



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

REPORT OF EXAMINATION
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 June 14, 1999	APPLICATION NUMBER S2-29862	PERMIT NUMBER	CERTIFICATE NUMBER
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NAME James Homola			
ADDRESS (STREET) PO Box 159	(CITY) Carbonado	(STATE) Washington	(ZIP CODE) 98323

PUBLIC WATERS TO BE APPROPRIATED

SOURCE Two Springs		
TRIBUTARY OF (IF SURFACE WATERS) Carbon River		
MAXIMUM CUBIC FEET PER SECOND	MAXIMUM GALLONS PER MINUTE 0.09	MAXIMUM ACRE FEET PER YEAR 0.4
QUANTITY, TYPE OF USE, PERIOD OF USE 0.4 Acre-feet per year	Single domestic supply (Hydro-electric Generation)	Year-round, as needed

LOCATION OF DIVERSION/WITHDRAWAL

APPROXIMATE LOCATION OF DIVERSION--WITHDRAWAL
Spring 1: (Hydro generation) located 2500 feet West and 500 feet South of the center of Section 32.
Spring 2: (Domestic supply) located 2250 feet West and 700 feet South of the center of Section 32.

LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION) SW 1/4 SE 1/4	SECTION 32	TOWNSHIP N. 19	RANGE, (E. OR W.) W.M. 6E	W.R.I.A. 10	COUNTY Pierce
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RECORDED PLATTED PROPERTY

LOT 3	BLOCK 3104	OF (GIVE NAME OF PLAT OR ADDITION) Carbon River Estates
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LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED

Lots 1, 2 and 3 of the Carbon Ridge Estates. All that portion of the Southwest quarter and the Southwest quarter of the Southeast quarter of Section 32. T. 19 N., R. 6 E. W.M. lying between the A.P. Tubbs County Road and the Carbon River.

2 Springs

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE: Started	COMPLETE PROJECT BY THIS DATE: Completed	WATER PUT TO FULL USE BY THIS DATE: In-use
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REPORT

BACKGROUND:

On June 14, 1999 James Homola of Carbonado, Washington applied for a permit to appropriate public surface water from two springs at a withdrawal rate of 0.09 cfs for single domestic supply and hydro electrical power generation. The project site is located in Pierce County within the Puyallup-White River Water Resource Inventory Area, (WRIA) 10. This water right application is S2-29862.

A legal notice of the proposed appropriation was published in the Puyallup County Herald on July 23rd and 30th, 1999. There were no protests to the application.

Based on my investigation, and the provisions of Chapters 90.03 Revised Code of Washington, I recommend the issuance of a water right permit.

INVESTIGATION:

In consideration of this application, I reviewed the information submitted with the application, relevant reports, and Department of Ecology's records, including stream-flow and precipitation data. References used included the following documents:

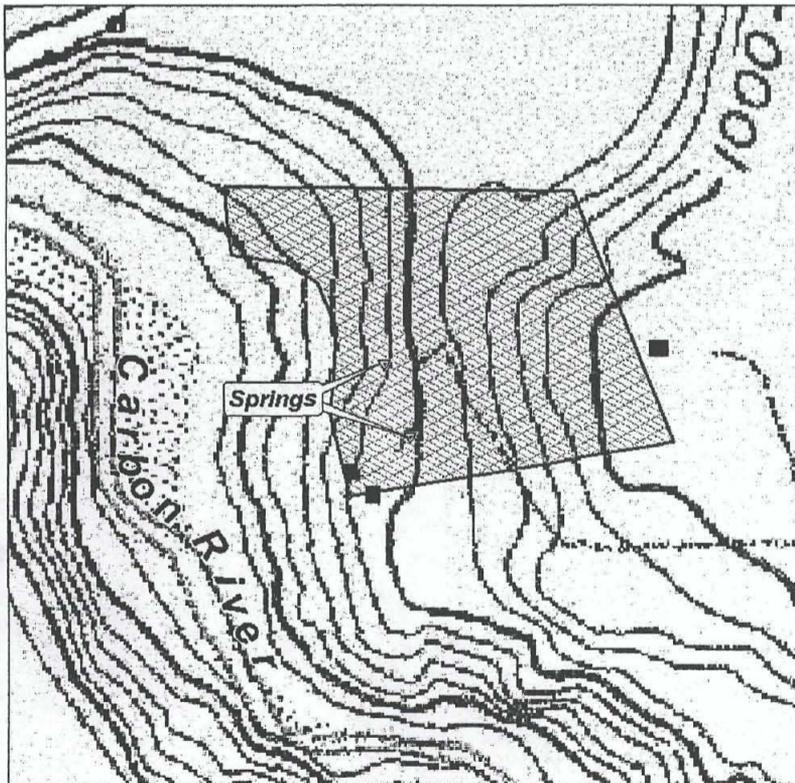
- Salmon Habitat Limiting Factors Report for the Puyallup River Basin (Water Resource Inventory Area 10), John Kerwin, Washington Conservation Commission, Olympia, Washington, July 1999.
- Catalog of Washington Streams and Salmon Utilization Volume 1 (WDOF 1975)

I visited the site, accompanied by Cynthia Knudsen of this office on November 23rd, 2005. We were met at the site by Mr. Homola, who showed me the springs and associated works.

The project site is Mr. Homola's private residence located at 18618 266th Avenue Court near the small community of Carbonado. Mr. Homola owns approximately 16 acres of land adjacent to the Carbon River. He utilizes water from two springs to provide potable water and electrical needs. With this permit application; Mr. Homola seeks authorization for his existing use of water.

Project Description

Both springs utilized by Mr. Homola emerge from the side of a steep embankment, with the Carbon River flowing at the toe of the slope. The slopes of the canyon support dense mixes of conifers and deciduous forest while the lower slopes are often sheer rock faces. An abandoned railroad grade parallels the river. Springs discharging along the slopes empty into the Carbon River through a series of wood stave culverts beneath the old rail line.

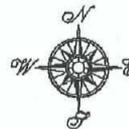


WASHINGTON STATE
DEPARTMENT OF
ECOLOGY

S2-29862

Homola parcel

Homola PODs



Spring 1 is utilized for electrical generation. This system is non-consumptive, with all water produced by this spring ultimately discharging back to the Carbon River. Water is collected in basin and piped approximately 400 feet (4-inch PVC, reduced to 2-inch) to a small 3.5 amp\200 watt turbine. The turbine charges several banks of batteries located in an outbuilding near the residence.

Spring 2 is used for domestic supply. The distribution system for this spring is similar to Spring 1 with an upper collection basin and PVC piping that conveys water to the intake. Mr. Homola has equipped the system with a ram pump, capable of generating adequate lift to pump the water uphill 735 feet (188 vertical feet) to a 1,000 gallon storage reservoir near his home.

Neither of the springs tapped by Mr. Homola produces a discernable creek. Water that is not captured in the upper collection basins combines with water that has passed through the electrical turbine and flows down hill to the base of the ravine and into the Carbon River. Due to the steepness of the terrain, and presence of the railroad grade, there is no potential for fish passage, except where areas were small streams flow over the bottomlands.

Area Hydrogeology

The major surface water feature in this area is the Carbon River. The Carbon River is a glacial fed tributary of the Puyallup River basin that contributes approximately 30 percent of the Puyallup River flow. The river flows approximately 32 miles from the Carbon and Russell glaciers on Mt. Rainier, and has nineteen tributary streams. The Carbon River is considered to represent the largest and most productive habitat available for natural salmonid production in the Puyallup River basin. The Carbon River joins the Puyallup River at Orting.

The water source for this application is two unnamed springs that discharge from the side of a steep hillside to the Carbon River near river mile (RM) 10.

The Homola property is located along the stretch of river generally referred to as the Carbon River gorge. This area was affected by the continental glacier that covered Puget Sound, but since glacial times the Carbon River cut the gorge into the sandstone, shale and coal of the Carbonado Formation. Precipitation in the upland area recharges the underlying aquifers and provides flow to the numerous springs that discharge along the cliffs that line the gorge.

Given the rural nature of this area, well drilling records are sparse. Ecology's data base indicates approximately 18 wells have been drilled within an approximate one mile radius of the Homola property. Only 4 wells can be considered to produce an adequate quantity of water to meet domestic needs for a residence. Well yields for the remaining wells are typically very low, 8 of them producing less than 5 gpm, which is considered less than adequate to supply in-house domestic needs. Four wells produce between 6 and 12 gpm. Two wells were decommissioned because they were dry holes. Well reports for all wells are similar and describe penetrating layers of sand and gravel followed by alternating layers of coal and sandstone.

Effect of the Proposed Groundwater Withdrawal on the Puyallup/White River

Under the provisions of Chapter 173-510 Washington Administrative Code (WAC), Instream Resources Protection Program - Puyallup River Basin, Water Resources Inventory Area 10, minimum flows were established for the Puyallup and Carbon Rivers.

While the instream flows established at gages in the Puyallup and Carbon Rivers are not consistently met, under WAC 173-510-070(2), in-house single domestic use is exempt from the basin closure, as is non-consumptive uses such as the Homola hydro-electric turbine.

Neighboring Water Users

The Homola property is located in a very rural area, and a review of Department of Ecology records indicates that no other water right certificates have been issued within an approximately 3 mile radius of the site. Within this same corresponding area, I noted only 4 claims on file with the Department of Ecology. These claims were generally filed on exempt wells for domestic purposes.

The Homola springs are tributary to the Carbon River. Ecology records indicate that 5 surface water certificates have been previously issued on the Carbon River, as well as 4 claims. These water rights are all located downstream from the Homola diversion.

File #	Person	Doc	Date	Use	Qi	Qa	Acres	TRS
S2-28034	Glacier Water Co	Cert	1/2/1991	CI	0.3	8		17.0N 07.0E 04
S2-28946	Glacier Water Co	Cert	7/12/1993	CI	0.3	32		17.0N 07.0E 04
S2-051335CL	KIENAST SR. JAMES A.	Claim S		ST,DG				19.0N 04.0E 13
7146	WILLIAMS C L	Cert	6/21/1955	IR	0.07	10	5	19.0N 04.0E 13
4319	NEELEY F L	CertChg	5/16/1951	IR	0.1		10	19.0N 04.0E 24
S2-139109CL	GRAHAM FRANCES L	Claim S		ST,IR				19.0N 05.0E 19
9545	Puget Sound Sod Growers	Cert	8/11/1964	IR	0.3	60	30	19.0N 05.0E 19
S2-147134CL	LARSON LEE R	Claim L		DG				19.0N 05.0E 26
S2-128182CL	BURTON HAROLD T	Claim S		IR,DG				19.0N 05.0E 27

While authorization of the Homola permit will slightly reduce the amount of water flowing in the Carbon River, the actual consumptive diversion is very small. This permit will be issued in the requested amount of 0.9 cfs, however, all of the hydroelectric water system, and a large portion of the domestic spring overflow is not consumptive and contributes directly to the Carbon River. Given the de minimus amount of water used by Mr. Homola's operations and the relative volume of Carbon River flows which average 429 cfs (period of record 1930-2002[USGS Station]), this appropriation will not impair existing water right holders.

Fisheries Concerns

Steve Boessow with the State Department of Fish and Wildlife reviewed this application are provided the following comments:

The Carbon River is inhabited by chinook, coho, chum, pink and steelhead salmon, Dolly Varden/bull trout, cutthroat trout and other game and non-game fish species. Since the proposed water uses are primarily (or entirely) non-consumptive, and since this is above anadromous fish access, I don't believe withdrawal will be detrimental to any fish resources.

Mr. Boessow recommended approval of this water right, contingent on the applicant securing any additional relevant permits, such as a Hydraulic Project Approval.

According to the *Salmon Habitat Limiting Factors Report for the PUYALLUP RIVER BASIN, July 1999*, water quantity is not believed to be a limiting factor for fish production in this reach of the Carbon/Puyallup River basin. Because of the relative lack of human development, structures and influence in this river reach, there is believed to be only minor impacts to water quality in this reach. The single most important water quantity controlling feature in this reach is that the water source is glacial. Acting as a steady, continuous water source, but also subjecting the channel to catastrophic natural water flow events, the glacial source serves to control the quantity function in a process that is assumed to be relatively uninfluenced by human intervention.

Water Demand

Water demand for domestic water use should not exceed an average of 350 gallons per day. This amounts to 0.40 acre-feet per year.

CONCLUSIONS:

Chapter 90.03 RCW authorizes the appropriation of public surface water for beneficial use and describe the process for obtaining water rights including the process to amend or change existing rights. Laws specifically governing the water right permitting process are Chapter RCW 90.03.250 through 90.03.340 RCW and for ground water within Chapter 90.44.050 through 90.44.080 RCW.

Under state law the following four criteria must be met for a permit to be approved:

- Water must be available
- There must be no impairment of existing rights
- The water use must be beneficial
- The water use must not be detrimental to the public interest

Water Availability

The source of this appropriation is two unnamed springs, tributary to the Carbon River. I have observed these sources, and from discussions with the applicant determined that they provide a good reliable source of water for his domestic needs. It is concluded that water is physically available for appropriation in the requested quantity.

This project is located within the Carbon River drainage, in WRIA 10. Under WAC 173-510 instream flows have been established for the Puyallup River and its tributaries. There are no public utilities in the area that may provide an alternate water source. Presently, there is no domestic water well on site. Under WAC 173-510-070(2), in-house single domestic use is exempt from the basin closure. Appropriation of water for domestic use, as proposed by the applicant is permissible. Non-consumptive water use such as for hydro-electrical power generation may be permitted provided that it does not conflict with the intent of the WAC.

Impairment of Existing Rights

A review of Ecology's water right records indicate that very few senior surface water certificates have been issued on the Carbon River. The area is sparsely developed. Given the de minimus amount of water used by Mr. Homola, this appropriation will impair existing water right holders.

Beneficial Use

According to RCW 90.14.031, both domestic supply and hydro-electrical power generation are considered to be beneficial uses of water.

Public Interest

No detriment to the public interest was identified during the investigation of the subject application. The following were considered in reaching this conclusion:

This water system serves an existing rural home in a remote area. The Homala home and water supply system are designed to be low impact and result in minimal environmental disruption. The domestic water supply ram and hydro-turbine both use gravity to operate eliminating the need for conventional power supplies.

In accordance with Chapters 90.03 and 90.54 RCW, I find that water is available for appropriation from the source in question for single domestic supply and hydro-electrical power generation.

RECOMMENDATIONS:

I recommend that this application be approved and a permit be issued to allow maximum instantaneous appropriation of 0.09 cfs and 0.4 acre-feet per year or single domestic supply and power generation the period of use is year-round as needed.

In accordance with Chapters 90.03 and 90.44 RCW, I find there is water available for appropriation from the source in question, that the appropriation as recommended is a beneficial use, and should not impair existing rights or be detrimental to public welfare.

This permit is subject to the following provisions.

PROVISIONS:

An approved measuring device shall 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.

Water use data shall be recorded annually and maintained by the property owner for a minimum of five years, and shall be promptly submitted to Ecology upon request.

The permit is 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 Capital Way North, Olympia, Washington, 98501-1091, Attention: Habitat Management Division, (360) 902-2534, to obtain specified requirements for your project.

The Water Resources Act of 1971, Chapter 90-54 RCW specifies certain criteria regarding utilization and management of the waters of the State in the best public interest. Favorable consideration of this application has been based on sufficient waters available, at least during portions of the year. However, it is pointed out to the applicant that this use of water may be subject to regulation at certain times, based on the necessity to maintain water quantities sufficient for preservation of the natural environment.

REPORTED BY: Jess E. Wash Date: 4/12/06

FINDINGS OF FACT AND DECISION

Upon reviewing the above report, I find all facts, relevant and material to the subject application, have been thoroughly investigated. Furthermore, I find water is available for appropriation and the appropriation as recommended is a beneficial use and will not be detrimental to existing rights or the public welfare.

Therefore, I ORDER a permit be issued under Surface Water Application Number S2-29862, subject to existing rights and indicated provisions, to allow appropriation of public surface water for the amount and uses specified in the foregoing report.

Signed at Olympia, Washington, this 12th day of April, 2006.

Thomas Loranger

Thomas Loranger
Water Resources Section Manager
Southwest Regional Office