

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 18284 Applicant's Name: TAMIYASU, STAN; GREEN RIDGE AGRONOMY LLC, GREEN
RIDGE AGRONOMY LLC

1) Is there a connection to a 303(d) listed water quality limited water body? NO YES
East fork of McKay Creek is a tributary to McKay Creek. McKay Creek is water quality limited for temperature,
dissolved oxygen, nutrients, toxics and bacteria.

Explain: **Table 1: 303(d) listings**

Basin Name Subbasin 4th Field HUC Record ID	Water Body LLID River Miles Segment Miles	Pollutant	Season	Status
Willamette Tualatin 17090010 7307	McKay Creek 1230119455224 0 to 15.8 15.8	Ammonia	June 1 - September 30	Cat 4A: Water quality limited, TMDL approved
Willamette Tualatin 17090010 25843	McKay Creek 1230119455224 0 to 22.7 22.7	Arsenic	Year Round	Cat 5: Water quality limited, 303(d) list, TMDL needed
Willamette Tualatin 17090010 20953	McKay Creek 1230119455224 0 to 15.7 15.7	Dissolved Oxygen	January 1 - May 15	Cat 5: Water quality limited, 303(d) list, TMDL needed
Willamette Tualatin 17090010 25383	McKay Creek 1230119455224 0 to 15.7 15.7	Dissolved Oxygen	Year Round (Non- spawning)	Cat 4A: Water quality limited, TMDL approved
Willamette Tualatin 17090010 6984	McKay Creek 1230119455224 0 to 15.8 15.8	E. Coli	FallWinterSpring	Cat 4A: Water quality limited, TMDL approved
Willamette Tualatin 17090010 6936	McKay Creek 1230119455224 0 to 15.8 15.8	E. Coli	Summer	Cat 4A: Water quality limited, TMDL approved

Willamette Tualatin 17090010 25847	McKay Creek 1230119455224 0 to 22.7 22.7	Iron	Year Round	Cat 5: Water quality limited, 303(d) list, TMDL needed
Willamette Tualatin 17090010 25844	McKay Creek 1230119455224 0 to 22.7 22.7	Lead	Year Round	Cat 3B: Insufficient data, potential concern
Willamette Tualatin 17090010 6452	McKay Creek 1230119455224 0 to 15.8 15.8	Phosphorus	June 1 - September 30	Cat 4A: Water quality limited, TMDL approved
Willamette Tualatin 17090010 6453	McKay Creek 1230119455224 15.8 to 22.7 6.9	Phosphorus	June 1 - September 30	Cat 4A: Water quality limited, TMDL approved
Willamette Tualatin 17090010 5997	McKay Creek 1230119455224 0 to 15.8 15.8	Temperature	Summer	Cat 4A: Water quality limited, TMDL approved

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 the proposed GW use is hydraulically connected to surface water. Surface water is not available May through November. Withdrawal could affect quantity and quality in critical summer months when temperatures are already too warm.

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?

When streamflow is reduced, heat capacity is reduced. Water temperature is influenced by groundwater inflows, water withdrawals and other influences. In a waterbody where temperature is already known to exceed standards, further withdrawals are likely to exacerbate the temperature impairment. As a waterbody heats up, dissolved oxygen concentrations decline.

Dissolved oxygen is affected by a combination of physical, chemical and biotic factors, including: temperature, flow and turbulence, nutrient and organic compound loading, and algae and plant growth, respiration and decomposition. In waterbodies where dissolved oxygen concentrations are known to be insufficient for the habitat of sensitive, threatened and endangered fish, any actions or conditions that cause additional reduction in DO concentrations would result in the diminution of habitat.

The waterbody is already limited for temperature in summer months and dissolved oxygen year round. By reducing streamflow, this use is likely to exacerbate the temperature and dissolved oxygen impairments.

Flow reductions can impact the assimilative capacity of the waterbody, increasing the concentration of some TMDL and 303(d) listings, such as, metals and nutrients.

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

NO

YES; recommend from Menu of Conditions and skip to question 7.

Period of Use: Water withdrawal is limited to January through April and December.

Site-Specific Condition: Applicant should consider graywater reuse. DEQ has a graywater reuse general permit 2402 for up to 1200 gallons/day (approximately 0.002 cfs). More information on graywater reuse is available at <https://www.oregon.gov/deq/wq/programs/Pages/Water-Reuse-Graywater.aspx>.

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?

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

DEQ Representative signature: Beth Moore *Beth Moore* Date: May 26, 2017

WRD Contact: Caseworker: Elisabeth Graham 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.