

## WATER TRANSFER WORKING GROUP PROJECT DESCRIPTION

APPLICATION NO./COURT CLAIM NO.		
Water Budget Neutral Request No. G4-35593 with mitigation from Trust Water Right No. CS4-01676sb5d@3		
APPLICANT NAME	CONTACT NAME	TELEPHONE NO.
Todd Sampson	Kurt Walker - Ecology	509-454-4237
WATER RIGHT HOLDER'S NAME (if different)		EMAIL
Mitigation with Clennon Trust Water Right		kwal461@ecy.wa.gov

DATE OF APPLICATION	PRIORITY DATE
December 17, 2012	New use mitigated by trust water right with priority date of June 30, 1900

WATER SOURCE:	CROP:
groundwater	Lawn or noncommercial garden
INSTANTANEOUS QUANTITY:	ANNUAL QUANTITY:
	0.414 acre-ft/yr
PERIOD OF USE:	
Continuous for single indoor domestic connection and irrigation season for lawn and garden	
PLACE OF USE:	PURPOSE OF USE:
Parcel No. 066935, located within the SW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 34, T. 21 N., R. 14 E.W.M.	Single domestic and Irrigation of 500 ft <sup>2</sup> lawn or garden
IRRIGATION METHOD:	

<p>CONSUMPTIVE USE CALCULATION:</p> <p><b>Indoor use:</b> One residential connection at 350 gallons per day (gpd) used continuously year round equates to 0.392 afy of water use, or:  Indoor total use (350 gpd per connection) x (365 days) x (one connection) x (1.0 ac-ft/325,851 gal) = <b>0.392 afy</b>  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 afy) x (0.30) = <b>0.118 afy</b></p> <p><b>Outdoor use:</b> The requestor proposes to irrigate 500 ft<sup>2</sup> 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 = <math>[(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}}</math>  Consistent with WAC 173-539A-050(3), 90% of outdoor use is consumptively used, so:  Outdoor consumptive use = (0.030 afy) x (0.90) = <b>0.027 afy</b></p>
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**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)**

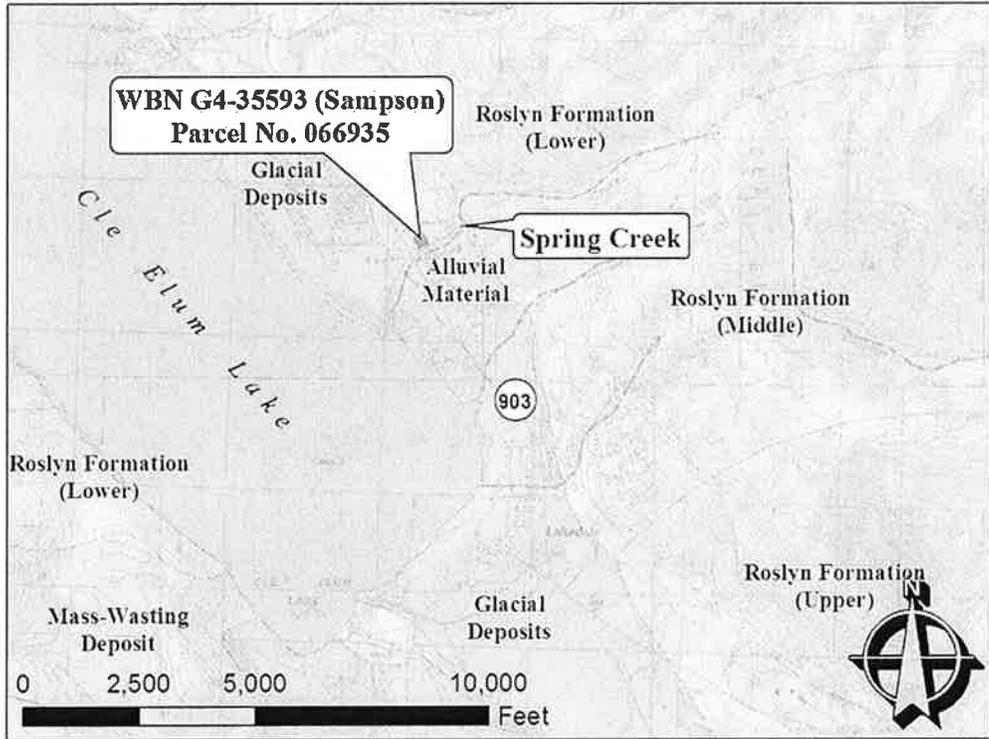
**For detailed analysis of month-to-month uses see spreadsheet below.**

NARRATIVE DESCRIPTION OF PROJECT:

The requestor proposes to offset the 0.145 afy of consumptive use for the project (one residential connection and 500 ft<sup>2</sup> of lawn and garden) with 0.145 afy 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 31 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 pumping under G4-35593 would result in flow impacts to Spring Creek which is located along the southern property boundary. Copies of the Draft Hydrogeology Memo for the subject water budget neutral request are available on request from Ecology. For a copy, please contact Kurt Walker at (509) 454-4237, kwal461@ecy.wa.gov.

## G4-35593 Location



## Total and Consumptive Use under G4-35593

Consumptive Use Calculator for WBN form and Contract water: WRTS No. G4-35593 (Sampson)  
 Clennon Water Right C54-01676sb5d@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:

	CIR (in/yr)	TIR per ac (AFY/ac)	TIR (afy)	CU (afy)	total use (AFY)	CU (AFY)	Total 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
<b>Total</b>	<b>25.42</b>		<b>0.030</b>	<b>0.027</b>	<b>0.392</b>	<b>0.118</b>	<b>0.145</b>

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)

USBR release begins as soon as August 1.

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

(Total CU)