

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 #: R 88338 Applicant's Name: MCKEE PROPERTIES

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

Explain: The Upper Willamette subbasin and tributaries have TMDLs or are identified as water quality limited and needing TMDLS as follows:

Table 1 – TMDL & 303(d) Listings 2012

Water Body (Stream/Lake)	River Miles	Segment Length	Parameter	Season	Criteria	Beneficial Uses	Status
Little Luckiamute River	0 to 26.4	26.4	Temperature	Year Round (Non-spawning)	Salmon and trout rearing and migration: 18.0 degrees Celsius 7-day-average maximum	Salmon and trout rearing and migration	Cat 4A: Water quality limited, TMDL approved
Luckiamute River	0 to 60.1	60.1	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	Cat 5: Water quality limited, 303(d) list, TMDL needed
Luckiamute River	0 to 39.8	39.8	Dissolved Oxygen	January 1 - May 15	Spawning: Not less than 11.0 mg/L or 95% of saturation		Cat 5: Water quality limited, 303(d) list, TMDL needed
Luckiamute River	0 to 60.1	60.1	Temperature	Year Round (Non-spawning)	Salmon and trout rearing and migration: 18.0 degrees Celsius 7-day-average maximum	Salmon and trout rearing and migration	Cat 4A: Water quality limited, TMDL approved

Table 2 - TMDL Reductions

Subbasin	TMDL Parameter Reductions
Upper Willamette and tributaries (Cooper Creek, Little Luckiamute, Luckiamute)	Mercury: <input type="checkbox"/> 27% Reduction Willamette Basinwide-All Subbasins through erosion control Temperature: <input type="checkbox"/> 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.
Upper Willamette and tributaries (Cooper Creek, Little Luckiamute, Luckiamute)	Bacteria: <input type="checkbox"/> 63% reduction average – Exclude livestock and erosion control

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

Explain: Withdrawal could affect quantity and quality in critical summer months when temperatures are already too warm. 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 such as dissolved oxygen and biological criteria May – July.

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? Downstream impacts from diversion and release.

Temperature and dissolved oxygen are a flow-related parameters. 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 of parameters.

The waterbody is already limited for temperature in critical summer months(June-Sept)/. Any additional heat would further impact this habitat. Flow reductions may impact the assimilative capacity of the waterbody, increasing the concentration of some TMDLs and 303(d) listings such as dissolved oxygen.

Release of impounded water must meet water quality standards (OAR 340-041) when discharged to surface waters. Water quality standards are developed for the protection of beneficial uses, such as, aquatic life, recreation, fish consumption.

Table 1. Percent of natural flow for months of proposed diversion (100 cfs /9 months =11 cfs/month)

Watershed ID	Exceedance Level	Month	Natural Stream Flow	Consumptive Use	Proposed 200 AF/100 cfs	Percent of Flow	Expected Stream Flow	Reserved Stream Flow	Instream Requirement	Net Water Avail	Download Date
30200301	50	JAN	560	7.71	18.71	3.3410714	552	0	0	552	8/4/2017
30200301	50	FEB	542	7.67	18.67	3.4446494	534	0	0	534	8/4/2017
30200301	50	MAR	403	7.38	18.38	4.560794	396	0	0	396	8/4/2017
30200301	50	APR	254	7.6	18.6	7.3228346	246	0	0	246	8/4/2017
30200301	50	MAY	134	10.2	21.2	15.820896	124	0	0	124	8/4/2017
30200301	50	JUN	84	15.4	26.4	31.428571	68.6	0	0	68.6	8/4/2017
30200301	50	JUL	45.7	18.2	29.2	63.894967	27.5	0	0	27.5	8/4/2017
30200301	50	AUG	30.2	15.6	15.6	-	14.6	0	0	14.6	8/4/2017
30200301	50	SEP	26	10.5	10.5	-	15.5	0	0	15.5	8/4/2017
30200301	50	OCT	29.6	6.47	6.47	-	23.1	0	0	23.1	8/4/2017
30200301	50	NOV	186	6.86	17.86	9.6021505	179	0	0	179	8/4/2017
30200301	50	DEC	529	7.64	18.64	3.5236295	521	0	0	521	8/4/2017
30200301	50	ANN	170000	7340	7460	4.3764706	162000	0	0	162000	8/4/2017

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

NO YES; recommend from Menu of Conditions

WRD Standard Conditions, such as, wq, b5, futile call, and riparian, are important for protecting water quality

The standard available conditions do not protect water quality in full. Additional conditions follow:

- Limit Diversion** No water shall be diverted under this right unless the percent of natural flow is <25%. **b51a** period of use limited to Nov through Apr or when flow at gage USGS 14190500 LUCKIAMUTE RIVER NEAR SUVER, OR is > 134 cfs.
- Prohibited Activities:** Permittee may not cause pollution of any waters of the state, or place or cause to be placed any wastes in a location where such wastes are likely to escape or be carried into the waters of the state by any means, per ORS 468B.025(1).
- Agricultural Management Plans:** Permittee must comply with basin specific Agricultural Management Plan rules in OAR 603-095.
- Pond releases:** Permittee shall not release polluted stored water into waters of the state, unless under emergency situations. For routine maintenance, the Permittee must land apply stored water or provide treatment prior to releasing. Permittee must comply with OAR 340-041 and ensure that water quality standards are not violated by releases from storage.
- Applicaton Updates:** If the application is amended in a way that may limit water quality, DEQ shall be notified and given the opportunity to submit updated comments and conditions. DEQ shall be notified and given the opportunity to submit updated comments and conditions if:
 - Design change from off-channel to in-channel. Applicaton indicates "Not in channel." Not all maps and designs are printable and readable.
 - Wetland determination of Army Corps 404 and Dept of State Lands triggering a DEQ 401 certification.
- Best management practices should be implemented during construction to limit the discharge of sediment, which supports reduction of TMDL parameters.
- Livestock exclusion in support of bacteria reductions.
- Replacement of riparian area disturbance.
- Ground cover post construction on exposed soil areas adjacent to the stream or in areas where exposed soils are likely to escape or be carried into the waters of the state by any means. **Prohibited Activities:** No person may cause pollution of any waters of the state or place or cause to be placed any wastes in a location where such wastes are likely to escape or be carried into the waters of the state by any means.

10. **DEQ 1200-C:** Prior to construction, permittee may need to obtain a valid 1200-C Stormwater Discharge Permit for construction project that disturbs one acre or more of land. The permit covers BMPs and monitoring for erosion control.
<http://www.oregon.gov/deq/wq/wqpermits/Pages/Stormwater-Construction.aspx>.
11. **DEQ 2300 :** Permittee is responsible for ensuring the pesticide application laws are met. A pesticide general permit, provides permit coverage for pesticide applications in or within three feet of water to control pests, weeds and algae, and nuisance animals. Entities with small-scale pesticide applications receive automatic coverage and only need to download a copy of the permit and adhere to the terms listed in order to satisfy permit terms. If contracted, applicators should be certified.

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:

6) If a permit is issued, are there any conditions you would like to see included in the permit? Refer to 4) above for 7) approval with conditions

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

DEQ Representative Signature: Nancy Gramlich Date: Aug 4, 2017

WRD Contact: Caseworker: Lisa Graham, Water Rights Division, 503-986-0808 / 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.