

STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY  
APPLICATION FOR CHANGE/TRANSFER  
**REPORT OF EXAMINATION**  
TO APPROPRIATE PUBLIC WATERS OF THE STATE OF WASHINGTON

- Surface Water (Issued in accordance with the provisions of Chapter 117, Laws of Washington for 1917, and amendments thereto, and the rules and regulations of the Department of Ecology.)
- Ground Water (Issued in accordance with the provisions of Chapter 263, Laws of Washington for 1945, and amendments thereto, and the rules and regulations of the Department of Ecology.)

PRIORITY DATE 1885 (Class 23)	APPLICATION NUMBER	PERMIT NUMBER	CERTIFICATE NUMBER Walla Walla River Adjudication Certificate No. 283(C)
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NAME Al Sholtis			
ADDRESS (STREET) 248 McKinney Road	(CITY) Walla Walla	(STATE) Washington	(ZIP CODE) 99362

**PUBLIC WATERS TO BE APPROPRIATED**

SOURCE Lower Cold Creek
TRIBUTARY OF (IF SURFACE WATERS)

MAXIMUM CUBIC FEET PER SECOND 0.06	MAXIMUM GALLONS PER MINUTE	MAXIMUM ACRE FEET PER YEAR 8.3
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QUANTITY, TYPE OF USE, PERIOD OF USE  
0.04 cubic feet per second (18 gpm) from April 1 to July 1; 0.03 cubic feet per second (13.5 gpm) from July 1 to October 1; and 0.06 cubic feet per second (27 gpm), when allowed, from October 1 to April 1, for the irrigation of 2 acres.

**LOCATION OF DIVERSION/WITHDRAWAL**

APPROXIMATE LOCATION OF DIVERSION--WITHDRAWAL

LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION) NE $\frac{1}{4}$ SE $\frac{1}{4}$	SECTION 27	TOWNSHIP N. 7	RANGE, (E. OR W.) W.M. 35 E.	W.R.I.A. 32	COUNTY Walla Walla
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**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**

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**DESCRIPTION OF PROPOSED WORKS**

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Pump, meter, pipeline, sprinklers

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**DEVELOPMENT SCHEDULE**

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BEGIN PROJECT BY THIS DATE: Started	COMPLETE PROJECT BY THIS DATE: May 1, 2010	WATER PUT TO FULL USE BY THIS DATE: May 1, 2011
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**REPORT**

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**BACKGROUND**

**Application**

An application for change was filed by Ben F. Cavalli, Jr. on December 12, 2001. The application was accepted and processed. The applicant proposes to add a point of diversion (a hydraulically connected well) to Walla Walla River Adjudication Certificate No. 283 (A), ("Adj. Cert. No. 283 (A)").

**Notice**

A notice of application was duly published in the Walla Walla Union Bulletin on April 18, and 25, 2002. No protests were received.

**SEPA**

This application is categorically exempt from the provisions of the State Environmental Policy Act (SEPA) of 1971, Chapter 43.21 RCW, due to the fact that the quantities involved are less than 1.0 cubic foot per second.

**INVESTIGATION**

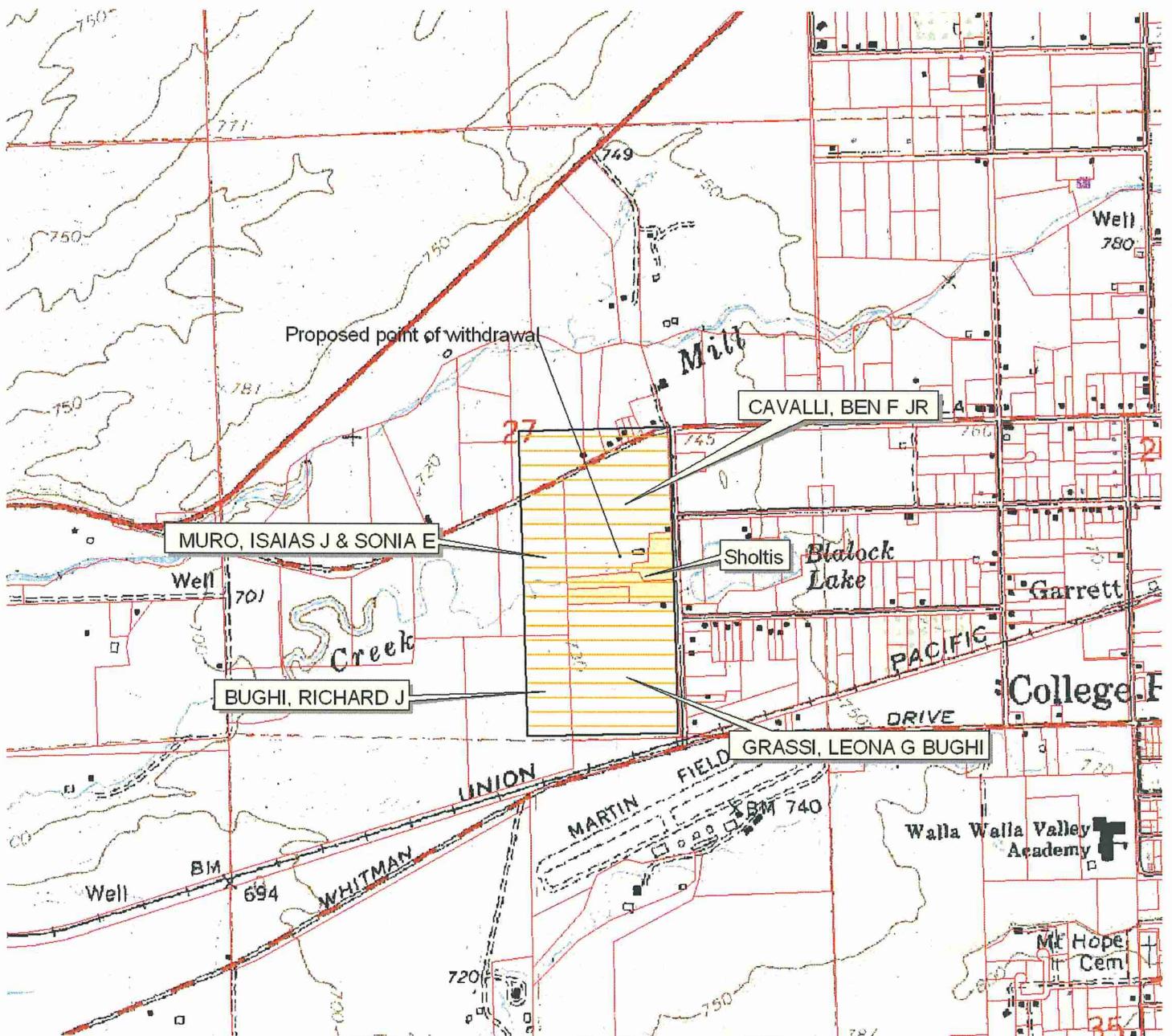
In considering the proposed change, the investigation included, but was not limited to, research and review of (1) appropriate rules and statutes; (2) Adj. Cert. No. 283 (A) and records of other water rights/claims/applications in the vicinity; (3) water well reports for wells in the vicinity; (4) USGS topographic maps and vicinity/plat maps; (5) aerial photographs, (6) discussions with regional program staff; and (6) site visits conducted by Bill Neve.

**Project Description**

A field examination was conducted by Bill Neve with Ben Cavalli on July 5, 2005. A subsequent visit was made with an adjacent landowner, Mr. Al Sholtis, on August 28, 2005. The project site is located approximately 1 mile west of College Place, Washington, at the headwaters of Lower Cold Creek.

Lower Cold Creek originates where two outfalls from what is known as Blalock Lake, connect together with springs just below (west) of the Lake, and then flows westward approximately 2.5 miles and empties into Mill Creek. Mr. Cavalli's current point of diversion exists at the point where these outfalls connect together with the spring to form a single channel. Adj. Cert. No. 283 originally issued authorizing the irrigation of 57 acres, from a pump located at these springs. In 1966, the right was segregated, consistent with landowner agreements, through Certificate of Change No. 900. This change split the right such that a 26.5 acre share went to property currently owned by Leona Bughi (Grassi), with the remaining 30.5 acres of this right left for use on the lands under consideration for this change. Certificate of Change No. 900 can be considered to be Adj. Cert. No. 283 (B), while the remaining portion of the right is identified as Adj. Cert. No. 283 (A).

According to Walla Walla County Assessor records, Mr. Cavalli owns approximately 18.25 acres within the authorized place of use of Adj. Cert. No. 283 (A). The only other landowner that has used water under this right in recent years is Mr. Al Sholtis, who owns approximately 7.5 acres within the place of use of this right.



### Existing Water Rights/Claims

The subject water right for this application authorizes the diversion of water as follows:

#### Walla Walla River Adjudication Certificate No. 283(A)

**Priority Date:** 1885 (Class 23)  
**Source:** Lower Cold Creek  
**Quantities:** 0.407 cubic feet per second (cfs) from April 1 to July 1; 0.305 cfs from July 1 to October 1; and 0.610 cfs from October 1 to April 1, when authorized  
**Purpose of Use:** Irrigation of 30.5 acres  
**Diversion Point:** NE¼SE¼ of Sec. 27, T. 7 N., R. 35 E.W.M.

Ecology records show no other water rights appurtenant to the subject place of use.

#### Evaluation of Walla Walla Adjudication Certificate No. 283(A)

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. While the Superior Court, through an adjudicative process, is the only authority that can make a final determination as to a water right's extent, validity and priority, Ecology can make a tentative determination of these factors for purposes of making decisions on change applications.

A review of Farm Service Agency records shows that of the 18.26 acres owned by Mr. Cavalli within the authorized place of use of Adj. Cert. No. 283 (A), 17.2 acres have been cropped and irrigated. Walla Walla County Assessor records show Mr. Sholtis owning 7.46 acres, of which approximately 2 have been irrigated. The remaining land within the place of use of this right consists of (1) a ~ 650 foot wide strip of land that runs adjacent to, and west of, the Sholtis and Cavalli properties, and (2) a triangular-shaped parcel lying north of Wallula Road.

The first parcel is currently owned by Isaias Muro. Water under this right has not been used on these lands since at least the mid 1980's. Relinquishment of two other rights which overlapped the Muro parcel was initiated in 1994, and

upheld on appeal by the Pollution Control Hearings Board in 1995. That portion of this right appurtenant to the Muro parcel is subject to relinquishment. A relinquishment order will be sent concurrent with this decision.

The second parcel is located north of Wallula Road. It does not appear that water under Adj. Cert. No. 283 (A) has ever been used on these lands. This parcel is currently being irrigated under Walla Walla River Adjudication Certificate No. 198, which authorizes the diversion of water from Mill Creek for the purpose of irrigation. This land will be removed from the authorized place of use of Adj. Cert. No. 283 (A).

Adj. Cert. No. 283 (A) originally authorized the diversion of up to 5 acre-feet per year. The Washington State Irrigation Guide (WA210-VI-WAIG, October 1985) was used to find the water requirement for the highest water use crops grown recently on the Cavalli/Sholtis parcels. Mr. Cavalli has typically double cropped on these lands, growing Walla Walla sweet onions, followed by fall spinach. The Irrigation Guide shows a net irrigation requirement of 30.92 inches for onions, and 5.72 inches for spinach. The combined water requirement then is 36.64 inches per acre. At a 70% system efficiency for hand line/wheel line sprinklers, there is a total water requirement of 52.34 inches per year per acre, or the equivalent of 4.36 acre-feet per acre. This results in an allocation of 75 acre-feet per year for the irrigation of 17.2 acres.

For Mr. Sholtis' two acres of pasture, the Irrigation Guide recommends an allocation of 34.83 inches per acre. Again, using a 70% system efficiency for hand line sprinklers, the total irrigation requirement is 49.75 inches per acre per year, or 4.15 acre feet per year. This results in an allocation of 8.30 acre-feet per year for the irrigation of 2 acres.

The full instantaneous quantities (cfs/gpm) authorized under Adj. Cert. No. 283 (A) have been put to beneficial use. These quantities would be divided proportionately between Mr. Cavalli and Mr. Sholtis.

The difference between the annual quantities beneficially used and those which issued under the original certificate, being 69.2 acre-feet and 11.3 acres of irrigation, are tentatively determined to be relinquished.

### **Assessment of the Proposed Change**

Changes to surface water rights are governed by RCW 90.03.380, which state, in part, that the holder of a valid surface water right may change the point of diversion for a beneficial use of water, if such change can be made without detriment or injury to existing water rights. In this particular case, it must also be determined that a high degree of hydraulic connection exists between the well and the ditch such that the water withdrawn from the well could essentially be considered the same as if it were coming out of the ditch.

### **Hydrology**

The proposed point of diversion 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.

The proposed withdrawal (diversion) point is an existing well located approximately 10 feet to the north of the current point of diversion. The water well report shows the well being drilled through gravel and clays to a depth of 160 feet below land surface. The casing was perforated from 26 to 155 feet, and the static water level measured 15 feet below the top of the casing on August 12, 2002.

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.

Analytical stream depletion modeling performed on gravel aquifer wells within the basin in the recent past has shown a direct hydraulic connection between many gravel aquifer wells and surface waters of the basin. A review of published reports and studies of the ground water resources of the basin was conducted. All the material reviewed emphasized a high degree of connection between the gravel aquifer and surface waters of the basin. The Walla Walla Basin Management Program also recognizes the hydraulic connection between the gravel aquifer and surface waters of the basin by requiring that: "New appropriators of ground water will be required to locate wells outside the zone of direct hydraulic continuity between a surface water stream and the ground water aquifer." (WAC 173-532-050). The context of this requirement is the fact that surface waters of the basin have been fully appropriated, and surface waters of the basin have been closed to new appropriations (WAC 173-532-040). Any additional impact to surface waters through issuance of a new water right or change to an existing water right will likely cause impairment to existing surface water right holders or otherwise appropriate some water from a stream that, by closure, has no water available.

Through evaluation of a new water right application in 1994, which requested the withdrawal of water from a well located 90 feet north of Lower Cold Creek and approximately ½ mile below the subject well, a hydraulic connection was established between the gravel aquifer and Lower Cold Creek. This application was denied primarily on the basis of this hydraulic connection, in that surface waters within the Walla Walla River Basin are fully appropriated, and any

additional withdrawal/diversion of surface water will impair existing water rights. The establishment of this hydraulic connection, and the decision to deny the application, was upheld by the Pollution Control Hearings Board in 1995.

It is reasonable to assume from the above-described information that the subject well is hydraulically connected to the surface water source. Pumping well water can affect groundwater movement by lowering pressure and heads, by reducing groundwater storage, and by changing rates of groundwater recharge and discharge. The interrelationship can be quite complex and effects are sometimes difficult or impossible to measure in the field. Also, pumping groundwater may not have a discernable effect on surface water until considerable time has passed, depending upon the conditions. This delay becomes important in evaluation of the potential impairment or injury of the change to existing water rights.

### **Impairment/Injury to Existing Water Rights**

Adj. Cert. No. 283 (A) is the first water right diversion on Lower Cold Creek, and, with a 1885 priority date, is also the most senior right on the stream. Change requests to move pumps from streams to hydraulically connected wells are most often denied on the basis that impairment will be created to downstream surface water rights through a delay in transit time if the subject right were regulated in favor of senior downstream rights. In this particular instance, the subject right is senior enough in priority that it should never be regulated in favor of senior downstream rights, as they currently exist. Therefore, a delay in the effect of cessation of pumping from the well on Lower Cold Creek should not impair any existing rights downstream, as they are all junior to the subject right. Depending upon the precise timing of the effects of pumping from the well on the creek, this change could conceivably improve instream conditions if the effects were delayed into the higher flow non-irrigation season.

There are numerous gravel aquifer wells in the vicinity of the proposed point of withdrawal, the closest being approximately 200 feet to the east. Ecology records show no reports of well problems or interference between wells in the vicinity of this proposal.

The change, as requested, would limit withdrawal of water from the proposed well to that quantity of water authorized by the right that is physically available for diversion at the current pump site within Lower Cold Creek. The purpose of this requirement would be to prevent water from being withdrawn in excess of that available within the stream.

### **FINDINGS**

Applications for change of water rights permits and certificates are governed by RCW 90.03.380 which state in part that: the holder of a valid surface water right to may, without losing priority of right, change the point of diversion of a water right, provided that:

- The change must not cause detriment or injury to existing rights;
- A valid right/claim exists that is eligible to be changed;
- The change shall not allow for the enhancement of the right perfected under the original certificate.

### **No Detriment/Injury to Existing Rights**

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

Provided the withdrawal of water from the proposed well is consistent with the provisions and limitations under which such a change would be granted, the proposed change would not impair or create injury to any downstream water rights.

### **No Enhancement of the Original Right**

The proposed change would not enhance the original right, provided the well were regulated consistent with how the right would be regulated if pumped from the original point of diversion on Lower Cold Creek.

### **A Valid Right Exists that is Eligible to be Changed**

For purposes of acting on the subject application, a tentative determination as to the extent and validity of the subject water right was made, the result of which determined that the quantities of water available for this change are as follows:

Adj. Cert. No. 283 (A) – (Cavalli) 0.36 cubic feet per second from April 1 to July 1; 0.27 cubic feet per second from July 1 to October 1; and 0.55 cubic feet per second, when allowed, from October 1 to April 1, 75 acre-feet per year, for the irrigation of 17.2 acres.

Adj. Cert. No. 283 (C) – (Sholtis) 0.04 cubic feet per second from April 1 to July 1; 0.03 cubic feet per second from July 1 to October 1; and 0.06 cubic feet per second, when allowed, from October 1 to April 1, 8.3 acre-feet per year, for the irrigation of 2 acres.

(Note: Part (B) of Adj. Cert. No. 283 is represented by Certificate of Change No. 900)

### Same Source of Water

The proposed new diversion point (a well) would essentially pump water from the same source as the original right.

### CONCLUSION

It is the conclusion of this examiner that, in accordance with RCW 90.03.380, an existing, valid right is eligible to be changed; that the change would not result in an unauthorized enhancement or enlargement of the original water right; that the change, if approved, would not create an impairment/injury to existing water rights. The difference between the quantities of water and acres listed on the original certificate and those approved herein based on beneficial use are relinquished.

This right shall be divided between Mr. Cavalli and Mr. Sholtis reflecting their proportionate allocations of this right, as outlined above. Mr. Sholtis intends to continue to use water from the existing point of diversion. As both parties need to install meters, separate authorizations with development schedules shall be prepared for each.

### RECOMMENDATIONS

It is recommended that this application to add a point of diversion from a surface water ditch to a hydraulically connected well be approved, subject to the following provisions:

“This authorization adds a point of diversion (to a hydraulically connected well) as provided by Chapter 90.03.380 RCW, and when perfected will supersede Walla Walla Adjudication Certificate No. 283, recorded in Vol. 4 of Water Right Certificates at Page 283 and dated August 20<sup>th</sup>, 1929, as modified by Certificate of Change No. 900, dated May 5<sup>th</sup>, 1966.”

“This authorization results in the division of Walla Walla River Adjudication Certificate No. 283 into three parts:

Adj. Cert. No. 283 (A) – (Cavalli) 0.36 cubic feet per second from April 1 to July 1; 0.27 cubic feet per second from July 1 to October 1; and 0.55 cubic feet per second, when allowed, from October 1 to April 1, 75 acre-feet per year, for the irrigation of 17.2 acres.

Adj. Cert. No. 283 (C) – (Sholtis) 0.04 cubic feet per second from April 1 to July 1; 0.03 cubic feet per second from July 1 to October 1; and 0.06 cubic feet per second, when allowed, from October 1 to April 1, 8.3 acre-feet per year, for the irrigation of 2 acres.

Adj. Cert. No. 283 (B) – (Bughi/Grassi) The third portion of the original right is documented through Certificate of Change No. 900: 0.353 cfs April 1 to July 1; 0.265 cfs July 1 to October 1; 0.530 cfs October 1 to April 1, when allowed, for the irrigation of 26.5 acres. This portion of the right was not involved in this change.”

“When the supply of water for irrigation purposes from April 1 to October 1 is insufficient in the Walla Walla River Valley to fill any adjudicated surface right, the owner of such a right is entitled to divert water during the period of October 1 to April 1.”

“Water available under this authorization may not provide a continual supply throughout each irrigation season.”

"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 for the actual crop(s) grown on the number of acres and the place of use specified."

"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."

"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."

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

"A Superseding Certificate will not be issued until a final examination is made. Quantities of water authorized for use and/or acres irrigated may be reduced at the time of issuance of a final water right certificate commensurate with those quantities actually diverted/withdrawn and put to beneficial use and/or number of acres actually irrigated."

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 monthly. The maximum rate of diversion/withdrawal and the annual total volume shall be submitted to Ecology by January 31st of each calendar year.

The following information shall be included with each submittal of water use data: owner, contact name if different, mailing address, daytime phone number, WRIA, Permit/Certificate/Claim No., source name, annual quantity used including units of measurement, maximum rate of diversion including units of measurement, monthly meter readings including units of measurement, peak monthly flow including units of measurement, Department of Health WFI water system number and source number(s), purpose of use, fish screen status, well tag number, open channel flow or pressurized diversion, other, and period of use. In the future, Ecology may require additional parameters to be reported or more frequent reporting. Ecology prefers web based data entry, but does accept hard copies. Ecology will provide forms and electronic data entry information.

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".

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.

Dated at Spokane, Washington this    day of   , 2009.

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Bill Neve - Watermaster  
Water Resources Program  
Walla Walla Field Office-Eastern Region

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