

# 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 18336 Applicant's Name: Davidson Living Trust Michael E & Connie Davidson

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

Explain: Mission Creek is a tributary to the Middle Willamette River. The Middle Willamette River and Tributaries have TMDLs or are identified as water quality limited and needing TMDLS as follows:

Middle Willamette TMDL Parameter Reductions
<b>Mercury:</b> <input type="checkbox"/> 27% Willamette Basinwide-All Subbasins
<b>Temperature:</b> <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.
<b>Bacteria:</b> <input type="checkbox"/> 88% summer <input type="checkbox"/> 75% fall-winter-spring Middle Willamette Specific Tributaries
Mission Creek Water Quality Limited 303(d) Listings
Dissolved Oxygen Year Round (Non-spawning) Cool water: Not less than 6.5 mg/l Cat 5: Water quality limited, 303(d) list, TMDL needed 2012 Data: [DEQ] STATION 33746 at RM 1.1 from 08/14/2006 to 12/20/2006, 3 of 5 (60%) samples < 6.5 mg/L 2010 Data: EPA addition to 303(d) list 12/14/2012: Three exceedences of the cool water aquatic life criterion out of 5 days of sampling between 8/14/06 and 12/20/06 at LASAR station 33746, Mission Creek near mouth at Champoeg Road

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

Explain: Well 2: The ground water review indicates that Well 2 will have substantial interference with surface water availability in Mission Creek and Champoeg, tributaries of the Middle Willamette River. Surface water is not available July 1 – Oct 31. Withdrawal could affect quality in critical summer months when temperatures are already too warm and listings for dissolved oxygen limitations are identified. Well 3: Groundwater appropriated, not subject to this Div 033 review for Mission Creek/Champoeg.

Champoeg Cr > Willamette River Pg. 7 Application G-18366

Month	Natural Stream Flow	Expected Stream Flow	Net Water Avail
JAN	37	31	30
FEB	52	46	45
MAR	22	19	19
APR	11	9	9
MAY	6	2	2
JUN	3	-3	-3
JUL	3	-7	-7
AUG	2	-6	-6
SEP	1	-3	-3
OCT	1	.70	.70
NOV	10	6	6
DEC	48	38	38
ANN	28100	25100	25100

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.

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

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

Potential impact to water quality May-Oct based on net water available.

- 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.

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 reduction in dissolved oxygen would impact aquatic species. Missions Creek is listed for dissolved oxygen limitations for cool water species, such as, pacific lamprey. The waterbody is also identified as needing temperature reductions in critical summer months for salmon and trout rearing and migration under the TMDL. 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 31, 2017

WRD Contact: **Caseworker:** Barbara Poage 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.

