

File NR S1-28774
WR Doc ID 6167648

STATE OF WASHINGTON
REPORT OF EXAMINATION
FOR WATER RIGHT APPLICATION

PRIORITY DATE 4/7/2014	WATER RIGHT NUMBER S1-28774
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MAILING ADDRESS ORCAS VISION PRESERVE LLC 1001 4TH AVENUE STE. 4200 SEATTLE WA 98154-1154	SITE ADDRESS (IF DIFFERENT) 131 CAROUSEL RD EASTSOUND, WA 98245
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Quantity Authorized for Diversion

DIVERSION RATE	UNITS	ANNUAL QUANTITY (AF/YR)
.09	CFS	3.22

Purpose

PURPOSE	DIVERSION			ANNUAL QUANTITY (AC-FT/YR)		PERIOD OF USE (mm/dd)
	ADDITIVE	NON-ADDITIVE	UNITS	ADDITIVE	NON-ADDITIVE	
IRRIGATION	.09		CFS	3.22		05/01 – 10/01

IRRIGATED ACRES	
ADDITIVE	NON-ADDITIVE
1.75	N/A

Source Location

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

SOURCE	PARCEL	TOWNSHIP	RANGE	SECTION	QUARTER QUARTER	LATITUDE	LONGITUDE
POND	261732001	36N	02W	17	NW¼ SW¼	48.6077	-122.9863

Datum: NAD83/WGS84

Place of Use

PARCELS
SAN JUAN COUNTY PARCEL NUMBERS 261723001, 261733013, 261724001, 261732001, 261731001, 261733015, 261723002 AND 261734001

LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE

PR E/12 SW-NW & PR GL 2 Sec 17, T 36N, R 2W
PR GL 2 TGW TDS Sec 17, T 36N, R 2W
PR GL 3 TGW TDS Sec 17, T 36N, R 2W
PR NW-SW Sec 17, T 36N, R 2W
PR N334.5' GL 5 Sec 17, T 36N, R 2W
PR GL 4 (LEGAL ACREAGE TO MEANDER LINE) Sec 17, T 36N, R 2W
N334.5 of E295.8 GL 5 Sec 17, T 36N, R 2W
PR W1/2 SW-NW Sec 17, T 36N, R 2W

Proposed Works

Water is diverted from a single diversion on a pond, pumped to a 75,000 gallon storage tank, and gravity fed to an onsite irrigation system.

Development Schedule

BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
Begun	November 1, 2018	November 1, 2020

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

Provisions

Measurements, Monitoring, and Metering

An approved measuring device shall be installed and maintained for the source 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.

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.

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.

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 (1) water is available from the source in question; (2) there will be no impairment of existing rights; (3) the purpose of use is beneficial; and (4) there will be no detriment to the public interest.

Therefore, I ORDER approval of Application No. S1-28774, 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).

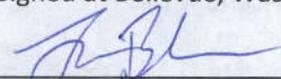
To appeal you must do the following within 30 days of the date of receipt of the Order:

- 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 31st day of August, 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

Application for Water Right – Orcas Vision Preserve LLC

Water Right Control Number S1-28774

Ria Berns, Department of Ecology

BACKGROUND

This report serves as the written findings of fact concerning Water Right Application Number S1-28774. Application S1-28774 seeks to appropriate surface water from a pond on the applicant's property for the purpose of landscape irrigation. The property is located on Orcas Island in San Juan County.

Table 1. Summary of Requested Water Right

Applicant Name:	Orcas Vision Preserve LLC
Date of Application:	04/07/2014
Place of Use	San Juan County Parcel numbers 261723001, 261723002000 261733013, 261724001, 261732001, 261731001, 261733015, 261734001

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

Purpose	Rate	Unit	Ac-ft/yr	Begin Season	End Season
Irrigation	.09	CFS	14	05/01	10/01

Source	Parcel	Township	Range	Section	Quarter	Latitude	Longitude
Unnamed Pond	261732001	36N	02W	17	NW SW	48.6077	-122.9863

NAD83/WGS84

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 *Islands' Sounder* on March 25 and April 1, 2015.

Consultation with 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 February 3, 2015, Steve Boessow responded to Ecology's request for comment with the following:

"Based on impacts to fish and/or wildlife and the habitat they rely on, and pursuant to Chapter 77.57.020 RCW, WDFW does not oppose the issuance of this application. There are no surface connections to public waters and no impacts to fish in waters of the state. This letter does not exempt the applicant from compliance with the state Hydraulic Code (Chapter 77.55 RCW)."

State Environmental Policy Act (SEPA)

A surface water right application is subject to a SEPA threshold determination (i.e., an evaluation of whether there are likely to be significant adverse environmental impacts) if the application is for more than 1 cfs. Because this application does not meet this condition, it is exempt from SEPA and a threshold determination is not required.

INVESTIGATION

On February 24, 2015, I visited the Orcas Vision Preserve site with Brian Gregory, the applicant's landscape architect. This investigation draws on this site visit and follow-up information provided by Mr. Gregory and Ms. Alison Kartiganer (project manager), water rights research, and the resources listed in the References section.

Proposed Use and Basis of Water Demand

The applicant applied for water from an unnamed manmade pond on their property for the purpose of non-commercial landscape irrigation. The applicant plans to landscape approximately 1.75 acres of their 165 acre property with irrigated turf and native plants. A small portion of this water will be used to irrigate a vegetable garden adjacent to the point of diversion.

Water will be pumped from the source in 1.5-inch galvanized and PVC pipes and conveyed uphill to a 75,000 gallon storage tank. The water will then be gravity fed through 3-inch HDPE pipes to the proposed place of use. A combination of drip irrigation and pop-up rotor sprinklers will be used.

Irrigation Works

- ½ HP Flint & Walling submersible pump
- 5 HP Flint & Walling booster pump (pumping capacity: 122 gallon per minute/.27 CFS with no lift)
- 1.5- 3-, and 4-inch conveyance pipes
- 75,000 storage tank
- Drip irrigation and pop-up rotor sprinklers

Source Water

The source water is a manmade pond on the property. Located in a lowland on the property, the pond is recharged by surface water runoff and groundwater. According to Brian Gregory, the pond is approximately 10 feet deep and fluctuates +/- 3 feet seasonally.

Geography and Climate

The Orcas Vision Preserve property includes eight parcels and 165 acres of mixed forest and cleared land near Deer Harbor on Orcas Island. Permit-exempt wells serve a main housing compound and a caretaker cabin on the property. The property has waterfront access and faces east towards West Sound.

The temperate climate of the San Juan Islands is typified by cool, dry summers, and mild, moderately wet winters. Due to the rainshadow effect from the Olympic Mountains, the San Juan Islands have significant variations in annual and seasonal precipitation across the islands (USGS, 2002).

The 2002 USGS Water-Resources Investigations Report 02-4114 found the mean annual precipitation for the place of use ranges from 28 to 32 inches/year. The same report lists the average annual recharge near the source as approximately 6 inches.

Other Rights Appurtenant to the Place of Use

There is one claim to a vested water right that shares the place of use with this application. Short-form claim S1-119074CL was filed by Garry Evans June 18, 1974 (Table 2). The claimed source is a pond and the purpose is domestic use. The listed place of use is the entire Section 17. The claim makes no mention of the date of first use or any additional details about the location of the point of diversion and the POU.

The Department of Ecology has record of 2 certificates, 15 long-form claims, and 10 short-form claims within a half-mile radius of the Orcas Vision Preserve LLC proposed point of diversion. 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).

Table 2. Record of Water Rights Appurtenant to the Place of Use

<i>Control Number</i>	<i>Name on Document</i>	<i>Document Type</i>	<i>Purpose</i>	<i>Q_i</i> <i>(gpm)</i>	<i>Q_a</i> <i>(ac-ft/yr)</i>
S1-119074CL	Garry Evans	Short-form Claim	Domestic	Not Listed	Not Listed

In addition to the above-listed water right claim, there are approximately 17 water wells located within a half mile radius of the proposed POD, including a couple serving the Orcas Vision Preserve property. This information was obtained using the Department of Ecology's well log database. Several of these wells likely overlap with water right claims and certificates on file. The remaining wells are likely permit-exempt wells (RCW 90.44.050).

FINDINGS

Under Washington State law, the following criteria must be met for a new 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).

The proposed Orcas Vision Preserve source pond is not in direct hydraulic continuity to the identified water rights or water right claims within a half mile radius. The pond is in a natural lowland and is primarily recharged with surface water runoff during the wet season. Groundwater recharge is also likely given the highly permeable soils. However, given the shallow depth of the pond and the much deeper permit-exempt and permitted groundwater water wells, it is unlikely that the sources are directly connected and therefore this diversion would not impair existing water right holders.

Even if short form claim S1-119074CL were determined to be valid, the purpose is different from the purpose of use requested as part of this application and an impairment test cannot be completed because the point of diversion is unknown.

Thus, Ecology finds no impairment to water resources, water quality, or existing water right holders is expected to result from this project.

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; and
- Potential riparian water rights, including non-diversionary stock water.
- 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.

On the day of site visit, the diversion structure was not fully installed so a pump test was not conducted. The diversion system will be designed to meet the proposed instantaneous quantity of .09 CFS. This amount is reasonable to meet ongoing irrigation needs.

The Department of Ecology uses the Washington Irrigation Guide (WIG) to determine crop water duties when the actual volume of water applied per acre is not known, or to assess whether actual use is reasonable for a given crop (see Table 3). Application efficiency (Ea) values are from *GUID-1210, Determining Irrigation Efficiency and Consumptive Use*. The applicant plans to irrigate turf as well as native plants, which have a lower water duty. However, native plants need additional water when they are being established. Thus, in order to provide some flexibility for the first couple of years, the Crop irrigation requirement (CIR) for turf will be used for these calculations. The 1992 lists the CIR for turf at the Olga Washington station as 16.61 inches/acre (1.38 feet/acre).

Table 3. Calculation of Total Irrigation Requirements for Turf

<i>Crop and System Type</i>	<i>Total Irrigation Requirement (TIR)</i>
Crop : Turf Irrigation System: Pop-Up Impact Area: 1.75 acres CIR: 1.38 ac-ft/ac Irrigation Efficiency: 75%	1.38 ac-ft/ac $\div 75\%$ $= 1.84 \text{ ac-ft/ac} * 1.75 \text{ acres}$ * * * TIR for all acres: 3.22 ac-ft/yr

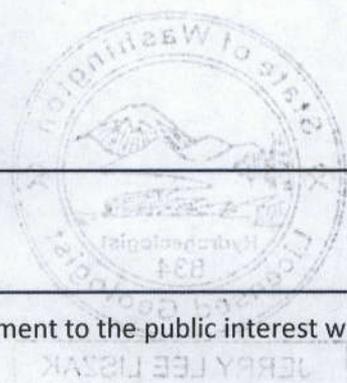
The water needs of this project do not support the requested instantaneous quantity of 14 ac-ft/yr. An annual quantity of 3.22 ac-ft/yr is reasonable and physically available from this source.

Legal availability

To determine whether water to 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 in this Orcas Island watershed and the Department of Fish and Wildlife found no impacts to fish, wildlife, or the habitat they rely on. Therefore, I find water is legally available for appropriation.



Beneficial Use

Irrigation 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:

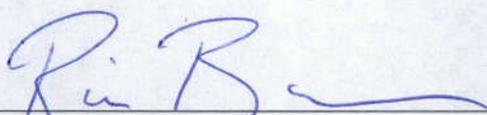
- 0.09 cfs
- 3.22 acre-feet per year
- Irrigation

Point of Diversion

NW¼, SW¼, Section 17, 36 North, Range 2 West, W.M.

Place of Use

San Juan County parcels numbers 261723001, 261723002, 261733013, 261724001, 261732001, 261731001, 261733015, 261734001


Ria Berns, Report Writer

8/26/2015
Date



JERRY LEE LISZAK

Jerry Liszak, L.Hg., Reviewer

8/26/15

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

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.

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.

ATTACHMENT 1: PLACE OF USE MAP

