



5-7-2012 Cashiering

For Ecology Use  
(Date Stamp)

Follow the attached instructions. Attach additional sheets as necessary.

- GROUND WATER       SURFACE WATER
- PERMANENT       SHORT TERM       TEMPORARY
- DROUGHT

**\*A NON-REFUNDABLE MINIMUM FEE OF \$50.00 MUST ACCOMPANY THIS APPLICATION.**

**Section 1. APPLICANT**

I have participated in a pre-application conference with Ecology.

Applicant/Business Name: Verbrugge Living Trust	Phone No: 509-671-7852	Other No:
Address: 5031 Scotia Road		
City: Newport	State: WA	Zip: 99156
Email Address (if available): garysrs@hotmail.com		

Contact Name (if different from above): Gary Verbrugge	Phone No: 509-671-7852	Other No:
Relationship to Applicant: Trustee for Verbrugge Living Trust		
Address: 5031 Scotia Road		
City: Newport	State: WA	Zip: 99156
Email Address (if available): garysrs@hotmail.com		

Legal Land Owner or Part Owner Name of the Proposed Place of Use: Verbrugge Living Trust	Phone No: 509-671-7852	Other No:
Address: 5031 Scotia Road		
City: Newport	State: WA	Zip: 99156
Email Address (if available): garysrs@hotmail.com		

For Ecology Use	APPLICATION NO: <u>S3-30664</u>	SEPA: Exempt/Not Exempt
	Fee Paid: <u>\$50.00</u>	Check No: <u>1004</u> ECY Coding: 001-001-WR1-0285-000011
Date Returned	By	Priority Date <u>5-7-2012</u> By <u>K. Ryf</u> WRIA: <u>62</u>
Pre-application interviewer: <u>Pend Oreille Co - Protection Area</u>		

## Section 2. STATEMENT OF INTENT

Do you own the land on which the proposed point of diversion/withdrawal is located?  YES  NO

If no, do you have legal authority to make this application for use of another's land?  YES  NO

Briefly describe the purpose of your proposed project: I want to install a non-consumptive micro-hydro system to supply electricity to a remotely situated cabin year around. A complete description of the proposed system can be found in Section 5. The stream originates on our property from several springs. The entire stream system is located on our property and runs approximately 1.25 miles until it joins the Little Spokane River which is also on our property. The diversion for the hydro system will be approximately 300 feet which is a very short section of the stream system. The water supply to the turbine is in one of the steeper areas of the creek to provide maximum head with minimal distance. A fish protocol survey determined that there are no fish present in this area. There is a natural fish barrier approximately a ½ mile downstream from the turbine/diversion. The stream originates from springs on our property so there is always a minimum flow of at least .33 CFS. Rain and snow melt increase the flow rate and currently it is .995 CFS. The maximum flow is about 1/3 more than it is now.

The property will be donated to Whitworth University for the purposes of environmental education. A conservation easement on the property precludes the granting of any additional easements including electrical lines. Whitworth would like to start using the property but the house where I currently live is the logical location for them to do so since it is near the county road and is easily accessible. I would like to restore my Uncle's cabin and move up there but the only potential source of electricity for the cabin is hydro electric power. The conservation easement permits restoration of the cabin but does not permit any new residential buildings in Section 17. The cabin is in a perfect location for hydro power. Solar and/or wind generation are not practical for the cabin as it is surrounded by trees and is in a protected draw so it does not receive enough wind to make that an option. Running a PUD electrical line is not possible because an easement for it can not be granted and it is approximately a mile to the nearest PUD electrical line. Whitworth

University will assist in the design of the system, will perform ongoing studies of and monitor the hydro system. They intend to study the various forms of alternative energy so they will also compare it to their observatory which is in a different location on our property and is solar powered. At my death the cabin will be used as a retreat and sabbatical location by Whitworth University.

Anticipated length of time to complete your project: 2 months

**Water Use** List all purposes for which water will be applied to a beneficial use and list quantity required for each.

Purpose(s) of Use	Rate (check one box only)		Acre-Feet per Year (AF/YR) (If known)	Period of Use (Continuously or Seasonal)
	<input checked="" type="checkbox"/> Cubic Feet per Second (CFS)	<input type="checkbox"/> Gallons per Minute (GPM)		
Hydropower	.2 CFS maximum or 1/2 of stream volume, whichever is less			Continuously
<b>TOTAL:</b>	.2 CFS maximum or 1/2 of stream volume, whichever is less			

**Short Term/Temporary Water Use**

Is this a request for a short term project (less than four months and non-recurring)?  YES  NO

Is this request for a temporary permit?  YES  NO

If yes to either question above, indicate the dates that the water will be needed:

FROM: \_\_\_/\_\_\_/\_\_\_ TO: \_\_\_/\_\_\_/\_\_\_

**Section 3. POINT OF DIVERSION OR WITHDRAWAL**  
(Complete A or B, and C below)

<p><b>A.) If Surface Water Source</b></p> <p><input type="checkbox"/> Spring <input checked="" type="checkbox"/> Creek <input type="checkbox"/> River <input type="checkbox"/> Lake</p> <p><input type="checkbox"/> Other: _____</p> <p>Source name: <u>Grouse Creek</u></p> <p>Tributary to: <u>Little Spokane River</u></p> <p>Number of proposed diversion points: <u>1</u></p> <p>Do you have an existing diversion? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p>	<p><b>B.) If Ground Water Source</b></p> <p><input type="checkbox"/> Well(s) <input type="checkbox"/> Other: _____</p> <p>Well diameter &amp; depth: _____</p> <p>Number of proposed points of withdrawal: _____</p> <p>Do you have an existing well? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>If available, attach Water Well Report and pump test.</p> <p>Well Tag ID No. _____</p>
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NOTE: If more than two points of diversion/withdrawal attach additional information on a separate sheet of paper.

**C.) Point of Diversion/Withdrawal – Legal Description**

Parcel No.	¼	¼	Section	Township	Range	County
453017000003	E1/2	W1/2	17	30N	45E	Pend Oreille
Lot(s)	Block(s)		Subdivision			

If known, enter the distances in feet from the point of diversion or withdrawal to the nearest section corner:

\_\_\_\_\_ Feet ( North/ South) and \_\_\_\_\_ feet ( East/ West)  
from the (NW SW NE SE  \_\_\_\_\_ ) corner of Section \_\_\_\_\_.

Parcel No.	¼	¼	Section	Township	Range	County
Lot(s)	Block(s)		Subdivision			

If known, enter the distances in feet from the point of diversion or withdrawal to the nearest section corner:

\_\_\_\_\_ Feet ( North/ South) and \_\_\_\_\_ feet ( East/ West)  
from the (NW SW NE SE  \_\_\_\_\_ ) corner of Section \_\_\_\_\_.

**Section 4. PLACE OF USE**

**Attach a copy of the legal description of the property (on which the water will be used) taken from a real estate contract, property deed or title insurance policy, or copy it carefully in the space below.**

The South half of the Southwest quarter of the Northeast quarter and the West half of the Southeast quarter and the Northwest quarter of the Northeast quarter and the West half of Section 17, all in Section 17, Township 30 North, Range 45 East, Willamette Meridian, Pend Oreille County, Washington.

The Southwest quarter of Section 8, Township 30 North, Range 45 East, Willamette Meridian, Pend Oreille County, Washington, EXCEPTING THEREFROM Tax 2, more particularly described as follows;

Commencing at the intersection of the East line of the Great Northern Railroad right of way with the North line of the SW1/4 of Said Section 8;

Thence, southerly along the East line of said Railroad right of way, 882 feet;

Thence, running East to a point 2 rods (33 feet) East of the East bank of the Little Spokane River;

Thence, northeasterly along the general course of said river and no place in line to be less than 2 rods (33 feet) East of the East bank of said river, and running to the line between the NW1/4 and the SW1/4 of said Section 8;

Thence, West along said line to the true point of beginning.

That portion conveyed by Burlington Northern Railroad Company in instrument No. 222639 and more particularly described as:

The Easterly 100 feet of said 200 foot wide right of way, bounded on the North side by the North line of said West half of the Southwest quarter of Section 8, Township 30 North, Range 45 East, Willamette Meridian, and bounded on the

southerly side by the centerline of Scotia Road, located 117 feet, southwesterly of the East line of said Section 7, as measured along the centerline of said Main Track.

**Assessor's Tax Parcel Number(s):**

453008 30 0001, 453017 00 0003, 453017 12 0001, 453017 00 0006 & 453017 00 0005.

1/4	1/4	Section	Twp.	Range	County
E1/2	W1/2	17	30N	45E	Pend Oreille

Do you own all the lands on which the proposed place of use is located?  YES  NO.

If no, do you have legal authority to make this application for use of another's land?  YES  NO.

Provide owner name(s), address, and phone number: \_\_\_\_\_

Are there any other water rights or claims associated with this property or water system?  YES  NO.

If yes, provide the water right and/or claim numbers: S3-21036C, G3-21041C, 10416

**Attach a map of your project showing the point of diversion/withdrawal and place of use. If platted property, be sure to include a complete copy of the plat map.**

**Section 5. WATER SYSTEM DESCRIPTION**

Describe your proposed water system (include type and size of devices used to divert or withdraw water from source): A small circular pond will be created approximately 10' wide and 3' deep using rocks to form a small dam. In the pond a catch basin approximately 2' wide by 2' deep will be placed. Buried four inch thick wall, well casing pipe will be run from the catch basin about 300' downhill to the turbine. Four shutoff valves will be placed in the pipe to allow flow regulation and clean out (sand trap) locations. The water flow of the stream will be monitored closely and the amount of water diverted to the hydro system will be adjusted so that a maximum of .2 CFS or no more than 1/2 of the stream volume is used, whichever is less. Once the water exits the turbine it will drop into a small concrete catch basin and then will be routed back to the existing stream through PVC pipe. No water will be consumed. The water quality will actually be improved by the process

since it will have increased oxygen in it. The electric line from the hydro pond to the turbine will be buried underground beside the water pipe, encased in conduit. The electric line from the hydro pond across the stream will be run overhead approximately 150'. The final length of electrical line to the cabin will be buried inside of conduit.

**Section 6. DOMESTIC WATER SUPPLY SYSTEM INFORMATION**

(Complete A or B, and C below)

A.) Domestic Water Systems only	B.) Municipal Water Systems only <i>(defined under RCW 90.03.015)</i>
Projected number of connections to be served: _____  Type of connections: _____ <i>(e.g., home, recreational cabin)</i>	Present population to be served water: _____  Estimate future population to be served: _____ (20 year projection)
<b>C.) Water System Planning</b>	
Do you have a Water System Plan approved by the Washington State Department of Health, Drinking Water Division? YES NO If yes, date plan was approved // Water System Number: _____  Name of water system: _____  Are you within the service area of an existing water system? YES NO If yes, explain why you are unable to connect to the system: _____ _____ _____ _____	

**Section 7. IRRIGATION/STOCKWATER/OTHER FARM USES**

**Irrigation**

Total number of acres requested to be irrigated under this application = \_\_\_\_\_ ACRES

NOTE: Outline the area to be irrigated on your attached map.

**Stockwater**

List number and kind of stock: \_\_\_\_\_

Is the proposed project for a dairy farm? YES NO

**Other Proposed Farm Uses**

Describe all proposed uses: \_\_\_\_\_

**Family Farm Water Act (RCW 90.66):**

Calculate the acreage in which you have a controlling interest, including only:

- Acreage irrigated under water rights acquired after December 8, 1977,
- Acreage proposed to be irrigated under this application, and
- Acreage proposed to be irrigated under other pending application(s).

Is the combined acreage under existing rights greater than 6000 acres? YES NO

Do you have a controlling interest in a Family Farm Development Permit? YES NO

If yes, enter Permit No: \_\_\_\_\_

**Section 8. OTHER WATER USES**

**Hydropower**

Indicate total feet of head 200 \_\_\_\_\_ and proposed capacity in kilowatts: 1.25

Describe works: See description in Section 5. There will be no water consumption. The stream origination is from springs on our property. The entire stream system and hydro system is on our property. The stream flow currently is .995 CFS. The stream water flow will be closely monitored and the hydro system will be adjusted so that no more than .2 CFS or 1/2 of the stream volume is used, whichever is less. A fish protocol survey determined there were no fish in the stream.

Indicate all uses to which power is to be applied: electrical supply for cabin \_\_\_\_\_

FERC License No: I am working with the Office of Regulatory Assistance to determine if this project is exempt. \_\_\_\_\_

**Mining/Industrial Use**

Describe use, method of supplying and utilizing water: \_\_\_\_\_

Other Use

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**Section 9. WATER STORAGE**

Will you be using a dam, dike, or other structure to retain or store water?  YES  NO

Are you proposing to store more than 10 acre-feet of water?  YES  NO

Will the water depth be 10 feet or more?  YES  NO

If you answered yes to any of the above questions, please describe: See complete description of system and dam/pool in Section 5. A small circular pool approximately 10' by 3' deep will be created using rocks to form a dam. The water will be returned to the stream once it exits the turbine. No water will be consumed.

*NOTE: If you will be storing 10 acre-feet or more of water and/or if the water depth will be 10 feet or more at the deepest point and some portion of the storage will be above grade, you must also complete an Application for Permit to Construct a Reservoir and a Dam Construction Permit and Application.*

**Section 10. DRIVING DIRECTIONS**

Provide detailed driving directions to the project site: Go north on N. Division St/US-2E approximately 2.6 miles. Keep right at the fork to go on US-2 E for 30.2 miles. Turn right onto Scotia Road and proceed on Scotia Road approximately 5 miles to 5031 Scotia Road.

Site Address: 5031 Scotia Road, Newport, WA 99156

**Section 11. REQUIRED SIGNATURES**

**I certify that the information provided in this application is true and accurate to the best of my knowledge. I understand that in order to process my application, I grant staff from the Department of Ecology access to the site for inspection and monitoring purposes. Even though the employees of the Department of Ecology may have assisted me in the preparation of the above application, all responsibility for the accuracy of the information rests with me, the applicant.**

Gary Verbrugge \_\_\_\_\_  
Print Name  
(Applicant or authorized representative)

*Gary Verbrugge* \_\_\_\_\_  
Signature

*5-2-2012*  
Date

*Trustee for Verbrugge Living Trust* \_\_\_\_\_