File No. CS4-MVID@156
WR Doc ID 5921321

State of Washington
Department of Ecology
Office of Columbia River
REPORT OF EXAMINATION
FOR TRUST WATER RIGHT

Changed Place of Use and Changed Purpose of Use of Water Right Claim (WRC) 003935 with priority date of 1908.

PRIORITY DATE	WATER RIGHT NUMBER	BEGIN TRUST TERM	END TRUST TERM
1908	WRC 003935	TWRA execution date	Permanent

WATER RIGHT OWNER	SITE ADDRESS (IF DIFFERENT)
Methow Valley Irrigation District PO Box 860 Twisp, WA 98856	

Purpose and Quantity

Trust water right for the purpose of instream flow and mitigation of out-of-stream uses, with quantities allocated to primary and second reaches in the following manner. "Primary reach" means that portion of a water body that benefits from both the former consumptive use and former return flow waters of a water right.

Reach	Flow	April	May	June	July	August	September	October	Total Annual, Peak Monthly
Primary	Qi (cfs)	4.38	7.34	8.94	10.93	9.14	6.24	4.72	10.93
Primary	Qa (ac-ft)	130.18	450.63	530.74	670.94	560.79	370.52	140.20	2854
Consumptive Use Quantity	Qi (cfs)	2.39	4.00	4.87	5.95	4.98	3.40	2.57	5.95
Consumptive Use Quantity	Qa (ac-ft)	70.92	245.48	289.12	365.49	305.48	201.84	76.37	1554.70

Trust Water Right Place of Use

WATERBODY	TRIBUTARY TO	COUNTY	WATER RESOURCE INVENTORY AREA
Twisp River	Methow River	Okanogan	48

REACH	WATERBODY	RIVER MI	TWN	RNG	SEC	QQ Q	LATITUDE	LONGITUDE
Begin Primary Reach	Twisp River	5.2	33N.	21E.W.M.	10	SW¼ SE¼	48°22'15"N	120°11'41"W
End Primary Reach	Methow River	27.9	32N.	22E.M.W.	20	SW¼ SE¼	48°15'14.5"N	120°6'56.14"W

1. Consumptive use is expected to be fully utilized via the MVID Water Bank within the primary reach. Therefore, no additional secondary reach location is authorized.
2. Latitude/Longitude Coordinates may approximate reach segments. Datum: NAD83/WGS84

Proposed Works

Water historically diverted will be left instream in the Methow River and will be conveyed to Ecology's trust water program with a trust water rights agreement to establish the MVID Water Bank. The

consumptive use and a portion of the non-consumptive use is intended to serve as mitigation for new water rights to be issued to MVID for beneficial use for the realigned district facilities.

Development Schedule

BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
October 1, 2014	October 1, 2016	October 15, 2017

Note: Completion of construction for the realigned district facilities is anticipated to be completed in 2016. Therefore, the first full year of trusted water put to beneficial use shall occur in 2017, after construction is complete and after new mitigated permits are issued to MVID from the MVID water bank. Although, the project is expected to yield phased instream flow benefit during construction.

Provisions

Trust Water Right Management

This trust water right will be managed as provided by the Department of Ecology and MVID Trust Water Right Agreement (TWRA) dated August 14, 2014, which establishes the MVID Water Bank.

Overlap with Twisp Change Authorization CS4-WRC003935

This authorization will create a temporary water right overlap of 138 acre-feet associated with existing 2001 change authorization CS4-WRC003935. 138 acre-feet of this trust water authorization shall not be exercised in addition to the 2001 change authorization CS4-WRC003935. If change authorization CS4-WRC003935 subsequently cancels, this provision shall not apply.

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.

Findings 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 the proposed change of purpose of use to instream flow and mitigation for out-of-stream uses and the associated change of place of use to the primary reach will not impair existing rights; and that there will be no detriment to the public interest.

Therefore, I ORDER approval of Trust Water Right Application No. CS4-MVID@156, subject to existing rights and the provisions specified above.

Your Right To Appeal

You have a right to appeal this Order to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of the Order:

- File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.

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

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

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	**Department of Ecology** Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 111 Israel Rd SW Ste 301 Tumwater, WA 98501	**Pollution Control Hearings Board** PO Box 40903 Olympia, WA 98504-0903

Signed at Yakima, Washington, this 14th day of August 2014.

Mark C. Schuppe, Operations Manager
Office of Columbia River

Investigator's Report

INVESTIGATOR'S REPORT ORGANIZATION

A draft Investigator's Report was authored by Dan Haller, P.E. of Aspect Consulting as part of a front-loaded application process, which was subsequently reviewed, amended, and formatted for use by Ecology as part of the formal decision-making process for the Methow Valley Irrigation District (MVID) Instream Flow Improvement Project. This Report is organized as follows:

- Background
  - MVID History
  - MVID Litigation History and 2011 Settlement Agreement
  - MVID Instream Flow Improvement Flow Project Description
  - Summary of Existing MVID Water Rights
  - MVID – Twisp Purchase and Sale Agreement
- Legal Requirements for Proposed Changes
- Investigation (Methow River, Twisp River, and Alder Creek Water Rights)
  - Past Tentative Determinations and Regulatory Actions
  - Water Use Based on Measured Diversions
  - Aerial Photo Review
  - Water Duty
  - Perfection, Relinquishment, Abandonment, and Waste
  - Consumptive Use
  - Consideration of Public Comments
  - Impairment
  - Public Interest
- Findings and Conclusions
- Recommendations
- Appendices
  - Appendix A: SEPA Checklist
  - Appendix B: MVID – Twisp Purchase and Sale Agreement
  - Appendix C: TWRA

BACKGROUND

MVID History

The MVID historically encompassed an area of approximately 2,276 acres of land on the floor of the Methow Valley, generally between the Towns of Twisp and Carlton. MVID utilizes two canals to divert and transport water. The west canal diverts water from the Twisp River at River Mile (RM) 4.3 and serves lands lying west of the Methow River. The east canal diverts water from the Methow River at RM 44.8 and serves lands lying east of the Methow River.

The MVID system was constructed at the turn of the 20th Century and supplied water to orchards and other lands that principally used flood irrigation methods. Many orchards were severely damaged by cold weather in 1968 and were cut down. The majority of current water use in the District is for alfalfa, grass hay, pasture, lawn, and orchard. Sprinkler systems are now commonly used throughout the District.

During the 1980s and 1990s, MVID evaluated several alternatives to improve their water use efficiency and provide more reliable water service to its patrons. During 2000, 115 applications for change were processed by the Department of Ecology (Ecology) for those individuals that were conditionally excluded

from the District and converted to individual wells. Ten of the applications were denied and 105 applications were approved, totaling approximately 712.7 acres of irrigation. These changes provided reliable water supply to those users at the lower ends of both canals, however these exclusions reduced the number of assessed acres and MVID patrons.

MVID Litigation History and 2011 Settlement Agreement

From the early 1980s to the present time, MVID and Ecology have been both litigants and funding partners with respect to the use of MVID's water from the Twisp and Methow Rivers. The litigation phase of the Ecology-MVID relationship was most intense from 2002 to 2011. In 2002, Ecology issued Administrative Order No. 02WRCR-3950 to MVID limiting its diversions from the Twisp River to 29 cubic feet per second (cfs) and 7,367 acre-feet annually and limiting its diversion from the Methow River to 24 cfs and 5,829 acre-feet annually, which MVID appealed to the Pollution Control Hearings Board (PCHB). This case, called *MVID I*[1] in subsequent legal challenges, presents a history of MVID's formation, its service to its members, and improvements it has made to its canal system over time (see Findings of Fact #I through #XL VIII, which are incorporated by reference in this Report).

The PCHB agreed with Ecology's waste order in the *MVID I* case, but made further findings that Ecology had not complied with all of the anti-waste requirements in RCW 90.03.005, which states in part:

> *Further, based on the tenet of water law which precludes wasteful practices in the exercise of rights to the use of waters, the department of ecology shall reduce these practices to the maximum extent practicable, taking into account sound principles of water management, the benefits and costs of improved water use efficiency, and the most effective use of public and private funds, and, when appropriate, to work to that end in concert with the agencies of the United States and other public and private entities.*

The PCHB ruled:

> *Ecology's Order DE 02WRCR-3950 issued to MVID is fully affirmed as a waste violation and MVID's appeal of its terms is denied. Ecology is further directed to re-examine the MVID irrigation system with the goal of issuing a supplemental order adequate to address excessive conveyance losses in light of any funding options available. Clarification of the Order should be made to assure any water being diverted by MVID for use on the Barkley lands is not also being diverted from the Barkley Irrigation Co. diversion.*

While this case was further appealed by MVID, Ecology's order was ultimately upheld in Okanogan County Superior Court. Ecology issued a subsequent Administrative Order DE 03WRCR-5904 in response to the PCHB's directive in *MVID I*. This second waste order was appealed by MVID and became known as *MVID II*[2]. The PCHB and Okanogan Superior Court upheld the second waste order, requiring the following:

- The 2003 Order DE 03WRCR-5904 set interim limits governing diversions from April 1, 2004, through September 15, 2006, and final limits governing diversions after September 15, 2006.
- The interim limits authorize MVID to divert from the Twisp River into the MVID West Canal at a maximum rate of 21 cfs up to a total of 5,161 acre-feet annually. The MVID diversion from the Methow River into the MVID East Canal is allowed at a maximum rate of 20 cfs up to a total of 4,909 acre-feet per year, less inflow from the Barkley Irrigation Company Canal (Barkley Canal).
- The final limits contained in Order DE 03WRCR-5904 reduce diversions from the Twisp River into the West Canal to a maximum rate of 11 cfs and a total of 2,716 acre-feet annually. The diversion from the Methow River into the East Canal remains at 20 cfs and 4,909 acre-feet

[1] See PCHB 02-071 & 074, http://www.eho.wa.gov/searchdocuments/2003%20archive/pchb%2002-071%20final.htm.
[2] See PCHB #04-005, http://www.eho.wa.gov/searchdocuments/2005%20archive/pchb%2004-005%20final.htm.

annually (less Barkley inflow). The MVID would have to make capital improvements to targeted aspects of its irrigation system to achieve the final diversion limits.

2011 Settlement Agreement

It took many years for the litigation described above to work its way through the PCHB and the court system, with *MVID II* eventually reaching the Washington State Court of Appeals. In 2010, while the *MVID II* case was before the Court of Appeals, Ecology and MVID began settlement discussions that ultimately would result in a new collaborative relationship and dispose of all the pending court cases. In March 2011 with the signing of a Settlement Agreement[3], all litigation between Ecology and MVID was concluded. The principle feature of the Settlement Agreement is a compliance schedule for MVID to meet limits for diversions from the West Canal that were established in *MVID II*, summarized in Table 1 below.

Table 1 – West Canal Compliance Schedule

Year	West Canal Instantaneous Diversion Limit, Qi (cfs)			Qa (acre-feet)
	April 15 to June 15	June 16 to August 31	September 1 to October 15	Annually
2010	17	17	17	5,161
2011	16	17	15	4,500
2012	16	17	15	4,500
2013	16	17	14	4,000
2014	14	15	13	3,500
2015	12	13	11	3,000
2016	11	11	11	2,716

The 2011 Settlement Agreement required more immediate compliance with the Court-ordered limits on diversions from the East Canal that were set in *MVID II*, but did provide a 2 cfs enforcement discretion "relief valve" for the 2011, 2012, and 2013 irrigation seasons during the months of July and August due to uncertainty about accuracy of measuring flow in the Barkley Canal (Settlement Agreement, Page 2, #5). This Settlement Agreement has prompted MVID's new evaluation of comprehensive improvements to its canal system.

Project Description

In 2012, MVID signed a Memorandum of Agreement with the Washington Water Project of Trout Unlimited to provide technical assistance on the MVID Instream Flow Improvement Project (MVID Project). The purpose of the MVID Project is to improve the MVID delivery system near Twisp, Washington with resulting benefits to instream flows and fish habitat in the Twisp River, Methow River, and Alder Creek, improved service for MVID members, and additional public water supply for the Town of Twisp (also an MVID member). A comprehensive description of the MVID Project is provided in Alternative 5 of the *Methow Valley Irrigation District Alternatives Evaluation Report*, Anchor QEA (August 2013)[4], with additional detail and updated descriptions of changes since August 2013 in Section 11 of the MVID Project SEPA Checklist (Appendix A). The following is a general project overview:

- West Canal: The West Canal will be reconfigured into shorter pressurized pipe systems (North Satellite Systems) serving approximately 141 assessed acres supplied by MVID production wells, with the remainder of former west canal members served by individual or group wells. A new end spill/drain will be created for system flushing and route any in-season operational water to the Methow River. The existing diversion structure on the Twisp River will be abandoned.
- East Canal: Portions of the East Canal will be converted to a pressurized pipe system, with several individual or group well conversions. Some laterals will be rehabilitated to improve efficiency. New East Canal spills will be created at the end of the system and near the

[3] See Ecology file, and on-line at http://www.ecy.wa.gov/programs/wr/cro/mvid.html or www.mvid.org.
[4] See www.mvid.org

canal/pipe interchange to route operational water (e.g. Barkley spill that currently enters the MVID East Canal) to the Methow River.

- Alder Creek: The Alder Creek diversion structure will be abandoned and formerly-diverted quantities will remain in the creek.
- Town of Twisp: 262 acre-feet is currently authorized under change authorization CS4-SWC945 for use for irrigation in Twisp. This quantity will continue to be conveyed through the new system by MVID for irrigation in Twisp, subject to a lease between MVID and Twisp. 138 acre-feet is currently authorized under change authorization CS4-WRC003935 for irrigation in Twisp. This quantity is subject to a Purchase and Sale Agreement (PSA) between MVID and Twisp (Appendix B).

Three trust water right applications are being reviewed concurrently by Department of Ecology (Ecology) to implement the MVID Project; these applications are nos. CS4-MVID@155 (SWC 945), CS4-MVID@156 (S4-003935CL) and CS4-118277CL (S4-118277CL).

On September 9, 2013, MVID filed three water right change applications requesting authorization to change purpose of use, change place of use, and place the subject water right into Washington State's Trust Water Right Program (TWRP). The purpose of this change application and the other two related change applications is to create a water bank and to provide instream flow benefits. The MVID water rights will be conveyed to Ecology's TWRP and be managed as provided by a trust water rights agreement negotiated between Ecology and MVID. MVID has applied for two new water rights (S4-33097 and G4-33098) to appropriate surface water and groundwater mitigated by the 3 above mentioned trust water right changes. For a more detailed project description see the SEPA checklist in Appendix A.

MVID Water Right Summary

The MVID diverts water from the Twisp and Methow Rivers to serve lands within the district, located within Okanogan County. In 2013, the district assessed 1,368.01 acres. MVID has historically struggled to provide reliable service to all of its members each year, particularly those at the south end of two long irrigation canals: the West Canal (served by the Twisp River diversion and the Alder Creek diversion) and East Canal (served by the Methow River diversion).

MVID holds three water rights. Attributes of these water rights are summarized in Table 2. The water rights authorizing diversions from the Twisp and Methow rivers were the direct subject of the waste orders and court cases *MVID I* and *II*, while Alder Creek was not. The Alder Creek right is also not included in the 2011 Settlement Agreement. However, as discussed later in this Report, Alder Creek is indirectly associated with the previous court cases and orders because it shares a common place of use with those water rights, geographically down canal where Alder Creek and the West Canal intersect. All three of the water rights are subject to metering orders. The requirement to meter Alder Creek diversions began in 2010.

Table 2 – Summary of Water Rights Attributes

Water Right	Source	Priority Date	Qi (cfs)	Qa (ac-ft)	Purpose of Use	Period Of Use	Place of Use
Claim 003935	Twisp River	1908	120	--	Irrigation of 705 acres	April 15 – October 15	MVID lands described, see claim
Certificate SWC 945	Methow River	August 22, 1919	150	--	Irrigation, power, and domestic supply	April 1 – November 15 (application) April 1 – September 30 (Proof)	Lands within the MVID, lying east of the Methow River
Claim 118277	Alder Creek	1914	2	360	Irrigation	April 15 – October 15	MVID lands described, see claim

Tables 3, 4, and 5 summarize the proposed changes to Certificate SWC 945, Claim 003935, and Claim 118277, respectively.

Table 3 – Summary of Change Application No. CS4-MVID@155 (SWC 945)

Attributes	Proposed
Applicant	Methow Valley Irrigation District
Application Received	September 9, 2013
Instantaneous Quantity	20 cubic feet per second
Annual Quantity	4,909 acre-feet per year
Source	Methow River
Point of Diversion	NE¼, NE¼, Section 25, T. 34 N., R. 21E.W.M.
Purpose of Use	Mitigation for out-of-stream uses and Instream Flow
Period of Use	April 15 to October 15
Place of Use	Methow River from point of diversion at RM 44.8 to termination of east canal at approximately RM 26.

Table 4 – Summary of Change Application No. CS4-MVID@156 (Claim 003935)

Attributes	Proposed
Applicant	Methow Valley Irrigation District
Application Received	September 9, 2013
Instantaneous Quantity	11 cubic feet per second
Annual Quantity	2,716 acre-feet per year
Source	Twisp River
Point of Diversion	SW¼, SE¼, Section 10, T. 33 N., R. 21E.W.M.
Purpose of Use	Mitigation for out-of-stream uses and Instream Flow
Period of Use	April 15 to October 15
Place of Use	Twisp River from confluence with Methow River to point of diversion at RM 5.2. Methow River from termination of West Canal at RM 27.9 to confluence with Twisp River.

Table 5 – Summary of Subject Application No. CS4-118277CL (Claim 118277)

Attributes	Proposed
Applicant	Methow Valley Irrigation District
Application Received	September 9, 2013
Instantaneous Quantity	2 cubic feet per second
Annual Quantity	360 acre-feet per year
Source	Alder Creek
Point of Diversion	NE¼, NW¼, Section 3, T. 32 N., R. 22E.W.M.
Purpose of Use	Mitigation for out-of-stream uses and Instream Flow
Period of Use	April 15 to October 15
Place of Use	Alder Creek from confluence with Methow River to RM 0.3.

MVID – Twisp Purchase and Sale Agreement

In 2001, MVID leased 400 acre-feet to the Town of Twisp, and Ecology approved two change applications associated with the lease in June 2002: applications CS4-SWC945 and CS4-WRC003935. The 400 acre-feet leased to the Town of Twisp was comprised contractually of two 200-acre-foot portions of these two water rights. However, the 2001 water right changes divided these amongst MVID's Twisp and Methow River rights in proportion to the acreages MVID has served under Certificate No. 945 and Claim No. 003935, 262 acre-foot (from Certificate SWC945, Methow River) and 138 acre-foot (from Claim 003935, Twisp River). These two rights continued to be for seasonal irrigation and were changed to be withdrawn from the Town's wells for use within the Twisp service area. Both change authorizations remain in valid development schedules. These two 2001 change authorizations will cancel when new water rights are issued to MVID and/or the Town of Twisp for municipal use from the MVID water bank. Until such time, there will be a temporary water right overlap of 138 acre-feet associated with existing 2001 change authorization CS4-WRC003935 and an overlap of 262 acre-feet associated with existing 2001 change authorization CS4-SWC945. Four hundred (400) acre-feet of these trust water authorizations shall not be exercised in addition to the 2001 change authorizations.

On February 25, 2014, MVID and Twisp executed a Purchase and Sale Agreement (PSA) to permanently integrate their mutual planning responsibilities within the Twisp service area. Key elements include:

- Reservation of 262 acre-feet for irrigation use in the Twisp service area to be supplied under the redesigned MVID system.
- Sale of 138 acre-feet to Twisp for municipal use in Twisp, with said quantity determined to be surplus to MVID Member irrigation needs in Twisp.
- Preservation of an asserted Determined Future Development (DFD) dating to the 2002 Change Authorizations and 2001 Leases.

LEGAL REQUIREMENT FOR APPLICATION PROCESSING

The following requirements must be met prior to processing a trust water right application:

Water Resources Statutes and Case Law

These applications and consideration of the changes of purpose and place of use relies on several pertinent sections in the trust water statute, RCW 90.42. Ecology is acting in several capacities on this project, including a funder, a regulator, and a water supply developer. The following are some of the relevant statutory authorities. The standard under these statutes requires a tentative determination of the extent and validity of the subject water right:

- RCW 90.03.380(1) states that a water right that has been put to beneficial use may be changed. The point of diversion, place of use, and purpose of use may be changed if it would not result in harm or injury to other water rights.
- The Washington Supreme Court has held that Ecology, when processing an application for change to a water right, is required to make a tentative determination of extent and validity of the claim or right. This is necessary to establish whether the claim or right is eligible for change. *R.D. Merrill v PCHB* and *Okanogan Wilderness League v. Town of Twisp*.
- RCW 90.42.040 states a water right acquired by the state shall be placed in the state trust water rights program to be managed by Ecology.
- RCW 90.42.040(4)(a) states that exercising a trust water right may be authorized only if Ecology determines neither existing water rights nor the public interest will be impaired at the time the trust water right is established.
- RCW 90.42.100(1) states that Ecology is authorized to use the TWRP for water banking purposes.
- RCW 90.42.100(2)(a) states that water banking may be used to mitigate for any beneficial use under chapter 90.03, 90.44 or 90.54 RCW, consistent with any terms and conditions established

by the transferor, except that return flows from water rights authorized in whole or in part for any purpose shall remain available as part of total water supply available and to satisfy existing rights for other downstream uses and users.

- RCW 90.42.100(2)(b) states that water banking may be used to document water right transfers to and from the TWRP.
- RCW 90.42.040(5) requires that prior to creating or exercising a trust water right, a notice containing pertinent information be sent to all appropriate state agencies, potentially affected local governments and federally recognized tribal governments, and other interested parties.
- RCW 90.90.020 directs Ecology to develop new water supplies to improve instream flow and out-of-stream uses, including irrigation (i.e. MVID) and municipal use (i.e. Twisp).

Public Notice

Notice of the proposed applications were published in Methow Valley News, Okanogan County, Washington, on November 20 and 27, 2013. The public notice described all three trust water right application CS4-MVID@155,CS4-MVID@156 and CS4-118277CL, along with the two new water right applications (S4-33097 and G4-33098). One protest was received in advance of the 30-day comment period and is addressed in the Consideration of Protests and Comments section below. A copy of the affidavit of publication and the protest is on file with Ecology. Notice under trust statute RCW 90.42.040(5) was also sent to interested parties; a copy of that letter and mailing list is also on file with Ecology.

State Environmental Policy Act (SEPA)

This project required SEPA review under WAC 197-11-310. Ecology and Okanogan County, acting as co-lead agencies for this project, reviewed a SEPA checklist prepared by the applicant (Appendix A). A final SEPA threshold determination was issued on July 30,, 2014.

Expedited Processing

This application qualifies for expedited processing under WAC 173-152-050(2)(c)(ii) whereby water right change applications may be processed prior to applications submitted at an earlier date when the proposed water use requires a change or transfer of water into the state trust water right program in accordance with chapter 90.38 or 90.42 RCW, if that transfer provides a substantial environmental benefit. This project will provide significant instream flow benefit, as well as provide habitat and fish passage benefits.

INVESTIGATION

Ecology's Policy 1120 *Conducting Tentative Determinations*[5] provides guidance on Ecology's methods for making a tentative determination of the extent and validity of water rights during a review of change applications. Generally, a review of multiple sources of water use data is prescribed to formulate an understanding of historic use over the life of the water right. For irrigation water rights, meter use and review of aerial photography is common. Aspect Consulting provided an initial Technical Memorandum titled *Evaluation of Methow Valley Irrigation District (MVID) Water Rights* (Aspect Consulting, January 16, 2014) which summarized much of the available water use information for MVID (see Ecology file). The following sections describe Ecology's investigation of MVID's historical water use.

Past Tentative Determinations and Regulatory Actions

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. They also found that the existence

[5] http://www.ecy.wa.gov/programs/wr/rules/images/pdf/pol1120.pdf.

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.

When making a tentative determination on a water right, Ecology generally evaluates the period of beneficial use since the last time Ecology evaluated the right. Although Ecology's decisions are tentative and not final until a water right is confirmed in a superior court adjudication, Ecology generally does not disturb or re-evaluate previous decisions when evaluating an application on a subsequent change. This Report adopts this common practice, and therefore a summary of previous Ecology tentative determinations is appropriate.

Ecology has made formal decisions relating to the extent and validity of the Twisp and Methow River water rights numerous times, but has never formally evaluated MVID's Alder Creek water right. For example, beginning in 1998, as part of a plan to realign portions of MVID's service area, Ecology processed 115 change applications to exclude members and move them to wells. Ecology also issued two waste orders, in 2002 and 2003, that evaluated MVID water use.

The 1998 Ecology change decisions were termed "tentative determinations" at the time, but only included an evaluation of on-farm water use, and not canal losses or spills. The waste orders were not termed "tentative determinations" and were done under the provision of the water code requiring prevention of waste (RCW 90.03.005) rather than the surface and groundwater change statutes where case law indicates that tentative determinations are triggered (i.e. RCW 90.03.380 and RCW 90.44.100).

None of these former administrative actions represent a "tentative determination" as described today under Policy 1120. This evaluation will include a more holistic evaluation of on-farm use and canal losses. This difference is because Ecology's understanding of when and how to perform tentative determinations has evolved in response to a myriad of court cases[6] where this issue has been litigated. Ecology acted based on several court decisions to adopt Policy 1120 in 2004, which occurred after all previous Ecology administrative actions on MVID water rights had occurred.

While there is not a fixed tentative determination for the Twisp and Methow River water rights under current Ecology methodology (and not at all for the Alder Creek water right), it is appropriate to use elements of both the previous on-farm tentative determinations and the waste orders (evaluating canal losses) in deriving this current tentative determination. In other words, the foundational pieces are there, but they have not been aggregated together. Additionally, Ecology must look at the intervening period of use since it last evaluated the water rights (e.g. generally the time from 2000 to present) to see if any significant changes have occurred.

Metered Water Use

MVID has metered its diversions from the Twisp and Methow Rivers since 2001 and from Alder Creek since 2011. The following sections summarize available metered water use data:

- <u>Methow River Water Right S4-SWC945</u>

  Table 6 summarizes Methow River diversions into the East Canal under Certificate SWC 945. The comments column provided in Table 6 includes notes from Ecology's metering records regarding problems encountered in the years when metering data is available. Since 2001, MVID diverted more water in nearly every year than the non-wasteful limits set by the Washington State Court of Appeals 20 cfs and 4,909 acre-feet.

[6] See *Rettkowski v. Department of Ecology*, 219 122 Wn. 2d 219, 858 P. 2d 232 (1993); *R.D. Merrill v. Pollution Control Hearings Board* 137 Wn. 2d 118, 969 P.2d 459 (1999); *Okanogan Wilderness League v. Town of Twisp* 133 Wn. 2d 769, 947 P. 2d 732 (1997) and *Public Utility District No. 1 of Pend Oreille County v. Department of Ecology* 70372-8 (2002).

Although MVID has coordinated with Ecology on various means to measure and control Barkley Spill into the MVID East Canal, reliable historical metering data for Barkley Spill are not available. The proposed design for the East Canal will include a means of routing Barkley Spill back to the Methow River instead of running in the length of the East Canal.

Table 6 – Methow River (Certificate SWC 945) Diversions

Year	Qi (cfs)	Qa (ac-ft)	Comments
	24	**5,829**	**2002 Order (*MVID I*)**
	20	**4,909**	**2003 Order Interim Levels *(MVID II)***
	20	**4,909**	**2003 Order Final Levels (East Diversion Less Barkley Canal Inflow) (*MVID II*)**
			Note: Metering data from 2001-2012 do not include Barkley Canal Inflow
2001	30	5,885.1	
2002	22	4,929.9	
2003	21	4,247.5	
2004	20	no data	Personal communications between MVID ditchmaster Bob Sims, Reclamation staff Greg Knott and Ecology Water Master suggest peak diversions were 20 cfs for the East Canal. USGS gages were removed in 2003, and Reclamation installed and calibrated new gages and rating curves in 2004/2005.
2005	20	no data	Personal communications between MVID ditchmaster Bob Sims, Reclamation staff Greg Knott and Ecology Water Master suggest peak diversions were 20 cfs for the East Canal. USGS gages were removed in 2003, and Reclamation installed and calibrated new gages and rating curves in 2004/2005.
2006	22.92	4,403.0	A meter problem occurred for East Canal diversions for several months during the irrigation season; potentiometer replaced, records from 7/28 to 9/6 suspect.
2007	20.86	4,746.0	
2008	11.78	2,766.9	Personal communication between Ecology Water Master and Bunny Morgan says data is accurate and that low flows attributed to reduced demand during cold summer.
2009	26.8	no data	Metering information for 2009 also showed peak cfs for July 24, 2009, of 58.21. This number is believed to be a glitch based on this number being the only number exceeding the peak flow cfs rate of 22.92 documented on July 6, 2006.
2010	16.76	3,236.4	
2011	23.7	5,282.3	Flood water entering canal not considered an overage per Ecology 2011 email correspondence with MVID.
2012	19.64	5,168.3	Qi and Qa are based on 2012 MVID metering data.
2013	11.93	4,592.4	Cold wet spring led to reduced demand.

- Twisp River Water Right Claim 003935

  MVID has struggled to maintain reliable meter records for its diversions on the West Canal, despite technical assistance from Reclamation. Calibration issues and equipment failures were often the cause. Nevertheless, there is a sufficient record of data to observe trends regarding total use from the Twisp River under Claim 003935.

  Since 2001, MVID diverted more water each year than the non-wasteful limits set by the Washington State Court of Appeals 11 cfs and 2,716 acre-feet. Since 2010 when MVID began negotiating cessation of litigation activities, which culminated in the 2011 Settlement Agreement, annual diversions have been less than the interim limits set by the Court, and

conform to the compliance schedule shown in Table 1. Periodic exceedances of the prescribed instantaneous quantity have occurred, primarily associated with demand for water returning in areas with formerly-unreliable service. MVID continues to work to manage its diversions within the ordered limits.

Table 7 – Twisp River (Claim 003935) Diversions

Year	Qi (cfs)	Qa (ac-ft)	Comments
	29	**7,367**	**2002 Order (*MVID I*)**
	21	**5,161**	**2003 Order Interim Levels (*MVID II*)**
	11	**2,716**	**2003 Order Final Levels (*MVID II*)**
2001	25	5,894.5	
2002	27	5,873.2	
2003	27	6,232.7	No water in river Sept and Oct; ditch master lost the daily measures; district able to deliver 12-13 cfs on the west side during this time.
2004	21	no data	Personal communications between MVID ditchmaster Bob Sims, Reclamation staff Greg Knott and Ecology Water Master suggest peak diversions were 21 cfs for the West Canal. USGS gages were removed in 2003, and Reclamation installed and calibrated new gages and rating curves in 2004/2005.
2005	21	no data	Personal communications between MVID ditchmaster Bob Sims, Reclamation staff Greg Knott and Ecology Water Master suggest peak diversions were 21 cfs for the West Canal. USGS gages were removed in 2003, and Reclamation installed and calibrated new gages and rating curves in 2004/2005.
2006	32.35	5,597.0	A meter problem occurred for West Canal diversions for several months during the irrigation season; potentiometer replaced, records from 7/22 to 8/17 suspect.
2007	26.64	6,247.9	West Canal improvements constructed (about 1 mile of canal replaced with pipe).
2008	22.64	5,783.1	
2009	22.92	no data	Metering information for 2009 showed peak cfs for July 24, 2009 of 58.21. This number is believed to be a glitch since it is the only number exceeding the peak flow cfs rate of 22.92 documented on July 6, 2006.
2010	18.47	5,030.6	
2011	18.5	3,626.3	Potentiometer malfunction resulted in peak hourly spikes likely not reliable. Potentiometer replaced. Cold wet spring/summers led to reduced demand.
2012	19.35	4,232.4	Cold wet spring/summers led to reduced demand. Potentiometer malfunction resulted in peak hourly spikes likely not reliable.
2013	18.21	3,523.2	Cold wet spring led to reduced demand.

- <u>Alder Creek Water Right Claim 118277</u>

  Limited data is available for Alder Creek. MVID located archived metering records for a weir on Alder Creek from 1991. That data showed average monthly flows from May to September of approximately 1.1 cfs (67 acre-feet per month) with the exception of August where flows dropped to approximately 0.12 cfs for much of the month (about 10 acre-feet), or a total of approximately 275 acre-feet. Peak daily flows were not available, but are expected to be higher than average monthly flows.

  MVID installed a measuring device and provided Alder Creek metering data in 2011. Table 8 was created by aggregating the daily cfs data to monthly volumes, and identifying the peak diversion in each month. Recorded peak flows at least equaled 2 cfs one day each month.

Table 8 – Alder Creek (Claim 118277) Diversions

May - October 2011 Metering data		
Month	**Peak Qi (cfs)**	**Qa (acre-ft)**
May	2	48.43
June	2	98.21
July	2	118.84
August	2	123.00
September	2	119.04
October	2	3.97
Total	**2**	**511.49**

- Twisp Metered Water Use

  Since the 2001 change authorizations were approved, Twisp has utilized a portion of the 400 acre-feet authorized under CS4-SWC945 and CS4-WRC003935. Twisp reports its metered water use every year to Ecology. Twisp reports well production data to DOH annually also. Based on Twisp's metered water use data, Table 9 summarizes the Town's total use.

  In order to estimate use under the 2001 change authorizations, Ecology evaluated the Town's use relative to its water right portfolio. Twisp holds 224 acre-feet of municipal water rights that can be used year-round. The water leased from MVID can only be used for seasonal irrigation use. Aspect Consulting analyzed the Town's water use from 2009 to 2012 to determine how municipal and irrigation water use varied. Copies of water use figures from 2009 to 2012 are provided in Ecology files. Winter use is attributed solely to the Twisp's municipal rights. Summer use is predominately irrigation. About 47% of Twisp's water use occurs from October to May each year, with 53% occurring from June to September (irrigation season). Irrigation in May and October was charged to winter use and assumed to balance the summer indoor demand.

Table 9 - Town of Twisp Water Use

Year	Well Production (Total ac-ft)	Municipal Use (ac-ft)	Irrigation Use (ac-ft)
2001	343	161	182
2002	337	158	179
2003	286	134	152
2004	473	222	251
2005	341	160	181
2006	351	165	186
2007	323	152	171
2008	351	165	186
2009	239	112	127
2010	204	96	108
2011	243	114	129
2012	207	97	110

Aerial Photography Review

Aerial photography along with estimates of crop water duty can be used to estimate water use. Many historic images are available for the area served by MVID.

In the late 1990s, Ecology processed 115 change applications, as part of a plan to realign portions of MVID's service area. Comprehensive sets of photos used by Ecology in those decisions were aerial photos from 1954 and 1983.

The next comprehensive aerial photo review occurred in support of Ecology's 2002 and 2003 waste orders. In those analyses and subsequent court cases, Ecology relied on comprehensive color imagery from 1995.

The Aspect Technical Memo (2014) summarized these older aerial photograph analyses and incorporates new photos from 2005, 2006, 2007, 2009, and 2011, as well as field and helicopter reconnaissance from 2012.

A summary of this data is provided in the following sections.

1954 and 1983 Aerial Photos

In the 115 change applications Ecology processed in the late 1990s, metering data was unavailable so Ecology relied almost exclusively on aerial photo imagery coupled with estimates of crop water duty for estimates of beneficial use. The first comprehensive sets of photos used by Ecology in those decisions were aerial photos from 1954 and 1983.

Detailed descriptions on how Ecology used these aerial photos were presented at the *MVID I* trial. Copies of the trial transcript in Ecology's file provide detail on the methodology. Pages 144 to 175 summarize testimony from Ecology witnesses Jim Lyerla and Ron Dixon. A summary of the key points in the transcript is provided below:

- Photos from 1954 were black and white aerial images.
- Photos from 1983 were color aerial images.
- The 1954 and 1983 flights were selected as they provided two points in time separated by a long period of time to judge changes in irrigation practices and because they covered the entirety of the MVID service area.
- Mylar was overlaid on the aerial images and field shapes were drawn corresponding to irrigated and possibly irrigated areas on the photos.
- Fields that were irrigated in either 1954 or 1983 were added to the Mylar tracings.
- The Mylar tracings were converted to GIS shape files.
- The sum of the 1954 and 1983 irrigated acres were used as the basis for the 115 tentative determinations to move MVID members to wells.

MVID I Finding of Fact XXXI summarizes the results on this aerial photo analysis:

> *Ecology began its tentative determination by examining the amount of area MVID has historically irrigated. Aerial photographs, MVID assessment records, and county parcel lists evidenced a maximum of approximately 1,250 acres irrigated in any given year. Because the historic irrigation did not always occur on the same 1,250 acres, the various lands irrigated at one time or another totaled nearly 1,600 acres. The acreage considered in the acreage calculation included approximately 40 acres referred to as the "easement lands."*

Ecology coupled the acreage calculations above with an estimate of on-farm water duty to derive the amount of water each of the 115 excluded members would receive in their change authorizations.

MVID I Findings of Fact XXXI – XXXIII summarize the water duty attributed to each acre of land excluded:

> *In establishing the tentative determination, Ecology began with an annual water duty of 4.0 acre-feet per acre for 1,250 acres, which generated an annual historic use figure of 5,000 acre-feet of water per year.*
>
> *In calculating the quantity of water attributed to each excluded MVID member, Ecology had to determine how to assign the historic water use of 5,000 acre-feet per year to the acreage within the District. One method would recognize 4.0 acre-feet per acre for each parcel receiving water, thereby excluding some of the 1,600 acres. A second option would assign a proportionate share of the 5,000 acre-feet to each of the 1,600 acres, which would result in an allocation of approximately 3.08 acre-feet per acre. MVID's representative advised Ecology that the District would prefer to follow the latter option and apply the 5,000 acre-feet across all 1,600 acres historically irrigated.*

During the same period Ecology was processing the change applications for excluded members, MVID filed its own change application to transfer 400 acre-feet of MVID water to the Town of Twisp pursuant to a lease. The 400 acre-feet of water leased to Twisp would no longer be available to allocate to MVID lands. Excluding it from the calculations yielded a final on-farm water allocation of 2.83 acre-feet per acre per year. MVID members seeking exclusion from the District were, accordingly, assigned 2.83 acre-feet per acre from the MVID rights.

So Ecology's tentative determinations in the late 1990s reflected distribution of the estimated annual water deliveries to the farm turnouts across all 1600 acres that had been irrigated over the 30 plus year period evaluated. The resulting "on farm" water duty of 2.83 acre-feet/acre was the basis for quantifying excluded members. Later these determinations were relied on to determine the diversion rates from the Twisp and Methow Rivers that were reasonably efficient. See orders DE-02 WRCR-3950 and DE 03WRCR-5904. Copies of the GIS shape files used by Ecology based on the Mylar tracings remain available, and the total acreage is 1,239.9 acres, which tracks with "approximately 1,250 acres" identified in *MVID I.*

1990 Klohn Leonoff Report

The next evaluation of irrigated MVID acres took place in 1990, when MVID hired engineering firm Klohn Leonoff to evaluate and recommend improvements for canal infrastructure. *MVID I* Findings of Fact X-XI describe this effort and the report is available in Ecology's files:

The Department issued Order DE 88-C386 to MVID in 1988, requiring the District to obtain the information necessary to develop a workable rehabilitation plan or curtail water use. The Order gave MVID the option to: (1) retain a registered professional engineer to prepare an engineering report of the MVID facilities and operations, or (2) reduce diversions for the 1989 irrigation season by 25 percent of the instantaneous diversion rate. The Order also required the District to install measuring devices at the headworks of the West and East Canals and to maintain diversion records.

MVID chose to obtain the engineering analysis and retained Klohn Leonoff Consulting Engineers to perform the required study. The Klohn Leonoff study was completed in January 1990, and contained a comprehensive review of the District facilities and operation.

Color aerial imagery and field reconnaissance were used to delineate irrigated acres in 1989. Klohn Leonoff found 445.5 acres being irrigated that year from the East Canal and 330.6 acres from the West Canal, or approximately 776 acres total.

1996 Montgomery Water Group Water Supply Facility Plan

In 1994, MVID hired the Montgomery Water Group to develop alternatives for improving the canal system. As part of this analysis, they updated irrigated acres based on aerial imagery and field reconnaissance, concluding that a total of 873 acres were irrigated in 1995 (*MVID II).* A copy of this report is available in Ecology's files.

1995 Aerial Imagery, Realignment and 2002-2003 Waste Orders

In 2000, MVID was on schedule to make substantial improvements to its canal system and realign its boundaries to a smaller footprint of 930 assessed acres (*MVID I*, Finding of Fact XXXIV).

In April 2000, the MVID Board adopted Resolution 00-07, which formally excluded all lands below and south of Wagoner Road on the east side of the Methow River, and all lands below and south of Booth Canyon on the west side of the Methow from the District's boundaries. This exclusion left approximately 881 acres of irrigable land served by the MVID canals.

However, later in 2001, MVID notified Ecology it would not proceed with the preferred alternative. After a notice of violation, Ecology issued Administrative Order No. 02WRCR-3950 to MVID on April 29, 2002 limiting MVID diversions. The basis for the order was 1995 aerial imagery. The 1995 photo was a

high-resolution color aerial photo that could be readily compared with GIS parcel mapping and assessed acres. The order relied on estimated canal losses.

In response to the direction by the PCHB in its *MVID I Decision*, Ecology re-evaluated MVID's canal system and issued Administrative Order No. 03WRCR-5904 in December 2003. This order also relied on the 1995 aerial photography. The 1995 photo appeared to correlate well with the excluded parcels associated with the 115 change applications approved three years earlier. This analysis resulted in a total of 881 acres of irrigated land (455 acres from the West Canal and 426 acres from the East Canal). This is the last formal evaluation of irrigated acres completed by Ecology, and 881 acres is referenced in more contemporary correspondence as the presumed status quo of MVID member irrigation use. However, the 881 acres was not a formal limit ordered by Ecology in the 2002-2003 Waste Orders. Rather, it was an assumption in the engineering analyses on which the quantities in the orders were based.

2007 Canal Management Plan

In 2007, Montgomery Water Group and IRZ Consulting prepared a *Canal Management Plan* for MVID. Irrigated acres were again evaluated using field reconnaissance as part of canal seepage testing. In 2007, 457.4 acres were irrigated from the East Canal and 345 acres from the West Canal, or 802.4 acres total.

2013 MVID Analysis, with Trout Unlimited and Reclamation Technical Assistance

In an effort to determine "current" irrigation by MVID members and develop water delivery alternatives for the current MVID Instream Flow Improvement Project, MVID, with technical assistance from Trout Unlimited (TU) and the US Bureau of Reclamation (Reclamation), evaluated recent aerial imagery augmented with field reconnaissance. MVID's assessment roll was joined with the Okanogan County Assessor's Office layer for mapping using the parcel numbers as unique identifiers. The team evaluated land within each parcel and determined whether it was irrigable and irrigated.

To analyze a parcel's suitability for irrigation (irrigable vs. non-irrigable), a low-level 2006 high-resolution photo, supplemented with LIDAR for detail work, was used. Land was categorized as non-irrigable if it included 1) steep slope topography, 2) river side channels or wetlands, or 3) roads and structures. Of the remaining land portions with irrigable suitability, current land use (irrigated or non-irrigated) was evaluated using photos from 2009 and 2011, along with aerial photos of the district taken from a helicopter in fall of 2012. This data was provided to MVID in 2013 and included in the Aspect Technical Memo (2014).

Once the irrigable/non-irrigable and irrigated/non-irrigated categories were evaluated for each parcel, these acreages were then compared to the MVID assessed acreages. Differences between irrigable and assessed were used to help identify which parcels might warrant further scrutiny.

The data suggests that 357.5 acres was irrigated from the East Canal and 343.6 acres from the West Canal, or 701 acres total. The irrigable acreage was determined to be about 1,100 acres.

However, based on continuing improvements in MVIDs existing system and increased reliability, and following notification in 2013 that the system would likely be further improved, approximately 23 members notified MVID that they resumed irrigation on their parcels in 2013. The estimated acreage returned to production in 2013 totals 116 acres. The estimated area irrigated in 2013 is approximately 817 acres.

Summary of acreage estimates from previous assessments

Table 10 compiles the aerial photography data summarized in the sections above. The <1984 data are the estimates from the 1954 and 1983 images. 1989 data are from the Klohn Leonoff Report. The 1995 data are from the Ecology engineering analyses prepared for the waste orders. They are corroborated by the 1995 Montgomery Water Group plan which estimated 873 acres in 1995. The 2007 data are from the Canal Management Plan. The 2013 data are from the MVID/TU/Reclamation evaluation.

Table 10: Aerial Photography Summary

Canal	<1984	1989	1995	2007	2013*
East	796.8	445.4	426.1	457.4	357.5
West	443.1	330.6	455.2	345	343.6
Total	**1239.9**	**776**	**881.3**	**802.4**	**701.1**

* Approximately 23 members notified MVID that they resumed irrigation on their parcels in 2013 in addition to the 701.1 acres estimated by TU and Reclamation, and verified by MVID.

Ecology evaluation of aerial photography and satellite imagery from 2005 – 2013

Ecology also performed an analysis of irrigated lands using sources available with the agency such as aerial photography and Land Satellite Imagery. The analysis was done for the period 2005 to 2013. Aerial photography data is available for the years 2005, 2006, 2009 and 2011 and Land Satellite Imagery data is available for the years 2007, 2008, 2010 and 2013.

The analysis was a combination of two-step process to estimate the total irrigated acreage. First was to find the irrigated lands using the Ecology's 1983 assessed parcel layer included both irrigated and possibly irrigated parcels, which was adapted to issue the waste order in 2002. The second step was to find the irrigated lands within MVID place of use but outside of 1983 assessed parcels. Parcels excluded from the district during the late 1990's were not part of the assessment. Table No. 11 summarizes the total acres irrigated for the years 2005 – 2013 following this methodology.

Table 11: Ecology Aerial Photography & Satellite Imagery Summary

Parcels	2005	2006	2007	2008	2009	2010	2011	2013
Total acres	**843**	**843**	**818**	**771**	**805**	**796**	**792**	**781**

Water Duty

The Washington State Supreme Court in *Ecology v. Grimes* (1993) provided the following guidance on beneficial use and water duty for irrigation rights:

- *"For purposes of appropriated water rights, "beneficial use" has two elements: (1) the purposes or types of activities for which the water may be used and (2) the amount of water that may be used as limited by the principle of 'reasonable use'".*
- *"'Water duty' is the amount of water that, by careful management and use and without wastage, is reasonably required to be applied to a parcel of land for the period of time that is adequate to produce a maximum amount of such crops as ordinarily are grown on the land. Water duty varies according to conditions."*

Water duty was part of the *MVID* I and *MVID* II court cases and provides guidance to Ecology in this ROE. In this project, MVID seeks to use the MVID Water Bank to allow members to resume irrigation at historic water duties. The following excerpt from the *MVID I* decision summarizes how the Court addressed water duty:

> *"In establishing the tentative determination, Ecology began with an annual water duty of 4.0 acre-feet per acre for 1,250 acres, which generated an annual historic use figure of 5,000 acre-feet of water per year.*
>
> *In calculating the quantity of water attributed to each excluded MVID member, Ecology had to determine how to assign the historic water use of 5,000 acre-feet per year to the acreage within the District. One method would recognize 4.0 acre-feet per acre for each parcel receiving water, thereby excluding some of the 1,600 acres. A second option would assign a proportionate share of the 5,000 acre-feet to each of the 1,600 acres, which would result in an allocation of approximately 3.08 acre-feet per acre. MVID's representative advised Ecology that the District*

would prefer to follow the latter option and apply the 5,000 acre-feet across all 1,600 acres historically irrigated.

During the same period Ecology was processing the change applications for excluded members, MVID filed its own change application to transfer 400 acre-feet of MVID water to the Town of Twisp pursuant to a lease. The 400 acre-feet of water leased to Twisp would no longer be available to allocate to MVID lands. Excluding it from the calculations yielded a final on-farm water allocation of 2.83 acre-feet per acre per year. MVID members seeking exclusion from the District were, accordingly, assigned 2.83 acre-feet per acre from the MVID rights."

The Court recognized that both 4.0 and 2.83 acre-feet/acre were reasonable and non-wasteful water duties for MVID. MVID chose to reduce its water duty to allow it to serve more of its members with less water, and to generate some financial benefits via the Twisp lease. Neither the Court findings, nor Ecology's 2002-2003 Waste Orders prescribe a specific water duty that must be met. Rather, they define the upper limits of non-wasteful diversions to serve MVID members who were using water for irrigation.

Water duty is typically estimated by using published sources of evapotranspiration. The closest weather stations to MVID where evapotranspiration is monitored are Winthrop and Omak. Several published estimates for crop irrigation requirement (i.e. evapotranspiration less effective rainfall) are available in this area. Depending on the published source which all use varying data and methodology, results vary. These include:

Winthrop Stations

- Irrigation Requirements for Washington (1982): Pasture/Turf (26")[7] and Apples w/Cover (32").
- Washington Irrigation Guide (1985): Pasture/Turf (18.61") and Apples w/Cover (23.5").
- Washington Irrigation Guide (2014 Provisional): Grass Mean (28.5") and Apples w/Cover (29.8").

Omak Stations

- Irrigation Requirements for Washington (1982): Pasture/Turf (34") and Apples w/Cover (41").
- Washington Irrigation Guide (1985): Pasture/Turf (26.89") and Apples w/Cover (31.67").
- Washington Irrigation Guide (2014 Provisional): Grass Mean (26.6") and Apples w/Cover (26.8").
- Bureau of Reclamation AgriMet[8] (2013 Data): Grass (29.8 inches).

Methow Stations

- Washington Irrigation Guide (1985): Pasture/Turf (26.49") and Apples w/Cover (31.25")
- Washington Irrigation Guide (2014 Provisional): Grass Mean (26.1") and Apples w/Cover (25.7")

MVID Members irrigate many different crops each year, including grass hay, lawn, garden and apples. Ecology's Water Resource Program Procedure PRO-1210 (Ecology, 2005) and Guidance GUID-1210 (Ecology, 2010) allow for use of multiple data sources to estimate site-specific crop irrigation requirements. The crop irrigation requirement value for Pasture/Turf in the Washington Irrigation Guide (1985) is 8 to 16 inches less than all other data sources, and Ecology believes this to be an outlier. The average values of all remaining crop irrigation requirements, excluding provisional 2014 Washington Irrigation Guide data, equates to approximately 28.6". Crop irrigation requirements from the above listed data are consistent with the provisional/pending 2014 Washington Irrigation Guide data. Therefore, irrigation water use for these water rights is calculated using the value for grass (28.5"),

[7] The symbol " represents a water equivalency of acre-inches per acre
[8] http://www.usbr.gov/pn/agrimet/monthlyet.html.

which is in the range of the published sources available and amongst the crop types grown by MVID members.

Another way to consider an appropriate crop irrigation requirement is to consider the relative efficiency of the overall water duty. For example, Ecology's waste order was predicated on an overall assumption of water duty of 2.83 acre-feet / acre. Based on a crop irrigation requirement of 28.5", this would imply an efficiency of 84% which is at the high end of sprinkler efficiency based on Ecology's Consumptive Use Guidance, GUID 1210[9]. Conversely if the lowest overall duty from the existing Washington Irrigation Guide of 18.61" were selected, that would equate to an on-farm efficiency of 54%, which is below the reasonable range of sprinkler efficiency in GUID 1210. Finally, if the Irrigation Requirements for Washington value of 34" were used, it would equate to an efficiency of 100% for sprinklers, which is not reasonable for most sprinkler irrigation. Ecology selected Grass Mean from the 2014 Provisional Washington Irrigation Guide as a representative crop grown within the district. The crop irrigation requirement of Grass Mean at the Winthrop Station is 28.5" per year.

Given MVID's intent to increase its current water duty from 2.83 acre-feet/acre back to as much as 4 acre-feet/acre, Ecology considered the relative efficiencies and consumptive use of these water duties. In summary, a range of water duties from 2.83 acre-feet to 4 acre-feet for pasture irrigation corresponds to a range of efficiencies spanning 59% to 84% (63% to 88% for apples). Ecology's GUID 1210 provides ranges of sprinkler efficiency across numerous application methods. Generally, an average range of 55% to 85% is common for sprinkler application efficiency. The water duties contemplated in these applications and for the MVID Water Bank fall within this range.

Perfection, Relinquishment, Abandonment, and Waste

Perfection of Alder Creek Claim 118277

Because Ecology has never made a tentative determination for Alder Creek Claim 118277, it must evaluate whether the claim was original perfected consistent with the claim registry requirements.

Claim 118277 was filed by MVID in 1974 during the first claim registry created by the Legislature. Surface water claims are only valid to the extent they represent a vested beneficial use that began before the adoption of the water code in 1917 (or 1932 for riparian rights under the Supreme Court case *Ecology v. Abbott* (1985)).

On the face of the claim under the "legal doctrine on which the right of claim is based", it states: *"Prior or vested use, supported by affidavit signed by Vernon LaMotte and recorded in Book 44, Page 140, Record No. 606496"*. According to MVID, Vernon LaMotte was a member of the MVID Board of Directors.

In his affidavit, Vernon LaMotte details the historic diversion and use of water from Alder Creek for irrigation by his family dating back to 1892 in Section 34, Township 33 N. Range 22E.W.M. This use continued until 1944, when the right was transferred for MVID use.

Vernon LaMotte's affidavit as to the extent and validity of a vested water right for Alder Creek is supported by a notice filed in Okanogan County Book of Water Rights, Volume D, Page 362, which Aspect Consulting retrieved from county records (Aspect Technical Memo (2014)). This notice filed by Vernon's great uncle W. L. LaMotte describes the vested water right from Alder Creek averaging 2.5 cfs for use on the Section 34 lands.

Ecology files contain a 1923 Appleby survey of irrigated lands that overlap the MVID service area. The 1923 Appleby survey supports the presence of 58 acres as presently irrigated and 109 acres as irrigable

[9] Guidance 1210 – Determining Irrigation Efficiency and Consumptive Use http://www.ecy.wa.gov/programs/wr/rules/images/pdf/guid1210.pdf.

in Section 34. MVID claimed 100 acres dating to a first use of 1914, although the LaMotte affidavit and notice suggest the priority date could be confirmed as early as 1892. The W. L. LaMotte notice does not expressly indicate a number of acres irrigated, but lists a place of use as a series of quarter-quarter sections totaling over 400 acres.

Water rights typically transfer by deed from one property owner to another, and it is seems clear that the LaMotte family initially perfected a vested surface water right for Alder Creek, then discontinued that use on their parcels when LaMotte transferred the water right to MVID. MVID has to-date been unable to locate a legal deed transferring the water right to their ownership. However, historic MVID records were stored at the Twisp Town Hall, which burned down and created a gap in critical district records. Other MVID records were stored in a shed in the 1970s, which caved in during a heavy snowstorm and those records were damaged and lost as well. In the absence of an assertion and evidence by a third party, an adjudication court would likely give weight to the contemporaneous filing of the claim by MVID and supporting declaration by Vernon LaMotte (relative of original vested owner and MVID Director) that title to the water right indeed transferred to MVID.

MVID diverts Alder Creek under Claim 118277 into the West Canal. It has been used collectively on MVID lands served by the West Canal, which is a change in place of use from the original claimed quantity. MVID has been operating under the guidance of RCW 90.03.380(3), which allows for transfer of water within its authorized district boundaries.

There is considerable support for the validity of the Alder Creek claim. The extent of the right is less certain, but still supported by the record assembled to-date. The LaMotte notice and 2011 metering records support that a peak flow of 2 cfs or more as claimed seems valid. The claimed quantity of 360 acre-feet could be satisfied by approximately 1.2 cfs average flow over 5 months, which is supported by the 1991 and 2011 data. The 100 acres claimed appears supportable from the 1923 Appleby map and LaMotte notice of the place of use, and it would represent a duty of approximately 3.6 acre-feet/acre, which is consistent with other MVID water rights and water duties discussed above.

Finally, Ecology must determine the interrelationship of the Alder Creek Claim 118277 to the Twisp River Claim 003935. Initially, they served discrete lands and were both apparently primary rights and additive to each other. However, Alder Creek Claim 118277 and Twisp River Claim 003935 serve the same lands within the district. As such, the Alder Creek instantaneous and annual quantities are not additive to those reasonably allowed for diversion under Claim 003935

Abandonment

Abandonment results from intent to abandon a project, or a long-standing period of nonuse that gives rise to a presumption of abandonment. None of MVID's actions have indicated intent to abandon their irrigation rights.

Relinquishment and Waste

MVID has continually diverted at or in excess of its authorized quantities under each water right since the waste orders issued in 2003, which does not give rise to relinquishment concerns. There has not been a period of 5 or more consecutive years when less than the ordered quantities were diverted from the Twisp and Methow Rivers. Alder Creek data is less available; however, MVID asserts that to the extent Alder Creek is available each year, they divert the full claimed quantity.

MVID has used its full authorized water quantities on fewer acres than assumed in the waste order (e.g. 700 to 800 acres instead of 881 acres). When irrigated acres decrease, it may be appropriate to divert proportionately less water (e.g. 700 to 800 acres relative to 881 acres represents a decrease of 10 to 20%). It may also be appropriate to divert the same amount of water at a slightly lower efficiency for the same crops, or at the same efficiency if more intensively irrigated crops are developed. Ecology must consider whether MVID's diversion of water at the ordered quantities represent beneficial use. Water diverted above the ordered quantities is waste under the Court Orders, subject to enforcement discretion by Ecology in the 2011 Settlement Agreement.

From a water budget standpoint, water diverted by MVID is either used on-farm, is spilled, or leaks from its canals. The time period from 2002 to 2013 represents a period of increased regulatory scrutiny by Ecology and increased investment in infrastructure by MVID. Ecology required and monitored metering up to weekly frequency at times, and also required monitoring of spills. Some improvements in canal management and efficiency were made by MVID (e.g. piping, polyacrylamide application) during this time period. Given this behavior, canal efficiency likely remained the same or slightly improved. Spills likely decreased. The only other portion of the water budget remaining then is on-farm duty.

If 10% to 20% more water were used on-farm (commensurate with a decrease of 10% to 20% in irrigated acreage), that duty would represent a range of 3.1 to 3.4 acre-feet/acre, which is still within the range of beneficial uses described by the PCHB and in previous Ecology decisions.

Relinquishment Exceptions

The only continuous period of non-use greater than 5 years are a portion of the quantities transferred to Twisp under the 2002 change authorizations.

A portion of the Methow and Twisp water rights are the subject of the 2002 Change Authorizations CS4-SWC945 and CS4-WRC003935, which remains in good standing and authorizes irrigation use in the Town of Twisp. Based on the Town's diversion data, they have only exercised a portion of the 2002 change authorization quantities. MVID and Twisp assert that the 2002 Change Authorizations represent a determined future development (DFD), which remain in effect today under the 2014 PSA.

RCW 90.14.140(2)(c) states a water right not used for more than 5 years is not relinquished if it is claimed for a determined future development (DFD) to take place within 15 years of the last beneficial use of water under the water right. In order to be valid, a determined future development plan must satisfy a series of tests as established in case law[10], including:

- The plan must be determined and fixed within five years of the last beneficial use of the water.
- The party exercising the plan must have equity in the water right.
- The plan must remain fixed.
- Affirmative steps must be taken to implement the plan within 15 years.

In this instance, the nonuse of the 400 acre-feet began in approximately 2002, which is coincident with the execution of a lease and change applications to move this water to Twisp. Both parties, MVID and Twisp, have equity interests in the subject water right, and have negotiated a Purchase and Sale Agreement to further cement a long-standing regional relationship. MVID and Twisp have continually renewed the lease and worked toward coordinating their respective service areas with these change authorizations, which is evidence that the plan has remained fixed. Significant quantities of water have been put to use under these authorizations which is evidence of affirmative steps, and 15 years has not yet elapsed.

Consumptive Use

RCW 90.42.080(5) states "The provisions of RCW 90.03.380 and 90.03.390 ... do apply to transfers of water rights under this subsection except that the consumptive quantity of a trust water right acquired by the state and held or authorized for use by the department is equal to the consumptive quantity of the right prior to transfer into the trust water right program." RCW 90.03.380 has an explicit application through annual consumptive quantity (ACQ), however ACQ does not apply to these transfers because acres are not being added nor is a purpose of use being added. RCW 90.03.380 has an implicit application by consumptive use not causing impairment to existing water rights. These transfers are following consumptive use methodologies and Ecology guidance described below, therefore the

[10] E.g., *R.D. Merrill Company v. Pollution Control Hearings Board; City of Union Gap and Ahtanum Ridge Business Park LLC v. Washington State Department of Ecology;* and *Protect Our Water v. Islanders for Responsible Water Management (Interveners), State of Washington, Department of Ecology, and King County Water District No. 19.*

requirement in RCW 90.42.080(5) is met. As a result, consumptive use is not being diminished as a result of these subject change authorizations.

Ecology Guidance 1220[11] provides guidance to quantify the amounts of water in the secondary reach of a trust water right based on consumptive use. The consumptive use associated with these water rights would serve as an offset to the consumptive use associated with the permits Ecology would approve for MVID, Twisp, and individual MVID members who elect to use their own wells. Therefore, a consumptive use analysis is required in this ROE. Ecology's general practice of calculating consumptive use is described in Ecology's Policy 1210[12], Procedure 1210[13] and Guidance 1210.

Consumptive use can be estimated by accounting for consumption from the following diversionary elements of each water right, which are summarized further in the following sections:

- Consumptive on-farm use.
- Consumptive canal/conveyance losses.
- Consumption from use by the Town of Twisp.

The time period from which to quantify the consumptive use is prescribed by the type of permitting action. Ecology GUID 1210 *Determining Irrigation Efficiency and Consumptive Use* specifies that if impairment is the criteria triggering a consumptive use determination, then the highest year in the period of record may be selected. Given the beneficial use analysis contained herein, Ecology chose the beneficial use from 1995 that is embodied in the 2002-2003 Waste Orders.

<u>Consumptive On-Farm Use for 881 acres under Claim 003935 (Twisp River), Certificate 945 (Methow River), and Claim 118277 (Alder Creek)</u>
Based on the holdings in *MVID I* and Ecology's Guidance 1210, consumptive use for the on-farm portion of MVID's rights is based on 28.5" crop irrigation requirement, 2.83 acre-feet/acre total use, 881 acres, and %CU = 93.9%, or 2,341 acre-feet[14].

- Certificate SWC945 represents 426.1÷881.3 of 2,341 acre-feet, or 1,131.8 acre-feet.
- Claim 003935 represents 455.2÷881.3 of 2,341 acre-feet, or 1,209.1 acre-feet.
- Claim 118277 is not allocated a consumptive use (already allocated to Claim 003935) and will retain a primary reach benefit only in Alder Creek.

<u>Consumptive Canal Losses under Claim 003935 (Twisp River) and Certificate 945 (Methow River)</u>
Some leaks in the East and West Canals are consumed by riparian vegetation and ponds adjacent to the canal, and some becomes return flow hydrating shallow groundwater and the Methow River. According to Ecology's Policy 1210, Ecology describes consumptive use as "Water that is transpired by plants at the place of use, water that escapes from a reasonably efficient conveyance system or from the place of use but does not become return flows, and water that is contained within a product or within a production byproduct." When lands were excluded and canals shortened in the 1990's and early 2000's, a decrease in riparian vegetation along the canals occurred.

Anchor QEA was hired by Trout Unlimited to estimate what portion of reasonable canal efficiency contributes to riparian vegetation, is associated with MVID irrigation diversion, and is likely to cease

[11] Guidance 1220 – Guidance for Processing and Managing Trust Water Rights.
[12] Policy 1210 – Policy for the Evaluation of Changes to Enable Irrigation of Additional Acreage or the Addition of New Purposes of Use to Existing Water Rights.
[13] Procedure 1210 – Calculating and Applying the Annual Consumptive Quantity.
[14] E.g., 28.5" / 12 = 2.375 ac-ft/ac, which equate to an efficiency of 83.9%. Using the 10% Evap. value for sprinklers from GUID 1210, this is a 93.9% CU, which is 2.66 ac-ft/ac consumptive water duty. This consumptive water duty times 881 acres is 2,341 acre-feet.

following implementation of this project. Anchor QEA calculated consumptive loss associated with evaporation from open water surfaces and transpiration by plants along the canals using aerial photography and field verification of vegetation type with the assistance of MVID staff. MVID completed a *Vegetation Survey* in 2013 and Anchor QEA completed a *Technical Memo* on August 19, 2013, summarizing this analysis. Anchor estimated that 83.7 acres of surrounding vegetation is associated with MVID canal leakage, with an associated consumptive use of 240.6 acre-feet. An additional 28.7 acre-feet was estimated from direct evaporation of canal surfaces, and 25.7 acre-feet from associated ponds/marshes. In total, Anchor QEA found approximately 295 acre-feet of consumptive use in their evaluation. The East Canal portion is estimated at 73.6 acre-feet and the West Canal portion at 221.4 acre-feet.

The TWRA contains an Adaptive Management Protocol for verifying the consumptive use estimates contained in the 2013 TU Vegetation Survey and 2013 Anchor QEA Evapotranspiration Report. This Protocol includes the following elements patterned after the 2013 analyses:

- Assessment of condition of east side and west side water delivery infrastructure.
- Aerial photo review.
- Field verification and GPS recording of affected vegetation, wetlands, and ponds.
- Characterization of vegetation type.
- Evapotranspiration estimates.

This analysis is anticipated to be completed in 2019. Ecology's exercise of the trust water rights will be conservative in the interim period. Following completion of the Adaptive Management Protocol, Ecology would exercise the trust water rights in accordance with the results.

Twisp Lease

The 2001 Change Authorizations do not specify an explicit consumptive use, but one may be estimated from the authorizations, which specifies irrigation within the Town of Twisp. Ecology's GUID-1210 provides estimates of consumptive use as a function of different methods of sprinkler application. For sprinklers, 85 percent consumptive use is common (75% application efficiency). However, Twisp has a progressive rate schedule with an overage charge for high water use, which will tend to improve irrigation scheduling and efficiency. Ecology selects a 90% consumptive use estimate for the 400 acre-feet authorized results in 360 acre-feet, split 235.8 acre-feet of consumptive use for Certificate SWC 945 and 124.2 acre-feet consumptive use for Claim 003935.

Total Consumptive Use

Based on the analysis above, the total consumptive includes:

- Certificate SWC 945: 1,131.8 acre-feet of on-farm use, 73.6 acre-feet of riparian/canal evaporation use, and 235.8 acre-feet of Twisp irrigation use, or **1,441.2** acre-feet.
- Claim 003935: 1,209.1 acre-feet of on-farm use, 221.4 acre-feet of riparian/evaporation use, and 124.2 acre-feet of Twisp irrigation use, or **1,554.7** acre-feet.
- Claim 118277: No consumptive use in addition to Claim 003935, primary reach benefit only in Alder Creek.

Ecology typically manages consumptive use on a monthly time-step. Apportioning the consumptive use using Washington Irrigation Guide pasture demand curves (Winthrop), provides the monthly consumptive use estimates shown in Table 12 for Certificate SWC 945 equivalent to 1,441.2 acre-feet. To calculate the primary reach quantity, an estimate of Barkley Inflow was necessary. The 2003 Waste Order was based on an engineering analysis performed by Dan Haller dated December 16, 2003. In Appendix A of that document, the on-farm and canal losses associated with the 412 acres of Barkley lands were estimated at 1,965.2 acre-feet. Deducting these quantities from the 4,909 acre-feet diversion authority in the 2003 Waste Order leaves approximately 2,944 acre-feet attributable to MVID.

The instantaneous quantities were allocated assuming continuous diversion of the monthly quantities (e.g. Monthly Qa / Days / 1.98).

Table 12: Methow Certificate SWC 945 Estimated Total and Consumptive Use

Reach	Flow	April	May	June	July	August	September	October	Total Annual, Peak Monthly
Primary	Qi (cfs)	4.92	8.25	10.04	12.28	10.25	7.01	5.30	12.28
Primary	Qa (ac-ft)	146.24	506.21	596.20	753.69	629.95	416.22	157.49	3206
Consumptive Use Quantity	Qi (cfs)	2.21	3.71	4.51	5.52	4.61	3.15	2.38	5.52
Consumptive Use Quantity	Qa (ac-ft)	65.74	227.56	268.01	338.81	283.18	187.10	70.80	1441.20

Table 13: Twisp Claim 003935 Estimated Totals and Consumptive Use

Reach	Flow	April	May	June	July	August	September	October	Total Annual, Peak Monthly
Primary	Qi (cfs)	4.38	7.34	8.94	10.93	9.14	6.24	4.72	10.93
Primary	Qa (ac-ft)	130.18	450.63	530.74	670.94	560.79	370.52	140.20	2854
Consumptive Use Quantity	Qi (cfs)	2.39	4.00	4.87	5.95	4.98	3.40	2.57	5.95
Consumptive Use Quantity	Qa (ac-ft)	70.92	245.48	289.12	365.49	305.48	201.84	76.37	1554.70

Table 14: Alder Creek Claim 118277 Estimated Total Use

Reach	Flow	April	May	June	July	August	September	October	Total Annual, Peak Monthly
Primary	Qi (cfs)	0.55	0.93	1.13	1.38	1.15	0.79	0.60	1.38
Primary	Qa (ac-ft)	16.42	56.84	66.95	84.63	70.74	46.74	17.68	360

Tables 12, 13 and 14 document the quantities of water valid for transfer for Certificate SWC 945, Claim 003935 and Claim 118277 respectively.

Primary Reach

The primary reach for Certificate SWC 945 is that portion of the Methow River from the East Canal Diversion (RM 45) to the end of the historic East Canal (RM 26.8).

The primary reach for Claim 003935 is that portion of the Methow River from the termination of the historic West Canal Diversion (RM 27.9) to the confluence with the Twisp River. The primary reach for the Twisp River is from the confluence with the Methow River to RM 5.2 on the Twisp River.

The primary reach for Claim 118277 is from the confluence of Alder Creek and the Methow River to the RM (0.3) on Alder Creek.

Secondary Reach

Because all consumptive use is intended by MVID to be reappropriated via the MVID Water Bank, no secondary reach is specified.

Potential for Impairment

Under RCW 90.42.040(4)(a), a trust water right certificate cannot be created if it would impair existing water rights. Further, RCW 90.42.080(5) provides that RCW 90.03.380 applies in evaluation of trust water right applications (which do not involve donations for instream flows). RCW 90.03.380 requires that a water right change cannot be approved if it would cause injury to other existing water rights. In considering impact to existing water right holders and the instream flows established under the Methow Basin Instream Flow Rule, one must consider actual river operations, particularly in drought years when water availability issues are most acute. In the context of this application, there are four classes of water uses that must be considered:

- Water right holders with priority dates senior to August 22, 1919 (the priority date of Certificate SWC945);
- Uninterruptible water right with priority dates junior to August 22, 1919;
- The instream flow water rights established through adoption of the State's December 28, 1976 Methow River Basin Instream Flow Rule; and
- Interruptible water rights with priority dates junior to the State's December 28, 1976 Instream Flow Rule.

In principle, creation of the MVID Water Bank by putting water instream cannot cause impairment to any of these classes of water users. New appropriations from the MVID Water Bank should also not cause impairment provided there is no increase in consumptive use; however, those considerations will be addressed in evaluating MVID's applications for new permits based on the trust water rights they seek to create (S4-33097 and G4-33098).

Water rights senior to the subject water rights will not be impaired by this trust decision, because water availability will increase or remain neutral to those users. These senior users can also call against these rights in times of shortage. Water rights junior to these subject rights, but senior to the instream flow rule will also not be impaired, because their availability will not decrease. The State Instream Flow will benefit from increased water availability under this decision, because more water will remain instream; however, that benefit will be between control stations so no change in river regulation will occur. Junior water users will not bear any risk of increased curtailment, because the MVID Water Bank will run on consumptive use equivalents and their availability will not decrease. Finally, no 3rd party can require MVID to maintain an inefficient system even if they benefit from transitory return flows. They can benefit from them while they exist, but retaining them instream and not diverting them in the first place cannot constitute impairment.

In sum, approval of this application would not cause impairment of other existing water rights.

Public Interest

Under RCW 90.42.040(4)(a), a trust water right certificate cannot be created if it would impair the public interest. The proposed appropriation provides for many benefits to the public interest, including:

- Benefits to instream flow and fish life on the Twisp River;
- Benefits to habitat associated with abandoning of the push-up dam and in-river work on the Twisp River.
- Benefits to instream flow and fish life in the Methow River.
- Benefits to instream flow and fish life in Alder Creek.
- Increased efficiency, which will improve system reliability for MVID Members.
- Increased water duty for MVID Members which closer matches their historic irrigation behavior, and is in the range of reasonable water duties upheld in previous Court rulings.

- Mitigation for out-of-stream uses, which will provide reliable water supply to assessed MVID Members who were not able to reliably irrigate.
- Mitigation for out-of-stream uses providing increased municipal supply for the Town of Twisp.

Consequently, approval of this application would not be contrary to the public interest.

Consideration of Protests and Comments

On November 7, 2013, a letter of protest was received on behalf of the Okanogan Wilderness League (OWL). This letter was sent by OWL prior to the public notice publication dates (November 20 and 27, 2013) for the three trust water applications discussed in this report (CS4-MVID@155, CS4-MVID@156 and CS4-118277CL). Because OWL's representative expected to be out of the country during the time the public notice would issue, OWL filed their protest prior to actual publication of the public notice.

The letter cited several concerns (paraphrased below, see Appendix D), which Ecology addresses below:

- *The change applications are premature because a trust water agreement is not finalized.* The Trust Water Agreement will define the relationship between Ecology and MVID once it is executed. There is no procedural requirement establishing whether a change of water right precedes execution of a trust water right management agreement or if it follows.
- *A maximum of 720.5 acres is authorized for current MVID irrigation.* The 2002 and 2003 Waste Orders were confirmed by the PCHB and are based on 881 acres irrigated. No acreage limit was specified in the Waste Orders. The investigation section of this report describes several different sources of data about MVID's water use and aerial photo and satellite images reviewed to make a determination of the extent of MVID's water right under the two claims (Twisp River and Alder Creek) and Methow River certificate that are proposed for changes of purpose of use.
- *SEPA and NEPA procedural concerns.* SEPA is complete and NEPA is not triggered by this project. Ecology and Okanogan County are co-leads on SEPA. A final SEPA determination was issued by Ecology and Okanogan County on July 30, 2014.
- *The project as proposed is not cost*-effective. This change authorization is permissive and putting water into trust allows multiple final design options. The project went through a Value Engineering Study to determine how to maximize public investments. Funding agencies will make their own decisions on project viability following availability of design and engineer's estimates.
- *Efforts to increase water duty should be abandoned.* This change authorization would result in a change of purpose to instream flow. The MVID Water Bank will be operated on a principle of balancing consumptive use associated with new permits with the consumptive use available within the Water Bank. Although MVID has not yet settled on its allocation framework, the range of options it is considering are within the range previously recognized as non-wasteful by Ecology, the PCHB, and the Okanogan County Superior Court. On-farm water duty can be increased provided it does not impair existing water rights.
- *Fisheries benefits on the Twisp River can be obtained for less money.* Project funding decisions will be made by Ecology and other funders following availability of final design and engineer's estimates.
- *Resolution of the Buckley Claim may hinder implementation of the project.* MVID and Mr. Buckley entered into a Water Delivery Memorandum of Agreement (MOA) in May 2012. This MOA does not prevent implementation of this project.
- *Instream flows will not be improved by the project.* While the overall operation of the MVID water bank will be neutral to instream flow downstream from MVID's service area, the project will provide local instream flow and/or habitat improvements a) in the Twisp River between the current diversion and the confluence with the Methow River, b) in the Methow River downstream of the Twisp River to the lower boundary of the MVID, and c) in Alder Creek below

the current point of diversion. Funders are aware that consumptive use will be reappropriated by the MVID Water Bank to serve MVID irrigation uses.

- *MVID's Alder Creek Claim is not valid.* The Alder Creek Claim is documented by a 1910 County filing by William LaMotte, the 1923 Appleby pre-adjudication survey which identifies then-irrigated lands, a 1974 declaration by Vernon LaMotte, and miscellaneous MVID measurement records. MVID also consulted with its current and past ditch masters and they are not aware of any interruption in Alder Creek diversions.
- *Negotiations with Twisp are uncertain.* The changes of MVID's water right for Twisp were approved in 2002. Twisp and MVID negotiated a purchase and sale agreement for a portion of the 400 ac-ft covered by the two water right change authorizations.
- *Wasted water will be converted to new acres.* Ecology's tentative determinations within these Reports of Examination of MVID's water rights were performed consistent with the earlier rulings on waste. Waste, as defined in the decisions of the PCHB and Superior Court, has not been considered or recognized as a beneficial use within these tentative determinations.

FINDINGS AND CONCLUSIONS

Tentative Determination and Consumptive Use

Ecology tentatively determines that the water rights are valid for change in the amounts described on the face sheets of this Report. Alder Creek Claim 118277 represents a valid claim for 2 cfs and 360 acre-feet for irrigation purposes. Certificate SWC 945 represents a certificate for 12.28 cfs and 3,206 acre-feet for irrigation purposes. Claim 003935 represents a valid claim for 10.93 cfs and 2,854 acre-feet for irrigation purposes. No quantity has been relinquished or abandoned since 2003, when Ecology last evaluated Certificate SWC 945 and Claim 003935.

Consumptive use for each water right is summarized on the face sheets of this Report.

Impairment

No water right, either publicly or privately held, will be impaired as a result of this change authorization.

Public Interest

The public interest will not be harmed as a result of this change authorization.

Procedural Compliance

Ecology finds that the procedural requirements for this change authorization have been met, including all required notices.

RECOMMENDATION

Based on the information presented above, the authors recommend that a change be authorized to change the purpose of use and place of use attributes of Certificate SWC 945, Claim 003935, and Claim 118277 in the amounts described, limited, and provisioned on the Face Sheets of this Report.

Report by: Daniel R. Haller — August 14, 2014
Daniel R. Haller, P.E. — Date
Aspect Consulting, LLC

Report by: Melissa Downes — August 14, 2014
Melissa Downes, Office of Columbia River — Date
Department of Ecology

Trust Water Right Agreement

This Trust Water Right Agreement (the "Agreement") is made and effective as of the 14 day of August, 2014, by and between the Washington State Department of Ecology, State Trust Water Right Program ("Ecology") and the Methow Valley Irrigation District, a quasi municipal Corporation, ("MVID").

Whereas, Ecology is the trustee of the State Trust Water Rights Program as authorized under Chapter 90.42 RCW (the "Trust Water Rights Program"); and

Whereas, MVID is the owner of certain water rights in the Methow River Basin as more particularly described and quantified in Exhibit A (the "Water") and presently appurtenant to the land legally described in Exhibit B (the "Land"), each such exhibit being attached hereto and incorporated herein; and

Whereas, MVID submitted three Water Right Change Applications to Ecology, Water Rights Tracking System (WRTS) File Numbers CS4-MVID@155 (Certificate SWC 945), CS4-118277CL (Claim 118277), and CS4-MVID@156 (Claim 003935) (collectively, the "Change Applications") in Exhibit A, to place these Water Rights (the "Water") into the Trust Water Rights Program for the purpose of enhancing in-stream flow and providing mitigation water to offset the permitting of new water rights to be used by MVID members for irrigation within the MVID boundaries and municipal water supply within the Town of Twisp water system service area as part of the MVID Instream Flow Improvement Project; and

Whereas, Ecology has accepted the Change Applications and is investigating the extent and validity of the Water in preparation to issue its Water Right Reports of Examination concerning the extent and validity of the Water (the "ROE's") and its trust water certificates (the "Certificates"). Following issuance of the ROE's, the Certificates will be incorporated into this Agreement and appended in Exhibit C to document Ecology's determination, including quantification of the consumptive use associated with the MVID's water rights; and

Whereas, subject to the terms of this Agreement and the Change Applications, Ecology confirms that it is willing, able and authorized to hold and manage the Water in the Trust Water Rights Program as provided for herein; and

Whereas, subject to the terms of this agreement, MVID confirms it is willing, able, and authorized to convey the Water to the Trust Water Rights Program as provided for herein; and

Whereas, MVID has submitted new "master" groundwater and surface water applications ("New Applications") to Ecology, WRTS File No's S4-33097 and G4-33098 in Exhibit D, to permit new MVID authorizations mitigated by the Water to be held in the Trust Water Rights Program. Following approval and issuance by Ecology of "New ROE's" and "New Permits" or "Other New Permits" in response to these New Applications, they

will be incorporated into this Agreement and appended in Exhibit D to document the new MVID diversionary authorization; and

Whereas, Ecology and MVID intend through this agreement to establish the MVID Water Bank; and

Whereas, the New Permits or other New Permits will be mitigated through permanent designation of such portions of MVID's beneficial interest in the Water as is reasonably required to offset the consumptive use associated with the use authorized by the New Permits and any Other New Permits to ensure there will be no impairment to the instream flows adopted in WAC 173-548, or to other senior water rights; and

Whereas, MVID may assign portions of the New Permits to its members to implement the MVID Instream Flow Improvement Project, and may also file "Other New Applications" during or following construction if unallocated water remains in the Trust Water Rights Program.

Definitions

"The Water" means the three water rights associated with Water Right Claim 003935, Water Right Claim 118277, and Surface Water Certificate 945.

"The Water Right Change Applications" means applications CS4-MVID@156 (Claim 003935), CS4-MVID@155 (Certificate SWC 945), and CS4-118277CL (Claim 118277).

"The Reports of Examination" means Ecology's Investigator's Reports and Findings of Fact and Order in response to the Water Right Change Applications.

"MVID Instream Flow Improvement Project" means Alternative 5 described in the Methow Valley Irrigation District Alternatives Report prepared by Anchor QEA as modified during design (see Attachment 1).

"The New Applications" or "New Applications" means Water Right Applications S4-33097 and G4-33098.

"The New Permits" or "New Permits" means Ecology's permit(s) issued in response to a New Application or New Applications.

"Other New Applications" means an application for a new water right filed by MVID on behalf of one or more MVID members, not including S4-33097 and G4-33098.

"Other New Permits" means Ecology's permit(s) issues in response to an "Other New Application."

"Assignment" means the process pursuant to RCW 90.03.310 for Ecology to acknowledge the change ownership from MVID to a MVID member of a portion or all of an unperfected New Permit or Other New Permit.

"Designation" means an allocation of any portion of The Water to offset the consumptive use of a new appropriation of public water requested in a New Application or Other New Application.

"Permanent Allocation to Instream Flow" means any portion of The Water committed to:

a) mitigate the consumptive impact associated with a New Permit or Other New Permit in good standing or has been superseded by a Certificate of Water Right; or,

b) be held by Ecology in the Trust Water Rights Program exclusively for instream flow improvement.

"MVID member" means the owner of land within the MVID boundaries and service area.

Now, therefore, in consideration of the forgoing, the mutual covenants and undertakings as hereinafter set forth, and other good and valuable consideration, the receipt of which is hereby acknowledged, the parties agree as follows:

1. The purpose of this Agreement and the primary reason MVID is willing to place the Water into the Trust Water Rights Program is in exchange for a fully funded and constructed "Instream Flow Improvement Project," the funding for which has been contracted between MVID and Trout Unlimited – Washington Water Project ("TU-WWP") pursuant to the contract dated August 14, 2014 and to provide a senior water right as off-setting mitigation ("MVID Water Bank") that will allow MVID members to apply for and receive new ground water withdrawal or surface water diversionary permits within the Methow River basin.

The primary purpose for Ecology to accept the Water into the Trust Water Rights Program is to provide instream flow benefit on the Twisp and Methow Rivers in exchange for grant funding of upgrades to MVID's irrigation system. Ecology's partner in implementing this project is Trout Unlimited (TU), which has negotiated an "*Agreement between Methow Valley Irrigation District and Trout Unlimited-Washington Water Project*" to facilitate implementation of the MVID Instream Flow Improvement Project.

1.1 Final quantities conveyed to the Trust Water Rights Program will be documented in the ROE's in Appendix A, and in the Deeds conveyed in Section 2.1 However, the general intent of this agreement is to provide the following quantities under this agreement, subject to final statutory decision-making by Ecology:

1.1.1 MVID's interest in Twisp River Water Right Claim 003935 from approximately RM 4 to the confluence of the Twisp and Methow Rivers for instream flow purpose, less that portion impacted by groundwater wells under the MVID Instream Flow Improvement Project.

1.1.2 MVID's interest in any non-consumptive water right quantity on the Methow River from MVID water rights Claim 003935, Certificate SWC 945, and Claim 118277 for instream flow purpose, except that quantity required to support reasonable return flow quantities associated with long-term lost and unaccounted for water associated with the redesigned conveyance system, reasonable return flow associated with a maximum of 4 acre-foot/acre on-farm water duty, and reasonable return flow associated with quantities conveyed/assigned to the Town of Twisp.

1.1.3 MVID's interest on Alder Creek from MVID water right Claim 118277 for instream flow purpose.

1.1.4 MVID's interest in any consumptive water right and reasonable non-consumptive right reserved under Section 1.1.2 from MVID water rights Claim 003935 and Certificate SWC 945 for irrigation, municipal, and water banking purposes.

2. This Agreement shall be effective upon its mutual execution. The term of this Agreement shall then be for so long as any portion of the Water remains in the Trust Water Rights Program (the "Term") unless terminated sooner as provided in this Agreement:

2.1 Prior to issuance of the New Permits by Ecology, MVID shall convey three (3) original signed Deeds to Ecology for the Water and record the Deeds with the Okanogan County Auditor. The Water shall permanently remain with Ecology's Trust Water Rights Program for management under this agreement unless the "Deed Reversion" provision in Paragraph 12.2.2 is triggered. One Deed shall be recorded for each of MVID's three water rights attached in Exhibit A.

2.2 Until the MVID Instream Flow Improvement Project for the upper west side system, is fully constructed, MVID retains the right to divert water from the Twisp River to meet MVID Member needs under a partially constructed system under the development schedule as set forth in Trust Water ROE CS4-MVID@156.

2.3 Ecology shall issue the New Permits under Applications S4-33097 and G4-33098 within 30 days of receipt and acceptance of the Deeds.

3. Once this agreement is executed and New Permits are issued in response to Applications S4-33097 and G4-33098, MVID may assign all or a portion of The Permits to the individual members it will serve as follows:

3.1 If MVID elects to assign MVID Members a portion of water under the "New Permits" or "Other New Permits" held by MVID:

3.1.1 MVID will adopt a framework that will govern assignment of portions of the New Permits or Other New Applications.

3.1.2 The Individual MVID Member assignments or Other New Applications will include the following information:

3.1.2.1 The peak instantaneous withdrawal rate and annual quantity of the Permit to be assigned, expressed as gallons per minute and ac-ft/yr, respectively.

3.1.2.2 The "firm" and "contingent" portion or portions of the Designated amount of Water (See 8.2)

3.1.2.3 Assignment shall be in a form consistent with the requirements of RCW 90.03.310, include responses to 3.1.2.1-3.1.2.2, and shall be filed and co-signed by MVID and the assignee.

3.1.3 Ecology agrees to timely process Permit assignments under this Agreement.

3.1.4 MVID Members assigned a portion of the New Permits would not need to file an application and receive a permit of their own for the use and amounts of water authorized by their assigned portion of the New Permit.

3.1.5 Upon satisfaction of the permit requirements consistent with RCW 90.03.330, Ecology shall issue a new certificate for each MVID Member (or MVID for the portion retained by the district).

3.2 <u>For New Individuals or Entities Designated by MVID (</u>"Other New Applications"): "Other New Applications" may also be filed at MVID's discretion if contingent or unallocated water remains in the Water Bank that is not already committed to other parties through the assignment process described in Section 3.1 (e.g. MVID members, instream flows). The process for MVID to file such applications is:

3.2.1 MVID or such third party member of MVID may make application to Ecology to appropriate surface or ground water at the desired location

and for the intended use and quantities, together with all regularly required supporting information. As part of the Other New Application, MVID will designate the specific quantity of the Water in the Trust Water Rights Program (MVID Water Bank) as required to offset the consumptive loss associated with the uses described on the application. In the case of a third-party applicant, MVID will also co-sign the Other New Application.

3.2.2 Upon receipt of a complete Other New Application, Ecology, pursuant to WAC 173-152-050(2)(g), shall accept and timely process it under RCW 90.03.260-.340 and Chapter 90.44 RCW utilizing such portion of the MVID Water Bank as reasonably needed under the quantity allocation set out in Exhibits A & C which, together with any other proposed mitigation measures, shall reasonably offset the impacts of such new withdrawal. Ecology agrees that expedited processing for water budget neutral projects such as the MVID Water Bank is appropriate under WAC 173-152-050(2)(g).

3.2.3 Ecology will prepare a public notice and send it to the applicant for publication in a newspaper with general circulation in the area as required by RCW 90.03.280.

3.2.4 The applicant must publish the notice and ensure that the newspaper transmits an affidavit of publication to Ecology. In the event Ecology prepares to issue an ROE for a New Application, it will publish the draft ROE on its internet site for a 30 day review period.

3.2.5 Ecology will investigate the Other New Application and prepare an ROE recommending issuance or denial of a permit based on applicable policy, rules, and law and the terms provided herein. Ecology's review of Other New Applications shall also include the following considerations:

> **3.2.5.1** In order to develop and confirm appropriate permit standards, MVID and/or such third party shall provide information to reasonably show or estimate, as the case may be, that the consumptive uses of the proposed project, when offset by the mitigation water allocated from the Trust Water Rights Program (MVID Water Bank) and any other proposed mitigation measures, do not increase the consumptive use of water. If the Trust Water Rights Program water ROE conditions a portion of the consumptive use eligible for mitigation upon certain performance (e.g. consumptive use assumptions born out via monitoring), then that conditioned portion of the mitigation shall not be allocated or assigned until such performance is met.

3.2.6 Following issuance of New Permits based on the Other New Applications in Appendix D that may subsequently be filed and approved,

MVID may assign portions of a Permit to new individuals or entities, provided such individual or entity may exercise that portion of the Permit consistent with the Permitted provisions, or such provisions are permissible for change under RCW 90.03.380 and RCW 90.44.100. In this event, an assignment form consistent with the requirements of RCW 90.03.310 and as provided in Exhibit E shall be filed and co-signed by MVID and the assignee. Ecology agrees to timely process permit assignments under this Agreement.

4. The New Permits relative to the New Applications and Other New Applications will specify the conditions and limitations on the use of water in a manner consistent with the Water held in the MVID Water Bank as mitigation. Conditions relating to measuring and reporting water use will also be included in the permit(s). Permits issued based on New Applications and Other New Applications will have a priority date based on the date filed (pursuant to RCW 90.03.340), provided however, that they will be provisioned to clarify that their priority date for purposes of regulation, adjudication, or any other challenge is equal to the water rights held in Trust Water Rights Program in the MVID Water Bank as set forth in Exhibit A.

5. Both the New Applications and Other New Applications, and their respective Permits once issued, shall be conditioned such that:

5.1 The forfeiture of a Permit or Certificate, or a subsequently issued certificate or portion thereof, does not disturb or prevent the assigned or associated portion of the Trust Water Right from further designation or use under this agreement.

5.2 In the event of forfeiture of a Permit or Certificate described above, Ecology shall notify MVID for the purposes of determining appropriate future designation or uses of the water right.

6. Upon development and beneficial use of water in accordance with Permits issued to MVID or an MVID-designated and assigned third party, the permit holder shall be issued a Certificate of Water Right consistent with the terms set forth herein. Certificates issued will have a priority date based on the date filed (pursuant to RCW 90.03.340), provided however, that they will be provisioned to clarify that their priority date for purposes of regulation, adjudication, or any other challenge is equal to the water rights held in Trust Water Rights Program in the MVID Water Bank as set forth in Exhibit C.

7. This agreement, including consideration of removal from the Water Bank of any Water that has not been and cannot be permanently assigned or designated due to circumstances beyond MVID's control, may be modified to incorporate changed circumstances or, alternatively, the agreement may be terminated as provided in paragraph 8. Those changed circumstances are as follows:

7.1 A lack of funding to fully implement the MVID Instream Flow Improvement Project. This provision shall have no effect once all, non-individual well construction contracts are signed and provided construction expenses do not exceed the construction budget determined to be adequate and available at the time construction contracts are signed.

7.2 An inability to obtain all necessary approvals from the various agencies with regulatory authority over the actions described herein.

7.3 An inability to implement any portion of the MVID Instream Flow Improvement Project or this Agreement because of any Court action, order, or other litigation. A Court action, order, or decision reducing MVID's authorized diversions below those contained in the ROEs is not a changed condition.

7.4 In the instances described in 7.1, 7.2 or 7.3 come to pass, and if MVID agrees, Ecology will convey from the water bank that portion of the water that cannot serve the purposes of this agreement back to MVID.

8. This agreement may be terminated due to any unforeseen circumstances only by mutual agreement of the parties:

8.1 As used in this paragraph, the term "unforeseen circumstances" means those circumstances not specifically described in paragraph 7.

8.2 Termination of this agreement due to unforeseen circumstances must be in writing and executed by all parties to this agreement.

8.2 In the event that the parties mutually agree to terminate this agreement due to unforeseen circumstances and do in fact terminate this agreement due to unforeseen circumstances, Ecology will convey from the water bank that portion of the water not already allocated under the terms of this agreement back to MVID.

9. During the Term and in its capacity as a fiduciary, Ecology shall hold and manage the Water in the Trust Water Rights Program pursuant to Chapter 90.42 RCW. Ecology:

9.1 Shall support its extent and validity determination and the findings in the ROE that the quantities and beneficial use of the Water is as stated in Exhibits A & C and paragraph 3 above, and this representation shall also apply to any Water removed from the MVID Water Bank.

9.2 Ecology will conservatively manage the portion of the Water represented by the estimated consumptive use reduction due to piping the east and west canals and replacing portions of the canals with wells ("contingent" water). An Adaptive Management Protocol (Protocol) for verifying the consumptive use estimates contained in the 2013 TU Vegetation Survey and 2013 Anchor QEA Evapotranspiration Report will be performed by MVID. This Protocol includes the following elements patterned after the 2013 analyses:

- Assessment of the condition of east side and west side water delivery infrastructure.
- Aerial photo review.
- Field verification and GPS recording of affected vegetation, wetlands, and ponds.
- Characterization of vegetation type.
- Evapotranspiration estimates.

This analysis is anticipated to be completed in 2019, but may be completed earlier, or incrementally, at MVID's discretion. Following completion of the Protocol, Ecology will timely review it, determine the verified consumptive use quantity, and subsequently exercise the trust water rights in accordance with the verified consumptive use quantity. Ecology would then timely respond to assignments or Other New Applications, as provided in 8.4, for MVID members assigned "contingent" water.

Ecology:

9.3 Shall, in addition to the protections against relinquishment in RCW 90.14.140(2)(h), manage, maintain, preserve and protect for the benefit of MVID and its successors, designees and assigns all aspects and attributes of the Water.

9.4 Shall process all New Applications and Other New Applications where portions of the Water is proposed as mitigation in accordance with the terms of this Agreement.

9.5 Shall not assess or charge MVID any costs or fees for maintaining the Water in the Trust Water Rights Program; provided that Ecology may charge member third parties its regular costs and fees for water right applications, assignments, transfers and investigations.

9.6 Shall use best efforts to seek and obtain funding sufficient for any costs for planning, design, permitting, and construction consistent with the MVID Instream Flow Improvement Project Alternative 5.

9.7 Shall provide technical assistance, where and when appropriate, to MVID to help identify and procure any necessary water right authority to implement the MVID Instream Flow Improvement Project.

9.8 Shall assist MVID in coordinating, permitting, and seeking funding for improvements to the East Canal System if Barkley Irrigation Company improves its system in a manner that reduces flow into the MVID East Canal.

10. In keeping with the purpose of this Agreement and as a material part of the consideration for this Agreement upon which its execution is dependent:

10.1 MVID makes the following undertakings, representations and warranties to Ecology:

10.1.1 MVID is a quasi-municipal corporation duly formed and authorized and fully able to enter into and perform all its obligations in this Agreement according to its terms.

10.1.2 Each individual executing this Agreement on behalf of MVID is duly authorized to execute and deliver this Agreement.

10.1.3 Upon its full execution, this Agreement is binding upon MVID in accordance with its terms.

10.1.4 MVID shall use its best efforts to fully and timely perform its obligations and actions contemplated by this Agreement.

10.2 Ecology makes the following undertakings, representations and warranties to MVID:

10.2.1 Ecology is a division of the State of Washington duly formed and authorized and fully able to enter into and perform all its obligations in this Agreement according to its terms.

10.2.2 Each individual executing this Agreement on behalf of Ecology is duly authorized to execute and deliver this Agreement.

10.2.3 Upon its full execution, this Agreement is binding upon Ecology in accordance with its terms.

10.2.4 Ecology shall use its best efforts to fully and timely perform its obligations and actions contemplated by this Agreement.

11. Upon alleged breach of this Agreement by any party, or other disputes arising hereunder, representatives of MVID and the Department of Ecology shall meet and confer in good faith to resolve their differences. In the event no resolution is reached, MVID may request a meeting with the Director of Ecology to occur within 30 days of the request in order to resolve those differences. In the event of any such alleged breach, or any other dispute, or if any term of this Agreement is found or believed by any party to

be void and unenforceable, the parties will meet and seek to reach a mutually agreeable modification. The parties may employ a mutually agreed upon mediator or other suitable facilitator if they believe this may help resolve their dispute. If, after a reasonable period of time, the parties are unable to resolve a dispute by the process outlined above, any party may seek appropriate relief.

12. If either party defaults in its obligations under this Agreement; or if this Agreement, or a material portion thereof, be declared illegal or unenforceable; or, either party, through no fault or action by such party, should be incapable or prevented from performing any material obligations or actions, the non-defaulting party in the event of a default or either party in any other event shall have the right to the following:

12.1 As the computation of damages may be difficult, continue this Agreement and bring an action to specifically perform this Agreement.

12.2 Declare the Agreement null and void, whereupon the parties shall cooperate to end the trust water right relationship in an orderly manner as follows, with MVID retaining the right to its original authorized points of diversion if the Agreement is terminated prior to start of construction:

12.2.1 MVID shall identify all in-process assignment agreements and inform Ecology of their status. MVID shall not make representations regarding in-process designations, and shall work with Ecology to determine whether an assignment should be completed in each instance. If Ecology agrees, the permit process will be completed promptly in accordance with applicable policies, rules, and law.

12.2.2 Ecology shall promptly convey to MVID or its designee the portion of the Trust Water Rights in the MVID Water Bank (i) not yet assigned as mitigation for individual ground water and surface water permits or associated with MVID's groundwater or surface water delivery systems or (ii) not permanently allocated to instream flow. If any reserve has been set aside to address uncertainty ("Contingent" water subject to the adaptive management plan) associated with the then-existing mitigated permits, Ecology will retain such reserve until it is either assigned to individual permits or Ecology determines some or all of the reserve is unnecessary. Any reserve not needed shall be promptly conveyed by Ecology to MVID.

12.2.3 Each party shall be responsible for their own costs associated with ending the trust water right relationship in an orderly manner.

12.3 Pursue any other remedy now or hereafter available.

13. This Agreement may be assigned by MVID upon the giving of written notice to Ecology. This Agreement is binding upon and inures to the benefit of the parties to the Agreement as well as upon and to the benefit of their respective heirs, personal representatives, assigns and other successors in interest. In the unlikely event of a dissolution of MVID, all interests in the water and rights herein, shall remain in good standing and be held by the then current members and water users of MVID.

14. Any notice or communication required by this Agreement between MVID and Ecology shall be given to the addresses set forth below:

To Ecology:

Washington Department of Ecology
Office of Columbia River
Central Regional Office
15 West Yakima Avenue, Suite 200
Yakima, Washington 98902-3452

To MVID:

Attn: Bunny Morgan
PO Box 860
Twisp, WA 98856

14. This Agreement is contingent upon:

14.1 The contemporaneous approval and execution of a separate Agreement between MVID and TU-WWP.

15. No provision of this Agreement is severable from any and all other provisions of this Agreement. Should any provision of this Agreement be unenforceable for any reason outside the control of the parties, and subject to the provisions of Paragraph 8, the party finding itself unable to enforce the provision may, at its sole discretion, declare this entire Agreement to be null and void.

16. If either party fails to exercise its rights under this Agreement, it will not be precluded from subsequent exercise of its rights under this Agreement. A failure to exercise rights will not constitute a waiver of any other rights under this Agreement, unless stated in a letter signed by an authorized representative of the party and attached to the original Agreement.

17. Amendments to this Agreement must be in writing and signed by an authorized representative of each of the parties.

18. Each party shall protect, defend, indemnify, and hold the other harmless from and against their respective acts and omissions and for all third party claims arising out of or related to this Agreement.

19. This Agreement will be governed and enforced under the laws of the State of Washington.

20. Each party agrees to defend the validity of this Agreement. In the event any part of this agreement or the process described in this Agreement is challenged by way of administrative or judicial processes, Ecology agrees to assume the lead in defense thereof.

This Agreement is effective as of the date first above written.

Methow Valley Irrigation District

John Richardson
Name

8/14/2014
Date

Vice President
Title

Washington State Department of Ecology

Mark C. Schuyler
Name

8/14/2014
Date

Operations Manager - OCR
Title

Exhibit A

Reports of Examination: CS4-MVID@155, CS4-MVID@156, CS4-118277CL

Exhibit B

The "Land" Appurtenant to Water Right Claim No. 003935, Surface Water Certificate No. 945 and Water Right Claim No. 118277

Exhibit C

Future Trust Water Right Certificates for CS4-MVID@155, CS4-MVID@156, CS4-118277CL

Exhibit D

New Water Right Applications Nos. G4-33098 and S4-33097

Exhibit B

John

METHOW VALLEY IRRIGATION DISTRICT

STATE OF WASHINGTON)
) SUMMARY 2014 ASSESSMENT ROLL
COUNTY OF OKANOGAN)

We, the undersigned President, Vice president and Secretary of the METHOW VALLEY IRRIGATION DISTRICT as a quasi municipal Corporation under the laws of the State of Washington, do hereby certify that the foregoing assessment roll, pages numbered one through nine, constitute the total assessment roll of said district for the year 2014, as equalized by the Directors on the 14th day of October 2013, and the amounts extended against the lots, tracts or parcels of land in the roll constitute the annual roll and assessments of said district according to the ration of benefits duly arrived at, at said meeting.

We further certify that there are two individual assessments levied specifically on said parcels of land as listed below:

Category (1) Administration fee only. Land within the district boundaries that the district cannot or has not delivered water to will be assessed at $146.00 Basic Fee for Administration only.
Total: 117.67 assessed acres at $2,920.02

Category (3) Land within the district boundaries that receive water or have been equalized by the Directors at the annual Equalization meeting as to the benefits that they have received from the district. These lands will be assessed at $146.00 Basic Administration Fee and $95.00 per acre for operation and maintenance.
Total: 1,243.14 assessed acres at $157,243.20

Category (0) Non-assessed acreage; Total: 3.43 acres.

Total assessed and non-assessed acreage of lands within the MVID boundaries: **1,364.24** acres.
Total assessments for the 2013 irrigation season: **$160,163.22**

Dated at Twisp, Washington this 23rd day of December 2013.

ATTEST:

B. Morg
Secretary

John Richardson
Director

A. H. Dix
Director

Director

RollYr	Parcel#	OwnerName	IrrgAcres	TotalAmt	Dist#	DistrictName
2013	3322270241	ACORD, CODY	4.01	146.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322220163	ACORD, CODY & CELESTE	3.63	344.86	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730110000	ADAMS, JEANINE	0.23	167.86	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130180000	AMDAL, HELGA	9.50	1,048.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130190000	AMDAL, HELGA	6.99	664.06	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5101170004	ARCHAMBEAULT, JAMES	2.00	336.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8800720100	ASPEN INVESTMENTS	1.00	241.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8800720200	ASPEN INVESTMENTS	1.00	95.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8800720300	ASPEN INVESTMENTS	0.50	47.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8800720400	ASPEN INVESTMENTS	0.50	47.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8800730100	ASPEN INVESTMENTS	0.50	47.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8800730200	ASPEN INVESTMENTS	0.50	47.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8800730300	ASPEN INVESTMENTS	1.22	115.90	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8800730400	ASPEN INVESTMENTS	0.50	47.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170403	ASPEN INVESTMENTS	1.01	95.96	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322160102	AYERS, BRUCE & AYERS, LARRY	3.39	322.06	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322163003	AYERS, BRUCE & AYERS, LARRY	5.04	478.80	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322160097	AYERS, BRUCE & AYERS, LARRY	1.62	299.90	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130260004	BABIK, EDWARD & JEANNE	4.12	537.40	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8828310100	BADER, KATHLEEN	2.00	336.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322210132	BAIR, GARY & DEBRA	2.03	338.86	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322210101	BAKER, JAMES C & MOLLY	15.85	1,505.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322210100	BAKER, JAMES C MD	4.42	565.90	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322270237	BAME, VERNON & MARY	2.50	383.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730270000	BARAIBAR, INAKI	0.33	177.36	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730090000	BARDIN, THOMAS & MARILYN	0.25	169.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322210134	BARKER, ELDRED	2.23	357.86	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322180064	BEAN, MARY TRUST	0.35	179.26	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322210136	BEARD, GARY	3.90	516.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322270246	BENSON, DONALD & JANET TRUST	3.00	431.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2760010004	BERNHARD, BRUCE & MONICA	1.02	242.90	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170150	BLACKBURN, LELAND	0.58	201.10	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322220146	BLAIR, BRANDON	4.40	564.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8843900300	BONICA, ANNA	0.27	171.66	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8843900400	BONICA, WILLIAM	0.23	167.86	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130300004	BOOTH, KRISTINA	2.83	414.86	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130300006	BOOTH, KRISTINA & RICHARDSON, JOHN	4.74	450.30	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8849700030	BRISTOL, JOSEPHINE	3.61	342.96	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8849700020	BRISTOL, MILTON & JOSEPHINE	4.84	146.00	15	METHOW VALLEY IRRIGATION DISTRICT

(2)

RollYr	Parcel#	OwnerName	IrrgAcres	TotalAmt	Dist#	DistrictName
2013	8830910200	BROOKS, ROBERT A	5.09	629.56 ~~483.56~~	15	METHOW VALLEY IRRIGATION DISTRICT $629.56
2013	5130460000	BRUCE, KENNETH	6.95	806.26	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322180092	BUCKINGHAM, DONNA	0.50	193.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170412	BUNNEY, CRAIG	0.07	8.56	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170413	BUNNEY, CRAIG	0.09	6.66	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8800600101	BUNNEY, CRAIG	0.56	53.20	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8890000011	BUNNEY, CRAIG	2.05	194.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8800600200	BUNNEY, CRAIG	0.39	37.06	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322220179	BUNNEY, CRAIG	0.04	149.80	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170359	BURBANK, LOUIS & NANCY	5.38	657.10	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850130007	BURNS, ROBERT S	4.09	534.56	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8828330200	BUSTAD, BRAD	5.85	701.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8835700302	BUSTAD, GARY & LINDA	0.09	8.56	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8828330100	BUSTAD, GARY & LINDA	1.40	279.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322270287	BUZZARD, ISAAC & TIA	5.00	621.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850090009	CAMPBELL, BRADLEY W	2.34	368.30	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322270319	CAPUTO, RALPH & JUDITH	5.00	621.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170167	CASCADE KINGS INC	1.37	265.70	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130430002	CASCADE RIM LLC	7.00	811.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322180151	CASWELL, ALAN & LOIS	0.67	209.66	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8862200200	CHENEL, EMILY & LINTS, KYLE	0.18	163.10	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8862200300	CHENEL, EMILY & LINTS, KYLE	0.11	10.46	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130310002	CHIABAI, RICHARD V	5.10	630.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170408	CHURCH, CASCADE BIBLE OF TWISP WA	1.83	319.86	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322160077	CHURCH, CONG JEHOVAH WITNESSES	0.57	200.16	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322160104	CHURCH, CONG JEHOVAH WITNESSES	0.10	9.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8817500204	CHURCH, JESUS CHRIST OF LDS	1.00	95.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8817500203	CHURCH, JESUS CHRIST OF LDS	1.00	241.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5101160002	CLEVELAND, DAVE & STACEY	9.22	1,021.90	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8850800300	COGDAL, BOB & THELMA	4.82	603.90	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170377	COLE, GERALD	0.67	209.66	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130260005	COLIN, BRIAN L	0.92	233.40	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170314	CRAMER, JOHN & CARRIE excluded	1.50	~~146.00~~	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8847900020	DARCY, RONALD & HOPE	5.14	634.30	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322210082	DARWOOD, DALLAS	2.00	336.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322270244	DARWOOD, STANLEY JR & EVELYN	5.97	713.16	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850070005	DAVIS, JESSE & DAVIS, SARAH	3.39	468.06	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850080001	DAVIS, JESSE & DAVIS, SARAH	1.44	136.80	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170223	DAVIS, JOHN B & RONDI	0.53	196.36	15	METHOW VALLEY IRRIGATION DISTRICT

RollYr	Parcel#	OwnerName	IrrgAcres	TotalAmt	Dist#	DistrictName
2013	8850800100	DAY, JASON	4.81	602.96	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322200044	DE WEERT, DANIEL & TERESA	3.00	285.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8868500020	DE WEERT, DANIEL & TERESA	1.21	260.96	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322270290	DELFINO, JANELLE J	9.25	1,024.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170190	DI RIENZO, TANA C	0.46	146.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322160081	DICKINSON, DEBORAH	0.40	184.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170267	DICUS, LEONARD & NANCY	0.70	212.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130290006	DIXON, STEPHEN ETAL	3.89	369.56	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130260010	DIXON, STEPHEN HENRY & TERRY	3.07	437.66	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730130001	DOMERGUE, SCOT	0.23	167.86	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8814900200	DONOHUE, DANIEL & MARGARET	0.28	172.60	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322210119	EASTMAN, JOHN & ARLENE	10.50	1,143.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850110011	EBBERT, JAME	1.37	276.16	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850060013	EBBERT, ROBERT	5.99	715.06	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322180082	EDSON, LEONE	0.16	161.20	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322180083	EDSON, LEONE	1.28	121.60	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322180090	EDSON, LEONE excluded 12/9/13	0.10	~~9.50~~	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2950020001	EDSON, MARK	1.25	146.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130300007	EDWARDS, RICHARD E & JENNIFER	2.13	348.36	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322210092	EIFFERT, MIKI	1.00	241.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	4270000100	EILEEN, JANET	23.12	73.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5101190009	EKLUND, WES & KATHERINE	1.74	311.30	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322180108	ELIASSEN, CHRISTINE	0.45	188.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5120170000	ERKELA, CHERYL ETAL	14.14	1023.17 ~~629.70~~	15	METHOW VALLEY IRRIGATION DISTRICT $1023.17
2013	3322270247	EVANS, BENJAMIN	6.99	810.06	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8868500010	FLAGG, ALFRED	2.05	340.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8868500040	FLAGG, ALFRED	1.88	178.60	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322160078	FLOYD, GILBERT	0.53	196.36	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322202005	FORT, MICHAEL ETAL	0.50	193.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8862200100	FRADY, CHARLES II & LYNDSAY	0.24	168.80	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850070003	FRASER, HANNELORE	5.98	714.10	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730050000	FRIGGIONE, VINCE & NANCY	0.26	170.70	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730040000	FRIGGIONE, VINCE & NANCY	0.28	26.60	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2760010005	FROYD, ERIK	0.92	233.40	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5120070000	GARMAGER, CURT	3.50	415.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130380000	GARY REGIS FAMILY L P	11.56	1,244.20	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130400000	GARY REGIS FAMILY L P	10.00	950.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130340002	GARY REGIS FAMILY L P	6.14	583.30	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730120000	GAVIN TRUST	0.25	169.76	15	METHOW VALLEY IRRIGATION DISTRICT

(4)

RollYr	Parcel#	OwnerName	IrrgAcres	TotalAmt	Dist#	DistrictName
2013	3322200082	GEIGER, EDWARD & NINA	2.21	355.96	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730020000	GLANDON, GLENN & ALICE	0.28	172.60	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3321120102	GOHL, BARBARA	2.50	383.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5340000120	GOUPIOS, GEORGE	1.65	29.20	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5340000121	GOUPIOS, GEORGE	1.58	29.20	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5340000122	GOUPIOS, GEORGE	0.79	29.20	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5340000123	GOUPIOS, GEORGE	0.52	29.20	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5340000000	GOUPIOS, GEORGE	2.05	29.20	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8800900031	GUNDERSON, KARLEN	1.20	260.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8800900032	GUNDERSON, KARLEN	0.05	4.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322280016	HADFIELD, I D & D ARLENE	1.00	95.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322270039	HADFIELD, I D & D ARLENE	6.00	716.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8889100200	HAGER, JONI	0.28	172.60	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130440000	HAMMER, JAMES	5.00	621.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322160084	HANFORD, FRANK & KATHLEEN	1.10	250.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322160101	HANFORD, FRANK & KATHLEEN	2.92	277.40	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322340025	HANLEY, MICHAEL & JUDY	5.00	621.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322180047	HANSON, STEPHEN & YVONNE	0.76	218.20	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322200055	HARVIE, FRANCES REVOCABLE LIVING TRUST	0.63	205.86	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322210107	HARVIE, FRANCES REVOCABLE LIVING TRUST	2.50	237.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322220156	HAUSMAN, JAMES & MEHAFFEY, KAREN	0.42	146.00 ~~485.90~~	15	METHOW VALLEY IRRIGATION DISTRICT Assessment Reduced
2013	8849150100	HERGET, PAUL	2.28	362.60	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322350018	HILL, BILLY & TAMMY	2.50	383.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322210125	HILL, LAWRENCE & MARY	9.35	1,034.26	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322350017	HILL, MARGARET	3.60	488.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170088	HINMAN, JEAN LLOYD	3.80	507.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8803300101	HOFFMAN, ROBERT & BELVA	1.00	241.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170376	HOKE, TERESA ETAL	0.57	200.16	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130230001	HOOPER, BOBBY & MARILYN	2.25	359.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8817400103	HOPP, JERRY & DOROTHY	2.03	338.86	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130410001	HOUGH, JAY ETAL	11.50	1,238.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850050001	HOWSON, ROBERT C JR	3.23	306.86	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322270292	HOWSON, ROBERT C JR	9.60	1,058.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322220154	HUTSON, MARK & EVA	0.23	48.68	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322220155	HUTSON, MARK & EVA	0.66	48.68	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322270228	HUTSON, MARK & EVA	0.41	HR. 64 48.66	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730190000	ING-MOODY, MICHAEL ETAL	0.54	51.30	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730180000	ING-MOODY, MICHAEL ETAL	0.28	172.60	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730150000	IRVINE, BARBARA	0.26	170.70	15	METHOW VALLEY IRRIGATION DISTRICT

RollYr	Parcel#	OwnerName	IrrgAcres	TotalAmt	Dist#	DistrictName
2013	2730160001	IRVINE, BARBARA	0.74	70.30	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8833700400	ISABELLA INVESTORS LLC	2.02	191.90	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8833800100	ISABELLA INVESTORS LLC	1.00	95.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8833700300	ISABELLA INVESTORS LLC	1.00	241.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8831000040	JACKSON, TED	2.00	336.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322270221	JENSEN, SANDRA ETAL	6.54	767.30	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322220165	JIM JOHNSON RANCHLANDS LLC	38.16	3,625.20	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8847900030	JIM JOHNSON RANCHLANDS LLC	5.37	656.16	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8847900010	JIM JOHNSON RANCHLANDS LLC	4.92	467.40	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322220184	JIM JOHNSON RANCHLANDS LLC	1.23	116.86	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5101190011	JOHNSON, GUNNAR	0.76	218.20	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322160096	JOHNSON, JERRY D & LOUCKS, JEANA	0.51	194.46	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8810500100	JOHNSON, LELA	0.33	177.36	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730100000	JOHNSON, TIM	0.29	173.56	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322200020	JOLLEY, VAUGHN	6.42	755.90	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322200076	JOLLEY, VAUGHN	12.53	1,190.36	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170351	JONES, DENNIS R & DAWN	0.61	203.96	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850020004	JONES, JIM & LAURA	0.81	222.96	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850030006	JONES, JIM & LAURA	0.29	27.56	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322160012	JUDD, CHERYL	0.40	184.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130360001	JUMARS, ALYSSA	5.00	621.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130360002	JUMARS, ALYSSA	5.00	475.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130210000	JUMPER, JOHN R	6.12	727.40	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322350016	KARLSEN, KAARE ETAL	3.32	461.40	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5101040002	KARPENKO, TORI	5.91	73.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5101060003	KARPENKO, TORI	4.84	73.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850060004	KARRO, RICHARD & RITA	0.09	8.56	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850060001	KARRO, RICHARD & RITA	5.28	647.60	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850060003	KARRO, RICHARD & RITA	0.07	6.66	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8840200100	KEELING, JOHN D II & DEBORAH	4.88	609.60	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8840200200	KEITH, GARY W	4.84	605.80	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8817500102	KEMPER, WILLIS & DONNA	2.56	389.20	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170338	KEMPER, WILLIS & DONNA	0.42	39.90	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8817500201	KEMPER, WILLIS & DONNA	1.09	103.56	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2760010006	KETCHAM, JENNIFER	0.03	2.86	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2760020002	KETCHAM, JENNIFER	0.53	196.36	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8849150200	KIMBERLY, GARY & SHARON	1.00	241.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322160086	KING, BRADLEY JAY	1.05	245.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730080001	KIRKLAND, DENNIS & MARY	0.23	167.86	15	METHOW VALLEY IRRIGATION DISTRICT

RollYr	Parcel#	OwnerName	IrrgAcres	TotalAmt	Dist#	DistrictName
2013	3322170373	KNOWLES, LEAH	0.36	180.20	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322200027	KONRAD, HANK & JUDY	1.40	133.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170360	KONRAD, HENRY & JUDY	3.11	441.46	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170087	KONRAD, HENRY P ETAL	4.84	605.80	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170379	KONRAD, HENRY P ETAL	0.15	14.26	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170383	KONRAD, HENRY P ETAL	1.58	150.10	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322160085	KONRAD, ROLAND & JENNIFER	1.00	241.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322270289	KORESKI, STEPHEN	9.25	1,024.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322270318	KULSRUD, ROCKY & KATHRYN	7.25	834.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8843900100	LABANAUSKAS, SAULIUS & TRACI	0.27	25.66	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170241	LABANAUSKAS, SAULIUS & TRACI	0.92	87.40	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8871600200	LABANAUSKAS, SAULIUS & TRACI	0.25	23.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8871600300	LABANAUSKAS, SAULIUS & TRACI	0.37	35.16	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8843900200	LABANAUSKAS, SAULIUS & TRACI	0.32	30.40	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8871600100	LABANAUSKAS, SAULIUS & TRACI	0.42	185.90	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322200029	LAFFAN, PETER & LUCYK, ORYSIA	1.00	241.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8808710401	LARSEN, CARLA	1.00	95.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5940000100	LARSEN, CARLA	1.00	241.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5940000200	LARSEN, CARLA	1.00	95.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5940000300	LARSEN, CARLA	1.00	95.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5940000400	LARSEN, CARLA	1.00	95.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5940000500	LARSEN, CARLA	1.02	96.90	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5940000600	LARSEN, CARLA	1.00	95.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5940000700	LARSEN, CARLA	1.00	95.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5940000800	LARSEN, CARLA	1.52	144.40	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8846620100	LARSEN, CARLA	1.44	136.80	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8846620200	LARSEN, CARLA	1.35	128.26	15	METHOW VALLEY IRRIGATION DISTRICT
2013	7770000100	LARSEN, CARLA	6.03	572.86	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850010001	LARSON, MARLIN & GLADYS	1.00	241.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850010003	LARSON, MARLIN & GLADYS	4.30	408.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8800700030	LEWIS, JANIE	5.00	475.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8800700020	LEWIS, JANIE	5.00	621.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8800900020	LINCE, JAMES R	1.25	264.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730030000	LIU, MICHAEL & JANIS	0.28	172.60	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170211	LLOYD HOLDCO LLC	0.67	209.66	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170411	LLOYD HOLDCO LLC	75.25	7,148.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8800600102	LLOYD HOLDCO LLC	0.08	7.60	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170168	LLOYD LOGGING INC	2.88	273.60	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170404	LLOYD LOGGING INC	3.46	328.70	15	METHOW VALLEY IRRIGATION DISTRICT

RollYr	Parcel#	OwnerName	IrrgAcres	TotalAmt	Dist#	DistrictName
2013	3322170226	LLOYD LOGGING INC	8.61	963.96	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8828320400	LOMISON, SANDRA	4.98	473.10	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8828310300	LOMISON, SANDRA	5.00	621.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5101180000	LORENZ, WILLIAM & JOYCE	6.00	716.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850130010	LORENZEN, NANCY	1.14	254.30	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850020005	LOSINSKI, JOHN & LAURI	1.38	277.10	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850030008	LOSINSKI, JOHN & LAURI	0.28	26.60	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170273	LOUSEN, WILLIAM & DONNA	0.25	169.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322160109	LOVE, MARK & JODY	1.87	323.66	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322160391	LOVE, MARK & JODY	0.04	3.80	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5120160002	LUDWIG, MARK & EDEN	11.34	1,223.30	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8848320400	MALIK ENTERPRISES LLC	3.02	432.90	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8813700100	MALOY, PAT JR ETAL	5.00	621.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130250003	MAPLES, DONALD & NOELLE	5.05	73.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130250005	MAPLES, DONALD & NOELLE	5.00	73.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730140002	MARCHINEY, WILLIAM & DIANA	0.25	169.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170104	MARTIN, RANDY M	0.89	230.56	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170258	MARTIN, RANDY M	0.60	57.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322220183	MARVIN, PAM	3.91	146.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322220138	MATHYER REVOCABLE LIVING TRUST	6.25	739.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170239	MATHYER-SCHILD, PAUL	0.77	219.5 ~~146.00~~	15	METHOW VALLEY IRRIGATION DISTRICT 219.5
2013	2730080002	MATTISON, R NEWT ETAL	0.07	152.66	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730010000	MATTISON, R NEWT ETAL	0.68	64.60	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322180081	MATTSON, KEN & KAREN	0.37	181.16	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730060000	MC AULIFFE, BRIAN & AMBER	0.25	169.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5101190005	MC DANIEL, DARLENE	1.00	241.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8835700200	MC HUGH, JEFFREY	3.63	490.86	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130290001	MC MENAMIN, RICHARD ETAL	0.15	160.26	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322160005	MC MILLAN, JAMES JR ETAL	1.50	288.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170274	MC MILLAN, JEREMY & RICKIE	0.25	169.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8830910100	MEHUS, JANET ETAL	3.00	431.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170117	MELTON, DEWARD	0.60	203.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730070000	MELUSKEY, SANDRA	0.25	169.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8803300102	METHOW SALMON RECOVERY FOUNDATION	0.22	166.90	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322180099	METHOW VALLEY ASSOC LLC	6.81	792.96	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170268	METHOW VALLEY HOME HEALTH AGENCY	0.54	197.30	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170227	METHOW VALLEY LUMBER	0.78	220.10	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322200078	MICHELSEN, SCOTT	14.34	1,508.30	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170316	MICKENS, STEVEN & LESLIE	0.23	167.86	15	METHOW VALLEY IRRIGATION DISTRICT

RollYr	Parcel#	OwnerName	IrrgAcres	TotalAmt	Dist#	DistrictName
2013	3322270291	MILLER ETAL, BARBARA	9.50	1,048.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8850260100	MITCHELL, JAMES & CHARLOTTE	0.48	191.60	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8850260200	MITCHELL, JAMES S II & STEPHANIE	0.13	12.36	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8890000033	MONGER, CHARLENE	5.48	666.60	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322220178	MONGER, RICHARD & CHARLENE	0.07	6.66	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130270000	MOODY, L THOMAS ETAL	5.61	678.96	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730200000	MOODY, WILLIAM & SANDRA	0.52	195.40	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322220180	NEWMAN, MICHAEL C & TINA	8.09	914.56	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322180121	NICKELL, JOHN & DEBRA	0.77	73.16	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322180091	NICKELL, JOHN & DEBRA	0.30	174.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5120130002	NIKOLAISEN, SONJA ETAL	8.89	990.56	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322271005	NORDANG, GREG & JUDY	9.73	1,070.36	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322270032	NORDANG, GREG & JUDY	1.50	142.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170090	NORTHCOTT, SHIRLEY	0.19	146.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	4270000200	NOTARO, MICHAEL & KATHRYN GOLDBERG	1.16	73.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322160093	O DAIMHIN, SEAMUS & LIBBY	0.30	174.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170272	OCHOA, DANIEL & ANGEL	0.25	169.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3222020012	ODION, ERIKA & ZACKERY	6.30	146.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8803700200	OLIVER, JERRY & CYNTHIA	4.00	146.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322270019	OWNBY, MICHAEL & LAUNA	1.34	273.30	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8808710100	PALM, MIKE & KAREN	1.00	241.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8808710200	PALM, MIKE & KAREN	1.00	95.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8808710301	PALM, MIKE & KAREN	1.00	95.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3321113002	PATTERSON, ERIK & INGRID	10.00	1,096.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8831700300	PENNOCK, TOBY & TAMMY	5.00	146.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130450000	PERRY, MARY JANE & PETER JUMARS	4.50	573.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322270238	PETERSON, RODNEY & WANITA	1.50	288.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130250004	PHILLIPS, DONALD S	4.96	599.34	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322270288	PICARD, JUDY	1.94	330.30	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5101140002	PUD #1 CHELAN CO	3.51	479.46	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322160072	PUD #1 OKANOGAN CO	1.80	317.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170073	RADOSEVICH, BRIAN	1.00	241.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170243	RADOSEVICH, BRIAN	0.33	31.36	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8810500200	RADOSEVICH, BRIAN	0.23	21.86	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170229	RED TAIL DEVELOPMENT LLC	0.56	199.20	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8800900043	REED, BENJAMIN & BRENDA	1.25	264.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8833900100	REID, LUCY	1.00	95.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170315	REMSBERG FAMILY LLC	0.98	93.10	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170207	REMSBERG FAMILY LLC	4.00	526.00	15	METHOW VALLEY IRRIGATION DISTRICT

RollYr	Parcel#	OwnerName	IrrgAcres	TotalAmt	Dist#	DistrictName
2013	5130320000	RICHNER, LARRY & MARILYN	10.00	1,096.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170276	RIPE OTTER LLC	0.43	186.86	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322210089	RIPE OTTER LLC	1.30	123.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170392	RIPE OTTER LLC	1.65	156.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5101190010	ROBERTS, HENRY JR & CELESTE	0.50	193.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322270226	ROCK, ROGER	1.00	241.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8832400200	ROGERS, EDWIN & JENNIFER	0.95	236.26	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8832400100	ROGERS, HENRY	0.94	235.30	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130250006	ROGERS, JAMES E	4.00	526.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730220001	ROSENBERG, HERBERT	0.81	222.96	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730230001	ROSENBERG, HERBERT	0.56	53.20	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730240001	ROSENBERG, HERBERT	0.49	46.56	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8843800200	ROSS, GARY	5.16	636.20	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322220147	ROUTIEN, RICHARD	7.13	146.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2760020003	RUFFRIDGE, ROBERT ETUX	0.53	196.36	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322210090	RUTHERFORD, GAERY SR	12.50	1,333.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8847900040	SALSBURY, STEPHEN F	5.19	639.06	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5101150001	SANSAVER, LESTER ETAL	2.28	362.60	15	METHOW VALLEY IRRIGATION DISTRICT
2013	2730210000	SCHABER, LARRY & BARBARA	0.81	222.96	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130390001	SCHACHTSCHNEIDER, EDWIN ETUX	1.00	241.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130420000	SCHACHTSCHNEIDER, EDWIN ETUX	8.00	760.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322200083	SCHEINBERG FAMILY TRUST	3.46	474.70	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322270217	SCHNEE, ALAN	1.01	241.96	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322270219	SCHNEE, ALAN	2.14	203.30	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170384	SCHULZ, DAVID & DE ANNIS	1.72	309.40	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322270280	SHAW, THOMAS & MARLENE	2.00	336.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170368	SIMMS, VICTORIA	1.13	107.36	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170192	SIMMS, VICTORIA	1.31	270.46	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130230004	SIMS, KRISTIAN ETAL	1.03	243.86	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130330001	SINCLAIR, JOHN & ELIZABETH	0.53	196.36	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130330002	SINCLAIR, JOHN & ELIZABETH	9.20	874.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130340001	SINCLAIR, JOHN & ELIZABETH	5.10	484.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850040004	SKELTON, MICHELLE	1.94	330.30	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322180065	SMIH, HANS IV & SCHROCK, SARAH	0.62	204.90	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5101140003	SMITH, ANN ETAL	7.49	711.56	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5101100001	SMITH, ANN ETAL	3.00	431.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5120080000	SMITH, CASEY & LORI	6.78	790.10	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322160070	SMITH, GRACE	1.50	288.50	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170405	SMITH, LARRY D	1.08	248.60	15	METHOW VALLEY IRRIGATION DISTRICT

RollYr	Parcel#	OwnerName	IrrgAcres	TotalAmt	Dist#	DistrictName
2013	3321120094	SNYDER, JUNETTE	1.24	263.80	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322210096	SNYDER, WILLIAM & SARAH	4.39	563.06	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8828320100	SONNICHSEN, HOWARD & CONNIE	1.52	290.40	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8828320200	SONNICHSEN, HOWARD & CONNIE	0.75	71.26	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8828320300	SONNICHSEN, HOWARD & CONNIE	0.75	71.26	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8828310200	SONNICHSEN, HOWARD & CONNIE	1.00	95.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8837500012	SPRAUER, JOSEPH & TRACY	5.00	621.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5120140001	STEPHENSON, DAVID & LORRAINE	5.00	621.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322222005	STIVERS, DAN & SANDY	5.00	621.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130390002	STOLBERG, WILLIAM	9.00	1,001.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8814900100	STORK, AMY	0.28	172.60	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8843800400	SURFACE, L RYAN	4.00	526.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8843800300	SURFACE, L RYAN & TIFFANY	4.00	380.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322340267	SURFACE, LARRY & JANE	6.55	768.26	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322340268	SURFACE, LARRY & JANE	6.56	623.20	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130370000	SUTTON, RICHARD T	5.00	621.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8817400101	SWENSON, MATTHEW & MEAGAN	1.12	252.40	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322180105	SZAFAS, CHUCK & TAMARA	4.00	380.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322070144	SZAFAS, CHUCK & TAMARA	4.00	526.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130470000	TACKMAN, JAMES ETAL	3.41	469.96	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8837500020	TENNANT, DOROTHY	4.61	583.96	15	METHOW VALLEY IRRIGATION DISTRICT
2013	7770000200	THERRIAULT INVESTMENT CO	2.21	355.96	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8848320200	THERRIAULT-CANNON PARTNERSHIP	2.57	390.16	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8848320300	THERRIAULT-CANNON PARTNERSHIP	2.57	244.16	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130290005	THOMPSON, T DAN & CRIS	7.68	737.36	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8817500101	THOMSON, CHRIS & DIANA	2.73	405.36	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5101190001	THOMSON, WALTER & GERALDINE	3.60	488.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8896100100	TONSETH, JUDITH	1.13	234.38	15	METHOW VALLEY IRRIGATION DISTRICT
2013	8843800100	TORPEY, DONNA	5.28	647.60	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130260009	TULLER, BRIAN & DEBORAH	1.91	327.46	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850050002	TWISP, TOWN OF	6.93	✓ 804.36	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850060014	TWISP, TOWN OF	1.55	✓ 147.26	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850100012	TWISP, TOWN OF	30.42	✓ 2,889.90	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322180017	TWISP, TOWN OF	0.51	✓ 48.46	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322210040	TWISP, TOWN OF	10.00	✓ 950.00	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322210128	TWISP, TOWN OF	14.29	✓ 1,357.56	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322210129	TWISP, TOWN OF	0.15	✓ 14.26	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322210099	TWISP, TOWN OF + #7770000101	3.47	329.66	15	METHOW VALLEY IRRIGATION DISTRICT
2013	6850090004	VAN DEN HENGEL, HANNELORE	3.72	353.40	15	METHOW VALLEY IRRIGATION DISTRICT

RollYr	Parcel#	OwnerName	IrrgAcres	TotalAmt	Dist#	DistrictName	
2013	6850130003	VAN DEN HENGEL, HANNELORE	0.24	22.80	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	6850130004	VAN DEN HENGEL, HANNELORE	1.60	152.00	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	6850070004	VAN DEN HENGEL, HANNELORE	1.57	149.16	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	3322210114	VAN DEN HENGEL, HANNELORE	3.00	285.00	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	6850090003	VAN DEN HENGEL, HANNELORE	5.16	636.20	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	3322340009	VANDERVORT, LESLEY & MADGE	4.03	528.86	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	3322350003	VANDERVORT, LESLEY & MADGE	0.93	88.36	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	3322220142	WA STATE DEPT OF TRANS	8.30	36.50	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	3322220134	WA STATE DEPT OF TRANS	6.46	36.50	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	3322220145	WA STATE DEPT OF TRANS	4.88	36.50	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	3322220005	WA STATE DEPT OF TRANS	5.00	36.50	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	8803300200	WAGNER, ROBERT ETUX	1.00 ~~3.00~~	241.00 ~~431.00~~	15	METHOW VALLEY IRRIGATION DISTRICT	Acreage Reduced to 1.00ac.
2013	8848320100	WALSH, LARRY & HEIDI	3.15	299.26	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	3322220049	WALSH, LARRY & HEIDI	7.80	887.00	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	3322200039	WALVATNE, DONALD & ROBIN	2.00	336.00	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	3322180089	WARDEN, MARK & AUDREY	1.00	241.00	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	3322270310	WARDEN, TERRY & SHARON	2.36	146.00 ~~370.20~~	15	METHOW VALLEY IRRIGATION DISTRICT	Reduced Assessment
2013	5130240001	WEATHERS, RONALD & MAUREEN	7.17	827.16	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	5130240002	WEATHERS, RONALD & MAUREEN	7.00	665.00	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	8889100300	WEBBER, CLAUDIA & DOUGLAS	0.25	23.76	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	8889100100	WEBBER, CLAUDIA & DOUGLAS	0.28	172.60	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	8890000022	WELCH, MAXINE ESTATE	1.62	299.90	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	5101170001	WERNER, TERRY & CATHERINE	2.00	336.00	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	3322200024	WEYERMANN, HAZEL RUTH	1.00	241.00	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	8851600012	WHALEN, DAN & LINDA	0.50	47.50	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	8851600011	WHALEN, DAN & LINDA	0.50	193.50	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	8868500032	WHITE, JACK & PEGGY	1.81	317.96	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	3321120103	WHITE, PAUL & ERICA	2.50	383.50	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	3322170378	WHITE, TONI	0.19	146.00	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	3322181003	WHITE, WILLIAM & SUELLEN	14.00	1,476.00	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	3322170331	WICKLUND, SCOTT	0.26	170.70	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	3322170206	WILLIAM J HENRY TRUST	3.00	431.00	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	3322160110	WOECK, RICHARD	0.57	200.16	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	3322210110	WOLLENBERG, REGINA & ROBIN	1.04	244.80	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	8831000010	WOODRUFF, KENT & DAWN	1.00	241.00	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	8831000020	WOODRUFF, KENT & DAWN	1.72	163.40	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	8831000030	WOODRUFF, KENT & DAWN	2.90	275.50	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	8850800400	WRIGHT, DANIEL LEE	4.91	612.46	15	METHOW VALLEY IRRIGATION DISTRICT	
2013	8800900010	YOAKUM, THOMAS	1.25	264.76	15	METHOW VALLEY IRRIGATION DISTRICT	

RollYr	Parcel#	OwnerName	IrrgAcres	TotalAmt	Dist#	DistrictName
2013	8817400102	ZAHN, CHRISTOPHER	1.45	283.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130230003	ZBYSZEWSKI, JENNIFER	1.47	285.66	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170238	ZUTTER, JUDY	0.87	82.66	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322160002	ZUTTER, JUDY	5.62	679.90	15	METHOW VALLEY IRRIGATION DISTRICT

1,364.41 159,722.18

(12)

RollYr	Parcel#	OwnerName	IrrgAcres	TotalAmt	Dist#	DistrictName
2013	8817400102	ZAHN, CHRISTOPHER	1.45	283.76	15	METHOW VALLEY IRRIGATION DISTRICT
2013	5130230003	ZBYSZEWSKI, JENNIFER	1.47	285.66	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322170238	ZUTTER, JUDY	0.87	82.66	15	METHOW VALLEY IRRIGATION DISTRICT
2013	3322160002	ZUTTER, JUDY	5.62	679.90	15	METHOW VALLEY IRRIGATION DISTRICT
			1,364.41	159,722.18		

3.60 + 441.03

County OK 1360.81 160,163.21

160,163.23

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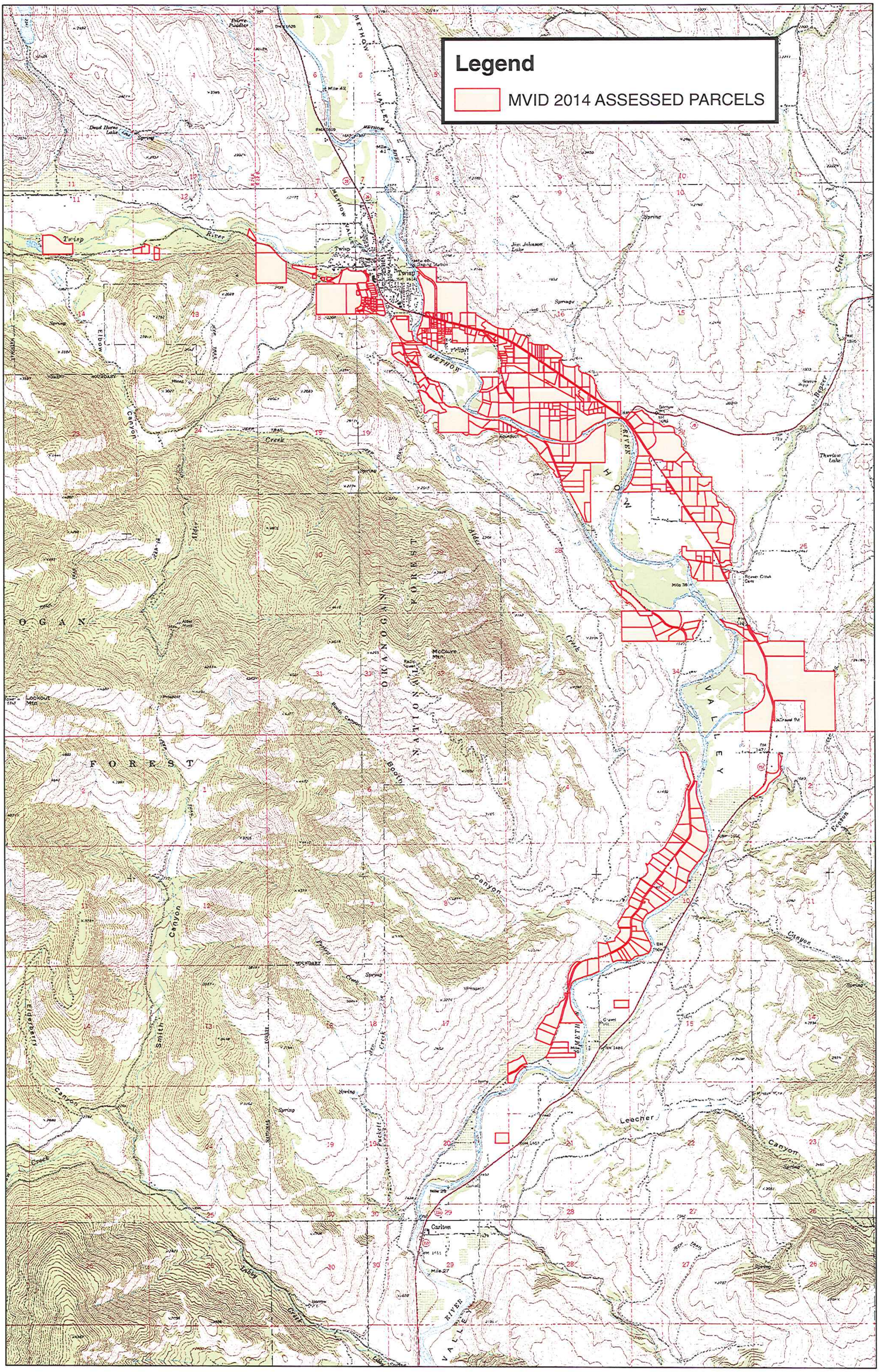
Legend
MVID 2014 ASSESSED PARCELS
Twisp
Twisp River
METHOW VALLEY
METHOW RIVER
Dead Horse Lake
Jim Johnson Lake
Beaver Creek
Thurlow Lake
Elbow Canyon
Alder Creek
OKANOGAN NATIONAL FOREST
McClure Mtn
Lookout Mtn
Booth Canyon
Smith Canyon
Elderberry Canyon
Libby Creek
Leecher Canyon
Carlton
Mile 42
Mile 41
Mile 40
Mile 36
Mile 28
Mile 27