



STATE OF WASHINGTON
DRAFT
REPORT OF EXAMINATION
FOR WATER RIGHT CHANGE

Changed Purpose of Use
Change Place of Use

APPLICATION DATE	WATER RIGHT CHANGE APPLICATION NUMBER
December 23, 2019	CG1-027480CL

PRIORITY DATE OF CLAIM PROPOSED FOR CHANGE	CLAIM NUMBER PROPOSED FOR CHANGE
Prior to 1945	G1-027480CL

NAME AND MAILING ADDRESS	SITE ADDRESS (IF DIFFERENT)
Richard A. Bertelsen Jr. 551 Hummingbird Trail Idaho Springs, CO 80452	20567 Starbird Road Mount Vernon, WA 98274

Total Rate and Quantity Authorized for Withdrawal

WITHDRAWAL RATE (gpm)	ANNUAL QUANTITY (ac-ft/yr)
5	1.4

gpm = Gallons per Minute; ac-ft/yr = Acre-feet per Year

Purpose(s)

PURPOSE	WITHDRAWAL RATE (gpm)	ANNUAL QUANTITY (ac-ft/yr)	PERIOD OF USE
Commercial	5	1.4	Continuously

IRRIGATED ACRES	PUBLIC WATER SYSTEM INFORMATION	
N/A	WATER SYSTEM NAME and ID	CONNECTIONS
	N/A	N/A

Source Location

COUNTY	WATERBODY	TRIBUTARY TO	WATER RESOURCE INVENTORY AREA
Skagit	Groundwater	N/A	3 – Lower Skagit/Samish

SOURCE NAME	PARCEL	WELL TAG	TOWNSHIP	RANGE	SECTION	QQ Q	LATITUDE	LONGITUDE
Well	P17699	BNB-764	33N	04E	33	NW NW	48.30952	-122.30991

QQ Q = Quarter Quarter

Datum: NAD83/WGS84

Place of Use

PARCEL(S)
P17700

LEGAL DESCRIPTION OF THE AUTHORIZED PLACE OF USE
W ½ of the NW ¼ of the NW ¼ of Section 33, within the same Township and Range (parcel P17700) EXCEPT from the above premises all road rights of way.

Proposed Works
Mr. Bertelsen plans to change both the place-of-use and the purpose of groundwater claim G1-027480CL from domestic/livestock to commercial use for the construction and use of a small-scale “agricultural brewery”. The water source is an existing 6-inch diameter well with a 5 gpm submersible pump located in a small pump house on an adjacent parcel owned by a family member. The well is connected to a ~50-gallon booster tank located alongside the well. There is no additional on-site storage. A well log could not be located for this water source, so no additional information is available.

Development Schedule		
BEGIN PROJECT BY THIS DATE	COMPLETE PROJECT BY THIS DATE	PUT WATER TO FULL USE BY THIS DATE
April 01, 2022	April 01, 2026	April 01, 2026

Attention: These dates represent deadlines that must be met or risk cancellation of this authorization. Submittal of formal documentation for each stage is required. Extensions may be requested.

Measurement of Water Use	
HOW OFTEN MUST WATER USE BE MEASURED AND RECORDED?	Monthly
HOW OFTEN MUST WATER USE DATA BE REPORTED TO ECOLOGY?	Annually by January 31
WHAT VOLUME SHOULD BE REPORTED?	Total annual quantity in acre-feet
WHAT RATE SHOULD BE REPORTED?	Annual peak rate of withdrawal in gpm

Provisions

RESTRICTION ON WATER RIGHT PLACE OF USE:
NO WATER WILL BE AVAILABLE TO P17699, P17702, AND P17415 FROM THIS WATER RIGHT UNDER THE REQUIREMENTS OF THE SKAGIT INSTREAM RESOURCE PROTECTION PROGRAM, WAC 173-503, AND THE WASHINGTON STATE SUPREME COURT DECISION *SWINOMISH TRIBAL NATION V. ECOLOGY* (2013).

ECOLOGY RECOMMENDS THAT ANY UNUSED PORTION OF THIS WATER RIGHT BE PLACED INTO THE TRUST WATER RIGHT PROGRAM TO ENSURE THAT THE UNUSED WATER QUANTITIES ARE NOT RELINQUISHED DUE TO NON-USE.

Measurements, Monitoring, Metering, and Reporting
An approved measuring device must 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”, chapter 173-173 WAC, which describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology (Ecology) for modifications to some of the requirements.

Recorded water use data shall be submitted electronically by January 31 each year. To set up an Internet reporting account, contact the Regional Office. If you do not have Internet access, you can still submit hard copies by contacting the Regional Office for forms to submit your water use data.

Proof of Appropriation

Consistent with the development schedule given in this report (unless extended by Ecology), the water right holder must file a Notice of Proof of Appropriation (PA) of Water with Ecology. The PA documents the project is complete and all the water needed has been put to full beneficial use (perfected). In order to verify the extent of water use under this water right change approval, an inspection of water use is typically required, known as a “proof exam”. After filing the PA, the water right holder’s next step is to hire a Certified Water Rights Examiner (CWRE) to conduct this proof exam. A list of CWREs is provided to the water right holder upon filing the PA with Ecology. The final water right document, a water right certificate, then may issue based upon the findings of the CWRE. Statutory county and state filing fees may apply prior to certificate issuance.

Schedule and Inspections

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

Findings of Fact and Order

Upon reviewing the investigator’s report, I find all facts, relevant and material to the subject application, have been thoroughly investigated.

Therefore, I ORDER **APPROVAL** of Change Application No. CG1-027480CL, 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 to Ecology in paper form - by mail or in person (see addresses below). E-mail is not accepted.

You must also comply with other applicable requirements in chapter 43.21B RCW and chapter 371-08 WAC.

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel RD SW, Ste 301 Tumwater, WA 98501	Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903

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>.

Authorizing Signature

Signed at Shoreline, Washington, this _____ day of _____, 2021.

Ria Berns, Section Manager
Water Resources Program/Northwest Regional Office
Department of Ecology

INVESTIGATOR'S REPORT

Water Right Change Application No: CG1-027480CL (Richard A. Bertelsen Jr.)

Investigator: John M. Rose L.G.

BACKGROUND

This report serves as the written findings of fact concerning Water Right Change Application Number CG1-027480CL.

Mr. Richard A. Bertelsen Jr. is seeking to change the place of use of this water right claim from the NW ¼ of the NW ¼ of Section 33 and the SW ¼ of the SW ¼ of Section 28, Township 33 North, Range 04 East W.M. to the W ½ of the NW ¼ of the NW ¼ of Section 33, within the same Township and Range (parcel P17700). Additionally, Mr. Bertelsen desires to change the purpose of use of this claim from livestock and domestic use to commercial for the establishment of a small-scale “agricultural brewery”. The water source, a groundwater well with Ecology well tag no. BNB-764 will remain unchanged.

Table 1. Existing Water Right Attributes

Name on Water Right Document	Benjamin S. Asia, Trustee
Claim Number	G1-027480CL
Priority Date	Prior to 1945
County	Skagit
WRIA	3 - Lower Skagit
Water Source	Well
Place of Use	P17699, P17700, P17702, P17415

Purpose	Instantaneous Rate (gpm)	Annual Quantity (ac-ft/yr)	Begin Season	End Season
Domestic	40	unlisted	N/A	N/A
Livestock		unlisted	N/A	N/A

Source Name	Parcel	Well Tag	Township	Range	Section	QQ Q	Latitude	Longitude
Well	P17699	BNB-764	33N	04E W.M.	33	NW NW	48.30952	-122.30991

WRIA = Water Resource Inventory Area; gpm = Gallons per Minute; ac-ft/yr = Acre-feet per Year; QQ Q = Quarter Quarter

Datum: NAD83/WGS84

Table 2. Requested Water Right Attributes

Applicant Name	Richard A Bertelsen
Date of Application	December 23, 2019
County	Skagit
WRIA	3 - Lower Skagit
Water Source	Well
Place of Use	W ½ of the NW ¼ of the NW ¼ of Section 33, Township 33N Range 04E W.M.
	Parcel P17700

Purpose	Instantaneous Rate (gpm)	Annual Quantity (ac-ft/yr)	Begin Season	End Season
Commercial	5	1.4	N/A	N/A

Source Name	Parcel	Well Tag	Township	Range	Section	QQ Q	Latitude	Longitude
Well	P17699	BNB-764	33N	04 E W.M.	33	NW NW	48.30952	-122.30991

Datum: NAD83/WGS84

INVESTIGATION

The following is a summary of this investigation:

- Review of the application as submitted.
- Review of the following materials submitted with the application:
 - Affidavits of historical water use provided by Mr. Bertelsen
 - Review of well logs in the vicinity of proposed project
- Discussions with the applicant.
- Site visit on June 24, 2021.
- Aerial photo analysis of the site.
- Review of local hydrogeologic reports, geologic maps, and well logs.

History of Water Use

Site Description

Water right claim G1-027480CL is located within the Skagit watershed in the Fisher Creek sub-basin. The stated Place of Use of the claim consists of four parcels, all owned by Bertelsen Farms LLC. (Skagit County Property Search website). The parcel (P17700) the applicant would like to transfer the water to is within the existing stated place of use.

G1-027480CL is located immediately to the east of Interstate 5, exit 218 between Mount Vernon, which is 7.5 miles to the north, and Stanwood, which is 3 miles to the south. The parcel sits on a roughly triangular plateau that gently slopes to the west before abruptly dropping into the flat, alluvial plain of the Skagit River delta to the west of Bertelsen’s property. To the east and northeast is a series of northwest trending steep hills. Average elevation near the claim is approximately 200 ft. above mean sea level (MSL). The highest peaks in the area are to the north-northeast and consist of Devil’s Mountain with an elevation of 1,727 ft. MSL and Scott Mountain with an elevation of 1,620 ft. MSL.

G1-027480CL stated Place of Use encompasses approximately 75 acres of open, relatively flat grassland with no trees. There are a number of structures on the southern end of the properties including two barns and an old, abandoned residence. The water well is located on parcel P17699 (owned by Mr. Richard Bertelsen Sr.) to the east of where Mr. Bertelsen Jr. is intending to transfer the claim. The area surrounding the claim’s Place of Use consists of mixed pastureland and irregular patches of forest, which are often part of the Fisher Creek riparian zone. Virtually all of the Fisher Creek sub-basin is zoned “Rural Reserve” which allows low-density development to preserve the open space character of this area. (Skagit County Code 14.16.320)

Nearby surface waters include the main stem of Fisher Creek to the northeast which flows through a steeply incised ravine less than ½ mile from G1-027480CL’s water well. There is a smaller tributary of the main stem Fisher Creek closer to the Bertelsen property, but it is unclear if this is a seasonal or perennial stream. To the west and southwest is the informally named “Little Fisher Creek”, a branch of the main stem Fisher Creek that is approximately 0.3 miles from the water well. “Little Fisher Creek” joins with the main stem of Fisher Creek downstream approximately 1.2 miles to the northwest of the Bertelsen property before it finally empties into the south fork of the Skagit River.

On June 24, 2021, the author visited the Bertelsen site and met with Mr. Rich Bertelsen Jr. During the site visit, I observed the current well, which is located in a pump house and has a properly attached Department of Ecology well tag. The well is currently unmetered. While I was there, I observed the pump cycling, confirming it was in operating condition. There were approximately 50-60 cattle on the south side of the property adjacent to the barn. I was unable to observe any cattle on the northern side of the property due to a slight rise in slope that occurs on the southern half of the property. Mr. Bertelsen did not know the exact number of cattle currently on the property, but stated that his father usually had about 100 head, and sold about 50 per year. The cattle were actively drinking from a blue plastic stock tank, which was filled from a hose bib connected to the well and held about 500 gallons. There is a barn, which has open sides, with an old attached silo that appears to be in adequate condition. The barn was a site where cattle were fed. A shed to the southeast of the barn is for equipment storage. An abandoned home is onsite, and was not in a habitable condition, but outwardly appeared to be in good condition. According to Mr. Bertelsen and confirmed from the Zillow real estate website, the house was constructed in 1930.

Water Use

Water right claim G1-027480CL was submitted to the Washington Department of Ecology on May 2, 1973 by Mr. Benjamin S. Asia, trustee. Mr. Asia claimed 40 gallons per minute continuous instantaneous rate for domestic use and livestock purposes. The claimant did not state an annual quantity on the claim form. The claim states that the date of first putting water to use was prior to 1945 by a previous owner.

One of the best tools to determine historical water use is aerial photographic interpretation. Ecology's GIS air photo library contains National Agricultural Imagery Program (NAIP) photos taken by the USDA. This includes photos from 1990, and 2006 to 2019 for this area. In addition, the online web service Historic Aerials offers free viewing of aerial photography that includes photos from 1981, 1980, 1969, and 1954.

NAIP photos from 2009 to 2019 are high resolution (3ft. or less) and individual cattle can be discerned in each of the photos from this period, predominantly from the elongated shadows cast on the ground. An estimated 20-40 cattle are observed in the photos during this period. Earlier photos do not show any cattle, however these photos are generally lower resolution (greater than 3 ft.) and some are black and white, which makes it more difficult to pick out small objects. However, Ecology's black and white photo set from 1990 does show a barn complex covering approximately 10,000 sq. ft. based on GIS analysis. The Historical Aerials website photos are also low resolution and no direct observation of cattle can be seen, however the barn complex can be seen in the photos going back to 1969. The 1954 air photo does not show the barn complex but shows a much smaller square building on the same site, which appears to be a commercial structure of some sort, and could easily be a barn. By 2003 the barn complex had been greatly reduced to 2 barns each of approximately 2,400 sq. ft. One of these barns straddles the property line between parcels P17700 and P17699.

Beginning in July 2012 Ecology's Water Resources program began a two-year streamflow monitoring program in the Carpenter-Fisher Creek area. Once a month during the year, and twice a month during the summers Ecology staff, including the author of this report visited this area and drove past the Bertelsen property. During these time cattle were observed on this property multiple times.

As stated earlier, the house on parcel P17700 has been abandoned for a significant time. During Ecology's 2012-2014 streamflow monitoring program, the author observed this building in the same advanced state of dilapidation.

Mr. Bertelsen has also submitted affidavits from three different individuals attesting to historical livestock use on this property. These affidavits are examined in a later section of this report. Mr.

Bertelsen has estimated the historical annual water used based on 100 cattle is 1.4 ac-ft/yr using the EPA's Manual of Individual and Non-Public Water Supply Systems as a guide (12 gallons per day for each cow).

Proposed Changes

Mr. Bertelsen plans to remodel the 1,000 sq. ft. abandoned house on parcel P17700 into an "agricultural" microbrewery producing approximately 400 gallons of ale per week. The facility will include a 494 sq. ft. brewing room, an office, unisex bathroom, and an ale tasting and tap room with seating for 12 persons. The tasting and tap room is planned to be open only from April to September. Mr. Bertelsen anticipates using the existing well located on parcel P17699 approximately 200 ft. northeast of the abandoned house (Christ, 2016). The applicant envisions growing hops, wheat, and/or barley on the property primarily for visual enhancement of the brewery. He has stated that he does not intend to irrigate this property. If necessary, he will purchase the ingredients for beer production during abnormally dry years. The initial plan is to grow about ½ acre of these plants.

Proposed Site Description

Mr. Bertelsen intends to reduce the water right claim's place of use from the original four parcels encompassing approximately 75 acres to just parcel P17700, which is approximately 18.6 acres in size. In addition to the abandoned house located in the southeastern portion of the property, there are also two barns within about 400 ft. of the house, one of which straddles the property line with parcel P17699. A map provided by architect Mark Christ shows an existing drain field to the immediate west of the house. The rest of the property consists of open field. Adjacent to the south end of the property is Starbird and Cedardale roads. On the other side of the road is the Bertelsen Winery operated by another member of the family.

Existing Water System Description

Prior to submittal of this change application, the well for stockwatering did not have an Ecology well tag affixed. On February 23, 2021, Mr. Bertelsen submitted a water well report for an existing well showing well tag BNB-764 had been placed on the well casing. However, Mr. Bertelsen has been unable to provide any well construction details such as diameter, depth, screened interval, pump characteristics, etc. Photos sent to Ecology show the pump house and interior. Based on these photos, and observations during the site visit, the well appears to be 6 inches in diameter with booster tank alongside it, probably 50-gallon capacity, and likely used to reduce excessive cycling of the pump. Electrical circuit breaker and control boxes are affixed to the wall with electrical wiring running to the well casing and tank. A blue flexible 1-inch diameter hose leads from the well casing to a 2-inch pipe with a pressure gage that connects to the tank and what appears to be an underground distribution system. (See photos). Mr. Bertelsen reported in an email on July 21, 2021 that Dahlman Pump and Drilling replaced the old pump in 2006 with a new Jacuzzi 0.75 horsepower pump with 5 gpm capacity. Mr. Scott Dahlman stated to Mr. Bertelsen that he chose a pump that closely matched what he believed was the historic well yield.

Proposed Project Water Requirements

Mr. Mark Christ was hired to provide architectural design and details of the proposed brewery. This includes a site plan of the building interior and an inventory of equipment that will be installed. Mr. Bertelsen provided further details in a January 2017 email to the author. The equipment will consist of one 100-gallon sparge/boiling tank, three 100-gallon fermenters plus a 1000-gallon storage tank. Additionally, there will be a toilet, and two to three sinks. Mr. Christ says the well is expected to provide 5 gpm and the brewery is anticipated to produce approximately 400 gallons of product per week. In an email from Mr. Bertelsen on November 8, 2019, he estimated that each gallon of product would require approximately 6 gallons of water. Therefore, about 2,400 gallons per week will be needed to support

brewery production. A conservative estimate of bathroom use based on household use is 130 gallons per day (Golder Associates 2014). It is reasonable to assume that the total weekly water use will average about 3,000 gallons. This equals 156,000 gallons per year or approximately 0.5 acre-feet/year. Ecology recommends that any unused portion of this water right be placed into the trust water right program to ensure that the unused water quantities are not relinquished due to non-use.

Hydrogeologic Evaluation

As there is no well log or pumping test data for well BNB-764, the author examined local hydrogeologic reports, geologic maps, and well logs in the vicinity to determine the likely water yield for BNB-764.

The WA Department of Natural Resources maintains geologic map data that is disseminated to other state agencies through its Geographic Information Services program. These data show the Bertelsen property is underlain by a mixture of Vashon glacial till (Qgt_v) and Everson glacial marine drift (Qgdme). Both of these geologic units are typically composed of poorly sorted mixed cobbles, gravel, sand, silt and clay which make poor aquifer material and usually have limited or no water bearing strata. The glacial till can contain lenses of sand and gravel.

In 2009, the United States Geologic Survey (USGS) completed a hydrogeologic framework study of this region, which includes Mr. Bertelsen's property. The study indicates that this area is underlain by multiple aquifers, including the regionally extensive and productive Vashon glacial outwash aquifer (Qga_v). This aquifer is the primary source for groundwater wells throughout most of the Skagit Lowlands and consists of medium to coarse stratified sand and gravel. This aquifer is typically overlain by the Qgt_v or Qgdme.

Examination of the well logs shows that there appears to be thick sequences of Qgt_v or Qgdme lying on top of Qga_v material. Most of the wells in the area are completed in this aquifer, although there are a few that are much shallower and tap a sand layer that is probably contained in the Qgt_v. While some of the well logs in the area showed wells that did not produce any water, those that did all had yields in excess of what the Bertelsen proposal would use.

With no proposed change in Point of Withdrawal, an analysis of altered stream impacts was unnecessary.

Materials Submitted in Support of Application

The following documents were provided as part of this application:

- Notarized affidavit of Janis Josephine Bertelsen
- Notarized affidavit of Richard Bertelsen Sr.
- Notarized affidavit of Todd Gran
- Un-notarized affidavit of Richard Bertelsen Sr.
- Cattle sales history report from Toppenish Livestock Commission
- Project proposal by Mark Christ, architect.

Janis Bertelsen is the mother of the applicant and states that she and her husband have resided on the adjacent property since 1974. She has contacted a number of residents in the area who remember the property operated as a dairy farm from the 1930s onward. This includes her statement that a Mrs. Katie Gates Egbers remembers living next door to the property while it was known as Galbraith Dairy Farm. This would have been from the 1930s to about 1950. She also spoke to Gary Weigand who is the grandson of the Galbraiths who visited his grandparents during the time it was a dairy farm. Based on his age, this would probably be in the late 1960s or early 1970s. The affidavit does not provide any

information on how many cattle were on site or what the water source was. She further states that she remembers the property operated as a dairy farm by a Mr. Robert Winters in the 1970s.

Richard Bertelsen, along with his wife Janis, is the current owner of the property. In his notarized affidavit, he states that since purchasing the property in 1988, he has maintained approximately 100 head of cattle at any one time, drinking water from the existing well.

Todd Gran's affidavit states that his family moved into a mobile home in 1971 on a property approximately 200 ft. south of the current well location. He recalls "the remnants of a dug well approximately 5 feet to the south of the existing...well". He also noted that the Posey brothers rented the land and raised approximately 100 head of cattle. He had been told that they rented the land for this purpose for eight years prior to his family's arrival. He goes on to state that "Bob" Winter rented the property and ran a dairy beginning in 1978 and used water from the well for that purpose. Various others rented the property after the Winters including a Bob McKalvy and the Boulmas until 1988.

Richard Bertelsen's un-notarized affidavit states that he rented a house on the property until approximately 2005. After this time, it appears water for domestic purposes ceased. He also states that he used the water for the livestock mentioned in his other affidavit.

Online Skagit County records do not go back far enough to confirm previous land ownership.

Mr. Bertelsen Sr. also provided cattle sale records from Toppenish Livestock Commission from 2010 to 2019. Earlier records were unobtainable from this organization. The records show that Mr. Bertelsen was actively selling cattle each year, ranging from 14 to 202.

Mark Christ's project proposal details are mentioned earlier in this report. Based on the proposal and the materials submitted, the water demands of the proposed brewery can apparently be met by the current well production, and the proposed water demands are less than quantities historically used.

ANALYSIS

Under Washington State statutory (RCW 90.03.380 and 90.44.100) and case law, in evaluating a water right change application, Ecology is required to determine whether, and to what extent, a water right is valid and eligible to be changed. Further, the following criteria must be assessed for a change to a groundwater claim.

- The existing right must not be enlarged.
- The proposed change and resulting water use must not cause impairment of existing rights.
- Water must be physically available at any new point of withdrawal.
- Water use must continue to be beneficial.
- The proposed change and resulting water use must not be detrimental to the public interest (public welfare).

Tentative Determination of Validity and Extent

A tentative determination of the validity and extent of a water right must be performed for any proposed water right change. Ecology must evaluate the historical use of the subject right and other factors to determine the rate and quantity of water that may be changed.

Air photo interpretation shows that the properties encompassed by water right claim G1-027480CL were occupied since at least 1954, which is the earliest photo available. Later air photos show buildings consistent with livestock activities. Cattle are clearly placed on the property from 2009 to present, based on the earliest high-resolution air photography.

The affidavits provide evidence of continuous use of the property as a dairy dating back to the 1930s. The statements made in the affidavits and the cattle sale records indicate that the number of livestock on the property was consistent going back to at least the early 1960s.

County records show that the domestic home was constructed prior to the adoption of Washington's groundwater code, RCW 90.44. However, domestic use ceased in 2005.

Based on the evidence provided, it is the author's conclusion that there is reasonable evidence that year-round water use for domestic and livestock began prior to the adoption of Washington's groundwater code, RCW 90.44. Livestock use has continued up to the present day.

A water right, or portions of a water right can be relinquished due to non-use if the water right holder fails without sufficient cause to beneficially use all or any part of said right for any period of 5 successive years as per RCW 90.14. Sufficient cause is defined under RCW 90.14.140. Based on review of the code and previous water use, the author concludes that **the domestic portion of this water right claim has been relinquished.**

Enlargement

A water right may not be enlarged through the change process. The original water right claim stated the instantaneous quantity was 40 gpm and no claimed annual quantity. Mr. Bertelsen's estimate of historical annual water use is based on 100 cattle is approximately 1.4 ac-ft/yr using the EPA's Manual of Individual and Non-Public Water Supply Systems as a guide (12 gallons per day for each cow).

Water Duty Analysis for Proposed Use

A well pumping at 5 gpm can produce 2,400 gallons in 8 hours, the typical working day. The proposed 100-gallon sparge/boiling tank, three 100-gallon fermenters and the 1000-gallon storage tank can all be filled on a daily basis based on this pumping rate with sufficient water left over for use of the onsite toilet and sinks. The historically perfected annual volume of 1.4 ac-ft/yr would allow such equipment to be filled every other day. As the proposed brewery production is 400 gallons per week, there is more than sufficient water available for Mr. Bertelsen's project. Historical use has shown that water is present in quantities and on a sufficiently frequent basis to provide a reasonably reliable source for Mr. Bertelsen's proposal.

Impairment

In analyzing impairment, Ecology must make a determination as to whether existing water rights, including instream flows established by Ecology rules, may be impaired by the proposed change.

This water right claim appears to have been used continuously since before the groundwater code was established in 1945. Since the water source is not being changed, there should be no alteration of impacts to senior appropriative water right holders.

With the water use commencing prior to the groundwater code, this claim is senior to the 2001 Skagit Instream Resources Protection Program WAC 173-503, and not subject to its provisions. However, a change to a water right cannot create new impacts/impairments to streams regulated under WAC 173-503. Historical pumping and use of water on the property was year-round with daily supply for livestock drinking water. The new use will also be year-round with no periods of the year where pumping and use are higher than historical pumping and use, therefore no impairment of instream flows is anticipated.

Beneficial Use

The proposed change must be for a continued beneficial use of water.

Commercial use is a beneficial use of water under RCW 90.54.020(1).

Public Interest

The proposed change, water withdrawal, and associated water use must not be detrimental to the public interest.

No potential for detriment of the public interest could be identified during the processing of the subject application.

Notification to the Washington Department of Fish and Wildlife

Per RCW 90.03.280 and 77.57.020, Ecology must give notice to the Washington Department of Fish and Wildlife (WDFW) of applications to divert, withdraw, use, or store water.

WDFW was provided notice of this water right change application on March 17, 2021. No comments were received.

State Environmental Policy Act (SEPA)

Under chapter 197-11 WAC, a water right application is subject to a SEPA threshold determination (i.e., an evaluation of whether there will be significant adverse environmental impacts) if any of the following conditions are met:

- It is a surface water right application for more than 1 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;
- It is a groundwater right application for more than 2,250 gpm;
- It is an application that, in combination with other water right applications for the same project, collectively exceed the amounts above;
- 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);
- 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.

Considering that none of the above conditions are met, the application under review is categorically exempt from a SEPA threshold determination.

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 Skagit Valley Herald on September 3, 2021 and September 10, 2021.

No protests to this water right application were received.

Conclusions

I find that:

- 5 gpm and 1.4 ac-ft/yr of water is valid and eligible for change.
- The proposed change will not result in an enlargement of the subject water right.
- The proposed change will not impair existing rights.
- Commercial use is a beneficial use.
- Approval of this change application will not be detrimental to the public interest.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend this request for a water right change be **APPROVED** in the amounts and within the limitations listed below and subject to the provisions listed above, including the following:

No water will be available to P17699, P17702, and P17415 from this water right under the requirements of the Skagit Instream Resource Protection Program, WAC 173-503, and the Washington state Supreme Court decision *Swinomish Tribal Nation V. Ecology* (2013).

Recommended Quantities, Purpose of Use, and Project Location

The rate and quantity of water recommended are maximum limits. The permit holder may only withdraw water at a rate and quantity within the specified limits that are reasonable and beneficial:

Table 3. Recommended Project Limits and Location

Maximum Instantaneous Rate (gpm)	5 gpm
Maximum Annual Quantity (ac-ft/yr)	1.4 ac-ft/yr
Purpose(s) of Use	Commercial
Point of Withdrawal	NW¼ NW¼ Section 33, Township 33 North, Range 04 East. W.M.
Place of Use	W ½ NW ¼ NW ¼ of Section 33, Township 33North, Range 04 East. W.M.

John Rose, Report Writer

Date

To request ADA accommodation including materials in a format for the visually impaired, call Ecology Water Resources Program at 360-407-6872. Persons with impaired hearing may call Washington Relay Service at 711. Persons with speech disability may call TTY at 877-833-6341.

References

Christ, Mark. Proposed Project: Bertelsen Ale. Architectural design and description. 2016

Historic Aerials website: <https://www.historicaerials.com/>

Skagit County Parcel Search database. <https://skagitcounty.net/Search/property/>

United States Geological Survey “Hydrogeologic Framework, Groundwater Movement, and Water Budget in Tributary Subbasins and Vicinity, Lower Skagit River Basin, Skagit and Snohomish Counties, Washington”. Scientific Investigations Report 2009-5270.

Various Ecology GIS data layers.

ATTACHMENT 1

