DEPARTMENT OF ECOLOGY State of Washington

State of Washington
REPORT OF EXAMINATION
FOR WATER RIGHT APPLICATION

---DENIED---

PRIORITY DATE
March 14, 2014

WATER RIGHT NUMBER
G3-30706

NAME & ADDRESS

Matt Rogers
PO Box 54
Curlew, WA 99118

Jesse Rogers
PO Box 311
Curlew, WA 99118

Quantity Authorized for Withdrawal

DIVERSION RATE	UNITS	ANNUAL QUANTITY (AF/YR)
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Purpose

PURPOSE	DIVERSION RATE		ANNUAL QUANTITY (AF/YR)		PERIOD OF USE (mm/dd)
	ADDITIVE	UNITS	ADDITIVE	NON-ADDITIVE	
Domestic supply for 2 homes, stockwater & irrigation of 100 acres	---	---	---	---	

Source Limitations

SOURCE FACILITY/DEVICE	DIVERSION RATE	ANNUAL QUANTITY (AF/YR)	PERIOD OF USE (mm/dd)
2 wells	---	---	---

Source Location

COUNTY	WATERBODY	TRIBUTARY TO	WATER RESOURCE INVENTORY AREA
FERRY	GROUND WATER	COTTONWOOD CREEK	60 – KETTLE RIVER

SOURCE FACILITY/DEVICE	PARCEL	TWP	RNG	SEC	QQ	LATITUDE	LONGITUDE
2 wells		40 N.	33 E.	33	NW¼SE¼		

Datum: WGS84

Place of Use (See Attached Map)

PARCELS (NOT LISTED FOR SERVICE AREAS)

LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE

N/A

Proposed Works

N/A

Development Schedule

BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
N/A	N/A	N/A

Findings of Facts

Upon reviewing the investigator's report, I find all facts, relevant and material to the subject application, have been thoroughly investigated. Furthermore, I concur with the investigator that water is not available from the source in question; that there will be impairment of existing rights; and that there will be detriment to the public interest.

Therefore, I ORDER Ground Water Application No. G3-30706 be **DENIED**.

Your Right To Appeal

You have a right to appeal this Order to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of the Order.

File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.

- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.
- You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Street Addresses	Mailing Addresses
Department of Ecology Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	**Department of Ecology** Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
Pollution Control Hearings Board 1111 Israel Road SW Ste 301 Tumwater, WA 98501	**Pollution Control Hearings Board** PO Box 40903 Olympia, WA 98504-0903

Signed at Spokane, Washington, this 20th day of January, 2016.

Keith L. Stoffel, Section Manager

For additional information visit the Environmental Hearings Office Website: http://www.eho.wa.gov. To find laws and agency rules visit the Washington State Legislature Website: http://www1.leg.wa.gov/CodeReviser.

INVESTIGATOR'S REPORT

Application for Water Right -- Rogers
Water Right Control Number G3-30706
Gene Drury, Department of Ecology

BACKGROUND

This report serves as the written findings of fact concerning Water Right Application Number G3-30706.

An application to appropriate public ground water was submitted by brothers Matt and Jesse Rogers to the Department of Ecology on March 14, 2014. The application was accepted and assigned Ground Water Application No. G3-30706. The applicants propose to withdraw water from two wells in the amount of 250 gallons per minute, continuously, for domestic supply of two homes, stockwater supply and seasonal irrigation of 100 acres. The proposed points of withdrawal are to be located within the NW¼SE¼ of Section 33, T. 40 N., R. 33 E.W.M. The applicants have also filed for a permit to withdraw surface waters under Application No. S3-30707.

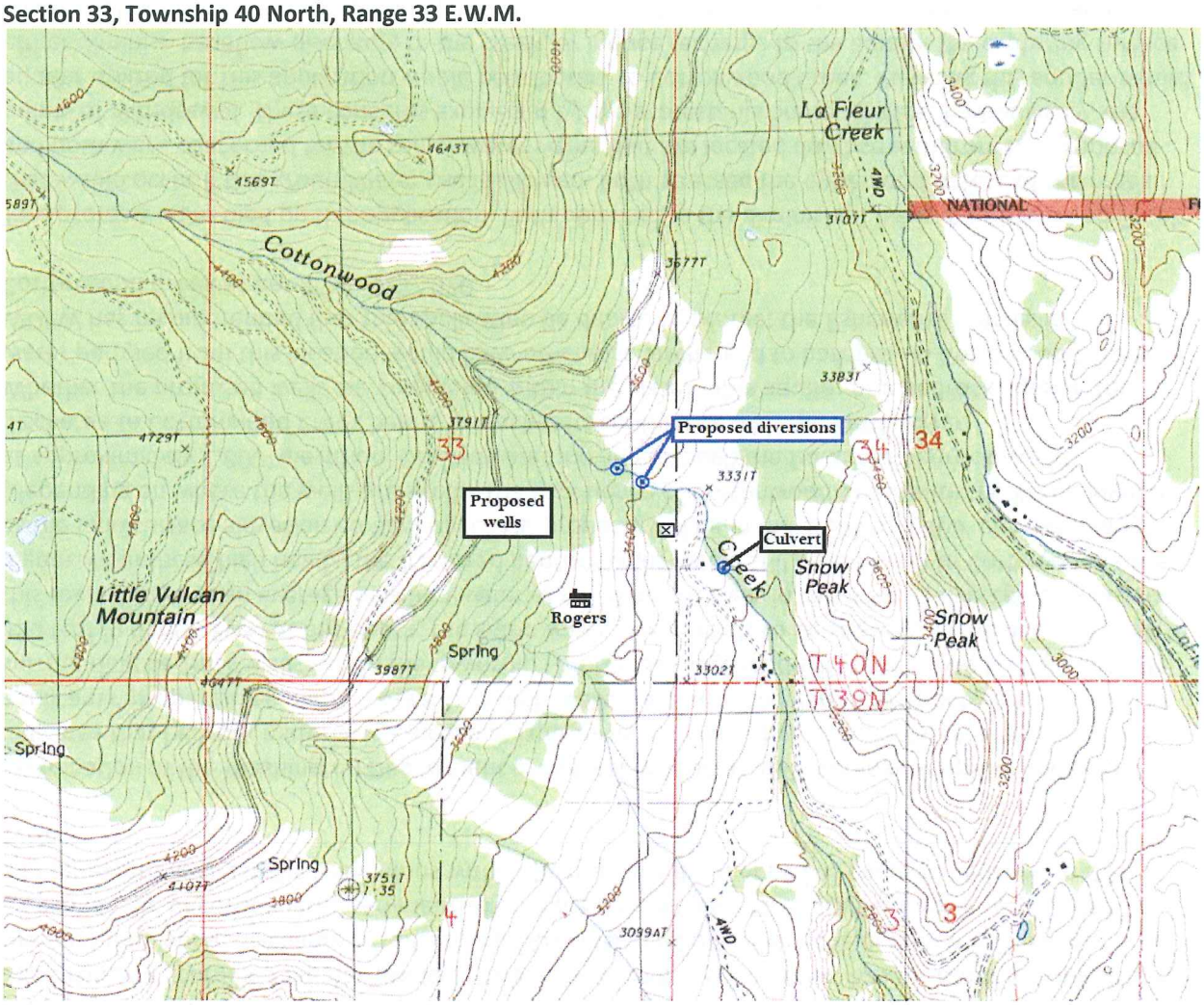
A notice of application was duly published in accordance with RCW 90.03.280 in the Ferry County View Newspaper on July 2 and 9, 2014. Two protests against this application were received.

INVESTIGATION

A site visit was conducted by Gene Drury on April 28, 2015. The project site is located approximately 4 miles north of Curlew, Washington. The property is located within the Cottonwood Creek drainage, between Little Vulcan Mountain and Snow Peak. At the time of site visit the applicants were not home but were contacted later by phone.

PROJECT LOCATION

Section 33, Township 40 North, Range 33 E.W.M.



USGS 7.5 Minute (Topographic Map) - "Vulcan Mtn/Curlew"

PROJECT DESCRIPTION

The application proposes two points of withdrawal to be groundwater wells located on the applicant's property. The wells would be constructed within the NW¼SE¼ of Sec. 33, T. 40 N., R. 33 E.W.M. within the Cottonwood Creek drainage. On the day of the site visit Cottonwood Creek was flowing an estimated 0.50 cubic foot per second or less in this area. The application proposed up to 4 domestic connections, stockwater supply for cattle and irrigation of 100 acres. A small home had been constructed along with an RV trailer located on the property. According to Matt Rogers, no well has yet been constructed.

Water Availability - Hydrologic/Hydrogeologic Evaluation

An analysis of water availability must take into account not only the physical limitations on the source of supply, but the legal availability as well. The hydrogeologic analysis for this application was provided by John Covert, hydrogeologist for Ecology's Water Resources Program.
The applicant proposes to drill two 4" by 30' deep wells in the NW¼SE¼ of Section 33, T40NR33E. Their application is requesting 250 gpm for the irrigation of 100 acres, stockwater, and domestic uses.

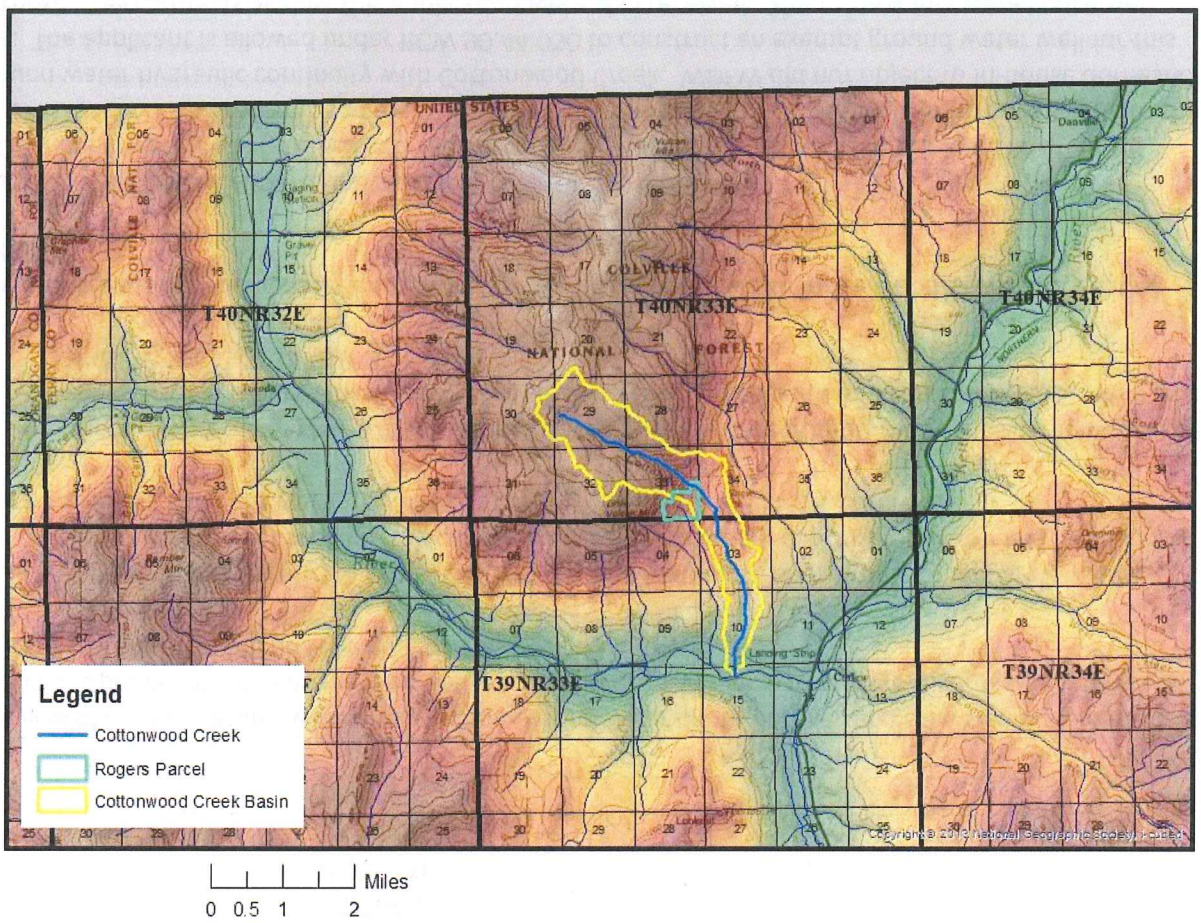
The applicants' property is adjacent to Cottonwood Creek, a small tributary (drainage area = 3.4 square miles) of the Kettle River. Cottonwood Creek is an ephemeral creek that often goes dry in the summer months (at least at the location where Ecology staff have historically measured the flow, about 2.5 miles downstream from where Cottonwood Creek crosses the applicants' property).

There are no well logs on file for Section 33, T40NR33E. Well logs located within township T40NR33E indicate that wells are completed in either a shallow, water table aquifer, which consists of unconsolidated sands and gravels or in deeper bedrock aquifers if the shallow aquifer is not present. The applicants' proposed, 30' wells suggests they hope to drill into a water table aquifer. If that is the case, this shallow, unconfined aquifer would be tributary to Cottonwood Creek. Groundwater moving through the sediment would discharge to Cottonwood Creek at locations where the aquifer intersects the creekbed. The unconsolidated sediments that make up the water table aquifer have a very limited aquifer extent as the higher elevations within the drainage are mapped as exposed bedrock on the surface.

Examination of the Washington Department of Natural Resources 100K geologic maps for the area indicates that bedrock material is exposed at land surface on land that is immediately adjacent to the applicants' property(see map on page 3). If their wells are completed within the fractured bedrock, the surrounding bedrock wells within the township (T40NR33E) suggest these bedrock wells could average 350 feet in depth. Even at this depth, the static water level is likely to be shallow, as the bedrock wells in this township have an average depth to water of 40'. Bedrock wells in this area on average only produce 6 gpm. With these high heads, the fractured bedrock wells would still be tributary to Cottonwood Creek as the land surface elevation on the applicants' property will be in the 3,600 to 3,800' elevation range (depending on where the wells are sited). The confluence of Cottonwood Creek with the Kettle River is at approximately 1,800' elevation. Groundwater moving through the fractured bedrock would likely discharge to Cottonwood Creek before it reaches its confluence with the Kettle River.
Whether the proposed wells are completed within the water table aquifer or a bedrock aquifer, the water pumped from this location would have otherwise discharged to baseflow in Cottonwood Creek. WDFW has recommended that this application be denied to protect the fisheries resources in Cottonwood Creek as per RCW 77.57.020.

Two protests were filed on this application. Both objected to the diminished flows in Cottonwood Creek that would occur if this groundwater use is allowed. Both stressed the ephemeral nature of the creek and both were concerned for the senior water rights that are located downstream from the proposed points of withdrawal. These concerns expressed by the protestants are legitimate. Hydraulically, the aquifer utilized for this application would be tributary to Cottonwood Creek. Pumping this aquifer would either diminish baseflow discharge to the creek, or induce recharge to the aquifer (by capturing surface water destined for Cottonwood Creek) and would impair the instream resources and senior water rights.

Cottonwood Creek's headwaters are at a topographic and hydraulic divide. Land surface slopes away to the west, south and east in this area. The groundwater aquifers present would have very limited catchment areas to augment recharge.



Impairment Considerations

Groundwater withdrawn at this location would contribute to streamflow of Cottonwood Creek. Sandy Dotts, a Habitat Biologist with Washington Department of Fish and Wildlife (WDFW) has investigated complaints on Cottonwood Creek for the past two years. She has viewed the creek conditions in the summer and is familiar with the area. The creek normally goes dry in the summer but did flow year round in 2013 and 2014 according to WDFW. During the WDFW investigations, it was noted that fish were present in Cottonwood Creek. Rainbow and Eastern Brook trout were both found in an electrofishing survey conducted by WDFW on May 30, 2014. On the day of the 2015 Ecology site visit to Cottonwood Creek, the creek was flowing but only an estimated 0.50 cubic foot per second or less at the applicant's culvert/driveway crossing.

Miscellaneous stream flow measurements were made by Ecology on the lower end of Cottonwood Creek at the road crossing in the S½S½ of Sec. 10, T. 39 N., R.33 E.W.M. in the summers of 1987 to 1991. That data is as follows:

Cottonwood Creek stream flow (S½¼S½ Sec. 10, T. 39 N., R. 33 E.W.M.)

DATE	FLOW (CFS)
07/07/87	DRY
08/11/87	DRY
06/04/88	DRY
06/21/88	DRY
07/19/88	DRY
08/09/88	DRY
06/20/89	0.09
07/19/89	DRY
08/22/89	DRY
06/28/90	0.92
07/17/90	0.07
08/28/90	DRY
06/27/91	1.33
07/30/91	0.006
08/29/91	0.01

A review of Ecology records was conducted for existing water rights, permits, and claims on or near the applicant's project and downstream on Cottonwood Creek. The search found two records on Cottonwood Creek. They are recorded under the following:

- **Surface Water Certificate No. S3-26790C** (Beener/Mathews), priority date of January 27, 1981. 0.04 cubic foot per second, 6.3 acre-feet per year for domestic supply, stockwater and irrigation of 2 acres. Point of diversion within the SW¼NE¼, Sec. 10, T. 39 N., R. 33 E.W.M.

- **Surface Water Claim No. 129445** (Utter), claimed priority date of 1910. 50 gallons per minute (0.11 cubic foot per second) for domestic and stockwater. Claimed point of diversion within S½NE¼ and N½SE¼, Sec. 3, T. 39 N. R. 33 E.W.M.

The withdrawal of groundwater at this location would impair flows in Cottonwood Creek and existing rights.

Public Interest Considerations

WDFW comments were received and recommended denial of the application, pursuant to Chapter 77.57.020 RCW. The recommendations were based on impacts to fish and/or wildlife habitat due to the ground water hydraulic continuity with Cottonwood Creek. WDFW did not object to in-house domestic use. The applicant is allowed under RCW 90.44.050 to construct an exempt ground water well for this purpose. Two protests against this application were also received. The protestants were concerned about the impacts to the flows of Cottonwood Creek and downstream water users. New water use associated with this application, if approved, would impair flows in Cottonwood Creek and therefore, it is not in the public interest to issue this right.

Consideration of Protests and Comments

The two protests against this application were as follows:

Craig Beener and Marjean Mathews of Curlew, WA (letter received July 18, 2014)
This protest stated that the requested amounts were unrealistic for the area and that the seasonally flowing Cottonwood Creek could not support such a significant withdrawal of water. It stated that WDFW has determined that there are fish in the lower portions of Cottonwood Creek and potentially upstream. The protestants were concerned that the withdrawals could potentially affect these fish populations. The protestants were also concerned with how the proposed withdrawal of so much water would impact the local ground water aquifers. Mr. Beener does hold a water right from an Unnamed Spring, tributary to Cottonwood Creek. The right is recorded under Surface Water Certificate No. S3-26790C, with a priority date of January 27, 1981.

John Magoteaux of Curlew, WA (letter received July 28, 2014)
This protest did not object to domestic or stockwater supply but strongly objected to the requested amounts for irrigation use. The protestant stated that Cottonwood Creek is a fragile system that goes sub surface in late summer. This underground water recharges the mid to lower sections of Cottonwood Creek which provide habitat for native trout and other animals in the drainage. The proposed appropriation would seriously harm Cottonwood Creek and have negative effects on downstream water users.

Conclusions

Under Chapter 90.03.290 RCW, an application for permit may only be approved if water is available for appropriation, and the proposed use would be a beneficial use, would not impair existing water rights, and would not be detrimental to the public welfare.

It is the conclusion of this examiner that although the proposed use is a beneficial use, water is not legally and physically available for further appropriation. The proposed new appropriation within this area will cause impairment to existing rights. This appropriation would be detrimental to the public welfare.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend that this request for a water right be **DENIED**.

1-20-2016

Gene Drury, Report Writer *Date*

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