STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PERMIT

TO APPROPRIATE PUBLIC WATERS OF THE STATE OF WASHINGTON

☒ Surface Water (Issued in accordance with the provisions of Chapter 117, Laws of Washington for 1917, and amendments thereto, and the rules and regulations of the Department of Ecology.)

☐ Ground Water (Issued in accordance with the provisions of Chapter 263, Laws of Washington for 1945, and amendments thereto, and the rules and regulations of the Department of Ecology.)

PRIORITY DATE	APPLICATION NUMBER	PERMIT NUMBER	CERTIFICATE NUMBER
February 12, 1998	S3-30094	S3-30094	

NAME
Anthony Calomeni & Margaret Riemer

ADDRESS (STREET)	(CITY)	(STATE)	(ZIP CODE)
703 Southwest 184th Street	Bothell	Washington	98012-6213

The applicant is pursuant to the Report of Examination which has been accepted by the applicant, hereby granted a permit to appropriate the following public waters of the State of Washington, subject to existing rights and to the limitations and provisions set herein.

PUBLIC WATERS TO BE APPROPRIATED

SOURCE
Pend Oreille River

TRIBUTARY OF (IF SURFACE WATERS)
Columbia River

MAXIMUM CUBIC FEET PER SECOND	MAXIMUM GALLONS PER MINUTE	MAXIMUM ACRE FEET PER YEAR
.07		2.83

QUANTITY, TYPE OF USE, PERIOD OF USE

.07 cubic foot per second, 1.83 acre-feet per year, from April 1 to October 1, each year for the non-commercial irrigation of 1 acre of lawn and garden; 1 acre-foot per year, continuously, for domestic supply.

LOCATION OF DIVERSION/WITHDRAWAL

APPROXIMATE LOCATION OF DIVERSION--WITHDRAWAL

160 feet south and 435 feet east from the center of Sec. 17

LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION)	SECTION	TOWNSHIP N.	RANGE, (E. OR W.) W.M.	W.R.I.A.	COUNTY
NW¼SE¼	17	37	43 E.	62	Pend Oreille

RECORDED PLATTED PROPERTY

LOT	BLOCK	OF (GIVE NAME OF PLAT OR ADDITION)
8	A	Northern Wilderness Estates

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED

Lot 8, Block A of Northern Wilderness Estates within the NW¼SE¼ of Sec. 17, T. 37 N., R. 43 E.W.M.

DESCRIPTION OF PROPOSED WORKS

Pump and pressure distribution system.

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE:	COMPLETE PROJECT BY THIS DATE:	WATER PUT TO FULL USE BY THIS DATE:
July 1, 2000	July 1, 2001	July 1, 2002

PROVISIONS

An approved measuring device shall be installed and maintained in accordance with RCW 90.03.360 and/or WAC 508-64-020 through WAC 508-64-040.

The amount of water granted is a maximum limit that shall not be exceeded and the water user shall be entitled only to that amount of water within the specified limit that is beneficially used and required for the actual crop grown on the number of acres and the place of use specified.

This authorization to make use of public waters of the State is subject to existing rights, including any existing rights held by the United States for the benefit of Indians under treaty or otherwise.

A certificate of water right will not be issued until a final examination is made.

Nothing in this authorization shall be construed as satisfying other applicable federal, state, or local statutes, ordinances, or regulations.

This permit shall be issued subject to Washington Department of Fish and Wildlife screening criteria as outlined in a Hydraulic Project Approval. Please contact the Department of Fish and Wildlife, 600 Capitol Way North, Olympia, Washington 98501-1091, Attention: Habitat Management Division, Phone (360) 902-2534, to obtain specific requirements for your project.

No dam shall be constructed in connection with this diversion.

Use of water under this authorization shall be contingent upon the water right holder's utilization of up to date water conservation practices and maintenance of efficient water delivery systems consistent with established regulation requirements and facility capabilities.

The Washington State Department of Fish and Wildlife (WDFW), has recommended that water rights from the Pend Oreille River be conditioned with instream flows of 7,700 cubic feet per second (cfs) on a year-round basis (as measured at the gage near Newport, Washington).

The following hydrographs for the U.S.G.S. Gage on the Pend Oreille River at Newport, Idaho (12395500) demonstrate important hydrologic characteristics of the Pend Oreille River. Before the construction of the Albeni Falls Dam, the river exhibited normal, riverine flow conditions. The first hydrograph shows the typical late summer flow regime for 10 different water years in the 1930s and early 1940s. The solid line at 7700 cfs represents WDFW's recommended instream flow value as it would have applied to the river in the 1930s. When summer flows reached their baseflow, they tended to stay down at that level for the remainder of the water year.

This permit shall be subject to cancellation should the permittee fail to comply with the above development schedule and/or to give notice to the Department of Ecology on forms provided by that Department documenting such compliance.

Given under my hand and the seal of this office at Spokane, Washington,

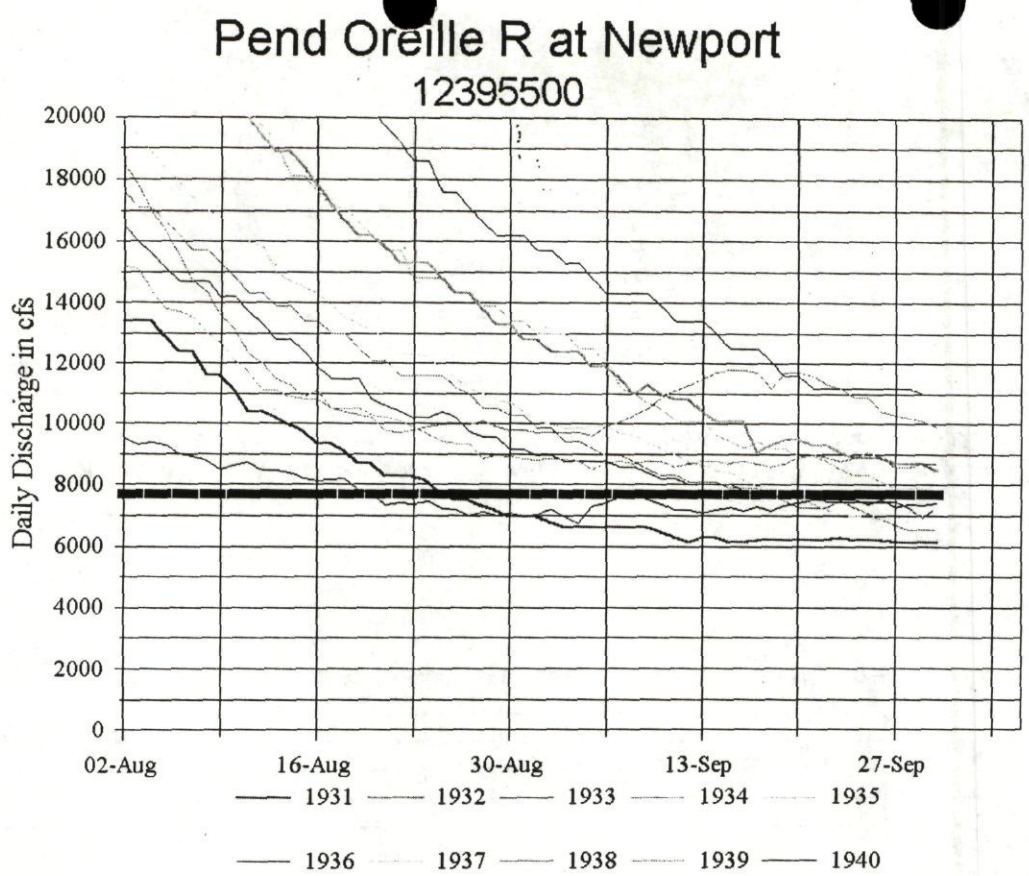
this 11th day of August, 1999,

DEPARTMENT OF ECOLOGY STATE OF WASHINGTON

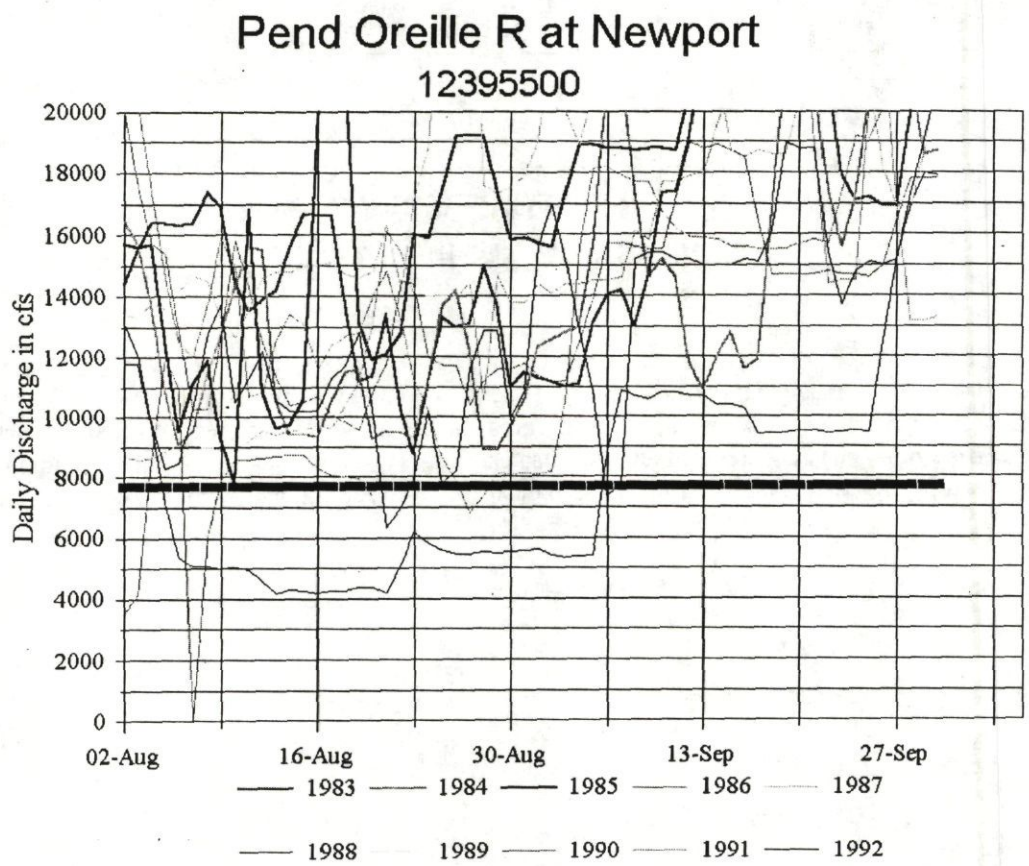
Department of Ecology

by _____
George B. Schlender, Section Manager

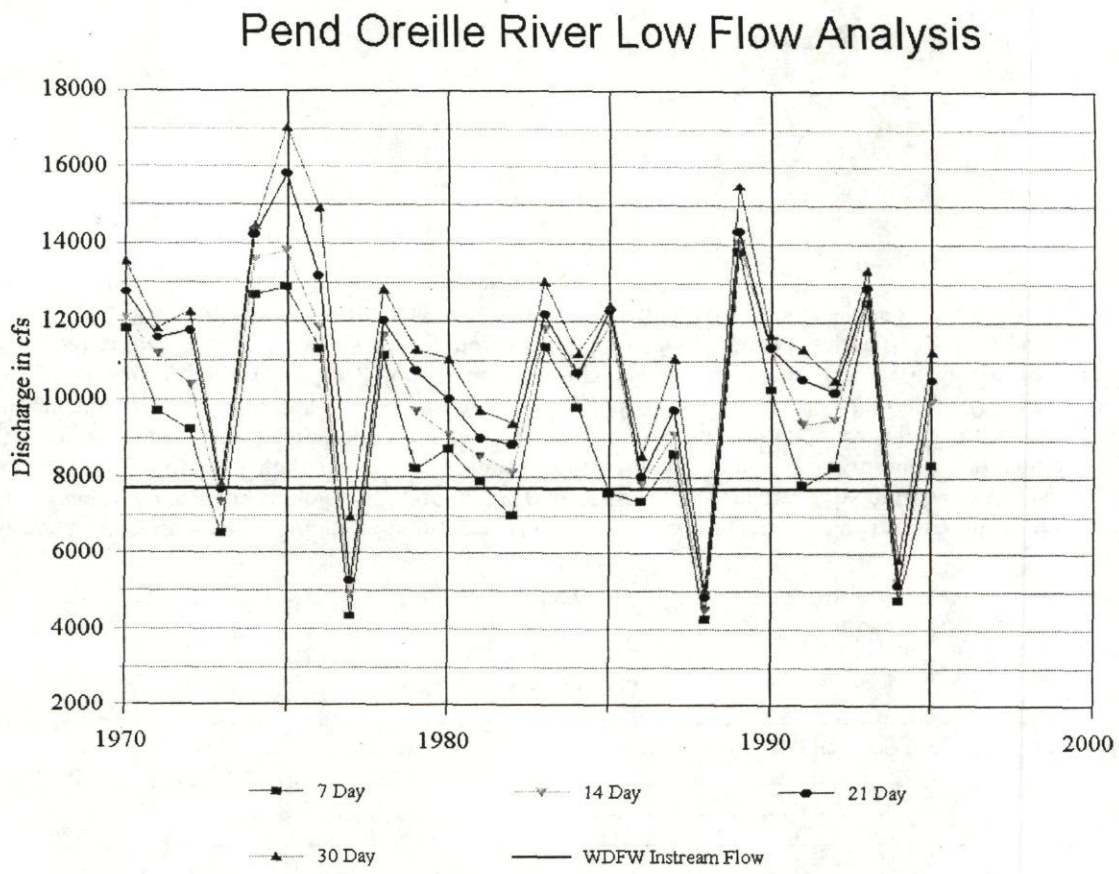
ENGINEERING DATA
OK CAC



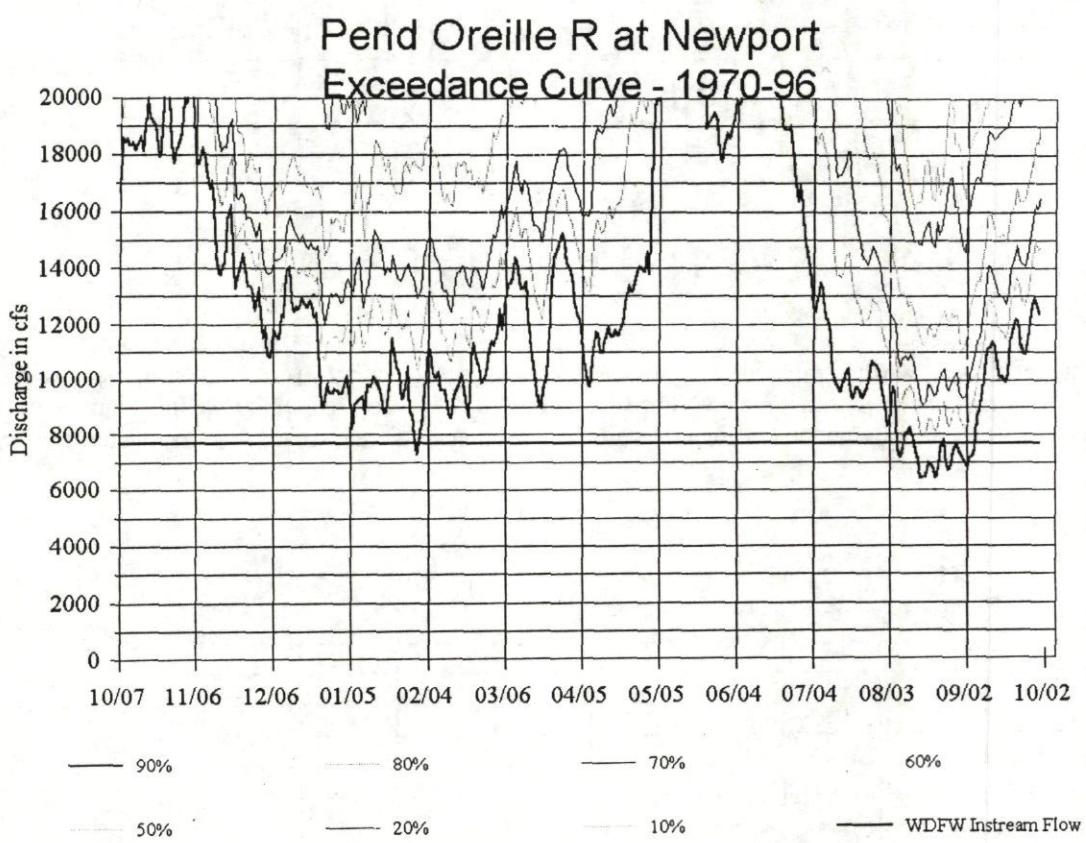
With the construction of the Albeni Falls dam in 1952, the character of the daily discharge changed dramatically from a riverine regime to an impounded, highly regulated, flow regime. The next hydrograph depicts the late summer, daily average discharge for a ten-year period in the 1980s through the early 1990s. The highly variable discharge data reflects the flows that result from the power generation demands that are placed on the river.



Trying to devise a methodology to implement the WDFW recommended instream flow given the current flow regime of the river requires some careful consideration of the day-to-day variability of the discharge. Given its fluctuations, just simply regulating junior water rights every time the daily average flow drops below 7700 cfs (the recommended instream flow) would be inappropriate and unworkable. Examining the data in the hydrograph indicates that the day-to-day variability is on the order of 5,000 cfs. Looking at a suite of duration frequency low flow analyses (7-day, 14-day, 21-day, and 30-day) for the 1970 through 1996 period allows us to get a better handle on when the flow in the river is truly flowing at a rate that is below the recommended instream flow. By looking at the actual daily flow data, we can see that three water years during the period 1970 – 96 exhibited sustained, low flow periods that were lower than the 7700 cfs threshold (1977, 1988, and 1994). The data from the duration frequency analysis shows that using a 14-day low flow criteria gives us the best opportunity to identify the low flow events.



Calculating the exceedance probability for the daily average flows for the period 1970 – 96 allows us to see how frequently (on a yearly basis) and for what duration (how many weeks during each year) the flows on the Pend Oreille River can be expected to be below the recommended instream flow. The following graph demonstrates that on average, we can expect the summer low flows in the Pend Oreille River will be above the instream flow 8 to 9 times out of ten years. During that one in ten year event when the flow in the river is below the recommended flow, the low flow will last for approximately one month (typically August).



Therefore, this permit shall be conditioned that all diversion shall cease when the 14-day average flow in the Pend Oreille River falls below 7700 cfs (as measured at the Pend Oreille River at Newport gage) as recommended by WDFW.