



State of Washington
Draft
REPORT OF EXAMINATION
FOR WATER RIGHT APPLICATION

PRIORITY DATE	APPLICATION NUMBER
January 4, 2012	G3-30637

MAILING ADDRESS	SITE ADDRESS (IF DIFFERENT)
Scott Byerley 501 W. Langdon Walla Walla, WA 99362	Wine Valley Water System

Quantity Authorized for Withdrawal

DIVERSION RATE	UNITS	ANNUAL QUANTITY (AF/YR)
1846	GPM	285 (non-additive)

Purpose

PURPOSE	WITHDRAWAL OR DIVERSION RATE			ANNUAL QUANTITY (AF/YR)		PERIOD OF USE (mm/dd)
	ADDITIVE	NON-ADDITIVE	UNITS	ADDITIVE	NON-ADDITIVE	
Multiple Domestic Supply (including commercial/industrial use and project non-agricultural irrigation)	1846	--	GPM	--	285	01/01 – 12-31
Fire Flow	As needed			As needed		01/01 – 12-31

Source Location

WATERBODY	TRIBUTARY TO		COUNTY			WATER RESOURCE INVENTORY AREA	
Groundwater			Walla Walla			32	
SOURCE FACILITY/DEVICE	PARCEL	TWN	RNG	SEC	QQ Q	LATITUDE	LONGITUDE
Well 1	340724430006	7	34E	24	SE¼SE¼	46.065144	-118.494784
Well 2	340724430006	7	34E	24	SE¼SE¼	46.064879	-118.49498
Well 3	340724430006	7	34E	24	SE¼SE¼	46.065007	-118.495081
Well 4	3407336510078	7	34E	25	SW¼SW¼	46.050708	-118.511323

Datum: WGS84

Place of Use (See Attachment 1)

LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE

The current place of use (POU) of this water right is shown on the map in Attachment 1, and includes the future service area of the Wine Valley Water System.

Once this system supplies 15 connections, the place of use (POU) of this water right will be the service area described in the most recent Water System Plan/Small Water System Management plan 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

Four existing wells

Development Schedule

BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
Started	January 1, 2025	January 1, 2035

Measurement of Water Use

How often must water use be measured?	Weekly
How often must water use data be reported to Ecology?	Annually (by Jan 31 for previous year)
What volume should be reported?	Total Annual Volume (ac-ft)
What rate should be reported?	Annual Peak Rate of Withdrawal (gpm)

Provisions

Ground Water Permit No. G3-30637 shall be less any water withdrawn under Ground Water Certificate No. 2716-A(C) together with Report of Examination dated February 4, 2009 including accompanying Record of Decision dated March 19, 2009, regarding annual quantity.

The total withdrawal under Ground Water Certificate No. 2716-A(C) together with Report of Examination dated February 4, 2009 (including accompanying Record of Decision dated March 19, 2009) and Ground Water Permit No. G3-30637 shall not exceed 2249 gallons per minute and 285 acre-feet per year.

Water may be used as needed for emergency fire suppression in accordance with POL-2015. Facilities may be constructed to provide rates of up to 2000 gpm, to meet fire marshal flow requirements.

Well, Well Log and Well Construction Standards

All wells constructed in the state shall meet the "Minimum Standards for the Construction and Maintenance of Wells" (WAC 173-160) and "Water Well Construction" (RCW 18.104). In general, wells shall be located at least 100 feet from sources of contamination and at least 1,000 feet of the boundary of a solid waste landfill. Any well which is unusable, abandoned, or is an environmental, safety, or public health hazard shall be decommissioned.

Required installation and maintenance of an access port as described in WAC 173-160- 291(3).

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.

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.

Well water use data shall be recorded weekly and maintained by the landowner for a minimum of five years. The weekly maximum rate of withdrawal and the annual total volume shall be submitted to Ecology by January 31st of each calendar year.

Ground Water Certificate No. 2716-A(C) together with Report of Examination dated February 4, 2009 including accompanying Record of Decision dated March 19, 2009 and Ground Water Permit No. G3-30637 shall have a separate water meter from the other water rights that utilizes the authorized wells. This data shall be submitted separately from the other rights that utilize the authorized wells.

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.

Your recorded water-use data shall be submitted via the Internet. To set up an Internet reporting account, contact the Eastern Regional Office. If you do not have Internet access, you can submit hard copies by contacting the Eastern Regional Office for forms on which to submit the data.

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, with the exception of fire

flow which does not need to be perfected provided infrastructure is in place to accomplish fire flow objectives. 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.

Municipal

If the criteria in RCW 90.03.386(2) are not met and a Water System Plan/Small Water System Management Program was approved after September 9, 2003, the place of use of this water right reverts to the service area described in that document. If the criteria in RCW 90.03.386(2) are not met and no Water System Plan/Small Water System Management Program has been approved after September 9, 2003, the place of use reverts to the last place of use described by The Department of Ecology in a water right authorization.

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 prior to beginning (or modifying) your project at DOH/Division of Environmental Health, 16201 E. Indiana Avenue, Suite 1500, Spokane Valley, WA 99216, (509) 329-2100.

This authorization shall not be considered a municipal supply right until the project meets the definition of a municipal supplier described in 90.03.015.

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.

Water Use Efficiency

Use of water under this authorization will be contingent upon the water right holder's maintenance of efficient water delivery systems and use of up-to-date water conservation practices consistent with established regulation requirements and facility capabilities.

Findings of Facts

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

Therefore, I ORDER approval of Application No. G3-30637, 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 111 Israel Road SW Ste 301 Tumwater, WA 98501	Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903

Signed at Spokane, Washington, this _____ day of _____ 2013.

Keith L. Stoffel, 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
G3-30637**

BACKGROUND

On January 4, 2012, Scott Byerley, dba Wine Valley Water System, filed an Application for Ground Water Right Permit G3-30637 with the Department of Ecology (Ecology). The application requests 1,846 gallons per minute (gpm) and 285 acre-feet per year (ac-ft/yr) for municipal supply purposes, as well as agricultural irrigation, golf course irrigation, irrigation of parks, open spaces, and other related landscaping needs for the Wine Valley water-supply project. The applicant holds other water rights for related purposes and indicates that the requested annual quantity is to be considered non-additive, such that total withdrawals do not exceed 285 ac-ft. The proposal is intended to be issued less any annual quantity authorized under Ground Water Certificate No. 2716-A(C) together with Report of Examination dated February 4, 2009, including accompanying Record of Decision dated March 19, 2009, which shall be referred to in the report as Ground Water Certificate No. 2716-A(C). The project site is located in Water Resource Inventory Area (WRIA) 32 in Walla Walla County.

Project Description

The project site is the Wine Valley Water System that is located in southern Walla Walla County, four miles east of Lowden and approximately six miles west of Walla Walla, Washington, on the north side of Highway 12. The water system will supply both potable water and fire flow for 273 homes, the Frenchtown Interpretive Center, a golf-course clubhouse, maintenance shop, cart house, and seven wineries. The Water System identification number, from the Department of Health, is AB581.

The proposed withdrawal points are four existing wells located on the project site.

The intent of this application is to secure additional water rights that are needed for flexibility at the Wine Valley project. Water under this permit will be used for a variety of purposes, initially for irrigation of the golf course while the housing component expands and later for types of domestic and commercial water uses that would qualify as municipal-supply purposes once the system reaches 15 active domestic connections and begins the water-system-planning process. This system does not currently qualify as a municipal water system under RCW 90.03.386, and as such is limited by the place of use described in the attachment. The purpose of use will be classified as Multiple Domestic Supply (including fire flow, commercial/industrial use and non-agricultural irrigation) until such time as the system qualifies. These uses will be restricted to the intended uses and scope of project described under Ground Water Certificate No. 2716-A(C) together with Report of Examination dated February 4, 2009 including accompanying Record of Decision dated March 19, 2009.

Table 1. Summary of Application No. G3-30637

<i>Attributes</i>	<i>Proposed</i>
Applicant	Scott Byerley
Application Received	January 4, 2012
Instantaneous Quantity	1,846 gpm (additive to Ground Water Certificate No. 2716-A(C))
Source	4 wells
Point of Diversion	Well 1 - 534 ft north and 717 ft west of the SE corner of Sec. 24 Well 2 – 474 ft north and 667 ft west of the SE corner of Sec. 24 Well 3 – 500 ft north and 650 ft west of the SE corner of Sec. 24 Well 4 – 575 ft north and 450 ft east of the SW corner of Sec. 25 All in Township 7N, Range 34 East
Purpose of Use	Municipal (MU)/Multiple Community Domestic Supply (including commercial/industrial, agricultural irrigation, dust control, road construction, heat exchange, frost protection, fire protection, fire flow water system maintenance/repair, stockwater recreation, aesthetics, environmental enhancement and irrigation of parks, open spaces, landscaping)
Period of Use	Year-round & seasonal, as needed
Place of Use	Place of use will be the area served by the Wine Valley Water System, as described in a Department of Health approved water-system plan.

Associated Water Rights

There are currently nine irrigation water rights appurtenant to the place of use; six groundwater rights and three surface-water rights. These rights have been issued for both golf course and agricultural irrigation.

The groundwater rights are

- 284-A(A)¹
- G3-23614C(A)

¹ The golf course will receive 354 gpm for irrigation of 80 acres from 284-A(A) with Byerley retaining 21 gpm and 5 acres of irrigation (this change is currently being processed by the Walla Walla County Water Conservancy Board).

- G3-23614C(C)
- G3-28030C(A)
- G3-28736C(A)
- 2716-A(C)

The surface-water rights are

- Walla Walla Adjudicated Certificate, Vol. 4A, Page 630/CHG 1-3-127,
- Walla Walla Adjudicated Certificate, Vol. 4A, Page 833/CHG 1-3-188
- S3-29174

These rights listed in the first half of Table 2, authorize the use of water for irrigation and are not associated with potable demands of the project. However, all of the groundwater demand for the project would be met by the same four wells.

Potable water demands, listed in the second half of the Table 2, are authorized by GWC 2716-A(C), which was modified by the Walla Walla Water Conservancy Board (WCB) to reflect a change in purpose of use from irrigation to domestic and industrial supply. The points of withdrawal associated with this water right are Wells 1 and 2 that are located in the SE¼SE¼ of Section 24, T. 7 N. R. 34 E. The right authorizes the withdrawal of 403 gpm and 285 acre-feet.

The applicant has indicated that total project demand, as requested under this permit (G3-30637), will not exceed 285 ac-ft/yr. Accordingly, this filing and resultant permit will be considered non-additive annual quantity to GWC 2716-A(C). Water rights associated with the property are detailed in Table 2.

Table 2 – Wine Valley and Related Property Basalt Groundwater Rights

Water Right	GPM	Ac-Ft/Yr		Acres		Purpose of Use	Source
		Additive	Non-Additive	Primary	Non-additive		
Irrigation							
G3-23614 (A)	140	224	0	238.66		Agricultural Irrigation	3 Wells
G3-23614 (C)	346	212	0	90		Golf Course Irrigation & Agricultural Irrigation	3 Wells
G3-28030 (A & E)	758	299.84	0	119.91	328.66	includes portion (E), Agricultural Irrigation	3 Wells
G2-28736 (A & E)	1158	324.16	735.84	0	448.57	Includes portion (E), Agricultural Irrigation	3 Wells
284-A(A)	354	211	0	80		Golf Course and Agricultural Irrigation	3 Wells

284-A	21	13.2	0	5		Agricultural Irrigation	3 Wells
<i>Irrigation Sub-Total</i>	<i>2,777</i>	<i>1,284.2</i>	<i>735.84</i>	<i>533.57</i>	<i>777.23</i>		
Municipal Supply							
2716	403	285	0	N/A	N/A	Domestic and industrial/commercial	2 Wells
Total	3,180	1,569.2					

Legal Requirements for Application Processing

The following requirements must be met prior to making a permit decision:

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. A notice of publication was published in the Waitsburg Times on Oct. 18 and 25, 2012. No protests were received as a result.

State Environmental Policy Act (SEPA)

The proposed action is categorically exempt from SEPA [WAC 197-11-305 or WAC 197-11-800(4)], because the instantaneous quantity requested by the water right application is less than the threshold of 2,250 gallons per minute.

The Wine Valley project as a whole is not SEPA exempt but has undergone environmental review by Walla Walla County and acquired appropriate permits for development. On June 16, 2009 Walla Walla County Community Development Program issued a mitigated determination of non-significance for the project. An addendum to the SEPA was submitted to Ecology on December 17, 2012. There is no significant change to the project and the existing mitigated determination of non-significance is adequate.

Water Resources Statutes and Case Law

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

Cost Reimbursement and Expedited Processing

Based on the provisions of RCW 43.21A.690 and RCW 90.03.265, this application has been processed by Pacific Groundwater Group under Ecology Cost-Reimbursement Agreement Contract No. C1000192, Work Assignment PGG015.

RCW 90.03.265(1)(b) provides that the requirement for an applicant to pay for the processing of senior applications does not apply in situations where it can be determined that the water allocated to one party will not diminish the water available to a senior applicant from the same source of supply. Because this requested appropriation is non-additive with respect to annual quantity, and it would not result in increased water consumption, this application has no tangible effect on other pending requests and can be processed prior to older pending applications.

INVESTIGATION

The examination of Groundwater Right Application G3-30637 was led by Pacific Groundwater Group. Dan Tolleson, Department of Ecology, Water Resources Program, Eastern Regional Office, oversaw the examination and provided review.

A site visit was conducted by Linton Wildrick of Pacific Groundwater Group on August 8, 2012. The visit included the inspection of the production wells and the project site. The investigation included, but was not limited to, the review of:

- The State Water Code, specifically WAC 173-532 and RCW 90.03 and 90.44
- Washington State Department of Ecology, 2012, Washington State Well Log Viewer website, <<http://apps.ecy.wa.gov/welllog/index.asp>>.
- Washington State Department of Ecology, 2012, Water Rights Tracking System (WRTS) website <<http://www.ecy.wa.gov/programs/wr/rights/tracking-apps.html>>.
- Walla Walla Watershed Level 1 Assessment, Executive Summary, EES

Site Description

The project site is located in southern Walla Walla County, four miles east of Lowden and approximately 6 miles west of Walla Walla, in the Walla Walla River Basin. The basin occupies 1,758 square miles in southeastern Washington and northeastern Oregon. Approximately 75% of the basin is located in Washington State and forms Watershed Resource Inventory Area 32 (WRIA 32). WRIA 32 is bounded by the Columbia River on the west, the Blue Mountains on the east, the state line on the south, and the Snake River Basin to the north.

The Wine Valley project site was historically irrigated for agricultural purposes and consists of rolling low hills that are typical of the region, on a gentle south-facing slope.

Hydrogeology

The sequence of geologic units (stratigraphy) at the site is generally the same as in the greater Walla Walla drainage basin (Newcomb, 1965²; GSI Water Solutions, 2007³). The geologic units are described below, from youngest to oldest (shallower to deeper):

- Quaternary Fine unit - this is a thin surficial unit of the Palouse Formation, a glacial windblown silt and very fine sand, called loess. The unit is not saturated, but allows precipitation and snowmelt to infiltrate to underlying units.
- Quaternary Coarse unit – an aquifer composed of uncemented sandy to gravelly basaltic sediments, with silty to sandy matrix and local silt interbeds;
- Mio-Pliocene Upper Coarse unit (aka, Old Gravel) – an aquifer consisting of variably cemented sandy gravel with muddy to sandy matrix. The sediments are red, red-brown, and yellow-brown, weathered basaltic particles.
- Mio-Pliocene Middle Fine unit (aka, Old Clay) – an aquitard (lower permeability unit that restricts groundwater flow) consisting of silt, clay, sandy clay, and sandy mud, in variable colors of blue, green, grey, brown, and yellow, interbedded with gravel.
- Basaltic bedrock – Columbia River Basalt Group

The Columbia River Basalt Group (CRBG) is a thick sequence of 6 to 17 million year-old lava flows that cover all of southeastern Washington and parts of northeastern Oregon and the panhandle of Idaho. The Walla Walla syncline is a trough-shaped feature that developed by deformation of the basalt. The syncline forms a basin into which the sedimentary units were deposited.

Based on the driller's log for Well 3 at the Byerley site (well owner listed as Bye-Far Golf LLC):

- the Quaternary Fine Unit is approximately 21 feet thick and provides an excellent quality agricultural soil, due to its moisture retention property;
- the Quaternary Coarse unit is 100 feet thick and consists of interbedded gray clay and sand;
- the Mio-Pliocene Upper Coarse unit is 53 feet thick and consists of interbedded brown clay and gravel;
- the Mio-Pliocene Middle Fine unit is 114 feet thick and consists of brown, dark blue, and dark gray clay, with sand; and
- the top of the basaltic bedrock was encountered at a depth of 288 feet. The upper 17 feet of this rock was weathered and relatively easy to drill. Several water-production zones were encountered in the basalt from 391 to 565 feet. The static water level at well completion, on

² Newcomb, R. C., 1965. *Geology and Ground-Water Resources of the Walla Walla River Basin, Washington-Oregon*. WA Dept. of Conservation, Div. of Water Resources, Water-Supply Bulletin No. 21.

³ GSI Water Solutions, 2007. *Results of the First Season of Shallow Aquifer Recharge Testing at the Locher Road Site, Walla Walla County, Washington*. Report for Gardena Farms Irrigation District 13 and Dept. of Ecology, July.

Nov. 9, 2011, was 206 feet below the top of the well, which indicates that the basalt is a confined aquifer at this location.

The basalt is an extremely heterogeneous aquifer system, with highly variable hydraulic properties. The principal water bearing subunits are contained in the vesicular and scoriaceous interflow zones that typically occupy only 5 to 10 percent of the thickness of an individual flow. The interflow zones are separated by less transmissive and more massive entablature and colonnade sections. Depth to the water-bearing zones within the basalt in the Walla Walla Basin varies widely due to the complicated nature of groundwater. Groundwater flow in the basalt aquifer is generally westward along the axis of the syncline. Recharge to the basalt aquifer system generally occurs from the Blue Mountains located at the southern and eastern sides of the basin. Further west and northwest in the Walla Walla and Touchet Sub basins, the basalt aquifer discharges groundwater to the Columbia and Snake Rivers, which are the major groundwater sinks for the basalt aquifer in this region.

Production Wells

Wells 1, 2, and 3 and 4 are completed in the CRBG unit and will be used to meet the proposed project demands and historic irrigation demands. Well 4 will continue to be used for irrigation, as authorized by previously issued rights and this permit. Well 4 may be integrated into the municipal system or continue to be used for the golf course and agricultural rights as authorized under existing rights. All wells may be used for emergency fire flow needs.

Well 1

Well 1 was drilled in 1975 to a depth of 566 feet below ground level with 16-inch casing extending to depth 566 feet in the upper part of the CRBG unit. In 1990, the well was deepened to 1,263 feet. A pumping test was conducted in April 2006, with a stated maximum pumping rate of 2,209 gpm. Observed drawdown at this rate was 32 feet below a static level of 185 feet below ground surface (bgs) after 24 hours of pumping, for a specific capacity of approximately 69 gpm per foot of drawdown (gpm/ft).

Well 2

Well 2 was constructed in 1987 to a depth of 600 feet, with a 10-inch -diameter casing extending to depth 296 feet and open borehole below in the CRBG unit. In 1990, the well was deepened to 1,035 feet. The well was test pumped on April 16, 2006 at a rate of 700 gpm. Total drawdown was observed at 56 feet below a static level of 168 feet bgs after 24 hours of pumping, for a specific capacity of 12.5 gpm/ft.

An additional set of pumping tests were conducted on April 19 through April 20, 2007 to confirm that Wells 1 and 2 had capacity to pump 800 gpm simultaneously. Well 1 was pumped consecutively at 750 gpm for 50 minutes, 1,000 gpm for 50 minutes, and 1,700 gpm for 22.5 hours, for a total pumping time of 24 hr and 10 minutes. Well 2 was pumped at 700 gpm for about 1,400 minutes. The drawdown in both wells was measured during the operations of both pumps, and an additional decline in water level

(interference drawdown) of 7 feet was noted in Well 1 when Well 2 turned on. The combined pumping rate was about 2,400 gpm.

Well 3

The original plan for the subject project envisioned the use of Wells 1 and 2 to provide for potable supply. Recently, the proponents drilled a third well (Well 3) at the well field that could be more easily approved as a drinking water source for the Bye Far golf course and adjacent residence.

Well 3 is located 85 feet west of Well 1. It is 565 feet deep and has 8-inch casing to depth 292 feet. It is completed in the CRBG unit. A 4-hour pumping test was conducted on June 1, 2012 at a constant rate of 25 gpm; at the same time, Well 2 was pumped steadily at 610 gpm and Well No. 1 was pumped at 1,250 gpm, for a total of 1,885 gpm. The water level in Well No. 3 declined approximately 10 feet during the test, for a specific capacity of 2.5 gpm/ft, substantially less than in Wells 1 and 2, as would be expected since it penetrates fewer water producing interflow zones of the CRBG. Well 3 is only equipped with a pump that is able to produce 30 gpm.

Well 4

Well 4 is located about a mile away from Wells 1, 2, and 3 and will be used for continued irrigation. Its use is already authorized by existing water rights and it will likely not be used directly for potable supply. The well was constructed in 1947 and is reported to be 1102 feet deep. The casing extends to 176.54 feet and is perforated between 48 to 57 feet and again between 62 and 68 feet. The applicant reports that the well is capable of producing 800 gpm.

Existing and Proposed Use

Wells 1, 2, and 4 are currently being used to supply water for the Wine Valley golf course and agricultural irrigation under existing rights (see Table 2 above). They are proposed to be used for these purposes until such time as Wells 1 and 2 are shifted over to provide supply municipal water. It is anticipated that there will be a time when Wells 1 and 2 will supply both agricultural and municipal water. The applicant proposes to move the agricultural rights to other locations as housing is developed. Well 4 is proposed to mainly supply the golf course and provide some agricultural irrigation under existing rights. Ground Water Certificate No. 2716-A(C) and Ground Water Permit No. G3-30637 shall have separate water meters from the other water rights that utilize the authorized wells. Well 3 currently supplies community domestic water under Ground Water Certificate No. 2716-A(C). In addition, the applicant will need to ensure that the system meets the requirements of the Health Department.

As previously noted, the Wine Valley wells are authorized to produce 3,180 gpm under previously issued rights for residential use, as well as irrigation of both cultivated fields and the golf course. Pumping tests have indicated that Wells 1, 2, and 3 are capable of producing more than 2,400 gpm, but are currently producing less. To meet all demands, the applicant will need to coordinate pumping between the

various uses and to upgrade the system as needed. The applicant anticipates that much of the agricultural irrigation will be moved to different sites and wells as the project is developed.

In accordance with RCW 90.03.386(2), a municipal water supplier may change its service area through the water system plan approval process. As long as the municipal water supplier is in compliance with the approved plan, the place of use for the water right is the service area of the plan.

Quantity of Additional Water Needed for Permit

The project site currently contains a residence, with associated outbuildings, and golf facility buildings. However, when the project is completed the water system will supply multiple residential and other types of service connections consistent with the definition of a municipal water system.

Municipal Supply Designation RCW 90.03.260(4) & (5) - Numbers of Connections and Population.

1. If a water system serving 15 or more existing residential service connections has a water right for community or multiple domestic supply, and the number of connections has been authorized by the Department of Health, the water right is for municipal water supply purposes and any population or connection limitations that may appear in water right documents are not limiting. Rather, the maximum instantaneous quantity (Q_i) and annual quantity (Q_a) are the controlling numbers.
2. If a water system serving less than 15 existing residential service connections has a water right that issued for a project proposing more than 15 residential service connections, and any number of connections specified on the application or any subsequent water right documents is 15 or greater, then such a water right may be conformed as a right for municipal water supply purposes under RCW 90.03.560. This conformance must follow actual physical service to at least 15 residential service connections.
3. If a water system is providing water for residential use to a nonresidential population numbering *less* than an average of 25 people for sixty or more days per year, under a water right issued for a project proposing residential use of water to a nonresidential population for an average of *greater* than 25 people for sixty or more days per year, then such a water right may be conformed as a right for municipal water supply purposes under RCW 90.03.560 following actual service to an average of 25 or more people for sixty or more days per year.

Multiple Domestic Supply for this project will include the uses normally associated with a community domestic supply of this nature which includes but is not limited to initial construction uses, maintenance of the system, landscaping, park irrigation, yard irrigation and domestic supply for homes. At full build out the community is anticipated to have approximately 273 homes and an additional 10 Equivalent Residential Units (ERU) is proposed to be used for commercial industrial uses. This total of 283 ERUs is estimated to have 0.25 acre each of associated lawn and landscaping irrigation for a total of 70.75 acres of non-agricultural irrigation.

Wine Valley Water System is designed to supply the entire project at full build out, which include a housing development, wineries, other commercial buildings and some irrigation of the golf course. This use is consistent with the underlying Ground Water Certificate No. 2716-A(C). Lot sizes for the individual homes are large – ranging from 0.5 to 2.5 acres in size. However, water conservation is an important element of the project, and water use will be managed so as not to exceed previously issued domestic water rights regarding annual quantity and use.

Total annual residential (potable) withdrawals include water for the following proposed uses:

- Domestic Supply - Average Daily Demand (ADD) for the residential elements of this system was estimated to range from 560 to 765 gallons per equivalent residential unit (ERU), based on regional water-use patterns and seasonal landscaping demand for the Walla Walla area. For water-system planning purposes, the Wine Valley Water System has planned for an ADD of 800 gpd/ERU. An 800 gpd/ERU equates to 152 gpm for average daily domestic supply of 273 homes. The Maximum Day Demand (MDD) was calculated to be 1,600 gpd/ERU and assuming a peaking factor of 2. Thus the MDD would be 303 gpm for the project. The residential peak hourly demand (PHD) was calculated to be 700 gpm. At full build out the annual withdrawals are estimated at 245 ac-ft/yr.
- Golf Course Non-irrigation Supply - Water use at the golf course will include demands for the restaurant, kitchen, maintenance shop, and office area. The ADD for the golf course complex was predicted to be 2,560 gpd, with an MDD of 5,120 gpd. Annual withdrawals are estimated at 2.87 ac-ft/yr.
- Interpretive Center - Water use at the Frenchtown Hall and Interpretive Center has been estimated to be in the order of 700 gpd (ADD) or 0.78 ac-ft/yr. This is proposed to be a stand alone facility located on the fringe of the development.
- Wineries - This project is being constructed to attract and support wineries, including their water needs. While the exact number and configuration of the wineries has not been established, it is estimated that up to seven wineries could be supported. Water use by wineries would include sanitary and processing water, as well as water for winery operations and minor landscape irrigation. An ADD of 15213 gpd, an MDD of 30,487 gpd and a PHD of 63 gpm have been projected for this component of the system, thus total estimated water use will be 17.04 ac-ft/yr.
- Fire Station - A dedicated parcel is being set aside for a future fire station. The ADD is 1,200 gpd, and the MDD is 2,400 gpd, for a total estimate of 1.34 ac-ft/yr.
- Fire flow – The Walla Walla County Fire Marshal has indicated that at full build out this project will require approximately 2,000 gallons per minute for fire protection. Facilities may be constructed to provide these rates. No annual quantities are associated with this use since no water right is required to actively fight a fire. Water may be used as needed for emergency fire suppression in accordance with POL-2015.
- Golf course irrigation – This non-agricultural irrigation is estimated to be a maximum of 281 ac-ft/yr for initial use. This use will be reduced as the housing and commercial building are

developed. It is anticipated that this right will supply little if any water to the golf course irrigation at full build out.

- Mixed general uses – As with any group domestic supply there are additional uses typically associated with a community of this type and size. It is anticipated that an approximately 18 acre-feet will be needed for mixed uses within the community. These uses include a riding arena, horse pasture, wildlife habitat, fish pond(s), irrigation of green areas/parks and commercial uses including maintenance.

In summary, the Wine Valley Water System will be constructed to supply potable water needs of up to 285 ac-ft/yr. Because this system already has rights for 285 ac-ft/yr (domestic/municipal purposes), adequate annual quantity already exist, so additional primary water rights are not needed in regards to annual quantity. This means Ground Water Permit No. G3-30637 shall be less any water withdrawn under Ground Water Certificate No. 2716-A(C), regarding annual quantity.

The total instantaneous quantity of water proposed under this application is anticipated to be 1846 gallons per minute, and includes water for the following proposed uses:

- Fire flow – The Walla Walla County Fire Marshal has indicated that at full build out this project will require approximately 2,000 gallons per minute for fire protection. Facilities may be constructed to provide these rates. No instantaneous quantities are associated with this use since no water right is required to actively fight a fire. Water may be used as needed for emergency fire suppression in accordance with POL-2015.
- Group Domestic supply –The combined peak water-system demands will not be needed until final build out of the development. While the system holds adequate rights for annual needs, the system lacks adequate instantaneous rights that are specific to meeting the projected Peak Hourly Flow (PHD) for this public water system, which is 776 gpm. The PHD calculation is vital for fire protection and a high Qi is needed to replenish depleted fire-suppression storage in less than 2 days, while still providing the Maximum Daily Demand (MDD) for the water system. Because 403 gpm are already allocated to this system for potable purposes, an additional 373 gpm are needed to ensure that the system can operated at 776 gpm for short periods of time. These allocations are derived from the Water system plan for Wine Valley and assume large of water storage facilities. This allocation of 373 gallons per minute of additional water is essential to the operation of the water system at full build out. In an effort to reduce costs and make the system more efficient, the applicant proposes to irrigate the green areas/parks and lawns within the project at night. This system of night irrigation will allow most of the project to be irrigated when evaporation is at a minimum, which is anticipated to use less water and reduce energy costs. This flexibility will allow the water system to be more efficient and allow for a reduction in storage capacity, which potentially helps with the water quality of the system. In addition, this method of use is anticipated to cause less depletion of storage water that will be available for emergencies. The applicant proposes to intensely irrigate 70.75 acres of parks (open areas) and lawns for 6 hours a night (11 pm to 5 am). Assuming a 75% rate of efficiency with 2249 gallon per minute, the annual quantity recommended in The State of Washington Irrigation Guide (WA210-VI-WAIG) for turf can be archived during July (the highest water duty month) at

approximately 6.25 hours of irrigation. During the dryer months of summer, night irrigation use will need to be closely coordinated with the other typical night uses associated with the domestic supply. This mean at times a small portion of the proposed irrigation will need to occur outside the hours of 11pm to 5 am. This night time use equates to approximately 32 gallons per minute per acre, which is significantly higher than the 10 gpm typically associated with agricultural irrigation. This quantity is reasonable given that agricultural irrigation typically occurs throughout most if not all of a day and yards are typically irrigated for short time periods, to allow use during the day.

In summary, the Wine Valley Water System is anticipated to supply water needs of up to 2249 gallons per minute under both G3-30637 and Certificate No. 2716-A(C). Because this system holds water rights under Certificate 2716-A(C) for 403 gallons per minute, the instantaneous portion of this authorization (G3-30637) will issue as additive to achieve the desired quantities of water.

The total withdrawal under Ground Water Certificate No. 2716-A(C) and Ground Water Permit No. G3-30637 shall not exceed 2249 gallons per minute and 285 acre-feet per year.

The applicant initially proposed to have agricultural irrigation, with associated frost protection as a use under this application. Based on review of certificates 2716-A and G3-23614A, the applicant has adequate groundwater rights for agricultural irrigation (Table 2). Furthermore, additional extensive, possibly redundant, surface-water rights are associated with this same acreage. Because those rights already allow the use of irrigation of this site from the same wells, there is no functional reason to recommend the issuance of redundant agricultural irrigation rights under this permit, and the applicant has withdrawn his request.

The applicant initially proposed to have stockwater as a use under this application. The exemption as described under RCW 90.44.050, allows for unlimited stockwater. Therefore, the applicant does not need a water right for stockwater.

Measuring and Reporting Water Use

RCW 90.03.360 requires that the owner of any water diversion maintain substantial controlling works and a measuring device. It must be constructed and maintained to permit accurate measurement and practical regulation of the flow of water diverted. Technical requirements for the measuring and reporting of water use are described in WAC 173-173. This decision contains provisions requiring the measuring and reporting of the quantities of water withdrawn or diverted. Since there are multiple rights and uses for each proposed well, the total withdrawal under Certificate No. 2716-A(C) and G3-30637 shall have a separate water meter from the other water rights that utilizes the wells. This data shall be submitted separately for the other rights that utilize the authorized wells.

Well Tags

WAC 173-160 contains requirements for well drillers, system operators and/or owners to tag new and existing wells with identification tags supplied by Ecology. The well identification program creates a

standard system to identify all newly constructed or existing wells, so that property owners and various agencies can readily share well data. In addition, Ecology field staff use the well tag to identify the well. Accordingly, this decision contains provisions requiring each well to be tagged with a unique identification number.

Impairment:

“Impair” or “impairment” means to: 1) adversely impact the physical availability of water for a beneficial use that is entitled to protection, and/or 2) to prevent the beneficial use of the water to which one is entitled, and/or 3) to adversely affect the flow of a surface water course at a time when the flows are at or below instream flows levels established by rule (POL-1200), and/or 4) degrade the quality of the source to the point that water is unsuitable for use by existing water right holders (WAC 173-150). Demonstration of impairment would require evidence of a substantial and lasting or frequent impact reflecting such conditions.

Impairment of Other Groundwater Users

The issuance of this permit is primarily administrative in nature in that it provides clarity for the Wine Valley Water System and clear authorization to meet the system’s peak hourly demand under its water rights. This permit does not authorize the withdrawal of additional water regarding annual quantity. Nor does it allow for an increase in the withdrawal rate beyond the well’s current physical capacity. Accordingly, the yields of surrounding wells will not be impaired.

Impairment of Other Water Rights

Table 3 lists water rights with sources located within an approximate one-mile radius of the Wine Valley production wells. These include the applicant’s own water rights, some of which are in the process of being modified, as well as water right claims that may or may not represent valid water rights. By the same consideration as in the preceding section, none of the nearby water rights will be impaired by issuance of this permit.

Table 3 – Water Rights within One Mile Radius of Wine Valley Production Wells.

File #	Cert #	Owner	Doc	Priority Date	Purpose	GPM	Qa	Ir Acres	TRS	QQ/Q	Src's	1stSrc
G3-*03495C(C)	02716(C)	Byerley Scott	SuperCert	01/27/1954	IR	403	285	96.6	06.0N 36.0E 08		3	Well 2
G3-045976CL		Wallace, W. P.	Claim L		DG	10	2		07.0N 34.0E 24	SE/NE	1	Well
G3-045977CL		Wallace, W. P.	Claim L		DG	10	2		07.0N 34.0E 24	SE/SE	1	Well
G3-*00097C(B)	00284(B)	Rawls, David	SuperCert	01/24/1946	IR	40	25	10	07.0N 34.0E 24	SE/SE	3	Well
CG3-*03495C(C)@2	02716(C)	Byerley Scott	Chng/ROE	04/02/2008	DM,CI	403	285		07.0N 34.0E 24	SE/SE	2	
G3-28030C(A)		Bye Far Golf LLC	SuperCert	08/15/1985	IR	746	284.84	441.41	07.0N 34.0E 24	SE/SE	3	Well 1
G3-28736C(A)		Bye Far Golf LLC	SuperCert	02/10/1990	IR	1135	288	441.1	07.0N 34.0E 24	SE/SE	3	Well 1
G3-28736C(B)		WA Transportation Department	SuperCert	02/10/1990	IR	38	6	10.6	07.0N 34.0E 24	SE/SE	3	Well
G3-28030C(B)		WA Transportation Department	SuperCert	08/15/1985	IR	18	29	10.6	07.0N 34.0E 24	SE/SE	3	Well
G3-23614C(B)		WA Transportation Department	SuperCert	09/04/1974	IR	9	15	6.34	07.0N 34.0E 24	SE/SE	3	Well
CG3-28736C(A)@1		AV Vineyard LLC	Chng/ROE	10/22/2008	IR	19	12.66	16.88	07.0N 34.0E 24	SE/SE	4	Well 1
G3-23614C(A)		Bye-Far Golf LLC	SuperCert	09/04/1974	IR	140	224	238.66	07.0N 34.0E 24	SE/SE	3	Well 1
G3-23614C(C)		J & J Golf LLC	SuperCert	09/04/1974	IR	346	212	90	07.0N 34.0E 24	SE/SE	3	Well 1
CG3-28736C(A)@4		Byerley, Scott	Chng/ROE	10/22/2008	IR	1135	288	441.1	07.0N 34.0E 24	SE/SE	3	Well 1
CG3-28030C(A)@4		Byerley, Scott	Chng/ROE	10/22/2008	IR				07.0N 34.0E 24	SE/SE	3	Well 1
G3-30637		Wine Valley Water System	NewApp	01/04/2012	DM,DC	1846	285		07.0N 34.0E 24	SE/SE	4	Well 1
G3-*00097C(A)(11-27)	00284(A)	WA Transportation Department	Chng/ROE	01/24/1946	GP	0.85	50.8		07.0N 34.0E 24	SE/SE	3	Well
G3-*00097C(A)	00284(A)	Bye-Far Golf LLC	SuperCert	01/24/1946	IR	375	224.2	85	07.0N 34.0E 24	SE/SE	3	
G3-*00097C(C)	00284(C)	WA Transportation Department	SuperCert	01/24/1946	IR	85	50.8	20.32	07.0N 34.0E 24	SE/SE	3	
CG3-*00097C(A)@1	00284(A)	Byerley, Scott	ChgApp	05/01/2012	IR	375	224.2	85	07.0N 34.0E 24	SE/SE	4	
G3-120496CL		Walla Walla Livestock Auction & Feedlot	Claim S		ST				07.0N 34.0E 25		1	
G3-120497CL		Walla Walla Livestock Auction & Feedlot	Claim S		ST,IR				07.0N 34.0E 25		1	
G3-079144CL		Hamm, J. L.	Claim S		ST,IR				07.0N 34.0E 25		1	
CG3-*09463C	6655	R & D Technical Services Inc	Chng/ROE	06/26/1997	IR	60	60	45	07.0N 34.0E 36		2	Well
G3-087871CL		Campbell, Ellen J.	Claim S		IR				07.0N 35.0E 19		1	
CG3-*06804C(C)	6798	Long Shadows Vintners LLC	Chng/ROE	03/14/2006	IR	35	15.01	15.06	07.0N 35.0E 19		1	
CG3-*01001S		Botimer Douglas	ChgApp	12/04/2008	IR	200	68	17	07.0N 35.0E 19	SW/SE	1	Well
CG3-*07928C	6265	Walla Walla River Estates LLC	ChgApp	08/30/2004	IR	800	1200	412	07.0N 35.0E 30		2	Well 2
G3-28853C		Walla Walla Port	Cert	05/07/1990	IR	51	53	11.5	07.0N 35.0E 30	SE/NW	1	
CG3-28030C(A)@1		AV Vineyard LLC	Chng/ROE	10/22/2008	IR	11	12.66	16.88	07.0N 37.0E 17	SE/NE	4	Proposed Addition

Effects on Other Wells

The Washington Department of Ecology's Well Log Viewer⁴ was accessed to identify wells (many appear to be under the exemption) within a one mile radius of Byerley's Wells 1, 2, and 3 and 4. There are about 8 wells within a mile of the Wine Valley Wells that are completed in the same basalt aquifer as the project wells or in the shallower gravel system. It is anticipated that these wells will not be negatively impacted by the additional withdrawal rate authorized under this permit.

Table 4 –Wells Near Project Site

Owner	Depth		Diameter	Town.	Range	Sec.	qtr	qtr_qtr	Date
BYERLY FARMS	300	Gravel	6	7	34 E	24	SE	SW	04/19/1991
MARK/SUSAN PLUMLEE	122	Gravel	8	7	34 E	25	SW	SE	06/04/1997
ROBERT/KAY WEEKS	98	Gravel	6	7	34 E	25	NE	NW	05/09/1993
THOMAS C. BERGEVIN	93	Gravel	6	7	34 E	25	SE	SW	02/05/1994
Mark and Susan Plumlee	122	Gravel	8	7	34 E	25	SW	SE	06/4/1997
Robert and Kay Weeks	98	Gravel	6	7	34 E	25	NE	NW	05/09/1993
RONALD DUNNING SR.	600	Basalt	10	7	34 E	25	SE	SW	07/08/1987
Demas Bergevin	460	Basalt	12	7	34 E	26	SE	-	03/15/1958
Frenchtown	96	Gravel	6	7	34 E	36	NW	NW	07/11/2011

Watershed Planning and Instream Flows

The Walla Walla basin is usually characterized as having limited water resources since most of the summer flow of the Walla Walla River has been diverted for irrigation. In 1976, Ecology adopted the Water Resources Program Rule for the Walla Walla River Basin (Washington Administrative Code 173-532) that seasonally closed most streams and rivers and limited future water withdrawals. Due to potential impairment of existing water rights, no new significant surface or groundwater rights have been issued in the basin since 1996.

In 2000, the Walla Walla Community initiated the development of a watershed plan to address the needs of the basin, including stream flow protection and restoration. The Water Resources Inventory Area (WRIA) 32 Watershed Plan was completed by the Watershed Planning Unit in May 2005 and was adopted by the Walla Walla and Columbia County's Board of Commissioners in June 2005.

The Watershed Planning Unit adopted a comprehensive watershed plan in May 2005. The committee decided that WAC 173-532 did not provide adequate protection for instream-flow resources and existing water rights in the basin. The committee recommended adoption of a new rule by Ecology that implements both instream-flow water rights and protective measures to avoid injury of existing water rights from future appropriations of water.

⁴ <http://apps.ecy.wa.gov/wellog/index.asp> (accessed on August 29, 2011)

In the Watershed Plan, recommendations were made for instream-flow rates (referred to as “new appropriation flows”), modification of stream closures, and use of winter and spring high flows for water-storage projects that improve stream flows for salmon production.

The rule amendment includes language setting instream flows and closures, as well as mitigation tools for managing water. However, since the Byerley application is not requesting an additional withdrawal, and his wells tap the deeper basalts, the issuance of this permit is not in conflict with plans or rules.

The Walla Walla Watershed Plan was completed in May of 2005 and includes basin-wide plans and strategies for managing water resources. Several of the planning objectives are consistent with the applicant’s proposed water-management objectives. These objectives include:

- Protection of existing water rights
- Providing for long-term reliable and predictable water supplies for human use, balanced with habitat and water-quality needs.
- Identifying and implementing water conservation and efficiency strategies.

Four Statutory Tests

This Report of Examination (ROE) evaluates the application based on the information presented above. To approve the application, Ecology must issue written findings of fact and determine that each of the following four requirements of RCW 90.03.290 has been satisfied:

1. The proposed appropriation will be put to a beneficial use;
2. Water is available for appropriation;
3. The proposed appropriation will not impair existing water rights; and
4. The proposed appropriation will not be detrimental to the public welfare.

Beneficial Use

The applicant has proposed to use this water for a beneficial purpose, specifically domestic water demand of a planned development. Once this system serves 15 connections, the Wine Valley Water System will qualify as a municipal provider based on its operation of the system as a Group A water system. The applicant’s other request for redundant supplies for purposes already authorized by other rights are not needed, and therefore do not represent beneficial purposes.

Under RCW 90.03.386(2) the place of use of a municipal water right automatically becomes the service area as approved by the (DOH) in an approved planning or engineering document. Until such time the place of use is defined by the description of the service area contained in the Attachment.

The proposed uses of water are a beneficial use per RCW 90.54.020(1).

Availability

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

Water is physically available for use and pumping tests have demonstrated that additional water can be produced from these wells without adverse impact to other water users or instream resources. Water is legally available, because this application increases only the instantaneous rate, while adding flexibility to withdrawal patterns. The allocation of this right is consistent with the intent of WAC 173-532 which specifies that new right may be issued that do not conflict with the intent of the Rule, and further that new permits can be issued if the proposed water use is non-consumptive⁵.

Potential for Impairment

As described above, other groundwater users will not be impaired because the actual volume of water being withdrawn is not being increased, thus the use will be water budget neutral in respect to other users. WAC 173-532 allows the issuance of new water rights that are non-consumptive, from the basalt aquifer and do not negatively impact the ability of other water users.

Public Welfare

RCW 90.03.290 requires that a proposed appropriation not be detrimental to the public interest.

The 1971 Water Resources Act provides the most comprehensive list of legislative policies that guide the consideration of public interest in the allocation of water. These policies generally require a balancing of the state's natural resources and values with the state's economic well-being. Specifically, the policies require allocation of water in a manner that preserves instream resources, protects the quality of the water, provides adequate and safe supplies of water to serve public need, and makes water available to support the economic well-being of the state and its citizens.

In the present case, water use will not be detrimental to public interest because it will be used in a manner that is non-consumptive in respect to other water users and is consistent with WAC 173-532. Based on the foregoing analysis, issuance of this water right will not be detrimental to the public interest.

There has been no public expression of protest or concern regarding the subject proposal, and no findings through this investigation indicate that there would be any detrimental impact to the public welfare through issuance of the water right.

CONCLUSIONS

The conclusions based on the above investigation are as follows:

⁵ "Non-consumptive use" means a type of water use where either there is no diversion or withdrawal from a source, or where there is no diminishment of the amount or quality of the water source.

Attachment

Subarea A

N $\frac{1}{2}$; N $\frac{1}{2}$ S $\frac{1}{2}$ and Govt. Lots 1 and 2 of Section 25, T. 7 N., R. 34 E.W.M. EXCEPTING therefrom, the following described tract:

Beginning at a point in the East line of Sec. 25, which point is 279.7 feet South, measured along the said East line, from the E $\frac{1}{4}$ corner of said Sec. 25; and running thence South 42°30' West 510.2 feet; thence South 55°44' West 308.5 feet; thence South 57°44' West 324.7 feet; thence South 0°29' East 1075 feet, more or less, to a point in the North line of the Narcisse Raymond Donation Claim; thence East along the said north line, 866 feet to a point in the East line of Said Sec. 25; thence North 0°11' East along the said East line, 1801.5 feet to the point of the beginning.

Also excepting the new Highway 12

AND

S $\frac{1}{2}$ SE $\frac{1}{4}$ of Section 24, T. 7 N., R. 34 E.W.M.

Subarea B

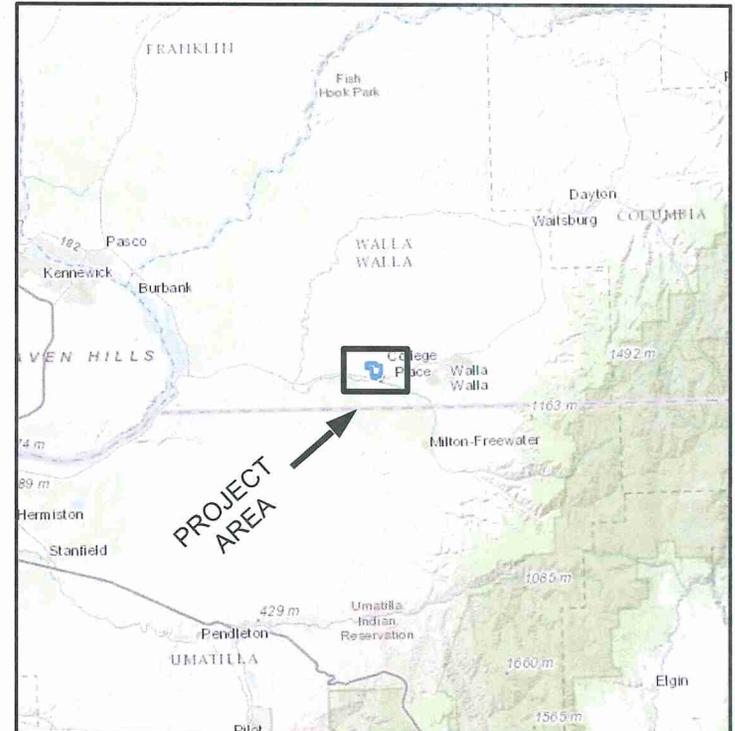
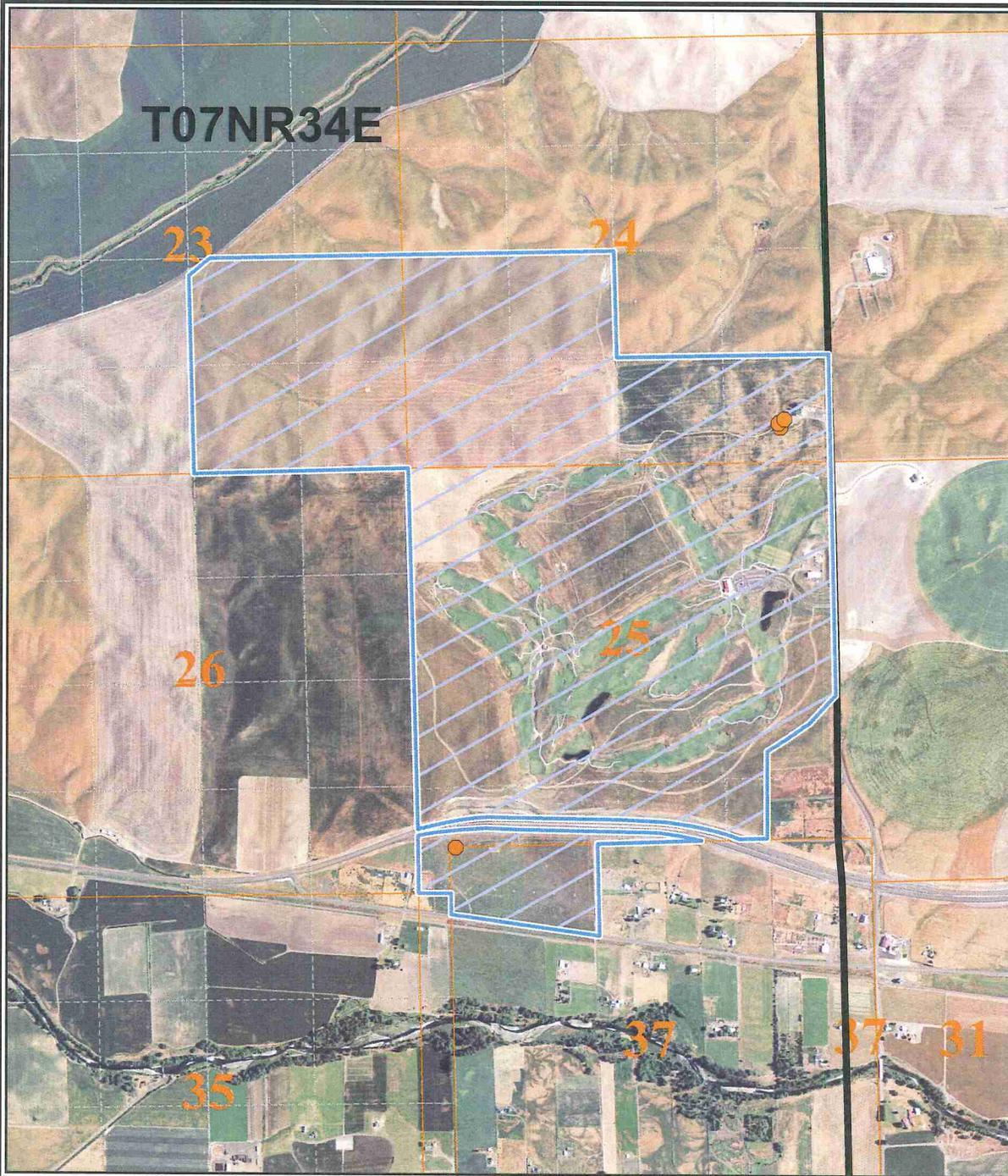
Government Lots 3 and 4, Sec. 25, T. 7 N., R. 34 E.W.M. Also, beginning at the NW corner of the Narcisse Raymond Donation Claim No. 37 in Secs. 25 and 36 in T. 7 N., R. 34 E.W.M., running thence East along the North line of said Donation Claim a distance of 1830.0 feet; thence South parallel to the west line of said claim to the Old Highway 12, then northwesterly along the Old Highway 12 to the west line of said donation claim; thence north along the west line of said donation claim to the point of beginning.

Exempting therefrom the new Highway 12

Subarea C

SW $\frac{1}{4}$ of Sec. 24 and the SE $\frac{1}{4}$ of Sec. 23 lying South of County Road

Scott Byerley
 G3-30637
 T07N/R34E



Basemap - (ESRI US Topographic Maps)

Legend

-  Authorized Place of Use
-  Townships
-  Sections
-  Authorized Point of Withdrawal

0 330660 1,320 1,980 2,640 3,300
 Feet
 Basemap - (NAIP 2011 1m color)



Map Date: 6/17/2013



Comment:

Place of use and source locations are as defined within the Report of Examination cover sheet for the document identified in the header above.