DEPARTMENT OF ECOLOGY
State of Washington

State of Washington
REPORT OF EXAMINATION
FOR WATER RIGHT CHANGE

Changed Place of Use (POU)

PRIORITY DATE	WATER RIGHT NO.	CHANGE APPLICATION NO.
June 30, 1878	S4-83513-J	CS4-00477sb11i@1

MAILING ADDRESS
Harrell and Sons Farms, LLC
3121 Hanson Road
Ellensburg, WA 98926

Total Quantity Authorized for Diversion

DIVERSION RATE	UNITS	ANNUAL QUANTITY (AC-FT/YR)
1.84	CFS	626.8*

* Pursuant to RCW 90.03.380(1), the maximum annual consumptive quantity shall not exceed 82.91 ac-ft/yr to allow for the irrigation of additional acreage during periods of water shortage.

Purpose

PURPOSE	DIVERSION RATE AND PERIOD OF USE (MM/DD)	ANNUAL QUANTITY (AC-FT/YR)
Irrigation of 80 acres	1.84 cfs 04/01 – 06/30 0.92 cfs 03/01 – 03/31 and 07/01 – 10/31	626.8

Source Location

COUNTY	WATERBODY	TRIBUTARY TO	WATER RESOURCE INVENTORY AREA
Kittitas	Manastash Creek	Yakima River	39-UPPER YAKIMA

SOURCE FACILITY/DEVICE	PARCEL	TWN	RNG	SEC	QQ Q	LONGITUDE	LATITUDE
MWDA*	17-17-14010-0011	17 N.	17 E.W.M.	14	NW NE	-120.67691	46.96942

*Manastash Water Ditch Association

Datum: NAD83/WGS84

Approximately 500 feet south and 150 feet east from the north quarter corner of Section 14, T. 17 N., R. 17 E.W.M., Kittitas County.

Place of Use (See Attachment 1)

PARCELS (NOT LISTED FOR SERVICE AREAS)

17-18-05010-0001, 17-18-05020-0001, 17-18-05040-0004, 17-18-06010-0001, 17-18-07010-0001, 18-18-32040-0007, 18-18-32040-0010, 17-18-05050-0001, 17-18-05050-0002, 17-18-05050-0003, 17-18-05010-0009, 17-18-05010-0003, 17-18-05010-0004, 17-18-05010-0005, 17-18-05010-0006, 17-18-05040-0001, 17-18-05040-0002, 17-18-05040-0003, 17-18-05010-0007, and 17-18-07050-0002.

LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE

Within T. 17 N., R. 18 E.W.M:

Government Lots 3 & 4, and the NE¼, and the S½NW¼, and the N½SW¼ and the SW¼SW¼, plus that portion of the SE¼SW¼ lying north of Hanson Road, and the NW¼SE¼ and the N½NE¼SE¼, and the SW¼SE¼ lying north of Hanson Road, all within Section 5; the SE¼ of Section 6; and the NE¼NE¼NE¼ of Section 7;

AND

Within T. 18 N., R. 18 E.W.M:

The S½SE¼ of Section 32.

Proposed Works

The applicant requests to consolidate nine individual water rights that have separately defined (and in some cases overlapping) places of use. All nine change applications have been submitted as part of a sprinkler conversion project to facilitate water conservation goals under a cost-share agreement between Harrell and Kittitas County Conservation District (KCCD). As a requirement of the agreement, the saved water from delivery and on-farm irrigation improvements will be donated, through three separate change applications, to the Washington State Trust Water Rights Program in perpetuity for the enhancement of instream flows in Manastash Creek. In order to maximize water conservation from the farm irrigation improvements, consolidation of the places of use for the water rights was integral for the restoration project on Manastash Creek to progress.

Measurement of Water Use	
How often must water use be measured?	Weekly
How often must water use data be reported to Ecology?	Annually (Jan 31)
What volume should be reported?	Total Annual Volume
What rate should be reported?	Annual Peak Rate of Diversion (CFS)

Provisions

A. Combined Consumptive Use Limitation / Water Short Years

The annual consumptive quantity under authorization CS4-00477sb11i@1 is determined to be 82.91 ac-ft/yr. The combined annual consumptive quantity under this right and all other water rights addressed in the combined place of use change authorizations[1] shall not exceed the annual consumptive quantity of 1906.06 ac-ft/yr. During water short years, applicant's water rights, like all other Basin rights, may be subject to reduction or curtailment on the basis of seniority.

B. Measurements, Monitoring, Metering and Reporting

1. An approved measuring device must be installed and maintained for each of the sources identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use," WAC 173-173, which describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology for modifications to some of the requirements.

[1] CS4-00657sb11a, CS4-00657sb11c@1, CS4-00477sb11a, CS4- 00477sb11c, CS4-00477sb11e, CS4-00477sb11f, CS4-00477sb11g, CS4-00477sb11h, and CS4-00477sb11i@1.

2. Recorded water use data shall be submitted via the Internet. To set up an Internet reporting account, contact the Central Regional Office. If you do not have Internet access, you can still submit hard copies by contacting the Central Regional Office for forms to submit your water use data.

C. Department of Fish and Wildlife Requirement(s)

The intake(s) must be screened in accordance with Department of Fish and Wildlife screening criteria (pursuant to RCW 77.57.010, RCW 77.57.070, and RCW 77.57.040). Contact the Department of Fish and Wildlife, 600 Capitol Way N, Olympia, WA 98501-1091. Attention: Habitat Program, Phone: (360) 902-2534 if you have questions about screening criteria. http://wdfw.wa.gov/about/contact/

D. Water Use Efficiency

The water right holder is required to maintain efficient water delivery systems and use of up-to-date water conservation practices consistent with RCW 90.03.005.

E. Schedule and Inspections

Department of Ecology personnel, upon presentation of proper credentials, will have access at reasonable times, to the project location, and to inspect at reasonable times, records of water use, wells, diversions, measuring devices and associated distribution systems for compliance with water law.

F. Real Estate Excise Tax

This decision may indicate a Real Estate Excise Tax liability for the seller of water rights. The Department of Revenue has requested notification of potentially taxable water right related actions, and therefore will be given notice of this decision, including document copies. Please contact the state Department of Revenue to obtain specific requirements for your project. Phone: (360) 570-3265. The mailing address is: Department of Revenue, Real Estate Excise Tax, PO Box 47477, Olympia WA 98504-7477 Internet: http://dor.wa.gov/. E-mail: reetsp@dor.wa.gov.

Finding of Facts

Upon reviewing the investigator's report, I find all facts, relevant and material to the subject application, have been thoroughly investigated. Furthermore, I concur with the investigator that there will be no impairment of existing rights and that the purpose(s) of use are beneficial.

Therefore, I ORDER approval of Application No. CS4-00477sb11i@1, subject to existing rights and the provisions specified above.

This Decision may be appealed pursuant to RCW 34.05.514(3), RCW 90.03.210(2), and Pretrial Order No. 12 entered in *State of Washington, Department of Ecology v. James Acquavella, et al.*, Yakima County Superior Court No. 77-2-01484-5 (the general adjudication of surface water rights in the Yakima River Basin). The person to whom this Decision is issued, if he or she wishes to file an appeal, must file the notice of appeal with the Yakima County Superior Court **within thirty (30) days of receipt of this Decision**. Appeals must be filed with the Superior Court Clerk's Office, Yakima County Superior Court, 128 North 2nd Street, Yakima WA 98901, RE: Yakima River Adjudication. Appeals must be served in

accordance with Pretrial Order No. 12, Section III ("Appeals Procedures"). The content of the notice of appeal must conform to RCW 34.05.546. Specifically, the notice of appeal must include:

- The name and mailing address of the appellant.
- Name and address of the appellant's attorney, if any.
- The name and address of the Department of Ecology.
- The specific application number of the decision being appealed.
- A copy of the decision.
- A brief explanation of Ecology's decision.
- Identification of persons who were parties in any adjudicative proceedings that led to Ecology's decision.
- Facts that demonstrate the appellant is entitled to obtain judicial review.
- The appellant's reasons for believing that relief should be granted, and a request for relief, specifying the type and extent of relief requested.

The "parties of record" who must be served with copies of the notice of appeal under RCW 34.05.542(3) are limited to the applicant of the decision subject to appeal, Ecology and the Office of the Attorney General.

All others receiving notice of this Decision, who wish to file an appeal, must file the appeal with the Yakima County Superior Court within **thirty (30) days of the date the Order was mailed.** The appeal must be filed in the same manner as described above.

Please send a copy of your appeal to:

Trevor Hutton, Section Manager
Water Resources Program
Ecology Central Regional Office
1250 West Alder Street
Union Gap, WA 98903

Signed at Union Gap, Washington, this 19th day of July, 2016.

Trevor Hutton

Trevor Hutton, Section Manager
Water Resources Program
Central Regional Office

If you need this document in a format for the visually impaired, call the Water Resources Program at (509) 575-2490. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call (877) 833-6341.

INVESTIGATOR'S REPORT

BACKGROUND

Description and Purpose of Requested Change

On April 9, 2012, Clarence Harrell of Ellensburg, Washington filed a total of nine applications with the Washington State Department of Ecology (Ecology) to change the Place of Use (POU) to one single consolidated POU for all of the Harrell rights. Seven of the applications are for Yakima Adjudicated Court Claim No. 00477 and two applications are for Yakima Adjudicated Court Claim No. 00657 in *The State of Washington, Department of Ecology v. James J. Acquavella, et al.* (*Acquavella*). The applications were accepted and assigned Application Nos. CS4-00657sb11a, CS4-00657sb11c@1, CS4-00477sb11a, CS4-00477sb11c, CS4-00477sb11e, CS4-00477sb11f, CS4-00477sb11g, CS4-00477sb11h, and CS4-00477sb11i@1.

In addition to this, on February 17, 2012, Ecology received an application requesting entrance for a portion of the adjudicated surface water right associated with Court Claim No. 00657 (Draft Certificate No. S4-83492-J) into the State Trust Water Right Program (TWRP). The application was accepted and assigned Application No. CS4-00657sb11c. On November 15, 2012, Ecology received two consolidated applications for the Irrigation Efficiency Grant Program (IEGP) requesting to place a portion of the adjudicated surface water rights associated with Court Claim No. 00477 (Draft Certificate Nos. S4-83511-J & S4-83513-J) into the TWRP. Both of these applications were accepted and assigned Application Nos. CS4-00477sb11e@1 and CS4-00477sb11i@2.

Manastash Creek Restoration Project History

The Manastash Creek Restoration Project (the Project) was implemented by the Manastash Creek Steering Committee (Steering Committee) with assistance from the Kittitas County Conservation District (KCCD). The Steering Committee was initiated in 2001. In 2008, membership was confirmed through a resolution of the Steering Committee and includes representatives of the water users of Manastash Water Ditch Association (MWDA), Keach Ditch, Jensen Ditch, Hatfield Ditch, Reed Ditch, Anderson Diversion, and Barnes Road Diversion, as well as representatives of Ecology, Washington State Department of Fish & Wildlife (WDFW), National Marine Fisheries Service, Washington Environmental Council (WEC), and the Yakama Nation.

The Steering Committee was formed in response to the WEC's intention to file a lawsuit, based on possible violation of the Endangered Species Act (ESA). ESA is a federal law that attempts to protect animal and plant species threatened with extinction. ESA also attempts to protect the habitat of these species. The WDFW and Yakama Nation have determined that Manastash Creek contains habitat suitable for ESA-listed species and that artificial fish passage barriers exist in the creek.

This Steering Committee's main goals are to satisfy compliance issues with fish passage and headwork screening in Manastash Creek, and to meter water diverted from Manastash Creek. By achieving these goals the irrigators would address ESA requirements and Chapter 173-173 WAC.

In 2006, the KCCD assisted water right holders to complete the applications to change the points of diversion (PODs) for Hatfield Ditch, Reed Ditch, and Anderson Ditch. The consolidation of these three ditches at the upstream POD location (MWDA) would, absent mitigation actions, result in a flow

reduction of 6 cfs or more from the new POD down to Reed Ditch. The change applications were received by Ecology in August and September of 2006. Along with these applications, a mitigation package was submitted to address potential adverse impacts of the upstream moves in PODs.

Expedited Processing

This application is one of several applications filed by the applicant that relies on the new consolidated diversion known as MWDA. It qualifies for expedited processing under WAC 173-152-050(2)(c) whereby water right change applications may be processed prior to applications submitted at an earlier date when the proposed water use, if approved, would substantially enhance or protect the quality of the natural environment.

The consolidated pipeline and a nearby lateral recently upgraded by Kittitas Reclamation District (KRD), known as the 13.8 lateral project, provides pressurized delivery of water to the applicant's property. The requested change in POU of the applicants Manastash Creek rights enables the most flexibility for upgrading to more efficient on-farm water application systems across the entire farm while not limiting the applicant to the layout of the former ditches and tail water capture system.

This change proposal plays an integral role in the Project, achieving the goals of improving fish passage during critical fish migration periods, and to improve habitat availability. All of the changes are part of a larger sprinkler conversion project. As a requirement of the agreements associated with the sprinkler upgrades, the saved water from delivery and on-farm irrigation improvements will be donated to the TWRP in perpetuity for the enhancement of instream flows in Manastash Creek. The Yakima River and its tributaries contain habitat that is exceptional for migration, rearing, and spawning for ESA listed species, including Spring Chinook Salmon and Mid-Columbia Steelhead. Manastash Creek is one of the tributaries that has been determined by WDFW and the Yakama Nation to contain exceptional habitat. As such, the quality of the natural environment would be substantially enhanced.

Legal Requirements for Proposed Change

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

Public Notice

Notice of this change request was published in the Northern Kittitas County Tribune on June 12, 2014 and June 19, 2014. No letters of protest or comments were received during the 30-day protest period.

State Environmental Policy Act (SEPA)

This change is part of a larger project that required a SEPA review under WAC 197-11-305(1)(ii), where the Project is part of a series of exempt actions that, considered together, trigger the need to do a threshold determination. Ecology, acting as the SEPA lead agency for this project, determined that it will have no unmitigated probable significant adverse impacts on the environment and issued a Mitigated Determination of Non-Significance (MDNS) on October 18, 2008. The MDNS included a proposed mitigation package (Manastash Creek Restoration Project, Instream Flow Enhancement Implementation Plan) that can be viewed at http://www.kccd.net/Manastash%20Imp%20Plan%2010-30-07.pdf or a copy is available by contacting Ecology's Central Regional Office in Yakima, WA, at (509) 575-2490.

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 POD, POU, and purpose of use may be changed if it would not result in harm or injury to other water rights.

WAC 173-152-050(2)(c) states that an application for change or transfer to an existing water right may be processed prior to competing applications provided the change or transfer, if approved, would substantially enhance the quality of the natural environment.

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 (see *R.D. Merrill v. PCHB and Okanogan Wilderness League v. Town of Twisp*). This is necessary to establish whether the claim or right is eligible for change. In this case, the proposed water right for change has been adjudicated by the Yakima Superior Court and a Conditional Final Order (CFO) for the Manastash Creek Subbasin (Subbasin No. 11) was issued on June 14, 2001. As there has been at least a five year period since the issuance of the CFO, a tentative determination of the extent and validity of the right is required.

INVESTIGATION

Site Visit

This water right change process included an on-site visit by Ecology employee Eric Hartwig on September 8, 2008. On February 5, 2014, a general site visit of the area was conducted by Ecology employees Scott Turner, Teresa Mitchell, Lara Henderson, and Jacquelyn Metcalfe. Sherry Swanson of the Kittitas County Conservation District was also present. Additional information and supporting documentation for this investigation was obtained through the following:

- Documentation submitted with the applications.
- Washington State Water Code, relevant case law, and administrative rules and policies.
- Review of recent aerial photography.
- Yakima County Superior Court *Reports of Referee* and *Conditional Final Order* in *Acquavella Subbasin No. 11 (Manastash Creek).*
- Manastash Creek Project Summary Memorandum (Golder 2006).

History of Water Use

Court Claim Nos. 00477 & 00657

Court Claim No. 00477 was filed by Clarence and Hazel Harrell for the use of waters from Manastash Creek for irrigation of 225 acres. According to the *Report of Referee, Supplemental Report of Referee,* and *2nd Supplemental Report of Referee for Subbasin No. 11,* the applicant based the claim to water rights on Decree Nos. 99 and 100 filed April 18, 1891, in Kittitas Superior Court by Olof Hansen. As a result of the proceedings, the Court awarded Olof Hanson 140 inches of Class 1 rights. After the decree was entered, a predecessor to the Harrells purchased 25 inches of Class 1 water that was originally awarded to E.S. Coleman. Olof Hanson also purchased 125 inches of Class 5 water from John Burch,

although there was no testimony regarding details of the sale. The water right attributes associated with each change request are listed in Attachment 2.

Court Claim No. 00657 was filed by Eugene J. and Yvonne Prater. The Prater's claimed 395 acres of irrigation. The property was sold to Clarence and Hazel Harrell on June 6, 1994 and was divided into three separate rights with different priority dates.

- Portion 1 (S4-83505-J) was confirmed 2.8 cubic feet per second (cfs) from April 1 through June 30, and 1.4 cfs from March 1 through March 31, and 1.4 cfs from July 1 through October 31, 942 acre-feet per year (ac-ft/yr) to irrigate 120 acres, with a priority date of June 30, 1871, from Manastash Creek.

- Portion 2 (S4-83529-J) was confirmed 0.02 cfs, 1 ac-ft/yr for continuous single domestic supply, with a priority date of June 30, 1871, from an unnamed spring. (This right is not addressed in the consolidated POU changes or trust water acquisitions currently at issue.)

- Portion 3 (S3-83564-J) was confirmed 0.583 cfs from April 1 through June 30, and 0.292 cfs from March 1 through March 31, and 0.292 cfs from July 1 through October 31, 196 ac-ft/yr to irrigate 25 acres, with a priority date of June 30, 1874, from Manastash Creek.

Attachments 2 and 3 list all water right change requests associated with the consolidated POU for the applicant's nine water rights.

Manastash Creek is part of the Yakima River Basin and rights to the use of the creek were addressed in the *The State of Washington, Department of Ecology v. James J. Acquavella, et al.* (Yakima Adjudication). During the Yakima Adjudication proceedings, a CFO specific to Manastash Creek (Subbasin No. 11) issued on June 14, 2001. For all water rights in this subbasin, absent testimony, the Court granted a water duty of 7.84 acre-feet per acre, per year, for irrigation from Manastash Creek.

The applicant owns approximately 593 acres of land, of which 562.4 acres are planted with Timothy hay in rotation with grains. The fields have been historically rill irrigated from several sources (listed in Table 2). According to the Report of Referee (ROR) return flows from Back Ditch are used to irrigate approximately 100 acres. Return flow waters from Center Ditch are used to irrigate approximately 61.4 acres. Water from the West Side Canal is used to irrigate 51 acres and water from Manastash Creek is used to irrigate the remaining 350 acres. Water from KRD is available for supplemental supply on 141 of the 350 acres.

Table 2: Harrell's Water Sources

Water Source	Irrigated Acreage (approximate)
Kittitas Reclamation District	(Available for) 141 acres
Back Ditch Return Flows*	100 acres*
Center Ditch Return Flows*	61.4 acres*
West Side Canal	51 acres
Manastash Creek	350 acres

*This is historical information and the water source is Manastash Creek. The adjudicated Creek rights themselves establish the basis for and limit on applicant's diversionary and consumptive use entitlements for irrigation.

On March 14, 2008, the applicant submitted an application associated with this water right to change the POD from the Reed Ditch POD to a consolidated upstream location at the present MWDA POD. This application for change was approved on June 30, 2009.

The availability of water in Manastash Creek changes throughout the year. The hydrograph for Manastash Creek typically peaks in the months of March, April, and May. Water supply begins to decline between late April and late May to the point that not all water rights from the Creek can be satisfied. Typically, by early to mid-June there is only enough water in Manastash Creek to satisfy Class 1 and Class 2 water rights. As the flows decline through the summer, the water right holders self regulate to satisfy the senior rights first. The court required that rights be reduced by 50% on July 1; however, some of the rights are reduced by 50% during the month of March as well. In a typical year, natural conditions produce reduced flows to the point that only Class 1 and a portion of the Class 2 water rights are satisfied after July 1.

The applicant's nine individual water rights associated with the consolidated POU change request have many overlapping areas (Attachment 3). According to Clarence Harrell, the water associated with water rights having the most senior priority date are applied to the land within their POU first. Since the water from Manastash Creek is in most cases unable to irrigate all of the lands within the entire POU, any remaining unirrigated acreage is then irrigated with water from one or more of the other available sources listed above in Table 2. Assessments of the POU, supporting documentation submitted by the applicant, and review of aerial photographs from 2001 to current revealed that the nine water rights were used to irrigate the maximum allowable acreage under each water right without a five year gap in use.

Annual Consumptive Quantity

The applicant has changed to the MWDA POD under the Project. The requested consolidation for nine individual water rights as part of a sprinkler conversion project will help facilitate better management of water on their irrigated lands. In most years, water from KRD will be used to replace lower class Manastash Creek water rights as they are curtailed. However, during low water years (i.e. drought years) when KRD is prorated by the US Bureau of Reclamation, it will be necessary for the applicant to spread the more senior Manastash Creek water rights to make up for the deficit. This management scheme requires Ecology to perform an annual consumptive quantity (ACQ) analysis in order to identify how much spreading is allowable under (RCW 90.03.380).

Despite the overlapping POUs associated with many of the water rights (Attachment 3), the authorized amount of irrigated acreage within the POUs is less acreage than the actual POUs themselves. Based on information obtained from the applicant or submitted on the applicant's behalf, Ecology was able to delineate the areas of irrigation taking place associated with each water right within the associated POU for all of the applicants Manastash Creek water rights (Attachment 4).

The ACQ for each of the nine water rights, as awarded by the court and requested for change, was calculated by taking the annual amount of water diverted pursuant to the water right, reduced by the estimated annual amount of return flows, averaged over the two years of greatest use within the most

recent five year period of continuous beneficial use of the water right (RCW 90.03.380(1)). The most recent five years of beneficial use for all nine water rights were used for the ACQ calculation (2009 – 2013).

The applicant rotates between four different crop types on a yearly basis (timothy, sudan grass, alfalfa, and wheat). As no metering data were available, the Washington Irrigation Guide (WIG) was consulted. According to information contained in the WIG at the Ellensburg monitoring station and Ecology's Guide 1210, the calculations shown below (Table 3) illustrate how the consumptive use for each crop type was found. An efficiency factor of 65% was used for the historic practice of rill irrigation, which has an estimated 5% consumptive loss during application. As such, 70% of the total irrigation applied would have been used consumptively.

Table 3: Crop Type Consumptive Use

Timothy	Wheat	Sudan/Alfalfa
33.15 in. / 12 in. = 2.76 ac-ft/yr	26.31 in. / 12 in. = 2.19 ac-ft/yr	29.76 in. / 12 in. = 2.48 ac-ft/yr
2.76 ac-ft/yr / 0.65 = 4.25 (TIR)	2.19 ac-ft/yr / 0.65 = 3.37 (TIR)	2.48 ac-ft/yr / 0.65 = 3.82 (TIR)
0.65 + 0.05 = 0.70	0.65 + 0.05 = 0.70	0.65 + 0.05 = 0.70
4.25 x 0.70 = 2.975 (CU)	3.37 x 0.70 = 2.36 (CU)	3.82 x 0.70 = 2.67 (CU)

TIR = Total Irrigation Requirement; CU = Consumptive Use; ac-ft/yr = acre feet per year; in. = inches

The ACQ calculations for each of the nine water rights requested for change are listed below in Table 4. During water short years when proratable water rights are curtailed, the maximum quantity of water allowed for irrigation from all water rights combined within the authorized POU will be reduced to a cumulative total of no more than of 1,906.06 ac-ft/yr.

Table 4: Two Highest Years of Consumptive Use

Water Right Change No.	Year	Crop	Acres	ac-ft/yr	Year	Crop	Acres	ac-ft/yr	Top Two Year Average
CS4-00477sb11a (S4-83515-J)	2011	Timothy	120.62	358.84	2012	Timothy	132.93	395.47	412.69
		Sudan	19.38	51.74		Sudan	7.24	19.33	
CS4-00477sb11c (S4-83564-J)	2010	Timothy	25	74.38	2011	Timothy	25	74.38	74.38
CS4-00657sb11a (S4-83505-J)	2010	Timothy	120	357	2013	Timothy	120	357	357
CS4-00477sb11e (S4-83511-J)	2010	Timothy	165	490.88	2012	Timothy	123.17	366.43	484.4
						Sudan	41.83	111.68	
CS4-00477sb11f (S4-83557-J)	2011	Timothy	11.45	34.06	2012	Timothy	11.45	34.06	34.06
CS4-00657sb11c@1 (S4-83492-J)	2010	Timothy	25	74.37	2012	Timothy	25	74.37	74.37
CS4-00477sb11h (S4-83512-J)	2011	Timothy	4.69	13.95	2012	Timothy	4.69	13.95	13.95
CS4-00477sb11g (S4-83514-J)	2009	Timothy	123.33	366.91	2012	Timothy	123.33	366.91	372.3
		Sudan	2.19	5.48		Sudan	2.19	5.48	
CS4-00477sb11i@1 (S4-83513-J)	2010	Timothy	27.87	82.91	2011	Timothy	27.87	82.91	82.91
TOTAL TOP TWO YEAR AVERAGE									**1,906.06 ac-ft/yr**

Proposed Use

The applicant is proposing to consolidate the POU for nine individual water rights to a single consolidated POU, and upgrade a portion of irrigated acreage within the consolidated POU from rill irrigation to a more efficient center pivot system for three of the nine water rights. The applicant's property will continue to be irrigated with water from Manastash Creek, however the proposed system would divert less water, thereby allowing a portion of three water rights to remain instream in perpetuity.

IEGP & Cost Share Agreement

Three applications were submitted in association with the sprinkler conversion projects that are a part of the Project. The conversion projects were funded through agreements with the KCCD and the Washington State Conservation Commission and enabled the applicant to upgrade from rill (flood) irrigation to a more efficient center pivot sprinkler system.

The first conversion project and agreement, funded by the Bonneville Power Administration (BPA), is between KCCD and the applicant (Agreement No. 02-09-2012-001). This agreement specifies a total quantity of 284.5 ac-ft/yr in association with the upgrades for approximately 95.5 acres. The saved water is conveyed into the TWRP from the water rights associated with Court Claim Nos. 00657 (Draft Certificate No. S4-83492-J) and 00477 (Draft Certificate No. S4-83513-J).

The second conversion project has two agreements. One is an IEGP Contract between Ecology, the Washington State Conservation Commission (Commission), KCCD, and the applicant (Agreement #12-28-IE-02) and the second agreement, funded by BPA, is between KCCD and the applicant (Agreement No. 09-13-2012-001). These two agreements specify a total quantity of 390.96 ac-ft/yr in association with the upgrades for approximately 73.01 acres. The saved water is conveyed into the TWRP from the water rights associated with Court Claim No. 00477 (Draft Certificate Nos. S4-83511-J & S4-83513-J).

Saved water from the conversion project will be placed permanently into the TWRP and used to augment instream flows in Manastash Creek. The quantities being placed in trust as instream flow are expressed as monthly quantities in ac-ft/yr and instantaneous rate in cfs. The total amount available for trust in ac-ft/yr has been divided up as defined by the two agreements. The water savings associated with each water right are shown in the table below (Table 5). These changes are also described in Attachment 2.

Table 5: Water Savings Associated With Each Water Right

Water Right No.	Contract	Contracted Qi (CFS)	Contracted Qa	Period of Use
S4-83511-J (2nd Class)	IEGP Contract	0.5 cfs	30.74	03/01 - 03/31
S4-83513-J (6th Class)	IEGP Contract	0.52 cfs	31.97	03/01 - 03/31
		1.04 cfs	201.38	04/01 - 06/30
		0.52 cfs	126.86	07/01 - 10/31
	BPA Contract	0.4 cfs	24.595	03/01 - 03/31
		0.8 cfs	144.397	04/01 - 06/30
		0.4 cfs	97.587	07/01 - 10/31
S4-83492-J (3rd Class)	BPA Contract	0.292 cfs	17.924	03/01 - 03/31

Trust Water Place of Use

Water conveyed into the TWRP typically is managed in what are known as primary and secondary reaches. The primary reach is the portion of the water body that benefits from both the former consumptive use and former return flows of the historically applied water. The secondary reach is the portion of the water body that benefits only from the former consumptive use portion of the applied water. The water savings from the irrigation efficiency projects provide savings only in the primary reach since the applicant will continue to consumptively use the same amount of water as they have in the past.

The primary reach begins at the consolidated diversion for Manastash Creek (MWDA). This diversion is located approximately 5.5 miles upstream from the confluence with the Yakima River, being described as a point 500 feet south and 150 feet east from the north quarter corner of Section 14, being within the NW¼NE¼ of Section 14, T. 17 N., R. 17 E.W.M. The primary reach continues downstream approximately 4 miles to creek mile 1.5.

Other Water Rights Appurtenant to the Proposed Place of Use

The subject right for this application has other rights that overlap the confirmed POU which are listed in Table 6. Surface water claims S4-83494-J and S4-83529-J are currently owned by Clarence Harrell and appurtenant to the residence and a small area of surrounding property. Surface water claims S4-84347-J and S4-84637-J are owned by KRD, and surface water claim S4-84636-J is owned by Westside Canal Co. All ground water claims are currently owned by Clarence Harrell but have not been used for the purpose of irrigating lands within the consolidated POU. Groundwater claims with instantaneous quantities have been converted to gallons per minute (GPM).

More information is available on the Court's determination of how these rights are to be separated in the *Yakima River Basin Water Rights Adjudication, Report of Referee for Subbasin No. 11*. The KRD and Westside Canal also deliver water to these lands.

Table 6: Appurtenant Water Rights to the Proposed Place of Use

Water Right Document No.	Priority Date	Instantaneous Quantity (CFS or GPM)	Annual Quantity (AC-FT/YR)	Purpose(s) of Use	Point of Diversion or Withdrawal
CS4-00477sb11a **(S4-83515-J)	June 30, 1871	3.26 cfs	1,098.6	Irrigation	Manastash Creek
CS4-00657sb11a **S4-83505-J	June 30, 1871	2.8 cfs	942	Irrigation	Manastash Creek
CS4-00477sb11c **S4-83564-J	June 30, 1871	0.583 cfs	196	Irrigation	Manastash Creek
CS4-00477sb11e **S4-83511-J	June 30, 1872	3.84 cfs	1,294.1	Irrigation	Manastash Creek
CS4-00477sb11f **S4-83557-J	June 30, 1872	0.315 cfs	105.8	Irrigation	Manastash Creek
CS4-00657sb11c@1 **S4-83492-J	June 30, 1874	0.583 cfs	196	Irrigation	Manastash Creek
CS4-00477sb11h **S4-83512-J	June 30, 1877	0.112 cfs	37.5	Irrigation	Manastash Creek
CS4-00477sb11i@1 **S4-83513-J	June 30, 1878	1.84 cfs	626.8	Irrigation	Manastash Creek
CS4-00477sb11g **S4-83514-J	June 30, 1877	2.91cfs	962	Irrigation	Manastash Creek
S4-83494-J	June 30, 1871	0.03 cfs	3	Irrigation and stockwater	Manastash Creek
S4-83529-J	June 30, 1871	0.02 cfs	1	Domestic	Manastash Creek
S4-84347-J	May 10, 1905	1,296.67 cfs	336,000	Irrigation & incidental domestic supply	Yakima River
S4-84637-J	May 10, 1905	25 cfs	8200	Irrigation	Yakima River
S4-84636-J	June 6, 1889	80 cfs	25,767.5	Irrigation	Yakima River
G4-105214CL*	June 18, 1974	***	***	Domestic & Irrigation	Well
G4-144803CL*	June 26, 1974	***	***	Domestic, stockwater & Irrigation	Well
G4-141074CL*	June 30, 1974	***	***	Domestic, stockwater & Irrigation	Well
G4-144796CL*	January 1, 1910	897.6 gpm	900	Irrigation & stockwater	Well
G4-144797CL*	January 1, 1910	673.2 gpm	400	Irrigation & stockwater	Well
G4-144798CL*	January 1, 1910	673.2 gpm	350	Irrigation & stockwater	Well
G4-144799CL*	January 1, 1910	448.8 gpm	200	Irrigation & stockwater	Well
G4-144804CL*	January 1, 1910	897.6 gpm	900	Irrigation & stockwater	Well

* Unadjudicated Claim (All information is claimed and has not been determined through an adjudication process.)

** Grey shaded water rights are subject to the consolidation. *** Quantities unknown

Impairment Considerations

RCW 90.03.380 provides that a perfected water right may be changed in several ways, provided that the change will not impair the right of another water right holder.
Impairment may result from an action that:

A. Adversely impacts the physical availability of water for a beneficial use that is entitled to protection, including earlier filed applications.
B. Prevents the beneficial use of the water to which a water right holder is entitled.
C. Adversely affects the flow of a surface water course at a time when the flows are at or below instream flows levels established by rule.
D. Degrades the quality of a groundwater source such that an existing user of that source is prevented from the beneficial use of water.

The proposed consolidated POU is identical to the exterior boundaries for the nine Manastash Creek water rights requested for change; water use will not be increased, nor will it be transferred to land that has not been historically irrigated or designated as a POU under at least one of the nine aggregate water rights.
In addition to this, as a requirement of the agreements associated with the sprinkler upgrades, the saved water from delivery and on-farm irrigation improvements will be donated to the TWRP in perpetuity for the enhancement of instream flows in Manastash Creek.

Consideration of Protests and Comments

There were no protests or comments filed in response to the public notice for this proposed application.

CONCLUSIONS

In accordance with RCW 90.03.380, the author makes a tentative determination that:

- Based on reviewing 2009 and 2011 aerial photos and supporting documentation submitted by the applicant, the subject water rights confirmed under Court Claim Nos. 00477 and 00657 represent valid water rights.
- Approval of this change to the POU will not cause impairment.
- Approval of this change to the POU will not enlarge the subject right.

RECOMMENDATIONS

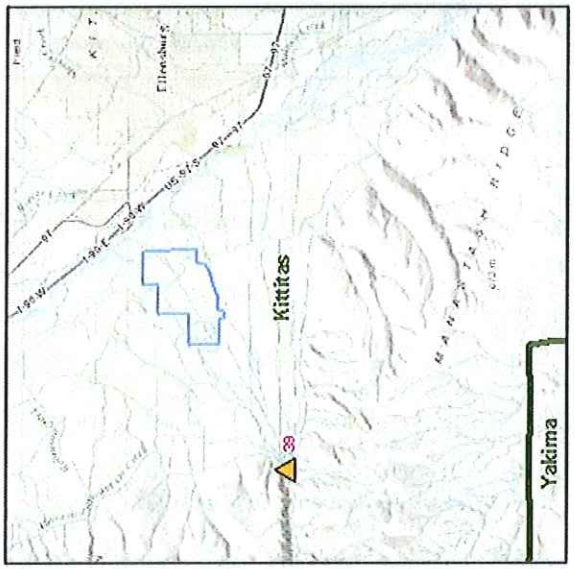
Based on the above investigation and conclusions, I recommend that the request for change on the subject water rights confirmed under Court Claim Nos. 00477 and 00657 be approved in the amounts and within the limitations listed in Attachment 2 (under the heading of Recommended) and subject to the provisions beginning on Page 2, et seq.

Report by: _____ 7/15/14
Jacquelyn Metcalfe, Permit Writer Date

If you need this document in a format for the visually impaired, call the Water Resources Program at (509) 575-2490. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call (877) 833-6341.

ATTACHMENT 1

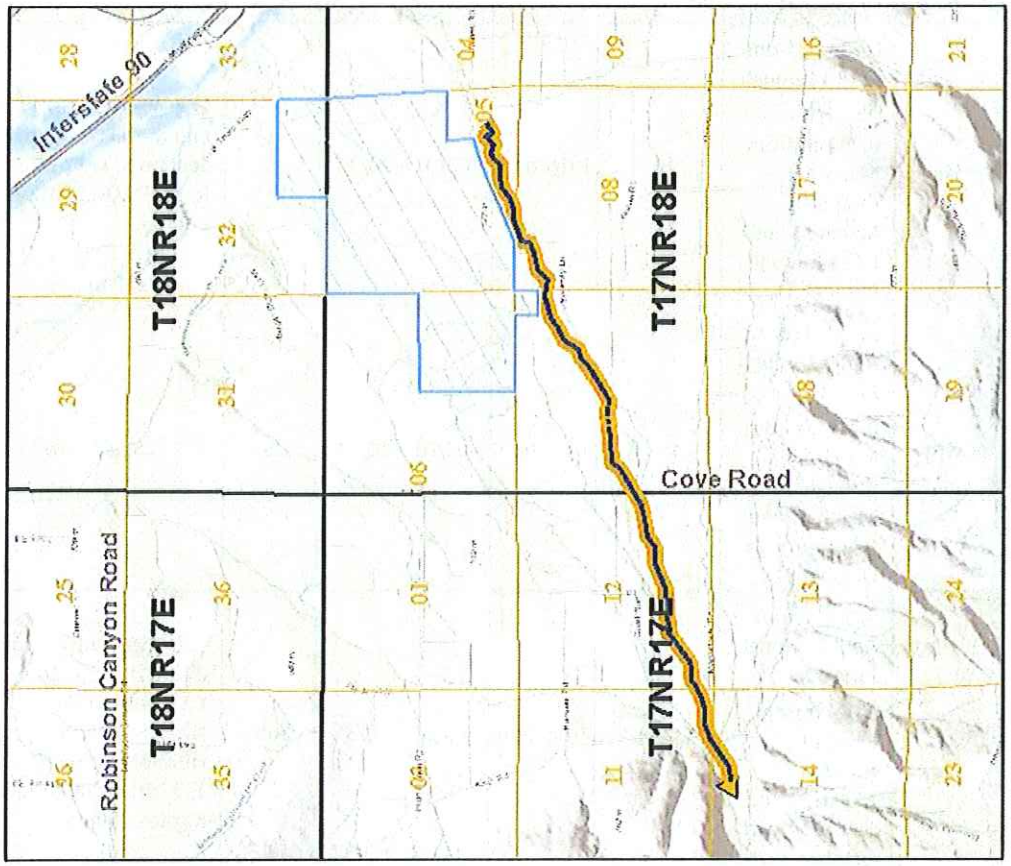
Harrell and Sons LLC
CS4 00657sb11a, CS4 00657sb11c, CS4 00477sb11a, CS4- 00477sb11c, CS4-00477sb11e, CS4-00477sb11f, CS4 00477sb11g, CS4 00477sb11h, CS4-00477sb11i.@1, CS4-00477sb11e@1, CS4-00477sb11i.@2, and CS4-00657sb11c@1.
T17N/R17E
WRIA 39 - Kittitas County



Basemap ESRI US Topographic Maps

Legend

- Authorized Place of Use
- Authorized Point of Diversion
- Primary Reach
- Townships
- Sections
- WRIA
- Counties



Basemap ESRI US Topographic Maps

0 1,800 3,600 7,200 10,800 14,400 Feet

Map Date: 12/7/2015

Comment:
Place of use and source locations are as defined within the Report of Examination cover sheet for the document identified in the header above.

Attachment 2: Harrell & Sons Farms LLC Water Right Change Attributes

Change Application No.		Instantaneous Quantity	Annual Quantity (ac-ft/yr)	Purpose of Use	Period of Use MM/DD	Irrigated Acres	Place of Use	Point of Diversion
CS4-00477sb11a (S4-83515-J)	Existing	3.26 cfs from April 1 through June 30. 1.63 cfs from March 1 through March 31 and July 1 through October 31.	1,098.6	Irrigation	03/01 – 10/31	140	The W½SW¼, NE¼SW¼, and the SW¼NW¼ of Section 5, T. 17 N., R. 18 E.W.M., Kittitas County.	MWDA [i]
	Recommended	3.26 cfs from April 1 through June 30. 1.63 cfs from March 1 through March 31 and July 1 through October 31.	1,098.6 [ii]	Irrigation	03/01 – 10/31	140	See Below[iii]	MWDA [i]
CS4-00477sb11c (S4-83564-J)	Existing	0.583 cfs from April 1 through June 30. 0.292 cfs from March 1 through March 31 and July 1 through October 31.	196	Irrigation	03/01 – 10/31	25	The W½SW¼, S½NW¼, and the NE¼SW¼ of Section 5, T. 17 N., R. 18 E.W.M., Kittitas County.	MWDA [i]
	Recommend	0.583 cfs from April 1 through June 30. 0.292 cfs from March 1 through March 31 and July 1 through October 31.	196 [ii]	Irrigation	03/01 – 10/31	25	See Below[iii]	MWDA [i]
CS4-00477sb11e (S4-83511-J)	Existing	3.84 cfs from April 1 through June 30. 1.92 cfs from March 1 through March 31 and July 1 through October 31.	1,294.1	Irrigation	03/01 – 10/31	165	The S½SE¼ of Section 32, T. 18 N., R. 18 E.W.M., and the N½NE¼, SW¼NE¼, NE¼SW¼ of Section 5, T. 17 N., R. 18 E.W.M., Kittitas County.	MWDA [i]

	Recommended	3.84 cfs from April 1 through June 30. 1.92 cfs from March 1 through March 31 and July 1 through October 31.	1,294.1 [ii]	Irrigation	03/01 – 10/31	165	See Below[iii]	MWDA [i]
CS4-00477sb11f (S4-83557-J)	**Existing**	0.315 cfs from April 1 through June 30. 0.157 cfs from March 1 through March 31 and July 1 through October 31.	105.8	Irrigation	03/01 – 10/31	13.5	That portion of the SW¼SE¼ of Section 5, T. 17 N., R. 18 E.W.M. lying north of Hanson Road, Kittitas County.	MWDA [i]
	Recommended	0.315 cfs from April 1 through June 30. 0.157 cfs from March 1 through March 31 and July 1 through October 31.	105.8 [ii]	Irrigation	03/01 – 10/31	13.5	See Below[iii]	MWDA [i]
CS4-00477sb11g (S4-83514-J)	**Existing**	2.91 cfs from April 1 through June 30. 1.45 cfs from March 1 through March 31 and July 1 through October 31.	962	Irrigation	03/01 – 10/31	125	Government Lots 3 and 4, the NW¼SE¼ and that portion of the SE¼SW¼ north of Hanson Road, all in Section 5, T. 17 N., R. 18 E.W.M., Kittitas County.	MWDA [i]
	Recommended	2.91 cfs from April 1 through June 30. 1.45 cfs from March 1 through March 31 and July 1 through October 31.	962 [ii]	Irrigation	03/01 – 10/31	125	See Below[iii]	MWDA [i]
CS4-00477sb11h (S4-83512-J)	**Existing**	0.112 cfs from April 1 through June 30. 0.056 cfs from March 1 through March 31 and July 1 through October 31.	37.5	Irrigation	03/01 – 10/31	4.8	The NE¼NE¼NE¼ of Section 7, T. 17 N., R. 18 E.W.M., Kittitas County.	MWDA [i]

	Recommended	0.112 cfs from April 1 through June 30. 0.056 cfs from March 1 through March 31 and July 1 through October 31.	37.5 [ii]	Irrigation	03/01 – 10/31	4.8	See Below[iii]	MWDA [i]
CS4-00477sb11i@1 (S4-83513-J)	**Existing**	1.84 cfs from April 1 through June 30. 0.92 cfs from March 1 through March 31 and July 1 through October 31.	626.8	Irrigation	03/01 – 10/31	80	The NW¼SE¼, N½NE¼SE¼, and the SE¼NE¼ of Section 5, T. 17 N., R. 18 E.W.M., Kittitas County.	MWDA [i]
	Recommended	1.84 cfs from April 1 through June 30. 0.92 cfs from March 1 through March 31 and July 1 through October 31.	626.8 [ii]	Irrigation	03/01 – 10/31	80	See Below[iii]	MWDA [i]
CS4-00657sb11a (S4-83505-J)	**Existing**	2.80 cfs from April 1 through June 30. 1.40 cfs from March 1 through March 31 and July 1 through October 31.	942	Irrigation	03/01 – 10/31	120	The SE¼ of Section 6, T. 17 N., R. 18 E.W.M., Kittitas County.	MWDA [i]
	Recommended	2.80 cfs from April 1 through June 30. 1.40 cfs from March 1 through March 31 and July 1 through October 31.	942 [ii]	Irrigation	03/01 – 10/31	120	See Below[iii]	MWDA [i]
CS4-00657sb11c@1 (S4-83492-J)	**Existing**	0.583 cfs from April 1 through June 30. 0.292 cfs from March 1 through March 31 and July 1 through October 31.	196	Irrigation	03/01 – 10/31	25	The SE¼ of Section 6, T. 17 N., R. 18 E.W.M., Kittitas County.	MWDA [i]

	Recommended	0.583 cfs from April 1 through June 30. 0.292 cfs from March 1 through March 31 and July 1 through October 31.	196 [ii]	Irrigation	03/01 – 10/31	25	See Below[iii]	MWDA [i]
CS4-00657sb11c (S4-83492-J)	**Existing**	0.583 cfs from April 1 through June 30. 0.292 cfs from March 1 through March 31 and July 1 through October 31.	196 [ii]	Irrigation	03/01 – 10/31	25	See Below[iii]	MWDA [i]
	Recommended	0.583 cfs from April 1 through June 30. 0.292 cfs from July 1 through October 31.	178.076 [ii]	Irrigation	04/01 – 10/31	25	See Below[iii]	MWDA [i]
		0.292 cfs from March 1 through March 31	17.924	Instream Flow	03/01 – 03/31	N/A	Instream flow in Manastash Creek	N/A
CS4-00477sb11i@2 (S4-83513-J)	**Existing**	1.84 cfs from April 1 through June 30. 0.92 cfs from March 1 through March 31 and July 1 through October 31.	626.8 [ii]	Irrigation	03/01 – 10/31	80	See Below[iii]	MWDA [i]
	Recommended	1.84 cfs from April 1 through June 30. 0.92 cfs from March 1 through March 31 and July 1 through October 31.	626.8	Instream Flow	03/01 – 10/31	N/A	Instream flow in Manastash Creek	N/A
CS4-00477sb11e@1 (S4-83511-J)	**Existing**	3.84 cfs from April 1 through June 30. 1.92 cfs from March 1 through March 31 and July 1 through October 31.	1,294.1 [ii]	Irrigation	03/01 – 10/31	165	See Below[iii]	MWDA [i]

	Recommended	3.84 cfs from April 1 through June 30. 1.42 cfs from March 1 through March 31; 1.92 cfs July 1 through October 31.	1,263.36 [ii]	Irrigation	04/01 – 10/31	165	See Below[iii]	MWDA [i]
		0.5 cfs from March 1 through March 31.	30.74	Instream Flow	03/01 – 03/ 31	N/A	Instream flow in Manastash Creek	N/A

[i] MWDA Point of Diversion: 500 feet south and 150 feet east from the north quarter corner of Section 14, being within the NW¼NE¼ of Section 14, T. 17 N., R. 17 E.W.M., Kittitas County.

[ii] The combined annual consumptive quantity for the draft certificate nos. described in the table shall not exceed 1906.06 ac-ft/yr. The maximum annual quantity for each individual water right can be seen in Table 4 of this report. During water short years, applicant's water rights, like all other Basin rights, may be subject to reduction or curtailment on the basis of seniority.

[iii] <u>Within T. 17 N., R. 18 E.W.M:</u>

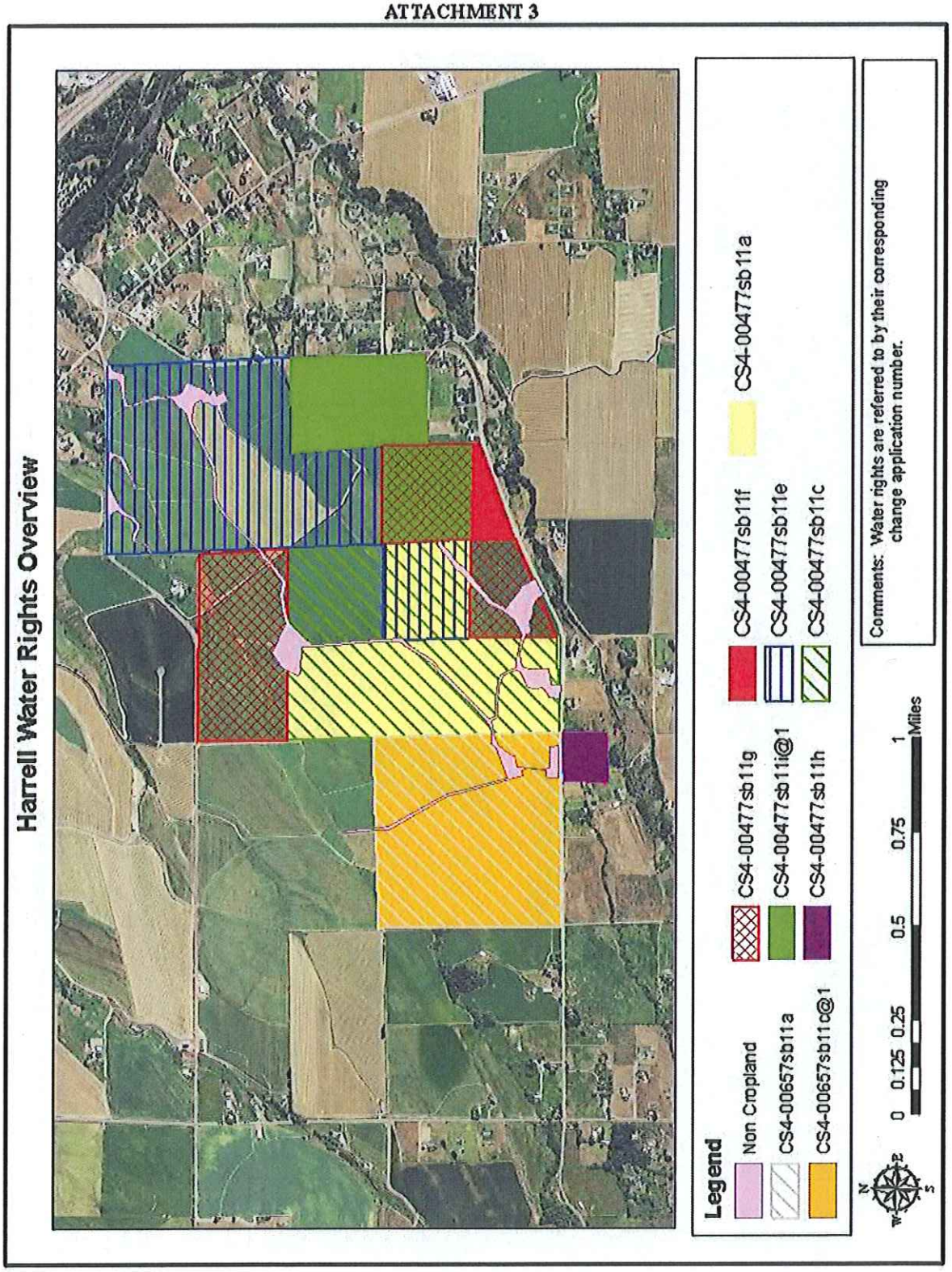
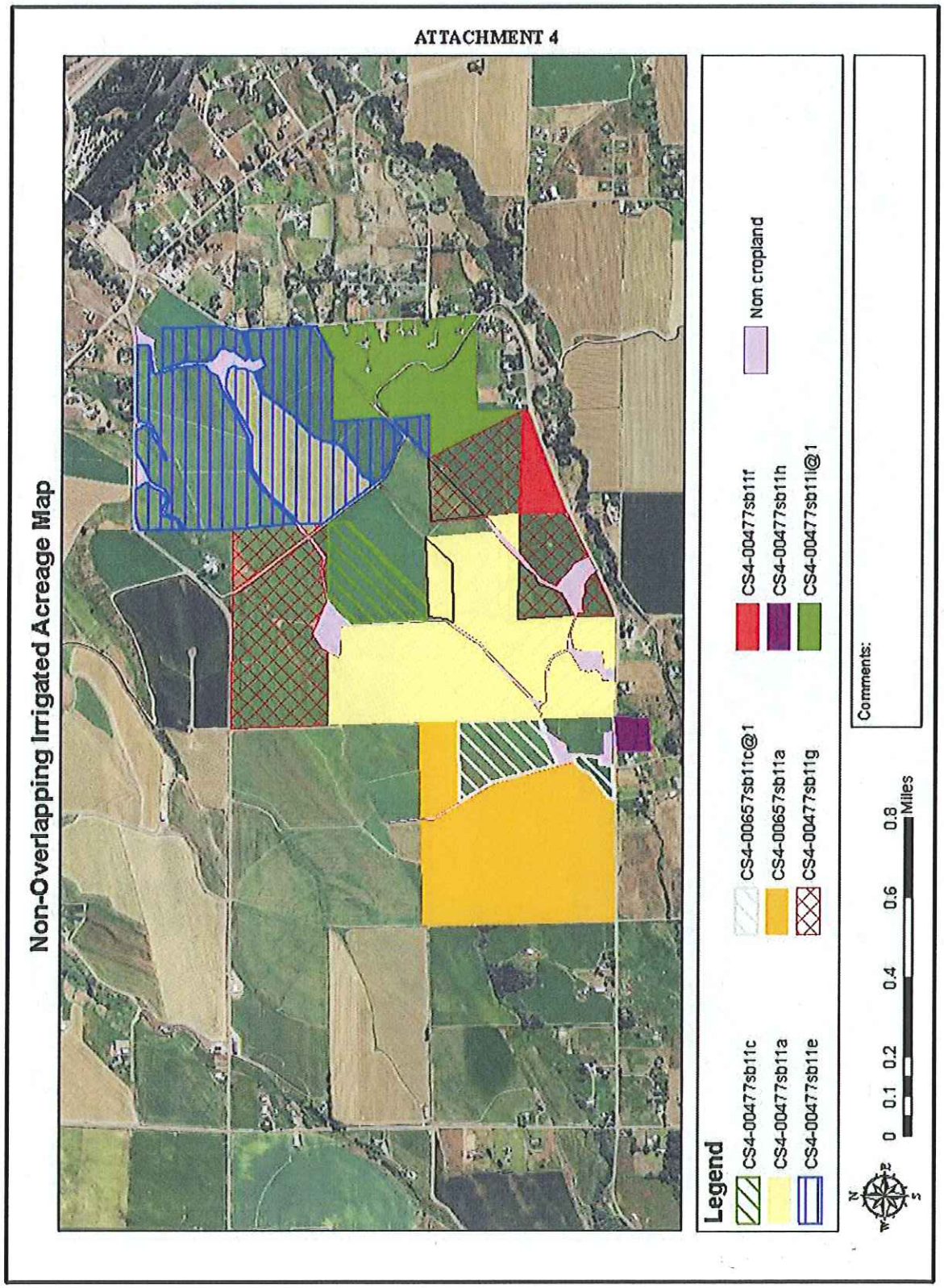
Government Lots 3 & 4, and the NE¼, and the S½NW¼, and the N½SW¼ and the SW¼SW¼, plus that portion of the SE¼ SW¼ lying north of Hanson Road, and the NW¼SE¼ and the N½NE¼SE¼, and the SW¼SE¼ lying north of Hanson Road, all within Section 5; the SE¼ of Section 6; and the NE¼NE¼NE¼ of Section 7;

AND

<u>Within T. 18 N., R. 18 E.W.M:</u>

The S½SE¼ of Section 32.

ATTACHMENT 3



ATTACHMENT 4