

**WATER TRANSFER WORKING GROUP PROJECT DESCRIPTION**

APPLICATION NO./COURT CLAIM NO.		
Water Budget Neutral Request No. G4-35291 with mitigation from Trust Water Right No. S4-05259CTCL@2sb7		
APPLICANT NAME Paul Lyman and Matt Coe	CONTACT NAME same	TELEPHONE NO. (206) 730-7581
WATER RIGHT HOLDER'S NAME (if different)		EMAIL

DATE OF APPLICATION April 29, 2010 (Determination of Water Budget Neutrality was issued on May 20, 2010)	PRIORITY DATE New use mitigated by trust water right with priority date of October 30, 1884
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WATER SOURCE: well	CROP: Lawn or noncommercial garden
INSTANTANEOUS QUANTITY:	ANNUAL QUANTITY: 3.310 acre-ft/yr
PERIOD OF USE: Continuous for 8 indoor domestic connections and irrigation season for lawn and garden	
PLACE OF USE: Parcel Nos. 952189, 952190, 952191, 952192, 952238, 952239, 952240, and 952241, all located within the NW $\frac{1}{4}$ of Section 29, T. 20 N., R. 14 E.W.M.	PURPOSE OF USE: Group domestic and Irrigation of 4,000 ft <sup>2</sup> lawn or garden
IRRIGATION METHOD:	

<p>CONSUMPTIVE USE CALCULATION:</p> <p><b>Indoor use:</b> Eight residential connections at 350 gallons per day (gpd) used continuously year round equates to 3.136 ac-ft/yr of water use, or:  <math>(350\text{gpd per connection}) \times (365 \text{ days}) \times (8 \text{ connection}) \times (1\text{ac-ft}/325,851\text{gal}) = 3.136 \text{ afy}</math>  Consistent with WAC 173-539A-050(3), 30% of domestic in-house use on a septic system is consumptively used, therefore:  Indoor consumptive use = <math>(3.136\text{afy}) \times (0.30) = \mathbf{0.941 \text{ ac-ft/yr}}</math></p> <p><b>Outdoor use:</b> The requestor proposes to irrigate 4,000ft<sup>2</sup> 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 0.173 ac-ft/yr, or:  <math>[(1.51 \text{ ft/yr}) \div 0.80] \times (4,000 \text{ ft}^2 \div 43560 \text{ ft}^2/\text{ac}) = 0.173 \text{ ac-ft/yr}</math>  Consistent with WAC 173-539A-050(3), 90% of outdoor use is consumptively used, so:  Outdoor consumptive use = <math>(0.173 \text{ ac-ft/yr}) \times (0.90) = \mathbf{0.156 \text{ ac-ft/yr}}</math></p>
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**As a result consumptive use (CU) for the project totals to 1.097 ac-ft/yr  
(CU April 1 to Aug 31 is 0.520 ac-ft and CU Sept 1 to Mar 31 is 0.576 ac-ft)**

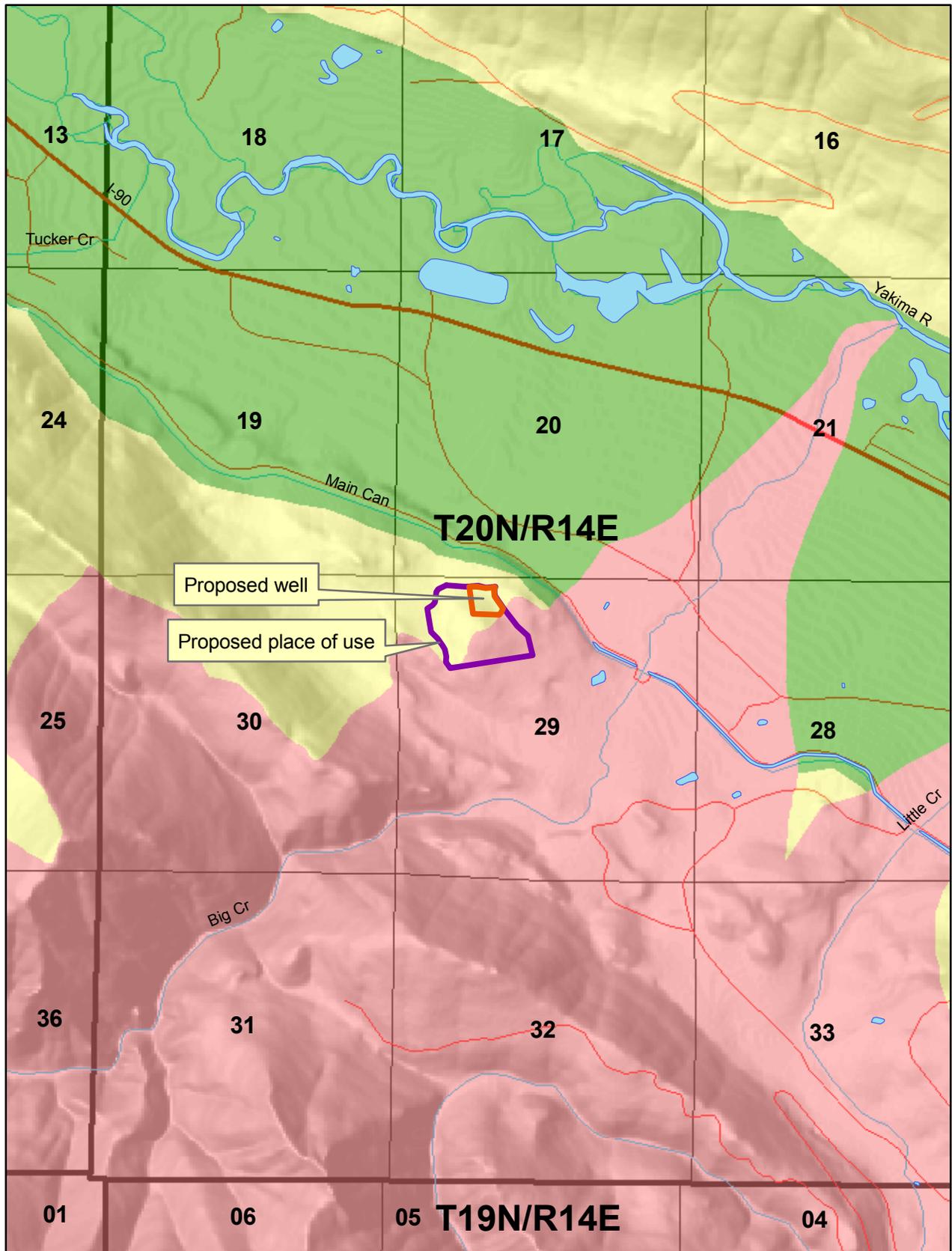
NARRATIVE DESCRIPTION OF PROJECT:

The requestor proposes to offset the 1.097 ac-ft/yr of consumptive use for the project (8 residential connections and 4,000 ft<sup>2</sup> of lawn and garden) with 1.097 ac-ft/yr of mitigation water acquired from Trust Water Right No. S4-05259CTCL@2sb7. During the irrigation season, 0.576 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 0.192 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. The proposed well was located near the boundary between the “green area” and the “yellow area,” and, as a result of additional hydrogeology review, it was determined that the proposed new use would be similarly suited to rely on the Suncadia trust water right for mitigation as would a well in the nearby “green area.” The additional review of the local area hydrogeology in the vicinity of the proposed well indicated the effects of the groundwater withdrawal from the proposed well will ultimately be felt on the Yakima Mainstem. More specifically, water withdrawn from the bedrock (in this area, schist/phyllite unit) and consumptively used will be recharged by water that was previously rejected and would thereby reduce the TWSA unless mitigated. The direction of rejected recharge naturally flowing through the thin overburden of soil and sediments would tend to be controlled by topography. In the area of the proposed well, the direction of topographically controlled flow would be toward the mainstem Yakima River. As a result, the Exchange Contract was 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](mailto:ahos461@ecy.wa.gov) or Ingrid Ekstrom at (509) 575-2396, [ieks461@ecy.wa.gov](mailto:ieks461@ecy.wa.gov).





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