

WATER TRANSFER WORKING GROUP PROJECT DESCRIPTION

APPLICATION NO./COURT CLAIM NO.		
Water Budget Neutral Request No. G4-35600 with mitigation from Trust Water Right No. CS4-01676sb5d@3		
APPLICANT NAME Scott Barbee	CONTACT NAME Kurt Walker - Ecology	TELEPHONE NO. 509-454-4237
WATER RIGHT HOLDER'S NAME (if different) Mitigation with Clennon Trust Water Right		EMAIL kwal461@ecy.wa.gov

DATE OF APPLICATION February 14, 2013	PRIORITY DATE New use mitigated by trust water right with priority date of June 30, 1900
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WATER SOURCE: groundwater	CROP: Lawn or noncommercial garden
INSTANTANEOUS QUANTITY:	ANNUAL QUANTITY: 0.422 acre-ft/yr
PERIOD OF USE: Continuous for single indoor domestic connection and irrigation season for lawn and garden	
PLACE OF USE: Parcel No. 17344, located within the NE¼ of Section 25, T. 20 N., R. 15 E.W.M.	PURPOSE OF USE: Single domestic and Irrigation of 500 ft ² lawn or garden
IRRIGATION METHOD:	

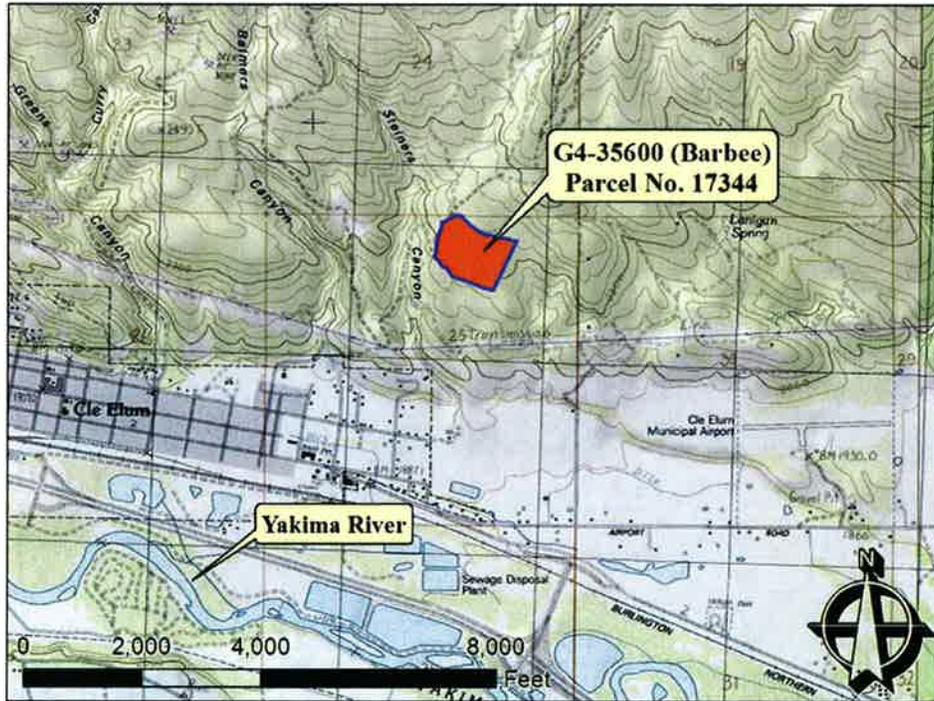
<p>CONSUMPTIVE USE CALCULATION:</p> <p>Indoor use: One residential connection at 350 gallons per day (gpd) used continuously year round equates to 0.392 afy of water use, or: $(350 \text{ gpd per connection}) \times (365 \text{ days}) \times (\text{one connection}) \times (1.0 \text{ ac-ft}/325,851 \text{ gal}) = 0.392 \text{ afy}$ Consistent with WAC 173-539A-050(3), 30% of domestic in-house use on a septic system is consumptively used, therefore: Indoor consumptive use = $(0.392 \text{ afy}) \times (0.30) = \mathbf{0.118 \text{ afy}}$</p> <p>Outdoor use: The requestor proposes to irrigate 500 ft² of lawn and garden. Using a crop irrigation requirement consistent with the methodology used to calculate the Trust Water Right quantities, the outdoor total and consumptive use is as follows: Outdoor total use = $[(2.12 \text{ ft/yr}) \div 0.80] \times (500 \text{ ft}^2 \div 43,560 \text{ ft}^2/\text{ac}) = \mathbf{0.030 \text{ afy}}$ Consistent with WAC 173-539A-050(3), 90% of outdoor use is consumptively used, so: Outdoor consumptive use = $(0.030 \text{ afy}) \times (0.90) = \mathbf{0.027 \text{ afy}}$</p> <p>As a result consumptive use (CU) for the project totals to 0.145 afy (CU April 1 to July 31 is 0.056 ac-ft and CU Aug 1 to Mar 31 is 0.089 ac-ft)</p> <p>For detailed analysis of month-to-month uses see spreadsheet below.</p>
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NARRATIVE DESCRIPTION OF PROJECT:

The requestor proposes to offset the 0.145 ac-ft of consumptive use for the project (one residential connection and 500 ft² of lawn and garden) with 0.145 ac-ft of mitigation water acquired from Trust Water Right No. CS4-01676sb5d@3. During the irrigation season, 0.089 ac-ft is assigned to the USBR-Ecology Exchange Contract (Contract No. 09XX101700) and released between August 1 and March 30 to address impacts along the Yakima River.

The proposed well for the new use is to be located in an area that needed additional information ("yellow area") to determine the suitability of the Clennon Trust Water Rights for use as mitigation to offset the new use. Review of the local area hydrogeology suggests that withdrawal under G4-35600 will result in flow impacts to the Yakima River south of the property and possibly to the intermittent stream within Steiners Canyon. For additional information, please contact Kurt Walker at (509) 454-4237, kwal461@ecy.wa.gov.

Location of G4-35600



Total and Consumptive Use under G4-35600

Consumptive Use Calculator for WBN form and Contract water: WRTS No. G4-35600 (Barbee)

Clennon Water Right CS4-01676sb5d@3

Assumptions for Irrigation:

Assumed efficiency	0.8
% CU for outdoor use	0.9 per WAC
Square feet to irrigate	500
Acreage	0.011

Assumptions for Domestic:

total use per ERU	350 gpd
total use per ERU	0.001074 af per day
#ERU	1
% CU	0.3 for septic system

	Irrigation portion:				Indoor Domestic portion:		Total CU (afy)
	CIR (in/yr)	TIR per ac (AFY/ac)	TIR (afy)	CU (afy)	total use (AFY)	CU (AFY)	
Jan	0.00				0.0333	0.0100	0.0100
Feb	0.00				0.0301	0.0090	0.0090
Mar	0.00				0.0333	0.0100	0.0100
Apr	0.00				0.0322	0.0097	0.0097
May	2.04	0.2125	0.002	0.002	0.0333	0.0100	0.0122
Jun	5.85	0.6094	0.007	0.006	0.0322	0.0097	0.0160
Jul	7.35	0.7656	0.009	0.008	0.0333	0.0100	0.0179
Aug	7.63	0.7948	0.009	0.008	0.0333	0.0100	0.0182
Sept	2.55	0.2656	0.003	0.003	0.0322	0.0097	0.0124
Oct	0.00				0.0333	0.0100	0.0100
Nov	0.00				0.0322	0.0097	0.0097
Dec	0.00				0.0333	0.0100	0.0100
Total	25.42		0.030	0.027	0.392	0.118	0.145

Results:

gray shaded cells= contract water

For WBN form:

Total CU	0.145 AFY
Total use	0.422 AFY

For Contract form:

CU (April 1 to July 31)	0.056 AFY
CU (Aug 1 to March 31)	0.089 AFY
Contract water	0.089 AFY

contract cost \$70.49

(\$22 per afy of assigned water for 36 years)

Assumes USBR release begins as early as August 1.

Total to add to IF at Parker:	0.000 AFY
Total to debit from TWR:	0.145 AFY

1/3 of water assigned to contract.

(Total CU) + (Total to add to IF at Parker)