2021-09 WATER TRANSFER WORKING GROUP PROJECT DESCRIPTION

APPLICATION NO./COURT CLAIM NO. S4-84225-J		
APPLICANT NAME	CONTACT NAME	TELEPHONE NO.
Norman and Merilee Redberg	Erin Eaton -Trout Unlimited	509-607-4354
WATER RIGHT HOLDER'S NAME (if different)		EMAIL
Grace M. Menig, Norman Redberg, Merilee Redberg (as listed		Erin.eaton@tu.org
on certificate)		

DATE OF APPLICATION	PRIORITY DATE
December 15, 2020 (KCWCB)	June 30, 1889

WATER SOURCE:	CROP:
Yakima River via the Tjossem and Clark	Lawn and garden
Ditches	
INSTANTANEOUS QUANTITY:	ANNUAL QUANTITY:
0.06 cubic feet per second	8 acre-feet
PERIOD OF USE:	
April 15 through October 15	
PLACE OF USE:	PURPOSE OF USE:
The north 337 feet of the west 350.6 feet of	Irrigation of 2.0 acre of lawn and garden
the NE1/4NW1/4NE1/4 of Section 24, T.	
17 N., R. 18 E.W.M.	
IRRIGATION METHOD:	
Sprinkler	

CONSUMPTIVE USE CALCULATION: (provided as example, POD change to POW should not change consumptive use values;	
however, consumptive use quantities may vary annually by crop type, e.g. spinach requires April irrigation)	

Month	Acre-feet	CFS
April	0.00	0.00
May	0.59	0.01
June	1.31	0.02
July	1.79	0.03
August	1.43	0.02
September	0.81	0.01
October	0.12	0.00
Totals	6.04	n/a

NARRATIVE DESCRIPTION OF PROJECT:

The subject water right is diverted from the Yakima River into a multi-user irrigation ditch, commonly referred to as the "Tjossem Ditch". The Tjossem Ditch begins on US Bureau of Reclamation property (Schaake Property) on the eastern bank of the Yakima River at approximately RM 150.5 just on the outskirts of Ellensburg, WA. Trout Unlimited (TU), in partnership with local, state and federal entities, has identified Tjossem Ditch as a source of salmonid mortality that limits restoration and recovery of both ESA-threatened and non-listed Yakima Basin fish.

Ecology's Guidance Document, GUID-1201, Determining Irrigation Efficiency and Consumptive Use provides the methodology for calculating the relative water amounts required for irrigation. It is noted that area fields are relatively course-grained, requiring a higher water duty to meet the Crop Irrigation Requirement (CIR), resulting in lower than average application efficiency. Here, 'pasture' was used to determine the Crop Irrigation Requirement (CIR) of 31.45 inches (2.6208 ac-ft/yr) based on an Ellensburg, WA location. The application efficiency (Ea), approximately 0.6552, was calculated as "Ea=CIR/TIR" from the original formula TIR=CIR/Ea. A miscellaneous evaporation of 10% was applied. These values were used to calculate the total consumptive acre-feet need as 6.04 from the application of 8.00 ac-ft/yr.

TU is coordinating the Tjossem Ditch Project (all landowners) with the other projects to provide alternative water delivery systems for the water users. The POD listed on the Water Right is located on the eastern bank of the Yakima River. This POD (and related conveyance system) insufficiently delivered water to the Redberg POU and created issues with water availability. As such, a shallow groundwater well and pump was installed on the property to deliver irrigation water prior to Redberg's ownership in 2007. A shallow groundwater well and pump have since provided the irrigation water, with no evidence of water withdrawal from the POD listed on the Water Right. Ecology's Water Resource Program Policy for Conducting Tentative Determination of Water Rights (POL-1120) states that, "In some situations, changes to historic uses associated with water rights have been made in the diversion or use of water without first obtaining authorization for the changes pursuant to chapters 90.03 and 90.44 RCW. Such unauthorized changes to existing water rights are commonly referred to as "defacto, or after-the-fact changes." Therefore, in this instance, the use of the well as the POD satisfies the beneficial use requirement and should be considered a de-facto change in point of diversion. TU intends to transfer this right from a surface water diversion to a proposed groundwater diversion (well). The proposed well would reside on Kittitas County parcel 768933 in Section 24 T. 17 N., R. 18 E.M.W. The water user will continue to use the water to irrigate their lawn and garden using a pressurized sprinkler system. The Purpose of Use and Place of Use will not change.

WTWG Project form



S4-84225-J: Existing & Proposed POD Change

0.8 Miles

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