



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Application for Change
REPORT OF EXAMINATION

PRIORITY DATE	APPLICATION NO.	PERMIT NO.	CERTIFICATE NO.
December 22, 1966	8442	7945	G3-01534C

NAME Stahl Hutterian Brethren		
ADDRESS/STREET	CITY/STATE	ZIP CODE
1485 North Hoffman Road	Ritzville, WA	99169

PUBLIC WATERS TO BE APPROPRIATED

SOURCE 2 wells		
TRIBUTARY OF (IF SURFACE WATERS)		
MAXIMUM CUBIC FEET PER SECOND (cfs)	MAXIMUM GALLONS PER MINUTE (gpm)	MAXIMUM ACRE FEET PER YEAR (ac-ft/yr)
	3150	3600

QUANTITY, TYPE OF USE, PERIOD OF USE
 3150 gallons per minute, 3600 acre-feet per year for seasonal irrigation of 1440 acres from February 1 to November 30

LOCATION OF DIVERSION/WITHDRAWAL

APPROXIMATE LOCATION OF DIVERSION--WITHDRAWAL
 200 feet east and 50 feet south from the center of Section 7, T. 19 N., R. 33 E.W.M.
 50 feet east and 50 feet south of the NW corner of Section 29, T. 19 N., R. 33 E.W.M.

LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION)	SECTION	TOWNSHIP	RANGE	WRIA	COUNTY
NW¼SE¼ of Sec. 7 and NW¼NW¼ of Sec. 29	7 & 29	19N.	33 E.W.M.	41	Adams
PARCEL NUMBER	LATITUDE		LONGITUDE	DATUM	

RECORDED PLATTED PROPERTY

LOT	BLOCK	OF (GIVE NAME OF PLAT OR ADDITION)
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LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED
 [Attachment 1 shows location of the authorized place of use and point(s) of diversion or withdrawal.]

Section 7, N½ of Section 18, W½ of Section 17 and S½S½ of Section 6, T. 19 N., R. 33 E.W.M. and N½ of Section 24 and the S½ of Section 13, T. 19 N., R. 32 E.W.M.

DESCRIPTION OF PROPOSED WORKS

2 wells, multiple pivots

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE	COMPLETE PROJECT BY THIS DATE	WATER PUT TO FULL USE BY THIS DATE
May 1, 2010	May 1, 2011	May 1, 2012

PROVISIONS

Total water use under Certificate G3-01534C and G3-01535C shall not exceed 6300 gpm, 3600 acre-feet per year for the irrigation of 1440 acres under both rights.

All wells constructed shall meet the construction requirements of chapter 173-160 WAC entitled "Minimum Standards for the Construction and Maintenance of Wells" and chapter 18.104 RCW titled "Water Well Construction".

Installation and maintenance of an access port as described in chapter 173-160 WAC is required.

An approved measuring device shall be installed and maintained for each of the sources identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use", chapter 173-173 WAC.

Water use data shall be recorded weekly and maintained by the property owner for a minimum of five years, and shall be promptly submitted to Ecology upon request.

Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the records of water use that are kept to meet the above provisions, and to inspect at reasonable times any measuring device used to meet the above provisions.

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 wells or diversions and associated distribution systems for compliance with water law.

"The amount of water granted is a maximum limit that shall not be exceeded and the water user shall be entitled only to that amount of water within the specified limit that is beneficially used and required."

"This authorization to make use of public waters of the State is subject to existing rights, including any existing rights held by the United States for the benefit of Indians under treaty or otherwise."

"Nothing in this authorization shall be construed as satisfying other applicable federal, state, or local statutes, ordinances, or regulations."

"All water wells constructed within the State shall meet the minimum standards for construction and maintenance as provided under RCW 18.104 (Washington Water Well Construction Act of 1971) and Chapter 173-160 WAC (Minimum Standards for Construction and Maintenance of Water Wells)."

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

"WAC 173-130A-170 Casing and Sealing. In order to protect existing shallow domestic and stock water wells, and springs, casing and sealing requirements will be determined on a case-by-case basis and included as a provision on all new permits issued. New permits will also be conditioned to prohibit cascading water in wells in accordance with chapter 173-160 WAC (Minimum standards for construction and maintenance of water wells). Sealing of required casing shall consist of filling the annular space between casing and well bore with cement grout placed by pumping from the bottom of the casing to land surface. Alternative methods to provide the same protection afforded by casing and sealing may be submitted to the department for review and shall only be used if approved in writing by the department prior to well completion."

"The proposed well (NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec 29) will be required to be properly constructed in accordance with the well drilling statutes (RCW 18.104 and WAC 173-160). The well depth and casing requirement for a well at this site shall be a minimum of 735 of casing to construct a well into the Grande Ronde aquifer."

"WAC 173-130A-180 Reworking Wells. Any well which is reworked shall be constructed to comply with the casing and sealing provisions of WAC 173-130A-170. Reworking shall include, but not limited to, reaming to enlarge well diameter or deepening."

"WAC 173-130A-140 Airlines. An airline and pressure gauge **shall be installed** and maintained in operating condition on all new or reworked wells and equipped with a standard tire valve, placed in an accessible location. The airline shall extend from land surface to the top of the pump bowls. The total length of the airline and any changes in length shall be reported to the department. Access shall be granted for annual water level measurement from this well. The airline shall be maintained in working order and accessible at all times for measurement."

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 the recommended change of Ground Water Certificate No. G3-01534C, subject to existing rights and the provisions listed above.

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

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

Be sure to do the following:

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

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

Mail appeal to:

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

OR

Deliver your appeal in person to:

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

2. To serve your appeal on the Department of Ecology

Mail appeal to:

The Department of Ecology
Appeals & Application for Relief
Coordinator
PO Box 47608
Olympia, WA 98504-7608

OR

Deliver your appeal in person to:

The Department of Ecology
Appeals & Application for Relief
Coordinator
300 Desmond Dr SE
Lacey, WA 98503

3. And send a copy of your appeal to:

Keith L. Stoffel
Department of Ecology
Eastern Regional Office
4601 North Monroe Street
Spokane, WA 99205

Signed at Spokane, Washington, this day of 2009.

Keith L. Stoffel, Section Manager
Water Resources Program
Eastern Regional Office

BACKGROUND

An application for change/transfer was submitted by Stahl Hutterian Brethren to the Department of Ecology on January 2, 2007. The applicant proposes to add a well to Ground Water Certificate G3-01534C.

A notice of application was duly published in accordance with RCW 90.03.280 in the Ritzville Adams County Journal on February 15 and 22, 2007 and no protests were received.

This application is not exempt from the provisions of the State Environmental Policy Act (SEPA) of 1971, Chapter 43.21C RCW because the right authorizes a use in excess of 2250 gallons per minute.

Ecology issued a SEPA determination of non-significance on April 23, 2009.

Attributes of Ground Water Certificate G3-01534C

Recorded Name:	Warden Hutterian Brethren
Priority Date:	December 22, 1966
Instantaneous Quantity – Q(i):	3150 gallons per minute
Annual Quantity – Q(a):	4234 acre-feet per year
Source:	A well
Point(s) of withdrawal:	NW¼SE¼ Sec. 7, T. 19 N., R. 33 E.W.M.
Purpose of Use:	irrigation of 1440 acres
Period of Use:	seasonal
Place of Use:	Section 7, N½ of Section 18, W½ of Section 17 and S½S½ of Section 6, T. 19 N., R. 33 E.W.M. and N½ of Section 24 and the S½ of Section 13, T. 19 N., R. 32 E.W.M.

The applicant proposes to add one point of withdrawal to the subject water right.

INVESTIGATION

The original well is pumping and irrigating approximately 1440 acres. The well has been experiencing declines in productivity. The applicant proposes to construct a new well at the south end of the project to maintain operating pressures and help increase the available water supply back to the previously used quantities. No other changes are proposed. Most all of the property is in pivots of various sizes from 169 acres to 5 acres.

The property lies within the Odessa Subarea, WAC 173-130A. The crops typically grown are rotational crops ranging from potatoes to wheat crops. A meter is installed on the source well.

Ground Water Certificate G3-01535C is also appurtenant to this property. This right issued for 3150 gallons per minute, 5760 acre-feet for irrigation of 1440 acres. This right issued as a separate source well in Section 18 to supplement the subject right. Both wells are serving the same 1440 acres. These rights are not additive. An application has been filed on this water right to add the well in Section 29 and a separate decision will be made on that application.

Evaluation of the Water Right and Beneficial Use Analysis:

The Washington State Supreme Court, in *Okanogan Wilderness v. Town of Twisp and Department of Ecology*, 133 Wn.2d 769, 947 P.2d 732 (1997), found that applications for change may be granted only to the extent the water has been historically put to beneficial use, as beneficial use determines the measure of a water right. They also found that the existence and quantification of a water right must be determined, including whether or not the water right has been lost for non-use before the Department can approve a change or transfer of the water right.

Ground Water Certificate G3-01534C authorized a use of 3150 gallons per minute 4234 acre-feet per year for irrigation of 1440 acres. This is 2.9 acre-feet per acre.

WAC 173-130A-150 states, the duty of water issued in permits for agricultural irrigation shall be not more than 2.5 acre-feet per acre per calendar year. This quantity was discussed with the applicant and he confirmed he needed no more than 2.5 acre-feet per acre. Typical crops vary from wheat to potatoes. Typically no more than 2.5 acre-feet per acre has been used. In the past few years, the declines in productivity of the existing source wells have declined. RCW 90.44.520 (1)(a) confirms any period of nonuse of a right to withdraw ground water from the aquifer is deemed to be involuntary due to drought or low flow period under RCW 90.14.140(2)(b) and . . . Any reduction in use based on the declining aquifer is considered not subject to relinquishment. The applicant is advised to submit the required notification under RCW 90.44.520(2)(a).

Hydrogeologic Analysis:

Applications for change/transfer of water right permits and certificates are governed by RCW 90.44.100, which states in part that: the holder of a valid right to withdraw public ground waters may, without losing his priority of right, construct wells at a new location in substitution for, or in addition to, those at the original location, or he may change the manner or the place of use of the water. Such amendment shall be issued by the Department only on the conditions that: (1) the additional or substitute well or wells shall tap the same body of public ground water as the original well or wells; (2) use of the original well or wells shall be discontinued upon construction of the substitute well or wells; (3) the construction of an additional well or wells shall not enlarge the right conveyed by the original permit or certificate; and (4) other existing rights shall not be impaired. The Department may specify an approved manner of construction and shall require a showing of compliance with the terms of the amendment.

The proposed project lies within the boundaries of the Odessa Sub-area as defined in Chapter 173-128A WAC. The Odessa Sub-area encompasses approximately 2,000 square miles. The relatively flat-lying land surface slopes in a southwesterly direction and is locally dissected by coulees.

Basalt aquifers of the Odessa Sub-area are part of a large ground water reservoir occurring in a thick series of basalt flows known as the Columbia River Basalt Group. The thickness of this series of flows varies from a few hundred feet at the Spokane River to over 10,000 feet in the Pasco Basin. The wells associated with this change application are all producing water from the same aquifer system and as such, they are all producing water from the same body of public groundwater.

The existing well in the NW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 7, T. 19 N., R. 33 E.W.M. was constructed in 1976 to a depth of 1720 feet below land surface. The static water level was described as 530 feet below land surface. The well appears to be constructed in the Grande Ronde aquifer. The proposed well is approximately 3 miles south of the existing well.

WAC 173-130A-170 Casing and Sealing allows the determination of casing and sealing requirements on a case-by-case basis in order to protect existing shallow domestic and stock water wells, and springs. The new well must be properly constructed in accordance with the well drilling statutes (RCW 18.104 and WAC 173-160).

Information on static water level collected over a number of years by the U.S. Geologic Survey and Ecology indicates the hydrologic break between the Wanapum and Grande Ronde aquifers typically occurs 200 feet below the geologic division of between the Wanapum and Grande Ronde Formations. In local instances, the Department has found that the hydrologic break occurs at a point more or less than 200 feet below the geologic contact. The department can modify the specified casing depth upon review of information that leads the Department to the conclusion that the hydrologic break occurs higher or lower in the well. This information is usually obtained through a carefully run video scan of the well, prior to placement of casing.

The altitude of the Grande Ronde Basalt Member (from the USGS WRI Report 87-4238, Sheet Three) for a well constructed in NW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 29, T. 19 N., R. 33 E.W.M. is approximately 1215 feet above sea level (ASL). With a land surface elevation of 1750 feet ASL, this puts the top of the Grande Ronde at 535' below land surface. The casing requirement for a well at this site would be 735' of casing.

The Department recognizes the Wanapum and the Grande Ronde Basalts as two separate aquifers. To properly construct your well you will be required to case and seal this new well to a minimum depth of 735 feet below ground surface to allow for production from the Grande Ronde aquifer. The annular space shall be a minimum of 4-inches greater than the permanent casing. After casing is sealed in place, the well may be completed by drilling out of the casing until sufficient water is obtained. More casing than specified may be necessary in this well should interaquifer transfer occur after casing and sealing is set.

Sealing shall be placed from the bottom of the well to the top until undiluted sealing material returns to the surface.

Adequate annular space also needs to be maintained for proper sealing of the well and for proper pump sizing. It is important to start out with and maintain a large enough well diameter to accommodate future reworking of wells. Ecology recommends discussing this with your well contractor prior to beginning work on your well.

To avoid any misunderstandings or problems, prior to any construction of a new well or reconstruction of an existing well, you may send a copy of the plans for construction or reconstruction to the Department for written concurrence with said plans.

An airline measuring device shall be installed pursuant to WAC 173-130A-140. Additionally, WAC 173-160-291(3) and your water right certificate require the well be equipped with an access port. The length of the airline needs to be reported to the Department of Ecology, Water Resources Program, Eastern Regional Office, N. 4601 Monroe, Spokane, Washington 99205-1295.

Impairment Considerations

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

This application is requesting authorization to add one well. As identified above, it appears the quantities listed in the above described certificates have at one time been exercised. The proposed change to add a point of withdrawal will not enlarge the quantity of water withdrawn from the aquifer, nor increase the irrigated acres. Several wells already exist in the vicinity of the proposed location. The instantaneous rate of withdrawal for new well at the proposed location will not exceed what is already being exercised.

CONCLUSIONS

There is a water right available for change/transfer under Ground Water Certificate G3-01534C. Ground water has been historically and beneficially used under this certificate for the purpose of irrigation of 1440 acres.

When considering an application for change to a water right, Ecology must determine that the proposed change can be made without detriment or injury to existing water rights. Factors considered when determining potential impact include the following:

No Impairment to Existing Rights:

The proposed change will not increase the volume of water currently withdrawn from the aquifer nor is it found to impair existing rights.

No Detriment to the Public Welfare:

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

No Enhancement of the Original Right:

No withdrawal of water over and above what has been historically put to beneficial use would be authorized through approval of this change.

Same Source of Water:

The proposed well associated with this change application will be constructed in a manner to produce water from this aquifer system and as such, is producing water from the same body of public groundwater.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend that the request for change to add a well be approved in the amounts and within the limitations listed below and subject to the provisions beginning on Page 2.

Purpose of Use and Authorized Quantities

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

- 3150 gpm
- 3600 acre-feet per year
- Irrigation of 1440 acres from February 1 to November 30

Total water use under Certificate G3-01534C and G3-01535C shall not exceed 6300 gpm, 3600 acre-feet per year for the irrigation of 1440 acres under both rights.

Points of Diversion/Withdrawal

200 feet east and 50 feet south from the center of Section 7, T. 19 N., R. 33 E.W.M.
50 feet east and 50 feet south of the NW corner of Section 29, T. 19 N., R. 33 E.W.M.

Place of Use

As described on Page 1 of this Report of Examination.

Report by: _____
Kevin Brown
Water Resources Program

_____ Date

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W/Draft ROEs/Brown 2009/G3-01534 SHB

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