



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

REPORT OF EXAMINATION
Application for Change to:
Ground Water Certificate No. G3-26037

PRIORITY DATE	APPLICATION NO.	PERMIT NO.	CERTIFICATE NO.
February 13, 1985	G3-26037	G3-26037	G3-26037

NAME City of Republic		
ADDRESS/STREET	CITY/STATE	ZIP CODE
P.O. Box 331	Republic, WA	99166

PUBLIC WATERS TO BE APPROPRIATED

SOURCE		
Three (3) 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)
---	280	56.7
QUANTITY, TYPE OF USE, PERIOD OF USE		
280 gallons per minute and 56.7 acre-feet per year, continuously, for community domestic supply		

LOCATION OF DIVERSION/WITHDRAWAL

APPROXIMATE LOCATION OF DIVERSION--WITHDRAWAL					
Well #1) 1500 feet south and 1500 feet east from the NW corner of Section 7					
Well #2) 1520 feet south and 1500 feet east from the NW corner of Section 7					
Well #3) 2000 feet south and 1800 feet east from the NW corner of Section 7					
LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION)	SECTION	TOWNSHIP	RANGE	WRIA	COUNTY
All within the SE $\frac{1}{4}$ NW $\frac{1}{4}$	7	36 N.	33 E.W.M.	52	Ferry
PARCEL NUMBER	LATITUDE	LONGITUDE	DATUM		
1) #33607900013200	48.6363944° N	118.7305940° W	WGS84		
2) #33607900013200	48.6363944° N	118.7305940° W			
3) #33607900012100	48.6352873° N	118.7300227° W			

RECORDED PLATTED PROPERTY

LOT	BLOCK	OF (GIVE NAME OF PLAT OR ADDITION)

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.]

Area served by the City of Republic, as described in the most recent Water System Plan dated April 30, 2009

DESCRIPTION OF PROPOSED WORKS

Three (3) wells, submersible pumps, storage and distribution system

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE	COMPLETE PROJECT BY THIS DATE	WATER PUT TO FULL USE BY THIS DATE
February 1, 2011	February 1, 2013	February 1, 2016

Quantity Limits, Flow and Regulation:

This change authorizes three (3) points of withdrawal in the amounts of 280 gallons per minute; 56.7 acre-feet per year, continuously, each year, for community domestic supply under Ground Water Certificate No. G3-26037C.

Municipal Supply and Public Water Systems:

If the criteria in RCW 90.03.386(2) are not met and a Water System Plan/Small Water System Management Program was approved after September 9, 2003, the place of use of this water right reverts to the service area described in that document. If the criteria in RCW 90.03.386(2) are not met and no Water System Plan/Small Water System Management Program has been approved after September 9, 2003, the place of use reverts to the last place of use described by Ecology in a water right authorization.

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 Eastern Drinking Water Operations, 1500 West Fourth Avenue, Suite 305, Spokane, WA 99204, (509) 456-3115.

Wells, Well logs and Well Construction Standards:

All wells constructed in the State 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".

In accordance with chapter 173-160 WAC, wells shall not be located within certain minimum distances of potential sources of contamination. These minimum distances shall comply with local health regulations, as appropriate. In general, wells shall be located at least 100 feet from sources of contamination. Wells shall not be located within 1,000 feet of a solid waste landfill.

The City of Republic wells have each been tagged with a well identification number. This unique well number shall remain attached to the well. Please reference these numbers when submitting data.

The Pine Grove Water Cooperative Association wells shall be decommissioned in accordance with Chapter 173-160-WAC.

Installation and maintenance of an access port as described in chapter 173-160 WAC is required. An air line and gauge may be installed in addition to the access port.

General Conditions:

The water source and/or water transmission facilities are not wholly located upon land owned by the applicant. Issuance of a water right change 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.

Use of water under this authorization shall 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.

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

The water right holder shall file the notice of Proof of Appropriation of water (under which the superseding 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 superseding certificate will reflect the extent of the project perfected within the limitations of the change authorization. Elements of the proof inspection may include, as appropriate, the source(s), system instantaneous capacity, beneficial use(s), annual quantity, place of use, and satisfaction of provisions.

Measurements, Monitoring, Metering and Reporting:

An approved measuring device shall be installed and maintained for each of the sources identified herein 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.

The rule above describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition Ecology for modifications to some of the requirements. Installation, operation and maintenance requirements are enclosed as a document entitled "Water Measurement Device Installation and Operation Requirements".

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 conditions, and to inspect at reasonable times any measuring device used to meet the above conditions.

Chapter 173-173 WAC describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition Ecology for modifications to some of the requirements. Installation, operation and maintenance requirements are enclosed as a document entitled "Water Measurement Device Installation and Operation Requirements".

<http://www.ecy.wa.gov/programs/wr/measuring/measuringhome.html>

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. Furthermore, I find the change of water right as recommended will not be detrimental to existing rights.

Therefore, I ORDER approval of the recommended change to add one point of withdrawal and change the place of use under Ground Water Certificate No. G3-26037C, 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 xx day of XXX, 2010.

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

INVESTIGATOR'S REPORT

BACKGROUND

An application for change/transfer was submitted by Pine Grove Water Cooperative Association of Republic, Washington to the Department of Ecology on May 21, 2008. On May 19, 2009, the application was assigned to the City of Republic. The City proposes to change the two (2) authorized points of withdrawal (POW) and add one existing point of withdrawal as granted under Ground Water Certificate No. G3-26037C. The three (3) proposed points of withdrawal are existing wells used by the City for municipal supply purposes.

The Pine Grove authorized points of withdrawal are two (2) wells located as follows: Well No. 2 within Government Lot 2 and Well No. 3 within Government Lot 7; both within the NW $\frac{1}{4}$ of Sec. 4, T. 36 N., R. 33 E.W.M. The three (3) City of Republic wells are all located within the SE $\frac{1}{4}$ NW $\frac{1}{4}$ of Sec. 7, T. 36 N., R. 33 E.W.M.

The authorized place of use under Certificate No. G3-26037C is the area served by Pine Grove Water Cooperative Association, Inc., within a portion of the NW $\frac{1}{4}$ of Sec. 3 and a portion of the N $\frac{1}{2}$ and SW $\frac{1}{4}$ of Sec. 4; ALL WITHIN T. 36 N., R. 33 E.W.M. The proposed place of use is the area served by the City of Republic as described in the most recently approved water system plan.

On May 1, 2009, Dorothy Tibbetts, Eastern Regional Manager for the Office of Drinking Water with the Washington State Department of Health (WDOH) requested that Ecology expedite processing of this application. According to WDOH, the Pine Grove water system has a history of poor water quality. Iron in the wells exceeds allowable levels, and the water is very corrosive leading to levels of copper exceeding maximum contaminant levels. The priority processing of this application was approved by Keith Stoffel, Water Resources Section Manager for the Eastern Regional Office on May 20, 2009.

A notice of application was duly published in accordance with RCW 90.03.280 in the Republic News Miner on July 17 and July 24, 2009 and no protests were received.

This application is categorically exempt from the provisions of the State Environmental Policy Act (SEPA) of 1971, Chapter 43.21C RCW.

Attributes of Ground Water Certificate No. G3-26037C

Recorded Name:	Pine Grove Water Cooperative Association, Inc.
Priority Date:	August 18, 1978
Instantaneous Quantity – Q(i):	280 gallons per minute
Annual Quantity – Q(a):	56.7 acre-feet per year
Source:	Two (2) wells
Point(s) of withdrawal:	Gov't Lot 2; Gov't Lot 7; All in Sec. 4, T. 36 N., R. 33 E.W.M.
Purpose of Use:	Community Domestic Supply
Period of Use:	Continuous
Place of Use:	Area served by Pine Grove Water Cooperative Association, Inc., within a portion of the NW $\frac{1}{4}$ of Sec. 3 and a portion of the N $\frac{1}{2}$ and SW $\frac{1}{4}$ of Sec. 4; ALL WITHIN T. 36 N., R. 33 E.W.M.

INVESTIGATION

In considering the proposed change, the investigation included, but was not limited to, research and review of: (1) appropriate rules and statutes; (2) City of Republic and Pine Grove water rights and other water rights in the vicinity; (3) water well reports; (4) USGS topographic maps; (5) City of Republic Water System Plan prepared by Varela & Associates, Inc., February 2009; (6) discussions with Department of Ecology regional program staff; including review by Ecology hydrogeologists. The field investigation for this application was conducted on May 27, 2009 with Jennifer McDonnell, President and Water System Operator for Pine Grove and Casey Giddings, Public Works Director for the City of Republic.

History of Water Use

The water right for the Pine Grove Water Cooperative Association, Inc. was applied for on August 18, 1978 under Ground Water Application No. G3-26037. This application requested 500 gallons per minute for a “public water system – multiple domestic supply” (domestic supply for 63 units). The Report of Examination (findings) for this water right issued on May 1, 1979 and recommended approval for 500 gallons per minute and 56.7 acre-feet per year for community domestic supply of 63 units. Permit G3-26037P issued in August of the same year. The Proof of Appropriation was filed by the Pine Grove in November of 1980. An application to change the place of use was filed in May of 1983 to cover the area served in Sec. 3, T. 36 N., R. 33 E.W.M. This change was approved and a Superseding Permit issued September 9, 1983.

Final inspection of the project was conducted and Ground Water Certificate No. G3-26037C was issued September 9, 1983. The certificate was reduced from 500 gallons per minute to 280 gallons per minute to reflect the maximum pumping capacity of both wells.

The Pine Grove Water System is located about three (3) miles east of Republic, Washington, near the intersection of State Route 20 and 21. The two (2) Pine Grove wells are located within Government Lot 2 and Government Lot 7 within Sec. 4, T. 36 N., R. 33 E.W.M. They are located south of the highway and between O’Brien Creek and the Sanpoil River.

The Pine Grove well locations were located with a GPS device (DATUM WGS84):

Pine Grove Well No. 2) LAT 48.6505158°N, LONG 118.6885033°W

Pine Grove Well No. 3) LAT 48.6502584°N, LONG 118.6885033°W

Pine Grove system currently serves water to 61 single family residences and 12 commercial connections (73 total connections). The population of Pine Grove is around 178. As noted above, the wells have poor water quality and iron that exceeds allowable levels. At this time only Well No. 2 is being used. The other well has not been used for a very long time. The two (2) Pine Grove wells are identified on the State of Washington Water Well Reports as “Well #2” and “Well #3” as the original Well No. 1 no longer exists according to Pine Grove. A note on the original application G3-26037C states that “*Well No. 1 was constructed in 1970 - there are no records of water rights being filed and issued*”.

Water use for Pine Grove was provided for the years 2005 through 2007. The maximum amount pumped in this timeframe was in 2005 during which Pine Grove pumped 18.57 million gallons of water or 57 acre-feet. The Pine Grove wells are proposed to be decommissioned once the change is approved to the City of Republic wells and construction of the delivery system is completed.

Proposed Use

The City of Republic is proposing to expand its service area by including the Pine Grove Water Cooperative Association, Inc.’s service area within its place of use. The City of Republic serves water to 337 single family residences and 102 commercial connections (439 total connections). The population of Republic is around 1,008.

The three (3) existing City of Republic municipal supply wells will provide water to this area. These wells are located just south of the city just east of Granite Creek and State Route 21 and west of the Sanpoil River. They are all within the SE¼NW¼ of Sec. 7, T. 36 N., R. 33 E.W.M. Well No. 1 and No. 2 are next to each other and Well No. 3 is less than 500 feet to the south.

The City of Republic well locations were located using a GPS device (DATUM WGS84):

Republic Well No. 1) LAT 48.6363944°N, LONG 118.7305940°W

Republic Well No. 2) LAT 48.6363944°N, LONG 118.7305940°W

Republic Well No. 3) LAT 48.6352873°N, LONG 118.7300227°W

Water use for the City of Republic was provided for the years 2005 through 2007. The maximum amount pumped in this timeframe was in 2006 during which Republic pumped 81.7 million gallons of water or 251 acre-feet.

Republic Well No. 3 (Unique Well ID #AHC066) is the primary well for the city. It was constructed in 1984 to a depth of 100 feet. The city pumps 500 gpm from this well using a 100 hp vertical turbine pump. The well log indicates that it was drilled into sand and gravel with some clay and had a static water level of 28 feet bls. The static water level in 1994 was measured at 33 feet bls. The well is screened from 87 feet to 97 feet.

All wells in Pine Grove and Republic produce water from an unconfined shallow aquifer of glaciofluvial sediments occupying the Sanpoil and Granite Creek valleys. These two aquifers join south of, and downgradient from, the Republic wells. They both produce from the same body of public groundwater.

Previous studies in the area indicate that both the Sanpoil River and Granite Creek are perched relative to the water table, thus surface generally loses water throughout the area of the change. A wetland developed at the confluence of Granite Creek and the Sanpoil River is generally coincident, or lower than, water table elevations reported for both Pine Grove and Republic wells. Thus, no net increase in impact to surface water will result from this change. The change in point of withdrawal will not impair surface water rights or resources.

The principal previous study for this area is the Report of Hydrogeologic Services, Wellhead Protection Study, for the City of Republic, dated February 2, 1996, by Geoengineers, located in the file.

Other Water Rights Appurtenant to the Place of Use

The City of Republic currently holds two other water rights recorded as follows:

Ground Water Certificate No. G3-27951C

Recorded Name: Town Of Republic
 Priority Date: 1985
 Instantaneous Quantity – Q(i): 1,100 gallons per minute
 Annual Quantity – Q(a): 156 acre-feet per year
 Source: Three (3) wells
 Purpose of Use: Municipal Supply

Ground Water Certificate No. 1742-A

Recorded Name: Town Of Republic
 Priority Date: 1953
 Instantaneous Quantity – Q(i): 270 gallons per minute
 Annual Quantity – Q(a): 112 acre-feet per year
 Source: Three (3) wells
 Purpose of Use: Municipal Supply

The total amount authorized under existing water rights for the City of Republic is 1,370 gallons per minute and 268 acre-feet per year from three wells. With the addition of the “Pine Grove” water right, Certificate G3-26037C, the total would be 1,650 gallons per minute and 324.7 acre-feet per year.

A search of the Water Rights Tracking System (WRTS) database was also conducted for any existing ground water rights in the surrounding area of the City wells in Sec. 7, T. 36 N., R. 33 E.W.M. The search found the following:

File #	Person	Doc	Priority Dt	Purpose	Qi	UOM	Qa	Acres	Ir	1stSrc
G3-153828CL	FULLER HAROLD E	Claim L		ST, IR		GPM				WELL
G3-128171CL	EGNER BERNARD W	Claim S		IR, DG		GPM				
G3-115615CL	PENDRY ROBERT E	Claim L		IR, DG		GPM				WELL
G3-082382CL	FIELDS ROBERT G.	Claim S		DG		GPM				
G3-057166CL	BURBANK JR. C. A.	Claim S		ST, DG		GPM				
G3-049603CL	WA Highways Dept	Claim L		DG		GPM				WELL
G3-012262CL	TAGG ANN	Claim L		ST, DG		GPM				
5518-A	WILSON R E	Cert	8/24/64	IR, DS	133	GPM	43	24		WELL
G3-01116CWRIS	FIELDS ROBERT G	Cert	9/20/68	IR	280	GPM	93	37		WELL

The majority of the documents in the above list are recorded water right claims. The intent of the Claims Registration Act, Chapter 90.14 RCW, was to document those uses of surface water in existence prior to the adoption of the State Surface Water Code, Chapter 90.03 RCW, which was adopted in 1917, and those uses of ground water in existence prior to the adoption of the State Ground Water Code, Chapter 90.44 RCW, which was adopted in 1945. Since each code(s) adoption, the only means of acquiring a water right within the state is by filing for, and receiving, a permit from the Department of Ecology or one of its predecessors or by establishing a right under the “domestic exemption” under the ground water code (RCW 90.44.050). The Department of Ecology recognizes that the final determination of the validity and extent associated with a claim registered in accordance with RCW 90.14 ultimately lies with the Superior Court through the general adjudication process provided for by Sections 90.03.110 through 90.03.240 RCW.

Impairment Considerations

“Impair” or “impairment” means to: 1) adversely impact the physical availability of water for a beneficial use that is entitled to protection, including earlier filed applications, 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.

Other wells using groundwater in the area include the Burbank well to the south, Anderson rental to the north, Fields well to the east (south of the City lagoons), and Tagg, Fuller and Pendry wells further to the south. No investigation of these rights was conducted to see how much water is actually being used. However, Casey Giddings with Republic indicated that most of the claims are for single domestic uses and are located away from the City’s wells. Testing was conducted when Republic Well No. 3 was constructed in 1994. The pump test did not show any signs of well interference.

No significant increase in pumping rates is proposed and there has been no documented history of pumping interference between existing wells in this area, therefore it is not anticipated that this change would cause any impairment to existing water rights.

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 received.

Same Source of Water

All of the wells withdraw water from the same body of public ground water in accordance with RCW 90.44.100(1).

CONCLUSIONS

It is the conclusion of this examiner that, in accordance with Chapters 90.03 and 90.44 RCW, this application to change the two (2) authorized points of withdrawal, add one existing point of withdrawal and change the place of use as granted under Ground Water Certificate No. G3-26037C 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 to change two (2) authorized points of withdrawal, add one existing point of withdrawal and change the place of use as granted under Ground Water Certificate No. G3-26037C 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:

- 280 gallons per minute
- 56.7 acre-feet per year
- Community domestic supply purposes

Points of Withdrawal

Three (3) wells all within the SE¼NW¼ of Sec. 7, T. 36 N., R. 33 E.W.M.

Place of Use

As described on Page 1 of this Report of Examination.

Report by: _____ Date _____
Gene Drury
Water Resources Program

Attachment 1

