

DEQ DIVISION 33 APPLICATION REVIEW SHEET

Recommendations for Water Right Applications that may affect the
Habitat of Sensitive, Threatened or Endangered Fish Species, OAR 690-33-310 through 340.

Application #: G 18321 Applicant's Name: Jan H Enterprises

1) Is there a connection to a 303(d) listed water quality limited water body? ☐ NO ☒ YES

Explain: Silver Creek is a tributary of the Pudding River. The Pudding and tributaries have TMDLs or are identified as water quality limited and needing TMDLs as follows:

Molalla-Pudding 2018 TMDL Parameter Reductions	
Mercury:	☐ 27% Reduction Willamette Basinwide-All Subbasins
Temperature:	☐ Attainment and preservation of effective shade levels on smaller tributaries associated with system potential vegetation will eliminate most anthropogenic nonpoint source heat loads. Surrogate measure is percent effective shade targets and a heat load equivalent of 0.05 °C of the Human Use Allowance. Other important measures— preserving and restoring cool water refuges where salmonids rear and migrate to when the river warms up in the summer; restore instream flow quantity.
Bacteria:	☐ 75% to 87% reduction summer ☐ 70% to 92% reduction fall-winter-spring
Iron:	☐ 3-6 mg/l total suspended target to meet 19% to 96% reduction based on stream flow Pudding River and Zollner Creek Watersheds.
Legacy	
Pesticides:	☐ 30% reduction DDT Pudding River and Tributaries ☐ 90% reduction Dieldrin Pudding River and Tributaries ☐ 15 mg/L Pudding River In stream total suspended solids targets
Molalla-Pudding 303(d) 2012 Water Quality Limitations	

Molalla-Pudding 303(d) 2012 Water Quality Limitations – Pudding River

Parameter	Season	Criteria	Beneficial Use	Status
Phosphate Phosphorus	Summer	Total phosphates as phosphorus (P): Benchmark 50 ug/L in streams to control excessive aquatic growths	Aquatic life	Potential concern
Dissolved Oxygen	January 1 - May 15	Spawning: Not less than 11.0 mg/L or 95% of saturation	Resident trout spawning	TMDL
Dissolved Oxygen	Year Round (Non-spawning)	Cool water: Not less than 6.5 mg/l	Cool-water aquatic life	TMDL
Biological Criteria	Year Round	Biocriteria: Waters of the state must be of sufficient quality to support aquatic species without detrimental changes in the resident biological communities.	Aquatic life	303(d) TMDL Needed
Dissolved Oxygen	October 15 - May 15	Spawning: Not less than 11.0 mg/L or 95% of saturation		303(d) TMDL Needed
Guthion	Year Round	Table 20 Toxic Substances	Aquatic life	303(d) TMDL Needed
Lead	Year Round	Table 20 Toxic Substances	Aquatic life	303(d) TMDL Needed

2) What is the potential for this use to impact a water quality limited water body: ☒ HIGH ☐ MEDIUM ☐ LOW

Explain: The ground water review indicates that GW is over appropriated and the proposed GW use will have the potential for substantial interference with surface water availability. Surface water is not available Jun1 thru Oct 3. Withdrawal could affect quantity and

quality in critical summer months when temperatures are already too warm. Silver Cr-Pudding R has an ISWR((59455). Based on water availability, the cumulative withdrawal is likely to cause the waterbody to exceed the load capacity or HUA for temperature or other flow dependent parameters Jun-Sept.

Silver CR>Pudding R – Willamette (Water Availability)

Watershed ID	Exceedance Level	Month	Natural Stream Flow	Consumptive Use	Expected Stream Flow	Instream Requirement	Net Water Available	Percent of flow
169	50	JAN	342	7.58	334	60	274	2
169	50	FEB	320	7.42	313	60	253	2
169	50	MAR	283	1.28	282	60	222	0
169	50	APR	209	1.39	208	60	148	1
169	50	MAY	119	2.46	117	60	56.5	2
169	50	JUN	62.4	5.28	57.1	50	7.12	8
169	50	JUL	30.8	7.27	23.5	23	0.532	24
169	50	AUG	14	6.31	7.69	23	-15.3	45
169	50	SEP	18	4.42	13.6	23	-9.42	25
169	50	OCT	32.1	1.24	30.9	60	-29.1	4
169	50	NOV	191	4.86	186	60	126	3
169	50	DEC	377	8.27	369	60	309	2
169	50	ANN	120000	3480	117000	36100	83900	3

3) If the answer to question (2) is HIGH or MEDIUM, will the proposed use still result in diminution of water quality for the habitat of sensitive, threatened, or endangered fish species? ☐ NO ☒ YES

If YES, how?

Temperature and dissolved oxygen are a flow-related parameter. When streamflow is reduced, heat capacity is reduced. As a waterbody heats up, dissolved oxygen concentrations decline. By reducing streamflow, this use is likely to exacerbate the temperature and dissolved oxygen impairments. The assimilative capacity of a waterway is flow dependent. Reduced flows can increase the concentrations parameters.

Flow reductions may impact the assimilative capacity of the waterbody, increasing the concentration of some TMDLs and 303(d) listings.

4) Can conditions be applied to mitigate the impact of the use?

☐ NO ☒ YES; recommend from Menu of Conditions and skip to question 7.

- WQ: The use may be restricted if the quality of the source stream or downstream waters decrease to the point that those waters no longer meet state or federal water quality standards due to reduced flows.
- Use of water should be limited when it interferes with any prior instream surface water rights.
- If the facts of the application change, DEQ should be notified and given the opportunity to submit updated comments.

5) If conditions cannot be identified to offset impacts, would the proposed use affect the Habitat of Sensitive, Threatened, or Endangered Fish Species? ☐ NO ☒ YES

If YES, please explain: Refer to 3) above and increases in temperature or reduction in dissolved oxygen would impact aquatic species referenced in 5). The waterbody is already limited for temperature in critical summer months. Any additional heat would further impact this habitat.

6) If a permit is issued, are there any conditions you would like to see included in the permit?

- If the facts of the application change, DEQ should be notified and given the opportunity to submit updated comments.

7) Your recommendation under OAR 690-033-0330 (2): ☒ Approval with conditions
☐ Approval without conditions
☐ Denial

DEQ Representative signature: Nancy Gramlich Date: January 25, 2017

MENU OF CONDITIONS FOR WRD, ODFW, DEQ AND AG

The following condition will be included in any permit issued unless ODFW explicitly requests that it be omitted:

The permittee shall not construct, operate or maintain any dam or artificial obstruction to fish passage in the channel of the subject stream without providing a fishway to ensure adequate upstream and downstream passage for fish, unless the permittee has requested and been granted a fish passage waiver or exemption through the Oregon Department of Fish and Wildlife. The permittee is hereby directed to contact an Oregon Department of Fish and Wildlife Fish Passage Coordinator before beginning construction of any in-channel obstruction.

- fishself** The permittee shall install, maintain, and operate fish screening and by-pass devices consistent with current Oregon Department of Fish and Wildlife (ODFW) standards. Fish screening is to prevent fish from entering the proposed diversion while by-pass devices provide adequate upstream and downstream passage for fish. The required screen and by-pass devices are to be in place and functional prior to diversion of any water. Permittee shall obtain written approval from ODFW that the installation of the required screen and by-pass devices meets the state's criteria or the permittee shall submit documentation that ODFW has determined screens and/or by-pass devices are not necessary.
- fishapprove** The permittee shall install, maintain, and operate fish screening and by-pass devices consistent with current Oregon Department of Fish and Wildlife (ODFW) standards. Fish screening is to prevent fish from entering the proposed diversion while by-pass devices provide adequate upstream and downstream passage for fish. The required screen and by-pass devices are to be in place and functional, and approved in writing by ODFW prior to diversion of any water. The permittee may submit evidence in writing that ODFW has determined screens and/or by-pass devices are not necessary.
- fishdiv33** If the riparian area is disturbed in the process of developing a point of diversion, the permittee shall be responsible for restoration and enhancement of such riparian area in accordance with ODFW's Fish and Wildlife Habitat Mitigation Policy OAR 635-415. For purposes of mitigation, the ODFW Fish and Wildlife Habitat Mitigation Goals and Standards, OAR 635-415, shall be followed.
- The use may be restricted if the quality of the source stream or downstream waters decrease to the point that those waters no longer meet existing state or federal water quality standards due to reduced flows.
- The permittee shall install, maintain, and operate fish screening and by-pass devices consistent with current Oregon Department of Fish and Wildlife (ODFW) standards. Fish screening is to prevent fish from entering the proposed diversion while by-pass devices provide adequate upstream and downstream passage for fish. The required screen and by-pass devices are to be in place and functional, and approved in writing by ODFW prior to diversion of any water. The permittee may submit evidence in writing that ODFW has determined screens and/or by-pass devices are not necessary.
- fishmay** Notwithstanding that ODFW has made a determination that fish screens and/or by-pass devices are not necessary at the time of permit issuance, the permittee may be required in the future to install, maintain, and operate fish screening and by-pass devices to prevent fish from entering the proposed diversion and to provide adequate upstream and downstream passage for fish.
- b52** Water may be diverted only when Department of Environmental Quality sediment standards are being met.
- b5** The water user shall install and maintain adequate treatment facilities meeting current DEQ requirements to remove sediment before returning the water to the stream.
- b51a** The period of use has been limited to _____ through _____.
- b57** Before water use may begin under this permit, a totalizing flow meter must be installed at each diversion point.
- b58** Before water use may begin under this permit, a staff gage that measures the entire range and stage between full reservoir level dead pool storage must be installed in the reservoir. The staff gage shall be United States Geological Survey style porcelain enamel iron staff gage style A, C, E or I. Additionally, before water use may begin under this permit, if the reservoir is located in channel then weirs or other suitable measuring devices must be installed upstream and downstream of the reservoir, and, a gated valve outlet must be installed. A written waiver may be obtained from the local Watermaster if in his judgment the installation of the weir(s) will provide no public benefit.
- futile call** The use of water allowed herein may be made only at times when waters from the (NAME OF SURFACE WATER) would not otherwise flow into a tributary of the _____ River or sufficient water is available to satisfy all prior rights, including rights for maintaining instream flows.
- riparian** If the riparian area is disturbed in the process of developing a point of diversion, the permittee shall be responsible for restoration and enhancement of such riparian area in accordance with ODFW's Fish and Wildlife Habitat Mitigation Policy OAR 635-415. For purposes of mitigation, the ODFW Fish and Wildlife Habitat Mitigation Goals and Standards, OAR 635-415, shall be followed.
- wq** The use may be restricted if the quality of the source stream or downstream waters decrease to the point that those waters no longer meet existing state or federal water quality standards due to reduced flows.
- fence** The stream and its adjacent riparian area shall be fenced to exclude livestock.
- blv** Water must be diverted to a trough or tank through an enclosed water delivery system. The delivery system must be equipped with an automatic shutoff or limiting flow control mechanism or include a means for returning water to the stream source through an enclosed delivery system. The use of water shall not exceed 0.10 cubic feet per second per 1000 head of livestock.

