Permit to Appropriate the Public Waters of the State of Oregon

This superseding permit, in the name of

CITY OF SUTHERLIN
126 E. CENTRAL AVENUE
SUTHERLIN, OREGON 97479

is issued to describe an amendment for an additional point of diversion and change in place of use under Permit Amendment Application T-12418 and approved by Special Order Vol. 104, Page 337, entered March 30th, 2017, and to describe an extension of time for complete application of water approved May 10, 1983, February 2, 1988, December 2, 1993, May 7, 2004, and November 14, 2014. This permit supersedes Permit S-44926.

This is to certify that I have examined the foregoing application and do hereby grant the same, SUBJECT TO EXISTING RIGHTS INCLUDING THE EXISTING MINIMUM FLOW POLICIES ESTABLISHED BY THE WATER POLICY REVIEW BOARD and the following limitations and conditions:

The right herein granted is limited to the amount of water which can be applied to beneficial use and shall not exceed 3.0 cubic feet per second measured at the point of diversion from the stream, or its equivalent in case of rotation with other water users, from the North Umpqua River.

The use to which water is to be applied is Municipal

Authorized Points of Diversion:

Twp	Rng	Mer	Sec	Q-Q	Measured Distances
26 S	5 W	WM	11	SE SW	1120 FEET NORTH AND 2320 FEET EAST FROM THE SW CORNER OF SECTION 11
26 S	6 W	WM	33	NW NE	610 FEET SOUTH AND 1400 FEET WEST FROM THE NE CORNER OF SECTION 33

Authorized Place of Use:

Twp	Rng	Mer	Sec	Q-Q	Measured Distances
City of Sutherlin Water Service Area					

and shall be subject to such reasonable rotation system as may be ordered by the proper state officer.

Permit Amendment T-12418 Conditions

The combined quantity of water diverted at the new point of diversion, together with that diverted at the old point of diversion, shall not exceed the quantity of water lawfully available at the original point of diversion.

Water use measurement conditions:

A. Before the use of any water at the new point of diversion may begin:
   a. the water user shall install a totalizing flow meter, or, with prior approval of the Director, another suitable measuring device, at the new point of diversion.
   b. The water user shall maintain the meter or measuring device in good working order.

c. The water user shall allow the Watermaster access to the meter or measuring device; provided however, where the meter or measuring device are located within a private structure, the Watermaster shall request access upon reasonable notice.

B. Before the use of any water at the authorized point of diversion may begin:
   a. the water user shall install a totalizing flow meter, or, with prior approval of the Director, another suitable measuring device, at the existing point of diversion.
   b. The water user shall maintain the meter or measuring device in good working order.
   c. The water user shall allow the Watermaster access to the meter or measuring device; provided however, where the meter or measuring device are located within a private structure, the Watermaster shall request access upon reasonable notice.

Prior to diverting water, the water user shall install an approved fish screen at the new point of diversion and shall provide to the OWRD a written statement from Oregon Department of Fish and Wildlife (ODFW) that the installed screen meets the state's criteria, or that ODFW has determined a screen is not necessary.

The water user shall operate and maintain the fish screen at the new point of diversion consistent with ODFW's operational and maintenance standards. If ODFW determines the screen is not functioning properly, and is unsuccessful in working with the water user to meet ODFW standards, ODFW may request that OWRD regulate the use of water until OWRD receives notification from ODFW that the fish screen is functioning properly.

Water shall be acquired from the same surface water source as the original point of diversion.

Extension of Time Conditions

Development Limitations

Diversion of any water up to 3.0 cfs from the North Umpqua River under Permit S-55041 (original permit S-44926) shall only be authorized upon issuance of a final order approving a Water Management and Conservation Plan (WMCP) under OAR Chapter 690, Division 86 that authorizes access to a greater rate of diversion of water under the permit consistent with OAR 690-086-0130(7). The required WMCP shall be submitted to the Department within 3 years of the extension final order issued on November 14, 2014. The amount of water used under Permit S-55041 (original permit S-44926) must be consistent with this and subsequent WMCP's approved under OAR Chapter 690, on file with the Department.

The deadline established in the Extension Final Order for submittal of a WMCP shall not relieve a permit holder of any existing or future requirement for submittal of a WMCP at an earlier date as established through other orders of the Department. A WMCP submitted to meet the requirements of the extension final order may also meet the WMCP submittal requirements of other Department orders.

Conditions to Maintain the Persistence of Listed Fish

A. Fish Persistence Target Flows
   a. Fish persistence target flows in the North Umpqua River as recommended by ODFW are in Table 1, below; flows are to be measured in the North Umpqua River at Winchester, Oregon (USGS Gage Number 14319500, or its equivalent).

Table 1

FISH PERSISTENCE TARGET FLOWS IN THE NORTH UMPQUA RIVER MEASURED AT USGS GAGE 141319500 NORTH UPQUA RIVER AT WINCHESTER, OR	
Month	Cubic Feet per Second
January – June	1350
July	1290
August	996

FISH PERSISTENCE TARGET FLOWS IN THE NORTH UMPQUA RIVER MEASURED AT USGS GAGE 141319500 NORTH UPQUA RIVER AT WINCHESTER, OR	
September	982
October	1190
November – December	1350

b. Alternate Streamflow Measurement Point
The location of a target flow measurement point as established in these Conditions to Maintain the Persistence of Listed Fish may be revised if the City provides evidence in writing that ODFW has determined that persistence flows may be measured at an alternate streamflow measurement point and provides an adequate description of the location of the alternate streamflow measurement point, and the Water Resources Director concurs in writing.

B. Determining Water Use Reductions – Generally
The maximum amount of the undeveloped portion of Permit S-55041 (original permit S-44926) that can be diverted as a result of this fish persistence condition is determined in proportion to the amount by which the flows shown in Table 1 are missed based on a seven day rolling average [Alternatively, the water user may use a single day measurement.] of mean daily flows as determined or measured by the water user in the North Umpqua River at Winchester (USGS Gage Number 14319500, or its equivalent). The percent of missed target flows is defined as:

$$(1 - [Q_{A-E)} / Q_T]) \times 100\%,$$

where QA is the actual flow measured at the designated gage based on the seven day rolling average, E is the undeveloped portion of the permit, and QT is the target flow (from Table 1).

The percent by which the target flow is missed applied to the undeveloped portion of the permit provides the maximum amount of undeveloped portion of the permit that can be diverted as a result of this fish persistence condition, and is defined as:

$$E - (E \times \% \text{ missed target flow}),$$

where E is the undeveloped portion of the permit as of this extension, being 3.0 cfs.

When $QA - E \geq QT$, the amount of the undeveloped portion of the permit that can be diverted would not need to be reduced as a result of this fish persistence condition.

C. Consumptive Use Percentages

a. Initial Consumptive Use Percentages
The City of Sutherlin has not identified any Consumptive Use Percentages based on the return of flows to the North Umpqua River through effluent discharge. Thus, at this time the City may not utilize Consumptive Use Percentages for the purpose of calculating the maximum amount of the undeveloped portion of Permit S-55041 (original permit S-44926) that can be diverted as a result of this fish persistence condition.

b. First Time Utilization of Consumptive Use Percentages
Utilization of Consumptive Use Percentages for the purpose of calculating the maximum amount of the undeveloped portion of Permit S-55041 (original permit S-44926) that can be diverted as a result of this fish persistence condition may begin after the issuance of the Final Order for this extension of time.

First time utilization of Consumptive Use Percentages is contingent upon the City (1) providing evidence in writing that ODFW has determined that withdrawal points and effluent discharges are within reasonable proximity to each other, such that fish habitat between the two points is not impacted significantly, and (2) submitting monthly Consumptive Use Percentages and receiving

the Water Resources Director's concurrence with the proposed Consumptive Use Percentages. Utilization of Consumptive Use Percentages is subject to an approval period described in 2.C.f., below.

Consumptive Use Percentages submitted to the Department for review must (1) be specified as a percentage (may be to the nearest 1/10 percent) for each month of the year and (2) include a description and justification of the methods utilized to determine the percentages. The proposed Consumptive Use Percentages should be submitted on the *Consumptive Use Percentages Update Form* provided with the Final Order for this extension of time.

c. Consumptive Use Percentages Updates

Continuing the utilization of Consumptive Use Percentages for the purpose of calculating the maximum amount of the undeveloped portion of Permit S-55041 (original permit S-44926) that can be diverted as a result of this fish persistence condition beyond an approval period (as described in 2.C.f., below) is contingent upon the City submitting updated Consumptive Use Percentages and receiving the Water Resources Director's concurrence with the proposed Consumptive Use Percentages Updates. Utilization of Consumptive Use Percentages Updates is subject to an approval period described in 2.C.f., below.

The updates to the Consumptive Use Percentages must (1) be specified as a percentage (may be to the nearest 1/10 percent) for each month of the year and (2) include a description and justification of the methods utilized to determine the percentages. The updates should be submitted on the *Consumptive Use Percentages Update Form* provided with the Final Order for this extension of time.

d. Changes to Wastewater Technology and/or Wastewater Treatment Plant Practices

If there are changes to either wastewater technology or the practices at the City's waste water treatment facility resulting in 25% or more reductions in average monthly return flows to the North Umpqua River, then the Consumptive Use Percentages in effect at that time may no longer be utilized for the purposes of calculating the maximum amount of the undeveloped portion of Permit S-55041 (original permit S-44926) that can be diverted as a result of this fish persistence condition. The 25% reduction is based on a 10-year rolling average of monthly wastewater return flows to the North Umpqua River as compared to the average monthly wastewater return flows from the 10 year period just prior to date of the first approval period described in 2.C.f., below.

If such changes to either wastewater technology or the practices at the City's waste water treatment facility occur resulting in 25% reductions, further utilization of Consumptive Use Percentages is contingent upon the City submitting Consumptive Use Percentages Updates as per 2.C.c., above, and receiving the Water Resources Director's concurrence with the proposed Consumptive Use Percentages.

e. Relocation of the Point(s) of Diversion(s) and/or Return Flows

If the point(s) of diversion(s) and/or return flows are relocated, Consumptive Use Percentages in effect at that time may no longer be utilized for the purposes of calculating the maximum amount of the undeveloped portion of Permit S-55041 (original permit S-44926) that can be diverted as a result of this fish persistence condition.

After relocation of the point(s) of diversion(s) and/or return flows, further utilization of Consumptive Use Percentages is contingent upon the City (1) providing evidence in writing that ODFW has determined that any relocated withdrawal points and effluent discharge points are within reasonable proximity to each other, such that fish habitat between the two points is not impacted significantly, and (2) submitting Consumptive Use Percentages Updates as per 2.C.c., above, and receiving the Water Resources Director's concurrence with the proposed Consumptive Use Percentages.

f. Approval Periods for Utilization of Consumptive Use Percentages

The utilization of Consumptive Use Percentages for the purpose of calculating the maximum amount of the undeveloped portion of Permit S-55041 (original permit S-44926) that can be diverted as a result of this fish persistence condition may continue for a 10 year approval period that ends 10 years from the Water Resources Director's most recent date of concurrence with Consumptive Use Percentages Updates as evidenced by the record, unless sections 2.C.d., or 2.C.e. (above) are applicable.

Consumptive Use Percentages (first time utilization or updates) which are submitted and receive the Director's concurrence will begin a new 10 year approval period. The approval period begins on the date of the Water Resources Director's concurrence with Consumptive Use Percentages Updates, as evidenced by the record. The City at its discretion may submit updates prior to the end of an approval period.

D. Examples

Example 1: Target flow met.

On September 15, the last seven mean daily flows were 975, 990, 1001, 1017, 1015, 1010 and 1008 cfs. The seven day rolling average (QA) is 1002 cfs. Given that the undeveloped portion of this permit (E) is 3.0 cfs, then the 7 day average of mean daily flows minus the undeveloped portion is greater than the 982 cfs target flow (QT) for September 15. In this example, $QA - E \geq QT$.

$$1002 - 3.0 \geq 982$$

The amount of the undeveloped portion of the permit that can be diverted would not be reduced because the target flow is considered met.

Example 2: Target flow missed.

Step 1: Given that the undeveloped portion of this permit (E) is 3.0 cfs, if on August 15, the average of the last seven mean daily flows (QA) was 800 cfs, and the target flow (QT) is 996 cfs, then the target flow would be missed by 20.0%.

$$(1 - [(800.0 - 3.0) / 996.0]) \times 100\% = 20.0\%$$

Step 2: Assuming the Consumptive Use Percentage is 62.2% [Currently, the City of Sutherlin may not utilize Consumptive Use Percentages for the purpose of calculating the amount of the undeveloped portion of Permit S-49765 that can be diverted as a result of this fish persistence condition. The utilization of the Consumptive Use Percentage 62.2% is only for illustrative purposes in this example.] during the month of August and the utilization of this percentage is authorized, and the target flow is missed by 20.0% (from Step 1), then the amount of the undeveloped portion of the permit that could be diverted would be reduced by 12.4%.

$$(62.2\% \times 20.0\%) / 100 = 12.4\%$$

(If adjustments are not to be made by a Consumptive Use Percentage, then the undeveloped portion of the permit would be reduced only by the % by which the target flow is missed – 20.0% in this example).

Step 3: Given that the undeveloped portion of this permit (E) is 3.0 cfs, and the undeveloped portion of the permit needs to be reduced by 12.4% (from Step 2), or 0.4 cfs, then the maximum amount of the undeveloped portion of Permit S-55041 (original permit S-44926) that could be diverted as a result of this fish persistence condition is 2.6 cfs. (This maximum amount may be limited as illustrated in Step 4, below.)

$$(3.0 \times 12.4\%) / 100) = 0.4$$

$$3.0 - 0.4 = 2.6$$

Step 4: The calculated maximum amount of water that could be diverted due to the fish persistence condition may not exceed the amount of water to which the City is legally entitled to divert. In this example, if the amount of water legally authorized for diversion under this permit is 1.5 cfs (for example, authorization provided through a WMCP), then 1.5 cfs would be the maximum amount of diversion allowed under this permit, rather than 2.6 cfs from Step 3.

(Conversely, if the amount of water legally authorized for diversion under this permit is 3.0 cfs, then 2.6 cfs (from Step 3) would be the maximum amount of diversion allowed under this permit.)

Fish Screening Condition

The permittee shall install, maintain and operate fish screening and by-pass devised as required by the Oregon Department of Fish and Wildlife (ODFW) to prevent fish from entering the proposed diversion. The required screens and by-pass devices are to be in place, functional and approved by an ODFW representative prior to diversion of any water.

The priority date of this permit is October 15, 1979

Actual construction work was to begin on or before July 14, 1981 and shall thereafter be prosecuted with reasonable diligence and be completed on or before October 1, 2050.

Complete application of the water to the proposed use shall be made on or before October 1, 2050.

WITNESS my hand this 30 *day of* March, *2017*

Dwight French, Water Right Services Administrator, for
THOMAS M. BYLER, DIRECTOR