

WATER TRANSFER WORKING GROUP PROJECT DESCRIPTION

APPLICATION NO./COURT CLAIM NO.		
Water Budget Neutral Request No. G4-35499 with mitigation from Trust Water Right No. S4-02255(A)CTCL@2		
APPLICANT NAME	CONTACT NAME	TELEPHONE NO.
Joseph Vlcek	Kurt Walker - Ecology	509-454-4237
WATER RIGHT HOLDER'S NAME (if different)		EMAIL
Mitigation with SwiftWater Ranch LLC Trust Water Right		kwal461@ecy.wa.gov

DATE OF APPLICATION	PRIORITY DATE
May 26, 2011	New use mitigated by trust water right with priority date of June 30, 1890

WATER SOURCE:	CROP:
Well (Ecology Tag No. AKW793)	Lawn or noncommercial garden
INSTANTANEOUS QUANTITY:	ANNUAL QUANTITY:
	0.414 acre-feet/year (afy)
PERIOD OF USE:	
Continuous for single indoor domestic connection and irrigation season for lawn and garden	
PLACE OF USE:	PURPOSE OF USE:
Parcel No. 17664, located within the NE $\frac{1}{4}$ of Section 22, T. 20 N., R. 15 E.W.M.	Single domestic and Irrigation of 500 ft ² lawn or garden
IRRIGATION METHOD:	

CONSUMPTIVE USE CALCULATION:
<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: $(350\text{gpd per connection}) \times (365\text{ days}) \times (\text{one connection}) \times (1\text{ac-ft}/325,851\text{gal}) = 0.392\text{ afy}$</p> <p>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 of 18.11 in/yr (or 1.51 ft/yr) for pasture/turf near Cle Elum from the Washington Irrigation Guide and an application efficiency of 80%, the total outdoor irrigation water use is 0.022 afy, or: $[(1.51\text{ ft/yr}) \div 0.80] \times (500\text{ ft}^2 \div 43,560\text{ ft}^2/\text{ac}) = 0.022\text{ afy}$</p> <p>Consistent with WAC 173-539A-050(3), 90% of outdoor use is consumptively used, so: Outdoor consumptive use = $(0.022\text{ afy}) \times (0.90) = \mathbf{0.019\text{ afy}}$</p>

**As a result consumptive use (CU) for the project totals to 0.137 afy
(CU April 1 to Aug 31 is 0.065 ac-ft and CU Sept 1 to March 31 is 0.072 ac-ft)**

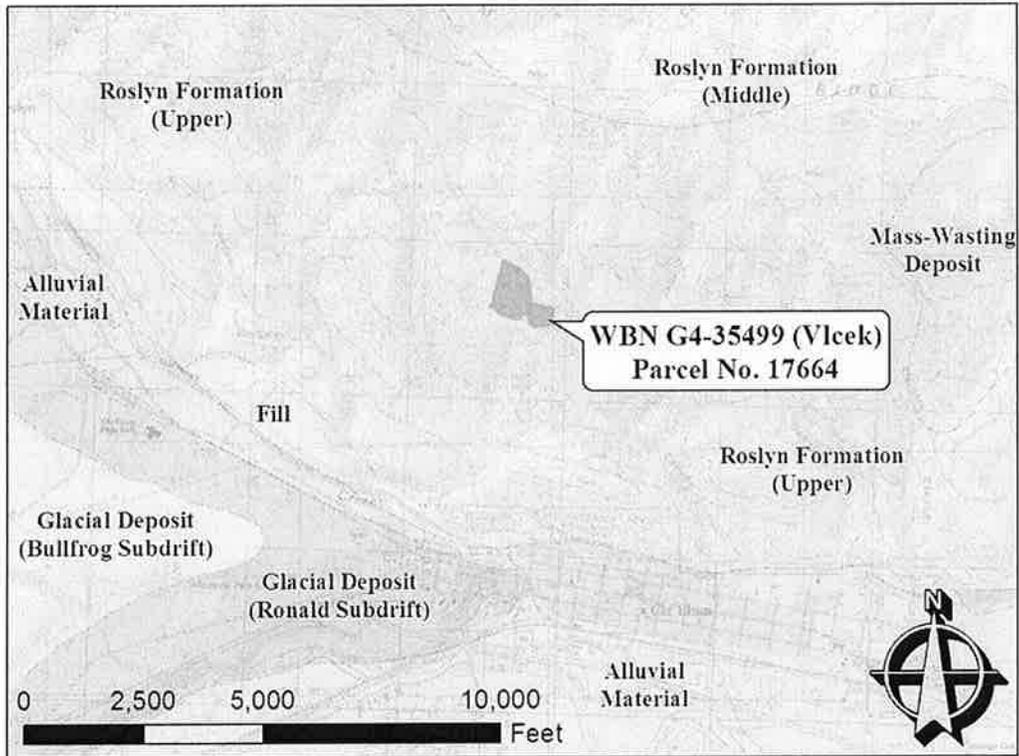
For detailed analysis of month-to-month uses see spreadsheet below.

NARRATIVE DESCRIPTION OF PROJECT:

The requestor proposes to offset the 0.137 afy of consumptive use for the project (one residential connection and 500 ft² of lawn and garden) with 0.137 afy of mitigation water acquired from Trust Water Right No. S4-02255(A)CTCL@2. During the irrigation season, 0.072 ac-ft is assigned to the USBR-Ecology Exchange Contract (Contract No. 09XX101700) and released between September 1 and March 31 to address flow impacts along the Yakima River.

The proposed well for the new use is to be located in an “yellow” area as noted on the SwiftWater Ranch LLC suitability map. Review of the local area hydrogeology suggests that the proposed groundwater withdrawals under G4-35499 will result in flow impacts the lower Teanaway River and Yakima River. For questions regarding the project area hydrogeology with respect to G4-35567, please contact Kurt Walker at (509) 454-4237, kwal461@ecy.wa.gov.

Location of G4-35499



Total and Consumptive Use under G4-35499

SwiftWater Out-of-Basin: Calculator for Consumptive Use, Contract Assignment, and Mitigation Tracking

Does not apply to new uses on In Teanaway R. basin where mitigation originated, use separate CU calculator for In-Basin Uses
 WRTS No. G4-35499 (Vlcek)

Assumptions for Irrigation:

Assumed efficiency
 % CU for outdoor use per WAC
 Square feet to irrigate
 Acreage

Assumptions for Domestic:

total use per ERU gpd
 total use per ERU af per day
 #ERU
 % CU for septic system

	Irrigation portion:				Indoor Domestic portion:		Total CU (afy)
	WIG (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	0.00				0.0333	0.0100	0.0100
Jun	3.34	0.3479	0.004	0.004	0.0322	0.0097	0.0133
Jul	6.50	0.6771	0.008	0.007	0.0333	0.0100	0.0170
Aug	4.79	0.4990	0.006	0.005	0.0333	0.0100	0.0151
Sept	3.47	0.3615	0.004	0.004	0.0322	0.0097	0.0134
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	18.11		0.022	0.019	0.392	0.118	0.137

Results:

For WBN form:

Total CU	0.137 AFY
Total use	0.414 AFY

shaded cells= contract water

For Contract form:

CU (April 1 to Aug 31)	0.065 AFY
CU (Sept 1 to March 31)	0.072 AFY
Contract water	0.072 AFY

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

Contract period from Sept 1 to March 31

Total to add to IF at Parker:	0 AFY
Total to debit from TWR:	0.137 AFY

Tributary TWR; see Exchange Contract Section 14(c)(1)
 (Total CU)