

# 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 18186 Applicant's Name: David Sather

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

Explain: Pudding River is listed for dissolved oxygen, temperature, biological criteria, *E. coli* and toxics. A TMDL exists for the Molalla-Pudding subbasin and includes temperature, bacteria, pesticides, nitrate, and metals.

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

Explain: The groundwater review indicates that although the wells will be drawing from a confined aquifer, there is still hydraulic connection between the wells and the Pudding River. Since water is not available to be withdrawn from the Pudding during much of the proposed months of use (June – October), withdrawals during that time could affect surface water quantity and quality in the Pudding River. The groundwater review also indicates that that the seasonal fluctuation in the alluvial aquifer may be increasing. Increased groundwater development in the area indicates a need for additional water-level monitoring if this permit is issued.

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. Be 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 of bacteria, pesticides, nitrate and metals.

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?

Threatened fish species potentially using the Pudding River during the proposed months of use for rearing and/or migration are Chinook, Coho, Steelhead, and Pacific lamprey.

Increases in temperature or a reduction in dissolved oxygen would impact sensitive, threatened, and endangered fish. Fish require different temperature and concentrations of dissolved oxygen based on their species and life history stage. Oregon's temperature and dissolved oxygen limits are based on the most sensitive species and life history stage at the location and season of concern. The temperature and dissolved oxygen concentrations of this waterbody are already known to be insufficient for the habitat of sensitive, threatened, and endangered fish. Any additional heat or reduction in dissolved oxygen concentrations would further impact the habitat.

The *E.coli* impacts may not result in the diminution of water quality for fish species. Oregon's *E. coli* concentration limits are based on human contact recreation standards, which is the most sensitive use for this parameter. Fish uses are less sensitive.

Flow reductions may impact the assimilative capacity of the waterbody, increasing the concentration of pesticides, nitrate and metals.

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

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

The February 19, 2016 initial review identifies that surface water is not available during the period June 1 through October 31. The withdrawals could affect surface water quantity and quality in the Pudding River.

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: Increases in temperature or a reduction in dissolved oxygen would impact sensitive, threatened, and endangered fish. Fish require different temperature and concentrations of dissolved oxygen based on their species and life history stage. Oregon's temperature and dissolved oxygen limits are based on the most sensitive species and life history stage at the location and season of concern. The temperature and dissolved oxygen concentrations of this waterbody are already known to be insufficient for the habitat of sensitive, threatened, and endangered fish. Any additional heat or reduction in dissolved oxygen concentrations would further impact the habitat

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

Water shall not be withdrawn from June 1 through October 31.

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.

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: Heather Tugaw Date: February 22, 2016

WRD Contact: **Caseworker:** Water Rights Division, 503-986-0900 / Fax 503-986-0901

## 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.