

2014-38-KITT-14-02 (King rev.)

WATER TRANSFER WORKING GROUP PROJECT DESCRIPTION

APPLICATION NO./COURT CLAIM NO. KITT-14-02 (a portion of Court Claim 00176)		
APPLICANT NAME Brian Pat King	CONTACT NAME Jessica Kuchan, Mentor Law Group, PLLC	TELEPHONE NO. (206) 838-7650
WATER RIGHT HOLDER'S NAME (if different) Brian Patrick King		EMAIL Kuchan@mentorlaw.com

DATE OF APPLICATION January 14, 2014 – Filed with Kittitas County Conservancy Board March 28, 2014 – Project Description provided to WTWG	PRIORITY DATE June 30, 1887
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WATER SOURCE: Big Creek	CROP: Pasture Grass
INSTANTANEOUS QUANTITY: 0.01 cfs	ANNUAL QUANTITY: 2.4 acre-feet per year for irrigation; 0.0067 acre-feet per year for stock water
PERIOD OF USE: May 1 to September 1 for irrigation; Continuous for stockwater	
PLACE OF USE: 0.5 acres located within Lot 5 and Parcel H of Surveys, recorded under Kittitas County Auditor's Recording Number 201004130016, being a portion of the Southeast Quarter of Section 20, Township 20 North, Range 14 E.W.M., Kittitas County	PURPOSE OF USE: Irrigation and stockwater
IRRIGATION METHOD: Flood	

<p>CONSUMPTIVE USE CALCULATION:</p> <p><i>This section has been revised to reflect the change in the consumptive quantity to 0.8767 as discussed in the April 7, 2014, WTWG meeting. Furthermore, the consumptive quantities for the secondary reach have been included below, as requested by the WTWG.</i></p> <p>The total consumptive use allocated under Court Claim 00176, and particularly the portion owned by Brian King, was estimated using the methodologies and information presented in the Washington Irrigation Guide (WIG) and Ecology Water Resources Guidance (GUID-1210). Pertinent input parameters and assumptions to the calculation is as follows:</p> <p style="text-align: center;">Irrigation Method: Surface/Flood</p>
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WIG Station: Cle Elum, Washington
 Crop: Pasture Grass
 Crop Irrigation Requirement: 18.11 inches per year (1985 WIG)
 Water Right/Duty: 2.4 acre-feet for 0.5 acres (4.8 acre-feet per acre water duty)
 Acres Irrigated Under King's Portion of Court Claim 00176: 0.5 acres

Mr. King's water right is to irrigate 0.5 acres, or 2.4 acre-feet per acre. The WIG estimates that the crop irrigation requirement for pasture grass is 18.11 inches per year (1985 WIG version) (1.51 acre-feet per acre). The CIR of 0.76 acre-feet per year indicates an irrigation efficiency of 31.66 percent ($31.66\% \times 2.4 = 0.76$) which is close to the typical irrigation efficiency range for surface flow irrigation as described in Ecology GUID 1210 (estimated by Ecology to be 35% to 65%). Ecology GUID 1210 also indicates that surface/flood irrigation methods have an additional evaporation consumptive loss of 5 percent. Therefore, the total consumptive loss for the irrigation of 0.5 acres of pasture grass with an annual water right of 2.4 acre-feet is 0.87 acre-feet per year ($36.66\% \times 2.4 = 0.87$ acre-feet per year).

The total water right of 2.4 acre feet for irrigation and 0.0067 acre-feet for stock water, as allocated under Court Claim 00176, can be divided into 0.76 acre-feet used consumptively by the crop, 0.11 acre-feet consumptively lost as evaporation during irrigation, 1.53 acre-feet of non-consumptive irrigation return flow, and 0.0067 acre-feet consumptively used by livestock. Total consumptive water use allocated for Mr. King's portion of Court Claim 00176 is 0.8767 acre-feet.

	Qa (acre-feet)	Qi (cfs)
Non-irrigation season (Sept 2 – April)	0.000558 (per month)	0.00001
May	0.000558	0.00001
June	0.200660	0.00337
July	0.383360	0.00624
August	0.278960	0.00454
September 1 st	0.008700	0.000440
Total	0.8767	

NARRATIVE DESCRIPTION OF PROJECT:

Mr. King is proposing to transfer his water right to instream flows. The application is currently pending before the Kittitas Water Conservancy Board. Mr. King will pursue a separate process with the Department of Ecology for admission of the water right into Trust. Mr. King's water right is the remaining portion of Court Claim 00176. Washington Water Trust brought the remaining portion to the WTWG under 2014-01, reviewed at the November 2013 WTWG.

