

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 #: S-87395 Applicant's Name: City of Harrisburg

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

Explain: The Willamette River (from its mouth to RM 186) is listed on the State's 303(d) list for exceedances of Oregon's temperature criteria. The water quality standards established by the DEQ are designed to protect each of the beneficial uses associated with the waterbody. In the case of temperature, the criteria are set to protect the beneficial uses of salmonid rearing and spawning, which are the most sensitive. The Total Maximum Daily Load (TMDL), finalized by the DEQ in 2006 and approved by the USEPA, demonstrates the connection between flow and river temperature in the Willamette Basin. Reduced flow in the Willamette has the potential to exacerbate water quality concerns such as elevated temperatures.

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

Explain: DEQ's modeling has determined that river temperature is related to flow during the summer. As flow is reduced, river temperatures are increased (see Willamette TMDL, Chapter 4 for a discussion of the sensitivity of the Willamette River to changes in flow). Oregon's water quality standards are established to protect all beneficial uses. In the case of temperature in the Willamette, the criteria protect the most sensitive beneficial uses of salmonid rearing and spawning. It is likely that this proposed water withdrawal has the greatest potential to impact the water quality-limited Willamette River during the summer months and the periods when flow in the river is low and salmon are present.

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? The DEQ regards the potential for this use to impact a water quality limited water body as being 'low' because of the relative magnitude of the requested withdrawal (2.61 cfs) when compared with the flow of the mainstem Willamette River. However, the TMDL demonstrates that during the summer months, the Willamette River is over-utilized from a thermal loading capacity so any additional withdrawal will decrease the river's thermal capacity and the river will get incrementally warmer. The temperature increase associated with this proposed withdrawal may not be measureable by itself, but the DEQ is concerned about the cumulative impact from all these new withdrawals on sensitive beneficial uses.

4) Can conditions be applied to mitigate the impact of the use? ☐ NO ☒ YES

Which conditions are recommended? (select from Menu of Conditions)

The DEQ recommends the application of the 'fishdiv33' condition to mitigate the impact of the use. This condition will address the disturbance of the riparian area, the potential to impact downstream water quality, as well as fish screening. We also recommend that the water right should be conditioned so that the diversion of water should only be allowed when the flows in the Willamette River meet or exceed ODFW's minimum recommended flows. These recommended flows are based on ODFW's Willamette River analysis and the Willamette Basin Biological Opinion issued by NOAA Fisheries. ODFW's recommended minimum fish flows should be met at the Salem stream-flow gage.

The direct impacts of the withdrawal on river temperature could also be mitigated via riparian restoration or other mechanisms which would reduce the thermal load to the river. In order to do so, the applicant would have to determine the precise impact of this proposed withdrawal on temperature by employing the Willamette temperature model which is available for download from the DEQ's web site.

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: As indicated, the Willamette River is home to a number of threatened and/or endangered fish species and reduced flow has the potential to exacerbate water quality problems such as elevated stream temperatures. Reduced flow can also hinder salmonid migration during critical times of the year.

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

Please see response to question #4. We would also like to see specific conditions incorporated into the permit (such as riparian restoration) that would mitigate the impacts of this withdrawal on river temperature.

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

DEQ Representative Signature: _____

Date: _____

11/18/09

WRD Contact: Caseworker: Michele McAleer 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 and 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.

State of Oregon
DEPARTMENT OF ENVIRONMENTAL QUALITY

FAX Transmittal Memorandum

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To: <u>Michele McAleer</u> Company or Department:	From: <u>JARED RUBIN</u> EUGENE OFFICE Dept. of Environmental Quality 1102 Lincoln St., Suite 210 Eugene, OR 97401
Phone:	Phone: (541) <u>687-7437</u>
FAX: <u>503-986-0901</u>	FAX: (541) 686-7551

Message:

☐ URGENT☐ Review☐ Please Comment☐ Please ReplyRe: S - 87395Hi Michele,Here is our Div. 33
feedback for
Harrisburg (S-87395).Be well,JARED