## WATER TRANSFER WORKING GROUP PROJECT DESCRIPTION

### APPLICATION NO./COURT CLAIM NO.

Water Budget Neutral Request No. G4-35508 with mitigation from Trust Water Right No. CS4-05259CL@2sb7

### APPLICANT NAME

Dakota Heights LLC

### CONTACT NAME

Kurt Walker - Ecology

### TELEPHONE NO.

509-454-4237

### WATER RIGHT HOLDER’S NAME (if different)

Mitigation with Suncadia Trust Water Right CS4-05259CTCL@2sb7

### EMAIL

kwal461@ecy.wa.gov

### DATE OF APPLICATION

June 27, 2011

### PRIORITY DATE

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

### WATER SOURCE:

Well (BAF995)

### CROP:

Lawn or noncommercial garden

### INSTANTANEOUS QUANTITY:

ANNUAL QUANTITY: 5.489 acre-ft/yr

### PERIOD OF USE:

Continuous for indoor domestic connections and irrigation season for lawn and garden

### PLACE OF USE:

Parcel No. 950354, located within portions of Section 6, T. 19 N., R. 16 E.W.M.

### PURPOSE OF USE:

Multiple Domestic (14 connections) Irrigation of 7000 ft² lawn or garden

### IRRIGATION METHOD:

**Indoor use:** 14 residential connections at 350 gallons per day (gpd) used continuously year round equates to 5.489 ac-ft/yr of water use, or:

\[
(350 \text{ gpd per connection}) \times (365 \text{ days}) \times (14 \text{ connection}) \times (1.0 \text{ ac-ft/325,850 gal}) = 5.489 \text{ ac-ft/yr}
\]

Consistent with WAC 173-539A-050(3), 30% of domestic in-house use on a septic system is consumptively used, therefore:

Indoor consumptive use = (5.489 ac-ft/yr) x (0.30) = **1.647 ac-ft/yr**

**Outdoor use:** The requestor proposes to irrigate 7000 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 0.303 ac-ft/yr, or:

\[
[(1.51 \text{ ft/yr}) \div 0.80] \times (7000 \text{ ft}^2 \div 43560 \text{ ft}^2/\text{ac}) = 0.303 \text{ ac-ft/yr}
\]

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

Outdoor consumptive use = (0.303 ac-ft/yr) x (0.90) = **0.273 ac-ft/yr**

As a result consumptive use (CU) for the project totals to **1.919 ac-ft/yr**

(CU April 1 to Aug 31 is 0.911 ac-ft and CU Sept 1 to Mar 31 is 1.009 ac-ft)

### NARRATIVE DESCRIPTION OF PROJECT:

The requestor proposes to offset the 1.919 ac-ft/yr of consumptive use for the project (14 residential connections and 7000 ft² of lawn and garden) with 1.919 ac-ft/yr of mitigation water acquired from Trust Water Right No. CS4-05259CL@2sb7. During the irrigation season, 1.009 ac-ft is assigned to the USBR-Ecology Exchange Contract (Contract No. [2012-16])
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 0.336 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 under this request would, more likely than not, impact the local unnamed streams and/or 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.