File NR G2-30602
WR Doc ID 5404999

DEPARTMENT OF
ECOLOGY
State of Washington

State of Washington

REPORT OF EXAMINATION FOR WATER RIGHT APPLICATION

PRIORITY DATE	WATER RIGHT NUMBER
9/6/2012	G2-30602

MAILING ADDRESS	SITE ADDRESS (IF DIFFERENT)
TWANOH COMMUNITY CLUB PO BOX 4249 BREMERTON WA 98312	201 E TWANOH TIDES DR BELFAIR WA 98528

Quantity Authorized for Withdrawal or Diversion

WITHDRAWAL OR DIVERSION RATE	UNITS	ANNUAL QUANTITY (AF/YR)
50	GPM	12.5

Purpose

PURPOSE	WITHDRAWAL OR DIVERSION RATE			ANNUAL QUANTITY (AF/YR)		PERIOD OF USE (mm/dd)
	ADDITIVE	NON-ADDITIVE	UNITS	ADDITIVE	NON-ADDITIVE	
Municipal Supply	50		GPM	12.5		01/01 - 12/31

IRRIGATED ACRES		PUBLIC WATER SYSTEM INFORMATION	
ADDITIVE	NON-ADDITIVE	WATER SYSTEM ID	CONNECTIONS
0	0	89800	

Source Location

COUNTY	WATERBODY	TRIBUTARY TO	WATER RESOURCE INVENTORY AREA
MASON	GROUNDWATER		14-KENNEDY-GOLDSBOROUGH

SOURCE FACILITY/DEVICE	PARCEL	WELL TAG	TWP	RNG	SEC	QQ Q	LATITUDE	LONGITUDE
Well S01	222205102900	AHB691	22N	02W	20	SWSE	47.3776	-122.9575
							Datum: NAD83/WGS84	

Place of Use (See Attached Map)

PARCELS (NOT LISTED FOR SERVICE AREAS)

LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE

The place of use of this water right is the service area described in the most recent Water System Plan/Small Water System Management Program approved by the Washington State Department of Health, so long as the water system is and remains in compliance with the criteria in RCW 90.03.386(2). RCW 90.03.386 may have the effect of revising the place of use of this water right.

Proposed Works

A 6-inch diameter well drilled to a depth of 127 feet equipped with a 5-HP pump. An above-ground 900-gallon reservoir tank, serving water through 3-inch main and 2-inch distribution lines to residences.

Development Schedule

BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
Started	Completed	April 1, 2019

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 shall 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 shall be decommissioned.

All wells shall 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 shall 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 shall 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. WAC 173-173 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.

Water use data shall be recorded monthly and maintained by the water right holder for a minimum of five years. Data shall be promptly submitted to Ecology, upon request.

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.

Non-Additive to Confirmed Claims
The water use authorized under this filing shall be considered non-additive to any water rights confirmed for Claim No. 012960 as a result of a general adjudication through Superior Court, should adjudication be undertaken.

Proof of Appropriation
The water right holder shall file the notice of Proof of Appropriation of water (under which the certificate of water right is issued) when the permanent distribution system has been constructed and the quantity of water required by the project has been put to full beneficial use. The certificate will reflect the extent of the project perfected within the limitations of the permit. Elements of a proof inspection may include, as appropriate, the sources, system instantaneous capacity, beneficial use, annual quantity, place of use, and satisfaction of provisions.

Schedule and Inspections
Department of Ecology personnel, upon presentation of proper credentials, shall 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 purposes of use is beneficial; and that there will be no detriment to the public interest.

Therefore, I ORDER approval of Application No. G2-30602, 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 25th day of March 2014.

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
Application for Water Right -- TWANOH COMMUNITY CLUB
Water Right Control Number G2-30602
Marie Peter, Department of Ecology

This report serves as the written findings of fact concerning Water Right Application Number G2-30602.

BACKGROUND

On September 6, 2012, Twanoh Community Club filed Application G2-30602 to obtain a permit to appropriate groundwater for multiple domestic supply of an existing community. The original application requested 12.15 acre-feet per year (ac-ft/yr) withdrawal rate of 7.53 gallons per minute but was later amended to reflect the actual peak instantaneous quantity of 50 gpm used by this system.

The Twanoh Community Club water system is located off of State Route 106, approximately seven miles southwest of Belfair in Mason County, within the Kennedy-Goldsborough Water Resource Inventory Area, WRIA 14.

Table 1 Summary of Requested Water Right

Applicant Name:	Twanoh Community Club
Date of Application:	9/6/2012
Place of Use	The place of use of this water right is the service area described in the most recent Water System Plan/Small Water System Management Program approved by the Washington State Department of Health, so long as the water system is and remains in compliance with the criteria in RCW 90.03.386(2). RCW 90.03.386 may have the effect of revising the place of use of this water right.

County	Waterbody	Tributary To	WRIA
Mason	Groundwater	Hood Canal	14-Kennedy-Goldsborough

Purpose	Rate	Unit	Ac-ft/yr	Begin Season	End Season
Municipal Supply	50	GPM	12.15	01/01	12/31

Source Name	Parcel Number	Well Tag	Twp	Range	Sec	QQ Q	Latitude	Longitude
Well S01	222205102900	AHB691	22N	02WW M	20	SW SE	47.3776	-122.9575

GPM=Galllons per minute; Ac-ft/yr = Acre-feet per year; Sec = Section; QQ Q = Quarter-quarter of a section; WRIA = Water Resource Inventory Area; WWM = West of the Willamette Meridian; Datum: NAD83/WGS84.

Public Notice

RCW 90.03.280 requires that notice of a water right application be published once a week, for two consecutive weeks, in a newspaper of general circulation in the area where the water is to be stored, diverted and used. A public notice was originally advertised in the *Shelton-Mason County Journal* on October 4 and 11, 2012. A new public notice for the amended application was published in the *Shelton-Mason County Journal* on October 17, 2013 and October 24, 2013. No protests or letters of concern were received in response to these notices.

State Environmental Policy Act (SEPA)

A water right application is subject to a SEPA threshold determination (i.e., an evaluation whether there are likely to be significant adverse environmental impacts) if any one of the following conditions is met:

- It is a surface water right application for more than 1 cubic feet per second, unless that project is for agricultural irrigation, in which case the threshold is increased to 50 cubic feet per second, so long as that irrigation project will not receive public subsidies;
- It is a groundwater right application for more than 2,250 gallons per minute;
- It is an application that, in combination with other water right applications for the same project, collectively exceed the amounts above;
- It is a part of a larger proposal that is subject to SEPA for other reasons (e.g., the need to obtain other permits that are not exempt from SEPA);
- It is part of a series of exempt actions that, together, trigger the need to do a threshold determination, as defined under WAC 197-11-305.

Because this application does not meet any of these conditions, it is categorically exempt from SEPA and a threshold determination is not required.

INVESTIGATIONS

My review of this application included, but was not limited to, research and review of the following:

- Department of Ecology's Water Rights Tracking System database and Well Log Image System.
- Water system information from the Department of Health's Sentry database.
- Field notes and observations from a site visit on September 26, 2013.
- On-site and telephone communications with Rich Bichler, Brian Yelland and Art Moyer of Twanoh Community Club.
- Memorandum dated February 11, 2014, by licensed Ecology staff hydrogeologist, Tammy Hall.

Location

The Twanoh Community Club water system service area is situated on a north-facing slope overlooking Hood Canal. Residential and commercial development in this area is concentrated along the shoreline, north of State Route 106. The area immediately up-gradient and south of the service area is forested. Resource parcels farther south were recently logged.

The Twanoh Community Club well and most of its service area are located south of State Route 106 along Twanoh Tides Drive. The system also serves three waterfront lots in the Belland Plat, north of the

highway. The uppermost lots in the service area, including the well parcel, abut the northwestern boundary of the Creekside Drive zone of the neighboring Twanoh Falls Water System service area.

The Twanoh Community Club well is located in a pump house at the upper end of the service area at 201 E. Twanoh Tides Drive. The elevation at the well site is approximately 220 feet above mean sea level. A small unnamed stream flows through the ravine near the pump house and discharges to Hood Canal within a thousand feet of the well site.

Well and water system information

The 6-inch diameter well was drilled in 1958 to a depth of 127 feet deep. The well is equipped with a 5 horsepower submersible pump capable of producing 50 gallons per minute. It is tagged with Unique Well Identification Number AHB691. There is no well report on file for this well.

The well pumps to a 900-gallon storage tank which delivers water on demand via gravity flow to the residences through 3-inch and 2-inch mainlines. A source meter is installed on the well and withdrawals are recorded every other week. Total system consumption and distribution system leakage are evaluated twice a year.

Proposed Use

The Twanoh Community Club water system is an existing Group A transient non-community public water system with 9 full-time and 19 part-time or seasonal residential connections. The water system service area consists of 31 lots. Residences and lot sizes are relatively small. Although the water system is essentially built-out, the service area includes three undeveloped lots that may eventually be developed. Full build-out may also result in a higher proportion of full-time residents.

Twanoh Community Club's use of water for domestic supply qualifies under RCW 90.03.015 as being for municipal water supply purposes. In addition to the nine full-time residential connections, the system provides residential use of water for a non-residential (seasonal) population of 25 people for at least 60 days a year, during the summer months.

Water Demand

Twanoh Community Club requests 12.15 acre-feet per year for domestic supply of 31 residences. This amounts to an average of 350 gallons per day per residence at full build-out. This is a reasonable allocation to meet the domestic supply needs of a community of this size with both full-time and seasonal residences. The annual quantity on the final water right certificate may be reduced based on actual metered use when the community is determined to be fully built-out.

Other Rights Appurtenant to the Place of Use

Water Right Claim No. 012960 was filed for domestic supply of Twanoh Community Club on March 20, 1972. The claim indicates that groundwater was first used in April, 1963. Use of up to 50 gallons per minute and 36 acre-feet per year is claimed. However, it does not pre-date the groundwater code and likely does not represent a valid water right.

General Area Hydrogeology

The Twanoh Community Club is at the northern edge of the Mason County glacial drift plain in southern Puget Sound. The glacial drift plain was formed from repeated glacial episodes in the region, the most recent glacial episode ended about 13,500 years ago (Vashon). This glacial drift overlies a sequence of

older glacial and non-glacial sediments (Pre-Vashon). Both Vashon and Pre-Vashon age deposits can serve as aquifers for groundwater wells in the area.

Glacial drift is a term used to collectively describe deposits left by glaciers. Glacial deposits originate in different environments, consist of different types of materials, and have different properties. A typical glacial sequence consists of the following from youngest (closest to the surface) to oldest (deepest):

- Glacial moraine deposits. In the southwestern part of Mason County, where the Vashon Glacier terminated, glacial moraines were left as the glacier melted. These moraine deposits consist of coarse, poorly sorted deposits of cobbles, gravel and sand. The deposits infer that little sorting occurred by melt water streams and therefore were likely dumped by melting glaciers. The topography over most of these materials is hummocky and irregular and ponds and swamps fill the depressions.

- Recessional outwash deposits. Recessional outwash was deposited by meltwater streams flowing from the glacier as it receded. As a result, these deposits are generally poorly sorted sand and gravel, which often may include cobbles and boulder-sized materials. Recessional outwash generally becomes finer grained upward within the unit and exhibit moderate to high permeabilities. Recessional outwash deposits typically serve as aquifers.

- Glacial till. These deposits are typically poorly sorted and predominately consist of silty sand and gravel, but may also contain boulders. Till was deposited directly by the glacier as a result of grinding and compaction and behave as confining units that impede groundwater flow. Drillers' logs refer to tills as hardpan.

- Advance outwash deposits. Advance outwash was deposited by the advancing glacier by streams and is similar in characteristics to recessional outwash. These deposits typically consist of well-graded sand and gravel and generally become finer grained with depth. Although the deposits are permeable, some portions are often dense and compacted as a result of the over-riding glacial ice. Advance outwash deposits can typically serve as aquifers. Vashon advance outwash deposits are widespread in occurrence and can be considered an important aquifer in the area.

A review of nearby wells of comparable depths indicates that this well is likely completed in pre-Vashon age deposits and intercepts groundwater that would otherwise discharge to Hood Canal.

Impairment Considerations

Impairment is an adverse impact on the physical availability of water for a beneficial use that is entitled to protection. A water right application may not be approved if it would:

- Interrupt or interfere with the availability of water to an adequately constructed groundwater withdrawal facility of an existing right. An adequately constructed groundwater withdrawal facility is one that (a) is constructed in compliance with well construction requirements and (b) fully penetrates the saturated zone of an aquifer or withdraws water from a reasonable and feasible pumping lift.
- Interrupt or interfere with the availability of water at the authorized point of diversion of a surface water right. A surface water right conditioned with in-stream flows may be

impaired if a proposed use or change would cause the flow of the stream to fall to or below the in-stream flow more frequently or for a longer duration than was previously the case.

- Interrupt or interfere with the flow of water allocated by rule, water rights, or court decree to in-stream flows.
- Degrade the water quality of the source to the point that the water is unsuitable for beneficial use by existing users (e.g., via sea water intrusion).

Potential Impacts to Existing Water Rights

The Department of Ecology's Water Rights Tracking System indicates the following neighboring water rights with sources within one half mile of the Twanoh Community Club wells:

- Twanoh Falls Water System has two wells, 67-foot Well 1 and 58.5-foot Well 2, located within the NW¼ SW¼ of Section 21, T. 22 N., R. 2 W.W.M., approximately 0.4 mile northeast of the Twanoh Community Club well. Wells 1 and 2 are authorized withdrawals of 100 gpm and 157.2 ac-ft/yr under Certificate G2-00697.

  Twanoh Falls has two additional wells, Wells 3 and 4, located more than ½ mile southeast of the Twanoh Community Club well, within the SE ¼ SW ¼ Section 21. Withdrawals from Wells 3 and 4 are authorized under Water Right Certificates G2-27273 and G2-25026.

  The Twanoh Falls community is fully built out at 397 services and is authorized withdrawals of 176 ac-ft/yr from under all rights.

- Ground Water Right Certificate G2-26107 was issued to Ted Francis for single domestic supply. The source is a 258-foot deep well located in the NE ¼ of the SE ¼ of Section 20, approximately ¼ mile northeast of the Twanoh Community Club well.

- Surface Water Right Certificate S2-00352 was issued to Earl Bluhm for domestic supply. The source under this right is a small stream located approximately 1,000 feet west of the Twanoh Community Club well. The stream is an independent tributary which discharges directly to Hood Canal, parallel to surface and groundwater flow at the Twanoh Community Club well site.

- The sources under Surface Water Right Certificates 6994 and S2-20464 are approximately ½ mile west of the Twanoh Community Club well and are also independent tributaries with parallel flow draining directly to Hood Canal.

- Twenty-six surface and ground water right claims are recorded in Section 20, mostly for general domestic supply.

In addition to the above water rights and claims, Ecology's Well Log database indicates that there are a number of permit-exempt domestic wells in this area. Ten wells are recorded within the same section as the Twanoh Community Club well (Section 20, T. 22 N., R. 02 W.W.M.). Only one of these, a 60-foot well (ABV913), is recorded within the same quarter quarter-section as the Twanoh Community Club well.

The Department of Health's Sentry database shows that there is also a small Group B public water system known as "HHS" located within the SW ¼ of the SW ¼ of Section 20, approximately ¼ mile west

of the Twanoh Community Club well. The HHS well, AKS203, is 120 feet deep, and serves three connections.

There is also an unspecified quantity of tribal water rights in existence. These include rights that are reserved out for future use. Tribal rights are senior to all other water rights.

Withdrawals from the Twanoh Community Club well are highly unlikely to impair existing rights. All wells in this area intercept groundwater that discharges directly to Hood Canal or emerges from the hillside as springs before entering Hood Canal. Although many surrounding wells draw water from depths comparable to the Twanoh Community Club well, they will not be affected by the proposed withdrawals because they are located either up-gradient or cross-gradient to the groundwater flow tapped by this well.

Although the Twanoh Community Club well is located within a quarter mile of the shoreline, it is completed approximately 93 feet above sea level and is not at risk of inducing seawater intrusion. Withdrawals will not impair existing rights through degradation of water quality.

Water Availability

For water to be available for appropriation, it must be both physically and legally available.

Physical availability

For water to be physically available for appropriation there must be ground or surface water present in quantities and quality and on a sufficiently frequent basis to provide a reasonably reliable source for the requested beneficial use or uses. For over five decades, high quality drinking water has continuously been available from the Twanoh Community Club well in the quantities requested.

Legal availability

The Twanoh Community Club water system is located within WRIA 14B, the South Shore Hood Canal area, which is addressed in the Water Resource Inventory Area (WRIA) 16 Watershed Management Plan adopted by the WRIA 16 Planning Unit on May 11, 2006. The Watershed Plan encourages the development of public water systems over new permit-exempt wells.

WAC 174-514, the WRIA 14 Instream Resource Protection Program, closes two South Shore area streams, Alderbrook Creek and Twanoh Creek, to future consumptive appropriations from May 1 through October 31. Due to distance and direction of groundwater flow, the proposed withdrawals will not impact flows in either of these streams. Furthermore, because groundwater tapped by the Twanoh Community Club well discharges almost immediately to Hood Canal, withdrawals do not have the potential to affect stream flows in any of the nearer Hood Canal tributaries, including the small tributary that flows through the service area.

The Twanoh Community Club well has been operating for over five decades. Groundwater has consistently been available from the well, year-round, with no reports of impairment of neighboring ground or surface water users. Because this system is almost fully built out, future adverse impacts are also very unlikely.

Water is physically and legally available from the source, as requested.

Beneficial Use

The proposed use of water for multiple domestic/ municipal supply purposes is a beneficial use in accordance with RCW 90.54.020(1).

Public Interest Considerations

The Twanoh Community Club water system is a municipal water system providing water to an existing residential community. Approval of this water right allows this system to continue serving the community with a safe and reliable water supply and discourages the proliferation of private wells, consistent with local watershed plan recommendations.

Approval of this application will not be detrimental to the public interest.

Consideration of Protests and Comments

No protests were filed against the approval of this application.

Conclusions

I find that:

- Water is available for appropriation from the Twanoh Community Club in the amounts requested.
- The use of water for domestic or municipal supply is a beneficial use.
- Existing rights, including in-stream flows set by rule, will not be impaired as a result of approving this application.
- The change will not be detrimental to the public interest.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend that this request for a water right be approved in the amounts and within the limitations listed below and subject to the provisions listed above

Purpose of Use and Authorized Quantities

The amount of water recommended is a maximum limit. Twanoh Community Club is authorized to beneficially use only the amount of water reasonably needed for municipal supply within the specified limits:

Maximum instantaneous rate:	50 gallons per minute
Annual quantity:	12.5 acre-feet per year
Purpose:	Municipal supply
Point of withdrawal:	SW¼, SE¼, Section 20, T. 22 N., R. 2 W.W.M.
Season of use:	Year-round, as needed

Place of Use:

The place of use of this water right is the service area described in the most recent Water System Plan/Small Water System Management Program approved by the Washington State Department of Health, so long as the water system is and remains in compliance with the criteria in RCW 90.03.386(2). RCW 90.03.386 may have the effect of revising the place of use of this water right.

Marie C Peh 3/25/14

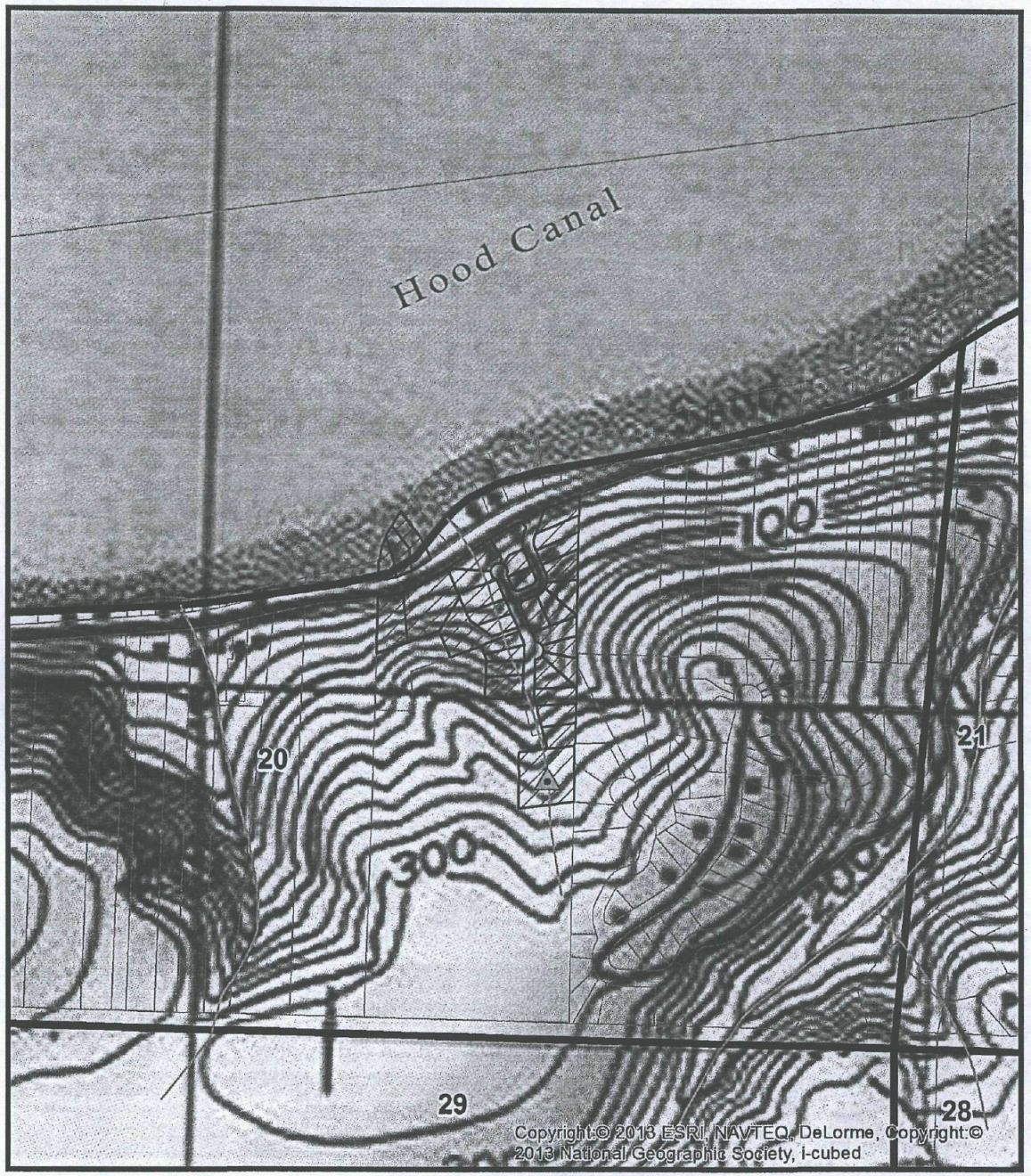
Report Writer Date

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.

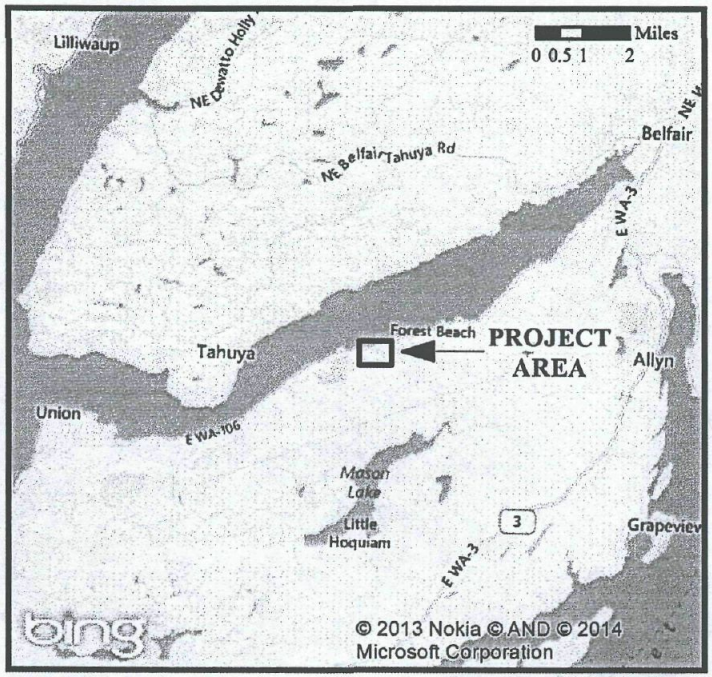
Selected References

Derkey, Robert E., Hehemann, Nicholas J. and Alldritt, Katelin, 2009, Geologic Map of the Lake Wooten 7.5-minute Quadrangle, Mason County, Washington, Washington Department of Natural Resources, July 2009

Twanoh Community Club
Water Right Application G2-30602,
Sec. 20, T. 22N., R. 2 W.W.M.
WRIA 14 - Mason County



Basemap - ESRI US TOPO MAP



Basemap - ESRI Bing Maps

Legend

- PLACE OF USE (POU)
- POINT OF WITHDRAWAL (POW)
- PARCEL
- SECTION
- STREAM

Comments:

The Washington State Department of Ecology does not warrant, guarantee, or make any representations regarding the use of, or results from the use of the data in terms of correctness, accuracy, reliability, or otherwise.

Map Created 1/29/2014

DEPARTMENT OF ECOLOGY State of Washington

0 250 500 1,000 Feet

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