WATER TRANSFER WORKING GROUP PROJECT DESCRIPTION

APPLICATION NO. or COURT CLAIM NO.		
CS4-00648CTCL		
APPLICANT NAME	**CONTACT NAME**	**TELEPHONE NO.**
Washington Water Trust	**Greg McLaughlin**	**509 844-4146**
WATER RIGHT HOLDER'S NAME (if different)		**EMAIL**
First Creek Water users Association - JP Roan,		**greg@washingtonwatertrust.org**

DATE OF APPLICATION	PRIORITY DATE
11/21/16	**November 2, 1877 and June 2, 1881**

WATER SOURCE:	CROP:
First Creek	Hay/Pasture

See attached table for description of water rights.

PERIOD OF USE:
April 1 – October 15 (198 days)

PLACE OF USE:	PURPOSE OF USE:
<u>Trust Water Affected Reaches:</u> Primary Reach begins at the historic point of diversion on First Creek, extends to the confluence with Swauk Creek, down Swauk Creek to the Yakima River, and in the Yakima River downstream to the confluence with Reecer Creek (where return flows historically returned to surface flow). The Secondary Reach extends down the Yakima River, to the Columbia River. **<u>Historic Place of Use:</u>** All in T. 19 N., R. 18 E.W.M.; 30.05 acres including the SE¼ of Section 17, a portion of W½E½ of Sec 20, NE¼SW¼, N½N½ SE¼SW¼ and a portion of the N½ of Section 21; and 5.08 acres within the NE¼SW¼, N½N½SE¼SW¼ and a portion of the N½ of Section 21, as further described in draft schedule of rights.	**Instream Flow** **Irrigation and Stockwater**

IRRIGATION METHOD: **Flood and Rill**

CONSUMPTIVE USE CALCULATION:

See attached table for consumptive use calculations.

NARRATIVE DESCRIPTION OF PROJECT:

The First Creek water rights acquisition project will add up to 1.71 cfs and 448.5 acre-feet/year in the lower 11.4 miles of Swauk and First Creeks. These quantities include permanent acquisition into the Washington State Trust Water Rights Program of up to .11 cfs and 20.50 acre-feet of conveyance water already in temporary trust and 1.60 cfs and 428 af of irrigation water to be acquired and changed to instream flow. This will provide significant benefits to listed Mid-Columbia steelhead and bull trout by positively affecting limiting factors of low flow and high temperatures, particularly in late summer when these creeks are at risk of dewatering. The instream flow benefit in the secondary reach (estimated at 0.49 cfs and 89.86 acre-feet/year of consumptive-use water) extends to the Columbia River and beyond.

Table: Trust Water Proposed for Transfer

Primary Reach

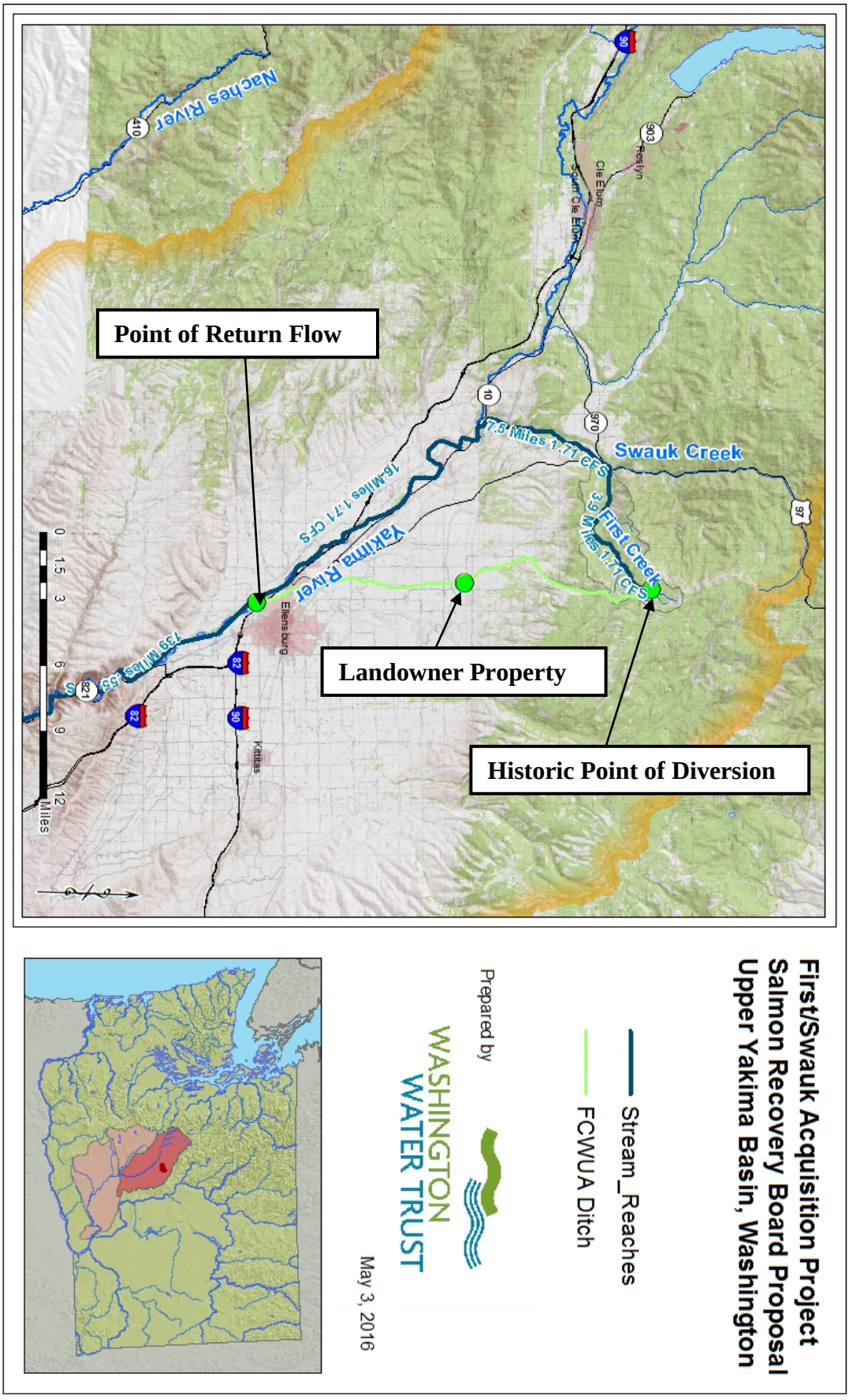
The total amount of water historically diverted for irrigation and conveyance purposes, when placed in the TWRP, benefits flow in the primary reach. The following table shows the amount of water available for protection as instream flow in the primary reach.

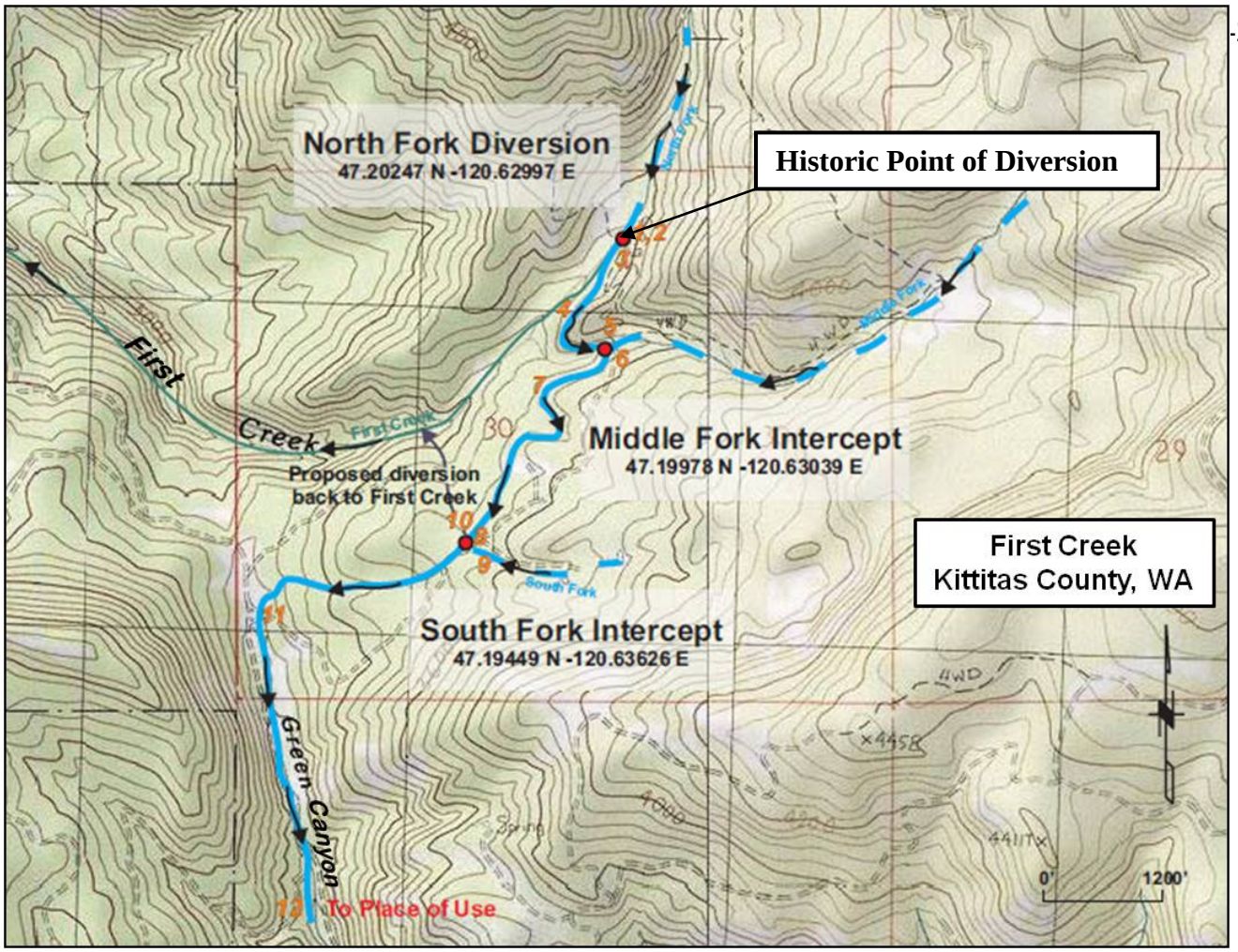
WR #	Purpose	Acres	Qi (cfs)	Qa (afy)
CS4-00648(AA)sb4-c	Irrigation	30.05	0.867	165.20
	Conveyance		**0.527**	**206.97**
Totals			**1.394**	**372.17**
CS4-00648(BA)sb4-c	Irrigation	5.08	0.131	27.94
	Conveyance		0.071	27.88
Totals			**0.202**	**55.82**
GRAND TOTAL		**35.13**	**1.596**	**427.99**

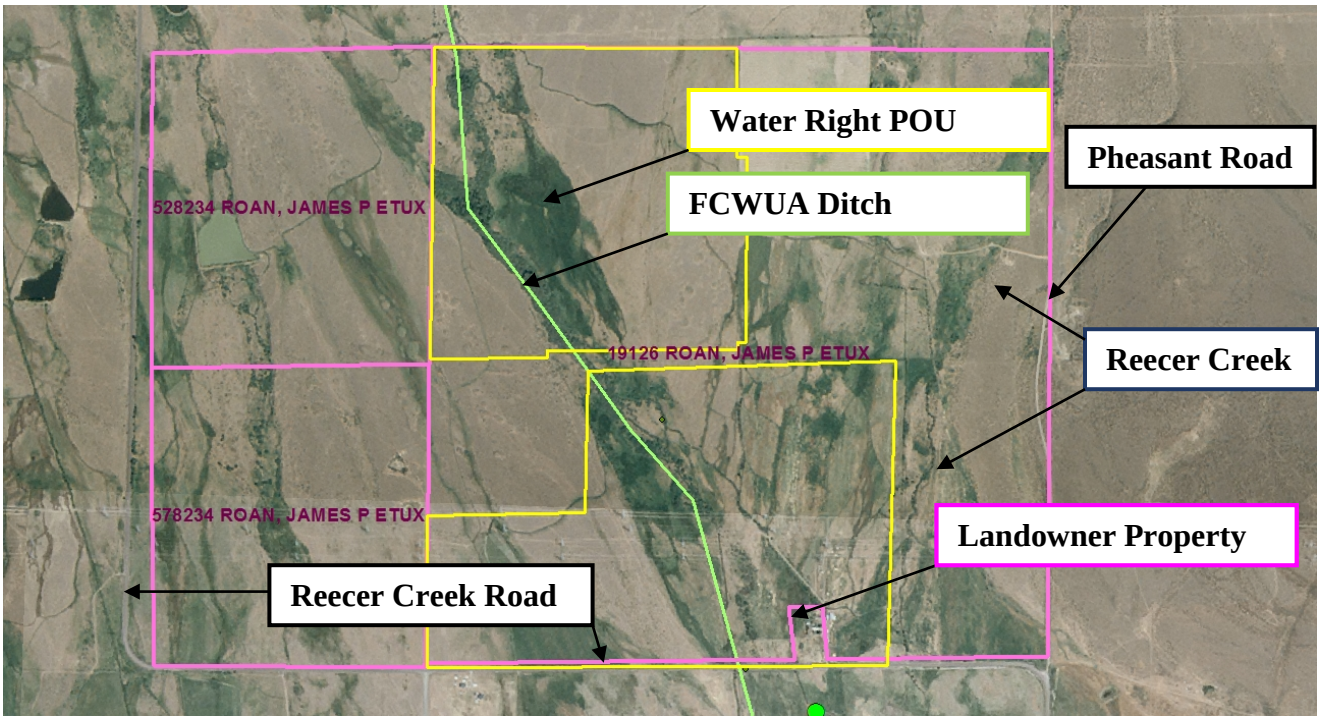
Secondary Reach (estimated totals from 35.13 acres of irrigation. Actual totals may be more or less than this based on application of Guidance Documents and best available tools for calculating consumptive use.) Consumptive use is estimated using methods presented in Ecology's Guidance Document (GUID-1210) *Determining Irrigation Efficiency and Consumptive Use* using the *Washington Irrigation Guide* (WIG) data for crop types in geographic stations. Crop Irrigation Requirement (CIR) for pasture/turf near Ellensburg is 31.46 inches per acre per year. Consumptive use is calculated using CIR, Total Irrigation Requirement (TIR), aka water duty and Application Efficiency (Ea) with the TIR = CIR/Ea relationship. Consumptive Use (CU) is a percentage of the TIR. In this case the CIR is 2.621 feet per acre (31.46 inches / 12 = 2.621 feet) and TIR is 5.5 af/ac. Ea equates to 0.48 as 2.621 / 5.5. The WIG breaks CIR up into monthly amounts, the following table showing CU in cfs (Qa) and cumulative amounts in acre-feet (Qa). A 5% evaporation factor is added to the CU in the following table.

Purpose	Unit	May	Jun	Jul	Aug	Sept	Oct	Total
Instream Flow (30.05 ac)	af	8.49	18.81	25.79	20.56	11.70	1.66	76.86
Instream Flow (5.08 ac)	af	1.44	3.18	4.36	3.48	1.98	0.28	12.99
SUM		***9.93***	***22.00***	***30.15***	***24.03***	***13.68***	***1.94***	***89.86***
Average Qi (30.05 ac)	cfs	0.143	0.317	0.420	0.335	0.197	0.028	---
Average Qi (5.08 ac)	cfs	0.024	0.054	0.071	0.057	0.033	0.005	---
SUM		**0.167**	**0.370**	**0.491**	**0.392**	**0.230**	**0.033**	

EXHIBIT NO.1 – Map of Conveyance and Place of Use of Water Rights




North Fork Diversion
47.20247 N -120.62997 E
Historic Point of Diversion
First Creek
Proposed diversion back to First Creek
Middle Fork Intercept
47.19978 N -120.63039 E
First Creek
Kittitas County, WA
South Fork Intercept
47.19449 N -120.63626 E
Green Canyon
To Place of Use
0'
1200'


Water Right POU
Pheasant Road
FCWUA Ditch
528234 ROAN, JAMES P ETUX
19126 ROAN, JAMES P ETUX
Reecer Creek
578234 ROAN, JAMES P ETUX
Landowner Property
Reecer Creek Road