DEPARTMENT OF ECOLOGY
State of Washington

STATE OF WASHINGTON
PROTESTED
REPORT OF EXAMINATION
FOR
INTERRUPTIBLE WATER RIGHT

WR File NR S1-28782
WR Doc ID 6263724

PRIORITY DATE	WATER RIGHT NUMBER
June 10, 2014	S1-28782

MAILING ADDRESS	SITE ADDRESS (IF DIFFERENT)
Courtney Polinder 1093 Polinder Road Lynden, WA 98264	

Total Quantity Authorized for Diversion

DIVERSION RATE	UNITS	ANNUAL QUANTITY (AF/YR)
0.67	CFS	173

Purpose

	DIVERSION RATE			ANNUAL QUANTITY (AF/YR)		
PURPOSE	ADDITIVE	NON-ADDITIVE	UNITS	ADDITIVE	NON-ADDITIVE	PERIOD OF USE (mm/dd)
Irrigation	0.67		CFS	173		05/01-09/30

REMARKS

USE OF WATER UNDER THIS WATER RIGHT IS NOT ALLOWED WHEN THE ACTUAL FLOW OF THE NOOKSACK RIVER (AT FERNDALE) – UNITED STATES GEOLOGICAL SURVEY (USGS) GAGE 12213100, IS LESS THAN THE MINIMUM INSTREAM FLOW FOR THAT CONTROL STATION, AS SPECIFIED IN WASHINGTON ADMINISTRATIVE CODE (WAC) 173-501-030(2) AND ATTACHMENT 2. **DUE TO THE LIKELIHOOD OF INTERRUPTION, THIS WATER RIGHT SHOULD NOT BE RELIED ON TO GROW PERENNIAL CROPS THAT REQUIRE IRRIGATION TO SURVIVE.**

IRRIGATED ACRES		PUBLIC WATER SYSTEM INFORMATION	
ADDITIVE	NON-ADDITIVE	WATER SYSTEM ID	CONNECTIONS
100		NA	NA

Source Location

COUNTY	WATERBODY	TRIBUTARY TO	WATER RESOURCE INVENTORY AREA
Whatcom	Nooksack River	Bellingham Bay	1 - Nooksack

SOURCE FACILITY/DEVICE	PARCEL	WELL TAG	TWN	RNG	SEC	QQ Q	LATITUDE	LONGITUDE
POD #1	400321151108	NA	40N	03E	21	NE SW	48.940334	-122.432289
POD #2	400321151108	NA	40N	03E	21	NE SW	48.938872	-122.431756
POD #3	400321151108	NA	40N	03E	21	NW SW	48.939395	-122.438479

Datum: NAD83/WGS84

Place of Use (See Attached Map)

PARCELS (NOT LISTED FOR SERVICE AREAS)

400321151108, 400321237095, 400328186457, and 400328242458

LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE

NE ¼ SW ¼, Section 21 lying south of the Nooksack River.
NW ¼ SW ¼, Section 21 lying south of the Nooksack River.
SE ¼ SW ¼, Section 21 lying south of the Nooksack River.
Eastern 450 feet SW ¼ SW ¼, Section 21.

Eastern 1,165 feet NE ¼ NW ¼, Section 28.

All in Township 40 North, Range 3 East W.M., in Whatcom County, Washington.

Proposed Works

Irrigation water directly pumped from the Nooksack River with a diesel powered pump on a movable trailer. Water pumped into an existing below grade 6-inch mainline with risers. Water applied via a traveling big gun sprinkler.

Development Schedule

BEGIN PROJECT	COMPLETE PROJECT	PUT WATER TO FULL USE
April 1, 2016	April 1, 2020	January 1, 2035

Measurement of Water Use

How often must water use be measured?	See footnote
How often must water use data be reported to Ecology?	See footnote
What rate should be reported?	See footnote
What volume should be reported?	See footnote

Footnote: Ecology issued a companion administrative order with this authorization that specifies what the water right holders will need to do to comply with the minimum instream flow rule, what data need to be measured and recorded throughout the irrigation season, and what data need to be reported to Ecology. This administrative order may be replaced in the future by a superseding administrative order that contains provisions relating to compliance with the minimum instream flow rule.

Provisions

Minimum Instream Flow

This authorization is subject to the following minimum flow provision as specified in WAC 173-501-030(1) through (3). It is subject to regulation by the Department of Ecology for protection of instream resources when gaged flows are less than the following minimum flow provisions at:

Control Station: Nooksack River (at Ferndale) – USGS 12213100
River Mile: 5.8
Minimum Instantaneous Discharge

Date*	Discharge (cfs)
January 1 through May 1	2,900
May 15 through July 1	3,500
July 15	3,000
August 1	2,400
August 15	1,900
September 1	1,800
September 15 through October 1	1,700
October 15	2,050
November 1	2,300
November 15	2,500
December 1	2,900

***Note: Attachment 2** shall be used for identification of minimum instream flows on those days not specifically identified in the table above.

Real-time discharge data for USGS station 12213100 can be obtained from the following web site: http://waterdata.usgs.gov/wa/nwis/uv/?site_no=12213100. Provisional data will be relied upon for regulation and any later revisions made to the data by the USGS will not be used as evidence of non-permitted water use by the water right holder.

Compliance
If you are irrigating without a legal water right, in excess of an existing right, or outside of the terms of your water right, you are violating provisions of Revised Code of Washington (RCW) 90.03 and will be notified to immediately curtail your diversion of water. According to provisions of RCW 43.27A.190 and RCW 90.03.600, failure to comply with Washington's water code may result in the issuance of an administrative order and/or notice of penalty, with possible fines of up to $5,000 per day of illegal water use.

Family Farm Irrigation
This authorization to use public waters of the state is classified as a Family Farm Permit in accordance with Chapter 90.66 RCW. This means the land being irrigated under this authorization shall comply with the following definition: Family Farm - a geographic area including not more than 6,000 acres of irrigated agricultural lands, whether contiguous or noncontiguous, the controlling interest in which is held by a person having a controlling interest in no more than 6,000 acres of irrigated agricultural lands in the state of Washington which are irrigated under water rights acquired after December 8, 1977. Furthermore, the land being irrigated under this authorization must continue to conform to the definition of a family farm.

Metering and Reporting
An approved measuring device must be installed and maintained for each of the sources identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use," Chapter 173-173 WAC.

Chapter 173-173 WAC describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology for modifications to some of the requirements.

Recorded water use data shall be submitted to Ecology via the Internet. To set up an Internet reporting account, contact the Bellingham Field Office or go to https://fortress.wa.gov/ecy/meteringx/Login.aspx. If you do not have Internet access, you can submit paper copies of your water use data by contacting the Bellingham Field Office for forms to use to submit your water use data.

Department of Fish and Wildlife Requirement(s)
Pursuant to Chapter 77.55 RCW, a Hydraulic Project Approval (HPA) permit must be obtained from the Washington State Department of Fish and Wildlife prior to beginning construction of the diversion*.

The intake(s) must be screened in accordance with Department of Fish and Wildlife screening criteria (pursuant to RCW 77.57). Contact the Department of Fish and Wildlife, 600 Capitol Way N, Olympia, WA 98501-1091. Attention: Habitat Program, Phone: (360) 902-2534 if you have questions about screening criteria. http://wdfw.wa.gov/licensing/hpa/

No dam or weir may be constructed in connection with this diversion.

*If construction has already begun or the diversion is already in place, an HPA permit must still be obtained. A permit must be obtained before any additional construction occurs.

Easement and Right-of-Way
If the water source and/or water transmission facilities are not wholly located upon land owned by the water right holder, they are advised that issuance of a water right by this department does not convey a right of access to, or other right to use, land which the water right holder does not legally possess. Obtaining such a right is a private matter between applicant and owner of that land.

Proof of Appropriation
The water right holder must file the notice of Proof of Appropriation of water (under which the certificate of water right is issued) when the permanent distribution system has been constructed and the quantity of water required by the project has been put to beneficial use. Once Ecology has accepted the Proof of Appropriation form, the applicant shall retain the services of a Certified Water Rights Examiner (CWRE) to verify the extent of the perfected right and prepare the necessary documentation to allow Ecology to issue a water right certificate for this project. The certificate will reflect the extent of the project perfected within the limitations of this authorization. Elements of a proof inspection may include, as appropriate, the source(s), system instantaneous capacity, beneficial use(s), annual quantity, place of use, and satisfaction of provisions. Information on hiring a CWRE is available on Ecology's website at: http://www.ecy.wa.gov/programs/wr/rights/cwrep.html or by calling the appropriate Ecology regional office.

Inspections
Department of Ecology personnel, with proper credentials, will have access to the project location to inspect records of water use, diversions, measuring devices, and associated distribution systems for compliance with water law at all times.

Senior Water Rights
This authorization to make use of public waters of the state is subject to existing rights, including any tribal water rights held by the United States for the benefit of tribes, to the extent they may exist.

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 available from the source in question under certain conditions; that there will be no impairment of existing rights if water is only diverted when instream flows are being met as per WAC 173-501; that the purpose of use will be beneficial; and that there will be no detriment to the public interest.

Therefore, I ORDER approval of Application No. S1-28782, subject to existing rights and the provisions specified above.

Your Right To Appeal

You have a right to appeal this Order to the Pollution Control Hearing 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 **Pollution Control Hearings Board** 1111 Israel RD SW, Suite 301 Tumwater, WA 98501	**Department of Ecology** Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608 **Pollution Control Hearings Board** PO Box 40903 Olympia, WA 98504-0903

Signed at Bellevue, Washington, this 26th day of June, 2015.

Thomas Buroker, 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: Courtney Polinder
Water Right Control Number: S1-28782
Investigators: Andy Dunn, Jim Bucknell, Adam Neff (RH2 Engineering, Inc.)

BACKGROUND

This report serves as the written findings of fact concerning Water Right Application Number S1-28782.

On June 10, 2014, Courtney Polinder filed a water right application with the State of Washington Department of Ecology. Application S1-28782 requested 0.668 CFS for irrigation of 80 to 85 acres from a surface water diversion from the Nooksack River.

Coordinated Cost Reimbursement

This application is one of nine applications being processed under a coordinated cost reimbursement process initiated under RCW 90.03.265(3). The water source included in this coordinated process is the stream management reach defined in WAC 173-501-030(1) as the Nooksack River, "from influence of mean annual high tide at low instream flow levels to the confluence with, and including, Smith Creek." This stream management reach contains one control station identified as Nooksack River (at Ferndale), which is USGS gage number 12213100. The Nooksack River includes minimum instream flows in WAC 173-501-030(2) and all applicants have been informed that any permits issued will be interruptible based on these flows. Only surface water applications were included for processing. Each individual applicant has entered into a cost reimbursement contract with the Department of Ecology. This report has been prepared by RH2 Engineering, Inc. (RH2) on behalf of the Department of Ecology.

Table 1 Summary of Requested Water Right

Applicant Name	Courtney Polinder
Date of Application	June 10, 2014
Place of Use	See Page 2 and Attachment 1

County	Waterbody	Tributary To	WRIA
Whatcom	Nooksack River	Bellingham Bay	01 - Nooksack

Purpose	Rate	Unit	Af/yr	Begin Season	End Season
Irrigation of 100 acres	0.67	CFS	150	Seasonal	

Source Name	Parcel	Well Tag	Twp	Rng	Sec	QQ Q	Latitude	Longitude
POD #1	400321151108	NA	40N	03E	21	NE SW	48.940334	-122.432289
POD #2	400321151108	NA	40N	03E	21	NE SW	48.938872	-122.431756
POD #3	400321151108	NA	40N	03E	21	NW SW	48.939395	-122.438479

POD = Point of Diversion; cfs = cubic feet per second; af/yr = acre-feet per year; Sec. = Section; QQ Q = Quarter-quarter of a section; WRIA = Water Resource Inventory Area; E.W.M. = East of the Willamette Meridian; Datum: NAD83/WGS84.

Legal Requirements for Approval of Appropriation of Water

Chapter 90.03 RCW authorizes the appropriation of public water for beneficial use and describes the process for obtaining water rights. Laws governing the surface water right permitting process are contained in RCW 90.03.250 through 90.03.340. In accordance with RCW 90.03.290, determinations must be made on the following four criteria in order for an application for a water right permit to be approved:

1. Water must be available
2. There must be no impairment of existing rights
3. The water use must be beneficial
4. The water use must not be detrimental to the public interest

Each of these four tests is addressed in the **INVESTIGATION** section.

Public Notices

RCW 90.03.265(3) requires that the Department of Ecology provide notice, both on its web site and in a newspaper of general circulation in the area where affected properties are located, if it elects to initiate a coordinated cost reimbursement process. Notice was provided on a Department of Ecology web site (http://www.ecy.wa.gov/programs/wr/rights/epwra.html) from April 9, 2014, through June 8, 2014. Notice of the coordinated cost reimbursement process was published by the Department of Ecology in the *Lynden Tribune* on June 4 and 11, 2014.

RCW 90.03.280 requires that notice of a water right application be published once a week, for two consecutive weeks, in a newspaper of general circulation in the county or counties where the water is to be stored, diverted and used. Notice of this application was published in the *Lynden Tribune* on October 8 and 15, 2014.

Consultation with the Department of Fish and Wildlife

The Department of Ecology must give notice to the Washington Department of Fish and Wildlife (WDFW) of applications for water right permits. On December 2, 2014, Mr. Andy Dunn of RH2 Engineering notified Mr. Steven Boessow (Water Rights Biologist) of WDFW of the 9 pending surface water right applications related to the coordinated cost reimbursement process. Mr. Boessow was provided with a summary of the applications and proposed decisions. On April 20, 2015 Mr. Boessow provided a letter stating that, "based on impacts to fish and/or wildlife and the habitat they rely on, and pursuant to Chapter 77.57.020 RCW, WDFW does not oppose the issuance of these applications as described in this ROE."

WDFW added that "pursuant to Chapter 77.55 RCW, A Hydraulic Project Approval permit must be obtained from the Washington State Department of Fish and Wildlife prior to beginning construction of the diversion. The intake(s) must be screened in accordance with the Department of Fish and Wildlife screening criteria (pursuant to RCW 77.27). Contact the Department of Fish and Wildlife, 600 Capitol Way N, Olympia, WA 98501-1091. Attention: Habitat Program, Phone: (360) 902-2534 if you have questions about screening criteria." http://wdfw.wa.gov/licensing/hpa/

Consultation with the Lummi Nation and Nooksack Tribe

The Lummi Nation and Nooksack Tribe were notified by the Department of Ecology prior to initiation of the coordinated cost reimbursement process. The Lummi Indian Business Council (LIBC) sent a protest letter dated June 30, 2014. In that letter the LIBC identified that it was protesting this application based on concerns over current and future potential impacts on instream flows. It also indicated that all withdrawals within WRIA 1 have the capacity to adversely impact rights asserted by the Lummi Nation. The Nooksack Tribe did not protest the application.

State Environmental Policy Act (SEPA)

A water right application is subject to a SEPA threshold determination (i.e., an evaluation whether there are likely to be significant adverse environmental impacts) if any one of the following conditions are met.

(a) It is a surface water right application for more than 1 cubic feet per second, unless that project is for agricultural irrigation, in which case the threshold is increased to 50 cubic feet per second, so long as that irrigation project will not receive public subsidies;
(b) It is a groundwater right application for more than 2,250 gallons per minute;
(c) It is an application that, in combination with other water right applications for the same project, collectively exceed the amounts above;
(d) It is a part of a larger proposal that is subject to SEPA for other reasons (e.g., the need to obtain other permits that are not exempt from SEPA);
(e) It is part of a series of exempt actions that, together, trigger the need to do a threshold determination, as defined under WAC 197-11-305.

Because the application does not meet any of these conditions, it is categorically exempt from SEPA and a threshold determination is not required.

INVESTIGATION

Site Visit

On January 7, 2015, Mr. Jim Bucknell, Mr. Andrew Dunn, and Mr. Adam Neff from RH2 Engineering, Inc., and Ms. Kasey Cykler from the Department of Ecology met with Mr. Courtney Polinder at the site of the proposed project. Before travelling to the proposed points of diversion, the proposed farm operations and the proposed water right were discussed with Mr. Polinder.

Mr. Polinder grows (non-irrigated) grass and corn, which is primarily sold to area dairies for feed. This water right application requests water for seasonal irrigation in order to provide for additional crop yields.

Mr. Polinder indicated that he plans to irrigate the areas planted in grass and those areas that are planted in corn where there are sandy soils, closer to the river. Currently, Mr. Polinder has an even split in acreage between corn and grass.

Mr. Polinder has a 6-inch diameter buried mainline across the proposed place of use, which is currently used for nutrient application, but will also be used to convey the irrigation water. Irrigation will be accomplished using one traveling big gun sprinkler system.

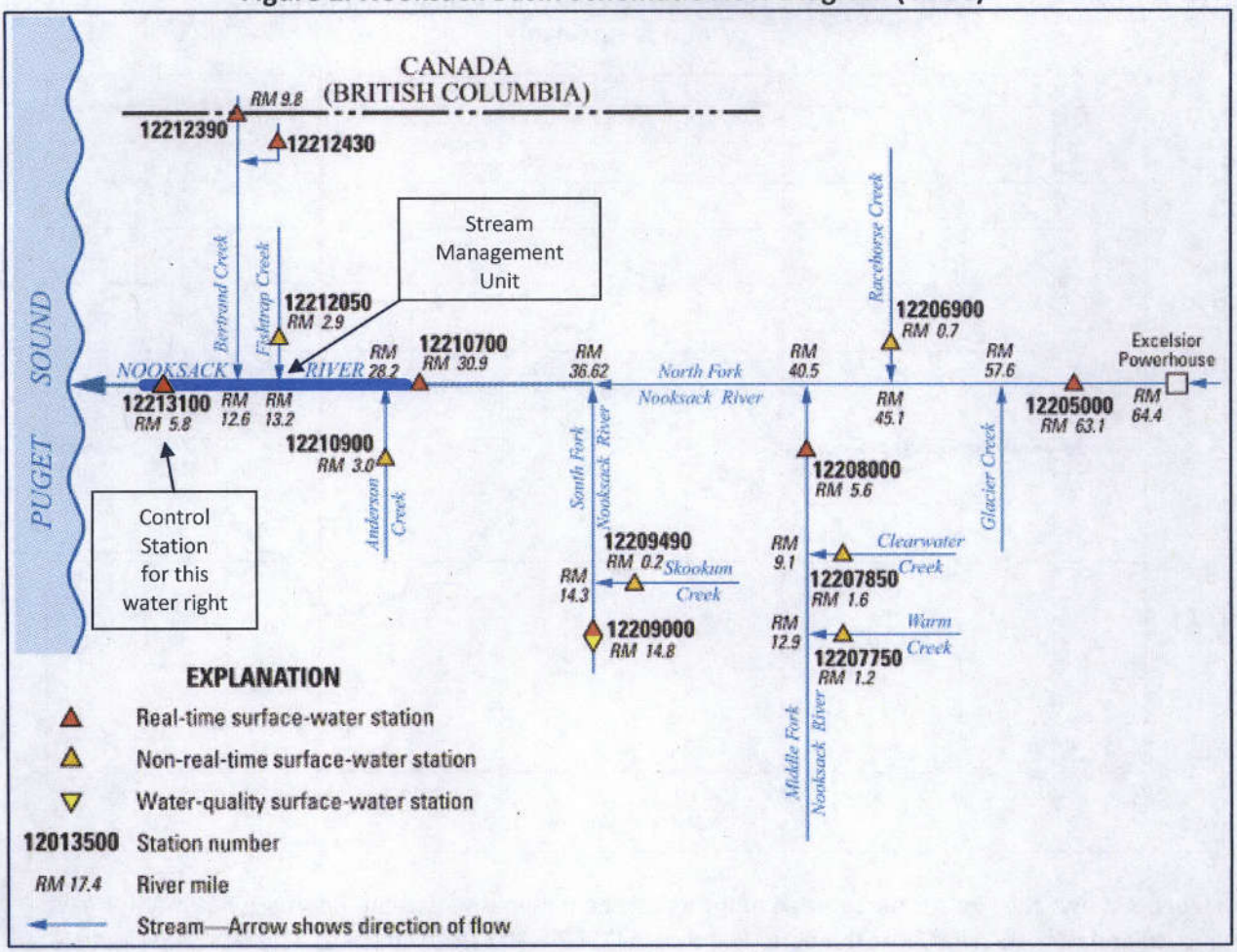
In touring around the property, Mr. Polinder pointed out three potential points of diversion. The exact locations of the point(s) of diversion are not yet known. Uncertainty in location is related to the vertical distance between the river and the top of the dike and uncertainty about the intake submergence needed and available at any particular point. The diversion(s) will likely utilize a diesel motor and centrifugal pump on a trailer. Power is currently not available near the river at the proposed diversion locations.

After the site visit, Mr. Polinder obtained permission from the neighbor to the east (Parcel No. 400321237095) to irrigate a portion of their property under this water right application. That increase in acreage enlarged the acres to be irrigated up to 100 acres from the originally requested 80 to 85 acres.

Nooksack River Hydrology

The Nooksack River is located in northwestern Washington State in Water Resource Inventory Area (WRIA) 1. The river's watershed spans from the northwest side of Mount Baker and the northern side of Mount Shuksan in the east to approximately the Canadian Border in the north with discharge occurring into Bellingham Bay. In the Cascade Mountains, small streams and creeks flow into one of three forks of the Nooksack River (North Fork, Middle Fork, and South Fork). These forks come together just upstream from the City of Deming to form the mainstem Nooksack River. After exiting the foothills, the river flows across a relatively flat area referred to as the Nooksack Lowland before discharging into the marine water of Bellingham Bay. Average precipitation across the watershed ranges from approximately 112 inches at the Mt. Baker Lodge in the Cascade Mountains to approximately 30 inches at the river's mouth (Smith, 1960). The watershed upstream of the USGS Gage 12213100 Nooksack River at Ferndale is 786 square miles. The average discharge for the period of 1967 through 2013 is 3,864 cfs, which is equivalent to either 2,799,000 af/yr, or 66.79 inches distributed over the entire 786 square mile watershed. The maximum recorded discharge of 57,000 cfs occurred on November 10, 1990, and the minimum recorded discharge of 463 cfs occurred during October and November, 1987 (United States Geological Survey, 2013).

Figure 1. Nooksack Basin Schematic Flow Diagram (USGS)



Nooksack River Regulation

The State of Washington adopted Chapter 173-501 WAC in 1986. WAC 173-501-030 includes the establishment of stream management units and control stations for those stream management units. This water right application requests to divert water from the Nooksack River (at Ferndale) stream management unit, which includes the reach of the Nooksack River from influence of mean annual high tide at low instream flow levels. This is located at approximately river mile 4.5, where the river historically bifurcated, with part of the flow going to Bellingham Bay and part moving down what is now referred to as the Lummi or Red River (Robinson Noble, 2013) and extending upstream to the confluence with, and including Smith Creek. Smith Creek flows into the Nooksack River just downstream of river mile 30 and is located approximately one mile downstream from where State Highway 542 (Mount Baker Highway) crosses the Nooksack River near Nugents Corner. The control station within this stream management unit is USGS gage 12213100, which is referred to as the Nooksack River at Ferndale, WA and is located at river mile 5.8 (**Figure 1**). **Figure 2** shows the established minimum instream flows for this control station.

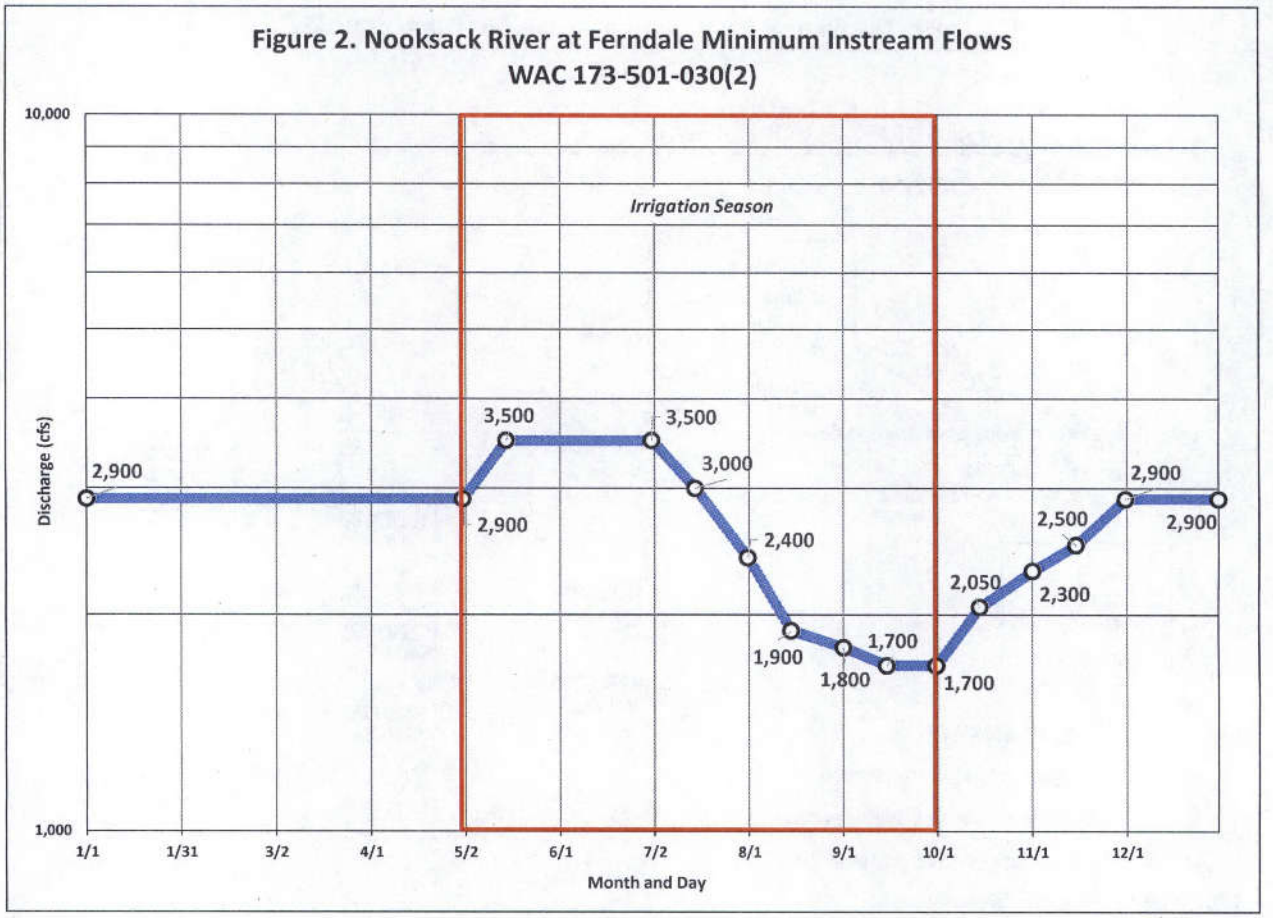
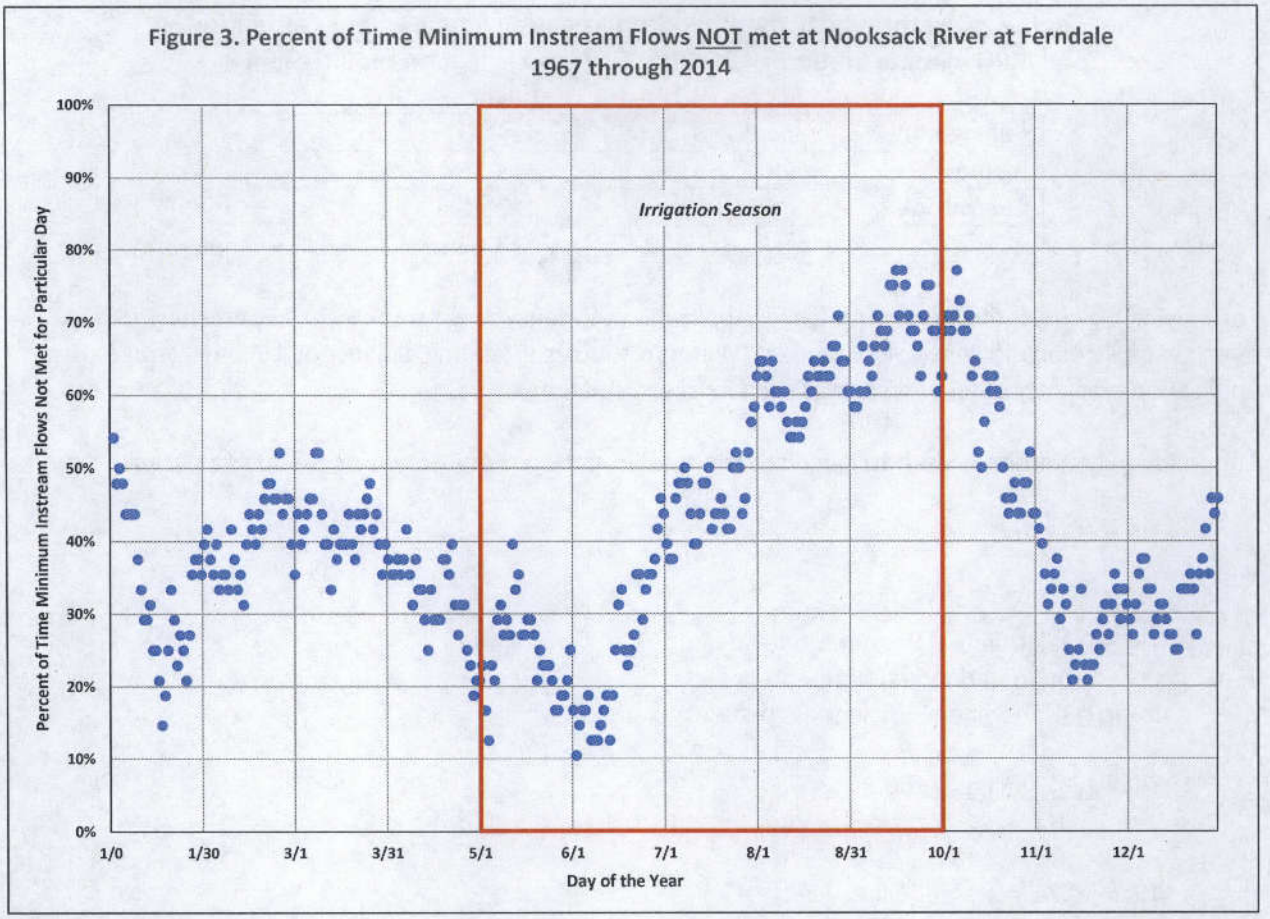


Figure 3 shows the historic percentage of time that the minimum instream flows are not met for each particular day of the year over the period of record (1967 – 2014) which spans 48 years. This figure shows that, in early May, the actual discharge of the river should be greater than minimum instream flows in 7 out of 10 years. In early June, the actual discharge of the river should be greater than the minimum instream flows in 8 out of 10 years. By mid-July the actual discharge of the river should be greater than the minimum instream flow in 5 out of 10 years. By late September, the actual discharge of the river should be greater than the minimum instream flows in only 2 out of 10 years. This graph shows that the holder of an interruptible water right should be prepared to shut off their water use on any particular day and the likelihood of having to shut off generally increases as the irrigation season progresses. Comparison of the irrigation season data through time suggests that the actual flow in the river during the irrigation season has decreased over the period of record. These data suggest that if that trend continues, there will be a greater probability of interruption than indicated by the historic record. Based on the likelihood of interruption and acknowledging that this is not a firm source of supply, it is advised that only crops that can survive without supplemental irrigation be grown.

Figure 3. Percent of Time Minimum Instream Flows NOT met at Nooksack River at Ferndale 1967 through 2014



Proposed Use and Basis of Water Demand

The proposed use is irrigation. The proposed irrigated crops to be grown are grass and corn. The Washington Irrigation Guide (WIG) (1985 and 1992) provides estimated crop irrigation requirements for a variety of crops in an average (1 in 2 year return interval) irrigation demand year. The highest duty crop grown in this region, which can tolerate an interruptible irrigation supply, is pasture/turf (WIG, 1992). From the WIG (1992) monthly breakdown of crop irrigation requirement, it is determined that irrigation should occur in the months of April through September to meet the crop irrigation requirement. However, all applicants participating in the coordinated cost-reimbursement process indicated that they would never irrigate in April. So, an irrigation season of May 1 through September 30 is reasonable for the typical crops grown in this region and was acceptable to the applicant.

Whatcom County has three WIG climate stations located in the western portion of the County. Those stations are Blaine, Bellingham, and Clearbrook (located near the City of Sumas). Since the project location falls between these three stations, an average of the three crop irrigation requirements (WIG, 1992), excluding the April data, was used (**Table 2**).

Table 2. May through September Crop Irrigation Requirement Calculation

WIG Climate Station	Pasture/Turf crop irrigation requirement (inches)
Bellingham	14.33
Blaine	13.85
Clearbrook	12.26
Average	**13.48**

For moving big gun sprinklers, estimates for application efficiency range from 55 to 75 percent with an average application efficiency of 65 percent (Water Resources Program Guidance 1210). An average application efficiency of 65 percent was used in this calculation.

The following equation is used to calculate the total irrigation requirement needed for a particular crop.

$$TIR = \frac{CIR}{E} * 100$$

TIR – Total Irrigation Requirement
CIR – Crop Irrigation Requirement
E – Irrigation System Efficiency in percent

$$TIR = \frac{13.48 \text{ inches}}{65} * 100$$

TIR = 20.74 inches [equal to 1.73 feet]

The following equation is used to calculate the annual volume of water needed to irrigate pasture/turf with a moving big gun on the desired number of acres.

$$Qa = \frac{TIR}{12 \text{ inches/foot}} * \text{Irrigated Acres}$$

Qa - Water Right Annual Volume
Irrigated Acres - Acres authorized to be irrigated under this application (100 acres)

$$Qa = \frac{20.74 \text{ inches}}{12 \text{ inches/foot}} * 100 \text{ acres}$$

Qa = 173 acre-feet

Based on the above calculations, the WIG calculated demand for this request will be 173 acre-feet per year. Additional water to account for drier than average years was not added in due to the likelihood that the water right holder will not be able to take additional water at those times because the minimum instream flows will be met less often in those years. As is, it is likely that the full annual volume might not be able to be diverted due to interruption of the water right due to the minimum instream flow not being met during the irrigation season.

Other Rights Appurtenant to the Place of Use

The Department of Ecology's Water Resources Explorer (https://fortress.wa.gov/ecy/waterresources/map/WaterResourcesExplorer.aspx accessed on April 15, 2015) was used to identify water rights that are appurtenant to the proposed place of use.

There are two water right certificates and three new applications for which the places of use include the proposed place of use for this water right. These water rights are listed in **Table 3**, along with the purpose of use.

Table 3. Water Rights Appurtenant to the Proposed Place of Use Not Held By Mr. Polinder

Water Right Name	Water Right Number	Purpose of Use
Skookumchuck Water Association	GWC 6620 (G1-*09728CWRIS)	Municipal
Skookumchuck Water Association	GWC 2313 (G1-*03784CWRIS)	Municipal
Skookumchuck Water Association (New Application)	G1-28071	Municipal
Fred Polinder (New Application)	G1-27180	Irrigation
Fred Polinder (New Application)	S1-27179	Irrigation

The first three water rights/applications in the table above are for different purposes of use (municipal). Therefore, the overlap of these water rights with this water right proposed place of use does not present a problem.

In addition to this application, Fred Polinder has two older pending applications, one groundwater and one surface water, for irrigation of this property. These applications are G1-27180 and S1-27179 respectively, both with priority dates of June 10, 1993. The groundwater application requests withdrawal of 350 gpm and 120 afy for irrigation of 60 acres. The surface water application requests 0.4 cfs and 60 afy for irrigation of 30 acres. These applications are not being processed at this time.

Impairment Considerations

Impairment is an adverse impact on the physical availability of water for a beneficial use that is entitled to protection. A water right application may not be approved if it would:

- Interrupt or interfere with the availability of water to an adequately constructed groundwater withdrawal facility of an existing right. An adequately constructed groundwater withdrawal facility is one that (a) is constructed in compliance with well construction requirements and (b) fully penetrates the saturated zone of an aquifer or withdraws water from a reasonable and feasible pumping lift.
- Interrupt or interfere with the availability of water at the authorized point of diversion of a surface water right. A surface water right conditioned with instream flows may be impaired if a proposed use or change would cause the flow of the stream to fall to or below the instream flow more frequently or for a longer duration than was previously the case.

- Interrupt or interfere with the flow of water allocated by rule, under a water right, or court decree to instream flows.
- Degrade the water quality of the source to the point that the water is unsuitable for beneficial use by existing users (e.g., via sea water intrusion).

This diversion is subject to the minimum instream flows set in WAC 173-501-030, and the water right will be provisioned to protect the established minimum instream flows. The provision will prevent this water right from impairing the minimum instream flows.

The most recent rating curve for the USGS gage 12213100 Nooksack River at Ferndale shows that at a flow of between 3,500 cfs and 1,700 cfs, which is the range of minimum instream flow levels during the irrigation season, the stage of the river will drop by a maximum of 0.001 feet for every 1 cfs decrease in flow. 0.001 feet is less than 1/64 of an inch.

This application requests to divert 0.67 cfs. This rate of diversion, which can only be exercised when the actual flow in the river exceeds the established minimum instream flow, will lower the level of the river by approximately 0.00067 feet as measured at the Nooksack River at Ferndale control station. This reduction in river level is likely not large enough to physically impair any existing senior water rights. Other than the 8 other applications processed as a part of this coordinated cost reimbursement process, there are no other known interruptible water rights on the Nooksack River mainstem, so there will not be any impact to curtailment by existing water right holders.

Water Availability

For water to be available for appropriation, it must be both physically and legally available.

Physical availability

For water to be physically available for appropriation, there must be surface water present in quantities and quality and on a sufficiently frequent basis to provide a reasonably reliable source for the requested beneficial use or uses.

The Nooksack River is a perennial river that flows past the proposed point of diversion at all times. Therefore, water is physically available for appropriation from this source, even if it is not considered to be a firm source of supply.

Legal availability

To determine whether water is legally available for appropriation, the following factors are considered:

- Regional water management plans – which may specifically close certain water bodies to further appropriation.
- Existing rights – which may already appropriate physically available water.
    - Volume of water represented by senior water rights, including adjudicated federal or tribal reserved rights or claims to such rights;
    - Water right claims registered under Chapter 90.14 RCW;
    - Groundwater uses established in accordance with Chapter 90.44 RCW, including those that are exempt from the requirement to obtain a permit; and

- Potential riparian water rights, including non-diversionary stock water.

- Ecology may deny an application for a new appropriation in a drainage where adjudicated rights exceed the average low flow supply, even if the prior rights are not presently being exercised. Water would not become available for appropriation until existing rights are determined to be relinquished for non-use by state proceedings.

While the Nooksack River has minimum instream flows in Chapter 173-501 WAC, it is not closed to further consumptive appropriation under WAC 173-501-040(1). This basin has not yet been adjudicated and the extent of any federal and tribal reserved rights that may exist have not been quantified. **Figure 3** shows that, in all years, there is anticipated to be water available at times above the minimum instream flow levels during the irrigation season. Therefore, water is legally available for appropriation under certain specific conditions and at certain specific times, as per WAC 173-501 and the provisions cited above.

Beneficial Use

The proposed use of water for irrigation is defined in statute (RCW 90.54.020(1)) as a beneficial use.

Public Interest Considerations

The proposed new permit will allow the water right holder to divert only at times when it has been determined that there is flow in excess of what is needed for preservation of environmental and aesthetic values in the Nooksack River, as per WAC 173-501. The issuance of this new permit (if approved) will provide for agricultural operations while maintaining the minimum instream flows. The permit holder will be required to curtail use during times when minimum instream flows are not met, thereby offering protection of the resource. In addition, the applicant will be required to meter and report water use.

Consideration of Protests and Comments

In response to the public notice of this application, the Department of Ecology received a protest from the following party:

Protestant	Date of Protest
Lummi Indian Business Council	June 30, 2014

The Lummi Nation objected to the proposed application based on their status as senior water rights holder and on-going negotiations with the United States and the State of Washington over unresolved issues. No specific technical arguments were provided concerning this application. In consideration of senior water right holders, including tribal water rights asserted by the Lummi Nation to the extent they may exist, the following provision is included.

This authorization to make use of public waters of the state is subject to existing rights, including any tribal water rights held by the United States for the benefit of tribes, to the extent they may exist.

Conclusions

The facts in this investigation support findings that water is both physically and legally available, that the proposed diversion will not impair existing water rights (since it will be subject to minimum instream flows), that the proposed use is beneficial, and that the proposed permit will not prove detrimental to the public interest.

RECOMMENDATIONS

Based on the above investigation and conclusions, I recommend that this request for a water right be approved in the amounts and within the limitations listed below and subject to the provisions listed above.

Purpose of Use and Authorized Quantities

The amount of water recommended is a maximum limit and the water user may only use that amount of water within the specified limit that is reasonable and beneficial:

- 0.67 cfs
- 173 af/yr
- Irrigation of 100 acres
- May 1 through September 30
- Subject to minimum instream flows at the Nooksack River at Ferndale (USGS 12213100) Control Station

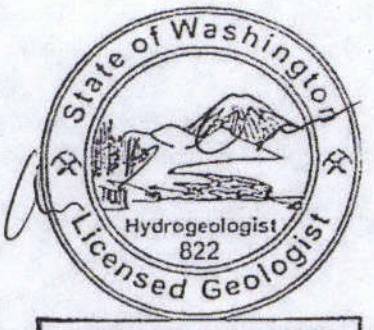
Points of Diversion
POD #1 and POD #2 - NE ¼ SW ¼, Section 21, Township 40 North, Range 03 E.W.M.
POD #3 - NW ¼ SW ¼, Section 21, Township 40 North, Range 03 E.W.M.

Place of Use
See Page 2 and Attachment 1

Jim Bucknell

JUN 26 2015

Jim Bucknell – RH2 Engineering, Inc. *Date*



ANDREW B. DUNN

JUN 26 2015

Andrew B. Dunn, L.G., L.HG., CWRE – RH2 Engineering, Inc. *Date:*

ADAM RUSSELL NEFF

JUN 26 2015

Adam Neff, L.G. – RH2 Engineering, Inc. *Date:*

JUN 26 2015

Kasey Cykler – Department of Ecology *Date:*

If you need this publication in an alternate format, please call Water Resources Program at (360) 407-6600. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

Selected References

Robinson Noble, Inc, October 2013, Nooksack River Tidal Influence Monitoring.

Smith, W.R., 1960, *Water Resources of the Nooksack River Basin and Certain Adjacent Streams*, Water Supply Bulletin No. 12, State of Washington, Department of Conservation, Division of Water Resources.

State of Washington Irrigation Guide (WIG), 1985 (amended 1992 for specific crops in Western Washington.

United States Geological Survey, 2013, Water-Data Report 2013, 12213100 Nooksack River at Ferndale, WA, Puget Sound Basin, Nooksack Subbasin. Accessed at http://wdr.water.usgs.gov/wy2013/pdfs/12213100.2013.pdf

Washington State Department of Ecology Water Resources Program, 10/11/2005, Guidance 1210 – Determining Irrigation Efficiency and Consumptive Use.

ATTACHMENT 1 – MAP

Minimum Instream Flows for the Nooksack River at Ferndale (USGS Stream Gage 12.2131.00) as Defined in WAC 173-501-030												
Day	January	February	March	April	May	June	July	August	September	October	November	December
1	2900	2900	2900	2900	2900	3500	3500	2400	1800	1700	2300	2900
2	2900	2900	2900	2900	2939	3500	3462	2360	1793	1723	2314	2900
3	2900	2900	2900	2900	2979	3500	3424	2321	1785	1746	2328	2900
4	2900	2900	2900	2900	3019	3500	3386	2283	1778	1770	2341	2900
5	2900	2900	2900	2900	3060	3500	3349	2245	1771	1793	2355	2900
6	2900	2900	2900	2900	3101	3500	3313	2208	1764	1818	2370	2900
7	2900	2900	2900	2900	3143	3500	3276	2171	1756	1842	2384	2900
8	2900	2900	2900	2900	3186	3500	3240	2135	1749	1867	2398	2900
9	2900	2900	2900	2900	3229	3500	3205	2100	1742	1892	2412	2900
10	2900	2900	2900	2900	3273	3500	3170	2065	1735	1917	2427	2900
11	2900	2900	2900	2900	3317	3500	3135	2031	1728	1943	2441	2900
12	2900	2900	2900	2900	3362	3500	3101	1998	1721	1969	2456	2900
13	2900	2900	2900	2900	3407	3500	3067	1964	1714	1996	2470	2900
14	2900	2900	2900	2900	3453	3500	3033	1932	1707	2023	2485	2900
15	2900	2900	2900	2900	3500	3500	3000	1900	1700	2050	2500	2900
16	2900	2900	2900	2900	3500	3500	2961	1894	1700	2064	2523	2900
17	2900	2900	2900	2900	3500	3500	2922	1888	1700	2078	2547	2900
18	2900	2900	2900	2900	3500	3500	2884	1882	1700	2092	2571	2900
19	2900	2900	2900	2900	3500	3500	2847	1876	1700	2106	2595	2900
20	2900	2900	2900	2900	3500	3500	2809	1870	1700	2121	2619	2900
21	2900	2900	2900	2900	3500	3500	2773	1864	1700	2135	2643	2900
22	2900	2900	2900	2900	3500	3500	2737	1858	1700	2149	2668	2900
23	2900	2900	2900	2900	3500	3500	2701	1852	1700	2164	2693	2900
24	2900	2900	2900	2900	3500	3500	2666	1846	1700	2179	2718	2900
25	2900	2900	2900	2900	3500	3500	2631	1841	1700	2194	2743	2900
26	2900	2900	2900	2900	3500	3500	2597	1835	1700	2208	2769	2900
27	2900	2900	2900	2900	3500	3500	2563	1829	1700	2223	2794	2900
28	2900	2900	2900	2900	3500	3500	2529	1823	1700	2239	2820	2900
29	2900	2900	2900	2900	3500	3500	2496	1817	1700	2254	2847	2900
30	2900		2900	2900	3500	3500	2464	1811	1700	2269	2873	2900
31	2900		2900		3500		2432	1806		2284		2900
The discharge of the Nooksack River, in cubic feet per second, as measured at stream gage 12.2131.00 must be greater												
than the number contained in the table above for the respective day before a water right provisioned to the minimum instream flows at this gage can divert or withdraw water.												
For the current discharge at this stream gage, see the following website: http://waterdata.usgs.gov/nwis/uv?12213100												

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
Northwest Regional Office • 3190 160th Ave SE • Bellevue, WA 98008-5452 • 425-649-7000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

JUN 26 2015

Courtney Polinder
1093 Polinder Road
Lynden, WA 98264

Re: Administrative Order Docket #15WRNR – DE 11489

Dear Mr. Polinder:

The Department of Ecology (Ecology) has issued the enclosed Administrative Order requiring you to comply with:

- Chapter 90.03 Revised Code of Washington (RCW)
- Chapter 173-501 Washington Administrative Code (WAC)

This is a companion Order to Water Right S1-28782, an interruptible surface water right for the Nooksack (Mainstem) River. Please read the Order carefully. It contains information on the following:

- It explains how to determine when you can divert water under S1-28782.
- It sets forth metering recording and reporting requirements for when you're diverting water under S1-28782.

This Order remains in effect unless it is rescinded or until a subsequent Order is issued.

If you have questions please contact Kasey Cykler at (360) 715-5222 or kasey.cykler@ecy.wa.gov.

Sincerely,

Thomas Buroker
Section Manager
Water Resources Program

Enclosures: Administrative Order Docket #15WRNR – DE 11489

Certified mail: 9171 9690 0935 0088 4614 93

ecc: Kasey Cykler, Water Master, ECY BFO
Water Resources Program Enforcement Coordinator

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

IN THE MATTER OF AN ADMINISTRATIVE ORDER ISSUED TO Courtney Polinder *RE: Water Right S1-28782*	))))	ADMINSTRATIVE ORDER DOCKET #15WRNR – DE 11489

To: Courtney Polinder
1093 Polinder Road
Lynden, WA 98264

The Department of Ecology (Ecology) has issued this Administrative Order (Order) requiring you to comply with:

- Water Right S1-28782
- Chapter 90.03 Revised Code of Washington (RCW) – Water Code
- Chapter 173-501 Washington Administrative Code (WAC) – Instream Resources Protection Program—Nooksack Water Resources Inventory Area (WRIA) 1

Ecology has the authority to issue this Order under Chapter 43.21A RCW.

The Department of Ecology is responsible for the supervision of public waters within the state and their appropriation, diversion (withdrawal), storage (dam safety), and use, Chapter 43.21A.064 Revised Code of Washington (RCW).

On June 26, 2015, Ecology approved your water right permit application and issued you water right S1-28782, an interruptible surface water right for diversions from the Nooksack River (Mainstem). Provisions of your water right include compliance with the minimum instream flow rule for the Nooksack River, as set forth in Chapter 173-501 WAC, and metering and reporting provisions. This Administrative Order supplements the provisions contained in water right S1-28782 and provides additional details on how to comply with those provisions.

ORDER TO COMPLY

Your water right permit or certificate is subject to minimum established flows for the Nooksack River. For these reasons and in accordance with RCW 90.03 and WAC 173-501, it is ordered that all persons diverting water under S1-28782 take the following actions:

Determining if Minimum Instream Flows Are Met

Any day you intend to divert water under water right S1-28782 you must follow the procedures set forth below in order to determine if minimum instream flows are being met and if you are able to divert water.

The figure for the actual flow (discharge) of the Nooksack River at Ferndale (USGS station 12.2131.00) needs to be read and recorded once each calendar day you want to divert water from the river. Directions for accessing this information is provided in the section entitled "How to Access Flow Data for the Nooksack River at Ferndale (USGS Stream Gage 12.2131.00)," below.

- **If the actual discharge of the Nooksack River <u>meets or exceeds</u>** the minimum instream flow requirement for that day, **as determined at 8:00 p.m. the calendar day *before* a diversion is planned**, then you can divert water from the Nooksack River for 24 hours. You will need to check the actual discharge of the Nooksack River again the following calendar day (no more than 24 hours later) if you would like to continue to divert water from the Nooksack River.

- **If the actual discharge of the Nooksack River is <u>less than</u>** the minimum instream flow when checked for that day, **as determined at 8:00 p.m. the calendar day *before* a diversion is planned,** you **cannot** divert water from the Nooksack River. If you had previously been diverting water from the river, you must immediately stop. Diverting water from the Nooksack River may resume on a future day when the actual discharge of the Nooksack River meets or exceeds the minimum instream flow when checked for that particular day.

***For example**: If you want to divert water on the morning of June 2nd, you look at what the discharge was at the Nooksack River Ferndale gage at 8 pm on June 1st and compare it to the minimum instream flow set for June 1st. The minimum instream flow for June 1st is 3500 cfs. If the actual flow at 8 pm was 3500 cfs or more, you can irrigate on June 2nd for 24 hours. If the actual flow at 8 pm is 3499 cfs or less, you cannot irrigate on June 2nd. You will repeat this each day you want to irrigate.*

<u>Recording Your Water Use</u>

Please see the below table that describes what information you must record and report to Ecology:

Metering and Reporting Requirements	
How often must water use be measured during irrigation season?	Your water meter(s) must be read: • Daily when diverting • Weekly when not diverting
How often must water use data be reported to Ecology?	Annually for the preceding calendar year (by January 31st) or whenever requested by Ecology staff
What rate should be reported?	Peak rate of diversion (cfs or gpm)
What volume should be reported?	Total annual volume (acre feet/year) and your water meter readings
What should be recorded when diverting water from the Nooksack River?	1. Days you diverted water from the Nooksack River. 2. The USGS measured streamflow (cfs) for 8:00 p.m. prior to each day you are diverting. 3. Your meter readings.

The following documents are included to assist you in meeting the above requirements:

- A copy of the daily Minimum Instream Flow values for the Nooksack River at Ferndale (USGS Stream Gage 12.2131.00). A copy of this is also included as Attachment 2 in your water right Report of Examination.

- An informational sheet on how to access the USGS Stream Gage 12.2131.00 data.

- Meter Recording sheets. We will also distribute electronic copies of these sheets to you. These sheets are intended to aid you in recording the information you must submit to Ecology. You may use these sheets or develop your own.

FAILURE TO COMPLY WITH THIS ORDER

Failure to comply with this Order may result in liability for penalties of a maximum of $5,000.00 per day for each separate and distinct violation of the requirements of this Order. In the event that there is failure to comply with this order for a period longer than one day, each day when violation occurs shall be considered a separate and distinct violation.

YOUR RIGHT TO APPEAL

You have a right to appeal this Order to the Pollution Control Hearing 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 both of the following within 30 days of the date of receipt of this 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.

Your appeal alone will not stay the effectiveness of this Order. Stay requests must be submitted in accordance with RCW 43.21B.320.

ADDRESS AND LOCATION INFORMATION

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

CONTACT INFORMATION

Please direct all questions about this Order to:

Kasey Cykler
Department of Ecology
Bellingham Field Office
1440 – 10th St, Ste #102
Bellingham WA 98225
(360) 715-5222
kasey.cykler@ecy.wa.gov

MORE INFORMATION

- **Pollution Control Hearings Board**
  www.eho.wa.gov/Boards_PCHB.aspx

- **Chapter 43.21B RCW – Environmental Land Use Hearings Office – Pollution Control Hearings Board**
  http://app.leg.wa.gov/RCW/default.aspx?cite=43.21B

- **Chapter 371-08 WAC – Practice and Procedure**
  http://app.leg.wa.gov/WAC/default.aspx?cite=371-08

- **Chapter 34.05 RCW – Administrative Procedure Act**
  http://app.leg.wa.gov/RCW/default.aspx?cite=34.05

- **Chapter 43.21A RCW – Department of Ecology**
  http://apps.leg.wa.gov/RCW/default.aspx?cite=43.21A

- **Chapter 90.03 Revised Code of Washington (RCW) – Water Code**
  http://apps.leg.wa.gov/rcw/default.aspx?cite=90.03&full=true

- **Chapter 173-501 WAC – Instream Resources Protection Program—Nooksack Water Resources Inventory Area (WRIA) 1**
  http://apps.leg.wa.gov/WAC/default.aspx?cite=173-501&full=true

- **Laws:** www.ecy.wa.gov/laws-rules/ecyrcw.html

- **Rules:** www.ecy.wa.gov/laws-rules/ecywac.html

SIGNATURE

Thomas Buroker
Section Manager
Water Resources Program

6/26/15
Date

Daily Minimum Instream Flow Values

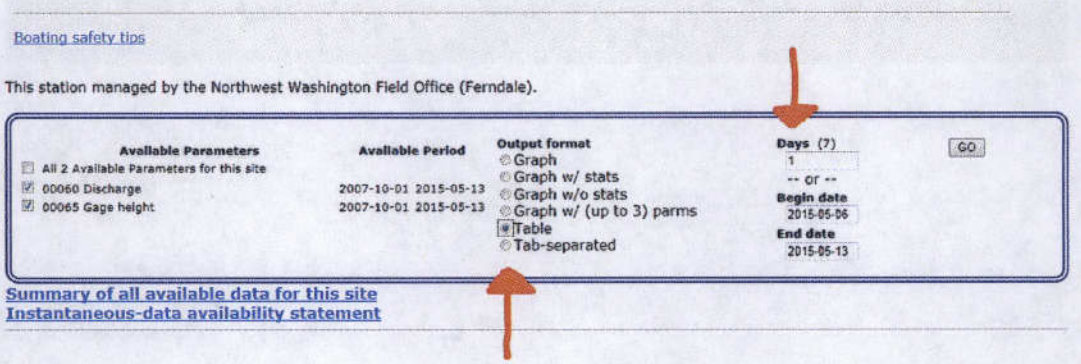
Minimum Instream Flows for the Nooksack River at Ferndale (USGS Stream Gage 12.2131.00) as Defined in WAC 173-501-030												
Day	January	February	March	April	May	June	July	August	September	October	November	December
1	2900	2900	2900	2900	2900	3500	3500	2400	1800	1700	2300	2900
2	2900	2900	2900	2900	2939	3500	3462	2360	1793	1723	2314	2900
3	2900	2900	2900	2900	2979	3500	3424	2321	1785	1746	2328	2900
4	2900	2900	2900	2900	3019	3500	3386	2283	1778	1770	2341	2900
5	2900	2900	2900	2900	3060	3500	3349	2245	1771	1793	2355	2900
6	2900	2900	2900	2900	3101	3500	3313	2208	1764	1818	2370	2900
7	2900	2900	2900	2900	3143	3500	3276	2171	1756	1842	2384	2900
8	2900	2900	2900	2900	3186	3500	3240	2135	1749	1867	2398	2900
9	2900	2900	2900	2900	3229	3500	3205	2100	1742	1892	2412	2900
10	2900	2900	2900	2900	3273	3500	3170	2065	1735	1917	2427	2900
11	2900	2900	2900	2900	3317	3500	3135	2031	1728	1943	2441	2900
12	2900	2900	2900	2900	3362	3500	3101	1998	1721	1969	2456	2900
13	2900	2900	2900	2900	3407	3500	3067	1964	1714	1996	2470	2900
14	2900	2900	2900	2900	3453	3500	3033	1932	1707	2023	2485	2900
15	2900	2900	2900	2900	3500	3500	3000	1900	1700	2050	2500	2900
16	2900	2900	2900	2900	3500	3500	2961	1894	1700	2064	2523	2900
17	2900	2900	2900	2900	3500	3500	2922	1888	1700	2078	2547	2900
18	2900	2900	2900	2900	3500	3500	2884	1882	1700	2092	2571	2900
19	2900	2900	2900	2900	3500	3500	2847	1876	1700	2106	2595	2900
20	2900	2900	2900	2900	3500	3500	2809	1870	1700	2121	2619	2900
21	2900	2900	2900	2900	3500	3500	2773	1864	1700	2135	2643	2900
22	2900	2900	2900	2900	3500	3500	2737	1858	1700	2149	2668	2900
23	2900	2900	2900	2900	3500	3500	2701	1852	1700	2164	2693	2900
24	2900	2900	2900	2900	3500	3500	2666	1846	1700	2179	2718	2900
25	2900	2900	2900	2900	3500	3500	2631	1841	1700	2194	2743	2900
26	2900	2900	2900	2900	3500	3500	2597	1835	1700	2208	2769	2900
27	2900	2900	2900	2900	3500	3500	2563	1829	1700	2223	2794	2900
28	2900	2900	2900	2900	3500	3500	2529	1823	1700	2239	2820	2900
29	2900	2900	2900	2900	3500	3500	2496	1817	1700	2254	2847	2900
30	2900		2900	2900	3500	3500	2464	1811	1700	2269	2873	2900
31	2900		2900		3500		2432	1806		2284		2900
The discharge of the Nooksack River, in cubic feet per second, as measured at stream gage 12.2131.00 must be greater												
than the number contained in the table above for the respective day before a water right provisioned to the minimum instream flows at this gage can divert or withdraw water.												
For the current discharge at this stream gage, see the following website: http://waterdata.usgs.gov/nwis/uv?12213100												

How to Access Flow Data for the Nooksack River at Ferndale (USGS Stream Gage 12.2131.00)

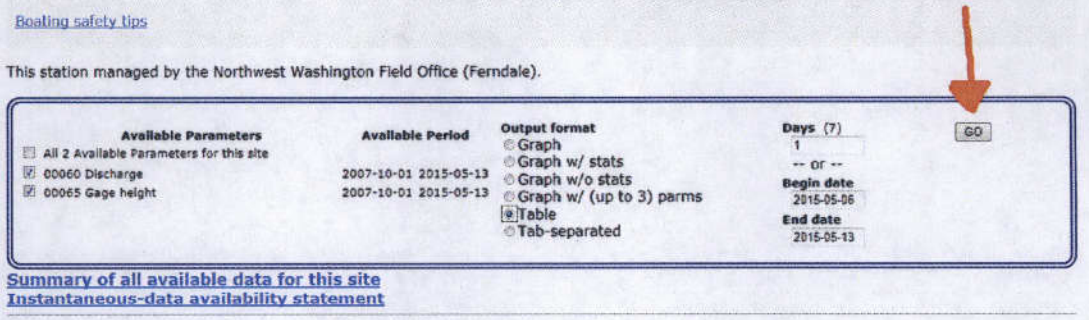
We are in the process of updating Ecology's website to show daily flows at 8 pm compared to the set minimum flows. Once that update is complete, we will notify you. In the meantime, you will need to do the following to check the 8 pm flows of the Nooksack River at Ferndale:

1. **Go to the USGS website for this gage**: http://waterdata.usgs.gov/wa/nwis/uv/?site_no=12213100&PARAmeter_cd=00060,00065

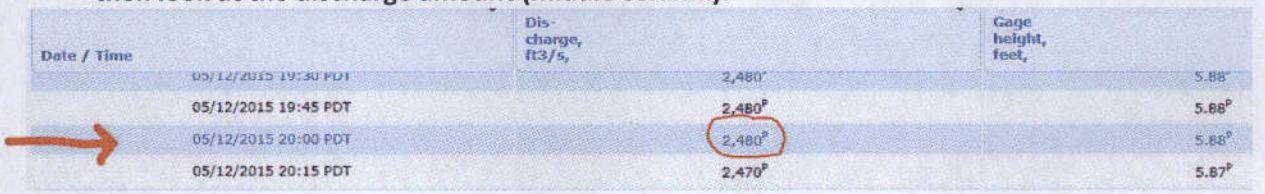
2. **In the selection box**:
   - Select "Table" as the Output format
   - Put "1" in the Days box



3. **Hit the Go button.**



4. **Scroll down until the date and time in the left hand column is 20:00 from the previous day and then look at the discharge amount (middle column).**



Date / Time	Dis-charge, ft3/s,	Gage height, feet,
05/12/2015 19:30 PDT	2,480	5.88
05/12/2015 19:45 PDT	2,480[P]	5.88[P]
05/12/2015 20:00 PDT	2,480[P]	5.88[P]
05/12/2015 20:15 PDT	2,470[P]	5.87[P]

Please note: although the flows are considered "real time," USGS notified us that sometimes there is up to a 90 minute delay in updating the data to their website.

Water Right Minimum Instream Flow Compliance and Metering

Actual Nooksack River Flow. USGS River at Ferndale gage (http://waterdata.usgs.gov/wa/nwis/uv/?site_no=12213100). Data only needs to be recorded for days when pumping from the river is starting, continuing, or resuming. Submit data to Ecology by January 31 of the following year.

	Minimum Instream Flow **for 8:00 PM Previous Day**	Nooksack River Flow **at 8:00 PM Previous Day**	Meter Reading	Did You Pump Today?	Pumping Rate
	(cfs)	(cfs)	Units = _____	(Yes/No)	Units = _____
05/01/2015	2,900				
05/02/2015	2,900				
05/03/2015	2,939				
05/04/2015	2,979				
05/05/2015	3,019				
05/06/2015	3,060				
05/07/2015	3,101				
05/08/2015	3,143				
05/09/2015	3,186				
05/10/2015	3,229				
05/11/2015	3,273				
05/12/2015	3,317				
05/13/2015	3,362				
05/14/2015	3,407				
05/15/2015	3,453				
05/16/2015	3,500				
05/17/2015	3,500				
05/18/2015	3,500				

05/19/2015	3,500				
05/20/2015	3,500				
05/21/2015	3,500				
05/22/2015	3,500				
05/23/2015	3,500				
05/24/2015	3,500				
05/25/2015	3,500				
05/26/2015	3,500				
05/27/2015	3,500				
05/28/2015	3,500				
05/29/2015	3,500				
05/30/2015	3,500				
05/31/2015	3,500				
06/01/2015	3,500				
06/02/2015	3,500				
06/03/2015	3,500				
06/04/2015	3,500				
06/05/2015	3,500				
06/06/2015	3,500				
06/07/2015	3,500				
06/08/2015	3,500				
06/09/2015	3,500				
06/10/2015	3,500				
06/11/2015	3,500				

06/12/2015	3,500				
06/13/2015	3,500				
06/14/2015	3,500				
06/15/2015	3,500				
06/16/2015	3,500				
06/17/2015	3,500				
06/18/2015	3,500				
06/19/2015	3,500				
06/20/2015	3,500				
06/21/2015	3,500				
06/22/2015	3,500				
06/23/2015	3,500				
06/24/2015	3,500				
06/25/2015	3,500				
06/26/2015	3,500				
06/27/2015	3,500				
06/28/2015	3,500				
06/29/2015	3,500				
06/30/2015	3,500				
07/01/2015	3,500				
07/02/2015	3,500				
07/03/2015	3,462				
07/04/2015	3,424				
07/05/2015	3,386				

07/06/2015	3,349				
07/07/2015	3,313				
07/08/2015	3,276				
07/09/2015	3,240				
07/10/2015	3,205				
07/11/2015	3,170				
07/12/2015	3,135				
07/13/2015	3,101				
07/14/2015	3,067				
07/15/2015	3,033				
07/16/2015	3,000				
07/17/2015	2,961				
07/18/2015	2,922				
07/19/2015	2,884				
07/20/2015	2,847				
07/21/2015	2,809				
07/22/2015	2,773				
07/23/2015	2,737				
07/24/2015	2,701				
07/25/2015	2,666				
07/26/2015	2,631				
07/27/2015	2,597				
07/28/2015	2,563				
07/29/2015	2,529				

07/30/2015	2,496				
07/31/2015	2,464				
08/01/2015	2,432				
08/02/2015	2,400				
08/03/2015	2,360				
08/04/2015	2,321				
08/05/2015	2,283				
08/06/2015	2,245				
08/07/2015	2,208				
08/08/2015	2,171				
08/09/2015	2,135				
08/10/2015	2,100				
08/11/2015	2,065				
08/12/2015	2,031				
08/13/2015	1,998				
08/14/2015	1,964				
08/15/2015	1,932				
08/16/2015	1,900				
08/17/2015	1,894				
08/18/2015	1,888				
08/19/2015	1,882				
08/20/2015	1,876				
08/21/2015	1,870				
08/22/2015	1,864				

08/23/2015	1,858				
08/24/2015	1,852				
08/25/2015	1,846				
08/26/2015	1,841				
08/27/2015	1,835				
08/28/2015	1,829				
08/29/2015	1,823				
08/30/2015	1,817				
08/31/2015	1,811				
09/01/2015	1,806				
09/02/2015	1,800				
09/03/2015	1,793				
09/04/2015	1,785				
09/05/2015	1,778				
09/06/2015	1,771				
09/07/2015	1,764				
09/08/2015	1,756				
09/09/2015	1,749				
09/10/2015	1,742				
09/11/2015	1,735				
09/12/2015	1,728				
09/13/2015	1,721				
09/14/2015	1,714				
09/15/2015	1,707				

09/16/2015	1,700				
09/17/2015	1,700				
09/18/2015	1,700				
09/19/2015	1,700				
09/20/2015	1,700				
09/21/2015	1,700				
09/22/2015	1,700				
09/23/2015	1,700				
09/24/2015	1,700				
09/25/2015	1,700				
09/26/2015	1,700				
09/27/2015	1,700				
09/28/2015	1,700				
09/29/2015	1,700				
09/30/2015	1,700				