

WATER TRANSFER WORKING GROUP PROJECT DESCRIPTION

APPLICATION NO. Groundwater Right Application No. G4-31244 with mitigation from Adjudicated Certificate No. S4-85160-J	
APPLICANT NAME Clyde Friend	CONTACT'S TELEPHONE NO (509) 945-3603
WATER RIGHT HOLDER'S NAME (if different)	CONTACT'S EMAIL friendconstr@yahoo.com

DATE OF APPLICATION April 28, 1992

WATER SOURCE: Well	CROP: Lawn and/or noncommercial garden
INSTANTANEOUS QUANTITY: 68 gpm	ANNUAL QUANTITY: 9.29 ac-ft/yr (2.858 CU)
PERIOD OF USE: Continuous for 30 domestic connection and season irrigation for lawn and/or garden	
PLACE OF USE: W $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ & E $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ all in Section 11, Lot 2 in the NW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 14, and Parcel A Tract 3 in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 12, all within T. 13 N., R. 19 E.W.M.	PURPOSE OF USE: Domestic supply and irrigation of 900 square feet of lawn and/or garden per residence.

NARRATIVE DESCRIPTION OF PROJECT: <p>The applicant has applied for domestic use for 30 residences each with up to 900 square feet of irrigation. For this application the applicant is estimating that each residence will use 200 gallons per day (gpd) of indoor domestic use. This 200 gpd estimate is lower than what the Washington State Department of Health estimates for an average domestic residence but has been used in the past in other water right decisions. The total indoor domestic water use for the proposed use will be 2,190,000 gallons or 6.72 acre-feet per year. Of this total indoor domestic water use 20% of it will be considered consumptively used, which is consistent with Ecology Water Resources Program Guidance: Final Guidance for Determining Net Ecological Benefit, GUID-2094. Thus the consumptive use for the indoor domestic use will be 1.344 acre-feet per year.</p> <p>For the irrigation portion of this application, the applicant has applied to have 625 square feet of irrigation for each domestic connection resulting in a total of 0.43 acres of irrigation. To calculate the amount of water needed for this irrigation Ecology reviewed the <i>Washington State Irrigation Guide (WIG)</i> and <i>Ecology Water Resources Program Guidance: Determining Irrigation Efficiency and Consumptive Use</i> (Guide 1210). For the Yakima station in the WIG, the crop irrigation requirement (CIR) for pasture/turf is 3.11 acre-feet per acre of water each season. To find the total irrigation</p>

requirement (TIR) Ecology divided the CIR by then irrigation efficiency of pop-up sprinklers, which on average according to Guide 1210 is 75%, and then multiplied that by the amount of irrigated acres. The TIR for the irrigation portion of this application is 1.78 acre-feet/year. To find the consumptive use, Ecology staff referred to Guide 1210 to find the consumptive use of pop-up sprinklers, 85%. This value takes into account the amount of the TIR that the plant consumptively uses plus the amount loss through evaporation and wind drift. The consumptive use for the irrigation portion of this application is 1.515 acre-feet/year.

WTWG Project form

Map of Project Area

