WATER TRANSFER WORKING GROUP PROJECT DESCRIPTION

APPLICATION NO./COURT CLAIM NO.		
Water Budget Neutral Request Nos. G4-35563, G4-35564, G4-35465, and G4-35566 with mitigation from Trust Water Right No. CS4-01676sb5d@3		
APPLICANT NAME Barton & Sheila Clennon	CONTACT NAME Kurt Walker - Ecology	TELEPHONE NO. 509-454-4237
WATER RIGHT HOLDER'S NAME (if different) Mitigation with Clennon Trust Water Rights		EMAIL kwal461@ecy.wa.gov

DATE OF APPLICATION	PRIORITY DATE
May 18, 2012	New use mitigated by trust water right with priority date of June 30, 1900

WATER SOURCE: wells	CROP: Lawn or noncommercial garden
INSTANTANEOUS QUANTITY:	ANNUAL QUANTITY: 1.683 afy
PERIOD OF USE: Continuous for 4 indoor domestic use and irrigation season for lawn and garden.	
PLACE OF USE: Parcel Nos. 954238, 954239, 954240, and 954241, located within the SE¼SW¼ of Section 29, T. 20 N., R. 16 E.W.M.	PURPOSE OF USE: 4 domestic uses and Irrigation of 2,000 ft^2 lawn or garden (500 ft^2 per domestic connection).
IRRIGATION METHOD:	

CONSUMPTIVE USE CALCULATION:

Indoor use: 4 residential connection at 350 gallons per day (gpd) used continuously year round equates to 1.568 acre-feet per year (afy) of water use, or:
(350 gpd per connection) x (365 days) x (4 connection) x (1 ac-ft/325,851gal) = 1.568 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 = (1.568 afy) x (0.30) = **0.470 afy**

Outdoor use: The requestor proposes to irrigate 2,000 ft^2 of lawn and garden (500 ft^2 per connection). Using a crop irrigation requirement of 24.0 in/yr (or 2.0 ft/yr) for pasture/turf near and an application efficiency of 80%, the total outdoor irrigation water use is 0.115 afy, or:
[(2.0 ft/yr) ÷ 0.80] x (2,000 ft^2 ÷ 43,560 ft^2/ac) = 0.115 afy
Consistent with WAC 173-539A-050(3), 90% of outdoor use is consumptively used, so:
Outdoor consumptive use = (0.115 ac-ft/yr) x (0.90) = **0.103 afy**

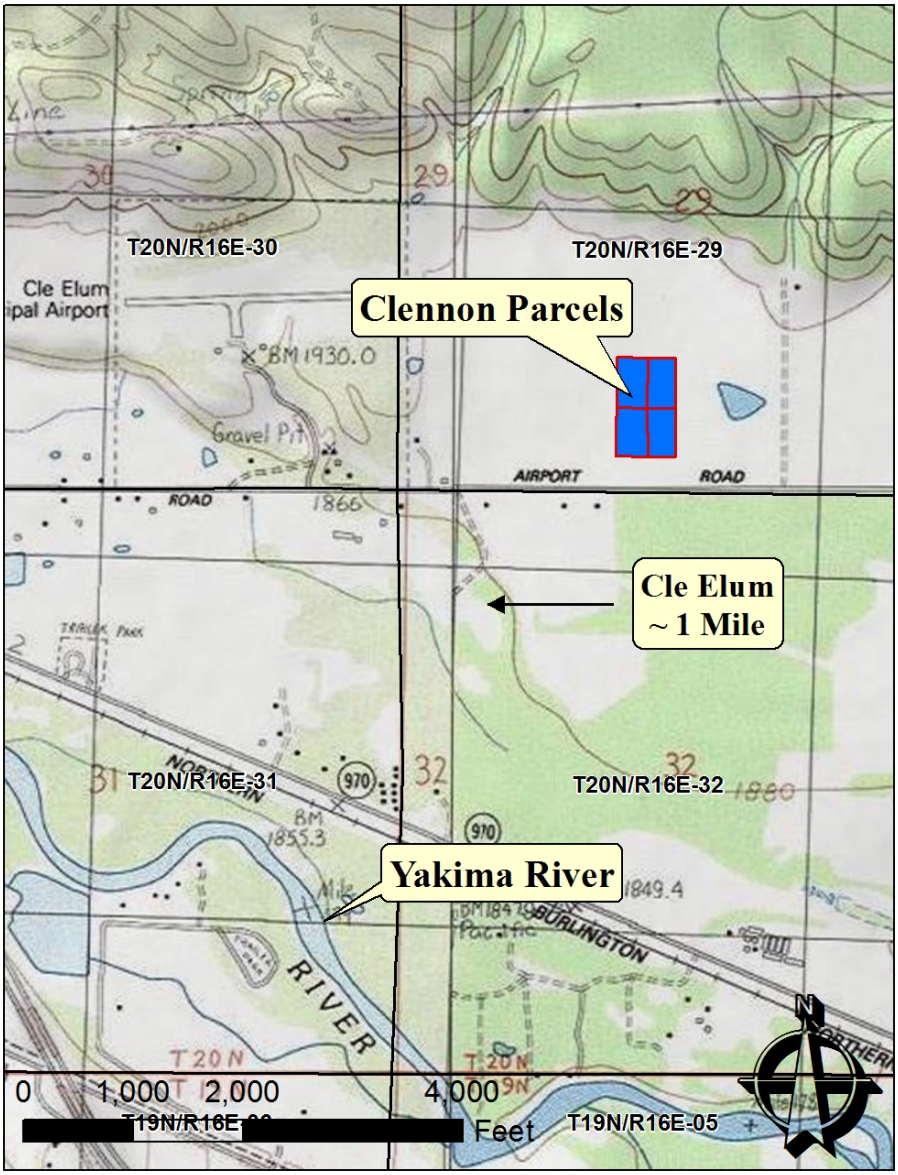
The combined consumptive use (CU) for the project totals to 0.574 afy
(CU May 1 to July 31 is 0.176 ac-ft and CU August 1 to April 30 is 0.398 ac-ft)

See Attached Spreadsheet for month-to-month use.

NARRATIVE DESCRIPTION OF PROJECT:

The requestor proposes to offset the 0.574 ac-ft/yr of consumptive use for the project (4 residential connection and 2,000 ft^2 of lawn and garden) with 0.574 ac-ft/yr of mitigation water acquired from Trust Water Right No. CS4-01676sb5d@3. During the irrigation season, 0.398 ac-ft is assigned to the USBR-Ecology Exchange Contract (Contract No. 09XX101700) and released between August 1 to April 30 to address out of season impacts along the Yakima River.

WTWG Project form



Consumptive Use Calculator for WBN form and Contract water: WRTS Nos. G4-35563, G4-35564, G4-35565, and G4-35566 (Clennon)

Assumptions for Irrigation:

Assumed efficiency	0.8	
% CU for outdoor use	0.9	per WAC
Square feet to irrigate	2000	
Acreage	0.046	

Assumptions for Domestic:

total use per ERU	350	gpd
total use per ERU	0.001074	af per day
#ERU	4	
% CU	0.3	for septic system

	Irrigation portion:				Indoor Domestic portion:		
	WIG (in/yr)	TIR per ac (AFY/ac)	TIR (afy)	CU (afy)	total use (AFY)	CU (AFY)	Total CU (afy)
Jan	0.00				0.1332	0.0400	0.0400
Feb	0.00				0.1203	0.0361	0.0361
Mar	0.00				0.1332	0.0400	0.0400
Apr	0.00				0.1289	0.0387	0.0387
May	0.90	0.0938	0.004	0.004	0.1332	0.0400	0.0438
Jun	5.07	0.5281	0.024	0.022	0.1289	0.0387	0.0605
Jul	7.35	0.7656	0.035	0.032	0.1332	0.0400	0.0716
Aug	6.46	0.6729	0.031	0.028	0.1332	0.0400	0.0678
Sept	4.21	0.4385	0.020	0.018	0.1289	0.0387	0.0568
Oct	0.00				0.1332	0.0400	0.0400
Nov	0.00				0.1289	0.0387	0.0387
Dec	0.00				0.1332	0.0400	0.0400
Total	**24.00**		**0.115**	**0.103**	**1.568**	**0.470**	**0.574**

Results:

gray shaded cells= contract water

For WBN form:

Total CU	**0.574**	AFY
Total use	**1.683**	AFY

For Contract form:

CU (May 1 to July 31)	**0.176**	AFY
CU (Aug 1 to April 30)	**0.398**	AFY
Contract water	**0.398**	AFY

Assumes irrigation season starts May 1 and USBR release begins Aug 1.

Total to add to IF at Parker:	**0.000**	AFY
Total to debit from TWR:	**0.574**	AFY

1/3 of water assigned to contract.

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

contract cost	$323.97

($22 per afy of assigned water for 37 years)