# **Oregon Water Resources Department**

Water Right Services Division

In the Matter of the Application for an Extension of Time	)	
for Permit G-12406, Water Right Application G-13221,	)	FINAL ORDER
in the name of the City of Brownsville	)	

# **Permit Information**

# Application File G-13221/ Permit G-12406

Basin 2 – Willamette Basin / Watermaster District 2 Date of Priority: December 7, 1992

#### **Authorized Use of Water**

Source of Water:

Wells B, C, D, and E within the Calapooia Creek Basin

Purpose or Use:

Municipal Use

Maximum Rate:

1.25 Cubic Feet per Second (CFS)

This Extension of Time request is being processed in accordance with Oregon Revised Statute 537.630 and 539.010(5), and Oregon Administrative Rule Chapter 690, Division 315.

#### Appeal Rights

This final order is subject to judicial review by the Court of Appeals under ORS 183.482. Any petition for judicial review must be filed within the 60-day time period specified by ORS 183.482(1). Pursuant to ORS 536.075 and OAR 137-003-0675, you may petition for judicial review or petition the Director for reconsideration of this order. A petition for reconsideration may be granted or denied by the Director, and if no action is taken within 60 days following the date the petition was filed, the petition shall be deemed denied.

#### Application History

Permit G-12406 was issued by the Department on April 26, 1996. The permit called for completion of construction by October 1, 1998, and complete application of water to beneficial use by October 1, 1999. On March 19, 2003, the City of Brownsville submitted an application for an extension of time for Permit G-12406. In accordance with OAR 690-315-0050(2), on January 8, 2019, the Department issued a Proposed Final Order proposing to extend the time to complete construction to October 1, 2048 and to extend the time to fully apply water to beneficial use to October 1, 2048. The protest period closed February 22, 2019, in accordance with OAR 690-315-0060(1). No protest was filed.

#### FINDINGS OF FACT

The Department adopts and incorporates by reference the findings of fact in the Proposed Final Order dated January 8, 2019. At time of issuance of the Proposed Final Order the Department concluded that, based on the factors demonstrated by the applicant, the permit may be extended subject to the following conditions:

#### CONDITIONS

#### 1. Development Limitations

A maximum appropriation of 0.479 cfs of water is currently allowed under Permit G-12406. Any appropriation of water beyond 0.479 cfs (not to exceed the maximum amount authorized under the permit, being 1.25 cfs) 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 appropriation 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 this Final Order. The amount of water used under Permit G-12406 must be consistent with this and subsequent WMCP's approved under OAR Chapter 690, Division 86 on file with the Department.

The Development Limitation established in the above paragraph supersedes any prior limitation of the appropriation of water under Permit G-12406 that has been established under a prior WMCP or Extension final order issued by 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 final order may also meet the WMCP submittal requirements of other Department orders.

# 2. Conditions to Maintain the Persistence of Listed Fish

The first 0.479 cfs of water under Permit G-12406 or any subsequent water right(s) originating from Permit G-12406 is not and will not be conditioned for maintaining fish persistence.

The portion of Permit G-12406 subject to these fish persistence conditions is established as 0.771 cfs in accordance with ORS 537.630(1). The use of 0.771 cfs as authorized under this permit must be hereafter conditioned with these fish persistence conditions. Therefore, all subsequent water right(s) originating from this portion of Permit G-12406 implemented will include these Conditions to Maintain the Persistence of Listed Fish. If more than one resulting water right is subject to these Conditions to Maintain the Persistence of Listed Fish, then legal use of the 0.771 cfs conditioned to maintain the persistence of listed fish species

Final Order: Permit G-12406 Special Order Volume \ \ \ \ \ \ \ \ page \ \ \ \ \ \ \ \ \ Page 2 of 9

shall be determined among all the permit/water right holders of record; all the permit/water right holders of record subject to these Conditions to Maintain the Persistence of Listed Fish must ensure that these fish persistence conditions are met.

### A. Fish Persistence Target Flows

a. Fish persistence target flows in the Calapooia River as recommended by ODFW are in Table 2, below; flows are to be measured in the Calapooia

River at Albany, Oregon (USGS Gage Number 14173500, or its equivalent).

Table 2

ODFW'S RECOMMENDED FISH PERSISTENCE TARGET FLOWS IN THE CALAPOOIA RIVER			
MEASURED AT USGS GAGE 14173500, CALAPOOIA RIVER AT ALBANY, OREGON			
Month	Cubic Feet per Second		
November – May	140		
June	90		
July - October	Appropriation Not Authorized		

# b. Alternate Streamflow Measurement Point(s)

The location of a steamflow 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 the City 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 portion of Permit G-12406 subject to fish persistence conditions is 0.771 cfs. The maximum amount of this portion of Permit G-12406 that can be appropriated as a result of this fish persistence condition is determined in proportion to the amount by which the Target Flows shown in Table 2 are missed based on a seven day rolling average of mean daily flows as determined or measured by the water user in the Calapooia River at Albany (USGS Gage Number 14173500, or its equivalent). The percent of missed target flows is defined as:

$$\left(\ 1 - \left[\left(Q_{A} \!\!-\! E_{PSI}\right) / \, Q_T\right]\ \right) \ x \ 100\%,$$

where QA is the actual flow determined at the designated gage based on the seven day rolling

average<sup>1</sup>,  $E_{PSI}$  is the portion of the permit, subject to these conditions, having PSI with the Calapooia River, and  $Q_T$  is the target flow (from Table 2).

E<sub>PSI</sub> is defined as:

$$E_{PSI} = E \times I_P$$

where E is the undeveloped portion of the permit, being 0.771 cfs, and  $I_P$  is the effect of pumping interference on surface water flows in the Calapooia River expressed as a percentage, being 95%.

The percent by which the target flow is missed applied to the amount of water conditioned for fish persistence provides the maximum amount of water that can be appropriated as a result of this fish persistence condition, and is defined as:

where E is the entire portion of the permit subject to fish persistence, being 0.771 cfs.

The maximum amount of water that can be appropriated as a result of this fish persistence condition may be adjusted by a Consumptive Use Percentage, when applicable, as per Item 2.C., below.

When  $Q_A - E_{PSI} \ge Q_T$ , the target flow is considered met and therefore the amount of water conditioned for fish persistence that can be appropriated would not need to be reduced as a result of this fish persistence condition.

# C. <u>Consumptive Use Percentages</u>

#### a. Initial Consumptive Use Percentages

The City of Brownsville has not identified any Consumptive Use Percentages based on the return of flows to the Calapooia 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 portion of Permit G-12406 that can be appropriated 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 water conditioned for fish persistence of Permit G-12406 that can be appropriated 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

Final Order: Permit G-12406 Special Order Volume 112 page 673 Page 4 of 9

<sup>&</sup>lt;sup>1</sup> Alternatively, the water user may use a single daily measurement.

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 water conditioned for fish persistence of Permit G-12406 that can be appropriated 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 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 Calapooia 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 water conditioned for fish

persistence of Permit G-12406 that can be appropriated 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 Calapooia 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 updated 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 water conditioned for fish persistence of Permit G-12406 that can be appropriated 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 updated 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 water conditioned for fish persistence of Permit G-12406 that can be appropriated as a result of this fish persistence condition may continue for a 10 year approval period that begins 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 June 15, the last seven mean daily flows were 94, 93, 94, 95, 94, 93 and 92 cfs. The seven day rolling average (QA) is 93.6 cfs. Given that the amount of water conditioned for fish persistence of this permit having PSI with the Calapooia River ( $E_{PSI}$ ) is 0.731 cfs, then the 7 day average of mean daily flows minus the amount of water conditioned for fish persistence is greater than the 90.0 cfs target flow (QT) for June 15. In this example, QA –  $E_{PSI} \ge QT$ .

$$93.6 - 0.731 > 90$$

The amount of water conditioned for fish persistence of the permit having PSI with the Calapooia River that can be appropriated would not be reduced because the target flow is considered met.

# Example 2: Target flow missed.

Step 1: Given that the amount of water conditioned for fish persistence of this permit having PSI with the Calapooia River (E<sub>PSI</sub>) is 0.731 cfs, if on June 15, the average of the last seven mean daily flows (QA) was 80 cfs, and the target flow (QT) is 90, then the target flow would be missed by 11.9%.

$$(1 - [(80 - 0.731) / 90]) \times 100\% = 11.9\%$$

Step 2: Assuming the Consumptive Use Percentage is 78.7%<sup>2</sup> during the month of June and the utilization of this percentage is authorized, and the target flow is missed by 11.9% (from Step 1), then the amount of water conditioned for fish persistence of the permit having PSI with the Calapooia River that could be appropriated would be reduced by 9.4%.

$$(78.7\% \times 11.9\%) / 100 = 9.4\%$$

(If adjustments are not to be made by a Consumptive Use Percentage, then the amount of water conditioned for fish persistence of the permit having PSI with the Calapooia River would only be reduced by the % by which the target flow is missed -11.9% in this example).

Step 3: The amount of water conditioned for fish persistence of this permit having PSI with the Calapooia River (E<sub>PSI</sub>) is 0.731 cfs. Therefore, in this example, the maximum amount of water conditioned for fish persistence of Permit G-12406 having PSI with the Calapooia River that can be appropriated as a result of this fish persistence condition is <u>0.662 cfs</u>.

$$0.731 - ((0.731 \times 9.4\%) / 100) = 0.662$$

Step 4: Given that the permitted quantity under this right is 1.25 cfs, the entire undeveloped portion is 0.771 cfs, and the amount of water conditioned for fish persistence having PSI with the Calapooia River is 0.731 cfs: If the amount of water legally authorized for appropriation at a given point in time (for example, authorization provided through a WMCP) is 1.0 cfs, then only 0.481 cfs of the amount of water conditioned for fish persistence having PSI with the Calapooia River would be used to satisfy the 1.0 cfs.

$$1.0 - ((1.25 - 0.771) + (0.771 - 0.731)) = 0.481$$

Note: (1.25 - 0.771) equals the developed portion of the permit (0.771 - 0.731) equals the undeveloped portion of the permit not having PSI

In this example, the <u>0.481 cfs</u> of water conditioned for fish persistence having PSI with the Calapooia River is less than the 0.662 cfs maximum amount of water conditioned for fish

Final Order: Permit G-12406 Special Order Volume 12 page 676 Page 7 of 9

<sup>&</sup>lt;sup>2</sup> Currently, the City of Brownsville may not utilize Consumptive Use Percentages for the purpose of calculating the amount of water conditioned for fish persistence of Permit G-12406 that can be appropriated as a result of this fish persistence condition. The utilization of the Consumptive Use Percentage 78.7% <sup>is</sup> only for illustrative purposes in this example.

persistence of the permit having PSI with the Calapooia River (from Step 3) that can be appropriated as a result of this fish persistence condition. Therefore, there would be no required reduction in water use of water conditioned for fish persistence under the permit.

Step 5: If the amount of water legally authorized for appropriation at a given point in time is 1.20 cfs, then <u>0.681 cfs</u> of water conditioned for fish persistence having PSI with the Calapooia River would be used to satisfy the 1.20 cfs.

$$1.20 - ((1.25 - 0.771) + (0.771 - 0.731)) = 0.681$$

In this example, the 0.681 cfs of water conditioned for fish persistence is greater than the 0.662 cfs maximum amount of water conditioned for fish persistence having PSI with the Calapooia (from Step 3) that can be appropriated as a result of this fish persistence condition. Therefore, the amount of water conditioned for fish persistence (having PSI with the Calapooia River) appropriated would need to be reduced by 0.019 cfs.

$$0.681 - 0.662 = 0.019$$

In this example, the maximum amount of water that could be appropriated is 1.181 cfs.

$$1.20 - 0.019 = 1.181$$

### **CONCLUSION OF LAW**

The applicant has demonstrated good cause for the permit extension pursuant to ORS 537.630, 539.010(5) and OAR 690-315-0080(3).

#### **ORDER**

The extension of time for Application G-13221, Permit G-12406, therefore, is approved subject to conditions contained herein. The deadline for completing construction is extended from October 1, 1998, to October 1, 2048. The deadline for applying water to full beneficial use within the terms and conditions of the permit is extended from October 1, 1999, to October 1, 2048.

DATED: March 1, 2019

Dwight French

Water Right Services Division Administrator, for

Thomas M. Byler, Director

Oregon Water Resources Department

Final Order: Permit G-12406 Special Order Volume 12 page 077 Page 8 of 9

If you have any questions about statements contained in this document, please contact Jeffrey D. Pierceall at (503) 986-0802.

If you have other questions about the Department or any of its programs, please contact our Water Resources Customer Service Group at (503) 986-0900.

Final Order: Permit G-12406 Special Order Volume 1/2 page 078 Page 9 of 9