

**Oregon Water Resources Department
Water Right Services Division**

Application for Extension of Time

In the Matter of the Application for an Extension of Time)
for Permit G-12666, Water Right Application G-12526,) PROPOSED FINAL ORDER
in the name of the City of Cascade Locks)

Permit Information

Application File G-12526/ Permit G-12666
Basin 4 – Hood River Basin / Watermaster District 3
Date of Priority: May 6, 1991

Authorized Use of Water

Source of Water: Two Wells within the Columbia River Basin
Purpose or Use: Municipal
Maximum Rate: 3.5 Cubic Feet per Second (CFS), being 2.3 CFS from
Well 1 and 1.2 CFS from Well 2

**This Extension of Time request is being processed in accordance with Oregon
Administrative Rule Chapter 690, Division 315.**

***Please read this Proposed Final Order in its entirety as it contains additional
conditions not included in the original permit.***

This Proposed Final Order applies only to Permit G-12666, water right Application G-12526

Summary of Proposed Final Order for Extension of Time

The Department proposes to:

- Grant an extension of time to complete construction of the water system from October 1, 1998 to October 1, 2029.
- Grant an extension of time to apply water to full beneficial use from October 1, 1999 to October 1, 2029.
- Make the extension of time subject to certain conditions as set forth below.

ACRONYM QUICK REFERENCE

Department – Oregon Department of Water Resources

City – City of Cascade Locks

ODFW – Oregon Department of Fish and Wildlife

PFO – Proposed Final Order

WMCP – Water Management and Conservation Plan

Units of Measure

cfs – cubic feet per second

gpm – gallons per minute

mgd – million gallons per day

AUTHORITY

Generally, see ORS 537.630 and OAR Chapter 690 Division 315.

ORS 537.630(2) provides in pertinent part that the Oregon Water Resources Department (Department) may, for good cause shown, shall order and allow an extension of time, for the completion of the well or other means of developing and securing the ground water or for complete application of water to beneficial use. In determining the extension, the department shall give due weight to the considerations described under ORS 539.010 (5) and to whether other governmental requirements relating to the project have significantly delayed completion of construction or perfection of the right.

ORS 539.010(5) provides in pertinent part that the Water Resources Director, for good cause shown, may extend the time within which the full amount of the water appropriated shall be applied to a beneficial use. This statute instructs the Director to consider: the cost of the appropriation and application of the water to a beneficial purpose; the good faith of the appropriator; the market for water or power to be supplied; the present demands therefore; and the income or use that may be required to provide fair and reasonable returns upon the investment.

OAR 690-315-0080 provides in pertinent part that the Department shall make findings to determine if an extension of time for municipal and/or quasi-municipal water use permit holders may be approved to complete construction and/or apply water to full beneficial use. Under specific circumstances, the Department may condition extensions of time for municipal water use permit holders to provide that use of the undeveloped portion of the permit maintains the

persistence of listed fish species in the portions of the waterways affected by water use under the permit.

OAR 690-315-0090(3) authorizes the Department, under specific circumstances, to condition an extension of time for municipal and/or quasi-municipal water use permit holders to provide that diversion of water beyond the maximum rate diverted under the permit or previous extension(s) shall only be authorized upon issuance of a final order approving a Water Management and Conservation Plan under OAR Chapter 690, Division 86.

FINDINGS OF FACT

Background

1. Permit G-12666 was granted by the Department on August 21, 1996. The permit authorizes the use of up to 3.5 cfs of water, being 2.3 cfs from Well 1 (MULT 2057) and 1.2 cfs from Well 2 (HOOD 352) within the Columbia River Basin, for municipal use. It specified that construction of the water development project was to be completed by October 1, 1998, and that complete application of water was to be made on or before October 1, 1999.
2. Due to an ongoing permit extension rulemaking, the Department placed all pending Applications for Extension of Time for municipal and quasi-municipal permits on hold and did not require municipal and quasi-municipal water use permit holders to submit Applications for Extension of Time until the new rules were adopted.
3. Municipal and quasi-municipal water use permit extension rules OAR 690-315-0070 through 690-315-0100 were adopted on November 1, 2002, amended, filed with the Secretary of State, and became effective on November 22, 2005.
4. The permit holder, the City of Cascade Locks (City), submitted an "Application for Extension of Time" to the Department on March 1, 2004, requesting the time to complete construction of the water system be extended from October 1, 1998 to October 1, 2029, and the time to apply water to full beneficial use under the terms and conditions of Permit G-12666 be extended from October 1, 1999 to October 1, 2029. This is the first extension of time request for Permit G-12666.
5. Notification of the City's Application for Extension of Time for Permit G-12666 was published in the Department's Public Notice dated March 3, 2004. No public comments were received regarding the extension application.
6. On February 16, 2005, May 8, 2014, and July 24, 2014, the City submitted additional information to supplement their Application for Extension of Time.

Review Criteria for Municipal Quasi-Municipal Water Use Permits [OAR 690-315-0080(1)]

The time limits to complete construction and/or apply water to full beneficial use may be extended if the Department finds that the permit holder has met the requirements set forth under OAR 690-315-0080. This determination shall consider the applicable requirements of ORS 537.230¹, 537.630² and/or 539.010(5)³

Complete Extension of Time Application [OAR 690-315-0080(1)(a)]

7. On March 1, 2004, the Department received a completed Application for Extension of Time and the fee specified in ORS 536.050 from the permit holder.

Start of Construction [OAR 690-315-0080(1)(b)]

8. Permit G-12666 was issued prior to June 29, 2005; therefore, the applicant is not required to provide evidence of actions taken to begin actual construction of the project.⁴

Duration of Extension [OAR 690-315-0080(1)(c) and (1)(d)]

Under OAR 690-315-0080(1)(c),(d), in order to approve an extension of time for municipal and quasi-municipal water use permits the Department must find that the time requested is reasonable and the applicant can complete the project within the time requested.

9. The remaining work to be accomplished under Permit G-12666 consists of completing construction of the water system including installing a new replacement well, constructing a booster pump station and PRV stations, replacing approximately 13,600 feet of existing waterline, constructing 0.5 MG and 0.115 MG reservoirs, and applying water to full beneficial use.
10. As of October 1, 1999, the permit holder has appropriated 1.59 cfs of the 3.5 cfs of water, being 0.50 cfs from Well 1 and 1.09 cfs from Well 2, authorized under Permit G-12666 for municipal purposes. There is an undeveloped portion of 1.91 cfs of water, being 1.80 cfs from Well 1 and 0.11 cfs from Well 2, under Permit G-12666 as per OAR 690-315-0010(6)(g).
11. In addition to the 3.5 cfs of water authorized under Permit G-12666 (Wells 1 and 2), the City holds the following municipal use water right certificates and permits:
 - Certificate 41302 for 0.5 cfs of water from Well 1 within the Columbia River Basin;
 - Certificate 16148 for 2.0 cfs of water from Dry Creek, a tributary of the Columbia River; and
 - Permit S-18134 for 10.0 cfs of water from Dry Creek, a tributary of the Columbia River.

¹ ORS 537.230 applies to surface water permits only.

² ORS 537.630 applies to ground water permits only.

³ ORS 537.010(5) applies to surface water and ground water permits.

⁴ Section 5, Chapter 410, Oregon Laws 2005 and OAR 690-315-0070(1)(d).

These water right certificates and permits total 16.0 of water, being 4.0 cfs of ground water, and 12.0 cfs of live flow (surface). The City is currently making beneficial use of 1.0 cfs from Well 1, (0.50 cfs under Certificate 40302 and 0.50 cfs under Permit G-12666) and 1.09 cfs from Well 2 (Permit G-12666). The City of Cascade Locks has not yet made beneficial use of 10.31 cfs of water, being 1.91 under Permit G-12666 and 8.4 cfs of water under Permit S-18134. The City's surface water rights are currently utilized as an emergency backup supply; a filtration plant must be constructed before it surface water rights can be used to meet current water quality standards.

12. According to the City, their peak water demand within its service area boundaries was 2.15 cfs in 2003.
13. According to the City, in 2005, the population within the service boundary of the City of Cascade Locks was 3210, being 1140 permanent residents + 1980 seasonal visitors. The City of Cascade Locks anticipates the population to reach an estimated population of 9280, being 2280 permanent residents + 7000 seasonal visitors by the year 2029, which calculates for an annual growth rate of 4.4 percent per year.
14. According to the City's 2003 WMCP, the City is not allowed to expand beyond the Urban Growth Boundary (UGB) without approval of the United States Congress; they do not anticipate expanding beyond their UGB. (2003 WMCP @ 6.) According to the City's Extension Application, the City has enough land within their UGB to allow for the population to increase from 1140 to their projected population of 2280.
15. According to the City, their peak day demand is projected to be approximately 4.53 cfs of water by the year 2029; however, during peak hours the demand is projected at 14.5 cfs.
16. Full development of Permit G-12666 is needed to address the present and future water demand of the City, including system redundancy and emergency use.
17. The City's request for an extension of time until October 1, 2029 to complete construction of the water system and to apply water to full beneficial use under the terms and conditions of Permit G-12666 is both reasonable and necessary.

Good Cause [OAR 690-315-0080(1)(e) and (3)(a-g) and (4)]

The Department's determination of good cause shall consider the requirements set forth under OAR 690-315-0080(3) and OAR 690-315-0080(4).

Reasonable Diligence and Good Faith of the Appropriator [OAR 690-315-0080(3)(a), (3)(c) and (4)]

Reasonable diligence and good faith of the appropriator must be demonstrated during the permit period or prior extension period as a part of evaluating good cause in determining whether or not to grant an extension. In determining the reasonable diligence and good faith of a municipal or quasi-municipal water use permit holder, the Department shall consider activities associated with the development of the right including, but not limited to, the items set forth under OAR 690-315-0080(4) and shall evaluate how well the applicant met the conditions of the permit or conditions of a prior extension period.

18. Work was accomplished during the original development time frame under Permit G-12666 as follows:
 - a new well system was constructed;

- the well system was connected to the City's water distribution system;
 - electronic pump controls were upgraded;
 - a Data Industrial Meter was installed;
 - a vault was constructed to house the well head and plumbing;
 - the electrical system in Pump No.1 was upgraded;
 - water meters to all connections were installed; and
 - water lines were replaced, upgraded, and/or installed.
19. Since October 1, 1998, the City submitted and received the Department's approval on a 2003 WMCP.
 20. According to the City, as of March 1, 2004, they have invested approximately \$755,993, which is approximately 19 percent of the total projected cost for complete development of this project. The City anticipates an additional 3,269,000 investment is needed for the completion of this project. The Department recognizes that while some of these investment costs are unique to construction and development solely under G-12666, other costs included in this accounting are not partitioned out for G-12666 because (1) they are incurred under the development of a water supply system jointly utilized under other rights held by the City, and/or (2) they are generated from individual activities counted towards reasonable diligence and good faith as listed in ORS 690-315-0080(4) which are not associated with just this permit, but with the development and exercise of all the City's water rights.
 21. The City has appropriated approximately 1.59 cfs of the 3.5 cfs authorized under the permit, being 0.50 from Well 1 and 1.09 from Well 2, for beneficial municipal purposes under the terms of this permit.
 22. The Department has considered the City's compliance with conditions, and did not identify any concerns.

Cost to Appropriate and Apply Water to a Beneficial Purpose [OAR 690-315-0080(3)(b)]

23. According to the City, as of March 1, 2004, they have invested approximately \$755,993, which is 19 percent of the total projected cost for complete development of this project. The City anticipates an additional 3,269,000 investment is needed for the completion of this project.

The Market and Present Demands for Water [OAR 690-315-0080(3)(d)]

24. As described in Findings 10 through 16 above, the City has indicated, and the Department finds that the City must rely on full development of their Permit G-12666.
25. The City projects a population increase, on average, of 4.44 percent per year over a twenty-four year period, being the year's 2005 to 2029.
26. Given the current water supply situation of the City, including current and expected demands, the need for system redundancy, and emergency water supply, there is a market and present demand for the water to be supplied under G-12666.

27. OAR 690-315-0090(3) requires the Department to place a condition on this extension of time to provide that diversion of water beyond 1.59 cfs, being 0.5 cfs from Well 1 and 1.09 cfs from Well 2, under Permit G-12666 shall only be authorized upon issuance of a final order approving a Water Management and Conservation Plan (WMCP) under OAR Chapter 690, Division 86. A “Development Limitation” condition is specified under Item 1 of the “Conditions” section of this PFO to meet this requirement.

Fair Return Upon Investment [OAR 690-315-0080(3)(e)]

28. Use and income from the permitted water development project would result in reasonable returns upon the investment made in the project to date.

Other Governmental Requirements [OAR 690-315-0080(3)(f)]

29. Delays caused by any other governmental requirements in the development of this project have not been identified.

Events which Delayed Development under the Permit [OAR 690-315-0080(3)(g)]

30. Delay of development under Permit G-12666 was due, in part, to the size and scope of the municipal water system, which was designed to be phased in over a period of years.

Maintaining the Persistence of Listed Fish Species [OAR 690-315-0080(1)(f) and (2)]

The Department’s determination regarding maintaining the persistence of listed fish species shall be based on existing data and advice of the Oregon Department of Fish and Wildlife (ODFW). The determination shall be limited to impacts related to stream flow as a result of use of the undeveloped portion of the permit and further limited to where, as a result of use of the undeveloped portion of the permit, ODFW indicates that stream flow would be a limiting factor for the subject listed fish species.

31. On May 3, 2006, the Water Resources Department determined under OAR Chapter 690 Division 9, that use of water under this ground water Permit G-12666 has the potential for substantial interference with surface water. On July 25, 2014, the Department’s estimates of impact on the Columbia River were updated to reflect application updates received on July 24, 2014, for the amount of water beneficially used prior to October 1, 1999.
32. The pending municipal Application for Extension of Time for Permit G-12666 was delivered to ODFW on August 20, 2009 for ODFW’s review under OAR-690-315-0080.
33. Notification that the pending municipal Application for Extension of Time for Permit G-12666 was delivered to ODFW for review was sent to the City on August 26, 2009.
34. Notification that the pending municipal Application for Extension of Time for Permit G-12666 was delivered to ODFW for review was published in the Department’s Public Notice dated September 1, 2009. No public comments were received regarding this notice.

35. On February 27, 2012, the Department received ODFW's Division 315 Superseding Fish Persistence Evaluation⁵ for Permit G-12666.
36. Summary and Excerpts of Advice from ODFW:

Use of water under the portion of this permit that is undeveloped as of October 1, 1999, which is the completion date for application of water to full beneficial use authorized in permit, and is found to have the Potential for Substantial Interference (PSI) with the Columbia River should be conditioned to maintain the persistence of listed fish species in the portions of waterways affected by water use under the permit. ODFW has determined that the Columbia River will be affected by water use under this permit. ODFW's advice is based on the best available information and existing data.

ODFW recognizes that climatic variations will affect the amount of water in the system. In favorable water years, fish populations tend to increase and in unfavorable water years, fish populations contract. The long term objective for a listed species is to have the population increase to a sustainable level over time and to be able to maintain itself through natural fluctuations in the environment.

The target flows, in Table 1, below, are ODFW's recommended flows measured at McNary Dam, Oregon, for maintaining the persistence of listed fish species in the Columbia River. ODFW advises the Water Resources Department to develop conditions that allow municipalities to meet their water needs while maintaining the persistence of listed fish species.

The severity of the measures to be taken by the permit holder should reflect the degree to which the recommended target flows are being missed and the percentage of water that is withdrawn by the municipality as compared to the overall streamflow level, and be adjusted by the ratio of water withdrawn to water being returned directly to the Columbia River through effluent discharges.

Table 1

ODFW'S RECOMMENDED FISH PERSISTENCE TARGET FLOWS IN THE COLUMBIA RIVER AT McNARY DAM NEAR UMATILLA, OREGON	
Month	1000 Cubic Feet per Second
April 10 – April 30	220-260
May – June	220-260
July – August	200

⁵ This advice supersedes advice issued on June 8, 2011. The February 27, 2012 superseding advice was issued following the Department's field inspection of the wells authorized under Permit G-12666, and it was determined that the wells had negligible PSI with Herman Creek.

Streamflow Measurement Point

After analysis of flow records, ODFW has determined that measuring flows at McNary Dam is sufficient for ensuring flows to maintain the persistence of listed fish are met throughout the Columbia River. Therefore, ODFW advises the Department to establish McNary Dam as the point for determining whether fish flows are being met for this municipal permit extension.

37. Department's Findings Based on Review of ODFW's February 27, 2012 Advice:

There is an undeveloped portion of 1.91 cfs of water, being 1.80 cfs from Well 1, and 0.11 cfs from Well 2 under Permit G-12666 as per OAR 690-315-0010(6)(g). Authorization to incrementally expand use of water under this permit beyond 1.59 cfs, being 0.5 cfs under Well 1 and 1.09 cfs under Well 2, up to the permitted quantity of 3.5 cfs can only be granted through the Department's review and approval of the municipal permit holder's future WMCPs (OAR 690-086). When ODFW's recommended target flows are not met, the Department's proposed conditions may result in a reduction in the amount of the undeveloped portion of water under Permit G-12666 having PSI with the Columbia River that can be appropriated. The proposed conditions in this extension of time are based on the following findings:

- a. As determined by the Department on July 25, 2014, use of the undeveloped portion of this permit, being 1.91 cfs, will result in 1.13 cfs of surface water interference with the Columbia River after 360 days of pumping. For the purpose of conditioning this permit to maintain the persistence of fish, the Department finds that the amount of the undeveloped portion of water under G-12666 having PSI with the Columbia River is 1.13 cfs, being 1.07 cfs from Well #1 and 0.06 cfs from Well #2.
- b. The target flows needed to maintain the persistence of fish must be measured in the Columbia River at McNary Dam, Oregon.
- c. When target flows are not met from April 10 through August 31, use of the undeveloped portion of the permit that impacts the Columbia River may need to be reduced in proportion to the degree to which the recommended target flows are being missed. ODFW's formula for determining the percent shortfall, or missed target flow in the Columbia River is defined as:

$$1 - (Q / Q_T),$$

where Q is the flow at the point of interest, and Q_T is the target flow (from Table 2).

- d. ODFW's advice recognizes that municipalities may return a certain amount of flow to a river or stream through their effluent discharge. If the withdrawal points and effluent discharges are within reasonable proximity to each other, such that

fish habitat between the two points is not impacted significantly, then ODFW recommends that any reduction to use of the amount of the undeveloped portion of Permit G-12666 that impacts the Columbia River should be adjusted by the monthly estimated percentage of the difference between the total water withdrawals and their return flows. Therefore, consistent with ODFW's advice, when appropriate, the Department proposes to adjust any reduction by a "Consumptive Use Percentage," as generally determined by $(1 - [\text{total municipal wide returned flows} / \text{total municipal wide diverted flows}])$.

- e. Because the main influence of Columbia River flow levels is the federal management of the dams and that the severity of the measures to be taken by the permit holder should reflect the percentage of water that is withdrawn by the municipality as compared to the overall streamflow level, the Department proposes to limit any overall reduction based on Columbia River flows to no more than 20 percent of the undeveloped portion of Permit G-12666 having PSI with the Columbia River.
- f. From April 10 through June 30, the target flow is expressed as a range (220K-260K cfs). This range is based on the Corps river level forecasting, which reflects the type of water year expected and the physical possibility of providing various flow levels. However, flows below 260K cfs are considered to be less beneficial to the persistence of listed fish species compared to flows of 260K cfs and above. Thus, the larger number in the range (260K cfs) is considered to be the target flow for fish persistence.
- g. The water user could receive "restoration credit" for restoring water to the Columbia River at the Point of Appropriation (POA), or its equivalent above the POA (see below), through instream transfers, instream leases and/or instream water exchanges approved by the Department. When target flows are missed, the credit may be applied to the calculated appropriation of the undeveloped portion of Permit G-12666 having PSI with the Columbia River allowed during the time period April 10-August 31, so long as (1) the total credit is not exceeded, and (2) the legal amount of water that can be diverted under Permit G-12666 is not exceeded.

To qualify for the credit, the instream transfers, instream leases and/or instream water exchanges must protect water for 151 river miles as measured from the POA (near the City of Cascade Locks) to the mouth of the Columbia River; or if protection begins upstream of the POA, it would be acceptable to protect the resource to maintain the equivalent proportion of total river miles of cfs credits as determined by river mile (RM) and Department approved instream transfers, instream leases and/or instream water exchanges. Water added instream below RM 151 (downstream of the POA) does not qualify for restoration credit.

h. Summary Table of Rates Showing Developed and Undeveloped Portions

	Total CFS	Well #1 (CFS)	Well #2 (CFS)
Authorized under Permit G-12666	3.5	2.30	1.20
Portion Developed by 10-1-1999	1.59	0.50	1.09
Undeveloped Portion	1.91	1.80	0.11
Undeveloped Portion with No PSI	0.78	0.73	0.05
Undeveloped Portion with PSI (E_{PSI})	1.13	1.07	0.06
20% Max on Undeveloped Portion with PSI with the Columbia River	0.22	0.21	0.01

38. The Department finds, based on ODFW's advice, that in the absence of conditions, the use of the undeveloped portion of Permit G-12666 that impacts Columbia River surface water will not maintain the persistence of listed fish species in the portions of the waterways affected by water use under the permit, and as a result of the use of the undeveloped portion of the permit with surface water impacts, streamflow would be a limiting factor for the listed fish species.
39. Based on ODFW's advice, the Department proposes to require conditions to maintain, in the portions of the waterways affected by water use under Permit G-12666, the persistence of fish species listed as sensitive, threatened or endangered under state or federal law. (See Item 2 of the "Conditions" section of this PFO.)⁶
40. On August 11, 2014, ODFW notified the Department that the proposed "Conditions to Maintain the Persistence of Listed Fish" for Permit 12666 are consistent with their advice.
41. On August 11, 2014, the Department sent notice to the City's representative, of ODFW's written advice and the "Conditions to Maintain the Persistence of Listed Fish" proposed in this PFO, per OAR 690-315-0080(2)(f), for the pending municipal Application for Extension of Time for Permit G-12666.

CONCLUSIONS OF LAW

1. The City is entitled to apply for an extension of time to complete construction and/or completely apply water to the full beneficial use pursuant to ORS 537.630(2).
2. The City has submitted a complete extension application form and the fee specified under ORS 536.050(1)(k), as required by OAR 690-315-0080(1)(a).
3. Pursuant to Section 5, Chapter 410, Oregon Laws 2005, the permit holder is not required

⁶ The Department, based on advice from the ODFW, has determined that the conditions contained in this PFO are appropriate for this extension. In other municipal extensions that require conditions to maintain the persistence of listed species, different conditions may be warranted depending on the advice received from ODFW and communications with the particular extension applicant.

to demonstrate that actual construction of the project began within one year of the date of issuance of the permit, as otherwise required by OAR 690-315-0080(1)(b).

4. The time requested to complete construction and apply water to full beneficial use is reasonable, as required by OAR 690-315-0080(1)(c).
5. Completion of construction and full application of water to beneficial use can be completed by October 1, 2029⁷ pursuant to OAR 690-315-0080(1)(d).
6. The Department has considered the reasonable diligence and good faith of the appropriator, the cost to appropriate and apply water to a beneficial purpose, the market and present demands for water to be supplied, the financial investment made and the fair return upon the investment, the requirements of other governmental agencies, and unforeseen events over which the water right permit holder had no control, and the Department has determined that the City has shown good cause for an extension of time to complete construction of the water system and to apply the water to full beneficial use pursuant to OAR 690-315-0080(1)(e).
7. As required by OAR 690-315-0090(3) and as described in Finding 27 above and specified under Item 1 of the "Conditions" section of this PFO, the diversion of water beyond 1.59 cfs, being 0.5 cfs from Well 1 and 1.09 cfs from Well 2, under Permit G-12666 shall only be authorized upon issuance of a final order approving a Water Management and Conservation Plan under OAR Chapter 690, Division 86.
8. In accordance with OAR 690-315-0080(1)(f), and as described in Findings 31 through 41 above, the persistence of listed fish species will not be maintained in the portions of the waterways affected by water use under this municipal use permit of the undeveloped portion with surface water impacts, in the absence of special conditions. Therefore, the diversion of water beyond 2.37 cfs under Permit G-12666, being 1.23 cfs from Well 1 and 1.14 cfs from Well 2, will be subject to the conditions specified under Item 2 of the "Conditions" section of this PFO.

⁷ Pursuant to ORS 537.630(4), upon the completion of beneficial use of water allowed under the permit, the permit holder shall hire a certified water rights examiner to survey the appropriation. Within one year after the complete application of water to a beneficial use (or by the date allowed for the complete application of water to a beneficial use), the permit holder shall submit a map of the survey and the claim of beneficial use.

Proposed Order

Based upon the foregoing Findings of Fact and Conclusions of Law, the Department proposes to issue an order to:

extend the time to complete construction of the water system under Permit G-12666 from October 1, 1998 to October 1, 2029.

extend the time to apply the water to beneficial use under Permit G-12666 from October 1, 1999 to October 1, 2029.

Subject to the following conditions:

CONDITIONS

1. **Development Limitations**

Diversion of any water beyond 1.59 cfs, being 0.5 cfs from Well 1 and 1.09 cfs from Well 2, up to 3.5 cfs, being 2.3 cfs from Well 1 and 1.2 cfs from Well 2, under Permit G-12666 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 this Final Order. The amount of water used under Permit G-12666 must be consistent with this and subsequent WMCP's approved under OAR Chapter 690, on file with the Department.

The deadline established in this 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 this final order may also meet the WMCP submittal requirements of other Department orders.

2. **Conditions to Maintain the Persistence of Listed Fish**

Under Permit G-12666, 2.37 cfs, being 1.23 cfs from Well 1 and 1.14 cfs from Well 2 is *not* subject to these fish persistence conditions.⁸

A. **Fish Persistence Target Flows**

Fish Persistence needs in the Columbia River as recommended by ODFW are in Table 2, below; flows are to be measured in the Columbia River at McNary Dam. Daily flow reports for McNary Dam are available from the Fish Passage Center (FPC) established by the Northwest Power Planning Council (NPPC) at <http://www.fpc.org/currentdaily/flowspil.txt>.

⁸2.37 equals the developed portion of the permit, 1.59 cfs (0.5 cfs from Well 2, 1.09 cfs from Well 2), plus the undeveloped portion not having PSI with surface water, 0.78 cfs (0.73 cfs from Well 1 and 0.05 cfs from Well 2). [1.59 + 0.78 = 2.37]

Table 2

FISH PERSISTENCE TARGET FLOWS IN THE COLUMBIA RIVER, MEASURED AT McNARY DAM NEAR UMATILLA, OR	
Month	1000 Cubic Feet per Second
April 10 – April 30	260
May – June	260
July – August	200

Alternate Streamflow Measurement Point

The location of a streamflow 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 undeveloped portion of Permit G-12666 as of October 1, 1999, having PSI with the Columbia River is 1.13 cfs, being 1.07 cfs from Well #1 and 0.06 cfs from Well #2. The maximum amount of the undeveloped portion of Permit G-12666 having PSI with the Columbia River that can be appropriated as a result of this fish persistence condition is determined in proportion to the amount by which the flows shown in Table 2 are missed based on a seven day rolling average⁹ of mean daily flows measured on the Columbia River at McNary Dam. 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 gage at McNary Dam, based on the seven day rolling average¹⁰, and Q_T is the target flow (from Table 2).

The percent missed target flows applied to the undeveloped portion of this permit having PSI with the Columbia River provides the maximum amount of water that could be appropriated under this permit as a result of this fish persistence condition, and is defined as:

$$E_{PSI} - (E_{PSI} \times \% \text{ missed target flows}),$$

where E_{PSI} is undeveloped portion of the permit having PSI with the Columbia River, being 1.13 cfs.

⁹ Alternatively, the water user may use a single daily measurement.

¹⁰ Alternatively, the water user may use a single daily measurement.

The maximum amount of water that can be appropriated as a result of this 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 having PSI with the Columbia River of the permit will not exceed 20%.

SUMMARY TABLE OF RATES SHOWING DEVELOPED AND UNDEVELOPED PORTIONS			
	Total CFS	Well #1 (CFS)	Well #2 (CFS)
Authorized under Permit G-12666	3.5	2.30	1.20
Portion Developed by 10-1-1999	1.59	0.50	1.09
Undeveloped Portion	1.91	1.80	0.11
Undeveloped Portion with No PSI	0.78	0.73	0.05
Undeveloped Portion with PSI (E _{PSI})	1.13	1.07	0.06
20% Max on Undeveloped Portion with PSI with the Columbia River	0.22	0.21	0.01

C. Consumptive Use Percentages

a. Initial Consumptive Use Percentages

The City of Cascade Locks has not identified any Consumptive Use Percentages based on the return of flows to the Columbia 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 G-12666 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 the undeveloped portion of Permit G-12666 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 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 G-12666 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 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 wastewater treatment facility resulting in 25% or more reductions in average monthly return flows to the Columbia 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 G-12666 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 Columbia 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 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.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 G-12666 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 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 G-12666 that can be appropriated 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. Columbia River Flow Restoration Credits for Utilization in Columbia River Calculations

- a. This Flow Restoration Credit (credit) is based, in part, on the amount of water restored to the Columbia River at or above the Point of Appropriation (POA) @ River Mile (RM) 151 through qualified and Department-approved instream transfers, instream leases and/or instream water exchanges. The credit is in cubic feet per second (cfs). When target flows are not met, the credit may be used to increase allowed appropriations to the extent discussed below, when appropriating the undeveloped portion of Permit G-12666 having PSI with the Columbia River.
- b. Since the overall reduction of amount of the undeveloped portion of the permit having PSI with the Columbia River may not exceed 20%, the maximum allowable credit is 0.22 cfs (20% of 1.13).
- c. The maximum allowable credit, 0.22 cfs, is based on flows restored to the Columbia River, being the total combined maximum rate (in cfs) of the instream transfers, instream leases and/or instream water exchanges that protect water in the Columbia River; and is also a function of the river mileage (RM) affected by the use of undeveloped portion of Permit G-12666 having PSI with the Columbia River. The affected river mileage is 151 miles, the distance from the POA near the City of Cascade Locks to the mouth of the Columbia River.

- d. The City has the option to protect flows beginning at or above the POA. If protection begins above the POA, the resource may be protected to maintain the equivalent proportion of total river miles of cfs credits as determined by river mile (RM) and Department approved instream transfers, instream leases and/or instream water exchanges. Protection that begins above the POA would require a proportionately smaller amount of flows restored to the Columbia River compared to flows restored at the POA. Flows restored below RM 151 (downstream of the POA) do not qualify for flow restoration credit.
- e. Utilization of the Flow Restoration Credit:

For the maximum allowable credit of 0.22 cfs, the amount and location of water added instream to the Columbia River must be such that $RM \times cfs = (151 \times 0.22) = 33.2$. For a credit of 0.22 cfs, the constant (33.2) divided by the RM equals the amount of flows that need to be restored to the Columbia River by the City to receive a credit of 0.22 cfs.

1. If water is added instream at McNary Dam (RM 292), then the amount of flows restored to the Columbia River by the City would only require 0.11 cfs in order to receive the 0.22 credit. ($33.2 / 292 = 0.11$)
2. If water is added instream at RM 200, then the amount of flows restored to the Columbia River by the City would only require 0.17 cfs in order to receive the 0.22 credit. ($33.2 / 200 = 0.17$)
3. If water is added at the POA near Cascade Locks (RM 151), then the amount of flows restored to the Columbia River by the City would require 0.22 cfs. ($33.2 / 151 = 0.22$)

For a credit less than the maximum allowable credit of 0.22, for example a credit of 0.15 cfs, the amount and location of water added instream to the Columbia River must be such that $RM \times cfs = (151 \times 0.15) = 22.7$. For a credit of 0.15 cfs, the constant (22.7) divided by the RM equals the amount of flows that need to be restored to the Columbia River by the City to receive the credit of 0.15 cfs.

1. If water is added instream at McNary Dam (RM 292), then the amount of flows restored to the Columbia River by the City would only require 0.08 cfs in order to receive the 0.15 credit. ($22.7 / 292 = 0.08$)
2. If water is added instream at RM 200, then the amount of flows restored to the Columbia River by the City would only require 0.11 cfs in order to receive the 0.15 credit. ($22.7 / 200 = 0.11$)

3. If water is added at the POA near Cascade Locks (RM 151), then the amount of flows restored to the Columbia River by the City would require 0.15 cfs in order to receive the 0.15 credit. ($22.7 / 151 = 0.15$)
- f. The Flow Restoration Credit may be applied to the calculated allowed appropriation of the undeveloped portion of Permit G-12666 having PSI with the Columbia River so long as:
- (1) the maximum amount of the undeveloped portion of Permit G-12666 having PSI with the Columbia River that could be appropriated under the undeveloped portion of the permit as a result of this fish persistence condition *PLUS* the allowed credit does not exceed 1.13 cfs.
 - (2) the allowed appropriation of the undeveloped portion of the permit having PSI with the Columbia River is determined in accordance with 1.A., 1.B., and 1. C., above,
 - (3) the total credit as determined above is not exceeded, and
 - (4) the legal amount of water that can be diverted under the permit as granted through the Department's review and approval of the municipal water user's WMCP under OAR 690-086 is not exceeded.
- g. Establishing the Flow Restoration Credit

The City of Cascade Locks has not identified any instream transfers, instream leases and/or instream water exchanges for restoring water to the Columbia River that meet the criteria in Section 1.D.a-f., above, for the purpose of a Flow Restoration Credit. Thus, at this time the City may not utilize a Flow Restoration Credit for the purpose of offsetting any required reduction to use of the undeveloped portion of Permit G-12666 having PSI with Columbia River due to fish persistence conditions.

In order to establish the Flow Restoration Credit, the City must receive the Water Resources Director's concurrence with any proposed Flow Restoration Credit based on instream transfers, instream leases and/or instream water exchanges for restoring water to the Columbia River that meet the criteria in Section 1.D.a-f.

E. Examples

(NOTE: although not shown in these examples, it is assumed the development limitations for each individual well are not exceeded.)

Example 1: Target flow met.

On July 15, the last seven mean daily flows in the Columbia River at McNary Dam¹¹ were 310K, 290K, 280K, 260K, 260K, 240K and 250K cfs. The seven day rolling average (Q_A) is 270K cfs. The amount of the undeveloped portion of the permit having PSI with the Columbia River that can be appropriated would not be reduced because the 7 day average of mean daily flows is greater than the 200K cfs target flows (Q_T) for July 15.

Example 2: Target flows missed.

Step 1: If on July 15, the average of the last seven mean daily flows was 170K cfs, and the target flow is 200K, then the target flow would be missed by 15.0%.

$$(1 - (170 / 200)) \times 100\% = 15.0\%$$

Step 2: Assuming the Consumptive Use Percentage is 78.7%¹² during the month of July and the utilization of this percentage is authorized, and the target flow is missed by 15.0% (from Step 1), then the amount of the undeveloped portion of the permit having PSI with the Columbia River that could be appropriated would be reduced by 11.8%.

$$(78.7\% \times 15.0\%) / 100 = 11.8\%$$

(If adjustments are not to be made by a Consumptive Use Percentage, then the undeveloped portion of the permit having PSI with the Columbia River would only be reduced by the % by which the target flow is missed – 15.0% in this example).

Step 3: The overall reduction of 11.8% of the amount of the undeveloped portion of the permit having PSI with the Columbia River does not exceed 20%.

¹¹ Daily flow data for McNary Dam is available at <http://www.fpc.org/currentdaily/flowspil.txt>.

¹² Currently, the City of Cascade Locks may not utilize Consumptive Use Percentages for the purpose of calculating the amount of the undeveloped portion of Permit G-12666 that can be appropriated as a result of this fish persistence condition. The utilization of the Consumptive Use Percentage of 78.7%¹³ is only for illustrative purposes in this example.

Step 4: Given that the undeveloped portion of this permit having PSI with the Columbia River (E_{PSI}) is 1.13 cfs, which needs to be reduced by 11.8% (from Step 2), or 0.13 cfs, then the maximum amount of the undeveloped portion of Permit G-12666 having PSI with the Columbia River that can be appropriated as a result of this fish persistence condition is 1.00 cfs.

$$(1.13 \times 11.8 \%) / 100 = 0.13$$

$$1.13 - 0.13 = 1.00$$

Step 5: Assuming the Flow Restoration Credit is 0.20 cfs¹³, and the utilization of this whole credit is authorized, then the maximum amount of the undeveloped portion of Permit G-12666 having PSI with the Columbia River that could be appropriated under the undeveloped portion of the permit as a result of this fish persistence condition is 1.13 cfs. (This maximum amount may be limited as illustrated in Step 6, below.)

$$0.20 + 1.00 = 1.20, \text{ not to exceed } 1.13 \text{ cfs}$$

Step 6: The calculated maximum amount of water that could be appropriated 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 2.5 cfs (for example, authorization provided through a WMCP), then 2.5 cfs would be the maximum amount of diversion allowed under this permit including the developed portion of the permit, being 1.59 cfs, plus the undeveloped portion of the permit not having PSI, being 0.78 cfs.

(Conversely, if the amount of water legally authorized for diversion under this permit is 3.5 cfs, then 3.5 cfs would be the maximum amount of diversion allowed under this permit. (1.13 from Step 5 + the 1.59 developed portion + the 0.78 cfs not having PSI = 3.5).

(Note: if the maximum curtailment was 20%, or 0.22 cfs (20% of 1.13), then 0.91 cfs would be the amount of the undeveloped portion of Permit G-12666 having PSI with the Columbia River that could be appropriated as a result of this fish persistence condition. If the Flow Restoration Credit was the allowable maximum of 0.22, and if the amount of water legally authorized for diversion under this permit is 3.5 cfs, then 3.5 cfs (0.91 cfs max. undeveloped portion with PSI + 0.22 credit + the 1.59 developed portion + the 0.78 cfs not having PSI) would be the maximum amount of diversion allowed under this permit.)

¹³ Currently, the City of Cascade Locks may not utilize a Flow Restoration Credit for the purpose of calculating the amount of the undeveloped portion of Permit G-12666 that can be appropriated as a result of this fish persistence condition. The utilization of the Flow Restoration Credit of 0.2 cfs is only for illustrative purposes in this example.

F. Relocation of the Point(s) of Appropriation (s) and New Quantification of PSI.

Any relocation of the point(s) of appropriation(s) through a permit amendment or transfer process will require a new OWRD ground water review pursuant to OAR Chapter 690 Division 9 to determine if use of water at the relocated point(s) of appropriation(s) has the potential for substantial interference (PSI) with surface water. This review will be used to quantify a new value for E_{PSI} , being the undeveloped portion of the permit as of October 1, 1999, having PSI with the surface water based on the new locations of the point(s) of appropriation(s). The new value for E_{PSI} will be then utilized in the calculations for determining the maximum amount of water that could be appropriated under this permit as a result of this fish persistence condition.

DATED: August 19, 2014


Dwight French
Water Right Services Division Administrator

If you have any questions, please check the information box on the last page for the appropriate names and phone numbers.

Proposed Final Order Hearing Rights

1. Under the provisions of OAR 690-315-0100(1) and 690-315-0060, the applicant or any other person adversely affected or aggrieved by the proposed final order may submit a written protest to the proposed final order. The written protest must be received by the Water Resources Department no later than **October 3, 2014**, being 45 days from the date of publication of the proposed final order in the Department's weekly notice.
2. A written protest shall include:
 - a. The name, address and telephone number of the petitioner;
 - b. A description of the petitioner's interest in the proposed final order and if the protestant claims to represent the public interest, a precise statement of the public interest represented;
 - c. A detailed description of how the action proposed in the proposed final order would adversely affect or aggrieve the petitioner's interest;
 - d. A detailed description of how the proposed final order is in error or deficient and how to correct the alleged error or deficiency;
 - e. Any citation of legal authority supporting the petitioner, if known;
 - f. Proof of service of the protest upon the water right permit holder, if petitioner is other than the water right permit holder; and
 - g. The applicant or non-applicant protest fee required under ORS 536.050.