

WATER TRANSFER WORKING GROUP PROJECT DESCRIPTION

APPLICATION NO./COURT CLAIM NO. Water Budget Neutral Request No. G4-35766 with mitigation from Trust Water Right No. CS4-00648(AA)sb4-b		
APPLICANT NAME J P & Jan Roan	CONTACT Jessica Kuchan	CONTACT'S TELEPHONE NO 206-838-7650
WATER RIGHT HOLDER'S NAME (if different) Roan-New Suncadia		CONTACT'S EMAIL kuchan@mentorlaw.com

DATE OF APPLICATION June 15, 2015

WATER SOURCE: Proposed Well	CROP: Lawn and\or noncommercial garden
INSTANTANEOUS QUANTITY: TBD	ANNUAL QUANTITY: 0.414 ac-ft/yr
PERIOD OF USE: Continuous for 1 domestic connection and season irrigation for lawn and\or garden	
PLACE OF USE: Parcel No. 698034, located within the E½, NW¼ of Section 4, T. 19 N., R. 18 E.W.M.	PURPOSE OF USE: Domestic and irrigation of 500 square feet of lawn and\or garden.

<p>CONSUMPTIVE USE CALCULATION:</p> <p>Indoor Use: 1 residential connection at 350 gallons per day (gpd) used continuously year round equates to 0.392 ac-ft/yr of water use, or: Consistent with WAC 173-539A-050(3), 30% of domestic in-house use on a septic system is consumptively used, therefore: indoor consumptive use (CU) = 0.118 ac-ft/yr.</p> <p>Outdoor Use: The requestor/applicant proposes to irrigate 500 ft² of lawn and/or garden. Using a crop irrigation requirement of 18.10 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 ac-ft/yr. Consistent with WAC 173-539A-050(3), 90% of outdoor use is consumptively used, therefore: outdoor consumptive use = 0.019 ac-ft/yr.</p> <p>Total Consumptive Use = 0.137 ac-ft/yr</p>

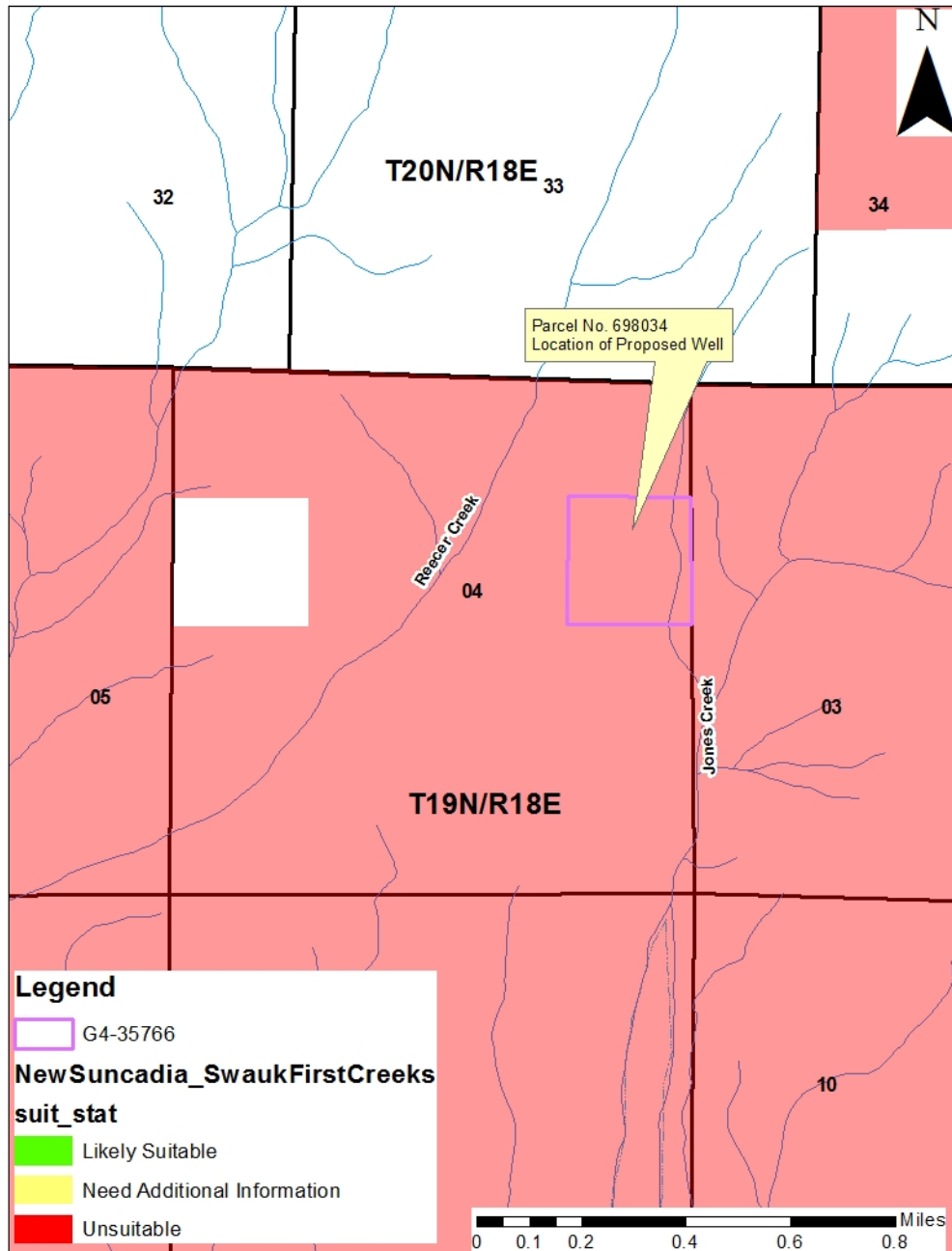
NARRATIVE DESCRIPTION OF PROJECT:

The project is located approximately 0.16 miles from Reecer Creek in a “Red” area as noted on Ecology’s current Mitigation Suitability Map (see attached map).

The requestor/applicant proposes to offset the 0.137 ac-ft/yr of consumptive use for the project (1 residential connection and 500 ft² of lawn and garden) with 0.137 ac-ft/yr of mitigation from Trust Water Right No. CS4-00648(AA)sb4-b.

Review of the local area hydrogeology suggests that “water is expected to be physically available for appropriation without serious injury to existing water rights.” Please review the attached hydrogeology memo for more information.

Location of G4-35766



TECHNICAL MEMORANDUM

DATE: October 1, 2018
TO: Chris Kossik and File
FROM: Kurt Walker, LHG 
RE: Hydrogeology Review Request for Determination of Water Budget Neutrality (WBN)
Nos. G4-35766, Kittitas County Parcel No. 698034.

Request

The Request for Determination of Water Budget Neutrality (WBN) No. G4-35766 proposes to use groundwater within Parcel No. 698034 for single domestic use and non-commercial lawn and garden (500 sq. ft.) purposes. The subject parcel is situated on a steep piece of ground approximately 3,700 feet above mean sea level (DRN topographic map) between Reecer Canyon and Robbins Canyon, approximately 10 miles north of the city of Ellensburg. The County records show the parcel is currently owned by Dawn Noelle Ambrose (not the applicant). A well has not yet been drilled for the proposed project.

Abbreviated Hydrogeologic Review

The surface of the parcel is mapped as Grande Ronde Basalt of the Columbia River Basalt Group (CRB). The CRB's consists of a thick assemblage of basalt flows and interbeds. The CRB's have been deformed through regional tectonic forces and locally dips approximately 15° to the southwest. A search of Ecology's Well Log Data Base did not show any well logs in Section 4. However, records show that two wells were drilled in Section 3 approximately ½ to one mile east of the site. Both wells, drilled to approximately 300 and 400 feet, did not produce useable quantities of water and were decommissioned.

Completing a groundwater well in this area will be challenging for the driller and proponent. Recharge rates into the Grande Ronde is notoriously low across the region, but groundwater is likely present deeper in the formation along the subject slope.

Availability and Impairment

Ecology currently does not have any unique restrictions regarding permit-exempt groundwater uses in the Lower Kittitas area. Thus, the proponent will be on their own regarding aquifer choice and compliance with local government requirements and restrictions including findings of adequate water supply and non-state mitigation program conditions. Under a commitment to provide technical assistance to Kittitas County, the following observations and opinions are offered regarding groundwater availability and impairment.

Local topography, geology and location of surface water bodies suggest that a proposed well drilled will capture water that would ultimately discharge to Yakima River. The aquifer may also discharge locally to springs and creeks where head and permeabilities allow, but it is difficult to confidently conclude a connection given the extensive irrigation infrastructure and inefficient water delivery systems in the area. Considering the site specific information and proposed withdrawal quantities, water is expected to be physically available for appropriation without serious injury to existing water rights. All review and judgement regarding the adequacy of the offered mitigation is the responsibility of Ecology's Permitting Unit in consultation with the Ecology's Section manager.

Given the areas low precipitation, high evaporation, and limited recharge potential, it is recommended to caution the applicant and other nearby groundwater users about the limitations of the requested water source.

ANALYSIS LIMITATIONS:

This analysis has been prepared for the Request for Determination of Water Budget Neutrality (WBN) No. G4-35766, WRIA 39, Kittitas County, Washington. This report is not intended for use for projects, applications, or determinations other than for the Request for Determination of WBN No. G4-35766. Therefore, the information contained herein is not applicable to other sites. A number of unique, application or project specific factors were considered when preparing this analysis. This analysis should not be applied to any purpose or project besides the determination, application or project for which it was prepared.

Because each hydrogeologic study is unique, each hydrogeologic analysis is unique and is based on conditions that existed at the time the determination, application or project investigation was performed. The findings and conclusions of this analysis may, however, be affected by the passage of time as a result of either manmade or natural events.

The practice of geology, geological engineering and hydrogeology are far less exact than other engineering and natural science disciplines. Interpretations of subsurface conditions presented in this report are based on available data. As this is a geologic analysis, professional judgment was applied to form a preliminary opinion about subsurface conditions throughout the area of interest. Actual subsurface conditions may differ, sometimes significantly, from those indicated in this report. Thus, conclusions and interpretations should not be construed as a warranty of the subsurface conditions.