



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

APPROVED
REPORT OF EXAMINATION
To Appropriate Public Waters of the State of Washington

PRIORITY DATE	APPLICATION NO.	PERMIT NO.	CERTIFICATE NO.
November 1, 2007	S1-28522A		

NAME		
Andrew & Alyson Stephens		
MAILING ADDRESS	CITY/STATE	ZIP CODE
4779 Pt. Lawrence Road	Olga, WA	98279

PUBLIC WATERS TO BE APPROPRIATED

SOURCE		
Pond		
TRIBUTARY OF (IF SURFACE WATERS)		
Unnamed stream that flows into Rosario Strait		
MAXIMUM CUBIC FEET PER SECOND (cfs)	MAXIMUM GALLONS PER MINUTE (gpm)	MAXIMUM ACRE FEET PER YEAR (ac-ft/yr)
0.0033	1.5	1.0
TYPE OF USE, PERIOD OF USE		
Irrigation supply for one acre – during the irrigation season		

LOCATION OF DIVERSION

APPROXIMATE LOCATION OF DIVERSION					
270 feet east and 1680 feet south from the northwest corner of Section 36					
LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION)	SECTION	TOWNSHIP	RANGE	WRIA	COUNTY
SW1/4 NW1/4	36	37 N	1W	2	San Juan
PARCEL NUMBER					
173623005000					

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED

A portion of the Southwest Quarter of the Northwest Quarter of Section 36, Township 37 North, Range 1 West, W.M., Orcas Island, County of San Juan, State of Washington, described as follows:

Commencing at a concrete monument marking the Northwest corner of said Section 36; thence along the northerly boundary of said Section 36, South 88°55'06" East, 1,318.15 feet; thence leaving said northerly boundary South 1°40'49" West, 1,328.60 feet to the northeast corner of said Southwest Quarter of the Northwest Quarter; thence along the northerly boundary of the said Southwest Quarter of the Northwest Quarter, North 88°53'58" West, 963.43 feet to the TRUE POINT OF BEGINNING of the parcel to be described; thence continuing along said northerly boundary, North 88°53'58" West, 353.43 feet to the northwest corner of the said Southwest Quarter of the Northwest Quarter, thence along the westerly boundary of the said Southwest Quarter of the Northwest Quarter, South 1°37'30" West, 647.78 feet to a point on the centerline of the existing county road, said point being the P.C. of a curve to the right, having a central angle of 0°04'96" and a radius of 554.42 feet, thence southeasterly with said centerline and along said curve, 0.66 feet to the P.T.; thence South 73°37'10" East, 32.73 feet to the P.C. of a curve to the left, having a central angle of 73°51'11" and a radius of 206.18 feet; thence along said curve, 265.82 feet to the P.T.; thence North 36°13'15" East, 150.52 feet to the P.C. of a curve to the right, having a central angle of 14°36'06" and a radius of 386.48 feet; thence along said curve, 98.49 feet; thence North 30° West, 118.00 feet; thence North 0°56'50" East, 282.47 feet to the true point of beginning, EXCEPT county roads.

Attachment 1 shows the location of the authorized place of use and point of diversion.

DESCRIPTION OF WATER WORKS

A 2 horsepower suction pump and a secondary booster pump lift water from the pond to a 1200 gallon storage tank located on the hill to the northeast of the garden area. When needed, water flows (by gravity) from the tank to soaker hoses and/or through hand nozzles to irrigate the garden area.

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE	COMPLETE PROJECT BY THIS DATE	WATER PUT TO FULL USE BY THIS DATE
Begun	January 1, 2010	January 1, 2012

PROVISIONS

1. **METER INSTALLATION:** An approved measuring device shall be installed and maintained for the diversion identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use", Chapter 173-173 WAC.

Chapter 173-173 WAC describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition Ecology for modifications to some of the requirements. Installation, operation and maintenance requirements are enclosed in a document titled "Water Measurement Device Installation and Operation Requirements".

2. **RECORDING & REPORTING:** Water use data shall be recorded annually and maintained by the property owner for a minimum of five years, and shall be promptly submitted to the Department of Ecology upon request.
3. **AUTHORITY TO ACCESS PROJECT:** Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the records of water use that are kept to meet the above conditions, and to inspect at reasonable times any measuring device used to meet the above conditions.
4. **AQUIFER CONTAMINATION PREVENTION:** Untreated surface (pond) water cannot be placed into a groundwater well. The water right holder must reconfigure the water delivery system to prevent contamination of the underlying aquifer.
5. **HYDRAULIC PROJECT APPROVAL:** State law (chapter 77.55 RCW) requires that any person, organization, or government agency wishing to conduct any construction activity that will use, divert, obstruct, or change the bed or flow of state waters must do so under the terms of a permit (called the Hydraulic Project Approval-HPA) issued by the Washington State Department of Fish and Wildlife (WDFW). State waters include all marine waters and fresh waters of the state, except those watercourses that are entirely artificial, such as irrigation ditches, canals and storm water run-off devices.

For information on how to apply for a HPA permit please: write or visit the Washington Department of Fish & Wildlife, North Puget Sound Region (4), 16018 Mill Creek Boulevard, Mill Creek, WA 98012-1296; or inquire by phone at (425) 775-1311; or via the Internet at <http://wdfw.wa.gov/hab/hpapage.htm>.

6. **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, system instantaneous capacity, beneficial use, annual quantity, place of use, and satisfaction of provisions.

FINDINGS OF FACT AND ORDER

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, the purpose of use is beneficial, there will be no impairment of existing rights, and there will be no detriment to the public interest.

Therefore, I ORDER approval of Application No. S1-28522, subject to existing rights and the provisions listed above.

You have a right to appeal this ORDER. To appeal this you must:

- File your appeal with the Pollution Control Hearings Board within 30 days of the "date of receipt" of this document. Filing means actual receipt by the Board during regular office hours.
- Serve your appeal on the Department of Ecology within 30 days of the "date of receipt" of this document. Service may be accomplished by any of the procedures identified in WAC 371-08-305(10). "Date of receipt" is defined at RCW 43.21B.001(2).

Be sure to do the following:

- Include a copy of this document that you are appealing with your Notice of Appeal.
- Serve and file your appeal in paper form; electronic copies are not accepted.

1. To file your appeal with the Pollution Control Hearings Board

Mail appeal to:

Deliver your appeal in person to:

The Pollution Control Hearings Board
PO Box 40903
Olympia, WA 98504-0903

OR

The Pollution Control Hearings Board
4224 – 6th Ave SE Rowe Six, Bldg 2
Lacey, WA 98503

2. To serve your appeal on the Department of Ecology

Mail appeal to:

Deliver your appeal in person to:

The Department of Ecology
Appeals Coordinator
P.O. Box 47608
Olympia, WA 98504-7608

OR

The Department of Ecology
Appeals Coordinator
300 Desmond Dr SE
Lacey, WA 98503

3. And send a copy of your appeal to:

Andrew B. Dunn
Department of Ecology
3190 160th Ave SE
Bellevue, WA 98008

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>.

Signed at Bellevue, Washington, this 7th day of April, 2009.

Andrew B. Dunn, LG, LHG
Section Manager
Water Resources Program
Northwest Regional Office

BACKGROUND

Project Description

Andrew and Alyson Stephens own 4.8 acres of land off of Pt. Lawrence Road, just northeast of the community of Doe Bay on Orcas Island. The Stephens' have applied for surface water rights to irrigate their garden from an existing pond located entirely on their property. Their home is served by the Doe Bay Water Users Association.

Legal Requirements for Application Processing

Chapter 90.03 RCW authorizes the appropriation of public water for beneficial use and describes the process for obtaining water rights. Laws governing the water right permitting process are contained in RCW 90.03.250 through 90.03.340.

The following legal requirements must be met prior to processing a water right application:

- **Public Notice**
Public notice of the application was published in *The Islands' Sounder* on December 26, 2007 and January 2, 2008. There were no written protests during the statutory 30-day protest period.
- **State Environmental Policy Act (SEPA)**
The subject water right application is categorically exempt under SEPA WAC 197-11-305 and WAC 197-11-800(4) because the instantaneous diversion rate is less than one cubic foot per second.

INVESTIGATION

In considering this application, my investigation included, but was not limited to, research and/or review of:

- Information supplied with the application
- The USGS Mt. Constitution 7.5 minute topographic map
- Water Supply Bulletin No. 46, Geology and Water Resources of the San Juan Islands, Dept. of Ecology, 1975
- Notes from my site visit on January 21, 2009
- Records of existing water rights within the place of use
- Records of other water rights on the same source
- A February 19, 2009, letter from Steve Boessow, Water Rights Biologist, WA Department of Fish & Wildlife

Description of the Place of Use

The requested place of use is located approximately one mile east of Moran State Park and approximately 1½ miles southeast of the peak of Mount Pickett. The garden area is located in the open southwestern quarter of the Stephens' property at an elevation of approximately 280 feet above mean sea level. The northern half of the property is wooded, contains the Stephens' home, and slopes upward toward the northeast to an elevation of approximately 360 feet above mean sea level. The Stephens' storage tank is located on this upland.

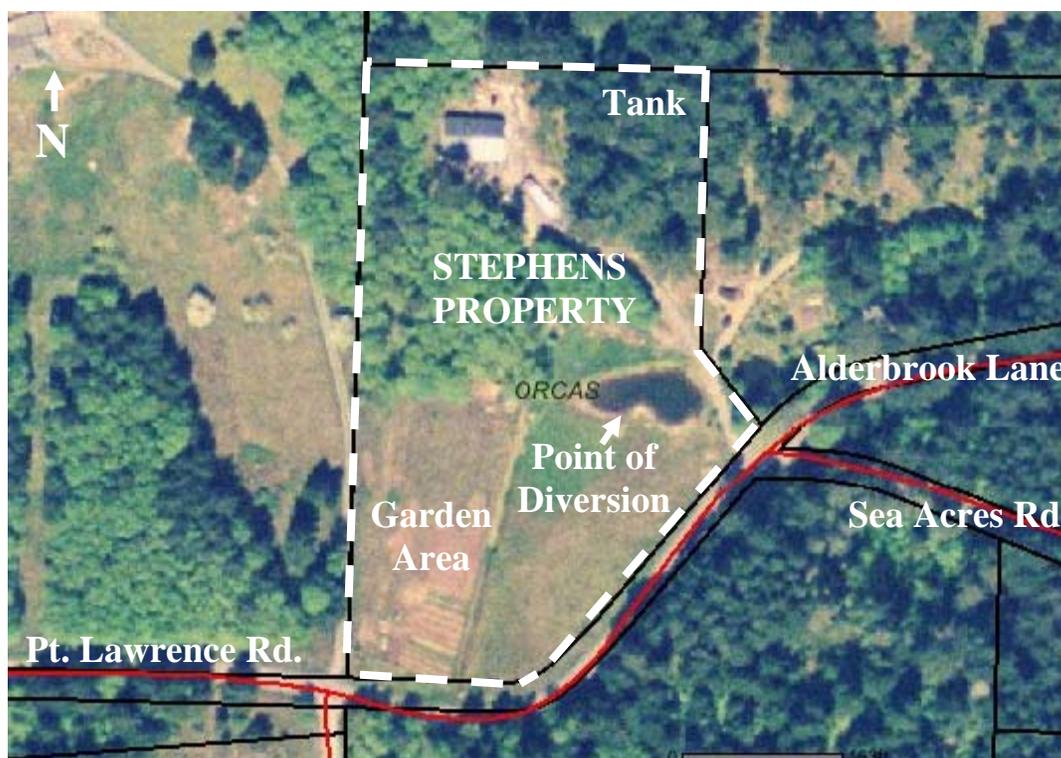


Figure 1: Showing the Stephens property, point of diversion, tank location, and garden area

Geologic Information

The southern half of the Stephens property is underlain by a Pleistocene to Recent age sedimentary unit. Water Supply Bulletin No. 46 described this unit as alluvium, beach deposits, glacial outwash, and glacial till. The northern half of the property is underlain by a bedrock formation of Ordovician age. This formation is known as the Turtleback Complex. It is composed of gabbro, diorite, and quartz diorite, with minor pyroxenite and serpentinite.

Site Visit

On January 21, 2009, I visited the Stephens' property. Mrs. Stephens was present and provided me with a tour of the property. I observed the irrigation pond, unnamed stream, and the area proposed for irrigation.

The irrigation pond is kidney-shaped, approximately 120 feet in length, and approximately 50 feet at its greatest width. Mrs. Stephens reported it is approximately 12 feet deep at its deepest point. Water to fill the pond comes from a small unnamed intermittent stream that originates from the eastern flanks of Mt. Pickett. Stream flow enters on the west side of the pond. Overflow water exits from the east side of the pond and flows through a culvert under the Stephens' driveway. The water then flows through a ditch that parallels the north side of Alderbrook Lane for a short distance before going through a culvert under the road. From there the stream flows east for approximately 2/3 mile to Rosario Strait.

The Stephens' originally applied to irrigate up to 3 acres of land, but according to Mrs. Stephens their intent is to irrigate just the current one acre they historically have irrigated.

The Stephens' use a small gas-powered pump to divert irrigation water from their pond. In the past they have pumped this water into a nearby shallow well to fill its casing. They then used the existing well pump to push the water uphill to their storage tank. From the tank water flows back downhill (by gravity) to the irrigation system.

I informed Mrs. Stephens that it is unlawful (according to RCW 90.48.080) to discharge untreated surface water into an underground aquifer. Surface water contains organic and inorganic matter that can cause contamination of the aquifer. I let Mrs. Stephens know the system must be reconfigured to prevent the introduction of surface water into the underlying aquifer (see Provision #4 on page 2).

The Stephens' pond is excavated and has no above-grade impoundment structure, so a reservoir permit is not required.

Other Water Rights Appurtenant to the Place of Use

There are no other water rights appurtenant to the Stephens property.

Downstream Water Rights on the Same Source

There are no downstream water rights on the subject stream.

Department of Fish & Wildlife Comment Letter

Steve Boessow of the Washington Department of Fish & Wildlife (WDFW) provided the following comments on the Stephens' application.

The subject unnamed stream is unlikely to be inhabited by any fish, save for possibly privately owned, planted fish.

There are no freshwater fish resources impacted by this application. WDFW does not oppose the approval of this application. Any work that changes the bed or flow of state waters requires a Hydraulic Project Approval (HPA). An Area Habitat Biologist should be consulted if this application requires a HPA.

DETERMINATIONS

In accordance with RCW 90.03.290, determinations must be made on the following four criteria in order for an application for water rights to be approved:

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

Water Availability

Legal Availability

There are currently no regulatory closures or legal restrictions affecting water availability within the unnamed stream watershed.

Physical Availability

Recharge to the Stephens irrigation pond will occur in three ways - by direct precipitation, inflow from the unnamed stream, and groundwater discharge from the surrounding watershed. Water should be physically available to fill the pond during the wet season, followed by a decline in pond water level during the dry (irrigation) season.

Impairment

There are no downstream right holders, so there is no potential for impairment of other rights.

Beneficial Use

Irrigation supply is considered to be a beneficial use under RCW 90.54.020(1). The rate of water requested (1.5 gallons per minute) is reasonable for the proposed purpose of use. The Stephens' requested an annual volume of 3.0 acre-feet per year. This volume is not attainable at 1.5 gpm over the course of the 150 day irrigation season. Approximately 1.0 acre-feet per year is attainable at that rate, which was calculated as follows:

1.5 gpm x 1440 minutes/day x 150 days = 324,000 gallons (1.0 ac-ft/yr is equal to 325,851 gallons).

Public Interest

No potential for detriment to the public interest could be identified during the investigation of this application.

RECOMMENDATION

Based on the above investigation and determinations, I recommend the subject application be approved, within the limitations listed below, and subject to the provisions on page 2.

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:

- 0.0033 cubic feet per second (1.5 gallons per minute)
- 1.0 acre-feet per year
- For irrigation supply, during the irrigation season

Point of Diversion

SW¹/₄ NW¹/₄, Section 36, Township 37 North, Range 1 West, W.M.

Place of Use

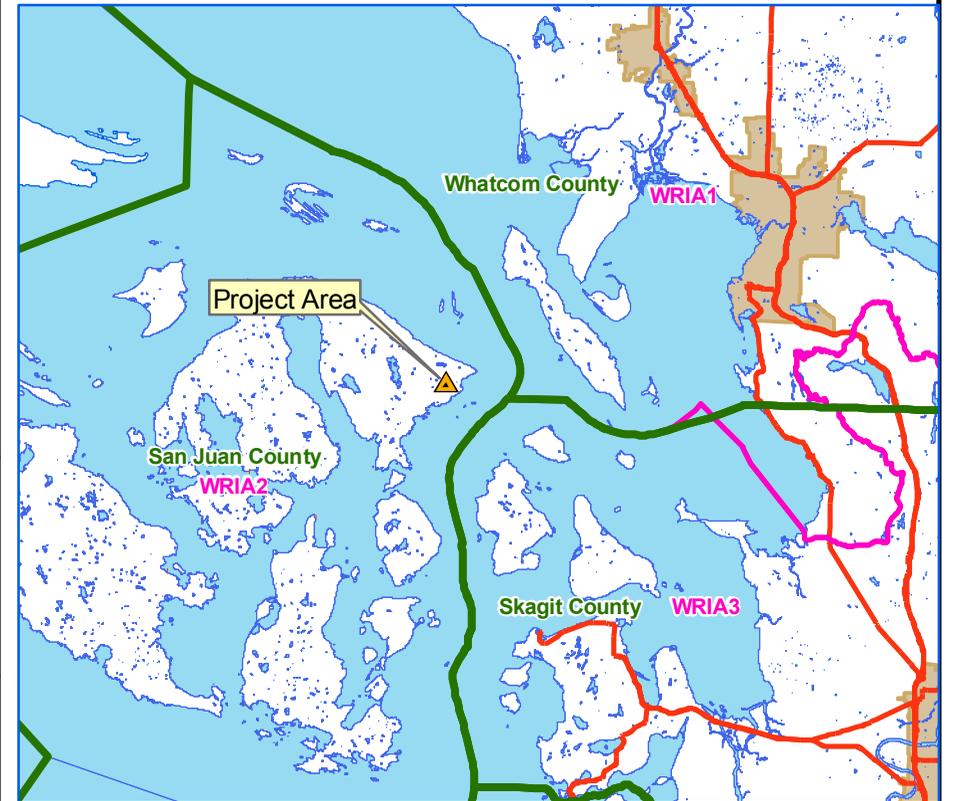
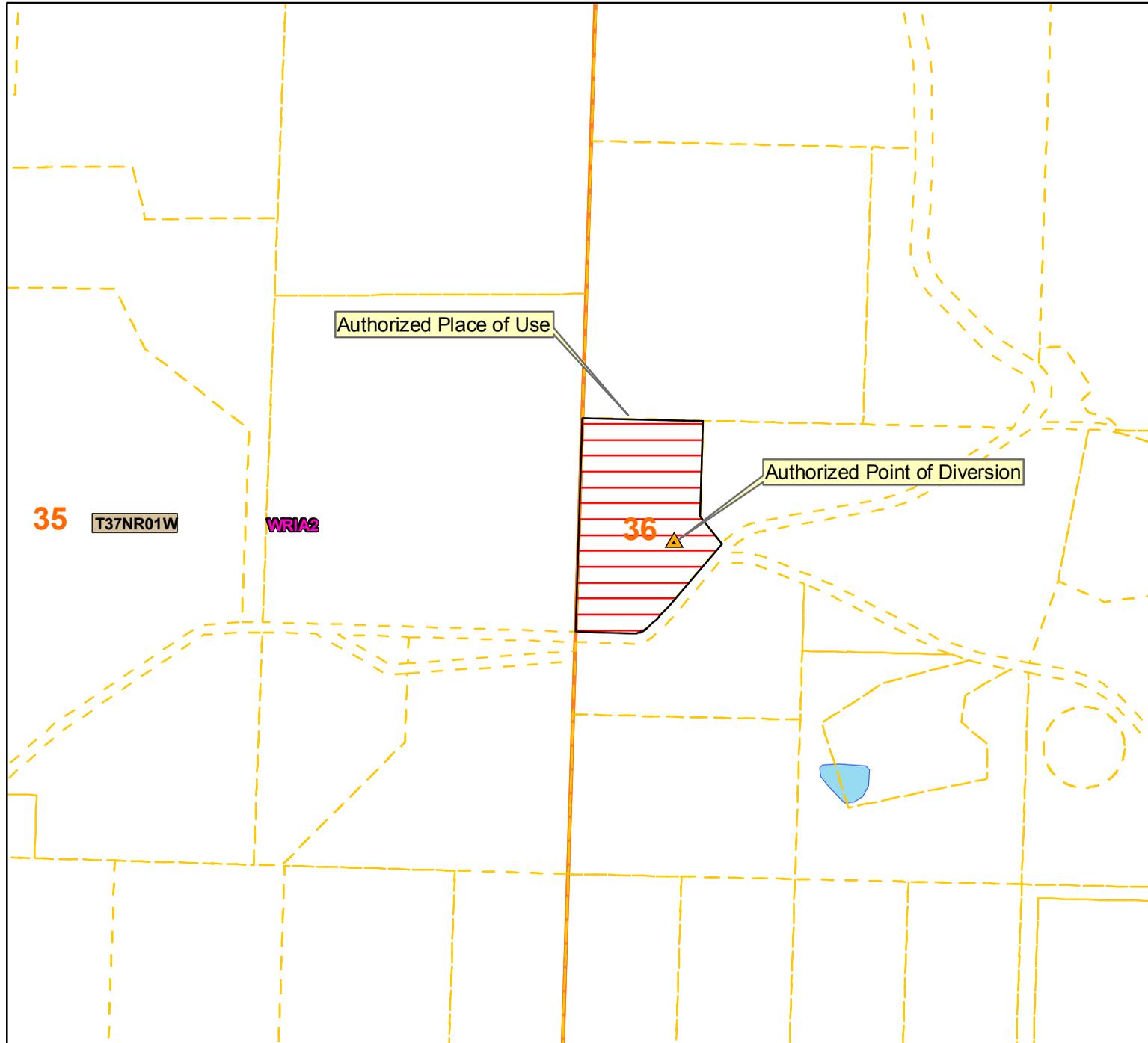
As described on page 1 and as shown in Attachment 1.

Report by: _____
Buck Smith, LG, LHG

April 1, 2009
Date

Licensed Geologist/Hydrogeologist No. 1479

If you need this publication in an alternate format, please call the Water Resources Program at (425) 649-7000. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.



Attachment 1

Legend

- County
- WRIA
- Highways
- Townships
- cities
- Sections
- Authorized Point of Diversion
- Authorized Place of Use

Place of use and point(s) of diversion/withdrawal are as defined on the cover sheet under the headings, 'LOCATION OF DIVERSION/WITHDRAWAL' and 'LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED.'

