### Water Transfer Working Group Project Description

**Application No./Court Claim No.**
Water Budget Neutral Request No. G4-35519 with mitigation from Trust Water Right No. S4-05259CL@2sb7

**Applicant Name**
Kurt Walker - Ecology

**Telephone No.**
509-454-4237

**Water Right Holder’s Name (if different)**
Mitigation with Suncadia Trust Water Right

**Date of Application**
September 23, 2011

**Priority Date**
New use mitigated by trust water right with priority date of October 30, 1884

**Water Source:**
well

**Crop:**
Lawn or noncommercial garden

**Instantaneous Quantity:**

**Annual Quantity:**
0.914 acre-ft/yr

**Period of Use:**
Continuous for single indoor domestic connection and irrigation season for lawn and garden

**Place of Use:**
Parcel Nos. 013034 and 593034, located within the SE¼ of Section 25, T. 20 N., R. 15 E.W.M.

**Purpose of Use:**
Domestic uses and Irrigation of 0.069 acres lawn or garden

**IRRIGATION METHOD:**

**Consumptive Use Calculation:**
- **Indoor use:** Two residential connections at 350 gallons per day (gpd) used continuously year round equates to 0.784 ac-ft/yr of water use, or:
  
  \[(350\text{gpd per connection}) \times (365 \text{ days}) \times (\text{two connections}) \times (1\text{ac-ft/325,851gal}) = 0.784 \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 = \[(0.784 \text{ afy}) \times (0.30) = 0.235 \text{ ac-ft/yr}\]

- **Outdoor use:** The requestor proposes to irrigate 0.069 acres 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 0.130 ac-ft/yr, or:
  
  \[[(1.51 \text{ ft/yr}) \div 0.80] \times (0.069 \text{ acres}) = 0.130 \text{ ac-ft/yr}\]

  Consistent with WAC 173-539A-050(3), 90% of outdoor use is consumptively used, so:
  
  Outdoor consumptive use = \[(0.130 \text{ ac-ft/yr}) \times (0.90) = 0.117 \text{ ac-ft/yr}\]

**As a result consumptive use (CU) for the project totals to 0.352 ac-ft/yr**
(CU April 1 to Aug 31 is 0.193 ac-ft and CU Sept 1 to Mar 31 is 0.159 ac-ft)
NARRATIVE DESCRIPTION OF PROJECT:

The requestor proposes to offset the 0.352 ac-ft/yr of consumptive use for the project (two residential connections and 0.069 acres of lawn and garden) with 0.352 ac-ft/yr of mitigation water acquired from Trust Water Right No. S4-05259CL@2sb7. During the irrigation season, 0.159 ac-ft is assigned to the USBR-Ecology Exchange Contract (Contract No. 09XX101700) and released between Sept 1 to Mar 31 to address out of season impacts along the Yakima River. In addition, consistent with the Exchange Contract, Ecology plans to assign 0.053 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.

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 Suncadia Trust Water Rights for use as mitigation to offset the new use. Review of the local area hydrogeology suggests that withdrawals from the subject request will solely impact the Yakima River. 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.