



Oregon Water Resources Department
 725 Summer Street NE, Suite A
 Salem OR 97301-1266
 503-986-0900
 www.oregon.gov/owrd

Application for Instream Water Right Certificate

SECTION 1: ORGANIZATION INFORMATION AND SIGNATURE

Organization Information

NAME OREGON DEPT. OF FISH AND WILDLIFE		PHONE 503-947-6000	FAX 503-947-6202
ADDRESS 4034 FAIRVIEW INDUSTRIAL DR. SE			CELL
CITY SALEM	STATE OR	ZIP 97302-1142	E-MAIL *

Agent Information – The agent is authorized to represent the applicant in all matters relating to this application.

AGENT / BUSINESS NAME ANNA PAKENHAM STEVENSON / OREGON DEPT. OF FISH AND WILDLIFE		PHONE 503-947-6084	FAX 503-947-6202
ADDRESS 4034 FAIRVIEW INDUSTRIAL DR. SE			CELL
CITY SALEM	STATE OR	ZIP 97302-1142	E-MAIL * ANNA.P.STEVENSON@STATE.OR.US

* By providing an e-mail address, consent is given to receive all correspondence from the Department electronically. (Note that paper copies of the Final Order documents will also be mailed.)

Anna Pakenham Stevenson
Water Program Manager

12/1/16

Applicant Signature

Print Name and Title

Date

Applicant Signature

Print Name and Title

Date

SECTION 2: NOTIFICATION TO DEQ, ODFW, AND PARKS

Please indicate the date you notified other state agencies of your intent to file an instream water right application.

Oregon Department of Environmental Quality was notified on: October 17 2016

Oregon Department of Fish and Wildlife was notified on: N/A

Oregon Parks and Recreation Department was notified on: October 17 2016

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SECTION 3: NOTIFICATION TO AFFECTED LOCAL GOVERNMENTS

Please provide copies of letters of your intent to file an instream water right application to each affected local government within whose jurisdiction the instream use is proposed. Affected local government means any city, county or metropolitan service district formed under ORS Chapter 268 or an association of local governments performing land-use planning functions under ORS 197.190.

SECTION 4: SOURCE AND REACH

Stream or lake name: East Fork Hood River Tributary to: Hood River

If the source is a stream, indicate the reach delineated by river mile (the upstream point to the downstream point) of the proposed instream water right:

In the East Fork Hood River, tributary to Hood River, beginning at river mile 6.2 in the SENW quarter of Section 28, Township 1 N, Range 10 E W.M. in Hood River County (45.5451, -121.5814), and continuing upstream to river mile 16.8, just above the confluence of Polallie Creek and the East Fork Hood River in the SESE quarter of Section 5, Township 2 S, Range 10 E W.M. in Hood River County (45.4185, -121.5685).

If the source is stored water that is authorized under a water right permit, certificate, or decree, attach a copy of the document or list the document number (for decrees, list the volume and page, or decree name). _____

If the source is stored water and you do not, or will not, own the reservoir(s), please enclose a copy of your written agreement with the owner of the reservoir to release flows identified in this application.

SECTION 5: PUBLIC USES AND AMOUNTS

The public uses to be served by the requested instream water right are: For the conservation, maintenance and enhancement of aquatic and fish life, wildlife, and fish and wildlife habitat. Applied flows include water for fish and wildlife migration, spawning, nesting, brooding, egg incubation, larval or juvenile development, juvenile and adult rearing and aquatic life. Flow levels will vary based on life cycle and life stage development needs.

The monthly (or half-monthly) flows in cubic feet-per-second (CFS) or acre-feet (AF) or by lake elevation (LE) necessary to support the public uses are:

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Unit
175	175	175	175	175	175	110	110	145	145	175	175	CFS

If this is a multi-agency request, please indicate the monthly (or half-monthly) flows in cubic feet-per-second (cfs) or acre-feet (af) or by lake elevation (le) that are necessary to support the public uses for each category of public use.

USE	J	F	M	A	M	J	J	A	S	O	N	D	
													<input type="checkbox"/> CFS
													<input type="checkbox"/> AF
													<input type="checkbox"/> LE
													<input type="checkbox"/> CFS
													<input type="checkbox"/> AF
													<input type="checkbox"/> LE

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SECTION 6: DATA, METHODS, AND COMPLIANCE

Please describe the technical data and methods used to determine the requested amounts.

ODFW relied on an IFIM/PHABSIM study to determine the requested amounts (Hood River Tributaries Instream Flow Study, Normandeau Associates 2014. See attached). This method quantifies physical habitat at different streamflow rates for all life stages of fish, based on stream hydraulics (Bovee et al 1998; Bovee 1997; Bovee 1982). It typically requires measurements at one to three flows, and uses hydraulic simulation to predict habitat over a wide range of flows. Results are tabulated for spawning and incubation, fry, juvenile and adult rearing, and passage flows. Criteria for spawning, rearing, and incubation include depth, velocity, substrate and cover. Fish passage is based on depth and velocity only.

ODFW used the habitat vs. flow relationships produced by this study to derive recommended flows in the East Fork Hood River. ODFW used the habitat vs. flow relationships for appropriate species and life stages to recommend flow levels specifically designed to meet the seasonal biological requirements of important fish species in the East Fork Hood River. These recommended flows were used in this instream water right application. The desired flow levels are determined by examining habitat vs. flow over the range of flows simulated, for each species and life stage according to the appropriate time periods.

Please provide written documentation of how your agency complied with the requirements contained in your own administrative rules for instream water rights, including application of the required methods to determine requested flows.

The methodology used in the study was IFIM/PHABSIM (Hood River Tributaries Instream Flow Study, Normandeau Associates 2014. See attached). As such, it conformed to the procedures laid out in the agency's rules- Determination of Instream Flow Measurement Methodologies, Oregon Administrative Rules Division 400, 635-400-0015. Specifically, the studies on the East Fork Hood used IFIM/PHABSIM to produce a relationship between physical habitat and flow. ODFW is satisfied that correct field and computer procedures were followed to produce the results (Bovee et al 1998; Bovee 1997; Bovee 1982). ODFW examined and interpreted the results of the study to determine the requested flows.

ODFW will also coordinate with OWRD instream water rights monitoring (635-400-0025). Specifically, ODFW will coordinate with OWRD to develop monitoring plans for instream water rights and to revise the existing Memorandum of Understanding between the Department and WRD to include issues related to instream water rights, such as measuring, monitoring and enforcement of instream water rights.

References:

Bovee, K.D., B.L. Lamb, J.M. Bartholow, C.B. Stalnaker, J. Taylor, and J. Henriksen. 1998. Stream habitat analysis using the Instream Flow Incremental Methodology. U.S. Geological Survey, Biological Resources Division Information and Technology Report USGS/BRD-1998-0004. viii+131 pp. <https://www.fort.usgs.gov/publication/3910>

Bovee, K.D. 1997. Dave collection procedures for the Physical Habitat Simulation System. U.S. Geological Survey, Biological Resources Division Information and Technology Draft Report USGS/BRD-1997-146pp. <https://www.fort.usgs.gov/sites/default/files/products/publications/20002/20002.pdf>

Bovee, K.D. 1982. A guide to stream habitat analysis using the instream flow incremental methodology. Instream Flow Information Paper 12. U.S. Fish and Wildlife Service FWS/OBS-82/26. 248 pp. <http://www.arlis.org/docs/voll/Susitna/1/APA193.pdf>

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SECTION 7: WITHIN A DISTRICT

If the reach is located within an irrigation district or other water district, please provide their contact information.

Irrigation District Name Middle Fork Irrigation District	Address 8235 Clear Creek Rd. PO Box 291	
City Parkdale	State OR	Zip 97041

Irrigation District Name Mt. Hood Irrigation District	Address PO Box 426	
City Parkdale	State OR	Zip 97041

Water District Name Crystal Springs Water District	Address 3006 Chevron Drive PO Box 186	
City Odell	State OR	Zip 97044

SECTION 8: REMARKS

Use this space to clarify any information you have provided in the application. _____

SECTION 9: MAP

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YOU ARE ENCOURAGED TO PROVIDE THIS INFORMATION:

A means and location for measuring the instream water right:

The strategy and responsibility for monitoring flows for the instream right:

Any provisions needed for managing the water right to protect the public uses: None

WE ARE RETURNING YOUR APPLICATION FOR THE FOLLOWING REASON(S):

- SECTION 1: _____
- SECTION 2: _____
- SECTION 3: _____
- SECTION 4: _____
- SECTION 5: _____
- SECTION 6: _____
- SECTION 7: _____
- SECTION 8: _____
- SECTION 9: _____
- Other: _____

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