File NR CG3-*09251C
WR Doc ID 4710450

DEPARTMENT OF ECOLOGY
State of Washington

State of Washington
REPORT OF EXAMINATION FOR WATER RIGHT CHANGE

PRIORITY DATE
May 29, 1968

WATER RIGHT NUMBER
6901-A

MAILING ADDRESS
PUBLIC UTILITY DISTRICT NO. 1 OF STEVENS COUNTY
PO BOX 592
LOON LAKE 99148-0592

SITE ADDRESS (IF DIFFERENT)

Total Quantity Authorized for Withdrawal or Diversion

WITHDRAWAL OR DIVERSION RATE	UNITS	ANNUAL QUANTITY (AF/YR)
34	GPM	18

Purpose

PURPOSE	WITHDRAWAL OR DIVERSION RATE ADDITIVE	WITHDRAWAL OR DIVERSION RATE NON-ADDITIVE	UNITS	ANNUAL QUANTITY (AF/YR) ADDITIVE	ANNUAL QUANTITY (AF/YR) NON-ADDITIVE	PERIOD OF USE (mm/dd)
Municipal	34			18		01/01 - 12/31

A|S: A=Alternate; S=Standby/Reserve

Source Location

COUNTY	WATERBODY	TRIBUTARY TO	WATER RESOURCE INVENTORY AREA
STEVENS	GROUNDWATER		59-COLVILLE

Source Name	Parcel #	Well Tag	Twp	Rng	Sec	QQ	Latitude	Longitude
Well 1 (S06)	5183910	ACW891	29N	41E	10	NE¼NW¼	N 48.03030	W 117.62111
Well 2 (S07)	5183910	ACW892	29N	41E	10	NE¼NW¼	N 48.03048	W 117.62140
Well 3 (S03)	688800	ABR226	30N	41E	34	SW¼SE¼	N 48.05088	W 117.61640
Well 4 (S04)	688800	ABR227	30N	41E	34	SW¼SE¼	N 48.05094	W 117.61637
Well 5 (S01)	8007826	ACW893	30N	41E	34	NE¼NW¼	N 48.06142	W 117.62443
Well 6 - No pump	8007826	AAK927	30N	41E	34	NW¼NW¼	N 48.06150	W 117.62494
Well 7 (S10)	5266300	BAC686	30N	41E	21	SE¼SE¼	N 48.07912	W 117.63101
Well 8 (Calder S01)	6483300	ACH833	30N	41E	28	NE¼NE¼	N 48.07421	W 117.63564
Well 9 (Calder S02)	6483300	ACH832	30N	41E	28	NE¼NE¼	N 48.07418	W 117.63545

Datum: WGS84

Place of Use (See Attached Map)

LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE

The place of use (POU) of this water right is the service area described in the most recent Water System Plan/Small Water System Management Program approved by the Washington State Department of Health, so long as the water system is and remains in compliance with the criteria in RCW 90.03.386(2). RCW 90.03.386 may have the effect of revising the place of use of this water right.

Proposed Works

Nine (9) wells, pumps, reservoirs and distribution system

Development Schedule

BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
Started	January 1, 2014	January 1, 2024

Measurement of Water Use

How often must water use be measured?	Bi-weekly
How often must data be reported to Ecology?	Upon Request by Ecology
What volume should be reported?	Total Annual Volume
What rate should be reported?	Annual Peak Rate of Withdrawal (gpm)

Bi-weekly means every two weeks

Provisions

Wells, Well Logs and Well Construction Standards

All wells constructed in the state must 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 must be decommissioned.

All wells must be tagged with a Department of Ecology unique well identification number. If you have an existing well and it does not have a tag, please contact the well-drilling coordinator at the regional Department of Ecology office issuing this decision. This tag must remain attached to the well. If you are required to submit water measuring reports, reference this tag number.

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

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", WAC 173-173, 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 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 rules require public water supply owners to obtain written approval from the Office of Drinking Water of the Washington State Department of Health. Please contact the Office of Drinking Water prior to beginning (or modifying) your project at DOH/Division of Environmental Health, 16201 E. Indiana Avenue, Suite 1500, Spokane Valley, WA 99216, (509) 329-2100.

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

Proof of Appropriation
The water right holder must file the notice of Proof of Appropriation of water (under which the certificate of water right is issued) when the permanent distribution system has been constructed and the quantity of water required by the project has been put to full beneficial use. The certificate will reflect the extent of the project perfected within the limitations of the water right. 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, will 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.

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, P O 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 **approval** of Change Application No. CG3-*09251C, 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
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503 **Pollution Control Hearings Board** 1111 Israel RD SW Ste 301 Tumwater, WA 98501	**Department of Ecology** Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608 **Pollution Control Hearings Board** PO Box 40903 Olympia, WA 98504-0903

Signed at Spokane, Washington, this 25th day of January, 2012.

Keith L. Stoffel
Section Manager
Water Resources Program

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

WASHINGTON STATE - DEPARTMENT OF ECOLOGY
Water Resources Program - Eastern Regional Office
Water Right Control Number CG3-*09251C
Ground Water Certificate Number 6901-A

BACKGROUND

An application for change/transfer was submitted by the Stevens County PUD No. 1 (PUD) of Loon Lake, Washington to the Department of Ecology on December 28, 2010. The PUD proposes to change one point of withdrawal, add 9 points of withdrawal, change the purpose of use and place of use under Ground Water Certificate No. 6901-A. The PUD proposed changes to each of its five water rights serving the Loon Lake Water System and has acquired two other water rights. The water rights proposed for change by the PUD are as follows:

- PERMIT NO. G3-28008P (PUD NO. 1 OF STEVENS COUNTY)
- CERTIFICATE NO. G3-22934C (PUD NO. 1 OF STEVENS COUNTY)
- CERTIFICATE NO. G3-01485C (PUD NO. 1 OF STEVENS COUNTY)
- CERTIFICATE NO. 5216-A (PUD NO. 1 OF STEVENS COUNTY)
- CERTIFICATE NO. 5180-A (PUD NO. 1 OF STEVENS COUNTY)
- CERTIFICATE NO. G3-20443C (JOHN J. ICE)
- CERTIFICATE NO. 6901-A (WILLIAM S. CHRISTENSEN)

The Washington State Department of Health, Office of Drinking Water requested expedited processing of this application due to poor water quality in some of the PUD's existing wells. Iron in some wells exceeds the allowable levels and the water is very corrosive, leading to levels of copper exceeding maximum contaminant levels. The proposed new PUD wells will help alleviate the iron and copper problems and treatment will no longer be needed which should also allow for more affordable water rates for its users.

Attributes of the Existing Water Right and Proposed Change

Change Application Filed: December 28, 2010

Attributes	Existing Water Right	Proposed Changes
Number	6901-A	CG3-*09251C
Name	CHRISTENSEN, W. S.	Public Utility District No. 1 of Stevens County
Priority Date	May 29, 1968	***
Instantaneous Quantity	34 gpm	***

Attributes	Existing Water Right	Proposed Changes
Annual Quantity	18 af/yr	***
Purpose of Use	Commercial and Community Domestic	Municipal Supply
Period of Use	Continuous	***
Point(s) of Withdrawal	1 well	10 wells
Place of Use	See Certificate	Municipal Water Supplier – RCW 90.03.386(2)

***No change

Proposed Sources of Withdrawal or Diversion

Source Name	Parcel #	Well Tag	Twp	Rng	Sec	QQ	Latitude	Longitude
Well 1 (S06)	5183910	ACW891	29N	41E	10	NE¼NW¼	N 48.03030	W 117.62111
Well 2 (S07)	5183910	ACW892	29N	41E	10	NE¼NW¼	N 48.03048	W 117.62140
Well 3 (S03)	688800	ABR226	30N	41E	34	SW¼SE¼	N 48.05088	W 117.61640
Well 4 (S04)	688800	ABR227	30N	41E	34	SW¼SE¼	N 48.05094	W 117.61637
Well 5 (S01)	8007826	ACW893	30N	41E	34	NE¼NW¼	N 48.06142	W 117.62443
Well 6 - No pump	8007826	AAK927	30N	41E	34	NW¼NW¼	N 48.06150	W 117.62494
Well 7 (S10)	5266300	BAC686	30N	41E	21	SE¼SE¼	N 48.07912	W 117.63101
Well 8 (Calder S01)	6483300	ACH833	30N	41E	28	NE¼NE¼	N 48.07421	W 117.63564
Well 9 (Calder S02)	6483300	ACH832	30N	41E	28	NE¼NE¼	N 48.07418	W 117.63545
Well 10 (S09)	0630700	---	30N	41E	34	NE¼NW¼	N 48.06094	W 117.62034

Existing Sources of Withdrawal or Diversion

Source Name	Parcel	Well Tag	Twp	Rng	Sec	QQ	Latitude	Longitude
Well	---	---	30N	41 E	34	Gov't Lot 2	N 48.05875	W 117.62210

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 area where the water is to be stored, diverted and used. Notice of this application was published in the Chewelah Independent on September 8 and 15, 2011. No protests were received.

State Environmental Policy Act (SEPA)

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

(a) It is a surface water right application for more than 1 cubic foot per second, unless that project is for agricultural irrigation, in which case the threshold is increased to 50 cubic feet per second, so long as that irrigation project will not receive public subsidies;
(b) It is a groundwater right application for more than 2,250 gallons per minute;
(c) It is an application that, in combination with other water right applications for the same project, collectively exceed the amounts above;
(d) It is a part of a larger proposal that is subject to SEPA for other reasons (e.g., the need to obtain other permits that are not exempt from SEPA);
(e) It is part of a series of exempt actions that, together, trigger the need to do a threshold determination, as defined under WAC 197-11-305.

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

INVESTIGATION

In considering the proposed application, the investigation included, but was not limited to, research and review of (1) appropriate rules and statutes; (2) Existing Stevens County PUD No. 1 water rights and other rights/claims/applications in the vicinity; (3) water well reports for the applicant's well; (4) USGS topographic maps; (5) Meeting with PUD officials; and (6) discussions with Department of Ecology regional program staff; including review by Ecology hydrogeologists.

A field investigation was conducted by Gene Drury on September 20, 2011 and included a meeting at the PUD office with Dick Price and Charisse Willis. It was noted that the project has started as the PUD pumps from some of the proposed wells and water is being used for municipal supply purposes for the Loon Lake Water System.

History of Water Use

The PUD is a municipal water supplier and provides water under this water right for "municipal water supply purposes" as defined under RCW 90.03.015(4). All of the PUD's water rights were changed on February 5, 2004 when they received approval to integrate their existing water rights and combine the "Southwest" and "Northeast" Loon Lake Water Systems. Today, there is one Loon Lake Water System consisting of 7 wells for municipal supply. The PUD's current reservoir capacity for this system is 300,000 gallons. Two reservoir tanks are located on the east side of the lake (41,000 and 103,000 gallons) and one reservoir tank on the west side (156,000 gallons). The PUD provided metered data for the years 2008, 2009 and 2010:

<u>PUD WATER USE - LOON LAKE WATER SYSTEM</u>
Year 2008 = 226 acre-feet
Year 2009 = 269 acre-feet
Year 2010 = 271 acre-feet

PUD WELLS - LOON LAKE WATER SYSTEM

Information about the wells proposed under this application was provided by the PUD:

Well #	Static Water Level (ft)	Pump Hp.	Pump Output (gpm)	Water Quality	Well Use
1 (S06)	17	20	127	Good	Production Well
2 (S07)	17	20	231	Good	Production Well
3 (S03)	17	3	100	Corrosive	Emergency Backup
4 (S04)	17	10	150	Corrosive	Emergency Backup
5 (S01)	56	25	233	High Iron	Emergency Backup
6 (no pump)	53	---	---	Good	No pump yet
7 (S10)	102	50	397	Excellent	Production Well
8 (Calder S01)	86	5	55	Good	Not yet connected to PUD System
9 (Calder S02)	85	5	55	Good	Not yet connected to PUD System
10 (S09)	41-53	2-2	30	Good	Emergency Backup

PUD WELLS 1, 2, 3, 4, 5, 6

No changes are proposed to the existing authorized PUD Wells Nos. 1-6.

GROUND WATER CERTIFICATE NO. G3-20443C - PROPOSED PUD WELL 7 ("ICE" S10)

PUD Well 7 was originally proposed to be drilled in the NW¼NE¼ of Sec. 34, T. 30 N., R. 41 E.W.M. This well was part of the changes authorized by the Department in 2004. The well was never drilled. Under the current applications, the PUD proposes to change this location to that which was originally authorized under Ground Water Certificate G3-20443C (John J. Ice). The PUD has filed a change application to Certificate G3-20443C (Ice) to change a point of withdrawal, add points of withdrawal, change the purpose to municipal supply and change the place of use to the area served by the PUD. The application was signed by the current owner and water right holder, Richard D. Brauner.

Ground Water Certificate G3-20443C was issued on July 5, 1979 with a priority of August 14, 1972. This right authorized 90 gallons per minute, 46 acre-feet per year, from May 15 to September 15, each year, for the irrigation of 15 acres; 40 gallons per minute, 5 acre-feet per year, continuously for stockwater and group domestic supply of 4 units. Water is being provided for the 4 units and stockwater under this right, however, the 15 acres has not been irrigated for well over 20 years. The irrigation portion of this water right along with the associated quantities appears to be relinquished and is not available for change. The 90 gallons per minute and 5 acre-feet per year is used and is available for change to municipal supply for the PUD for use from all of the PUD municipal supply wells.

The original two "Ice" wells are located within: Well 1) NW¼NW¼ of Sec. 27 and Well 2) SE¼SE¼SE¼ of Sec. 21, both in T. 30 N., R. 41 E.W.M. The PUD proposes to change the location of "Ice" Well No. 1 from the NW¼NW¼ of Sec. 27 to existing PUD Well No. 2 (S07) located within the NE¼NW¼ of Sec. 10, T. 29 N., R. 41 E.W.M. and already authorized under existing PUD water rights. The Ice Well No. 1 cannot be located. The Ice Well No. 2 will be changed to the new PUD Well No. 7 (S10) which was drilled in 2009 under a Showing of Compliance form signed by property owner Richard D. Brauner. This well will remain located in the SE¼SE¼SE¼ of Sec. 21. The well (Unique ID #BAC 686) was drilled to 180 feet and

produced over 100 gallons per minute. This is the primary water source for the PUD's Loon Lake System.

PROPOSED PUD WELL 8 ("CALDER" S01) AND PUD WELL 9 "CALDER" S02)

The PUD has proposed to add points of withdrawal to its Loon Lake Water System. The two points are referred to as the "Calder" wells and will only be used for emergency-backup purposes for municipal supply. These two wells are Well No. 8 (Calder S01) and Well No. 9 (Calder S02) and are already authorized under existing water rights, Ground Water Certificate Nos. G3-27904C and G3-28925C. These two certificates authorize a combined total withdrawal from the two wells in the amounts of 300 gallons per minute and 45.3 acre-feet per year for community domestic supply. The two wells are both located on Stevens County Parcel No. 6483300 and within the NE¼NE¼ of Sec. 28, T. 30 N., R. 41 E.W.M. Both of the Calder wells were drilled in 1985 and each have 5 horsepower pumps installed. They pump around 55 gallons per minute each. The water pumped serves water to Loon Lake Acres within a portion of the NE¼ of Sec. 28, T. 30 N. R. 41 E.W.M. The two wells have not yet been connected to the PUD Loon Lake Water System. On November 10, 2010, the PUD obtained a signed letter from Carol Calder, President of Loon Lake Acres granting authorization to file the applications to add the two wells.

GROUND WATER CERTIFICATE NO. G3-01485C AND CONSOLIDATION OF EXEMPT RIGHT - PROPOSED PUD WELL 10 (S09) -"ALROY CHRISTENSEN"

The PUD has filed a change application under Ground Water Certificate G3-01485C to consolidate an exempt well. This exempt well is located east of Highway 395 near the Conoco gas station and Loon Lake Laundromat. There is no recorded well log however, the current landowner, Mr. Alroy Christensen says the well was dug with a clamshell around 1962 and is 55 feet deep and 36 inches in diameter. The well produced 45 gallons per minute and served 14 connections, including the car wash and Loon Lake Laundromat. The water system did have a Department of Health Water System ID No. 12910K which was later voided when consolidated with the PUD system in November of 2009. Metered water usage by the PUD from September 2010 through August 2011 showed that approximately 1,870,770 gallons (or 5.7 acre-feet) was being used for the same connections. This is the best estimate that is available to calculate the water that was pumped from the exempt well. Therefore 45 gallons per minute and 5.7 acre-feet per year can be consolidated to Ground Water Certificate No. G3-01485C. These quantities will now be available for municipal supply purposes from all of the PUD's municipal supply wells.

The PUD originally proposed to consolidate the quantities of this exempt right to G3-01485C and then keep the well as a PUD water source and to be identified as PUD Well 10 (S09). However, RCW 90.44.105(4) states the following: "the exempt well or wells the use of which is to be discontinued will be properly decommissioned in accordance with chapter 18.104 RCW and the rules of the department". After discussions with the PUD, they agreed to consolidate the right and add the quantities of the right and decommission the existing well. Therefore, the PUD Well 10 (S09) proposed under all of the PUD change applications will not be added the PUD water rights as a source. This leaves the PUD with a total of 9 wells not 10.

GROUND WATER CERTIFICATE NO. 6901-A ("WILLIAM S. CHRISTENSEN")

This water right certificate was issued to William S. Christensen on June 30, 1970 with a priority of May 29, 1968. This right authorized a well located within Government Lot 2, Sec. 34, T. 30 N., R. 41 E.W.M. for withdrawal of 34 gallons per minute, 18 acre-feet per year, continuously, for commercial use and community domestic supply for 20 lots. The place of use was that portion of the Plat of Christensen Subdivision lying westerly of U.S. Highway 395 within the E½NW¼, Sec. 34, T. 30 N., R. 41 E.W.M.

The original well was hand dug to 24 feet in 1955 and is located west of U.S. Highway 395 near John's Thrift Store. It appears that a second well was later drilled in 1977. This well is a 6 inch diameter well and 40 feet deep. It produces over 50 gallons per minute. According to the owner, Alroy Christensen, this well provided water for approximately 10 businesses, several homes and two restaurants. In 1985 the PUD began hooking up all the customers that were once served under Certificate 6901-A. Once the right is changed to the PUD, the drilled well will continue to only provide water to John's Thrift Store (only a bathroom). The PUD does not own the property where the original source is located. The 34 gallons per minute and 18 acre-feet per year is being changed to municipal supply purposes for use from all of the PUD municipal supply wells.

Other Water Rights Appurtenant to the Place of Use

Water Rights held by the Public Utility District No. 1 of Stevens County at Loon Lake are as follows:

Ground Water Permit Number G3-28008P

Recorded Name:	P.U.D. No. 1 of Stevens County
Priority Date:	May 2, 1985
Instantaneous Quantity - Qi:	330 gallons per minute
Annual Quantity - Qa:	258 acre-feet per year
Purpose of Use:	Municipal supply
Period of Use:	Continuous
Source:	Seven (7) wells

Ground Water Certificate Number G3-22934C

Recorded Name:	P.U.D. No. 1 of Stevens County
Priority Date:	April 4, 1974
Instantaneous Quantity - Qi:	100 gallons per minute
Annual Quantity - Qa:	30 acre-feet per year
Purpose of Use:	Municipal supply
Period of Use:	Continuous
Source:	Seven (7) wells

Ground Water Certificate Number G3-01485C

Recorded Name:	P.U.D. No. 1 of Stevens County
Priority Date:	October 23, 1958
Instantaneous Quantity - Qi:	300 gallons per minute
Annual Quantity - Qa:	112 acre-feet per year
Purpose of Use:	Municipal supply
Period of Use:	Continuous
Source:	Seven (7) wells

Ground Water Certificate Number 5216-A

Recorded Name:	P.U.D. No. 1 of Stevens County
Priority Date:	July 22, 1963
Instantaneous Quantity - Qi:	20 gallons per minute
Annual Quantity - Qa:	32 acre-feet per year
Purpose of Use:	Municipal supply
Period of Use:	Continuous
Source:	Seven (7) wells

Ground Water Certificate Number 5180-A

Recorded Name:	P.U.D. No. 1 of Stevens County
Priority Date:	December 12, 1963
Instantaneous Quantity - Qi:	120 gallons per minute
Annual Quantity - Qa:	192 acre-feet per year
Purpose of Use:	Municipal supply
Period of Use:	Continuous
Source:	Seven (7) wells

The PUD proposes to add the following two water rights to the Loon Lake system:

Ground Water Certificate Number G3-20443C

Recorded Name:	John J. Ice
Priority Date:	August 14, 1972
Instantaneous Quantity - Qi:	130 gallons per minute
Annual Quantity - Qa:	51 acre-feet per year
Purpose of Use:	Group domestic supply of 4 units, stockwater supply and irrigation of 15 acres
Period of Use:	Continuous for domestic and stockwater; Seasonal for irrigation
Source:	Two wells

Ground Water Certificate Number 6901-A

Recorded Name:	William S. Christensen
Priority Date:	May 29, 1968
Instantaneous Quantity - Qi:	34 gallons per minute
Annual Quantity - Qa:	18 acre-feet per year
Purpose of Use:	Commercial use and Community domestic supply for 20 lots
Period of Use:	Continuous
Source:	A well

Hydrologic/Hydrogeologic Evaluation

Applications for change of water right permits and certificates are governed by RCW 90.44.100, which states in part: 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 hydrogeologic analysis for the PUD's applications was provided by Guy Gregory, hydrogeologist for Ecology's Water Resources Program. The general geology of the Loon Lake area is described by F. K. Miller in the 1969 preliminary map of the Loon Lake area, published by Washington State Department of Natural Resources as geologic map GM-6. In the vicinity of these change applications, bedrock consists of intrusive felsic igneous rocks of Cretaceous or Tertiary age, known as the Loon Lake batholith. Overlying this intrusive rocks are sands and gravels, either of glacio-lacustrine origin, or as colluvial or near-source alluvial sand and gravel deposits owing their origin to pre-glacial weathering of the intrusive rocks. Subsurface differentiation of these materials is quite difficult.

Groundwater occurs in fractures in the bedrock, with well yields capable of supporting small uses. Wells capable of significant yields occur only in sand and gravel deposits in this area.

Three new pumping locations are proposed by the PUD under the applications for change filed by the PUD. They are a new PUD Well No. 7 (S10), PUD Well No. 8 (Calder Well S01) and PUD Well No. 9 (Calder Well S02). The PUD also proposes to change the old production from the "Ice" Well 1 to PUD Well No. 2 (S07).

<u>PUD WELL No. 7 (S10)</u>
PUD WELL 7 (S10) was drilled by JOYCO Drilling in July of 2009. This 8 inch well located in the SE¼SE¼SE¼ of Sec. 21, T. 30 N., R. 41 E.W.M. was drilled to a depth of 180 feet in sand and gravel. The 2009 static water level in this well is 102 feet below ground surface. In 2009, it reported a yield in excess of 100 gallons per minute. The PUD has installed a 50 hp pump capable of pumping around 400 gallons per minute.

<u>PUD WELL No. 8 (Calder Well S01)</u>
The Calder Well S01 was drilled by Noonan Drilling in May of 1985. This 6 inch well located in the NE¼ of Sec. 28, T. 30 N., R. 41 E.W.M. was drilled to 125 feet in sand and gravel. The 1985 static water level in this well is 86 feet below ground surface, with a reported yield of 75 gallons per minute. This well pumps around 55 gallons per minute.

<u>PUD WELL No. 9 (Calder Well S02)</u>
The Calder Well S02 was drilled by Noonan Drilling in March of 1985. This 6 inch well located in the NE¼ of Sec. 28, T. 30 N., R. 41 E.W.M. was drilled to 115 feet in sand and gravel. The 1985 static water level in this well was 85 feet below ground surface, and it yielded 38 gallons per minute. This well today also pumps around 55 gallons per minute.

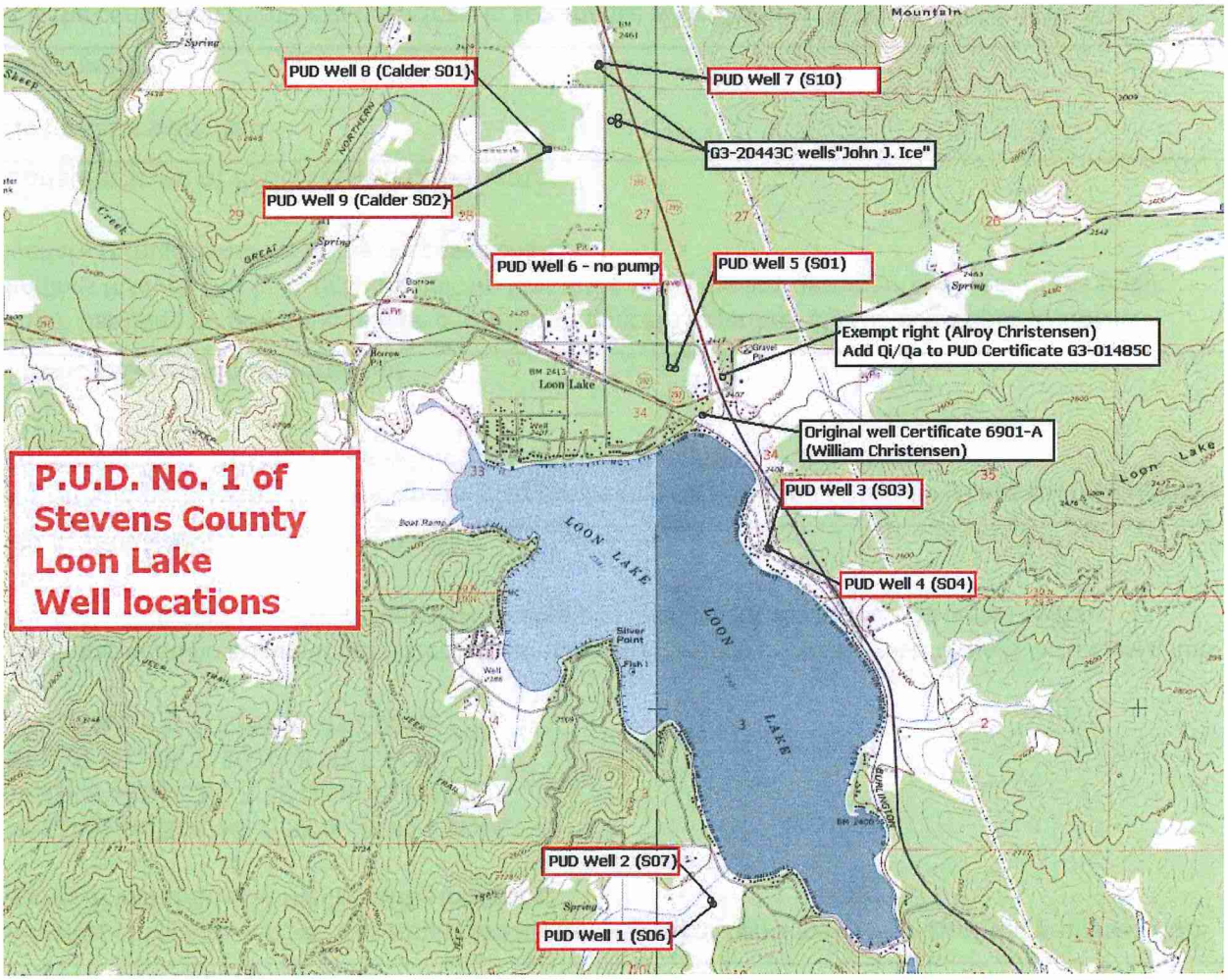
As discussed above, the two Calder wells are to be used by the PUD for the Loon Lake System for emergency-backup purposes only.

There is no log available for the Ice well, though it was apparently 112 feet deep, and capable of producing in excess of 130 gallons per minute.

The PUD well No. 2 was drilled in November, 1992 by Sam's Drilling. It is located in the NE¼ of the NW¼ of Sec. 10, T. 29 N., R. 41 E.W.M, and is 105 feet deep. Its 1992 static water level was 17 feet below ground surface, and it had a yield estimated at 800 gallons per minute.

All producing wells involved in this change application are wells producing from the sand and gravel deposits, thus they all produce from the same body of public ground water. No additional instantaneous or annual quantities are to be changed, and installation of additional points of withdrawal does not enlarge the existing rights.

This application is requesting authorization to add three existing wells. The proposed change to add points of withdrawal will not enlarge the quantity of water withdrawn from the aquifer. There is no change to the authorized place of use as a result of this change. No impact to existing beneficial uses or to surface water is anticipated.



Impairment Considerations

A review of Ecology records was conducted for existing water rights in the vicinity of the proposed PUD points of withdrawal in the following locations:

NE¼NW¼ of Sec. 10, T. 29 N., R. 41 E.W.M.
SE¼SE¼ of Sec. 21, T. 30 N., R. 41 E.W.M.
NE¼ of Sec. 28, T. 30 N., R. 41 E.W.M.
SE¼ of Sec. 34, T. 30 N., R. 41 E.W.M.

There has been no documented history of pumping interference between existing wells in this area, and it is not anticipated that this change would cause any impairment to any existing water rights.

No Enhancement of Original Right

No withdrawal of water over and above what has been historically put to beneficial use and/or originally authorized under existing rights will be allowed through approval of this change.

Public Interest Considerations

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

Consideration of Protests and Comments

No protests were filed.

Conclusions

It is the conclusion of this examiner that, in accordance with Chapters 90.03 and 90.44 RCW, this application to change under Ground Water Certificate No. 6901-A will not enlarge the quantity of water historically authorized, nor will it impair existing rights provided the terms and conditions below are followed.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend that the request for change to Ground Water Certificate No. 6901-A is approved in the amounts and within the limitations listed below and subject to the provisions beginning on Page 2, and following.

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:

Qi: 34 gallons per minute
Qa: 18 acre-feet per year
Purpose: Municipal Supply
Points of Withdrawal: 9 Wells
Place of Use: As described on Page 1 of this Report of Examination.

As described on Page 1 of this Report of Examination.

The Water Rights for Public Utility District No. 1 of Stevens County for the Loon Lake Water System are recommended to be issued as follows:

Ground Water Permit Number G3-28008P

Priority Date:	May 2, 1985
Instantaneous Quantity - Qi:	330 gallons per minute
Annual Quantity - Qa:	258 acre-feet per year
Purpose of Use:	Municipal supply
Source:	Nine (9) wells

Ground Water Certificate Number G3-22934C

Priority Date:	April 4, 1974
Instantaneous Quantity - Qi:	100 gallons per minute
Annual Quantity - Qa:	30 acre-feet per year
Purpose of Use:	Municipal supply
Source:	Nine (9) wells

Ground Water Certificate Number G3-01485C

Priority Date:	October 23, 1958
Instantaneous Quantity - Qi:	345 gallons per minute
Annual Quantity - Qa:	117.7 acre-feet per year
Purpose of Use:	Municipal supply
Period of Use:	Continuous
Source:	Nine (9) wells

Ground Water Certificate Number 5216-A

Priority Date:	July 22, 1963
Instantaneous Quantity - Qi:	20 gallons per minute
Annual Quantity - Qa:	32 acre-feet per year
Purpose of Use:	Municipal supply
Period of Use:	Continuous
Source:	Nine (9) wells

Ground Water Certificate Number 5180-A

Priority Date:	December 12, 1963
Instantaneous Quantity - Qi:	120 gallons per minute
Annual Quantity - Qa:	192 acre-feet per year
Purpose of Use:	Municipal supply
Period of Use:	Continuous
Source:	Nine (9) wells

Ground Water Certificate Number G3-20443C

Priority Date:	August 14, 1972
Instantaneous Quantity - Qi:	90 gallons per minute
Annual Quantity - Qa:	5 acre-feet per year
Purpose of Use:	Municipal supply
Period of Use:	Continuous
Source:	Nine (9) wells

Ground Water Certificate Number 6901-A

Priority Date:	May 29, 1968
Instantaneous Quantity - Qi:	34 gallons per minute
Annual Quantity - Qa:	18 acre-feet per year
Purpose of Use:	Municipal supply
Period of Use:	Continuous
Source:	Nine (9) wells

P.U.D. NO. 1 OF STEVENS COUNTY WATER RIGHT TOTAL – LOON LAKE WATER SYSTEM:
The total amount of water authorized for withdrawal from the Nine (9) wells for the Loon Lake Water System shall not exceed 1039 gallons per minute and 652.7 acre-feet per year, continuously, for municipal supply.

Gene Drury, Report Writer — 1-25-2012 *Date*

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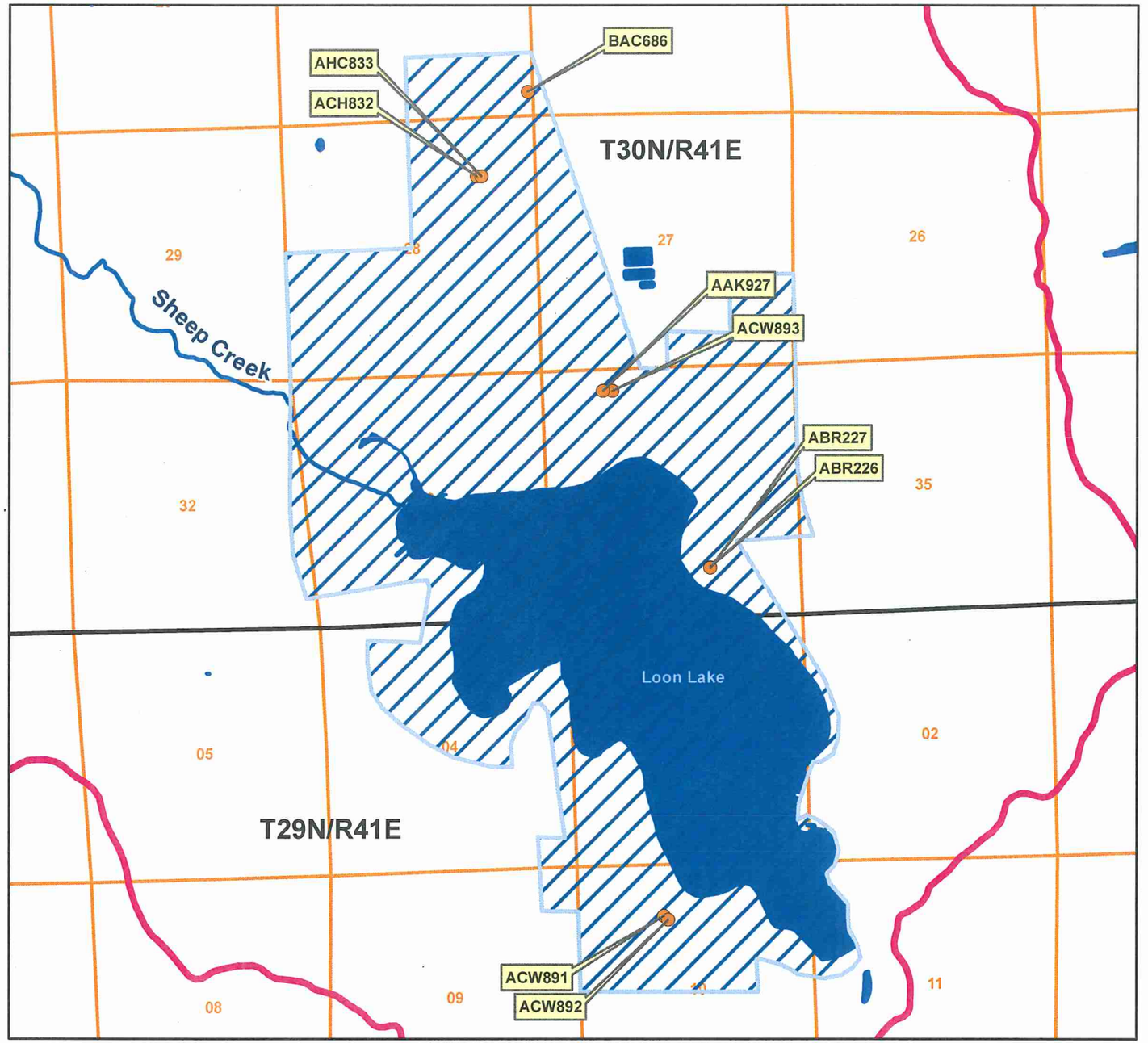
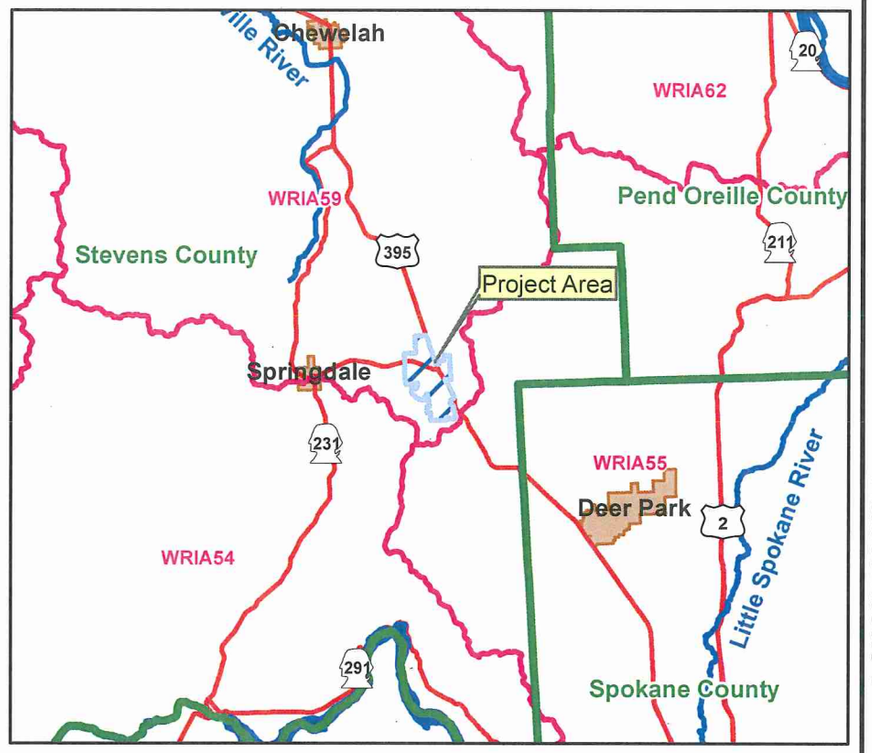
Public Utility District No. 1 of Stevens County
FileNR CG3-*09251C
WR Doc ID 4710450
T30N/R41E.W.M., T29N/R41E.W.M.
WRIA 59 - Stevens County



5,280 2,640 0 5,280 10,560 15,840 Feet



6 3 0 6 12 Miles

Legend

- County
- WRIA
- Cities
- Local Roads
- Highways
- Townships
- Sections
- Authorized Point of Diverison
- Authorized Point of Withdrawal
- Authorized Place of Use

Comments:

Attachment 1