



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

**TRUST WATER RIGHT
REPORT OF EXAMINATION**
Permanent Purchase of the Water Right
WRTS File #: CG3-34260J

PRIORITY DATE	CLAIM NO.	PERMIT NO.	CERTIFICATE NO.
August 13, 1919			Touchet River Adjudicated Surface Water Certificate No. 260

NAME OF PARTY CONVEYING RIGHT TO TRUST WATER RIGHTS PROGRAM		
Washington Water Trust, c/o Amanda Cronin (representing land owner Melvin Lewis Talbott)		
ADDRESS/STREET	CITY/STATE	ZIP CODE
1530 Westlake Ave. N. Suite 400	Seattle, Washington	98109

TRUST WATER RIGHT ATTRIBUTES

SOURCE		
Touchet River		
TRIBUTARY OF (IF SURFACE WATERS)		
Walla Walla River		
MAXIMUM CUBIC FEET PER SECOND	MAXIMUM GALLONS PER MINUTE	MAXIMUM ACRE FEET PER YEAR
2.20	N/A	193.65
QUANTITY, TYPE OF USE, PERIOD OF USE		
1.466 cubic feet per second from April 1 to September 15, and 2.20 cubic feet per second from September 15 to April 1 each year, for instream flow		

HISTORIC POINT OF DIVERSION OR WITHDRAWAL

APPROXIMATE LOCATION OF HISTORIC DIVERSION/WITHDRAWAL					
The NE¼ of the NW¼, Section 2, Township 9 N., Range 35 E. W.M.					
LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION)	SECTION	TOWNSHIP	RANGE [E. or W.] W.M.	WRIA	COUNTY
NE¼NW¼	2	9 N.	35 E.	32	Walla Walla
PARCEL NUMBER	LATITUDE	LONGITUDE	DATUM		
350902210003					

AFFECTED REACHES--DESCRIPTION OF PLACE OF USE

[See Attachment 1 for map of the trust water right location.]

The primary reach instream flow is located as:

Start point: GPS-- Latitude 46.29198N; Longitude -118.39655W (WGS 84 datum) Approximately 31 river miles from the mouth of the Touchet River, where it discharges into the Walla Walla River

End point: Approximately 30.2 river miles from the mouth of the Touchet River.

The secondary reach instream flow is located as:

Start point: 30.2 river miles from the mouth of the Touchet River

End point: 29.7 river miles from the mouth of the Touchet River

TRUST WATER RIGHT TERM

BEGIN DATE	END DATE
March 11, 2009	Permanent

Provisions related to the Trust Water Right:

Consistent with RCW 90.42.080(1)(a), this Trust Water Right shall be managed by Ecology as an instream flow right for the Touchet River, as described on this Trust Water Report. Consistent with Trust Water Management provisions in the following ROE report.

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 or detrimental to the public interest.

Therefore, I ORDER the requested change of place and purpose of use under Trust Water Right Application No. CG3-34232J, be approved subject to existing rights and the provisions specified 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:		Deliver your appeal in person to:
The Pollution Control Hearings Board PO Box 40903 Olympia, WA 98504-0903	OR	The Pollution Control Hearings Board 4224 – 6 th Ave SE Rowe Six, Bldg 2 Lacey, WA 98503

2. To serve your appeal on the Department of Ecology

Mail appeal to:		Deliver your appeal in person to:
The Department of Ecology Appeals and Application for Relief Coordinator PO Box 47608 Olympia, WA 98504-7608	OR	The Department of Ecology Appeals and 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 N. Monroe Street
Spokane, WA 99205

Signed at Spokane, Washington, this 12th day of January, 2010.

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

BACKGROUND

Description and Purpose of Proposed Change

Two trust water right applications for Touchet River Adjudicated Certificate (TRAC) Nos. 232 and 260 were submitted by Amanda Cronin of the Washington Water Trust, on behalf of Melvin Lewis Talbott, to the Department of Ecology on March 11, 2009. The applicant proposes to place both TRAC Nos. 232 and 260 into the Washington State Trust Water Program. The proposed trust water right projects are a permanent acquisition (purchase). The entirety of the two water rights will be transferred to the Washington State Trust Water Program for instream flow purposes and for the benefit of fish and wildlife in the Touchet River.

The permanent purchase of TRAC No. 232 acquires the quantity of water in terms of instantaneous flow (Qi) of 1.466 cubic feet per second (cfs) from April 1 to September 15 and 2.200 cfs from September 15 to April 1 each year. The previous five (5) years (2004 to 2008) of water usage data were evaluated to estimate the consumptive use in order to determine the amount of water available to place into the Trust Water Program.

The Walla Walla River Basin provides habitat to two salmonid species listed under the Endangered Species Act (ESA) as threatened; steelhead and bull trout. Basin surface waters are over appropriated, in that most years there are water rights in excess of water available to fill those rights during the summer months. Significant amounts of time, effort and money have been invested within this basin by local, state, federal and tribal interests to restore and preserve habitat conditions for these species. Instream flow has been identified as a primary limiting factor to species recovery in multiple water related plans which have been completed for this basin in recent years, including the Bonneville Power Administration Subbasin Plan, Snake River Region Salmon Recovery Plan, and the Walla Walla Watershed Plan, among others. As important as improving instream flow conditions in basin streams are the necessity to prevent further degradation of those flows. This project is expected to enhance instream flows in the lower Touchet River and benefit all life stages of ESA listed steelhead and bull trout as well as re-introduced Spring Chinook.

This application qualifies for expedited processing under WAC 173-152-050(3)(a) whereby water right change applications may be processed prior to applications submitted at an earlier date when the proposed water use, if approved, would be non-consumptive and would substantially enhance or protect the quality of the natural environment.

Attributes of the Certificate and Proposed Change

Table 1 Summary of Existing Attributes and Proposed Changes to Water Right TRAC No. 260

Attributes	Documented	Proposed
Name	F. D. Sharp	Washington Water Trust
Priority Date Date of Application for Change	August 13, 1918	March 5, 2009
Instantaneous Quantity	1.466 cfs from April 1 to September 15 2.20 cfs from September 15 to April 1	Same
Annual Quantity	6 acre-feet per acre per year (660 acre-feet/year)	Same
Source	Lower Touchet River	Same
Point of Diversion/Withdrawal	NE¼NW¼ of Sec. 2, T. 9 N., R. 35 E.W.M.	Same
Purpose of Use	Irrigation of 110 acres	instream flow
Period of Use	April 1 to September 15;September 15 to April 1	Same
Place of Use	W½ of the NW¼ of the NE½ of the NW¼ of Sec. 1, T. 9 N., R. 35 E.W.M. Also the S½ of the S½ of Sec. 25, T 10 N., R. 35 E.W.M., less 2 rod strip off east side thereof. Also the N½ of the S½ of said Sec. 35	31 river miles of lower Touchet River

The second water right which will also be placed into the Trust Water Program and its existing attributes are listed in Table 2 below:

Table 2 Summary of Existing Attributes and Proposed Changes to Water Right TRAC No. 232

Attributes	Documented	Proposed
Name	F. D. Sharp	Washington Water Trust
Priority Date Date of Application for Change	1912	March 5, 2009
Instantaneous Quantity	1.466 cfs from April 1 to September 15 2.20 cfs from September 15 to April 1	Same
Annual Quantity	6 acre-feet per acre per year (660 acre-feet /year)	Same
Source	Lower Touchet River	Same
Point of Diversion/Withdrawal	NE¼NW¼ of Sec. 2, T. 9 N., R. 35 E.W.M.	Same
Purpose of Use	Irrigation of 110 acres	instream flow
Period of Use	April 1 to September 15; September 15 to April 1	Same
Place of Use	W½ of the NW¼ of the NE½ of the NW¼ of Sec. 1, T. 9 N., R. 35 E.W.M. Also the S½ of the S½ of Sec. 25, T. 10 N., R. 35 E.W.M., less 2 rod strip off east side thereof. Also the N½ of the S½ of said Sec. 35	31 river miles of lower Touchet River

Legal Requirements for Proposed Change

The following is a list of requirements that must be met prior to authorizing the proposed change from irrigation to instream flow enhancement.

- **Public Notice**

A notice of application was duly published in accordance with RCW 90.42.040(5) in the Walla Walla Daily Bulletin on July 26 and August 2, 2009. No protests or objections were received.

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

This application is not exempt from the provisions of the State Environmental Policy Act (SEPA), Chapter 43.21 RCW, due to the fact that the cumulative quantities of water for this project under all water rights, including those proposed for trust water herein, constitute a withdrawal of more than one (1) cubic foot per second. The Department of Ecology (Ecology), acting as lead agency, determined that the subject action does not have a significant adverse impact on the environment and an environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). A final Determination of Non-Significance was issued by Ecology on September 10, 2009.

- **Water Resources Statutes and Case Law**

This application is subject to legal requirements in statute, administrative rules, and relevant case law which must be considered prior to issuance of the requested change(s). Among these legal requirements:

- 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 90.03.380(1) allows for a water right that has been put to beneficial use to be changed. The point of diversion, place of use, and purpose of use may be changed if the change would not result in harm or injury to existing water rights.

- RCW 90.14.160 states that any person entitled to divert water through an appropriation authorized through a general adjudication, who abandons or voluntarily fails, without sufficient cause, to divert all or any part of said right for a period of five successive years after July 1, 1967, shall relinquish such right or portion thereof, to the state.

INVESTIGATION

Site Inspection

On May 29, 2009, upon proper advance notice given to the applicant, Mr. Melvin Lewis Talbott, Ecology representatives, Ying Fu and Bill Neve, along with Amanda Cronin, with Washington Water Trust, met Mr. Talbott and his family at his property. We asked him questions regarding the crops he planted, and history of the water use in the past five years. We walked to the river intake point where he installs his pumps each year, and checked the pump meter panel which showed the pumping records. We took some pictures at the point of diversion, of the meter panel, and of some handline irrigation pipes and sprinklers.

The point of diversion at the Touchet River was measured and recorded as: Latitude 46.29198 N.; Longitude 118.39655W. This measured location is little off from the point of diversion listed in the original water right certificate. The elevation lift was about 20 feet from the river intake, and the pump capacity (Qi) was approximately 3 cfs. It appears that the applicant has the ability to pump up to the certificated Qi amount of 2.20 cfs. The total authorized acreage for the two water rights is a combined 220 acres. The applicant has a total of 388 acres of farm land, of which approximately 350 acres are cropland. The irrigation system consists of two pumps (one 40-HP and one 50-HP) and hand line sprinkler systems. Historical irrigated acreages varied from year to year depending on the crops that were planted each year.

History of Water Use

In the trust water application, the applicant supplied the following information:

Mr. Talbott has irrigated wheat on 220 acres for 20 years. Occasionally he has alternated with other crops such as soybeans and alfalfa. During the last two irrigation seasons (2008 and 2007) he has also irrigated 11 acres of alfalfa seed on the north side of Highway 124. He generally irrigates April through June or July and does some winter watering beginning in October to build up the soil moisture profile.

Direct water use meter records at the point of diversion were not available. Electrical records for the two pumps were provided by the applicant. These power/electrical usage records don't include the household domestic use. Aerial photos for the years of 2004, 2005 and 2006 (Attachments #2, #3 and #4) were used to evaluate the crops grown each year. Aerial photos for the years 2007 and 2008 are not available.

Cropping data from Farm Services Agency with Department of Agriculture was also used to evaluate the irrigated acres and non-irrigated acres each year. Mr. Talbott also provided the cropping information from year 2004 through 2008. The acreages planted are consistent with the Farm Services Agency data. However, it is not clear what crops were irrigated and what crops were not irrigated each year from his submittal. The State of Washington Irrigation Guide was also used to calculate the water quantity needed to grow each crop.

The summary sheet for the power/billing record is attached as Attachment #5 with this Report of Examination (ROE). The average annual usage quantity Qa (acre-feet) was calculated and listed in the table in Attachment #5. Given the total irrigated land of 220 acres, the calculated acre-feet per acre per year data is also listed in the table to compare with the certificated maximum of 6 AF (acre-feet) per acre per year. Notice in the second table in Attachment #5, three (2004, 2007 and 2008) out of five years, the annual AF/acre exceeded the water right limit of 6 AF/acre. These data makes a case of either the power records are not correct, or the water usage has violated the terms of their water right certificate. Therefore, it is concluded that the power records will not be used when calculating the consumptive usage for the past five years.

Table 3 Farm Services Agency Cropping Record (Acres Planted):

<u>Year</u>	<u>Alfalfa</u>	<u>Soybean</u>	<u>Peas</u>	<u>Mustard Seed</u>	<u>Winter wheat</u>	<u>Spring Wheat</u>
2004				141.5 (Ni)	203.5 (Ni)	
2005					270 (Ir)	75 (Ir)
2006		35.4 (Ir)				309.6 (Ni)
2007	10 (Ir)	203.5 (Ni)				131.5 (Ni)
2008	10 (Ir)		137.2 (Ni)		189.7 (Ni)	

The applicant provided the cropping information from 2004 through 2008, and acreages planted for the year were consistent with the data provided from the Farm Services Agency above. The Ni indicates Non-irrigated crop for that year, and Ir indicates irrigated crop for the year from the Farm Services report.

Notice in Attachment #5, the year 2004 has the highest electrical usage, but Table 3 shows the crops in 2004 were all non-irrigated. The 2005 crop record indicates the largest irrigated acreages. By examining the power/billing

record closely, it shows all 2004 irrigation occurred in the fall: October, November and December for preparing the winter wheat which would be harvested in 2005 and counted for 2005 crop. Therefore it seems to be consistent with the fact that in 2005, the irrigated acreage for wheat was the highest due to the extensive irrigation activity in the fall of 2004.

Aerial photos

For the aerial photo taken in June of 2004, it appeared two crops were planted for approximately 140 acres and 203 acres which is consistent with the crop record in Table 3 (showing 141.5 acres of mustard seed and 203.5 acres of winter wheat). For the aerial photo taken in July of 2005, it appeared 75 acres were planted in the middle of the surrounding 270 acres which is consistent with crop record in Table 4 (showing 75 acres of spring wheat and 270 acres of winter wheat). For the aerial photo taken in June of 2006, a small plot of 35 acres appears to be soybeans and the rest of field, about 309 acres is spring wheat. Aerial photos for 2007 and 2008 are not available, therefore the crop records cannot be verified for these two years.

Proposed Use

The proposed purpose of use is to transfer the entirety of the two water rights TRAC 232 and TRAC 260 into the Washington State Trust Water Program permanently, for instream flow purposes to benefit fish and wildlife.

Other Rights Appurtenant to the Place of Use

A review of Ecology records show two other water right certificates also appurtenant to the place of use of the TRAC No. 260. The Touchet River Adjudicated Certificate No. 232 has the same place of use as Touchet River Adjudicated Certificate No. 260, and is part of the same trust water project which is proposed to be put into permanent trust.

The other water right Touchet River Adjudicated Certificate No. 261 is a power generation water right certificate, which is appurtenant to the same place of use, but is not part of the project and will not interfere with this trust water project. Touchet River Adjudicated Certificate No. 261 does not appear to have been used for a long period of time and may be subject to relinquishment for non-use.

Hydrologic/Hydrogeologic Evaluation

The Touchet River is the largest tributary of the Walla Walla River in southeastern Washington. It originates above the town of Dayton, Washington, and passes through Waitsburg and Prescott before joining the Walla Walla River at the town of Touchet, Washington. The main Touchet River is formed by the confluence of the North Fork of the Touchet which originates in the vicinity of the Bluewood Ski Area, and the South Fork of the Touchet which originates at Deadman Peak. The forks join approximately 2 miles south and upstream of Dayton. The North Fork is approximately 25 miles long and the South Fork is approximately 20 miles long.

At the foot of the mountain slope, the river abruptly changes direction and flows westward to the Eureka Flats passing through the towns of Waitsburg and Prescott, after which it flows southward where it converges with the Walla Walla River at the town of Touchet. The valleys that dissect the Blue Mountains are mostly narrow, steep gradient canyons with streambeds composed of poorly sorted cobbles and gravels. As the North Fork Touchet flows toward Dayton and merges with the South Fork Touchet, the river gradient decreases and the channel becomes broader. The poorly sorted cobble and gravel streambed has increasing amounts of sand. As the Touchet River flows through the valley, the streambed materials grade into poorly sorted coarse gravels and cobbles with sand. West of Prescott, the Touchet River flows over basalt bedrock returning to poorly sorted coarse gravels and cobbles with sand after the river has turned south. The streambed materials alternate between poorly sorted alluvium and bedrock to the mouth of the Touchet River, where it discharges into the Walla Walla River. The Touchet River is 85 miles in length, drains 747 square miles and ranges in elevation from 6,074 feet at its headwaters to 420 feet above sea level at its confluence.

The USGS ran a streamflow gage on the Touchet River near the town of Touchet during the 1940s thru the mid 1950s. Mean annual flow for this period of record was 245 cfs. The lowest daily average flow occurred on September 14, 1944 at 7 cfs and the highest daily average flow occurred on February 1, 1949 at 9,000 cfs. August monthly average flows were typically 25 cfs or less at this gage.

The location where the enhancement of instream flows will take place is in the lower 31 miles of the Touchet River, in Water Resource Inventory Area (WRIA) 32. The land associated with this water right is located south of Highway 124 and approximately 22.8 miles west of the town of Prescott, Washington.

Trust Water Right Calculations

According to RCW 90.03.380 and RCW 90.42.080, quantification for acceptance into the Trust Water Program is determined by the extent and validity review, or by the highest consumptive use within the previous five years before the acquisition. This report uses the highest water consumptive use within the past five years to determine the eligible quantity, in terms of acre-feet (AF), to be accepted into the State Trust Water Program.

Ecology guidance document GUID-1210 gives further instruction in determining Consumptive and Non-Consumptive balance of the total water use. The attached Table #7 illustrated the irrigation application efficiency (Ea), and percent for consumptive use (CU) and return flows. Handline irrigation systems have an application efficiency of 75%; consumptive use out of the total use would be 85%, and the return flow would be 15% of the total. In summary, the formula to calculate the consumptive portion of the water use is as follows:

$$\text{acres planted} \times \frac{\text{Water need (from Irrigation guide) inch}}{12 \text{ inch/1ft}} \div \text{Ea} \times \text{CU} = \text{? acre-feet (AF)}$$

Previous 9 years of cropping data were obtained from Farm Services Agency, and are listed below:

Table 4 Cropping Data from Farm Services Agency (2000 to 2009)

<u>Year</u>	<u>Irrigated Crops</u>	<u>Non-Irrigated Crops</u>
2000		347.2 acres Wheat
2001		141.5 acres fallow, 205.7 winter wheat
2002	128.5 acres alfalfa	75 acres fallow; 141.5 spring wheat
2003	128.5 acres alfalfa, 216.5 acres wheat	
2004		141.5 Mustard seed, 203.5 acres wheat
2005	75 acres spring wheat, 270 acres winter wheat	
2006	35.4 acres soybean	309.6 acres spring wheat
2007	10 acres alfalfa	203.5 acres soybean, 131.5 acres spring wheat
2008	10 acres alfalfa	137.2 acres peas, 189.7 acres wheat

The applicant has been farming this land (approximately 345 acres crop land) more than 20 years. The data used to calculate the consumptive use of the past five (5) years are from 2004 and 2008. As noted in Table 4 from the Farm Services Agency crop records, the irrigated crops are noted as **Ir** and non-irrigated crops are noted as **Ni**. Their respective acreages planted and the specific crop water need by referencing The Washington State Irrigation Guide are detailed below:

2004: All crops are non-irrigated crops, therefore it is assumed there was no water usage.

2005: Irrigated crops are 75 acres of hard red spring wheat and 270 acres of soft white winter wheat. The State of Washington Irrigation Guide has no water usage guide for spring wheat. The winter wheat seasonal water need is about 18.64 inches for the growing season, therefore the consumptive use would be as following:

$$220 \times \frac{18.64 \text{ inch}}{12 \text{ inch/1ft}} \div 0.75 \times 0.85 = 387.3 \text{ AF (acre-feet)}$$

2006: According to Farm Services data 35.4 acres of soybean were irrigated and 309.6 acres of spring wheat were not irrigated. The irrigation guide for soybeans is 27.67 inches of water per growing season.

$$35.4 \times \frac{27.67 \text{ inch}}{12 \text{ inch/1ft}} \div 0.75 \times 0.85 = 92.5 \text{ AF}$$

2007: According to Farm Services Agency data, the 203.5 acres of soybeans were not irrigated. However, the applicant, Mr. Talbott, had written a letter to Ecology (Attachment #7) which stated that he planted the crop in early May, irrigated the crop in May, June and July, and harvested the crop in October. The power usage/billing record in 2007 has confirmed this claim. The irrigation guide for those three months of water needs are: 0.28 inch, 3.19 inch and 10.27 inch, therefore the total water usage for 203.5 acres of soybeans in 2007 were: 13.74 inches. In addition, 10 acres of alfalfa were planted with 32.85 inches water needed during the growing season according to irrigation guide.

$$203.5 \times \frac{13.74 \text{ inch}}{12 \text{ inch/1ft}} \div 0.75 \times 0.85 = 264.1 \text{ AF (for soybean)}$$

$$10 \times \frac{32.85 \text{ inch}}{12 \text{ inch/1ft}} \div 0.75 \times 0.85 = 31.0 \text{ AF (for alfalfa)}$$

2008: According to Farm Services data, only 10 acres of alfalfa were irrigated in 2008. The irrigation guide indicates 32.85 inch of water needed for the season to grow the crop:

$$10 \times \frac{32.85 \text{ inch}}{12 \text{ inch/1ft}} \div 0.75 \times 0.85 = 31.0 \text{ AF}$$

Based on the above information and calculations, Table 5 below lists the calculated results each year for total water usage and the consumptive usage.

Table 5 Calculated Results of Consumptive Use for TRACs 232 & 260

Year	Irrigated acres and crops used for calculation	Total Usage (AF)	Consumptive Use (AF)
2004	none	0	0
2005	220 acres winter wheat	455.6	387.3
2006	35.4 acres soybean	108.8	92.5
2007	203.5 acres soybean,+ 10 acres alfalfa	347.2	295.1
2008	10 acres alfalfa	36.5	31.0

The highest consumptive quantity was 2005 for **387.3 AF (acre-feet)** for both water right certificates of TRAC 232 and 260 with the combined irrigated acreage of 220 acres. Therefore the calculated consumptive use of 387.3AF is recommended to be accepted into the Trust Water Program. For each water right, half of 387.3 AF is determined to be the maximum Qa, and would be $387.3/2 = 193.65$ **AF per year**.

Trust Water Place of Use

Trust water use for instream flow is generally split into primary and secondary reaches in order to distinguish the contribution of return flows from a water use and the benefits of any reduction in consumptive water use. The annual quantity placed into Trust is calculated differently for a primary reach and secondary reach due to the effects of return flows.

The primary reach is the portion of a water body that benefits from both the former consumptive use and return flow waters of a trust water right. It is the reach between the original diversion point and the point where the last return flows re-enter the stream or river. The secondary reach is the portion of a water body that received return flow waters while the water right was exercised for its original out-of-stream purpose. The secondary reach therefore only benefits from the former consumptive portion of the trust water right. It is downstream from the point where return flows from the prior consumptive use under the water right re-entered the stream or river. RCW 90.42.020(2) and RCW 90.38.010(2)

Primary Reach

Using a drainage pattern analysis from the USGS topography map, the primary reach for this Trust Water is from the river intake (point of diversion) to the return point at approximately 0.8 miles downstream from the project site, and it is approximately 30.2 river miles from the mouth of the Touchet River, where it discharges into the Walla Walla River.

Secondary Reach

The secondary reach starts from the end of the primary reach and continues to approximately 0.5 miles further downstream according to the same drainage map, and it is approximately 29.7 river miles from the mouth of the Touchet River.

Trust Water Management

Consistent with RCW 90.42.080(1)(a), this Trust Water Right shall be managed by Ecology as an instream flow right for Touchet River as described in this Trust Water Report.

Compliance Inspections: Department of Ecology personnel, upon proper notice and presentation of credentials, shall have the right of entry at reasonable times, to the property to conduct post-acquisition compliance inspections. The inspection shall include, but not be limited to the following:

Verify all pumps and pipes have been removed from the original river in-take point and the conveyance system, so that the water diversion function from the river is permanently dismantled. Verify the meter panel, and irrigation related pipes, pumps and sprinklers have been permanently removed and the distribution system fully dismantled.

By accepting this transfer and change, the holder hereof consents to allow the Department of Ecology staff to conduct periodic compliance inspections through the life of the trust water right acquisition. Compliance inspections may also be performed by the Department of Fish and Wildlife in conjunction with post implementation habitat assessments.

Regulating illegal or wasteful uses: Ecology may regulate where unauthorized water use or wasteful practices interfere with or impair the Trust Water Right (RCW 90.03.005 and RCW 90.03.400).

Protecting trust water rights in primary and secondary reaches: Ecology may regulate a junior water right user within the primary reach who impairs the instantaneous rate of a senior Trust Water Right. In the secondary reach or upstream of it, Ecology may regulate a junior user who interferes with maintenance of the consumptive quantity outlined in the schedule in the trust water right.

Superseding Certificate: After the acquisition, Ecology will issue a superseding certificate to document the permanent trust water right acquisition. (RCW 90.42/040(2), RCW 90.38.040(1)); and update the Water Right Tracking System (WRTS) and Trust Water Right Database.

FINDINGS

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) 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 trust water has been evaluated as to the potential for impairment to existing water rights in the area. The water retained instream from the trust water right will be available to other water rights in accordance with seniority and no impairment of any water right will occur. The primary reach has been designated in part to avoid potential impairment to existing water rights. There is only one water right found in the primary and secondary reaches according to Ecology water right records. The TRAC No. 334 in the secondary reach of the project site, has not been active in the past several years according to former Ecology water master, Bill Neve, during a May, 2009 site investigation. Therefore there is no potential impact to this water right relating to the trust water project.

Public Interest Considerations

This trust water right will be used for instream flow enhancement, and to help implement the Walla Walla Watershed Plan and associated implementation strategies. Specifically, this trust water right with required permanent removal of pumping equipment, will improve the fish passage at the lower Touchet River, and riparian habitat enhancements.

Consideration of Protests and Comments

No protest or comments regarding this application were received.

CONCLUSIONS

It is the conclusion of this examiner that, in accordance with Chapter 90.42 RCW, the applications for trust water right under Touchet River Adjudicated Surface Water Certificate Nos. 232 and 260 will not impair existing water rights, will be beneficial to the instream flow of the lower Touchet River, and is not detrimental to the public interest.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend that the request to permanently place the Touchet River Adjudicated Certificate Nos. 232 and 260 in the quantities identified into Washington State Trust Water Program be approved, in the amounts of and within the limitations listed below and subject to the provisions listed in the Report of Examination.

Trust Water Right Attributes:

1.466 cfs, from April 1st to September 15th, and 2.20 cfs from September 15th to April 1st for instream flow enhancement purposes in the primary reach.

The primary reach begins at the original point of diversion, a GPS measurement of Latitude 46.29198N; Longitude -118.39655W, approximately 31 river miles from the mouth of the Touchet River, where it discharges into the Walla Walla River. The primary reach extends for approximately 0.8 miles down stream to approximately 30.2 river miles from the mouth of the Touchet River.

The secondary reach begins approximately 30.2 river miles from the Touchet River, and extends approximately 0.5 miles down stream at 29.7 river miles of the Touchet River.

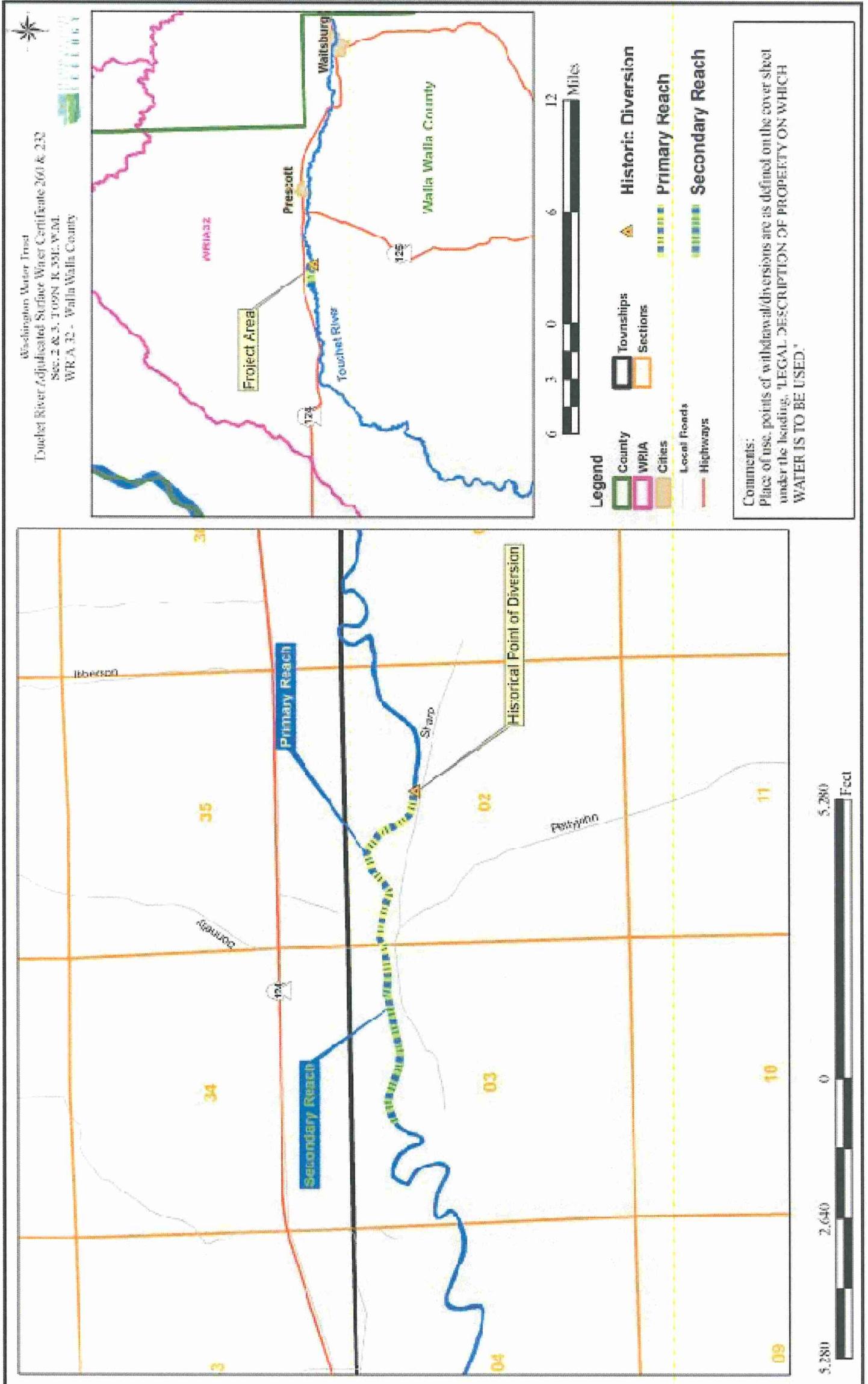
Based on an annual consumptive use analysis for the previous five years, an estimated **193.65 AF(acre-feet)** are being placed into the Trust Water Program for this water right TRAC 260.

Report by: Ying Fu
Water Resources Program

1-12-2010
Date

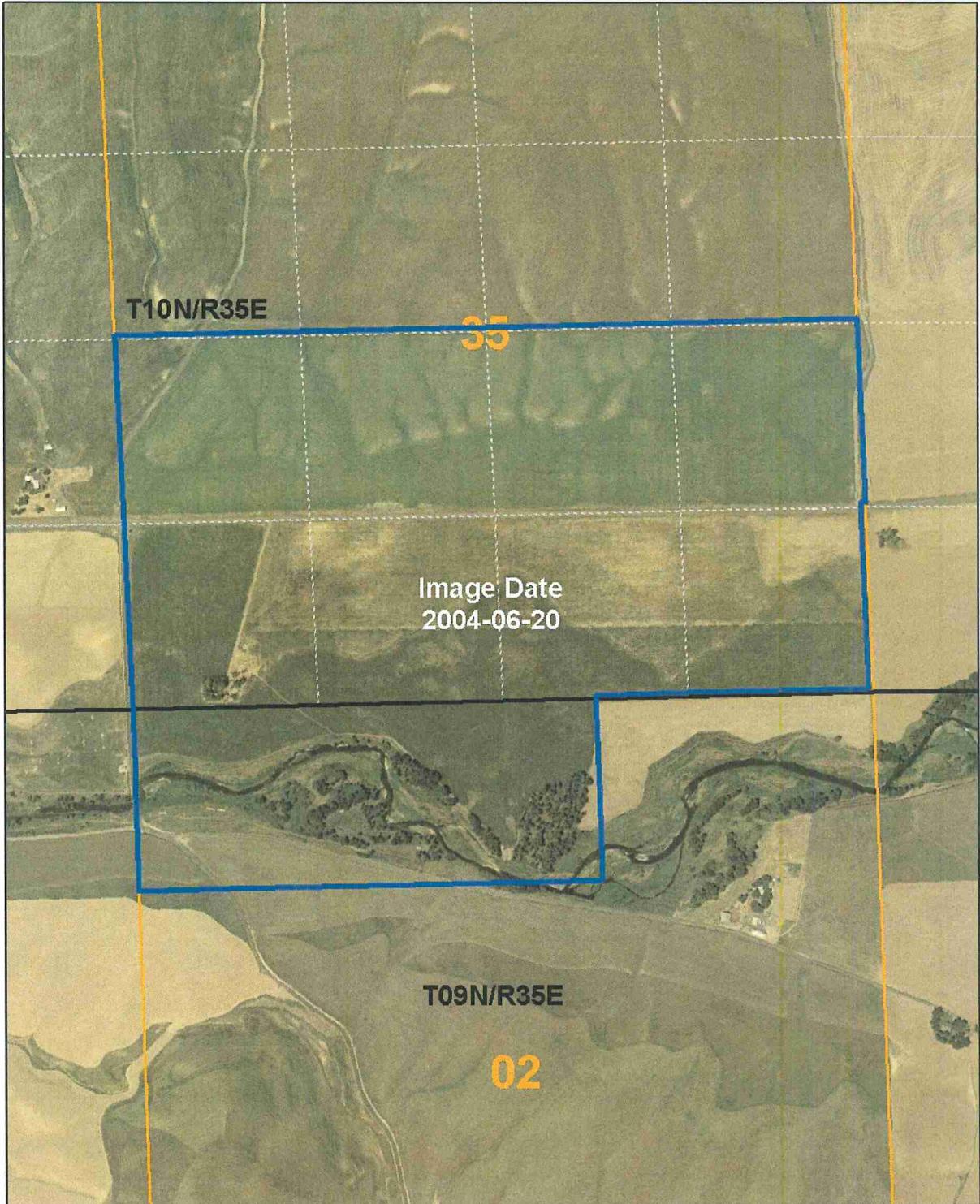
Y/Final Docs/ROEs/Fu 2010/TRAC 260

Attachment 1

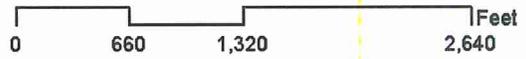


Attachment 2

Adjudicated Certificate 260 & 232



-  Township / Range
-  Section
-  qtrqtr lines
-  Former Place of Use

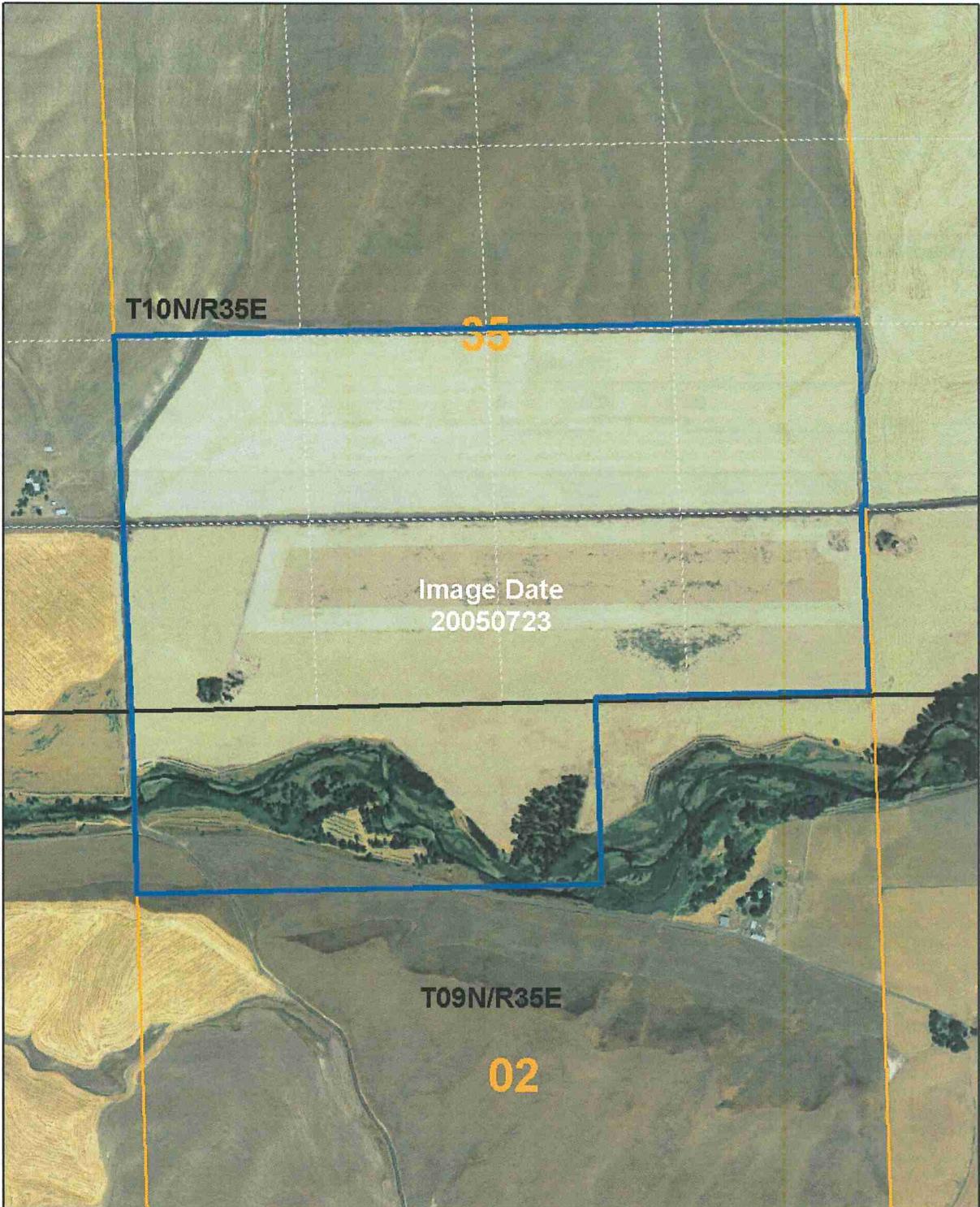


Comments:

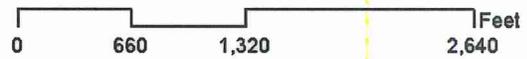
2004 Aerial Photo

Attachment 3

Adjudicated Certificate 260 & 232



- Township / Range
- Section
- qtrqtr lines
- Former Place of Use

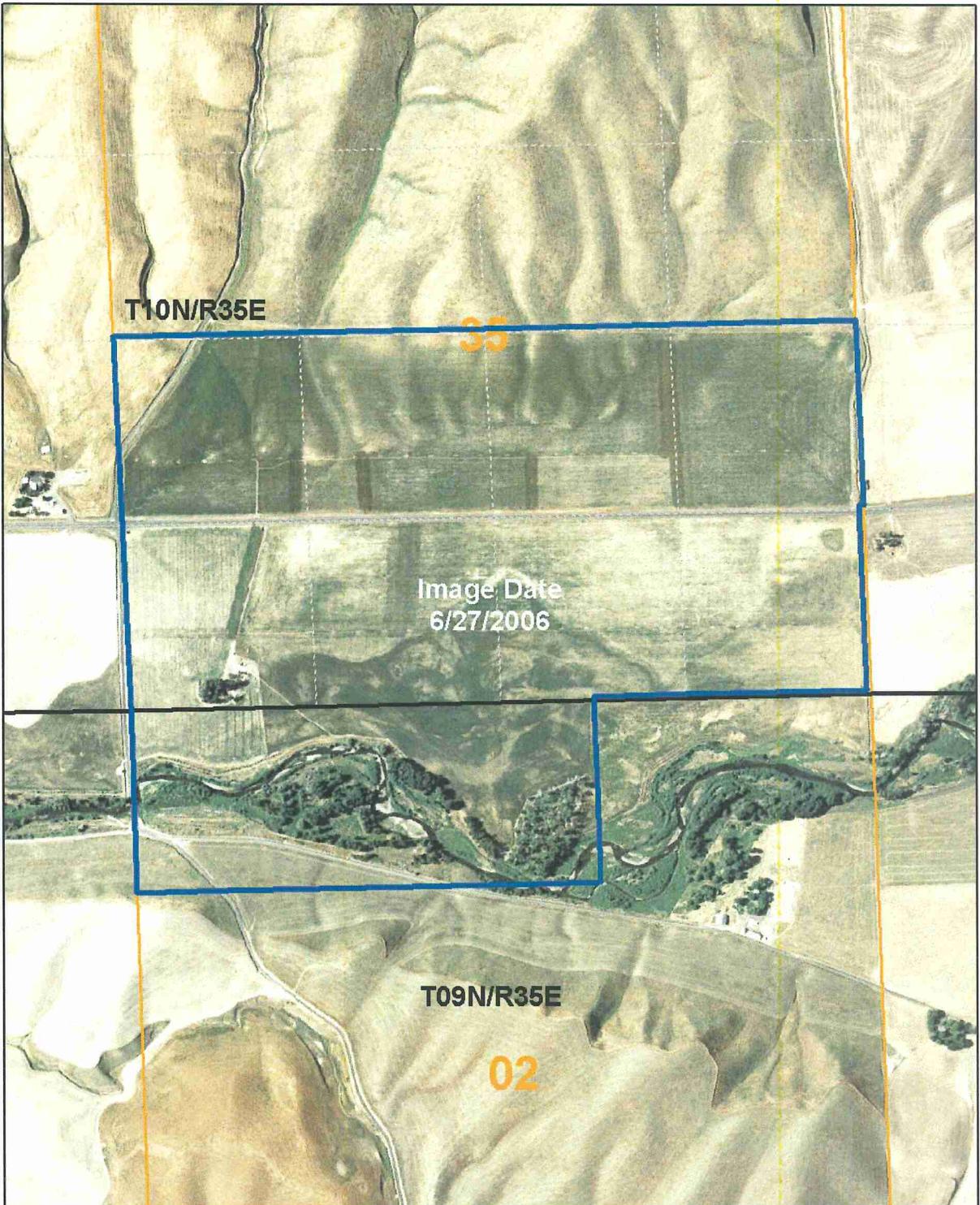


Comments:

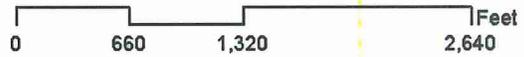
2005 Aerial Photo

Attachment 4

Adjudicated Certificate 260 & 232



- Township / Range
- Section
- qtrqtr lines
- Former Place of Use



Comments:

2006 Aerial Photo

Attachment 5

Washington Water Trust Irrigation Records Review

RE: Annual Quantity Calculations from Electrical Billing Records

Client: Lewis Talbott, 220 acres of irrigation

02-26-09

Table of annual volume calculations (2004-2008)

Season	Total KWH	Lower Total AF	Upper Total AF
2004	45,267	2,158	3,386
Oct		630	989
Nov		974	1,529
Dec		553	868
2005	11,161	532	835
May		532	835
2006	21,023	1,002	1,572
June		1,002	1,572
2007	30,307	1,445	2,267
May		127	199
June		907	1,423
July		411	645
2008	25,520	1,216	1,909
March		608	954
April		156	245
May		252	395
June		201	316

Upper AF
 $V = \frac{318,600(\text{KWH})(.85)(.90)}{10\text{ft.}(325,851)}$

Lower AF
 $V = \frac{318,600(\text{KWH})(.65)(.75)}{10\text{ft.}(325,851)}$

Annual Water Usage Quantity Estimated from Electrical Billing Records:

<u>Year</u>	<u>Total KWH</u>	<u>lower AF</u>	<u>Upper AF</u>	<u>Average AF</u>	<u>AF/acre</u>
2004	45,267	2158	3386	2772	12.6
2005	11,161	532	835	683.5	3.1
2006	21,023	1002	1572	1287	5.85
2007	30,307	1445	2267	1856	8.4
2008	25,520	1216	1909	1563	7.1

Table 1: Summary of Application Efficiency Ranges, Consumptive Use, and Return Flows¹

Method	Application Efficiency, E_a (%) ²		%Total Evaporated	% Total Use Consumed	Return Flow	
	Range	Average, $E_{a,avg}$	%Evap	%CU, Average ³	%RF, Average ⁴	
Surface:	Graded Furrow	50 – 80	65	5	70	30
	w/ tailwater reuse	60 – 90	75	5	80	20
	Level Furrow	65 – 95	80	5	85	15
	Graded Border	50 – 80	65	5	70	30
	Level Basins	80 – 95	85	5	90	10
	Flood	35 – 60	50	5	55	45
Sprinkler:	Periodic Move (Handline)	60 – 85	75	10	85	15
	Side Roll (Wheelline)	60 – 85	75	10	85	15
	Moving Big Gun	55 – 75	65	10	75	25
	Solid-Set—Overtree	55 – 80	70	15	85	15
	Solid Set—Undertree	60 – 85	75	10	85	15
	Pop-Up Impact	60 – 85	75	10	85	15
Center-Pivot	Impact heads w/end gun	75 – 90	80	15	95	5
	Spray heads w/o end gun	75 – 95	90	10	100	0
	LEPA ⁵ w/o end gun	80 – 98	92	5	97	3
Lateral-Move	Spray heads w/hose feed	75 – 95	90	10	100	0
	Spray heads w/canal feed	70 – 95	85	10	95	5
Microirrigation:	Trickle/Drip	70 – 95	88	5	93	7
	Subsurface Drip	75 – 95	90	0	90	10
	Microspray	70 – 95	85	10	95	5

1. Calculate the actual water use from water meter data, power meter, or run-time data. In the absence of such data, the TIR (total irrigation requirement) = CIR / E_a , where CIR is the crop irrigation requirement from the WIG (Appendix B) and E_a is the case-specific application efficiency above.
2. %Evap is the portion of the total irrigation requirement that is evaporated due to factors other than crop ET.
3. Select appropriate %CU based on type of irrigation system. If calculated E_a is greater or less than $E_{a,avg}$, then $\%CU = E_a + \%Evap$. $CU = TIR \times \%CU$.
4. Select appropriate %RF based on type of irrigation system. If calculated E_a is greater or less than $E_{a,avg}$, then $\%RF = 100 - \%CU$. $RF = TIR \times \%RF$
5. Low Energy Precision Application.

Attachment #7

9/08/2009

SEP 11 2009

Dear Amanda

DEPARTMENT OF ECOLOGY
EASTERN REGIONAL OFFICE

In regards to our conversation dealing with my 2007 crop of soy beans I would like to clarify details of my irrigation that year since the Farm Services Agency has a record of the crop being non irrigated. I planted 203 acres of soy beans the first of May 2007 and irrigated them in May, June and July..Harvest took place in October 2007. I really don't know why FSA has mistakenly listed them as non irrigated. It should be noted that soy beans would not survive in this dry climate without water.

Melvin Lewis Talbott

Melvin Lewis Talbott

Cc Ying Fu, Department of Ecology