



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

REPORT OF EXAMINATION
Change of Withdrawal
WRTS File # CG3-*06747C@1

PRIORITY DATE	CLAIM NO.	PERMIT NO.	CERTIFICATE NO.
June 10, 1963		6389	4997-A

NAME Deanna L. Billingsley		
ADDRESS/STREET	CITY/STATE	ZIP CODE
1631 Havstad Drive	Walla Walla, Washington	99362

PUBLIC WATERS TO BE APPROPRIATED

SOURCE
A well
TRIBUTARY OF (IF SURFACE WATERS)

MAXIMUM CUBIC FEET PER SECOND (cfs)	MAXIMUM GALLONS PER MINUTE (gpm)	MAXIMUM ACRE-FEET PER YEAR (ac-ft/yr)
	5	4

QUANTITY, TYPE OF USE, PERIOD OF USE
5 gallons per minute, 4 acre-feet per year for the seasonal irrigation of 1 acre

LOCATION OF DIVERSION/WITHDRAWAL

APPROXIMATE LOCATION OF DIVERSION--WITHDRAWAL
50 feet south and 650 west of the N¼ corner of Section 6

SOURCE	PARCEL	LATITUDE	LONGITUDE	QTR/QTR	SECTION	TOWNSHIP	RANGE
A well	360606540005	46.0346°N	118.3593°W	NE¼/NW¼	6	6 N.	36 E.W.M.

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.]

Lot No. 5 G.A.M. Subdivision according to the official plat thereof, recorded in Volume 2 of the Roll Files, Page A-4 records of Walla Walla County under Auditor's file No. 7810980
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DESCRIPTION OF PROPOSED WORKS

Well, pump and sprinklers

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE	COMPLETE PROJECT BY THIS DATE	WATER PUT TO FULL USE BY THIS DATE
Started	Completed	May 1, 2012

PROVISIONS

Wells, Well logs and Well Construction Standards

1. All wells constructed in the state shall meet the construction requirements of WAC 173-160 titled "Minimum Standards for the Construction and Maintenance of Wells" and RCW 18.104 titled "Water Well Construction". Any well which is unusable, abandoned, or whose use has been permanently discontinued, or which is in such disrepair that its continued use is impractical or is an environmental, safety or public health hazard shall be decommissioned.
2. Installation and maintenance of an access port as described in WAC 173-160- 291(3) is required.
3. In the event well repair or construction activity occurs at the proposed well, a well log shall be prepared in accordance with WAC 173-160.

Measurements, Monitoring, Metering and Reporting

4. An approved measuring device shall be installed and maintained for each of the sources authorized by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use", chapter 173-173 WAC. <http://www.ecy.wa.gov/programs/wr/measuring/measuringhome.html>
5. Water use data shall be recorded monthly and maintained by the property owner for a minimum of five years. The maximum rate of diversion/withdrawal and the annual total volume shall be submitted to the Department of Ecology by January 31st of each calendar year.
6. Recorded water use data can be submitted via the Internet. To set up an Internet reporting account, access <https://fortress.wa.gov/ecy/wrx/wrx/Meteringx/>. If you do not have Internet access, contact the Eastern Regional office for forms to submit your data.

Schedule and Inspections

7. 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.
8. The water right holder shall file the notice of project completion 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 of Change* will reflect the extent of beneficial use within the limitations of the change authorization. Elements of the project completion inspection may include, as appropriate, the source(s), system instantaneous capacity, beneficial use(s), annual quantity, place of use, and compliance with provisions.

General Conditions

9. 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.
10. 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.
11. The total annual withdrawal under Ground Water Certificate No. 4997-A (including certificate of change) shall not exceed 256 acre-feet, less any quantity diverted to this land under existing rights.
12. The total annual quantity under Ground Water Certificate No. 4997-A and 988-D for the portion of the place of use appurtenant to Lot No. 5 G.A.M. Subdivision according to the official plat thereof, recorded in Volume 2 of the Roll Files, Page A-4 records of Walla Walla County under Auditor's file No. 7810980, shall be limited to 6 gallons per minute and 4 acre-feet per year for the seasonal irrigation of 1 acre.

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 of withdrawal under Change Application No. 4997-A, subject to existing rights and the provisions listed above.

You have a right to appeal this action to the Pollution Control Hearing Board (PCHB) within 30 days of the date of receipt of this document. 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 this document:

- File your appeal and a copy of this document 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 document on Ecology in paper form - by mail or in person. (See addresses below.) Email is not accepted.

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

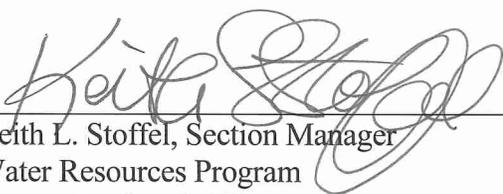
Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	Department of Ecology Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel Road SW Suite 301 Tumwater, WA 98501	Pollution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

Please also send a copy of your appeal to:

Mr. Keith L. Stoffel
 Department of Ecology
 Eastern Regional Office
 4601 North Monroe Street
 Spokane, WA 99205-1295

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>.

Signed at Spokane, Washington, this 22nd day of March, 2011.



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

BACKGROUND

Description and Purpose of Proposed Change

An application for change/transfer was submitted by David and Pam Leen of Walla Walla, Washington, to Ecology on November 6, 2003. The application was assigned to Deanna Billingsley on April 15, 2009. Deanna Billingsley proposes to add a point of withdraw under Water Right Certificate No. 4997-A.

Attributes of the Certificate and Proposed Change

Table 1 Summary of Proposed Changes to Water Right No. 4997-A

<i>Attributes</i>	<i>Documented</i>	<i>Proposed</i>
Name	Howard Roberts, MD	Deanna Billingsley
Priority Date Date of Application for Change	June 10, 1963	November 6, 2003
Instantaneous Quantity	300 gallons per minute	<i>No change</i>
Annual Quantity	256 acre-feet per year	<i>No change</i>
Source	A well	Add a well to Billingsley portion of the place of use
Point of Diversion/Withdrawal	Government Lot No. 2	NE¼NW¼ of Section 6, T. 6 N., R. 36 E.W.M.
Purpose of Use	Irrigation of 64 acres	<i>No change</i>
Period of Use	Seasonal	<i>No change</i>
Place of Use	Approximation: portions of the N½ of Section 6, T. 6 N., R. 36 E.W.M. and S½S½ of Section 31, T. 7 N., R. 36 E.W.M.	<i>No change: application only proposed to apply to Billingsley portion of the place of use.</i>

Legal Requirements for Proposed Change

The following is a list of requirements that must be met prior to authorizing the proposed additional point of withdrawal.

- **Public Notice**

A notice of application was duly published in accordance with RCW 90.03.280 in The Walla Walla Union-Bulletin on August 25 and September 1, 2009, and no protests were received.

- **State Environmental Policy Act (SEPA)**

Environmental review under SEPA is required for many projects; however, some minor projects are categorically exempt from SEPA. Appropriations of one cfs or less of surface water, or of 2,250 gpm or less of ground water, for any purpose, and appropriations of 50 cfs or less for surface water used for irrigation are categorically exempt from SEPA. See WAC 197-11-305

- **Water Resources Statutes and Case Law**

RCW 90.03.380(1) states that a water right that has been put to beneficial use may be changed. The point of diversion, place of use, and purpose of use may be changed if it would not result in harm or injury to other water rights.

The Washington Supreme Court has held that Ecology, when processing an application for change to a water right, is required to make a tentative determination of extent and validity of the claim or right. This is necessary to establish whether the claim or right is eligible for change. R.D. Merrill v. PCHB and Okanogan Wilderness League v. Town of Twisp

RCW 90.44.100(2) requires that any well or wells added to a ground water certificate must tap the same body of public ground water as the original well on the certificate.

INVESTIGATION

In considering the proposed changes/transfers, the investigation included, but was not limited to, research and review of: (1) appropriate rules and statutes; (2) Ground Water Certificate No. 4997-A, and other water rights/claims/permit in the vicinity; (3) wells; (4) USGS topographic maps, aerial photographs, and; (5) discussions with Department of Ecology regional program staff.

A site visit of the project was conducted on March 19, 2009, by Dan Tolleson. This project is located on the southwestern edge of the city of Walla Walla, Washington. The water right is located in the Walla Walla Basin which is managed under Chapter 173-532 WAC Water Resources Program for the Walla Walla River Basin, WRIA 32.

The authorized place of use is approximately 65 acres of land, lying within portions of the N½ of Section 6, Township 6 N., Range 36 E.W.M. and the S½ of Section 31, Township 7 N., Range 36 E.W.M. This area is currently subdivided into a housing project with lots that average 1-2 acres. These lots are predominately single residences with large irrigated yards.

Ground Water Right No. 4997-A has approximately 42 lots with various land owners within the authorized place of use. This water right authorizes enough acreage to potentially provide irrigation for all the place of use. Because of multiple owners, this change will only address that portion of the water right proposed for change by Deanne Billingsley.

History of Water Use

This water right was developed within an area of historically irrigated commercial farmland with multiple water rights. These rights also had multiple sources and many were alternate supplies to one another. The unofficial name for the group of water rights in this area is the “Taumarson Complex” which is summarized in the table below.

Table 2 Summary of “Taumarson Complex” Water Rights

Water Right (priority date)	Qi max	Qa	Acres	Certificate of Change
<i>Surface Water Rights</i>				
WWAC 772 (1917)	1.204 cfs	301	60.2	303 and 670
WWAC 127 (1878)	0.268 cfs	67	13.4	669
<i>Ground Water Rights (gravel wells)</i>				
988-D (1924)	50 gpm	28	7	668
998-D (1912)	200 gpm	68	17	720
4997-A (1963)	300 gpm	256	64	
5122-A (1964)	200 gpm	136	103	
<i>Ground Water Rights (basalt wells)</i>				
986-D (1911)	600 gpm	340	85	288 and 719
987-D (1923)	500 gpm	284	71	698
2544-D (1955)	750 gpm	664	166	118

(See: *Rights Appurtenant to the Place of Use*, for further detail.)

Ground Water Certificate No. 4997-A is one of the many water rights that make up the Taumarson Complex. This right was issued with the following restriction “The total annual withdrawal under this right shall not exceed 256 acre-feet, less any quantity diverted to this land under existing rights”. The existing rights listed on the original Report of Exam are Walla Walla Adjudicated Certificate No. 127 and Ground Water Certificate No. 988-D. Certificate No. 127 has not been in use on Ms. Billingsley’s lot in many years, and may be subject to relinquishment. Certificate No. 988-D is a primary water right, with Certificate No. 4997-A being issued as less any annual quantity pumped under this right. The quantity under Certificate No. 988-D is documented as being 1 acre-foot for the portion of the right appurtenant to Ms. Billingsley’s lot. The total annual quantity under Ground Water Certificate No. 4997-A and 988-D for Ms. Billingsley’s lot is 6 gallons per minute and 4 acre-feet per year for the seasonal irrigation of 1 acre.

The authorized well for this water right was constructed within an existing hand dug well in 1963. Water use from the authorized well was incrementally scaled back as portions of the place of use were subdivided into smaller lots for houses. At some point, use of the authorized point of withdrawal was abandoned. The actual well was decommissioned when the portion of the place of use on which it was located was subdivided into smaller lots sometime in the early 1990s. These smaller lots developed their own wells and continued to withdraw water under this and others water rights. Not all lots within the place of use claim a use under the existing water rights. Ms. Billingsley's well was constructed in 1983. Her well has been utilized to supply water under both Ground Water Certificate Nos. 988-D and 4997-A, since the lot was divided from the original farmland.

Aerial photographs were used to help verify the extent of development, historical and beneficial use of Ground Water Certificate No. 4997-A. The authorized place of use has been historically irrigated first as farmland and later on as yards. Irrigation on the lot owned by Ms. Billingsley is approximately 1 acre.

The authorized water duty of this certificate is 4 acre-feet per year, per acre. Historically, this right was used to irrigate various crops and is currently used to irrigate yards and gardens. The State of Washington Irrigation Guide (WA210-VI-WAIG) states that an estimated 2.9 acre-feet, per acre, is required for grass/turf in the Walla Walla area. The current irrigation system of sprinkler is estimated at a 75% efficiency rate of application. With a 75% efficiency rate of application an estimated 4 acre-feet per acre would need to be applied for crops that use 2.9 acre-feet per acre. Continued irrigation of the lot owned by Ms. Billingsley will require 4 acre-feet per, per year, for the irrigation of 1 acre.

The place of use of Ms. Billingsley portion of the this right will be narrowed down to the legal description of her lot which is described on Page 1 of this Report of Examination.

Rights Appurtenant to the Place of Use

A review of Ecology records was conducted for existing water rights, permits, and claims in the area surrounding the project. The search focused primarily on Section 6, Township 6 N., Range 36 E.W.M. and Section 31, Township 7 N., Range 36 E.W.M. The review of Ecology records shows sixteen water rights, with various certificates of change that overlap the authorized place of use, which are as follows:

Walla Walla Adjudicated Water Right Nos. 127 w/chg. 699 and 772 w/chg. 670 have a place of use that overlaps and generally coincides with GWC 4997-A. A second certificate of change to Walla Walla Adjudicated Certificate No. 303 authorizes a larger place of use that overlaps GWC 4997-A. These rights have priority dates of 1878 and 1917 respectively and are authorized a water diversion from a Spring Branch. They appear to have been abandoned and/or relinquished many years ago, with little if any of these rights currently being used. These rights have not been in use on the lot owned by Ms. Billingsley, in many years, if ever.

Ground Water Right Nos. 5510-A, 5601-A, 6195-A, G3-21216C, G3-28824C, G3-28824C, G3-28945C, G3-21012C, G3-27561C, G3-27514C and G3-27178C were issued with priority dates between 1966 to 1991. These rights were issued for irrigation (yard irrigation) of individual lots within the authorized place of use of GWC 4997-A. They are not part of the original Taumarson Complex irrigation rights, but were for the subsequent subdivisions. They were issued as less existing right which includes GWC 4997-A. None of these rights have ever been in use on the lot owned by Ms. Billingsley.

Ground Water Right Nos. 987-D w/chg. 698 and 2544-A w/chg. 118, have a place of use that overlaps GWC 4997-A. These rights have priority dates of 1878 and 1917 respectively. They authorize a water withdrawal from basalt aquifer wells. These rights have not been in use on the lot owned by Ms. Billingsley, in many years.

Ground Water Right No. 988-D w/chg. 668 has a place of use that overlaps and generally coincides with GWC 4997-A. This right was issued as being less any water pumped under Certificate No. 4997-A.

(The validity and extent of above listed water rights and claims are not determined in this report.)

Hydrologic/Hydrogeologic Evaluation

John Covert, hydrogeologist in Ecology's Water Resources Program, provided the following hydrogeologic evaluation.

Applications for change 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. Any amendment shall be issued by the Department of Ecology (Ecology) only under the conditions that (1) an 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) all existing water rights shall not be impaired. Ecology

may specify an approved manner of well construction and shall require a showing of compliance with the provisions of the amendment.

The point of withdrawal for this change application is located within the Walla Walla Basin, a hydrologic sub basin of the Columbia Plateau. This basin developed as a structural trough within the Columbia River Basalt Group that was later overlain by unconsolidated sediments. The lowermost sediment unit is referred to as the "blue clay" which rests directly on the basalt basement rock. Directly overlying the "blue clay" and interfingering with it, is the gravel unit. The various unconsolidated gravels serve as the aquifer material which forms the uppermost, unconfined, water table aquifer. Aquifers are also present within the consolidated, Tertiary-aged, Columbia River Basalt Group. These predominately confined basalt aquifers are separated from the gravel aquifer by the "blue clay" unit.

Information from well drilling logs throughout the basin indicates that the gravel aquifer is generally unconfined. Long-term water level measurements (on the order of half a century) collected by both the USGS and the Oregon Water Resources Program indicate that the gravel aquifer is experiencing a slow, gradual, decline in the water table surface. This is occurring on top of the seasonal variation in water level that typically occurs in unconfined aquifers.

The basalt aquifer system is comprised of a series of zones, some of which easily conduct water. These high-conductivity zones alternate with zones of dense basalt, which impede the flow of water and are considered to have low hydraulic conductivity. The highly permeable basalt zones range in thickness from a few feet to 25 feet or more. It is the composite of these permeable, water conducting zones that constitutes the "basalt aquifer" within the sub basin.

The original point of withdrawal for this water right was located within the NW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 6, T. 6 N., R. 36 E.W.M. It was deepened in 1963 to a depth of 247 feet below land surface and was 8 inches in diameter. The static water level at the time of drilling was 14 feet below land surface. The well yielded 356 gpm with 114 feet of drawdown after 9 hours. The well was drilled through a series of gravel and clay layers. The well had been originally hand dug to a depth of 68' and had 35' of cement cribbing installed within its 8' x 8' framework. After deepening, casing was installed to 124 feet.

The proposed point of withdrawal is located within the NE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 6, T. 6 N., R. 36 E. It was drilled in 1982 to a depth of 132 feet below land surface and is 6 inches in diameter. The static water level at the time of drilling was 40 feet below land surface. The well was drilled through a series of sand, gravel, and clay layers. Casing was installed to a depth of 121 feet and it has a 20 foot surface seal.

As indicated above, 90.44.100 requires the new well to be completed within the same body of public groundwater. Both of these wells appear to be completed within the gravel aquifer and are completed within the same body of public groundwater.

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).

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 the new well at the proposed location will not exceed what is already being exercised. There has been no documented history of pumping interference problems between existing wells in this area, and it is not anticipated that the proposed change would cause any impairment to existing water rights. In the unforeseen event that the new well will cause impairment to these existing rights, it will be treated as a junior appropriator and regulated accordingly.

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.

Enhancement Considerations

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

CONCLUSIONS

It has been tentatively determined that there is a water right available for change/transfer under Ground Water Certificate No. 4997-A in the amount of 5 gallons per minute, 4 acre-feet per year, each year for the irrigation of one acre.

Based on the above Hydrologic/Hydrogeologic Evaluation, Ecology has determined the authorized and proposed wells withdraw water from the same body of public ground water.

It is the conclusion of this examiner that, in accordance with Chapters 90.03 and 90.44 RCW, this application to add a point of withdrawal under Ground Water Certificate No. 4997-A will not enlarge the quantity of water historically authorized, nor will it impair existing rights provided the provisions, terms and conditions contained within this report are followed.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend that the request for change, to add a point of withdrawal, 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:

- 5 gallons per minute
- 4 acre-feet per year
- Irrigation of 1 acre

Point of Withdrawal

NE $\frac{1}{4}$ NW $\frac{1}{4}$, Section 6, Township 6 North, Range 36 E.W.M.

Place of Use

As described on Page 1 of this Report of Examination.

Report by: Dan Tolleon 3-14-2011
Dan Tolleon Date
Water Resources Program

If you need this publication in an alternate format, please call Water Resources Program at 360 407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

Y/Final docs/ROEs/Tolleon 2011/4997-A Billingsley

Attachment 1

