

WATER TRANSFER WORKING GROUP PROJECT DESCRIPTION

APPLICATION NO./COURT CLAIM NO. Acquavella Court Claim No. 00777, (A) 05114		
APPLICANT NAME Milton and Geraldine Downs	CONTACT NAME Jeff Slothower	TELEPHONE NO. (509) 925-6916
WATER RIGHT HOLDER'S NAME (if different)		EMAIL jslothower@lwhsd.com

DATE OF APPLICATION 5/17/16	PRIORITY DATE June 30, 1885
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WATER SOURCE: Teanaway River	CROP: Clover
INSTANTANEOUS QUANTITY: 0.44 cfs – irrigation	ANNUAL QUANTITY: 143 - irrigation 2 - stock water
PERIOD OF USE: May 1 to September 15	
PLACE OF USE: That portion of the E½ of Section 14, T. 20 N., R. 16 E.W.M., described as follows: Commencing at the east quarter corner of said section; thence north to the south right of way of the Teanaway Road; thence northwesterly to the intersection of said road and 3M Ditch, being the point of beginning; thence northwesterly along said right of way 700 feet, more or less; thence southerly 90 feet, more or less, to the old railroad right of way; thence southeasterly along the said right of way 2000 feet, more or less; thence easterly 80 feet, more or less, to Mason Creek; thence northeasterly along the west bank of said creek to the 3M Ditch; thence northwesterly along the south bank of said ditch to the point of beginning. [SEE ATTACHED MAP]	PURPOSE OF USE: Irrigation of 22 acres and stock water
IRRIGATION METHOD: Flood (gated pipe)	

CONSUMPTIVE USE CALCULATION: Consumptive use associated with the irrigation of 22 acres was calculated using Ecology's <i>Guidance 1210-Determining Irrigation Efficiency and Consumptive Use</i> (Ecology, 2005) and the Washington irrigation Guide (WIG) developed by Washington State University under contract to Ecology (Peters, 2013). Calculations of consumptive use for irrigation of timothy hay are shown on Table 1. The following paragraphs provide the assumptions and sources of data used in the water use calculations. The main components for estimating consumptive water use are the crop irrigation requirement (CIR) for the crop type and geographic location; the irrigated acreage for a given crop; the total irrigation requirement (TIR) or total water applied to the field; and an evaporative component (%Evaporation) describing evaporative losses of water due

to factors other than crop evapotranspiration and based on the irrigation method. Monthly CIR values for timothy hay were selected from the revised WIG for Cle Blum. The TIR and irrigated acreage were set equal to the full irrigation water right authorization, including additional water available in May and June, of 143 afy and 22 acres. The % Evaporation of 5 percent was selected as the recommended value from Guidance 1210 for surface irrigation methods.

Applying the above values, the calculated consumptive water use is 53.99 afy.

Table 1 - Consumptive Use Calculation, Adjudicated Claim 00777

Downs Water Right, Cle Elum, WA

Month	CIR In Inches	CIR In ac-ft	TIR In Inches	TIR In ac-ft	CU In Inches	CU In ac-ft
January	0.00	0.00	0.00	0.00	0.00	0.00
February	0.00	0.00	0.00	0.00	0.00	0.00
March	0.00	0.00	0.00	0.00	0.00	0.00
April	0.00	0.00	0.00	0.00	0.00	0.00
May	2.56	4.69	7.82	14.33	2.95	5.41
June	4.61	8.45	14.07	25.80	5.31	9.74
July	5.15	9.44	15.72	28.82	5.94	10.88
August	6.32	11.59	19.29	35.37	7.28	13.36
September	4.67	8.56	14.26	26.14	5.36	9.87
October	2.24	4.11	6.84	12.54	2.58	4.73
November	0.00	0.00	0.00	0.00	0.00	0.00
December	0.00	0.00	0.00	0.00	0.00	0.00
Total	25.55	46.84	78.00	143.00	29.45	53.99

Location: Cle Elum
 Acres: 22
 Crop: Timothy (Grass Hay)
 Irrigation Method: Flood (Gated Pipe)
 Application Efficiency: 33%
 %Evaporation: 5%

Notes:

CIR - Crop Irrigation Requirement, from recent Ecology-funded updates to the Washington Irrigation Guide completed by Washington State University

TIR - Total Irrigation Requirement, selected as total authorized diversion under Claim 00777

Application Efficiency - Calculated as CIR/TIR

CU - Consumptive use, equals TIR*(Application Efficiency + %Evaporation)

%Evaporation, percentage of TIR evaporated due to factors other than crop evapotranspiration, selected from Ecology Guidance 1210 for surface irrigation methods

NARRATIVE DESCRIPTION OF PROJECT:

The requested change is to allow the water right to be used for instream flow purposes, including but not limited to mitigation of out of priority water uses.

Once the transfer is complete, the applicant intends to enter into a Trust Water Right Agreement with Ecology.

