

WATER TRANSFER WORKING GROUP PROJECT DESCRIPTION

APPLICATION NO./COURT CLAIM NO.		
Water Budget Neutral Request No. G4-35286 with mitigation from Trust Water Right No. S4-05259CTCL@2sb7		
APPLICANT NAME	CONTACT NAME	TELEPHONE NO.
Marvin and Vicki Thurgood	same	(509) 967-3027
WATER RIGHT HOLDER'S NAME (if different)		EMAIL

DATE OF APPLICATION	PRIORITY DATE
April 27, 2010	New use mitigated by trust water right with priority date of October 30, 1884

WATER SOURCE:	CROP:
well	Lawn or noncommercial garden
INSTANTANEOUS QUANTITY:	ANNUAL QUANTITY:
	0.544 acre-ft/yr
PERIOD OF USE:	
Continuous for one indoor domestic connection and irrigation season for lawn and garden	
PLACE OF USE:	PURPOSE OF USE:
Parcel No. 796634, located within the SW ¹ / ₄ NW ¹ / ₄ of Section 7, T. 19 N., R. 16 E.W.M.	Single domestic and Irrigation of 3,500 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 ac-ft/yr of water use, or: $(350\text{gpd per connection}) \times (365\text{ days}) \times (1\text{ connection}) \times (1\text{ ac-ft}/325,851\text{gal}) = 0.392\text{ afy}$ Consistent with WAC 173-539A-050(3), 30% of domestic in-house use on a septic system is consumptively used, therefore: Indoor consumptive use = $(0.392\text{afy}) \times (0.30) = \mathbf{0.118\text{ ac-ft/yr}}$</p> <p>Outdoor use: The requestor proposes to irrigate 3,500ft² 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 0.151 ac-ft/yr, or:</p>

$$[(1.51 \text{ ft/yr}) \div 0.80] \times (3,500 \text{ ft}^2 \div 43560 \text{ ft}^2/\text{ac}) = 0.151 \text{ ac-ft/yr}$$

Consistent with WAC 173-539A-050(3), 90% of outdoor use is consumptively used, so:

$$\text{Outdoor consumptive use} = (0.151 \text{ ac-ft/yr}) \times (0.90) = \mathbf{0.136 \text{ ac-ft/yr}}$$

As a result consumptive use (CU) for the project totals to 0.254 ac-ft/yr

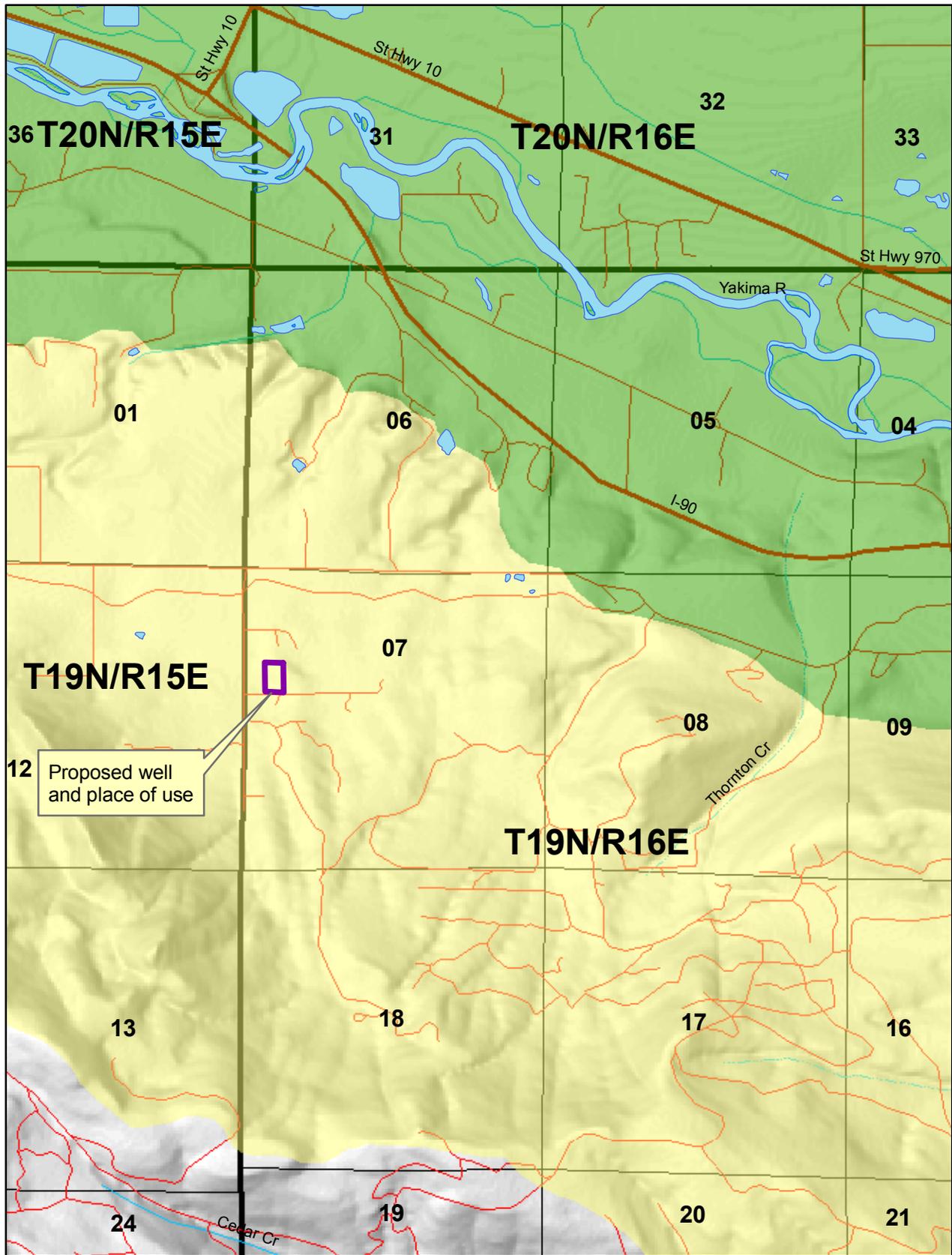
(CU April 1 to Aug 31 is 0.160 ac-ft and CU Sept 1 to Mar 31 is 0.094 ac-ft)

NARRATIVE DESCRIPTION OF PROJECT:

The requestor proposes to offset the 0.254 ac-ft/yr of consumptive use for the project (1 residential connection and 3,500 ft² of lawn and garden) with 0.254 ac-ft/yr of mitigation water acquired from Trust Water Right No. S4-05259CTCL@2sb7. During the irrigation season, 0.094 ac-ft is assigned to the USBR-Ecology Exchange Contract (Contract No. 09XX101700) and released between Sept 1 to Mar 31 to ensure that the new exempt use is water budget neutral at Parker year round. In addition, consistent with the Exchange Contract, Ecology plans to assign 0.031 ac-ft of the Trust Water Right to be managed within the Trust Water Right Program for instream flow purposes to benefit the Yakima River below Parker.

The proposed well for the new use is located in an area that needed additional information (“yellow area”) to determine the suitability of the Suncadia Trust Water Rights for use as mitigation to offset the new use. Additional review of the local area hydrogeology in the vicinity of the proposed well indicates the effects of the groundwater withdrawal from the proposed well will ultimately be felt on the Yakima Mainstem. As a result, the Exchange Contract can be appropriately used along with Trust Water Right No. S4-05259CTCL@2sb7 for mitigation. The new use of groundwater will be water budget neutral with respect to Total Water Supply Available at Parker.

Copies of the Draft Hydrogeologic Memo for the subject water budget neutral request are available on request from Ecology. For a copy, please contact either Anna Hoselton at (509) 454-7887, ahos461@ecy.wa.gov or Ingrid Ekstrom at (509) 575-2396, ieks461@ecy.wa.gov.



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