gov. To find laws and agency rules visit the Washington State Legislature Website: http://www1.leg.wa.gov/CodeReviser.

INVESTIGATOR'S REPORT
Tammy Hall, Department of Ecology
Water Right Control Number CG2-111759CL

BACKGROUND

This report serves as the written findings of fact concerning Application of Change to a Water Claim No. CG2-111759CL.

On September 19, 2012, Ed Bressette, Jr., representing YMCA Camp Seymour filed *Application for Change of Water Right* CG2-111759CL.

Groundwater Claim 111759 claims use of 30 gallons per minute (gpm) and an unspecified annual quantity for drinking, sanitation, and filling the camp's swimming pool.

Table 1. Attributes of the Existing Water Right and Proposed Change

	Existing	***Proposed***
Name	Tacoma-Pierce County YMCA Camp Seymour	Same
Priority Date	1906	
Change Application Date		9/19/2012
Instantaneous Rate (gallons per minute, gpm)	30	Same
Annual Quantity (acre-ft per year, ac-ft/yr)	Not specified	12
Purpose(s) of Use	Drinking, sanitation, swimming pool filling	Domestic supply
Period of Use	Year-round	Same
Place(s) of Use	Beginning at the intersection of Government meander line with line between Government Lots 4 & 5, thence along meander line 41'/2° west to intersect a line parallel with a 432 feet south of north line of section, thence east to a point 1199.88 feet east of west line of Government Lot 4, thence north 432 feet to north line of Section, thence east to corner of Government Lot 3; thence north 26° west to a point north 48° 30' east 6.58 chains to beginning. Together with tidelands abutting south 4.84 chains of Government lot 3 except roads. Easement of record: Section 6 Township 21 North Range 1 EWM.	Same

Table 2. Proposed Sources of Withdrawal

Source Name	*Parcel*	*Twp*	*Rng*	*Sec*	*QQ Q*	*Latitude*	*Longitude*
Well 1	0121061002	21N	01E	06	NE NW	47.3425	-122.7281
Well 2A	0121061002	21N	01E	06	NE NW	47.3446	-122.7290

Table 3. Existing Source of Withdrawal

Source Name	*Parcel*	*Twp*	*Rng*	*Sec*	*QQ Q*	*Latitude*	*Longitude*
Well 1	0121061002	21N	01E	06	NE NW	47.3425	-122.7281
Well 2	0121061002	21N	01E	06	NE NW	47.3447	-122.7301

Legal Requirements for Proposed Change

The following is a list of requirements that must be met prior to authorizing the proposed change.

Public Notice

RCW 90.03.280 requires notice of a water right application be published once a week for two consecutive weeks in a newspaper of general circulation in the county where the water is withdrawn. An original public notice for this project proposal was posted in *The Gateway,* published in Kitsap County beginning March 3 and ending March 13, 2013. The Department of Ecology did not receive any protests or letters of concern in response to this notice.

State Environmental Policy Act (SEPA)

A SEPA determination evaluates if a proposed withdrawal will cause significant adverse environmental impacts. A SEPA threshold determination is required for:

1) Surface water applications for more than 1 cubic feet per second (cfs). For agricultural irrigation, the threshold increases to 50 cfs, if the project isn't receiving public subsidies.
2) Groundwater applications requesting more than 2,250 gpm.
3) Projects with several water right applications where the combined withdrawals meet the conditions listed above.
4) Projects subject to SEPA for other reasons (e.g., the need to obtain other permits that are not exempt from SEPA).
5) Applications that are part of several exempt actions that collectively trigger SEPA under WAC 197-11-305.

This application does not meet any of these conditions and is categorically exempt from SEPA.

Water Resources Statutes and Case Law

RCW 90.03.380(1) states a water right put to beneficial use may be changed. The point of diversion, place of use, and purpose of use can be changed, as long as other water rights will not be harmed or injured.

The Washington Supreme Court has held that when Ecology processes an application for change to a water right, they are required to make a tentative determination. A tentative determination establishes the extent and validity of the claim or water right to verify that it is eligible for change. (*R.D. Merrill v. PCHB* and *Okanogan Wilderness League v. Town of Twisp.)*

Same Body of Public Groundwater

RCW 90.44.100 allows Ecology to amend a ground water permit(or claim) to allow the user to construct a replacement or additional well at a new location outside of the location of the original well, or to change the manner or place of use of the water, if:

(a) For replacement wells, the user must discontinue use of the original well and properly decommission the original well.
(b) For additional wells, use from the original well can continue, but the combined total withdrawal from all wells must not enlarge the right.
(c) Other existing rights must not be impaired.
(d) The wells must draw from the *same body of public groundwater*. Sources in the same *body of public groundwater are*:
- Hydraulically connected.
- Have a common recharge (catchment) area.
- Share a common flow regime.

INVESTIGATION

The material reviewed in support of this application included the following:

- The State Ground Water Codes, administrative rules, and policies.
- Department of Ecology's Water Right Tracking System (WRTS) database.
- Topographic and local area maps.
- Notes from a site visit on June 27, 2013.
- Hydrogeology memo written by Tammy Hall, licensed hydrogeologist, with Water Resources Southwest Regional Office, dated July 25, 2013.

Project Location and Site Description

YMCA Camp Seymour is situated in Glen Cove on the northern part of the Key Peninsula. Camp Seymour occupies roughly 150 acres, consisting of forested hills and half a mile of saltwater shoreline.

See Attachment #1

Intent of Proposed Change

The intent of CG2-111759Cl is to add Well 2A as a source.

Construction of a new dining hall in 2012 made it necessary to drill a new well (Well 2A) and decommission Well 2.

This *Application for Change* was filed on September 19, 2012 after Camp Seymour submitted a Source Approval to Washington Department of Health Southwest Drinking Water Operations to add Well 2A to their water system. Because Well 2A was not a specified point of withdrawal under 111759CL, it was necessary to file a water right change application.

A temporary permit, issued by Ecology September 20, 2012, allows Camp Seymour to use Well 2A until this *Application for Change* is processed. Until the temporary permit was issued, the camp was served by two wells, Wells 1 and 2.

History of Water Use

Camp Seymour has been in operation since 1906 and provides service to two permanent residences, cabins and tent houses, several group buildings (lodge, dining hall, shower house, marine biology center) and a swimming pool. The camp operates year round and serves an average of 250 campers a day. Summer is peak season when as many as 400 campers attend the camp daily.

Over the past 100 years, the camp's water use has varied. In the past, the camp irrigated orchards of fruit trees and grass fields. These high demand uses have discontinued and the camp continues to make a conscious effort to conserve water, installing a living center complex that re-uses wastewater to irrigate the camp's athletic fields.

A meter was installed in 2003. Water use data from 2008 to 2012 shows the highest use was roughly 11.5 ac-ft in 2012.

Proposed Use

The purpose of use will not change. Camp Seymour will continue to use water consistent with their current uses.

Other Rights Appurtenant to the Place of Use

Camp Seymour has no water rights other than Claim No. 111759CL.

Hydrologic/Hydrogeologic Evaluation

The Key Peninsula is in northwestern Pierce County, at the southern end of the Puget Lowland, in WRIA 15 (Kitsap Basin). The subsurface in the area consists of unconsolidated and semi-consolidated glacial sediments. These deposits are between 1,200 to 2,000 feet thick (Jones, 1996).

In the Camp Seymour area Vashon-age glacial till is exposed at the ground surface (Logan, 2006). Till is typically an unsorted mixture of cobbles and pebbles in a silt and clay matrix. Although till can be highly compacted, it can also contain interbedded sand and gravel which can serve as aquifers.

Site Conditions

The original water well was drilled as part of several improvements to the camp that took place from 1918 to 1938. This well served the camp until Wells 1 and 2 were drilled in the 1970's.

The original Camp Seymour well and Well 1 are roughly 100 feet apart and situated in a ravine occupied by an unnamed perennial stream. This stream originates from runoff from the hill above the camp and shallow groundwater discharges from permeable seams in the Qvt where it intersects the land surface.

Well 1 is drilled in the ravine, roughly 15 feet above the stream. A well report for Well 1 is not available. Anecdotal information indicates it was drilled in 1970 to a depth of 90 feet.

Well 2 was located about 150 feet from marine water and served as a second well for the water system from 1977 until it was decommissioned during the summer of 2012 when the new dining hall was built..

Well 2A was drilled to replace Well 2 in May 2012. Well 2A is drilled at the top of the hill that overlooks Glen Cove, roughly 50 feet in elevation above Well 2 and 500 feet east.

See Attachment #1

The construction details of Well 1, Well 2, and Well 2A are summarized in Table 4.

Table 4. Construction details of Camp Seymour's wells

	Well 1[1]	Well 2[2]	Well 2A[3]
Well Tag	AEF246	AEF247	BCA395
Date Drilled	7/22/1977	1970	5/11/2012
Well elevation (ft above mean sea level, msl)	85	40	90
Well diameter (inches, in)	6	6	6
Completed depth (ft below ground surface, bgs)	90	62	159
Elevation, ft mean sea level (msl)	+5	-20	-69
Screened intervals (ft bgs)	Unknown	50-52	149-154 (14-slot)
Ft above msl			154-159 (20-slot)
Hydrologic unit	Vashon Aquifer/ Qvt	Same	Same
Static water level		3 ft below top of casing	41 ft below top of casing
Date measured	Unknown	8/2/1977	5/11/2012
Pumping capacity (gpm)	25	30	40

[1]Sentry, WDOH database.
[2]Driller's well report. Well 2 was decommissioned 8/16/2012.
[3]Driller's well report.

Seawater Intrusion

The Camp Seymour wells are situated less than 500 feet from the marine waters of Glen Cove in Puget Sound. Because both wells are completed near sea level in an aquifer directly discharging to marine water, over -pumping can potentially cause seawater intrusion. For this reason, Ecology recommends routine chloride monitoring to ensure chloride levels remain stable. If levels begin rising, the well operator should consider decreasing the instantaneous pumping rate (gpm) from the wells or pumping only at high tide.

According to the federal Environmental Protection Agency, the recommended the Secondary Maximum Contaminant Level (SMCL) allowed according to Federal standards for chloride is 250 mg/l.

Impairment Considerations

The proposed change will not affect area water users. The amount of water being pumped will not change. The proposed new well to be added, Well 2A is situated less than 500 feet from Well 2 and completed in the same body of public groundwater.

Public Interest Considerations

Approving the proposed change in CG2-111759CL is not contrary to the public interest.

Consideration of Protests and Comments

No protests were filed against this application.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend that this proposed change to 11759CL be approved in the amounts and within the limits listed below, subject to the provisions listed above.

Purpose of Use and Authorized Quantities

The amount of water recommended is a maximum limit and the water user may only use that amount of water within the specified limit that is reasonable and beneficial:

- 30 gpm
- 11.5 acre-feet per year
- Domestic supply

Points of Withdrawal:

- Well 1 and Well 2A BOTH in NE¼, NW¼, Section 6, Township 21 North, Range 1 E.W.M.

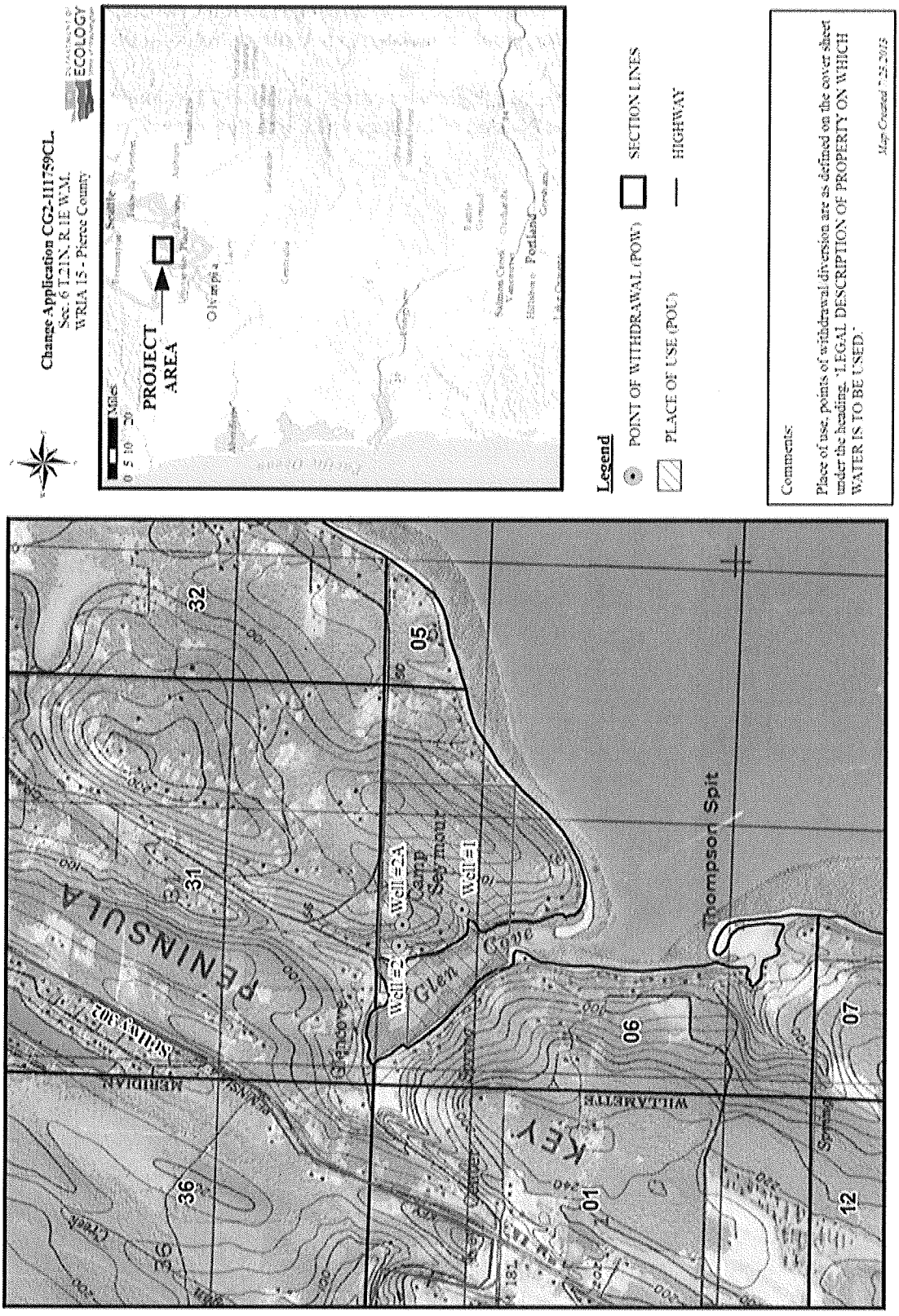
Place of Use

- As described on Page 1 of this Report of Examination.

Tammy Hall — *Date* 9/19/2013

If you need this publication in an alternate format, please call Water Resources Program at (360) 407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

ATTACHMENT 1



References

Jones, M.A. 1996, Thickness of Unconsolidated Deposits in the Puget Sound Lowland, Washington and British Columbia, a Contribution of the Regional Aquifer-System Analysis Program: US Geological Survey.

Logan, R.L.; Walsh, T.J.; Troost, K.G., 2006, Geologic Map of the Fox Island 7.5-minute Quadrangle, Pierce County, Washington: Washington Division of Geology and Earth Resources Geologic Map GM-63.