

Permit to Appropriate the Public Waters of the State of Oregon

This superseding permit, in the names of

CITY OF SALEM
555 LIBERTY STREET SE, RM 325
SALEM, OREGON 97301

CITY OF HILLSBORO
150 E. MAIN STREET
HILLSBORO, OREGON 97123

is issued to describe an amendment for a change in point of diversion for 56 cfs proposed under Permit Amendment Application T-12512 and approved by Special Order Vol. 104, Page 841, entered May 5, 2017, and to describe an extension of time for complete application of water approved May 10, 1983, February 2, 1988, July 8, 1988, February 26, 1993, and July 31, 2015 and partial assignment of 56 cfs to a new permittee approved August 9, 2016. This permit supersedes Permit S-45565.

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 200.0 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 Willamette River.

The use to which water is to be applied is Municipal Use

Authorized Points of Appropriation:

Twp	Rng	Mer	Sec	Q-Q	Measured Distances
8 S	4 W	WM	1	SE SW	750 FEET NORTH AND 1620 FEET EAST FROM THE NW CORNER OF SECTION 12
3 S	1 W	WM	23	NW SW	3391 FEET SOUTH AND 495 FEET EAST FROM THE NW CORNER OF SECTION 23

Authorized Place of Use:

MUNICIPAL			
Twp	Rng	Mer	Sec
6 S	3 W	WM	34
7 S	2 W	WM	5
7 S	2 W	WM	6
7 S	2 W	WM	7
7 S	2 W	WM	8
7 S	2 W	WM	17
7 S	2 W	WM	18
7 S	2 W	WM	19
7 S	2 W	WM	20
7 S	2 W	WM	29
7 S	2 W	WM	30
7 S	2 W	WM	31
7 S	2 W	WM	32

MUNICIPAL			
Twp	Rng	Mer	Sec
7 S	3 W	WM	1
7 S	3 W	WM	3
7 S	3 W	WM	8
7 S	3 W	WM	9
7 S	3 W	WM	10
7 S	3 W	WM	11
7 S	3 W	WM	12
7 S	3 W	WM	13
7 S	3 W	WM	14
7 S	3 W	WM	15
7 S	3 W	WM	16
7 S	3 W	WM	17
7 S	3 W	WM	18

MUNICIPAL			
Twp	Rng	Mer	Sec
7 S	3 W	WM	19
7 S	3 W	WM	20
7 S	3 W	WM	21
7 S	3 W	WM	22
7 S	3 W	WM	23
7 S	3 W	WM	24
7 S	3 W	WM	25
7 S	3 W	WM	26
7 S	3 W	WM	27
7 S	3 W	WM	28
7 S	3 W	WM	29
7 S	3 W	WM	30
7 S	3 W	WM	31
7 S	3 W	WM	32
7 S	3 W	WM	33
7 S	3 W	WM	34
7 S	3 W	WM	35
7 S	3 W	WM	36
8 S	2 W	WM	5
8 S	2 W	WM	6
8 S	2 W	WM	7
8 S	2 W	WM	8
8 S	2 W	WM	17
8 S	2 W	WM	18
8 S	2 W	WM	19

MUNICIPAL			
Twp	Rng	Mer	Sec
8 S	2 W	WM	20
8 S	3 W	WM	1
8 S	3 W	WM	2
8 S	3 W	WM	3
8 S	3 W	WM	4
8 S	3 W	WM	5
8 S	3 W	WM	6
8 S	3 W	WM	7
8 S	3 W	WM	8
8 S	3 W	WM	9
8 S	3 W	WM	10
8 S	3 W	WM	11
8 S	3 W	WM	12
8 S	3 W	WM	13
8 S	3 W	WM	14
8 S	3 W	WM	15
8 S	3 W	WM	16
8 S	3 W	WM	17
8 S	3 W	WM	20
8 S	3 W	WM	21
8 S	3 W	WM	22
8 S	3 W	WM	23
8 S	3 W	WM	24
8 S	3 W	WM	27
8 S	3 W	WM	28

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

Permit Amendment T-12512 Conditions

The quantity of water diverted at the new 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 of the 56.0 cfs of water assigned to the City of Hillsboro 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 is located within a private structure, the Watermaster shall request access upon reasonable notice.
- B. Before the use of any of the 144.0 cfs of water assigned to the City of Salem 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 devices; provided however, where the meter or measuring device are located within a private structure, the Watermaster shall request access upon reasonable notice.

The water user shall operate and maintain an approved fish screen at the new point of diversion. If Oregon Department of Fish and Wildlife (ODFW) determine 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 200.0 cfs under Permit S-55045 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 of time Final Order dated July 31, 2015. The amount of water used under Permit S-55045 must be consistent with this and subsequent WMCP's approved under OAR Chapter 690, on file with the Department.

The Development Limitation established in the above paragraph supersedes any prior limitation of the diversion of water under Permit S-55045 that has been established under a prior WMCP or Extension final order issued by the Department.

The deadline established in this Extension Final Order dated July 31, 2015 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 this final order dated July 31, 2015 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 on the Willamette River as recommended by ODFW are in Table 1, below; flows are to be measured on the Willamette River near Salem, Oregon (USGS Gage Number 14191000, or its equivalent).

Table 1

FISH PERSISTENCE TARGET FLOWS ON THE WILLAMETTE RIVER MEASURED AT USGS GAGE 14191000 NEAR SALEM, OREGON	
Month	Cubic Feet per Second
July 1– October 31	5,630
November 1 – March 31	6,000
April 1 – April 15	15,000
April 16 –April 30	17,000
May 1 – May 31	15,000
June 1 – 15	12,600
June 16 – 30	8,500

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-55045 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 average¹ of mean daily flows measured in the Willamette River at the specified gage location. The percent of missed target flows is defined as:

$$(1 - [Q_A / Q_T]) \times 100\%$$

where Q_A is the actual flow measured at the designated location based on the seven day rolling average, and Q_T is the target flow (from Table 1).

¹ Alternatively, the water user may use a single daily measurement.

The percent by which the target flow is missed applied to the undeveloped portion of the permit provides the maximum amount of the 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 200.0 cfs.

The maximum amount of undeveloped portion of the permit that can be diverted as a result of this fish persistence condition may be adjusted by a Consumptive Use Percentage, when applicable, as per Item 2.C., below. The overall reduction to the amount of the undeveloped portion of the permit will not exceed 20%.

When $Q_A \geq Q_T$, 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

- i. Utilization of these “Initial Consumptive Use Percentages” is contingent upon (1) the point of diversion being located at river mile 84.4 and the return flow point located at river mile 78.25, or (2) upon the City 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.
- ii. The Initial Consumptive Use Percentages for the City of Salem to adjust water use reductions for the purpose of calculating the amount of the undeveloped portion of Permit S-55045 that can be diverted as a result of this fish persistence condition are shown in Table 2, below. Utilization of initial Consumptive Use percentages is subject to an approval period described in 2.C.e, below.

Table 2

Month	Initial ¹ Consumptive Use Percentages
January	0 %
February	0 %
March	10.6 %
April	7.7 %
May	24.7 %
June	40.6 %
July	49.7 %
August	46.3 %
September	34.2 %
October	31.4 %
November	9.4 %
December	0 %

¹Use of these initial percentages expires 10 years from the date of the Final Order dated July 31, 2015 for this Extension of Time

b. Consumptive Use Percentages Updates

Continuing the utilization of Consumptive Use Percentages for the purpose of calculating the amount of the undeveloped portion of Permit S-55045 that can be diverted as a result of this fish persistence condition beyond an approval period (as described in 2.C.e, 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.e, 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 dated July 31, 2015.

c. 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 wastewater treatment facility, resulting in 25% or more reductions in average monthly return flows to the Willamette River, then the Consumptive Use Percentages in effect at that time may no longer be utilized for the purposes of calculating the amount of the undeveloped portion of Permit S-55045 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 Willamette 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.e., below.

If such changes to either wastewater technology or the practices at the City's wastewater 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.b., above, and receiving the Water Resources Director's concurrence with the proposed Consumptive Use Percentages.

d. 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 purpose of calculating the amount of the undeveloped portion of Permit S-55045 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 Percentage Updates as per 2.C.b, above and receiving the Water Resources Director's concurrence with the proposed Consumptive Use Percentages.

e. Approval Periods for Utilization of Consumptive Use Percentages

The utilization of Consumptive Use Percentages for the purpose of calculating the maximum total amount of the undeveloped portion of Permit S-55045 that can be diverted as a result of this fish persistence condition may continue for a 10 year approval period that begins from either (1) the date of the Extension Final Order dated July 31, 2015, or (2) the Water Resources Director's most recent date of concurrence with Consumptive Use Percentages Updates as evidenced by the record, unless sections 2.C.c, or 2.C.d. (above) are applicable.

Consumptive Use Percentages 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 July 15, the last seven mean daily flows in the Willamette River at the Salem gage were 7000, 6500, 6000, 5500, 5250, 5000 and 4750 cfs. The seven day rolling average (Q_A) is 5714 cfs. The amount of the undeveloped portion of the permit that can be diverted would not be reduced because the 7 day average of mean daily flows is greater than the 5,630 cfs target flow (Q_T) for July 15. In this example, $Q_A \geq Q_T$.

Example 2: Target flow missed.

Step 1: If on July 15, the average of the last seven mean daily flows (Q_A) was 5011 cfs, and the target flow is 5630, then the target flow would be missed by 11.0%.

$$(1 - [5011 / 5630]) \times 100\% = 11.0\%$$

Step 2: Assuming use of the Consumptive Use Percentage is 49.7% during the month of July and the use of this percentage is authorized, and the target flow is missed by 11.0% (from Step 1), then the amount of the undeveloped portion of the permit that could be diverted would be reduced by 5.5%.

$$(11.0\% \times 49.7\%) / 100 = 5.5\%$$

(If adjustments are not to be made by a Consumptive Use Percentage, the undeveloped portion of the permit would be reduced only by the % by which the target flow is missed – 11.0% in this example).

Step 3: The overall reduction of 5.5% of the amount of the undeveloped portion of the permit does not exceed 20%.

Step 4: Given that the undeveloped portion of this permit as of this extension (E) is 200.0 cfs, and the undeveloped portion of the permit needs to be reduced by 5.5% (from Step 2), or 11.0 cfs, then the maximum amount of the undeveloped portion of Permit S-55045 that could be diverted as a result of this fish persistence condition would be 189.0 cfs. (This maximum amount may be limited as illustrated in Step 5, below.)

$$(200.0 \times 5.5\%) / 100 = 11.0$$

$$200.0 - 11.0 = 189.0$$

Step 5: 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 25.0 cfs (for example, authorization provided through a WMCP), then 25.0 cfs would be the maximum amount of diversion allowed under this permit, rather than 189.0 cfs from Step 4.

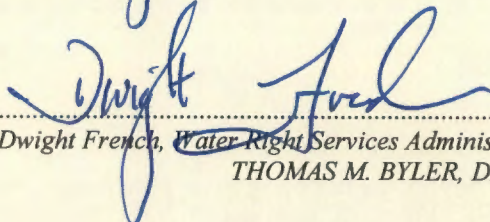
(Conversely, if the amount of water legally authorized for diversion under this permit is 200.0 cfs, then 189.0 cfs (from Step 4) would be the maximum amount of diversion allowed under this permit.)

The priority date of this permit is December 6, 1976

Actual construction work was to begin on or before October 1, 1997 and shall thereafter be prosecuted with reasonable diligence and be completed on or before October 1, 2086.

Complete application of the water to the proposed use shall be made on or before October 1, 2086.

WITNESS my hand this 5 day of May, 2017


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