File NR: G4-35592
WR Doc ID: 5523601

DEPARTMENT OF ECOLOGY
State of Washington

State of Washington
REPORT OF EXAMINATION
FOR WATER RIGHT APPLICATION

PRIORITY DATE
November 19, 2012

WATER RIGHT NUMBER
G4-35592

MAILING ADDRESS
GARY DALLAS KNAPP
1004 SANDERS RD
ELLENSBURG WA 98926-9351

SITE ADDRESS (IF DIFFERENT)
70 ESTATE LANE
ELLENSBURG, WA 98926

Quantity Authorized for Withdrawal or Diversion

WITHDRAWAL OR DIVERSION RATE	UNITS	ANNUAL QUANTITY (AF/YR)
10	GPM	0.414

Purpose

	WITHDRAWAL OR DIVERSION RATE			ANNUAL QUANTITY (AF/YR)		
PURPOSE	ADDITIVE	NON-ADDITIVE	UNITS	ADDITIVE	NON-ADDITIVE	PERIOD OF USE (mm/dd)
Domestic Single	10		GPM	0.392		01/01 - 12/31
Irrigation		10	GPM	0.022		06/01 - 09/30

IRRIGATED ACRES		PUBLIC WATER SYSTEM INFORMATION	
ADDITIVE	NON-ADDITIVE	WATER SYSTEM ID	CONNECTIONS
0.011	0	N/A	N/A

Source Location

COUNTY	WATERBODY	TRIBUTARY TO	WATER RESOURCE INVENTORY AREA
KITTITAS	GROUNDWATER		39-UPPER YAKIMA

SOURCE FACILITY/DEVICE	PARCEL	WELL TAG	TWP	RNG	SEC	QQ Q	LATITUDE	LONGITUDE
1 well	20584	BAE644	18N	19E	32	SW SE	47.00056	-120.48362

Datum: NAD83/WGS84

Place of Use (See Attached Map)

PARCELS (NOT LISTED FOR SERVICE AREAS)
20584

LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE
Lot 4 of ROSE MEADOWS NO. 1 SHORT PLAT, Kittitas County Short Plat No. SP-04-58, as recorded March 25, 2005, in Book H of Short Plats, pages 38 and 39, under Auditor's File No. 200503250039, records of Kittitas County, state of Washington; being a portion of Section 32, T. 18 N., R. 19 E.W.M., in the county of Kittitas, state of Washington.

Proposed Works

The delivery system is not yet constructed.

Domestic wastewater will be discharged to an on-site individual or group septic system pursuant to the Declaration of Covenant.

Development Schedule

BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
Begun	March 31, 2023	March 31, 2025

In determining the above Development Schedule, that is the timeframe for the applicant to implement the authorized use of water, reasonable and just time was considered and allowed under the existing conditions to begin and to complete construction of the project. Sufficient time is also awarded in order for the applicant to collect water-use data and to put the water to full beneficial use. The Development Schedule above reflects consideration of the potential cost and magnitude of the project and the engineering and physical features potentially to be encountered.

Measurement of Water Use

How often must water use be measured?	Bi-weekly
How often must water use data be reported to Ecology?	By January 31st Annually
What volume should be reported?	Total Annual Volume
What rate should be reported?	Annual Peak Rate of Withdrawal (gpm)

Provisions

1. **Wells, Well Logs and Well Construction Standards**
   a) The subject well and the right to use water from it is restricted to and authorized for the Ellensburg Formation aquifer.

   b) All wells constructed in the state shall meet the construction requirements of WAC 173-160 titled "Minimum Standards for the Construction and Maintenance of Wells" and RCW 18.104 titled "Water Well Construction." Any well which is unusable, abandoned, or whose use has been permanently discontinued, or which is in such disrepair that its continued use is impractical or is an environmental, safety or public health hazard shall be decommissioned.

   c) 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.

   d) Installation and maintenance of an access port as described in WAC 173-160- 291(3) is required.

2. **Measurements, Monitoring, Metering and Reporting**
   a) 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.

b) Recorded water use data shall be submitted via the Internet. To set up an Internet reporting account, contact the Central Regional Office. If you do not have Internet access, you can still submit hard copies by contacting the Central Regional Office for forms to submit your water use data.

c) Water use shall be recorded bi-weekly. The maximum monthly rate of withdrawal and the monthly total volume shall be submitted to Ecology by January 31st of each calendar year.

d) 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.

3. Water Level Measurements

a) In order to maintain a sustainable supply of water and ensure that your water source is not impaired by future withdrawals, static water levels **should** be measured and recorded monthly using a consistent methodology. Static water level is defined as the water level in a well when no pumping is occurring and the water level has fully recovered from previous pumping. Static water level data should include the following elements:

- Unique Well ID number.
- Measurement date and time.
- Measurement method (air line, electric tape, pressure transducer, etc.).
- Measurement accuracy (to nearest foot, tenth of foot, etc.).
- Description of the measuring point (top of casing, sounding tube, etc.).
- Measuring point elevation above or below land surface to the nearest 0.1 foot.
- Land surface elevation at the well head to the nearest foot.
- Static water level below measuring point to the nearest 0.1 foot.

4. Water Use Efficiency

a) 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.

5. Proof of Appropriation

a) 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.

6. Schedule and Inspections

a) 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.

7. **Other Conditions**

a) This authorization shall in no way excuse the permittee from compliance with any federal, state, or local statutes, ordinances, permits, or regulations including those required and administered by other programs of the Department of Ecology.

b) You (applicant) will record with the Kittitas County Auditor a property covenant as required under the Aqua Mitigation LLC Trust Water Right Agreement, dated August 9, 2011, and subsequent First Amendment for Trust Water Right Agreement, dated March 25, 2013, that requires an approved septic or other waste treatment facility that is reasonably designed to infiltrate treated water from which it is withdrawn and that restricts or prohibits trees or shrubs over a septic drain field on Parcel No. 20584.

c) You (applicant) will record with the Kittitas County Auditor an appropriate conveyance instrument under which the applicant obtains an interest in Trust Water Right No. CS4-01968sb11a to offset consumptive use in the amount of 0.161 acre-feet per year.

d) Any valid priority calls against the source Trust Water Right No. CS4-01968sb11a, based on local limitations in water availability, will result in temporary curtailment of the use of water under the permit until the priority call for water ends.

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. G4-35592, 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 **Pollution Control Hearings Board** 1111 Israel RD SW Ste 301 Tumwater, WA 98501	**Department of Ecology** Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608 **Pollution Control Hearings Board** PO Box 40903 Olympia, WA 98504-0903

Signed at Yakima, Washington, this 24 day of JUNE 2013.

Mark Kemner, LHG, Section Manager
Water Resources Program/CRO

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.

BACKGROUND

This report serves as the written findings of fact concerning Water Right Application Number G4-35592.

Priority Processing

This application is being priority processed because it qualified under the criteria under which an application may be processed prior to competing applications (WAC 173-152).

Table 1: Summary of "Originally Requested" Water Right

Applicant Name	Gary Dallas Knapp
Date of Application	11/19/2012
Place of Use	Lot 4 of ROSE MEADOWS NO. 1 SHORT PLAT, Kittitas County Short Plat No. SP-04-58, as recorded March 25, 2005, in Book H of Short Plats, pages 38 and 39, under Auditor's File No. 200503250039, records of Kittitas County, state of Washington; being a portion of Section 32, T. 18 N., R. 19 E.W.M., in the county of Kittitas, state of Washington.

County	Waterbody	Tributary To	WRIA
Kittitas	Groundwater		39-Upper Yakima

Purpose	Rate	Unit	Ac-ft/yr	Begin Season	End Season
Domestic Single	60	GPM	0.392	01/01	12/31
Irrigation	60	GPM	0.040	Seasonal	Seasonal

Source Name	Parcel	Well Tag	Twp	Rng	Sec	QQ Q	Latitude	Longitude
1 well	20584	BAE644	18N	19E	32	NE NE	N/A	N/A

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

On March 11, 2013, the representative for the applicant amended the original application to change the location of the proposed source and alter the requested annual water duty. The corrected parameters follow:

Table 2: Summary of "Amended Requested" Water Right

Date of Amendment	03/11/2013
Amended Point of Withdrawal	The proposed well is located in the SW¼ SE¼ of Section 32, T. 18 N., R. 19 E.W.M. (Parcel 20584).
Amended Water Duty	10 gallons per minute, 0.414 af/yr total use

The applicant intends to mitigate for consumptive use under the requested appropriation through the purchase of Lower Kittitas mitigation credits from the Amerivest Class 3 Water Exchange. The Amerivest Water Exchange was established by transferring Court Claim No. 01968 into the Trust Water Right Program (TWRP). Consumptive loss resulting from the applicant's proposed use will be offset with Trust Water Right No. CS4-01968sb11a. The use of the supplemental storage contract, Long-Term Water Storage and Exchange Agreement Between the United States and the State of Washington, Department of Ecology is unnecessary for this proposal.

Legal Requirements for Approval of Appropriation of Water

RCW 90.03 and 90.44 authorize 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 and 90.03.340 and RCW 90.44.050. In according with RCW 90.03.290, determinations must be made on the following four criteria in order for an application for a water right 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.

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 Daily Record on March 2 and March 27, 2013. No protests were received by Ecology.

Consultation with the Department of Fish and Wildlife

The Department must give notice to the Department of Fish and Wildlife of applications to divert, withdraw, or store water (RCW 77.57.020). Notice was provided on May 6, 2013 during a Water Transfer Working Group meeting at the Bureau of Reclamation in Yakima, Washington. An extension for comment was agreed upon and subsequently a positive response was received by Ecology on May 30, 2013 with regard to this proposal.

State Environmental Policy Act (SEPA)

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

(a) It is a surface water right application for more than 1 cubic foot per second (cfs), unless that project is for agricultural irrigation, in which case the threshold is increased to 50 cfs, so long as that irrigation project will not receive public subsidies.

(b) It is a groundwater right application for more than 2,250 gallons per minute (gpm).

(c) It is an application that, in combination with other water right applications for the same project, collectively exceed the amounts above.

(d) It is a part of a larger proposal that is subject to SEPA for other reasons (e.g., the need to obtain other permits that are not exempt from SEPA).

(e) It is part of a series of exempt actions that, together, trigger the need to do a threshold determination, as defined under WAC 197-11-305.

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

INVESTIGATION

Site Visit

Ecology personnel Danielle Jansik visited the proposed site on May 14, 2013. Mr. and Mrs. Knapp, applicants, were also present. Photographs and Global Positioning Satellite (GPS) coordinates were recorded and local geology was noted.

Using 2011 National Agricultural Imaging Program (NAIP) aerial photography and ArcGIS10 computer software, Ecology later determined that the GPS coordinates placed the well approximately 180 feet too far to the southwest. Therefore, Ecology used the best available science of aerial photography coupled with the recall of the site visit to accomplish a more precise mapping of the location of the well.

Proposed Use and Basis of Water Demand

The December 2009, Water System Design Manual[1] (WSDM) by the Department of Health (DOH) contains guidance for establishing water demands. The suggested methods, in order of preference, include:

1. Metered water-production and use records.
2. Comparable metered water-production and use data from analogous water systems. See WAC 246-290-221(3)(a) and Section 5.2.3.
3. The criteria presented in Chapter 5.

According to the WSDM, new systems or water systems that have no source meters records, information can be obtained from analogous water systems or from information presented in Appendix D in order to estimate the Average Daily Demand (ADD) and the Maximum Daily Demand (MDD) for residential connections (WAC 246-290-221(3)).[2] Analogous water systems are defined in Section 5.2.3 of the WSDM as systems with similar characteristics, such as but not limited to: demographics, housing size, lot sizes, climate, conservation practices, use restrictions, soils and landscaping, and maintenance practices. As such, a reasonable level for a MDD for internal uses can be established at 350 gallons per day (gpd) per Equivalent Residential Unit (ERU).

Since there is no water use for the proposed residence to review and records for qualifying analogous systems are not available, the MDD values are set at 350 gpd/Equivalent Residential Unit, which is consistent with the WSDM. Under authority of WAC 173-539A, 30% domestic in-house on a septic system is assumed to be consumptively used and 90% of outdoor domestic use is assumed to be consumptive.

Monthly and annual use at full build-out of the project were calculated based on the proposed one ERU, DOH's MDD, Ecology's Guidance Document 120 entitled, Determining Irrigation Efficiency and Consumptive Use, the Washington Irrigation Guide (WIG) for outdoor water use, and the assumptions found in WAC 173-539A. A crop irrigation requirement (CIR) for grass in the Cle Elum area of 18.11 inches was estimated using the WIG. Assuming the outdoor use is 90% consumptive, consistent with WAC 173-539A, and applying the WIGs CIR, the outdoor water requirement for 0.011 acre of grass

[1] Department of Health, *Water System Design Manual*," Olympia, Wa., 2009, pp. 27-32, www.doh.wa.gov/chp/dw/Publications/331-123.pdf, access on March 11, 2013.
[2] Ibid. p. 28.

is 0.019ac-ft/yr. The calculated consumptive use and total calculation considered factors specified in WAC 173-539A and are summarized in **Table 3** below.

Table 3: *Estimated Total and Consumptive Use

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Total Use (ac-ft)	.033	.030	.033	.032	.033	.036	.041	.039	.036	.033	.032	.033	**0.414**
Total Consumptive (ac-ft)	.010	.009	.010	.010	.010	.013	.017	.015	.013	.010	.010	.010	**0.137**

*Calculations were rounded.

Other Rights Appurtenant to the Place of Use

There are numerous water rights appurtenant to the proposed place-of-use and are described in **Attachment 2**, Table 4. Other water rights within 0.5-mile vicinity are summarized in **Attachment 3**, Table 5.

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).

Water Availability

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

Physical Availability

For water to be physically available for appropriation there must be ground or surface water present in quantities and quality and on a sufficiently frequent basis to provide a reasonably reliable source for the requested beneficial use or uses. In addition, the following factors are considered:

- Volume of water represented by senior water rights, including federal or tribal reserved rights or claims.
- Water right claims registered under Chapter 90.14 RCW.
- Ground water uses established in accordance with Chapter 90.44 RCW, including those that are exempt from the requirement to obtain a permit.
- Potential riparian water rights, including non-diversionary stock water.
- 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.

When considering applications for new groundwater right permits, Ecology has a statutory directive to limit appropriations of groundwater to amounts that will maintain and provide a safe sustaining yield to prior appropriations and to avoid aquifer overdraft (RCW 90.44.130, PCHB No. 94-114). Given the hydraulic relationship described below and due to the acquisition of trust water under Certificate of Trust Water Right No. CS4-01968CTCLsb11a-Trust Water Right B in the amount of 0.161 acre-feet per year (af/yr), this directive will be satisfied. This trust right is dedicated to in stream flow for water banking mitigation purposes on Manastash Creek between April 1st and October 31st of each year for as long as the right remains in the Trust Water Right Program (TWRP).

With regard to Trust Water Right No. CS4-01968sb11a, Ecology's modification order contains the following advisory statement:

> "The subject right is an 1874 priority class 3 water right on Manastash Creek. In most years Manastash Creek does not have sufficient flow to allow for the exercise of this right throughout the irrigation season. It has been determined that the shut off date for all water use associated with the 1874 class 3 rights typically falls between July 15 and August 15. In exceptional water years the there may be sufficient flow to allow for the full exercise of this right through October 15 (for example the 2006 season). This conclusion is based on Manastash Creek stream gage flows, the schedule of adjudicated Manastash Creek water rights, and historic information regarding regulation of Manastash Creek".

As such, while the Class 3 Trust Water Right (CS4-01968sb11a) being used by the applicant as mitigation to offset consumptive use for the project is typically curtailed annually between July 15 and August 15 due to low flows on Manastash Creek, it is through the management of Ecology's Class 1 portfolio of Trust Water Rights (CS4-01553sb11b and CS4-01553sb11a) that any necessary retiming can be

accomplished, thereby reducing and/or ultimately eliminating potential impacts to Manastash Creek and the Yakima River.[3]

Based on the hydrogeologic setting described below, the extent of the aquifer, and well data, **the physical availability of water in the quantities requested is not in question.**

Hydrologic/Hydrogeologic Evaluation

The following hydrologic/hydrogeologic technical excerpts were written, prepared, and stamped by licensed hydrogeologist and unit supervisor, Stuart Luttrell, and seeks to address, by way of discussion, analysis, and evaluation, potential for impairment to existing water users. The entire Technical Memorandum can be reviewed upon request.

Hydrogeologic Setting

The Kittitas valley is a very wide segment of the Yakima River valley and is the topographic expression of a broad synclinal basin in the Yakima Basalt Subgroup and the Ellensburg Formation. The Yakima River flows in a southeasterly direction, generally coincident with the synclinal axis, which plunges to the southeast and is bound by anticlinal structures: Naneum Ridge to the north and Manastash Ridge to the south. Within the Kittitas valley, glacial deposits, alluvial deposits, remnant Thorp Gravels and an occasional thin veneer of loess overlie sedimentary rocks of the Ellensburg Formation. The Ellensburg Formation sedimentary rocks are weakly-to moderately-indurated. Grande Ronde basalt forms the bedrock boundary below the Ellensburg Formation and outcrops in Manastash Ridge and Naneum Ridge. Water wells commonly do not penetrate the full sediment thickness. The deepest Ellensburg City water well reached approximately 1,200 feet below ground surface without encountering the basalt.

Within the Kittitas valley, the sediment package (alluvium, Thorp Gravels, Ellensburg Formation) thickens from the northwest to the southeast consistent with the synclinal structure's plunge orientation. The uppermost aquifer consists of unconsolidated alluvial sediments deposited by the Yakima River, which are generally underlain by the Thorp Gravels, a relatively minor aquifer unit. Below the Thorp sediments, the saturated portion of the Ellensburg Formation serves as an aquifer bounded by the basalt below. Drillers' water well reports indicate the Ellensburg Formation consists largely of weakly consolidated clays, silts, siltstones, sands, sandstones, gravels, and cemented gravels. Cementation, porosity and permeability vary, and layers can pinch out, grading from clays to sands to gravels, resulting in heterogeneous conditions. Most wells are perforated or completed within the permeable sand and gravel layers.

Recharge to the aquifer system is predominantly by precipitation occurring largely in the western and northern regions of the basin. Discharge from the aquifer system is to wells throughout the basin and to surface water primarily in the southern portion of the valley where the sediments thin near the basalt margin and the Yakima River enters a tightly constricted canyon.

[3] Robert Barwin. Allwest Proposal Presentation. Yakima Water Transfer Working Group. Bureau of Reclamation, Yakima, WA Jul. 2012.

Availability

Records exist in the Department of Ecology well database for approximately 23 wells drilled in an area that includes the north half of T 17 N., R. 19 E.W.M., Section 5; and the south half of T. 18 N., R. 19 E.W.M., Section 32. The average depth of the wells is 198 ft, ranging from 90 ft to 275 ft. The depth to water generally ranges from 20 to 60 ft below ground surface (a depth to water of 100 ft was also reported in one well). The well yield reported from airlift methods ranges from 15 to 75 gpm.

This application identifies a well (ID number BAE-644) that is the proposed point of withdrawal (source) of water. This well was drilled to a total depth of 198 ft bgs and the 4½ inch casing was perforated from 138 to 198 ft bgs. The well report notes 'dark brown hard sandstone' between 136 ft and 178 ft bgs, and 'dark brown sandstone gravel & water' between 178 and 198 ft bgs. This sandstone is part of the Ellensburg Formation.

The physical availability of water in the quantities requested is not in question. Based on the extent of the aquifer in the Ellensburg Formation and numerous wells with adequate well yields located near the subject parcel, there is water available to support this application. Mitigation water provides for water budget neutral determination within the Yakima River mainstem to maintain the Total Water Supply Available at Parker.

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.

Legal availability is ultimately a permitting/management decision that is, in part, based on the above information.

Mitigation

According to a Manastash Creek Surface Water Right valuation report prepared for Washington Rivers Conservancy and Ecology in 2008 by Harry Seely of West Water Research, LLC,[4] a Class 3 water right can be expected to yield 309.12/513 (the downward adjustment to the maximum value reflecting unavailability) of an acre-foot historically awarded by the court. This information then informs Ecology how much of the Class 3 Trust Water right to debit as managers of that water bank. Consequently, if the applicant proposes 1 acre-foot as mitigation to offset consumptive use from the proposed project, a total supply of 1.66 acre-feet (1 X 513/309.12) would need to be mitigated for the project to be defined as water budget neutral. Therefore, this application proposes to appropriate 0.137 consumptively-used acre-feet and proposes to mitigate that use with 0.161 acre-feet from Trust Water Right No. CS4-01968sb11a.

Beneficial Use

The proposed uses of water for single domestic and incidental irrigation of lawn and garden are defined in statue as a beneficial uses (RCW 90.54.020(1)).Public Interest Considerations

When investigating a water right application, Ecology is required to consider whether the proposal is detrimental to the public interest. Ecology must consider how the proposal will affect an array of factors, such as wildlife habitat, recreation, water quality, and human health. The environmental resources and other natural values associated with the area were taken into account during the consideration of this proposal.

Consideration of Protests and Comments

No protests were filed against this application.

Conclusions

In conclusion,

- Water is physically available at the quantities sufficient to meet project demand. When combined with the proposed mitigation measures, water is legally available under the provisions of WAC 173-539A.
- RCW 90.54.020 recognizes domestic and irrigation uses as beneficial uses of water.
- Approval of the proposed appropriation will not result in impairment of existing water rights.
- Approval of the proposed appropriation is not detrimental to the public interest.

[44] Harry Seely, "Economic Evaluation of Manastash Creek Subbasin Surface Water Rights," West Water Research, LLC, January 21, 2008, pp. 25-33.

RECOMMENDATIONS

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

Purpose of Use and Authorized Quantities

The amount of water recommended is a maximum limit and the water user may only use that amount of water within the specified limit that is reasonable and beneficial:

- 10 gallons per minute.
- 0.414 acre-feet per year (0.392 af/yr for single domestic and 0.022 af/yr for irrigation of lawn and garden).
- Continuous, year-round indoor single domestic supply.
- Seasonal irrigation of up to 0.011-acre of lawn and garden from June 1 through September 30 annually.

Point of Withdrawal

Approximately 2012 feet west and 283 feet north from the SE corner of Section 32, Township 18 North, Range 19 E.W.M.

Place of Use

As described on Page 2 of this Report of Examination.

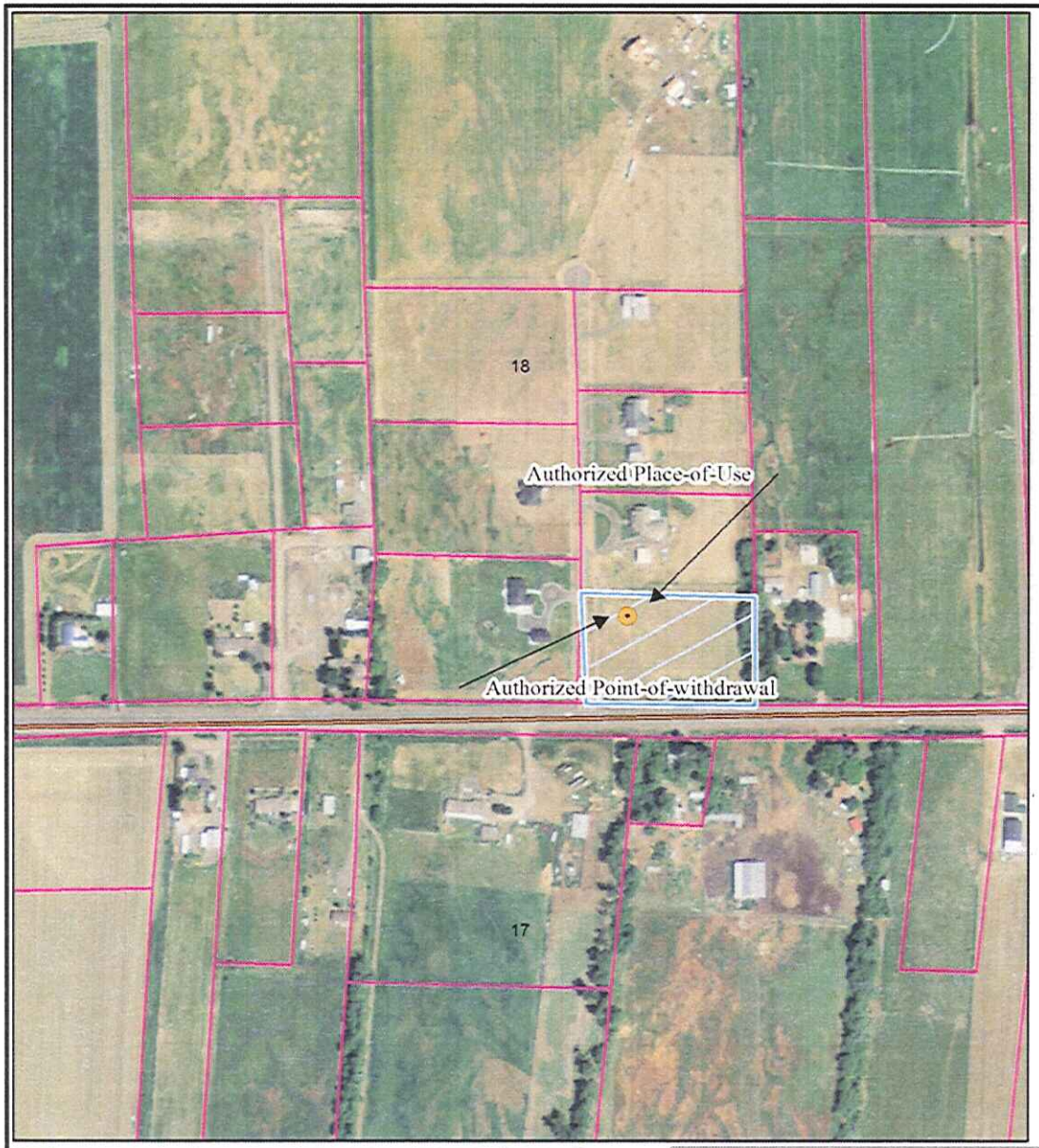
Candis Gray — June 24, 2013

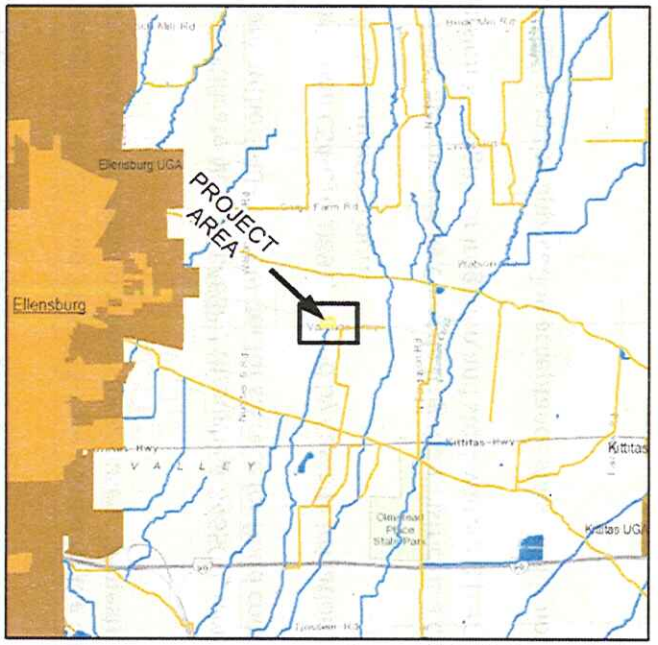
Report Writer — *Date*

If you need this publication in an alternate format, please call Water Resources Program at (360) 407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

ATTACHMENT 1

GARY DALLAS KNAPP
G4-35592
Sec. 32 T18N/R19E
WRIA 39 - Kittitas County





Basemap - ESRI US Topographic Map

Legend

- Authorized Place of Use
- Authorized Point of Withdrawal
- Water Bodies
- Highway
- Townships
- Sections
- Parcels
- City

0 190 380 760 1,140 1,520 Feet

Basemap - ESRI Streets

DEPARTMENT OF ECOLOGY State of Washington

Map Date: 5/20/2013

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

ATTACHMENT 2

Table 4: Appurtenant Water Rights

Control #	Claim #	Document Type	Source	Purpose	Qa (Annual Quantity)
S4-84625-J	00891	CFO	Yakima R.	IR, ST	33,025
S4-84626-J	00891	CFO	Yakima R.	IR, ST	16,800
S4-84627-J	00891	CFO	L. Kachees	SR*	16,800
S4-84628-J	00891	CFO	Currier/Reecer Cr.	IR, ST	641
S4-84629-J	00891	CFO	Lyle Cr.	IR, ST	1,137
S4-84635-J	00891	CFO	Yakima	ST	250
S4-84638-J	02276	CFO	Yakima R.	SR	166,846
S4-84639-J	02276	CFO	Kachees R.	SR	250,261
S4-84640-J	02276	CFO	Yakima R.	SR	446,610
S4-84641-J	02276	CFO	Bumping R.	SR	38,768
S4-84642-J	02276	CFO	Tieton R.	SR	216,850
S4-84643-J	02276	CFO	Tieton R.	SR	5,300
S4-84644-J	02276	CFO	Yakima R.	SR	472
S4-84645-J	02276	CFO	Tieton R.	SR	2
S4-84646-J	02276	CFO	Yakima R.	SR	56
S4-84647-J	02276	CFO	Yakima R.	SR	60
S4-84648-J	02276	CFO	Yakima R.	SR	408
S4-84649-J	02276	CFO	Tieton R.	SR	1,265
S4-84650-J	02276	CFO	Yakima R.	SR	5,120
CS4-CTCL0891	0891	Change/ROE	Yakima R.	IR, ST	50,075
CS4-00891CTCL@1	00891/02800	Change/ROE	Yakima, et al**	IR, ST	50,075
CS4-00891CTCL@2	00891	Application	N/a	N/A	N/A

IR=Irrigation, ST=Stock water, SR=Storage, CFO=Conditional Final Order
*Storage, filling, detention, carryover, release, and delivery of water.
**Currier, Reecer, Lyle, Naneum, Coleman, Caribou, Parke, Badger

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S4-84625-J through S4-84629-J and S4-84635-J are owned by the Cascade Irrigation District and these rights authorize stock water, irrigation, and storage uses. Domestic use cannot be obtained from these rights.

Surface Water Certificate Nos. S4-84638-J through S4-84650-J, which are owned by the US Bureau of Reclamation, are authorized to use water for storage for flood control purposes.

Change Authorization CS4-CTCL0891, owned by Cascade Irrigation District, is still in litigation over an appeal filed with the Superior Court.

CS4-00891CTCL@1, also owned by Cascade Irrigation District is a change authorization adding multiple points-of-diversion to a right for irrigation and stock watering purposes.

CS4-00891CTCL@2 is in the application acceptance stage and is not being considered in this analysis.

ATTACHEMENT 3

Table 5: Vicinity Rights Within 0.5-Mile Radius

Control #	Claim #	Document Type	Source	Purpose	Qa (Annual Quantity)
S4-84322-J	00577	CFO	Naneum Creek	IR, ST	90
G4-048052CL	N/A	Claim-Short Form	1 Well	DG, ST	Unspecified
G4-087352CL	N/A	Claim-Short Form	1 Well	DG, ST, IR	Unspecified
G4-108268CL	N/A	Claim-Long Form	1 Well	DG, ST	0
G4-121944CL	N/A	Claim-Long Form	1 Well	DG	1
G4-160584CL	N/A	Claim-Long Form	Wilson Creek	IR, ST	1440
G4-006188CL	N/A	Claim-Long Form	1 Well	DG	2
G4-020776CL	N/A	Claim-Long Form	1 Well	DG, ST	16
G4-053748CL	N/A	Claim-Short Form	1 Well	DG, ST	Unspecified
G4-119100CL	N/A	Claim-Short Form	1 Well	DG, ST	Unspecified
G4-000084CL	N/A	Claim-Long Form	1 Well	DG	2
G4-130993CL	N/A	Claim-Long Form	1 Well	DG	2
G4-107469CL	N/A	Claim-Short Form	1 Well	DG, ST	Unspecified
G4-106492CL	N/A	Claim-Short Form	1 Well	DG	Unspecified

Note: This list does not necessarily address validity of each documented claim.[5]
IR=Irrigation, ST=Stock water, DG=Domestic General including lawn and garden irrigation, CFO=Conditional Final Order.

S4-84322-J is for the purpose of irrigation and stockwater. Water delivered by the Kittitas Reclamation District is also used on this land.

Claim Nos. G4-087352CL and G4-108268CL, (which claims zero annual quantity and renders the claim somewhat suspect) overlap on the same property and via 2011 aerial photography, there appears to be no residence associated with the place-of-use; however, irrigation appears to be exercised as of 2011.

G4-048052CL and G4-006188CL together also encompass the same place of use and it appears water is currently in use. It also appears irrigation is being exercised; however, these two Claims do not authorize irrigation as a purpose.

G4-121944CL is for single domestic use.

G4-020776CL claims domestic general and stockwater. G4-053748CL overlaps the same place-of-use and is likely not being utilized.

[5] The above referenced claims were filed under Claims Registration Act, RCW 90.14. The intent of this act was to document those uses of surface water in existence prior to the adoption of the State Surface Water Code, RCW 90.03, which was adopted in 1917, and those uses of ground water in existence prior to the adoption of the State Ground Water Code, RCW 90.44, which was adopted in 1945. Since each code adoption, the only means of acquiring a water right within the state is by filing for, and receiving, a permit from Ecology or one of its predecessors or by establishing a right under the "exemption" under the Ground Water Code RCW 90.44.050. Ecology recognizes that the final determination of the validity and extent associated with a claim registered in accordance with RCW 90.14 ultimately lies with the Superior Court through the general adjudication process provided for by RCWs 90.03.110 through 90.03.240. Ecology does, however, recognize that water use may be occurring under these claims.

G4-119100CL claims domestic general and stockwater as well,but its use appears suspect as no residence has been built on the described place-of-use.

G4-000084CL claims domestic and there appears to be irrigation on the described place-of-use in addition to domestic use.

G4-130993CL claims domestic and appears to be in use.

G4-107469CL claims domestic and stockwater and irrigation appears to be exercised.

G4-106492CL overlaps G4-107469CL and also appears to be in use for the claimed domestic and stockwater purposes but also irrigation appears to be exercised.

G4-160584CL is a questionable claim as it identifies the source as Wilson Creek as being the groundwater used for irrigation and stockwatering purposes.