



State of Washington
DRAFT
Report of Examination for Water Right

PRIORITY DATE	WATER RIGHT NUMBER
October 6, 2015	G4-35799(D)

MAILING ADDRESS	SITE ADDRESS (IF DIFFERENT)
Kittitas County 205 West 5th Avenue Ellensburg, WA 98926	Various

Total Quantity Authorized for Withdrawal or Diversion

WITHDRAWAL OR DIVERSION RATE	UNITS	ANNUAL QUANTITY (AF/YR)
92.682*	GPM	149.6*

* Total withdrawals authorized under Groundwater Permit Nos. G4-35799(A), G4-35799(B), G4-35799(C), G4-35799(D), and G4-35799(E) must not exceed the total quantity authorized for withdrawal listed above.

Purpose

PURPOSE	WITHDRAWAL OR DIVERSION RATE			ANNUAL QUANTITY (AF/YR)		PERIOD OF USE (mm/dd)
	ADDITIVE	NON-ADDITIVE	UNITS	ADDITIVE	NON-ADDITIVE	
Domestic Multiple, up to 467 residences	92.682	-	GPM	149.6	-	01/01-12/31

REMARKS

Up to 262 units under Package A and 205 units under Package B.

- Package A provides 0.092 acre-feet/year (AF/YR) for indoor use.
- Package B (Upper County) provides 0.112 AF/YR, which includes both indoor use and up to 500 square feet of outdoor irrigation.
- Package B (Lower County) provides 0.126 AF/YR, which includes both indoor use and up to 500 square feet of outdoor irrigation.

Source Location

COUNTY	WATERBODY	TRIBUTARY TO	WATER RESOURCE INVENTORY AREA
Kittitas	Groundwater		39-Upper Yakima

Up to 467 wells in the unconsolidated and consolidated aquifer system of the Lower Kittitas Basin within the Wilson-Cherry subbasin:

T. 16 N., R. 19 E.W.M.	Portions of Sections 1-4, 11, and 12
T. 16 N., R. 20 E.W.M.	Portions of Sections 3-10, 14-18, and 21- 23
T. 17 N., R. 18 E.W.M.	Portions of Sections 1, 3, 11-13, and 24
T. 17 N., R. 19 E.W.M.	Portions of Sections 1-36
T. 17 N., R. 20 E.W.M.	Portions of Sections 2-11, 13-23, and 28-34
T. 18 N., R. 18 E.W.M.	Portions of Sections 1, 11-14, 23-27, and 34-36
T. 18 N., R. 19 E.W.M.	Portions of Sections 2-11, and 13-36
T. 18 N., R. 20 E.W.M	Portions of Sections 17-21, and 28-34

ALL IN KITTITAS COUNTY, WASHINGTON

Place of Use (See Attached Map)

PARCELS (NOT LISTED FOR SERVICE AREAS)

N/A

LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE

Areas within:

T. 16 N., R. 19 E.W.M.	Portions of Sections 1-4, 11, and 12
T. 16 N., R. 20 E.W.M.	Portions of Sections 3-10, 14-18, and 21- 23
T. 17 N., R. 18 E.W.M.	Portions of Sections 1, 3, 11-13, and 24
T. 17 N., R. 19 E.W.M.	Portions of Sections 1-36
T. 17 N., R. 20 E.W.M.	Portions of Sections 2-11, 13-23, and 28-34
T. 18 N., R. 18 E.W.M.	Portions of Sections 1, 11-14, 23-27, and 34-36
T. 18 N., R. 19 E.W.M.	Portions of Sections 2-11, and 13-36
T. 18 N., R. 20 E.W.M	Portions of Sections 17-21, and 28-34

ALL IN KITTITAS COUNTY, WASHINGTON

NOTE: The map of approved mitigation area “green zones” may change as Ecology’s knowledge of mitigation suitability improves. The County is authorized to beneficially use water under this authorization on any current or future “green zone” parcels within the authorized place of use described above.

Proposed Works

The proposed works include a combined total of up to 467 wells for G4-35799(A), G4-35799(B), G4-35799(C), G4-35799(D), and G4-35799(E) using a combination of individual, Washington State Department of Health-defined Group A and/or Group B wells, to supply up to 92.682 gallons per minute (gpm) of water for up to 467 residences. The individual average use will be 0.092 to 0.126 AF/YR per residence for continuous, year-round domestic use. Depending on the mitigation package selected, a mix of public water systems and individual or independent systems may be developed.

Development Schedule

BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
December 31, 2016	December 31, 2026	December 31, 2027

This development schedule recognizes long-term rural growth potential within the authorized place of use.

Measurement of Water Use

How often must water use be measured?	At least once during each of the following months: March, July, August, September, and October
How often must water use data be reported to Ecology?	Annually
What volume should be reported?	Total Annual Volume
What rate should be reported?	Annual Peak Rate of Withdrawal

Provisions

General Conditions

Kittitas County Public Health will record with the Kittitas County Auditor a property covenant that restricts or prohibits trees or shrubs over a septic drain field on each of the authorized parcels within the described place of use once the mitigation credit purchase is finalized.

Kittitas County Public Health will record with the Kittitas County Auditor an appropriate conveyance instrument under which the mitigation credit purchaser obtains an interest in Trust Water Right Nos. CS4-0167sb5d@2, CS4-0167sb5d@3, CS4-01553sb11a, or CS4-01968sb11a once the mitigation credit purchase is finalized. Consumptive use quantities (total withdrawal minus return flow) shall be fully offset by debit of an equal quantity of Trust Water Right No. Trust Water Right Nos. CS4-0167sb5d@2, CS4-0167sb5d@3, CS4-01553sb11a, or CS4-01968sb11a.

Under RCW 90.44.055, Kittitas County is proposing a water resource management technique to ensure the most environmental benefit possible by periodically re-accounting mitigation certificates. Kittitas County may petition Ecology for a re-accounting of mitigation certificates under this permit to assure mitigation certificates are backed by the most appropriate trust water right within the County's portfolio.

Any valid priority calls against the source Trust Water Right Nos. CS4-0167sb5d@2, CS4-0167sb5d@3, CS4-01553sb11a, or CS4-01968sb11a, based on local limitations in water availability, may result in temporary reduction or curtailment of the use of water under the permit until the priority call for water ends, or until other mitigation is supplied. Kittitas County may propose new trust water right holdings as sources of mitigation under this permit. Ecology may approve updated mitigation sources via Departmental Order, with notification to affected permittees and any individuals that protested this application.

Notwithstanding any permit that may be issued by Ecology here (and notwithstanding any Endangered Species Act (ESA) impacts or lack thereof) the Yakama Nation has a Treaty water right with a time immemorial priority date in the Lower County for fish and other aquatic life and has the right at any time to make a call on the water permitted hereunder for its Treaty water right purposes. Notwithstanding this permit, any water rights permitted hereunder are subject to regulation, reduction and cessation in the future as necessary to satisfy and protect senior rights including the Yakama Nation's rights.

As determined by Ecology based on point of withdrawal location, Kittitas County may use the Water Storage and Exchange Contract No. 09XX101700, between the United States Bureau of Reclamation (USBR) and Ecology, Yakima Project, Washington. Kittitas County will pay to Ecology the sum

representing a proportionate amount of the payment due and owing to the United States for storage and proportionate amount of the payment due and owing to the United States for storage and delivery of water under Paragraph 15(a) of the applicable version of the contract. The consumptive use from September 1 through March 31 is subject to the terms and conditions in the Water Storage Exchange Contract No. 09XX101700. Kittitas County will collect annual storage costs from each water bank user based on \$2.51 (average storage cost of package A & B at \$22/year/cubic foot) per year times the number of annual customers through an annual metering fee charged to users. If Ecology determines the storage fee to exceed the amount included in the metering fee, Kittitas County will modify annual fees as is necessary.

After the project is complete and water has been applied to full use, a Certified Water Right Examination (CWRE) is required prior to issuance of a water right certificate. If issued, this certificate will be held by Kittitas County, not individual mitigation certificate holders. If applicable, the permit will be conformed under RCW 90.03.560 and a certificate issued for municipal purpose of use if it meets the statutory definition provided under RCW 90.03.015.

Wells, Well Logs, and Well Construction Standards

For wells 600 feet or closer to Type 1 and Type 2 stream and rivers, and natural wetlands, creeks, lakes, and ponds, Kittitas County Ordinance 2015-007 specifying well setback, casing, and sealing requirements must be met .

A.

Kittitas County's approval of Adequate Water Supply Determinations (AWSD) and building permits will include all conditions agreed to by Kittitas County in the Settlement Agreement and adopted in County code, and Kittitas County's building permit decision will incorporate the conditions imposed by Ecology in its decision under the subject permit.

The subject wells are authorized for groundwater withdrawal from the unconsolidated and consolidated aquifer systems of the Wilson-Cherry Subbasin. These sediments are located above the Columbia River Basalt Group (CRBG). The aquifer is composed of alluvial, loess, glacial, sedimentary, and Ellensburg Formation deposits. The Wilson-Cherry Subbasin is located in Sections 1-4, 11, and 12, T. 16 N., R 19 EWM; Sections 3-10, 14-18, and 21- 23, T. 16 N., R 20 EWM; Sections 1, 3, 11-13, and 24, T. 17 N., R 18 EWM; Sections 1-36, T. 17 N., R 19 EWM; Sections 2-11, 13-23, and 28-34, T. 17 N., R 20 EWM; Sections 1, 11-14, 23-27, and 34-36, T. 18, N., R 18 EWM; Sections 2-11, and 13-36, T. 18 N., R 19 EWM; Sections 17-21, and 28-34, T. 18 N., R 20 EWM.

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

All wells shall be tagged with a Department of Ecology unique well identification number. If you (applicant) or the well user(s) have an existing well and it does not have a tag, please contact the well-

drilling coordinator at the Central Regional Office. This tag shall remain attached to the well. If you submit water measuring reports, reference this tag number.

New wells constructed under this authorization should observe a minimum 50-foot setback from property boundaries and other wells to minimize potential for well interference.

Measurements, Monitoring, Metering and Reporting

Each water user shall install and maintain an approved measuring device for each of their uses in accordance with the rule "Requirements for Measuring and Reporting Water Use," WAC 173-173.

The County shall monitor and analyze water usage data at least once during each of the following month: March, July, August, September, and October.

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.

Department of Health Requirements

Prior to any new construction or alterations of a public water supply system, the State Board of Health requires such system owners to obtain written approval from the Washington State Department of Health, Office of Drinking Water. Contact that office 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

Easement and Right-of-Way

The water source and/or water transmission facilities are not wholly located upon land owned by the applicant. Issuance of a water right authorization by this department does not convey a right of access to, or other right to use, land which the applicant does not legally possess. Obtaining such a right is a private matter between applicant and owner of that land.

Water Use Efficiency

Each water user (or group system) is required to maintain efficient water delivery systems and use of up-to-date water conservation practices consistent with RCW 90.03.005.

Proof of Appropriation

The water right holder (applicant) shall file the notice of Proof of Appropriation of water (under which the certificate of water right is issued) when the permanent distribution systems have been constructed and the quantity of water required by the project has been put to full beneficial use. Elements of a proof inspection may include, as appropriate, the source(s), system instantaneous capacity, beneficial use(s), annual quantity, place of use, and satisfaction of provisions.

Schedule and Inspections

Department of Ecology personnel, upon presentation of proper credentials and at reasonable times, shall have access to the project location, and to inspect records of water use, wells, diversions, measuring devices and associated distribution systems for compliance with water law.

Real Estate Excise Tax

This decision may indicate a Real Estate Excise Tax liability for the seller of water rights. The Department of Revenue has requested notification of potentially taxable water right related actions, and therefore will be given notice of this decision, including document copies. Please contact the state Department of Revenue to obtain specific requirements for your project. Phone: (360) 570-3265. The mailing address is: Department of Revenue, Real Estate Excise Tax, PO Box 47477, Olympia WA 98504-7477 Internet: <http://dor.wa.gov/>. E-mail: REETSP@DOR.WA.GOV.

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 find the change of water right as recommended will not be detrimental to existing rights or the public welfare.

Therefore, I ORDER the requested permit under Application No. G4-35799(D) 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 Hearing 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
<p>Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503</p> <p>Pollution Control Hearings Board 1111 Israel RD SW, Ste 301 Tumwater, WA 98501</p>	<p>Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608</p> <p>Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903</p>

Signed at Union Gap, Washington, this _____ day of _____ 2016.

 Trevor Hutton, Section Manager
 Water Resources Program
 Central Regional Office

DRAFT

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

Background

This report serves as the consolidated written findings of facts concerning Water Right Application Nos. G4-35799(D) and G4-35799(E) (the proposal). This proposal is specific to Kittitas County's (County's) interests in the Roth, Clennon, Williams, and Amerivest Water Banks, and is to cover areas identified as green in the Roth, Clennon, Williams, and Amerivest suitability maps (Trust Water Right Nos. CS4-0167sb5d@2, CS4-0167sb5d@3, CS4-01553sb11a, or CS4-01968sb11a). If additional water rights and water banks are acquired by the County, they would require separate review and approval by the Washington State Department of Ecology (Ecology) to determine if the water rights or banks would be included in the Over-The-Counter mitigation program.

On July 16, 2009, the Ecology adopted Chapter 173-539A WAC (Upper County Rule). This rule closed Upper Kittitas County to all new withdrawals to prevent impairment to senior users through unmitigated new use. Under the Upper County Rule, all new uses must be water budget neutral, meaning they must be mitigated by a pre-1905 water right protected in stream to ensure impairment does not occur. On May 15, 2014, the County adopted new regulations for County areas not affected by Chapter 173-539A WAC to require water budget neutral mitigation for all new domestic groundwater uses within the Yakima River Basin.

The basin closure implemented by Chapter 173-539A WAC, was preceded by a legal challenge to County's Revised 2006 Comprehensive Plan (Plan), through which the Eastern Washington Growth Management Board (EWGMB) and the Washington State Supreme Court determined that the County was in violation of the State Growth Management Act (GMA). Following this decision, the County entered into a Settlement Agreement with Ecology and the other appellants in the case to ensure sustainable water resource management, including new uses that are water budget neutral.

To help facilitate new water budget neutral uses for domestic purposes, the County developed a water bank program by acquiring the existing Williams water bank and portions of the existing Roth, Clennon, and Amerivest water banks. In order to provide public involvement on how the County's water bank would operate, the County formed a Citizen's Advisory Committee that met in 2014 and 2015. The charter for the Committee was:

"To gather information and formulate a recommendation on the quantity of water to be issued with a mitigation certificate for the Kittitas County Water Bank. Committee members will share resources and research issues affecting residential and outdoor water use to support an educated recommendation to the Board of County Commissioners on the quantity of water the county will offer with a mitigation certificate through the Water Bank".

Based on recommendations supported by the majority of the Committee, the County adopted a resolution offering two Mitigation Certificates from its bank:

"Package A": An indoor use package of approximately 275 gallon per day (gpd)/house, which is mandatory for customers who have access to irrigation water supply for outdoor irrigation (e.g. irrigation district supply).

OR

“Package B”: An indoor use package of approximately 275 gpd/house with an outdoor use package of 500 square feet at 25 gpd, or 300 gpd/house (averaged for the calendar year), which is mandatory for customers who do not have access to an irrigation water supply for outdoor irrigation.

Based on coordination with Ecology, these packages have been converted to annual consumptive volumes of 0.092 AF/YR for Package A, and 0.112 (Upper County) to 0.126 (Lower County) for Package B.

The County is seeking to obtain groundwater mitigation permit(s) to provide mitigation certificates to building permit applicants that do not meet the domestic use exemption under RCW 90.44.050. The County runs a similar program for domestic uses that are exempt under RCW 90.44.050, wherein mitigation certificates can be obtained and, if obtained, are recorded against qualifying parcels to document their water budget neutrality. The proposed program for non-permit-exempt applicants will be offered through the Over-The-Counter (OTC) Program, which has already received Ecology’s and the Water Transfer Working Group’s (WTWG) approval for permit-exempt applicants. The combined total quantity from the County’s OTC Program for new permit-exempt uses plus these proposed mitigation groundwater permits will not exceed the quantity listed above. These quantities are currently authorized for mitigation for new permit-exempt uses under the County’s OTC Program in the green zone. Additionally, as part of the overall project goals set forth in the Settlement Agreement, but not as part of the mitigated groundwater permit application(s), the County would like to provide mitigation in the form of Total Water Supply Available (TWSA) neutrality for existing domestic uses of groundwater which pre-date the County’s regulation changes in 2014 and WAC 173-539A. The implementation of this addition to the County’s OTC Program does not preclude applicants from obtaining mitigation water for non-permit exempt uses from other water banks in Kittitas County, or from self-mitigating and applying directly with Ecology.

Under this application, the County is requesting a 10-year development schedule, after which the County would file a Proof of Appropriation and seek a Certified Water Right Examination to obtain a certificate for the quantity that has been beneficially used. The County may return to Ecology and the WTWG for review and authorization for additional mitigation quantities if appropriate. The County is also proposing bi-annual check-in meetings with Ecology and the WTWG to review the spatial distribution and density of mitigation certificates under the mitigation groundwater permits as well as for exempt uses. These check-in meetings are designed to address any potential local impairment issues, including any concerns related to density of assigned mitigation certificates.

Summary of Requested Water Right

The original application, filed October 5, 2015, was for multiple group or individual wells to provide water for up to 467 domestic connections within Kittitas County. The application for a new permit is accompanied by a commitment of up to 149.6 ac-ft/year of water (52.2 ac-ft/year consumptive use) from the County’s interests in the Amerivest, Williams, Roth, and Clennon Water Banks. The proposal is to authorize new domestic groundwater uses for building permit applicants in the County who, in addition to mitigation for their consumptive use of water, also need a groundwater permit because they are not eligible for an exempt groundwater use under RCW 90.44.050. If approved, the County would then offer two application packages, Package A and Package B that mirror those in the exempt-portion of the County’s Water Banks. Package A would provide 275 gpd (0.11 acre-foot/year; ac-ft/yr) per domestic connection and incidental outdoor water use for up to 262 units. Package B would provide up

to 300 gpd (0.112 ac-ft/yr (Upper County) to 0.126 ac-ft/yr (Lower County)) for Package B. per unit, which includes 275 gpd for indoor water use and 25 gpd for outdoor irrigation. Package B would be required for any unit without access to outdoor irrigation water, and would serve up to 205 connections.

After a technical assistance meeting between Ecology and the County on December 2, 2015, the applicant requested to amend and split the application to accommodate three separate bodies of groundwater administered by Ecology. These include Upper Kittitas County, and the unconsolidated and consolidated and bedrock aquifers in Lower Kittitas County. Pursuant to RCW 90.44.100(2), Ecology must consider each body of groundwater separately. RCW 90.44.100(2) is premised on a groundwater regulation scheme that begins with identification of a body of public groundwater. In the context of the proposed application, and the trust water rights that would serve as the TWSA offset to be water budget neutral, Ecology agreed it is appropriate to divide the application into three applications: G4-35799(A), G4-35799(B), and G4-35799(C). Specifically, these include:

- Portion (A) represents the aquifer systems of the Upper Kittitas Basin. The Upper Kittitas Basin consists of unconsolidated aquifers that are predominately of alluvial, lacustrine, and glacial deposits interspersed with consolidated metamorphics, sandstone, and volcanics. The upper basin is located above the confluence of Swauk Creek and the Yakima River.
- Portion (B) represents the unconsolidated and consolidated aquifer systems of the Lower Kittitas Basin. These sediments are located above the Columbia River Basalt Group (CRBG). The aquifer is composed of alluvial, loess, glacial, sedimentary, and Ellensburg Formation deposits. The lower basin is located below the confluence of Swauk Creek and the Yakima River.
- Portion (C) represents the bedrock aquifers of the Lower Kittitas Basin. This aquifer is composed of Columbia River Basalt Groups (CRBGs) and associated sedimentary interbeds. The lower basin is located below the confluence of Swauk Creek and the Yakima River.

Following additional consultation with Ecology and basin stakeholders, a subset of subbasins in the northeast portion of Lower Kittitas County were selected to pilot the approach in evaluation of water availability and impairment. To facilitate permitting of this pilot area, the County requested Ecology again split the pilot portion(s) of Nos. G4-35799(B) and G4-35799(C). Ecology agreed and the resulting applications (Nos. G4-35799(D) and G4-35799(E)) included the pilot area in the Wilson and Cherry Creek subbasins. Application No. G4-35799(A) remained unchanged. The resulting applications include:

- Portion (B) represents the unconsolidated and consolidated aquifer systems of the Lower Kittitas Basin, excluding the Wilson-Cherry Subbasin. These sediments are located above the Columbia River Basalt Group (CRBG). The aquifer is composed of alluvial, loess, glacial, sedimentary, and Ellensburg Formation deposits. The lower basin is located below the confluence of Swauk Creek and the Yakima River.
- Portion (C) represents the bedrock aquifers of the Lower Kittitas Basin, excluding the Wilson-Cherry Subbasin. This aquifer is composed of CRBGs and associated sedimentary interbeds. The lower basin is located below the confluence of Swauk Creek and the Yakima River.

- Portion (D) represents the unconsolidated and consolidated aquifer systems of the Wilson-Cherry Subbasin. These sediments are located above the Columbia River Basalt Group (CRBG). The aquifer is composed of alluvial, loess, glacial, sedimentary, and Ellensburg Formation deposits. The Wilson-Cherry Subbasin is located in Sections 1-4, 11, and 12, T. 16 N., R 19 EWM; Sections 3-10, 14-18, and 21- 23, T. 16 N., R 20 EWM; Sections 1, 3, 11-13, and 24, T. 17 N., R 18 EWM; Sections 1-36, T. 17 N., R 19 EWM; Sections 2-11, 13-23, and 28-34, T. 17 N., R 20 EWM; Sections 1, 11-14, 23-27, and 34-36, T. 18, N., R 18 EWM; Sections 2-11, and 13-36, T. 18 N., R 19 EWM; Sections 17-21, and 28-34, T. 18 N., R 20 EWM.
- Portion (E) represents the bedrock aquifers of the Wilson-Cherry Subbasin. This aquifer is composed of CRBGs and associated sedimentary interbeds. The Wilson-Cherry Subbasin is located in Sections 1-4, 11, and 12, T. 16 N., R 19 EWM; Sections 3-10, 14-18, and 21- 23, T. 16 N., R 20 EWM; Sections 1, 3, 11-13, and 24, T. 17 N., R 18 EWM; Sections 1-36, T. 17 N., R 19 EWM; Sections 2-11, 13-23, and 28-34, T. 17 N., R 20 EWM; Sections 1, 11-14, 23-27, and 34-36, T. 18, N., R 18 EWM; Sections 2-11, and 13-36, T. 18 N., R 19 EWM; Sections 17-21, and 28-34, T. 18 N., R 20 EWM.

The County proposed that each application retain the 92.682 gpm and 149.6 ac-ft/yr originally requested, but that the sum of all 5 applications will not exceed 92.682 gpm and 149.6 ac-ft/yr. This will allow the County to accommodate varying well depths and mitigation locations under their mitigated groundwater permit program. To meet the statutory requirements for issuing a new water right, Ecology evaluated each application as if the full 92.682 gpm and 149.6 ac-ft/yr would impact the body of groundwater, even though on average, it may be closer to one-fifth of the total authorization provided.

Table 1 summarizes the changes pertaining to the (A), (B), (C), (D), and (E) portions of the application.

Table 1: Summary of Groundwater Applications: G4-35799(A), G4-35799 (B), G4-35799(C), G4-35799(D), and G4-35799(E).

Place of Use	<p>G4-35799(A): Sections 2-6,8-11,13,14,24, T. 19 N, R 16 EWM Sections 15,16,19-23,25-28,33-36, T 19 N, R 17 EWM Sections 1,11,12,13,14,24, T. 20 N, R 13 EWM Sections 7,16-23,25-29,34-36, T. 20 N, R 14 EWM Sections 25-28,31-36, T. 20 N, R 15 E.W.M. Sections 28-34, T. 20 N, R 16 EWM</p> <p>G4-35799 (B) & (C): Sections 2, 3, and 11-18, T. 17 N., R 17 EWM; Sections 2-11, 13-18, 21-26, T. 17 N., R 18 EWM; Sections 30-32, T. 17 N., R 19 EWM; Sections 1-5, 8-16, 21-27, and 34-36, T. 18 N., R 17 EWM; Sections 1-11, 14-23, and 27-34, T. 18, N., R 18 EWM; Sections 1-15, T. 19 N., R 14 EWM; Sections 1-18, T. 19 N., R 15 EWM; Sections 21, and 25-36, T. 19 N., R 17 EWM; and</p>
--------------	--

	<p>Sections 19-36, T. 19 N., R 18 EWM; G4-35799 (D) & (E): Sections 1-4, 11, and 12, T. 16 N., R 19 EWM; Sections 3-10, 14-18, and 21- 23, T. 16 N., R 20 EWM; Sections 1, 3, 11-13, and 24, T. 17 N., R 18 EWM; Sections 1-36, T. 17 N., R 19 EWM; Sections 2-11, 13-23, and 28-34, T. 17 N., R 20 EWM; Sections 1, 11-14, 23-27, and 34-36, T. 18, N., R 18 EWM; Sections 2-11, and 13-36, T. 18 N., R 19 EWM; Sections 17-21, and 28-34, T. 18 N., R 20 EWM;</p>
Amended Points of Withdrawal	<p>G4-35799(A): Sections 2-6,8-11,13,14,24, T. 19 N, R 16 EWM Sections 15,16,19-23,25-28,33-36, T 19 N, R 17 EWM Sections 1,11,12,13,14,24, T. 20 N, R 13 EWM Sections 7,16-23,25-29,34-36, T. 20 N, R 14 EWM Sections 25-28,31-36, T. 20 N, R 15 E.W.M. Sections 28-34, T. 20 N, R 16 EWM G4-35799 (B) & (C): Sections 2, 3, and 11-18, T. 17 N., R 17 EWM; Sections 2-11, 13-18, 21-26, T. 17 N., R 18 EWM; Sections 30-32, T. 17 N., R 19 EWM; Sections 1-5, 8-16, 21-27, and 34-36, T. 18 N., R 17 EWM; Sections 1-11, 14-23, and 27-34, T. 18, N., R 18 EWM; Sections 1-15, T. 19 N., R 14 EWM; Sections 1-18, T. 19 N., R 15 EWM; Sections 21, and 25-36, T. 19 N., R 17 EWM; and Sections 19-36, T. 19 N., R 18 EWM; G4-35799 (D) & (E): Sections 1-4, 11, and 12, T. 16 N., R 19 EWM; Sections 3-10, 14-18, and 21- 23, T. 16 N., R 20 EWM; Sections 1, 3, 11-13, and 24, T. 17 N., R 18 EWM; Sections 1-36, T. 17 N., R 19 EWM; Sections 2-11, 13-23, and 28-34, T. 17 N., R 20 EWM; Sections 1, 11-14, 23-27, and 34-36, T. 18, N., R 18 EWM; Sections 2-11, and 13-36, T. 18 N., R 19 EWM; Sections 17-21, and 28-34, T. 18 N., R 20 EWM;</p>
Amended Quantities	<p>G4-35799(A): 92.682 gpm and 149.6 ac-ft/yr G4-35799(B): 92.682 gpm and 149.6 ac-ft/yr G4-35799(C): 92.682 gpm and 149.6 ac-ft/yr G4-35799(D): 92.682 gpm and 149.6 ac-ft/yr G4-35799(E): 92.682 gpm and 149.6 ac-ft/yr The sum of G4-35799(A), G4-35799(B), G4-35799(C), G4-35799(D), and G4-35799(E) shall not exceed 92.682 gpm and 149.6 ac-ft/yr</p>

Legal Requirements for Approval of Appropriation of Water

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

Public Notice

Public notice of the application G4-35799(A), G4-35799(B), and G4-35799(C) was given in the *Daily Record*, Ellensburg, Kittitas County, Washington on February 15, 2016 and May 15, 2016. The protest period ended on April 14, 2016. G4-35799(D) and G4-35799(E) were split from application Nos. G4-35799(B) and G4-35799(C) after the publication of the public notice, however, the publication provided a description of all proposed water use under the five applications.

Consideration of Protests and Comments

Ecology received no protest letters or letters of concern.

State Environmental Policy Act (SEPA)

This application is subject to environmental review under SEPA. The applications request cumulative quantities less than 2,250 gpm which meet the exemption under WAC 197-11-800(4). However, land use decisions related to the permitted uses and previous SEPA decisions associated with the County's Water Bank are not exempt. As the County's proposal contains a series of exempt and non-exempt actions, review is required for this application under WAC 197-11-305(1)(b)(i).

Kittitas County acted as lead agency for the SEPA review for this proposal. A checklist was completed and a Mitigated Determination of Non-Significance (MDNS) was issued by the County. Notice of the MDNS was published in the *Daily Record*, Ellensburg, Kittitas County, Washington on March 31, 2016. No action was taken on this application for 14 days following the publication of the determination per WAC 197-11-340.

Water Resources Statutes and Case Law

- RCW 90.44.060 specifies that new groundwater permits are processed in the same manner as in the surface water code, RCW 90.03.250 through RCW 90.03.340. Paramount among these statutes is the requirement in RCW 90.03.290 that a new permit can only issue if water is available, and the proposed use is beneficial, will not impair existing rights, or be detrimental to the public welfare.
- RCW 90.42.100(1) states that Ecology is authorized to use the trust water rights program in the Yakima River basin for water banking purposes.
- RCW 90.42.100(2)(a) allows Ecology to use water banking to mitigate for new uses and issue new water rights for any beneficial use under chapter 90.03, 90.44. or 90.54 RCW, consistent with any terms and conditions established by the transferor, except that return flows from water rights authorized in whole or in part for any purpose shall remain available as part of the Yakima basin's TWSA and to satisfy existing rights for other downstream uses and users.
- RCW 90.42.100(2)(b) states that water banking may be used to transfer water rights to and from the trust water rights program.
- RCW 90.03.250 specifies requirements for application content when filling for a new groundwater right. Aspect Consulting prepared an initial draft of this Report of Examination (ROE) as part of Ecology's front-loaded application process. Ecology reviewed and modified this ROE prior to reaching a final decision.

- RCW 90.03.380(5)(b) states that applications relating to existing surface or groundwater rights may be processed and decisions on them rendered independently of processing and rendering decisions on pending applications for new water rights within the same source of supply without regard to the date of filing of the pending applications for new water rights.
- RCW 90.03.386(2) states that 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.

Consultation Process

Per Ecology policy POL-2035, Ecology shall consult with other tribes, agencies, and entities with relevant expertise, when evaluating mitigation plans, which include water banks.

The WTWG is a voluntary team of agencies and water users that meet monthly to provide technical review of proposed water right transfers in the Yakima basin. To meet this consultation requirement, Ecology presented the project to the WTWG on August 1, 2016. The WTWG members provided comments, but no objections were received from the WTWG.

Ecology POL-2035 also requires consultation with WDFW when evaluating mitigation plans, including water banks. Ecology sent copies of these applications to WDFW, and provided a summary of the water-right applications and to WDFW at a WTWG meeting.

Ecology considers any comments received in the stakeholder and public review process in the evaluation of this ROE.

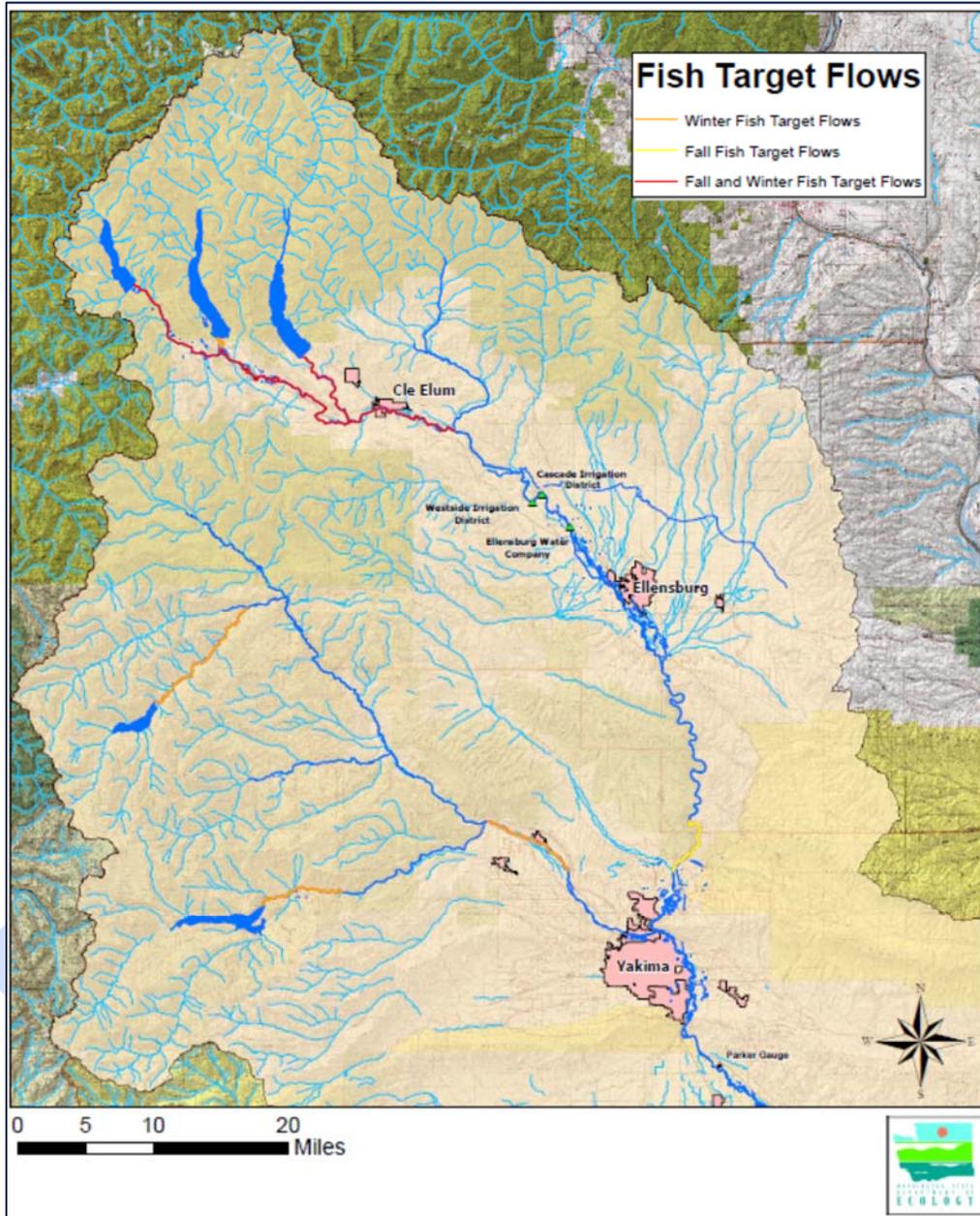
Total Water Supply Available and Bureau of USBR Water Exchange Contract

TWSA comprises all of the natural flow and stored water estimated to be available to meet the needs of the Yakima Irrigation Project and the water users holding rights senior to it. The primary measuring point of TWSA is at Parker, Washington, which is located downstream of Union Gap. USBR maintains instream target flows in the lower Yakima River at the Parker and Prosser stream flow gages from April 1 through October 31 each year.

In addition to flow regulation for TWSA at Parker, Reclamation maintains in basin fall and winter fish target flows above Parker, and within the scope of County's water bank and the subject applications. The locations for these flow targets on the Yakima River and its tributaries are summarized on Figure 1.

All water users that would be authorized by these permits would have their consumptive use offset by the Kittitas County Water Bank trust water rights, which meet the TWSA neutrality requirement at Parker. However, depending on the water uses served, the County's water bank may not fully mitigate for fall and winter fish targets shown in Figure 1.

Figure 1: Fish Target Flows in the Yakima Basin



The USBR and Ecology entered into Water Storage and Exchange Contract No. 09XX101700 dated January 29, 2009, which allows Ecology to utilize storage space in the Federal Yakima Project water storage reservoirs, when available, to store up to 1,000 acre-feet of state trust water for re-timing and later release for mitigation or other purposes during the non-irrigation season or when needed. The combination of the Water Exchange Contract, along with the Kittitas County Water Bank trust water rights, can ensure that fall and winter fish targets are not impaired. The Water Exchange Contract is expected to be applied in the following ways to water uses under these permits:

- Water uses in Lower Kittitas County below the confluence of the Teanaway and Yakima Rivers, the Water Exchange Contract will not be applied¹; and
- Water use in Upper Kittitas County above the confluence of the Teanaway and Yakima Rivers, the Water Exchange Contract will be assigned from the end of the County's water bank's authorized season of use through March 31st of the following year.

Expedited Processing

This new water right application qualifies for expedited processing under the Hillis Rule, including WAC 173-152-050(2)(g) for water budget neutral projects and WAC 173-152-050(2)(d) which would result in providing for public water supplies.

Four Statutory Tests for Issuance of a New Water Right

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

Investigation

Proposed Use and Basis of Water Demand

Mitigation suitability for each bank has previously been determined by Ecology. In total, the County has acquired 149.60 ac-ft/yr; or 52.50 ac-ft/yr (consumptive use), which is suitable for mitigation on the mainstem Yakima River and select tributaries, such as the Manastash Creek subbasin through the County's OTC Program and the subject applications.

The proposal is to authorize new domestic groundwater uses for building permit applicants in the County who, in addition to mitigation for their consumptive use of water, also need a groundwater permit because they are not eligible for an exempt groundwater use under RCW 90.44.050. If approved, the County would then offer two application packages, Package A and Package B, that mirror those in the exempt-portion of the County's Water Banks. Package A would provide 275 gpd (0.092 ac-ft./year) per domestic connection and incidental outdoor water use for up to 262 units. Package B would provide up to 300 gpd (0.112 ac-ft/yr (Upper County) to 0.126 ac-ft/yr (Lower County))) per unit, which includes 275 gpd for indoor water use and 25 gpd for outdoor irrigation. Package B would be required for any unit without access to outdoor irrigation water, and would serve up to 205 connections. The amount of water provided in these two packages was determined by a Citizens Advisory Committee convened by Kittitas County Public Health Department. The basis of the water quantities offered in this package was average household size in the county, outdoor water use demands, and water use data from public and private water systems.

¹ Note: Ecology has reserved the right to apply the contract in the reach below the Teanaway but above the Cascade Irrigation District diversion, but has not done so to-date on other applications.

Water Demand

The total water used for Package A and B under the five permit applications, No. G4-35799(A), G4-35799(B), G4-35799(C), G4-35799(D), and G4-35799(E) would be capped at 92.682 gpm, 149.6 ac-ft/yr – the same combined total quantity already authorized under the County’s OTC Program for new permit-exempt uses. Water demand characteristics of the packages include:

- Provide domestic water for up to 262 units under package A and 205 units under package B.
- 30 percent of the total withdrawal is estimated to be consumed, based on a septic tank drainfield return flow of 70 percent.
- Multiple packages may not be purchased and applied to the same parcel without a building permit requiring mitigation for a new use of groundwater.
- Based on these quantities, the total consumptive use for each Equivalent Residential Unit (ERU) is estimated to be 0.092 ac-ft/yr for Package A and 0.112 ac-ft/yr (Upper County) to 0.126 ac-ft/yr (Lower County) for Package B.
- Cumulatively, the combined total quantity from the County’s OTC Program for new permit-exempt uses plus these proposed mitigation groundwater permits will not exceed 52.50 ac-ft/yr.

Trust Water Rights Offered as Mitigation

As a basis for water bank development, the County acquired the existing Williams water bank and portions of the existing Roth, Clennon, and Amerivest water banks. The water banks include mitigation credits supported by water rights from the Yakima River mainstem and tributaries. Trust Water Right Nos. CS4-0167sb5d@2, CS4-0167sb5d@3, CS4-01553sb11a, or CS4-01968sb11a).

Other Rights Appurtenant to the Place of Use

Ecology requires documentation of other water rights appurtenant to the proposed place of use of a water right application so it can consider them when evaluating water availability and impairment to existing water rights. This section describes the extent of water rights within the area covered by the proposed County groundwater mitigation permits.

The spatial extent of the places of use for these applications covers likely suitable areas for the Roth, Clennon, Williams, and Amerivest water banks. This encompasses a large portion of lower Kittitas County. Based on consultation of Ecology’s water right database, thousands of existing water rights overlap this same area. These water rights are available in tabular form by stream reach or subwatershed. However, when water budget neutral mitigation is proposed and physical availability is not expected to be limiting, a right-by-right tabulation is less instructive in informing Ecology whether a new water right may be approved. Rather, water rights may be grouped into different classes based on priority, source, and user to inform Ecology regarding relative risk. Generally, these rights are categorized as follows:

- Adjudicated senior (pre-1905) and junior surface water rights;
- Non-adjudicated groundwater rights and claims;
- Groundwater permit exempt uses;
- Tribal treaty water rights; and
- Federal water rights.

All surface water rights in these areas are currently subject to the Yakima County Superior Court under the Acquavella Adjudication. A list of all appurtenant surface water rights can be found in the Conditional Final Orders (CFO) for the following subbasins:

09 – Wilson-Naneum

10 – Kittitas

Additionally, there are several Major Claimants with water rights appurtenant to the proposed places of use: Yakama Nation, the USBR, Ellensburg Water Company, West Side Irrigation Company, Cascade Irrigation District, Kittitas Reclamation District, City of Ellensburg, and City of Cle Elum. The Acquavella Adjudication issued CFO's for major claimants separate from the subbasins, which are also documented in Ecology's files.

The Yakama Nation has Treaty water rights for fish and other aquatic life in the proposed area with a priority date of time immemorial. These rights are senior to all water rights referenced in the 1945 Consent Decree and limited in *Ecology v Acquavella* (1996). The Confederated Tribes of the Umatilla Indian Reservation may also have instream flow rights in the Yakima River.

The Federal Rights are held by USBR and were created May 10, 1905, when the Secretary of the Interior withdrew all the unappropriated waters of the Yakima River and tributaries for benefit of the proposed Yakima Reclamation Project. These rights provide for the irrigation of 450,000 acres and the storage of 1,065,400 acre-feet. May 10, 1905 is the priority date for these Federal Rights and are prorable.

Groundwater is not being considered under the *Acquavella* Adjudication. Groundwater rights and claims to groundwater within the proposed area have never been adjudicated and, consequently, there is more uncertainty with them than with the surface water rights and claims to surface water currently under the *Acquavella* Adjudication. Ecology's files and water right tracking system includes:

- Groundwater certificates for which the extent of the right was known when issued, but may be diminished since that time due to relinquishment or abandonment;
- Groundwater permits that are being developed and may be certificated following a certified water right examination;
- Groundwater claims that have not been evaluated but may represent vested uses pre-dating adoption of the groundwater code; and
- Groundwater permit exempt uses, represented not by water rights in Ecology's database, but for which surrogate values can be obtained in some cases through well log drilling records and water budget neutral (WBN) orders issued by Ecology from existing water banks.

New applications for surface and groundwater rights also exist in Ecology's database, though permits under these applications likely cannot be issued without mitigation since all water has been either reserved by USBR or allocated for existing uses. The County's applications seek to provide a new mitigated option for many of these pending groundwater applications.

Impacts to surface and groundwater rights will be evaluated in the impairment section of this report.

Hydrologic/Hydrogeologic Discussion and Evaluation

Aspect completed a hydrogeologic investigation (Aspect, 2016) in support of permitting the County's groundwater mitigation permits. The investigation included a multiple line of evidence approach that used the best available data describing the hydrogeology of the area. The objective of the investigation was to determine if water is available and if impairment of senior water rights or Endangered Species Act (ESA)-listed species would occur. The scope of this hydrogeologic investigation was limited to summarizing existing information from studies and reports completed by federal and state agencies (e.g. U.S. Geological Survey, USBR, and Department of Ecology) and private entities, and calculations of the potential for local well interference.

Following consultation with Ecology and basin stakeholders, including the Yakama Nation and the Bureau of Reclamation, a subset of subbasins in the northeast portion of Lower Kittitas County were selected to pilot the approach in evaluation of water availability and impairment. The area includes green zones in the Wilson and Cherry Creek subbasins (Wilson-Cherry). These subbasins were selected because they were generally identified as having fewer water supply issues.

The area includes the area from Caribou Creek through Wilson Creek. The Wilson-Cherry subbasin is located in the Kittitas Valley northeast of Ellensburg, Washington. This hydrogeologic investigation is limited to green zone(s) of the water bank's mitigation suitability maps, which is bounded to the north and east by the Kittitas Reclamation District's (KRD's) North Branch irrigation canal and extends south to the mainstem of the Yakima River.

Based on the site-specific hydrogeologic conceptual model presented in the technical memorandum, it was determined that:

- Wells drilled under the groundwater mitigation permit will have effects on the Yakima River and lower sections of its tributaries creeks as a function of location and well depth. Locations and target aquifers are known based on the County's mapping and investigation of permit vs. permit-exempt authority requirements;
- Both the OTC Program and the subject permits are water budget neutral with respect to TWSA;
- Cumulative impacts within the approved green zone up to the 402 building permit limit will be the same irrespective of whether groundwater mitigation occurs through the OTC Program or this groundwater mitigation permit;
- Groundwater levels in the unconsolidated and consolidated and bedrock aquifers in the existing Lower County have increased beyond predevelopment levels;
- All Mitigation Certificates issued under the County OTC program or this groundwater mitigation permit will be provisioned based on future curtailment risk;
- All Mitigation Certificates and this groundwater mitigation permit will be provisioned on well construction standards, including completion interval and sealing requirements consistent with the subject permit and to minimize tributary impacts;
- Interference drawdown at 500 feet from continuously pumping the proposed wells at an average withdrawal rate (32.5 gpm) for 1 year is estimated to be less than 1 foot in a consolidated sedimentary aquifer and less than 10 feet in the basalt aquifer. Peak pumping (withdrawal of 92.682 gpm for 30 continuous days) results in less than 1.5 in the consolidated

sedimentary aquifer and less than 20 feet of drawdown in the basalt aquifer. Both estimates conservatively assume no leakage or boundary condition from the nearby Yakima River and are a small percentage of the total available drawdown in the Basalt Aquifer; and

- Endangered Species Act (ESA) listed species are present in surface water throughout the Lower County. The additional withdrawal of 52.5 ac-ft/yr of consumptive use from the green zone areas was previously considered in the OTC Program to not impair these species, and the groundwater mitigation permit approach is designed to not exceed these levels.
- Local Native American Indian Tribes time immemorial Federally-protected fishing rights in their Usual and Accustomed areas as also located throughout the Lower County.

Water Availability

For water to be available for appropriation, it must be both physically and legally available. Water availability may be evaluated through conceptual, analytical, or numerical analyses, and Ecology determines the level of analysis appropriate consistent with application-specific hydrogeologic and regulatory conditions to satisfy a finding of water availability. In this application, Kittitas County proposes a water budget neutral mitigation proposal, consistent with an approved OTC Program that is in place, which has been approved by Ecology and basin stakeholders with provisions to respect local priority of water rights in tributaries. The proposed application does not request allocations of water in addition the current OTC Program. Additionally, Kittitas County's proposed approach is to conservatively evaluate the effect of the entire proposed quantity from each source in each subbasin. Based on this framework, and the lack of historic regulatory need in this subbasin, Ecology has determined that a conceptual analysis of physical water availability is appropriate. Future Ecology permitting actions in Kittitas County, or water banking proposals in other areas, may require additional application-specific analyses.

Physical and legal availability analyses are provided in the following sections. Results of the hydrogeologic investigation (Aspect, 2016) was used to provide the basis for the evaluation of water availability.

Physical Availability

The full quantity requested under the subject water right (92.682 gpm; 149.6 ac-ft) was conservatively assumed to be withdrawn from a single well completed in each source in the Wilson-Cherry subbasin. Based on mapping completed by Kittitas County, wells will be dispersed across the entire subbasin, completed at different distances and depths from subbasin tributaries and the mainstem Yakima River. Pumping impacts on subbasin tributaries will be greatly attenuated, and will not exceed the 92.682 gpm (or about 0.2 cfs) requested. Therefore, based on information presented in the hydrogeologic investigation, water is found to be physically available from each source for the proposed permits in the Wilson-Cherry subbasin. Mean annual recharge has increased significantly as a result of on-farm irrigation and canal and lateral leakage. Local groundwater levels, storage and baseflows have also increased with these practices, resulting in an increase from less than 3 inches pre development to greater than 20 inches today in the greater Ellensburg Area.

Water has been physically available in the subject subbasins every year to satisfy existing water rights since signing of the CFO. In addition, review of Ecology files indicate no enforcement actions or curtailment orders have been issued on nearby water rights due to local availability.

Future Physical Availability

Climate change, administrative or regulatory changes, and infrastructure project development have the potential to affect water resources in the Yakima River Basin. These factors are being actively evaluated in the basin, predominantly as part of the Yakima River Basin Integrated Resource Management Plan.

Potential impacts include changes in future temperatures and precipitation patterns, and the resulting implication for stream runoff rate and timing, water temperatures, and reservoir operations (USBR 2012), all of which affect water availability. In addition, planned future improvements in irrigation efficiency, deliveries, and infrastructure may reduce the amount of return flow and/or foreign water in the basin.

The Yakima River Basin Integrated Water Resource Management Plan is a proposed approach to improving water management in the Yakima River basin. Its goals are to protect, mitigate and enhance fish and wildlife habitat, provide increased operational flexibility to manage instream flows to meet ecological objectives, and improve the reliability of water supply for irrigation, municipal supply and domestic uses.

Specific to Kittitas County's groundwater mitigation permit, the County advertises mitigation with a pre-1905 senior priority date with currently firm reliability. As provisioned in the County's mitigation certificates, if a future occurrence results in a finding that water is not locally available, the permittee will be pro-rated or curtailed. The County is considering pursuing purchase of senior water rights in other tributary subbasins, which could allow in-kind mitigation of potential impacts to tributaries if future curtailment problems occur. In addition, other mitigation option may exist, such as cooperative flow agreements with local irrigation districts. Individual users always have the option of pursuing water right acquisitions and transfers that would further increase reliability of their own water supply.

Legal Availability

To determine whether water is 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; and
- Fisheries and other instream uses (e.g., recreation and navigation).

The hydrogeologic investigation (Aspect, 2016) discussed above found the following information:

- The POU is not within a closed basin;
- Ecology files indicate no water availability enforcement action or curtailment order has been issued on water rights within the green zone;
- The trust water rights that will offset the proposed use have a pre-1905 priority date;
- The consumptive use withdrawn under this permit will be mitigated for TWSA with a Trust Water Right, and seasonal impacts to a portion of the Yakima River will be offset by use of the Storage Contract; and
- Use of the full permitted quantity as provisioned will not impair ESA-listed species, including tribal fishing rights.

Total Water Supply Available

TWSA comprises all of the natural flow and stored water estimated to be available to meet the needs of the Yakima Irrigation Project and the water users holding rights senior to it. The measuring point of TWSA is at Parker, Washington, which is located downstream of Union Gap, Washington.

USBR maintains instream target flows in the lower Yakima River at the Parker and Prosser stream flow gages from April 1 through October 31 each year. USBR does not maintain any non-irrigation season (i.e., from November 1 through March 31 of the following year) instream target flows below the confluence of the Teanaway River with the Yakima River, a point which is located approximately 15 river-miles upstream of the west-most and nearest portion of the proposed POU for this permit.

Water Budget Neutrality Within the Yakima Basin TWSA²

Water uses that would be authorized by this permit would have their consumptive use offset by the Amerivest, Williams, Roth, and Clennon trust water rights.

USBR and Ecology have entered into a water storage contract, or Water Exchange Contract, which allows Ecology to utilize storage space in the Federal Yakima Project water storage reservoirs, when available, to store up to 1,000 acre-feet of state trust water for re-timing and later release for mitigation or other purposes during the non-irrigation season or when needed.

The season of use for the trust water rights purchased by Kittitas County ranged from April 1st through 1st, thus providing in-time mitigation from April 1 through September 1st each year for all of the uses proposed by this permit. To ensure no negative impact to TWSA, Water Storage and Exchange Contract No. 09XX101700, between the USBR and Ecology, Yakima Project, Washington will be utilized to ensure target flows are met between September 1 through March 31.

The State of Washington Department of Ecology and the USBR entered into a Water Storage and Exchange Contract, No. 09XX101700, dated January 29, 2009. The Storage Contract allows Ecology to store up to 1,000 acre-feet of state trust water in the Federal Yakima Project storage reservoirs for re-timing and later release for mitigation or other purposes during the non-irrigation season or when needed. The USBR will manage the water to meet all instream flow targets on the reach of the Yakima River adjacent to the POU.

Impairment

Impairment is an adverse effect on the quantity of a water right with an earlier priority date. 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

² Isley, Stan via email January 28, 2014 and March 25, 2014.

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).

Groundwater Impairment

The well interference caused by groundwater withdrawals under likely conditions will not lead to impairment of a right to withdraw groundwater from a qualifying work. Potential drawdown and well interference was evaluated in the hydrogeology evaluation and reported previously in this document.

Although pumping interference effects are likely, no impairment of existing groundwater rights—either permit or permit-exempt—will occur in the unconsolidated and consolidated and bedrock aquifers with full use of the requested quantity.

Surface-Water Impairment

Withdrawals from the subject aquifers will likely cause a small impact to local stream flows. The impacts will be greatly annulated and will not exceed the 92.682 gpm (or about 0.2 cfs) requested. These impacts will occur within reaches that generally have a surplus of water, especially during the irrigation season, and that the small predicated impacts will not impair senior surface water rights or spawning and rearing habitat for ESA-listed species. However, the Yakama Nation holds a time immemorial water right in its usual and accustomed hunting and fishing areas. While this water right was not quantified by the Acquavella Adjudication for local tributaries, if flows drop to a point where fish and other aquatic life are adversely affected, the Yakama Nation could make a call for their time immemorial water right.

To further minimize impacts to tributary surface water, permits issued under the groundwater mitigation permit will be provisioned for well construction and location as described in the Provision section.

Beneficial Use

In the Supreme Court case *Ecology v. Grimes* (1993), the Court held that “*for the purposes of appropriated water rights, ‘beneficial use’ has two elements: (1) the purposes or types of activities for which the water may be used and (2) the amount of water that may be used as limited by the principle of ‘reasonable use’*”

The use of water for domestic supply purposes is defined in statute as a beneficial use of water (RCW 90.54.020(1)).

The County’s requested quantities include two packages. Package A limits indoor and incidental outdoor water use to an average annual use of 275 gallons per day (gpd). Package A does not permit any outdoor irrigation. Package B allows the irrigation of up to 500 square feet with the withdrawal of an annual average of 25 gpd in addition to the indoor quantities specified in Package A, for an average annual use of 300 gpd. Ecology previously determined that these packages are a reasonable use of water when evaluating the County’s over-the-counter program for exempt uses.

Public Interest Considerations

When investigating a water right application, Ecology is required to consider whether the proposal is detrimental to the public interest (Chapter 90.03.290 RCW). In determining whether the proposed use is detrimental to the public interest, Ecology considered the following factors:

- Kittitas County is required to consider and address water resource issues in land use planning (RCW 36.70A.020(10)). This proposed application will help Kittitas County meet its statutory obligations.
- Kittitas County subdivision review must include provisions for potable water supplies (RCW 58.17.110(2)). Additionally, Kittitas County must provide adequate provisions for potable water when issuing a building permit (RCW 19.27.097). This proposed application will help Kittitas County meet its statutory obligations.
- Ecology is directed to encourage regional water supply solutions (RCW 90.54.020(8)). This proposed application will provide for water supplies across Kittitas County.
- Ecology is directed to consider environmental effects of water resource management techniques proposed by applicants (RCW 90.44.055). The County's proposal is TWSA and water budget neutral and provides a mitigation pathway consistent with protection of existing water right holders and the environment.
- This application provides mitigated new uses for up to 462 homes through a simplified approval process, making reliable water available to potential homeowners more efficiently.
- This groundwater mitigation permit process will reduce the number of water rights permits processed through the state, freeing resources for work on other agency projects, compared to a conventional application process where each project is considered and permitted separately. Additionally, this groundwater mitigation permit process will reduce workload for agency partners like the WTWG who provide consultation on water right permitting.
- This application process will support new home construction, which provides jobs and increased tax revenue.
- This application helps implement the County and Ecology's 2014 Settlement Agreement and Supreme Court cases described in the Legal Requirements section of the ROE.

Nothing in the proposed use of water is inconsistent with the fundamental principles of water resources outlined in RCW 90.54.020. State, local, and federal natural resource agencies have been consulted regarding the proposed water use and, after multiple rounds of feedback and suggestions, concerns on their behalf have been incorporated into 1) the scope of the project and 2) mitigating the consumptive use component of the requested water without causing impairment to senior permit-exempt or water right holders or ESA-listed species. There are no anticipated effects on navigation, water quality, public health or safety that are not consistent with the public interest. Finally, additional public interest considerations were addressed in the Mitigated Determination of Non-Significance document.

Conclusions

- Water is physically and legally available for this appropriation.
- The proposed use is beneficial use of water.
- The proposed use is not contrary to the public interest.
- The proposed use will not cause detriment or injury to existing rights.

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 between Groundwater Application Nos. G4-35799(A), G4-35799(B), G4-35799(C), G4-35799(D), and G4-35799(E) and the water user(s) may only use that amount of water within the specified limit that is reasonable and beneficial.

Limits and Purpose

- 92.682 gpm;
- Total use 149.6 ac-ft/yr;
- Total withdrawals authorized under Groundwater Permit Nos. G4-35799(A), G4-35799(B), G4-35799(C), G4-35799(D), and G4-35799(E) must not exceed the total quantity authorized for withdrawal listed above;
- For continuous (year-round) indoor multiple domestic with no outdoor use for up to 262 residences; and
- For continuous (year-round) indoor multiple domestic and up to 500 square feet of outdoor irrigation for 205 residences.

Points of Withdrawal

Up to 467 wells in the unconsolidated (G4-35799(D)) and bedrock (G4-35799(E)) aquifer of the Lower Kittitas Basin within the Wilson-Cherry subbasin. The total count of wells for G4-35799(A), G4-35799(B), G4-35799(C), G4-35799(D), and G4-35799(E) shall not exceed 467 wells.

Place of Use

Within the following locations:

- T. 16 N., R. 19 E.W.M. Portions of Sections 1-4, 11, and 12
- T. 16 N., R. 20 E.W.M. Portions of Sections 3-10, 14-18, and 21- 23
- T. 17 N., R. 18 E.W.M. Portions of Sections 1, 3, 11-13, and 24
- T. 17 N., R. 19 E.W.M. Portions of Sections 1-36
- T. 17 N., R. 20 E.W.M. Portions of Sections 2-11, 13-23, and 28-34
- T. 18 N., R. 18 E.W.M. Portions of Sections 1, 11-14, 23-27, and 34-36
- T. 18 N., R. 19 E.W.M. Portions of Sections 2-11, and 13-36
- T. 18 N., R. 20 E.W.M Portions of Sections 17-21, and 28-34

ALL IN KITTITAS COUNTY, WASHINGTON.

Report by:

Aspect Consulting

Date

References

- Aspect Consulting, 2016, Draft Memorandum: Water Availability and Impairment Evaluation – Kittitas County Groundwater Mitigation Permit.
- Keys, M.E., Vaccaro, J.J., Jones, M.A., and Julich, R.J., 2008, Hydrographs showing ground-water level trends for selected wells in the Yakima River basin aquifer system, Washington: U.S. Geological Survey Data Series 343
- Jones, M.A., Vaccaro, J.J., and Watkins, A.M., 2006, Hydrogeologic Framework of Sedimentary Deposits in Six Structural Basins, Yakima River Basin, Washington: U.S. Geological Survey Scientific Investigations Report 2006-5116, 24 p.
- PRISM Climate Group, Oregon State University, created 24 Feb 2016.
<http://prism.oregonstate.edu>
- R.W. Tabor, R.B. Waitt, V.A. Frizzell, Jr., D.A. Swanson, G.R. Byerly, and R.D. Bentley 1982. Geologic Map of the Wenatchee 1:100,000 Quadrangle, Central Washington. U.S. Geological Survey Map 1-1311.
- Theis, C.V., 1935, The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using ground-water storage, Transactions, American Geophysical Union 16: 519–524.
- USDA, 2012. Census of Agriculture. <https://www.agcensus.usda.gov/Publications/2012/>
- Vaccaro, J. J., M.A. Jones, D.M. Ely, M.E. Keys, T.D. Olsen, W.B. Welch, and S.E. Cox, 2009, Hydrogeologic Framework of the Yakima River Basin Aquifer System, Washington: U.S. Geological Survey Scientific Investigations Report 2009-5152, 120p.
- Walker, Kurt, 2015, Technical Memorandum: Hydrogeology Review for Water Right Permit Application Nos. G4-35643(A) and G4-35643(B), Yakima River Adjudication Subbasin No. 8 (Thorp) area, Kittitas County. Washington State Department of Ecology.
- Wait, Richard B, Jr., 1979, Late Cenozoic Deposits, Landforms, Stratigraphy, and Tectonism in Kittitas Valley, Washington. Geological Survey Professional Paper 1127.
- Washington Department of Natural Resources (DNR), 2013, Interactive Geologic Map, http://www.dnr.wa.gov/researchscience/topics/geosciencesdata/pages/geology_portal.aspx
- Washington State Department of Ecology (Ecology), 2016. Washington State Well Log Viewer. <https://fortress.wa.gov/ecy/waterresources/map/WCLWebMap/default.aspx>.
- WDFW. SalmonScape. <http://wdfw.wa.gov/mapping/salmonscape/index.html>.