



State of Washington
**REPORT OF EXAMINATION
FOR WATER RIGHT APPLICATION**

PRIORITY DATE
1/2/2009

WATER RIGHT NUMBER
G1-28602

MAILING ADDRESS
TAYLOR REALTY LLC
PO BOX 2086
FRIDAY HARBOR WA 98250

Quantity Authorized for Withdrawal

WITHDRAWAL RATE	UNITS	ANNUAL QUANTITY (AF/YR)
52	GPM	11.7

Purpose

PURPOSE	WITHDRAWAL RATE			ANNUAL QUANTITY (AF/YR)		PERIOD OF USE (mm/dd)
	ADDITIVE	NON-ADDITIVE	UNITS	ADDITIVE	NON-ADDITIVE	
DOMESTIC MULTIPLE	52		GPM	11.7		01/01 - 12/31

IRRIGATED ACRES		PUBLIC WATER SYSTEM INFORMATION	
ADDITIVE	NON-ADDITIVE	WATER SYSTEM ID	PROPOSED CONNECTIONS
N/A	N/A	UNKNOWN	39

Source Location

COUNTY	WATERBODY	TRIBUTARY TO	WATER RESOURCE INVENTORY AREA
SAN JUAN	GROUNDWATER	N/A	2-SAN JUAN

SOURCE	PARCEL	WELL TAG	TOWNSHIP	RANGE	SECTION	QUARTER QUARTER	LATITUDE	LONGITUDE
Well #3	351021001000	BAK-452	35N	03W	10	NE¼ NW¼	N 48.5473	123.0546 W
Well #4	351021001000	BAK-454	35N	03W	10	NE¼ NW¼	N 48.5476	123.0533 W

Datum: NAD83/WGS84

Place of Use (See Attachment 1)

PARCELS (NOT LISTED FOR SERVICE AREAS)

351021001000

LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE

A portion of the property referenced in Statutory Warranty Deed recorded under Auditor's File Number 2000 0719005, records of San Juan County, Washington more particularly described as follows:

PARCEL 1:

That portion of Section 10, Township 35 North, Range 3 West, W.M., in San Juan County, Washington lying northerly of Beaverton Valley Road.

EXCEPT the Northwest quarter of the Northwest quarter; the Northwest quarter of the Northeast quarter; the Southwest quarter of the Northwest quarter; the Northwest quarter of the Southwest quarter; and the East 20 feet of the Northeast quarter of the Southeast quarter thereof.

PARCEL 2:

The West 18 acres of the Northwest quarter of the Northwest quarter, and the Southwest quarter of the Northwest quarter all in Section 11, Township 35 North, Range 3 West, W.M., in San Juan County, Washington.

TOGETHER WITH all reservations, restrictions, covenants and easements of record.

Proposed Works

Two 6-inch wells that are 620 feet deep (well 3) and 700 feet deep (well 4) with 19- and 39-foot sealed surface casings, respectively, pumps to meet system demand, serving a residential water system.

Development Schedule

BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
Begun	March 1, 2025	March 1, 2035

Measurement of Water Use

How often must water use be measured and recorded?	Monthly
How often must water use data be reported to Ecology?	Upon Request by Ecology

Provisions

Pumping Rate

Given the corresponding drawdown effects at wells 3 and 4 during their respective pump tests, the wells should operate on an alternating basis with infrequent, peak-time simultaneous pumping and pump at 52 gpm only in emergency situations.

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, 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.

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.

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 source(s), system instantaneous capacity, beneficial use(s), annual quantity, place of use, and satisfaction of provisions.

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 Northwest Drinking Water Operations, 20435 72nd Ave S, Suite 200, K17-12, Kent, WA 98032-2358, (253) 396-6750.

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.

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 purpose of use is beneficial; and that there will be no detriment to the public interest.

Therefore, I ORDER approval of Application No. G1-28602, 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).

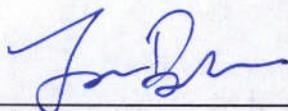
To appeal you must do the following within 30 days of the date of receipt of the Order:

- 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 Bellevue, Washington, this 12th day of February 2015.



Tom Buroker, 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

Ria Berns, Department of Ecology
 Application for Water Right – Taylor Realty LLC
 Water Right Control Number G1-28602

BACKGROUND

This report serves as the written findings of fact concerning Water Right Application Number G1-28602. The application seeks a continuous, year-round water supply for a proposed Group A water system on San Juan Island. Thirty-nine (39) connections are proposed and the project will be built in phases over 20 years.

Table 1. Summary of Requested Water Right

Applicant Name:	Taylor Realty LLC
Date of Application:	01/02/2009
Place of Use	<p>A portion of the property referenced in Statutory Warranty Deed recorded under Auditor's File Number 2000 0719005, records of San Juan County, Washington more particularly described as follows:</p> <p>PARCEL 1: That portion of Section 10, Township 35 North, Range 3 West, W.M., in San Juan County, Washington lying northerly of Beaverton Valley Road.</p> <p>EXCEPT the Northwest quarter of the Northwest quarter; the Northwest quarter of the Northeast quarter; the Southwest quarter of the Northwest quarter; the Northwest quarter of the Southwest quarter; and the East 20 feet of the Northeast quarter of the Southeast quarter thereof.</p> <p>PARCEL 2: The West 18 acres of the Northwest quarter of the Northwest quarter, and the Southwest quarter of the Northwest quarter all in Section 11, Township 35 North, Range 3 West, W.M., in San Juan County, Washington.</p> <p>TOGETHER WITH all reservations, restrictions, covenants and easements of record.</p>

County	Waterbody	Tributary To	WRIA
San Juan	Groundwater	N/A	2-San Juan

Purpose	Rate	Unit	Ac-ft/yr	Begin Season	End Season
Domestic Multiple	52	GPM	11.7	01/01	12/31

Source	Parcel	Well Tag	Township	Range	Section	Quarter Quarter	Latitude	Longitude
Well #3	351021001000	BAK-452	35N	03W	10	NE NW	48.5473	-123.0546
Well #4	351021001000	BAK-454	35N	03W	10	NE NW	48.5476	-123.0533

Legal Requirements for Approval of Appropriation of Water

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 county or counties where the water is to be stored, diverted and used. Notice of this application was published in the *Journal of the San Juan Islands* on March 11 and March 18, 2009.

Consultation with the Washington Department of Fish and Wildlife

Ecology must give notice to the Washington Department of Fish and Wildlife (WDFW) of applications to divert, withdraw or store water. On December 2, 2014, Ecology requested comment from WDFW's Steven Boessow. WDFW submitted no comments concerning the proposed withdrawal.

State Environmental Policy Act (SEPA)

Groundwater withdrawals are subject to a SEPA threshold determination (i.e., an evaluation of whether there are likely to be significant adverse environmental impacts) if the water right application proposes withdrawals greater than 2,250 GPM. Because this application does not meet this condition and because the application is not part of a larger project that would trigger SEPA, the application is considered to be categorically exempt from SEPA and a threshold determination is not required.

INVESTIGATION

This investigation draws on an October 7, 2013 site visit to the Taylor Property with hydrogeologist John Rose as well as: (1) follow-up communications with Dan Drahn, project engineer, and Gregor Miller, project developer, (2) analysis of a 2008 hydrogeologic project report produced by GeoEngineers, (3) water rights research, and (4) the resources listed in the References section.

Hydrologic/Hydrogeologic Evaluation

Geological Overview of the San Juan Islands

Bounded by the Strait of Juan de Fuca to the south, Rosario Strait to the east, Haro Strait to the west, and Boundary Pass to the north, the San Juan Islands archipelago has a complex geologic history. Radiometric dating indicates that the San Juan Islands were accreted to North America sometime prior to the Late Jurassic Period. However, the Late Cretaceous period most dramatically shaped the Islands' bedrock geology. A major suture, known as the Haro Thrust zone, formed during the late Cretaceous Period and joined the Wrangellia terrane of Vancouver Island and the San Juan-Cascade nappes (Brandon, 1989). The San Juan Islands consist of a thick sequence of Late Cretaceous thrust faults, referred to as the San Juan thrust system, containing a diverse group of rocks (terranes) ranging from early Paleozoic to middle Cretaceous in age. A terrane is a fault-bounded package of rocks with a distinctive stratigraphy, structure and geologic history. Formed in compressed tectonic zones (e.g., subduction zones), a nappe is a large sheet of rock with a horizontal or sub-horizontal axial plane that has moved due to faulting or folding.

Wrangellia is a large allochthonous terrane that underlies most of Vancouver Island and parts of Alaska. On Vancouver Island it is characterized as a coherent Paleozoic-to-Lower Jurassic stratigraphic sequence that is dominantly volcanic. The thrust system straddles the southeastern edge of the Wrangellia terrane of Vancouver Island. The San Juan-Cascade nappes are northwest-trending belts that are bounded by the Skagit metamorphic core. In the San Juan Islands, five terranes (Haro, Turtleback, Deadman Bay, Garrison, and Decatur) were thrust and stacked upon each other and on top of the Wrangellia Terrane. The San Juan-Cascade nappes are thought to represent an old accretionary system formed by the successive arrival of these far-traveled terranes (Brandon, 1989).

The bedrock geology of the San Juan Islands has been greatly modified by the three major glacial advances, including the Double Bluff Glaciation (earliest), Possession Glaciation, and Fraser Glaciation (latest) (Russell et al, 1975). However, erosion beneath the glaciers was likely guided by the topography formed by the fracture and fault zones already in existence.

San Juan Island Hydrogeology

San Juan Island is the second largest of the San Juan Islands and has an aerial extent of about 55 square miles. About 40 percent of San Juan Island is overlain by Quaternary glacial deposits, but only as thin, discontinuous sheets, with thicknesses generally less than 30 feet. The glacial deposits, where saturated, generally yield large quantities of water to wells, but the bedrock is nonporous, and water occurs primarily in joints and fractures (Russell et al, 1975).

The underlying geology in the vicinity of the Taylor Property is part of the Late Jurassic Constitution Formation (referred to as KJmm and Jc), which includes ophiolitic plutonic rocks, mid-oceanic-ridge basalt, ribbon chert, and arc-derived mudstone-sandstone (Brown et al, 2007). The Constitution Formation is the predominant geologic formation on San Juan Island. Overlaying the Constitution Formation at the Taylor Property site are two glacial formations, the Pleistocene Era Qgd and Qgdm_{es} formations (DNR, Washington Interactive Geologic Map). The Qgd is undifferentiated glacial drift from the Fraser glaciation. The Qgdm_{es} formation underlies the Qgd and consists of glaciomarine drift from the Everson Glaciomarine Drift (Dragovich et al, 2002).

The property elevation ranges from 100 to 160 feet mean sea level (MSL). The mean annual precipitation for the Taylor Properties site is 30-32 inches/year. Average annual recharge to the ground water system for this area ranges from 4 to 7 inches (Orr, 2002).

Proposed Use and Basis of Water Demand

The Taylor Property development, located in San Juan Island's Beaverton Valley, proposes 39 domestic connections on 257 acres owned by the applicant. The project will be completed in phases. During the first phase, the applicant will seek Department of Health approval for a Group A system and initiate the short platting process. This phase is expected to begin within the next two years. The applicant expects to build 4 houses per year once the short platting process is complete. The proposed homes are large and some outdoor irrigation is likely. Submersible pumps in each well will have a combined capacity to meet the maximum allowable instantaneous quantity (52 gpm). The water will be directed to a 40,000-gallon storage tank and distributed throughout the system through 2- and 4-inch water lines.

Water System and Well Test Results

The applicant drilled four bedrock wells in Fall 2008. Wells 1 (well ID # BAK-449) and 2 (well ID # BAK-450) had low productivity and were used as monitoring wells for the well 3 and 4 pump tests. Wells 3 and 4 had significantly higher yields and will serve as the production wells for the development. GeoEngineers, the applicant's hydrogeological consultant, oversaw the drilling and well testing, assessed the current aquifer conditions, and evaluated saltwater intrusion risks.

Well 3

Well 3 (well ID BAK-452) is 6-inches in diameter and 620 feet deep, located in the NE¼ NW¼ of Section 10, Township 35 North, Range 3 West. The casing is completed to 19 feet below surface. Step-rate and constant-rate pump tests were completed on September 26 and October 15 – 18, respectively. The pumping rate averaged 29 gpm during the pump test and after 72 hours, the well drawdown was 71.34 feet with a specific capacity of 0.4 gpm per foot of drawdown. The well reached 42 percent recovery in 1.5 minutes and 91 percent recovery in less than five days. The pump test was not conducted for a long enough period to reach full recovery.

Well 4

Well 4 (well ID BAK-454) is 6-inches in diameter and 700 feet deep, located in the NE¼ NW¼ of Section 10, Township 35 North, Range 3 West. The casing is completed to 39 feet below surface. Both step-rate and constant-rate pump tests were completed on October 6, 2008 and October 23 – 25, respectively. The well was pumped at a rate of 26.5 gpm. After 72 hours, the well drawdown was 103.77 feet with a specific capacity of 0.26 gpm per foot of drawdown. The well reached 48 percent recovery within 30 minutes and 93 percent recovery after three days. This recovery pattern is similar to that of well 3.

Located 347 feet from one another, wells 3 and 4 served as monitoring wells for one another in addition to wells 1 and 2. During the pump test for well 3, GeoEngineers found that there was no observable drawdown interference at well 1, some drawdown interference observed at well 2 (10.78 feet), and a more significant drawdown interference at well 4 (18.5 feet) (Purdy, 2008). During the well 4 pump tests, GeoEngineers similarly found no drawdown interference at well 1. The drawdown interference at well 2 was 15.77 feet and 16.27 feet at nearby well 3 (Purdy, 2008).

Water Rights in the Vicinity

The Department of Ecology has record of seven water rights or water right claims within a half mile radius of the Taylor Property proposed points of withdrawal (see Table 2 and Attachment 2). Of the water rights considered for the impairment analysis, one is a state-issued water right certificate, one is a permit for a surface water diversion, and five are claims (2 short-form claims and 3 long-form claims).

A water right claim is a *claim* to a water right for a beneficial use which predates the state water code (1917 for surface water and 1945 for groundwater) and is not authorized by a state-issued permit or certificate. Water right claims can only be confirmed through adjudication by the Washington State Superior Court. The Department of Ecology cannot verify a claim's validity. However, Ecology may tentatively determine the extent and validity of a claimed water right pursuant to RCW 90.14 (Ecology

POL 1120). Many of the below-listed claims represent uses allowable under the groundwater permit exemption (RCW 90.44.050).

Table 2. Record of Water Rights within a Half Mile Radius from the Two Proposed Points of Withdrawal

<i>Control Number</i>	<i>Name on Document</i>	<i>Document Type</i>	<i>Priority Year</i>	<i>Purpose</i>	<i>Q_i</i>	<i>Q_a (ac-ft/yr)</i>
G1-064523CL	Mildred J Ervin	Claim L		DG	10 GPM	1
G1-064524CL	Mildred J Ervin	Claim L		DG	10 GPM	1
G1-079617CL	Edward R King	Claim S		DG		
G1-089364CL	Lorena L Buchanan	Claim S		IR, ST		
G1-093667CL	Thomas C Wilmer	Claim L		DG, IR	12 GPM	2
G1-23453GWRIS	Richard Wright et al	Certificate	1979	DS, IR, ST	5 GPM	2.1
S1-28683P	Peach Mountain Organics	Permit	2011	IR	.033 CFS	

Abbreviation Key: Q_i – instantaneous quantity, Q_a – annual quantity, CFS – cubic feet per second, GPM – gallons per minute, DG – domestic general, DS – domestic single, IR – irrigation, and ST – Stockwatering

In addition to the above-listed water rights and water right claims, there are approximately 20 water wells located within a half mile radius of the Taylor Property points of withdrawal. This information was obtained using the Department of Ecology’s well log database. Several of these wells likely overlap with the above listed water rights and claims. The remainder are likely permit exempt wells (RCW 90.44.050).

FINDINGS

Under Washington State law, the following four criteria must be met for an application to be approved:

- There must be no impairment of existing rights
- Water must be available
- The water use must be beneficial
- The water use must not be detrimental to the public interest

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 instream flows may be impaired if a proposed use or change would cause the flow of the stream to fall to or below the instream 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 instream 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).

During the pump tests for production wells 3 and 4, the applicant monitored Taylor Property wells 1 and 2, which are the closest wells to the proposed points of withdrawal (See Attachment 2). For both well tests, the applicant found no drawdown interference at well 1, 1,587 feet from well 3 and 1,311 feet from well 4 (Purdy, 2008). As discussed above, some drawdown effect was seen at well 2,606 feet from well 3 and 505 feet from well 4. A permit-exempt 1976 water well is located on the presumed boundary of the zone of interference, but only minimal drawdown impact is expected. In summary, Ecology finds no potential impairment to existing water rights or nearby permit-exempt water wells.

In an effort to evaluate impairment, GeoEngineers examined the effects of peak use by assuming continuous combined production from wells 3 and 4 for a period of 2, 4, and 6 weeks. This represents the most severe pumping schedule during summer months when water use is at its highest. Under this scenario, with a 60/40-production ratio between well 3 and 4, the projected drawdown is shown in Table 3.

Table 3. Projected Drawdowns* Under Peak Use

<i>Well</i>	<i>After 2 Weeks</i>	<i>After 4 Weeks</i>	<i>After 6 Weeks</i>
1	3.4	6.8	8.8
2	15.9	19.3	21.3
3	43.2	46.6	48.6
4	42.9	47.0	49.4

*Drawdowns are depths to water measured below static water level (Purdy, 2008)

These worst-case projections have drawdowns that are still well above sea level, eliminating the risk of seawater intrusion (Purdy, 2008). However, given the corresponding drawdown effects at wells 3 and 4 during their respective pump tests, the wells should operate on an alternating basis with infrequent, peak-time simultaneous pumping and pump at 52 gpm only in emergency situations.

Seawater Intrusion Potential

Seawater intrusion is the movement of seawater into fresh water due to natural processes or human activities. In order for seawater intrusion to occur, an aquifer must be in hydraulic connection with seawater and the hydraulic head of the fresh ground water must be reduced relative to that of the seawater. On an island, if a well withdraws water at a rate that sufficiently lowers the water table and disturbs the fresh-sea water balance, seawater will rise as a cone and move toward the well (Dion and Sumioka, 1978).

Accurately calculating seawater intrusion potential in a confined bedrock aquifer is difficult. Thus, chloride concentrations are often used as an indicator. Six chloride samples were collected from wells 3 and 4 from October 15 – 26, 2008. Early samples showed chloride levels at 40 mg/L; however, subsequent samples yielded lower chloride concentrations. This suggests that freshwater is recharging the well rather than saltwater. The wells are outside San Juan County's risk assessment boundary for seawater intrusion based on distance from the shoreline, well depth, chloride concentrations, and source aquifer. Thus, Ecology finds low potential for seawater degradation of the groundwater source.

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. In addition, the following factors are considered:

- Volume of water represented by senior water rights, including federal or tribal reserved rights or claims;
- Water right claims registered under Chapter 90.14 RCW;
- Ground water uses established in accordance with Chapter 90.44 RCW, including those that are exempt from the requirement to obtain a permit;
- Potential riparian water rights, including non-diversionary stock water; and
- Lack of data indicating water usage can also be a consideration in determining water availability, if the department cannot ascertain the extent to which existing rights are consistently utilized and cannot affirmatively find that water is available for further appropriation.

Well tests conducted on wells 3 and 4 demonstrate a combined instantaneous rate of 52 gpm. However, the water system plans to alternate pumping between well 3 and 4 and pump simultaneously only during rare peak times. Thus, the water system will rarely pump over 26 gpm. With this proposed pumping schedule and the combined wellhead storage and 40,000-gallon reservoir, I find that water is physically available for appropriation from these wells.

The annual quantity is calculated based on the domestic needs for 39 residential connections. Using an average water use requirement of 0.3 ac-ft/yr, a total annual quantity of 11.7 ac-ft/yr is available and sufficient to meet the Taylor Property development needs. This is a generous allocation, although reasonable given the larger homes and proposed outdoor irrigation.

Legal Availability

To determine if water will be legally available for appropriation, the following factors are considered:

- Regional water management plans – which may specifically close certain water bodies to further appropriation.
- Existing rights – which may already appropriate physically available water.
- Fisheries and other instream uses (e.g., recreation and navigation). Instream needs, including instream and base flows set by regulation. Water is not available for out of stream uses where further reducing the flow level of surface water would be detrimental to existing fishery resources.
- The Department may deny an application for a new appropriation in a drainage where adjudicated rights exceed the average low flow supply, even if the prior rights are not presently being exercised. Water would not become available for appropriation until existing rights are relinquished for non-use by state proceedings.

There are no regulatory closures or restrictions affecting water availability on San Juan Island and WDFW did not submit comments related to impacts on fish, wildlife, or the habitat they rely on. Therefore, I find water is legally available for appropriation.

Beneficial Use

Domestic use is considered a beneficial use under RCW 90.54.020(1).

Public Interest Considerations

No protests were filed against this application and no potential for detriment to the public interest was identified during the investigation of this application.

Conclusions

In accordance with chapter RCW 90.03, I conclude there is water available from the source in question, the purpose of use is beneficial, there will be no impairment of existing rights, and there will be no detriment 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 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:

- Qi: 52 gpm
- Qa: 11.7 ac-ft/yr
- Purpose: Year-round multiple domestic

Points of Withdrawal

Wells 3 and 4: NE $\frac{1}{4}$ NW $\frac{1}{4}$, Section 10, Township 35 North, Range 3 West, W.M.

Place of Use

A portion of the property referenced in Statutory Warranty Deed recorded under Auditor's File Number 2000 0719005, records of San Juan County, Washington more particularly described as follows:

PARCEL 1:

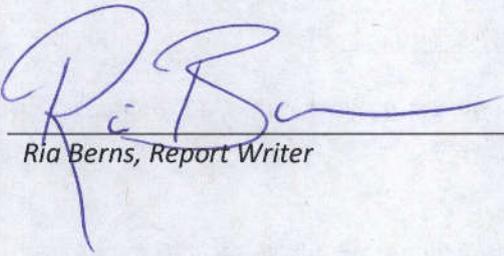
That portion of Section 10, Township 35 North, Range 3 West, W.M., in San Juan County, Washington lying northerly of Beaverton Valley Road.

EXCEPT the Northwest quarter of the Northwest quarter; the Northwest quarter of the Northeast quarter; the Southwest quarter of the Northwest quarter; the Northwest quarter of the Southwest quarter; and the East 20 feet of the Northeast quarter of the Southeast quarter thereof.

PARCEL 2:

The West 18 acres of the Northwest quarter of the Northwest quarter, and the Southwest quarter of the Northwest quarter all in Section 11, Township 35 North, Range 3 West, W.M., in San Juan County, Washington.

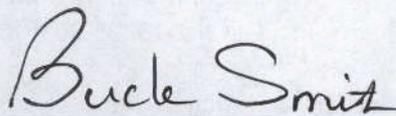
TOGETHER WITH all reservations, restrictions, covenants and easements of record.


Ria Berns, Report Writer

FEBRUARY 10, 2015
Date



J. R. "BUCK" SMITH



Buck Smith, L.Hg, Senior Hydrogeologist

February 12, 2015
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

Brandon, M.T., 1989. *Geology of the San Juan-Cascade Nappes, Northwestern Cascade Range and San Juan Islands*. Geologic guidebook for Washington and adjacent areas: Washington Division of Geology and Earth Resources Information Circular 86, 26 pages.

http://earth.geology.yale.edu/~markb/Eprints/Brandon1989DGER_FieldGuide.pdf

Brandon, M.T., et al, 1988. *The Late Cretaceous San Juan thrust system, San Juan Islands, Washington*. Geological Society of America Special Paper 221, 81 p.

http://earth.geology.yale.edu/~markb/Eprints/Brandon_etal1988.pdf

Brown E.H., et al, 2007. *Tectonic Evolution of the San Juan Islands Thrust System, Washington*. The Geological Society of America, Field Guide 9, 35 pages.

<http://myweb.facstaff.wvu.edu/bernieh/reprints/brown-gsa-cord-07-san-juans.pdf>

Dion, N.P., and Sumioka, S.S., 1984. *Seawater intrusion into coastal aquifers in Washington, 1978*. State of Washington Department of Ecology Water Supply Bulletin 56, 24 pages.

<https://fortress.wa.gov/ecy/publications/publications/wsb56.pdf>

McLellan, R.D., 2006. *Geology of the San Juan Islands, University of Washington Publications in Geology*.

http://www.cr.nps.gov/history/online_books/geology/publications/state/wa/uw-1927-2/intro.htm

Orr, L.A., Bauer, H.H. and Wayenberg, J.A., 2002. *Estimates of Ground-Water Recharge from Precipitation to Glacial-Deposit and Bedrock Aquifers on Lopez, San Juan, Orcas, and Shaw Islands, San Juan County, Washington*. U.S. Geological Survey Water-Resources Investigations Report 02-4114, 114 pages.

Purdy, Joel W. and Michael A.P. Kenrick, 2008. *Hydrogeological Analysis of Water Supply Well Testing Taylor Property, Friday Harbor San Juan Island, Washington*. GeoEngineers, Inc: File No. 18005-001-00.

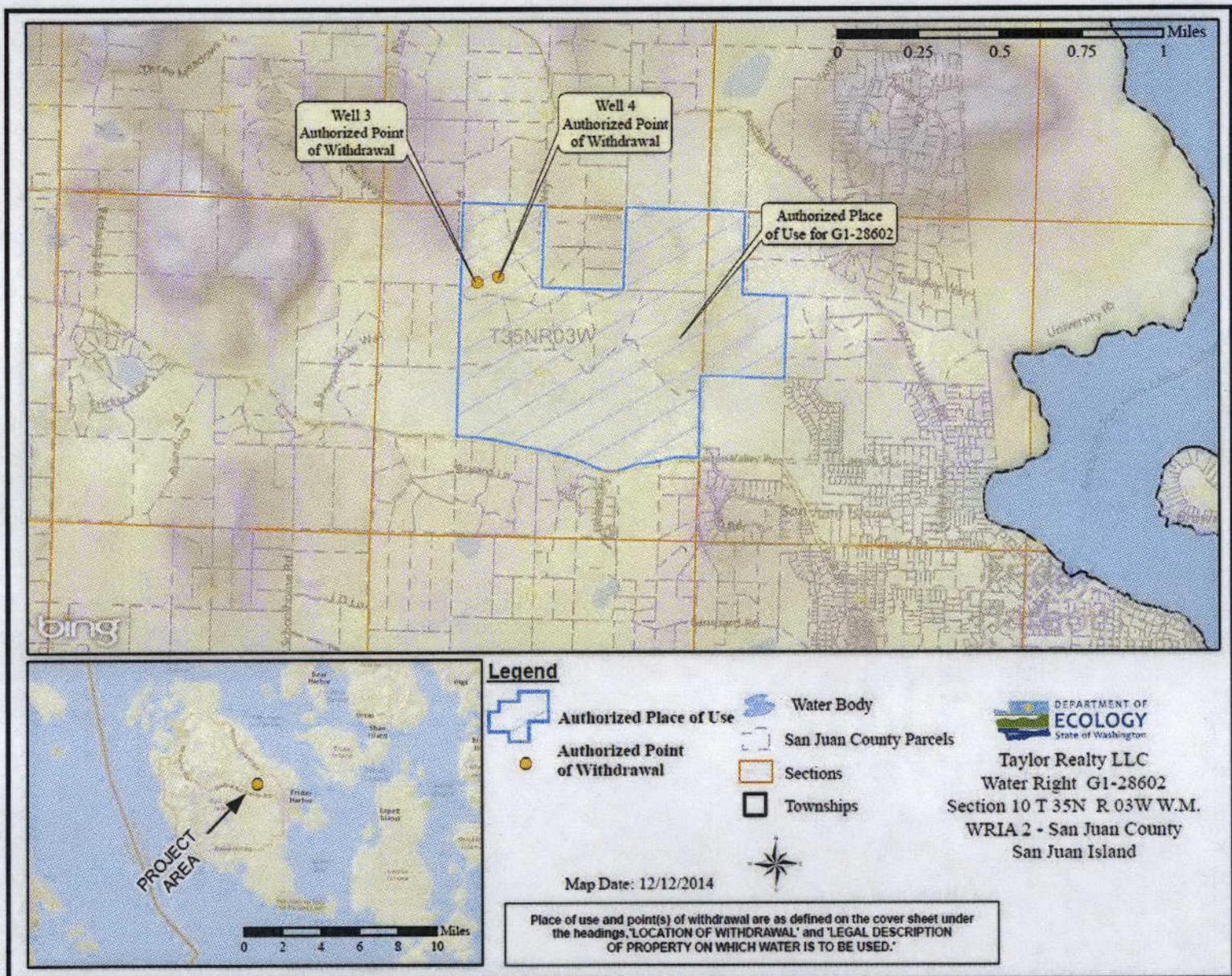
Russell, R.H. ed., 1975. *Geology and Water Resources of the San Juan Islands, San Juan County, Washington*. Washington Department of Ecology Water Supply Bulletin No 46, 171 pages.

Washington Department of Natural Resources. *Geology of Washington: Puget Lowland*. Modified from: Lasmanis, R., 1991. *The Geology of Washington: Rocks and Minerals*, v.66, no. 4, P. 262-277.

<http://www.dnr.wa.gov/ResearchScience/Topics/GeologyofWashington/Pages/lowland.aspx>

Washington Department of Natural Resources. Washington Interactive Geologic Maps, Division of Geology and Earth Resources – Washington Geologic Survey.

<https://fortress.wa.gov/dnr/geology/?Theme=wigm>. Accessed October 7, 2014.



ATTACHMENT 2: IMPAIRMENT MAP

