

## WATER TRANSFER WORKING GROUP PROJECT DESCRIPTION

### Manastash Restoration Project

APPLICATION NO./COURT CLAIM NO. See Attachment 1		
APPLICANT NAME Manastash Water User (See Attachment 1)	CONTACT NAME Kittitas County Conservation District	TELEPHONE NO. 509-952-8585
WATER RIGHT HOLDER'S NAME (if different) See Attachment 1		EMAIL

DATE OF APPLICATION 2006 (See Attachment 1)	PRIORITY DATE 1871-1878 (See Attachment 1)
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WATER SOURCE: Manastash Creek (Subbasin 11)	CROP:
INSTANTANEOUS QUANTITY: See Attachment 1	ANNUAL QUANTITY: See Attachment 1
PERIOD OF USE: Irrigation April 1 through October 15 Stock Water Continuous	
PLACE OF USE: Manastash Sub-basin within Kittitas County	PURPOSE OF USE: Irrigation And Stock Water
IRRIGATION METHOD: The main method of irrigation is Flood. There is a small amount of sprinklers.	

CONSUMPTIVE USE CALCULATION:  The project is not changing any acreage. It is only proposing to combine 4 points of diversion and piping a portion of the ditches.
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NARRATIVE DESCRIPTION OF PROJECT:  There are 28 applications for change to combine four points of Diversion and five applications for in-stream flow filed for the Manastash Restoration Project. An implementation plan has been
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agreed upon and submitted to mitigate for the projects impacts. The Implementation plan can be viewed at [www.kccd.net/Current\\_Projects/Manastash/Manastash\\_Project.htm](http://www.kccd.net/Current_Projects/Manastash/Manastash_Project.htm)

## Background

The Manastash Creek Restoration Project is being implemented by the Manastash Creek Steering Committee with assistance from the Kittitas County Conservation District (KCCD). The Manastash Steering Committee was formed in 2001 and consists of representatives of the Manastash Water Ditch Association (MWDA), individual irrigators from Keach Ditch, Jensen Ditch, Hatfield Ditch, Reed Ditch, Anderson Diversion and Barnes Road Diversion, as well as the Washington Department of Ecology, Washington Department of Fish & Wildlife, Washington Environmental Council, West Side Irrigating Company, Kittitas Reclamation District, US Bureau of Reclamation and the Yakama Nation.

The KCCD was engaged in 2003 to provide project management after the Washington State Legislature appropriated \$2.24 million for construction of fish screens and fish passage at Manastash Creek diversions. In addition to those funds, the Bonneville Power Administration awarded \$1.4 million to the Manastash Project through an application submitted by the Washington Department of Fish & Wildlife in 2002. Both of these funding sources were provided to construct fish screen and fish passage facilities.

In the years between 2003 and 2006, the strategy for providing fish screen and fish passage facilities underwent a number of changes. Initially, the Anderson, Reed, Hatfield, and Keach-Jensen diversions were to be moved to the MWDA diversion site. That plan was abandoned in 2005 and all diversions were to be screened at their current location. The consolidation plan was then modified and revived in early 2006. The current plan includes consolidating only the Reed Ditch, Anderson Diversion and Hatfield Ditch diversions to the MWDA diversion site. The Keach-Jensen diversion will be screened at its present location. In addition, the Barnes Road diversion will be screened at its present location.

In 2006, the KCCD worked with the water right owners on the Hatfield Ditch, Reed Ditch and Anderson diversions and Department of Ecology to complete applications to change their points of diversion to the MWDA diversion. Twenty eight applications were received by Ecology in August and September, 2006. Public notice of the change applications was published in the Ellensburg Daily Record on February 5, 2007 and February 12, 2007. Letters describing the proposed changes were sent by Ecology to each of the individual water right owners in early February 2006. No protests were received during the public comment period.

Also in 2006, at the direction of the Steering committee, the KCCD applied for a continuation of BPA funds (\$1.5 million) to complete the fish screen and fish passage projects. KCCD also applied for additional BPA funds (\$893,000) to begin addressing instream flow. BPA announced their FY07-09 Fish and Wildlife Project Selection Decision on their website on February 13, 2007. Both Manastash proposals were selected for funding.

## Purpose

The plan has two distinct stages. The first is related to the proposed consolidation of the Reed Ditch, Hatfield Ditch and the Anderson Ditch diversions upstream to the MWDA diversion. Stage 1 addresses the 3,950 foot reach between the Reed Ditch diversion and the MWDA diversion. Implementation Plan FINAL DRAFT October 30, 2007. This is the reach most significantly impacted by the proposed consolidation. The objective of this stage is to provide an additional 6

cfs (before pro-rationing) of water for instream flow to mitigate for diminished stream flow in this reach resulting from the proposed changes. In addition to the 6 cfs, the instream conveyance loss between the MWDA diversion and the, Reed Ditch diversion and Anderson Ditch diversion under current irrigation practices will be left instream at the consolidated diversion. All water dedicated to maintaining or improving instream flow will be protected via the Washington Trust Water program and, as necessary, agreements not to divert. Water acquisition and water conservation projects to achieve the 6 cfs goal will be implemented concurrent with or immediately after construction of the fish screen and fish passage facilities. In addition, operational spill from the KRD that is currently diverted by downstream users at the Reed diversion will no longer be diverted after the consolidation is complete.

The Hatfield Diversion is 1500 feet down stream of the proposed Diversion. The Reed Ditch diversion is 3500 feet down steam from the proposed consolidated diversion. The Anderson Diversion is 11000 feet down stream of the proposed diversion and is within the reach of Manastash Creek that goes dry annually.

The second stage addresses the entire lower six miles of Manastash Creek, including the 3,950 foot reach addressed in the first stage. This is a long term effort to improve instream flow conditions in order to provide fish passage especially during critical fish migration periods and improve habitat availability. The actions to improve instream flow will occur over several years as individual projects are developed and funding secured. The goal for this stage is not a specific volume of water in Manastash Creek, but a continuing reduction in the length of the reach that is dry annually and the time period in which it is dry in order to work toward the long term goal of perennial flow in lower Manastash Creek. Water saved through implementation of conservation practices will be protected through the Trust Water Rights Program. This stage requires continuing involvement and good faith efforts by all members of the Manastash Steering Committee to find and develop projects, secure funding, and implement projects. This stage will reach a conclusion only when there is a consensus of the Steering Committee that all reasonable options have been implemented.

### ***Diversion Consolidation***

Stage 1 proposes consolidation of the Hatfield Ditch, Reed Ditch, and Anderson Diversion to the MWDA diversion. At that location, a screening and passage facility will be constructed consistent with plans that are currently being developed and permitted by the KCCD and HDR Fishpro (an engineering firm contracted by BPA). Construction will include a water measuring system both in the creek and in the diversions that are continuously monitored using a data logger. That data will be available via telemetry to the irrigators and Ecology. In addition, the screening, passage, and measuring facilities for the Keach-Jensen and Barnes Road diversions are proposed for construction as part of Stage 1. See Figure 1 and Figure 2 for maps of the project area before and after Stage 1.

Applications for POD changes for the consolidation of Anderson, Reed Ditch, and Hatfield Ditch, with the MWDA diversion, will collectively commit not to divert water from the consolidated diversion until 6 cfs (before pro-rationing) of adjudicated water rights for instream flow purposes has been obtained and put into trust in perpetuity, in addition to any water saved by the consolidation of Reed, Anderson and Hatfield to the MWDA site. The 6 cfs for instream flow

purposes will come from the various sources identified in bullet 2 below. This commitment is subject to the following conditions:

1. In addition to and exclusive of the 6 cfs, all water savings resulting from the consolidated diversion project will be dedicated to instream flow enhancement and transferred to the Department of Ecology's trust water rights program. The exact amount of water rights to be transferred to instream flow enhancement will depend on a quantification of the conveyance water lost in Manastash Creek reaches between the MWDA site and the other diversions (Reed, Hatfield and Anderson). Although the exact quantity is not known at this time, based on draft data collected in the summer of 2006, as much as 2 cfs during July and August is expected to be instream. Intensive monitoring in Implementation Plan FINAL DRAFT October 30, 2007 this reach will occur in the 2007, 2008 and 2009 seasons to establish a firm value for conveyance loss in the stream channel.

2. In addition to the water savings from the consolidation, 6 cfs of water rights (or a prorated amount) will be put into the Department of Ecology's Trust Water Rights Program for instream flow enhancement under Title 90.38 RCW and Title 90.42 RCW. These water rights will come from a combination of some or all of the following sources:

a. Acquisition of water rights through purchase agreements with willing sellers. The parties presently anticipate as much as 50% of the 6 cfs is likely to be obtained through acquisition and put into the Department of Ecology's Trust Water Rights Program.

b. Conveyance efficiencies from piping of selected portions of the MWDA canal and Reed ditch. Very preliminary estimates suggest that up to 2.5 cfs of water savings could be available at a cost of just over \$1 million. Quantified, saved conveyance water will be donated into the Trust Program.

c. Voluntary, publicly funded, on-farm efficiency measures, including conversion from rill irrigation to sprinklers, including but not limited to where the publicly funded project requires water saved or conserved to be placed in stream. Any water saved by Keach-Jensen irrigators will be bypassed at the MWDA/Consolidated Dam in accordance with an agreement not to divert by junior water right holders. Quantified water from efficiency practices will be donated into the Trust Water Rights Program.

d. Projects coordinated with the KRD, including but not limited to piping KRD laterals, and lining KRD canals.

e. In addition, projects may be implemented working with landowners with dual water rights (KRD and Manastash Creek), who are willing to forgo some or all of their creek rights in exchange for assistance improving the efficiency of the delivery of their water right. Quantified water from efficiency practices will be donated into the Trust program.

f. Pursuing alternate sources, including but not limited to, conversion from surface water to groundwater.

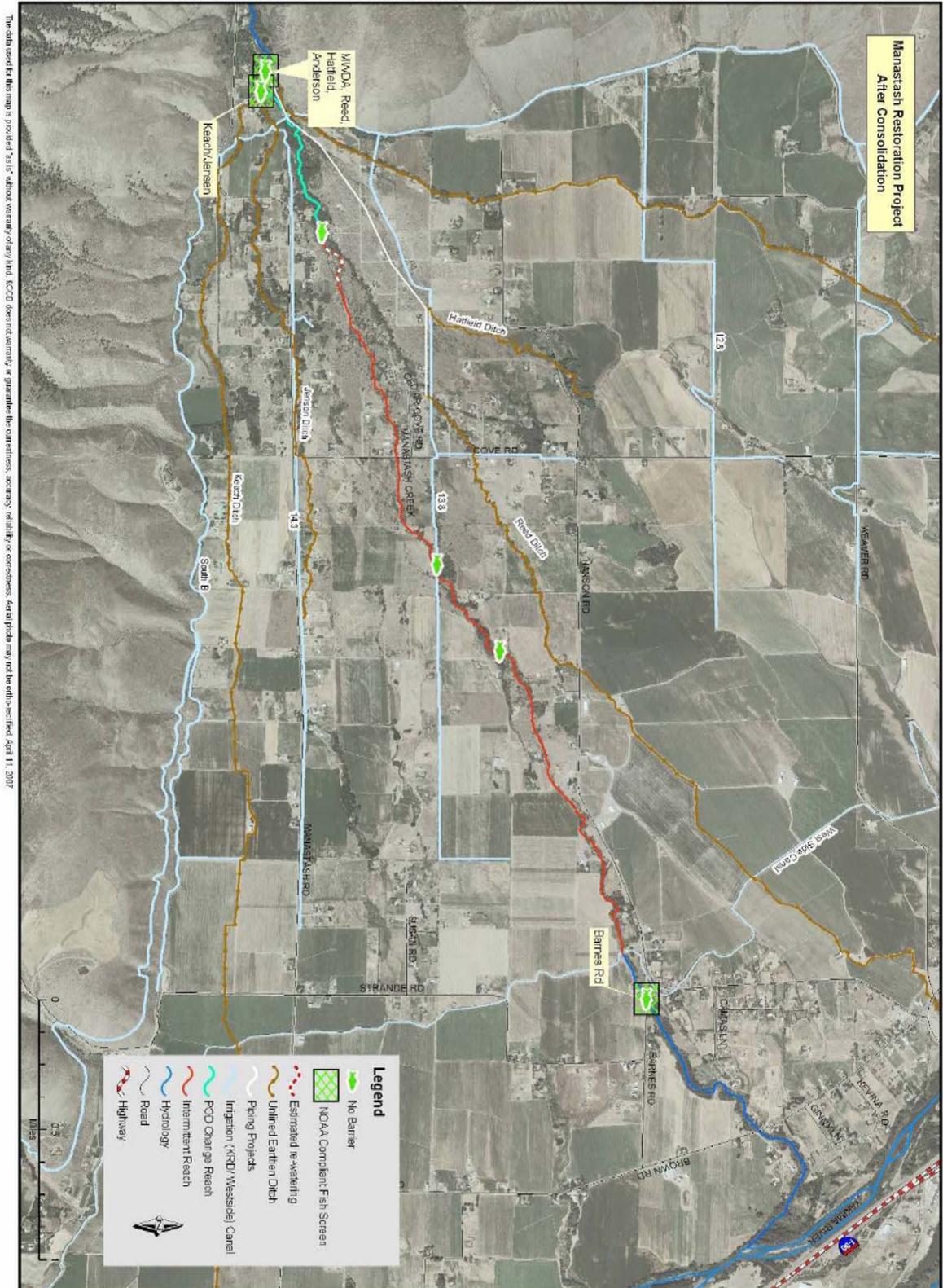
- g. Other options. For example, retiring acreage, water banking, etc.
3. Water savings from efficiency projects will be reevaluated upon completion and the amount of saved water bypassed will be adjusted to reflect actual water savings. During times of water shortage, the amount of saved water will also be adjusted in accordance with pro-ration formulas and priorities established in the *Conditional Final Order for Subbasin No. 11*.
4. Subject to availability of funding, water rights acquisition and efficiency projects will continue to be pursued under this consolidation mitigation plan until 6 cfs of water rights are available for bypass over MWDA/Consolidated Dam during times when prorationing is not required, in addition to any water saved by the consolidated diversion project. Implementation Plan FINAL DRAFT October 30, 2007.
5. All obtained or saved water rights will be transferred to the Trust Water Rights Program under Title 90.38 RCW and Title 90.42 RCW to benefit instream flows as they become available and agreements not to divert will be developed on an as needed basis.
6. The effects of saved water on stream flows and fish habitat will be monitored consistent with any approved changes until the 6 cfs goal is attained. Stream flow monitoring will occur as described in the Flow Monitoring section later in this document. Fish habitat monitoring will be completed by the Co-Managers.

### **Trust Water Applications**

Washington Rivers Conservancy has contracted to purchase water with five irrigators that divert from Manastash Creek. These irrigators have applied to change a portion of their irrigation to the trust water program in perpetuity. These changes will be placed in front of the Water Transfer Work Group for the October Meeting.



Figure 1. Manastash Project Map indicating existing conditions including fish passage barriers, absence of fish screens and the seasonally dry reach.



**Figure 2. Map of Manastash Project after Stage 1. This includes consolidation of the Anderson, Reed, and Hatfield Diversions to the MWDA diversion site and construction of the fish passage and fish screening facilities at all sites. Consolidation will include a saved water component which may result in flow downstream of the Reed diversion during times it has been dry in the past. It is unknown how far downstream this water may flow. This reach is indicated by the red and white line.**

### Attachment 1

<i>Control Number</i>	<i>Applicant Name</i>	<i>Priority</i>	<i>Max cfs</i>	<i>Acre-feet</i>	<i>acres</i>	<i>Diversion</i>	<i>App Received</i>
CS4-01950CTCL@1	Anderson	06-30-1872	2.353	720.2	101 ac	Anderson	5/2/2006
CS4-02253CTCL	Anderson	06-30-1872	0.233	71.1	10 ac	Anderson	5/2/2006
CS4-02270CTCL	Boyle	06-30-1877	0.84	256.2	256.2ac	Anderson	10/3/2006
			3.426	1047.5			
CS4-00328CTCL	Richards	06-30-1882	1.4	428.4	60 ac	Hatfield	4/3/2006
CS4-00328CTCL@1	Richards	06-30-1883	1.4	428.4	60 ac	Hatfield	4/3/2006
			2.8	856.8			
CS4-00258CTCL	Smith/Tasker	06-30-1877	0.52	158.6	22.5 ac	Reed	8/16/2006
CS4-00258CTCL@1	Smith/Tasker	06-30-1871	0.7	213.5	30 ac	Reed	8/16/2006
CS4-00373CTCL	Weeber	06-30-1877	0.78	240	33.4 ac	Reed	8/16/2006
CS4-00477CTCL	Harrell	06-30-1871	3.26	1098.6	140 ac	Reed	3/20/2006
CS4-00477CTCL@1	Harrell	06-30-1871	0.583	196	25 ac	Reed	3/20/2006
CS4-00477CTCL@2	Harrell	06-30-1872	3.84	1294.1	165 ac	Reed	3/20/2006
CS4-00477CTCL@3	Harrell	06-30-1872	0.315	105.8	13.5 ac	Reed	3/20/2006
CS4-00477CTCL@4	Harrell	06-30-1877	0.112	37.5	4.8 ac	Reed	3/20/2006
CS4-00477CTCL@5	Harrell	06-30-1877	2.91	962	125 ac	Reed	3/20/2006
CS4-00477CTCL@6	Harrell	06-30-1878	1.84	626.8	80 ac	Reed	3/20/2006
CS4-00657CTCL	Harrell	06-30-1871	2.8	942	120 ac	Reed	3/20/2006
CS4-00657CTCL@1	Harrell	06-30-1874	0.583	196	25 ac	Reed	3/20/2006
CS4-00923CTCL	Ross	06-30-1878	0.058	17.8	2.5 ac	Reed	8/16/2006
CS4-00987CTCL	Sparks	06-30-1889	0.467	142.46	20 ac	Reed	5/2/2006
CS4-00987CTCL@1	Sparks	06-30-1874	0.467	142.4	20 ac	Reed	5/2/2006
CS4-00987CTCL@2	Sparks	06-30-1871	0.583	177.7	25 ac	Reed	5/2/2006
CS4-01478CTCL	Sparks	06-30-1877	1.46	446.7	45 ac	Reed	5/2/2006
CS4-01478CTCL@4	Evans	06-30-1877	2	613	86.2 ac	Reed	8/16/2006
CS4-01478CTCL@1	Hackett	06-30-1877	1	28	4.66 ac	Reed	8/16/2006
CS4-01478CTCL@2	Page	06-30-1877	0.105	32	4.5 ac	Reed	8/16/2006
CS4-01478CTCL@3	Smith	06-30-1877	0.22	67.2	9.34 ac	Reed	8/16/2006
CS4-01772CTCL	Lindstrom	06-30-1878	0.029	8.9	1.25 ac	Reed	8/16/2006
CS4-04536CTCL	Moore-Samson	06-30-1878	0.058	18.8	2.5 ac	Reed	8/16/2006

