

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

Application for Extension of Time

In the Matter of the Application for an Extension of Time	)	PROPOSED
for Permit S-45008, Water Right Application S-59448,	)	FINAL ORDER
in the name of the City of Nehalem	)	

Permit Information

Application File S-59448/ Permit S-45008

Basin 1 – North Coast Basin / Watermaster District 1

Date of Priority: October 22, 1979

Authorized Use of Water

Source of Water:	West Branch Coal Creek, an Unnamed Stream and Coal Creek, a tributaries of North Fork Nehalem River
Purpose or Use:	Municipal Use
Maximum Rate:	4.0 cubic feet per second (cfs); being 1.5 cfs from West Branch Coal Creek, 1.0 cfs from an Unnamed Stream, and 1.5 cfs from Coal Creek

**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 S-45008, water right Application S-59448.

Summary of Proposed Final Order for Extension of Time

The Department proposes to:

- Grant an extension of time to complete construction from October 1, 2001 to October 1, 2051.
- Grant an extension of time to apply water to full beneficial use from October 1, 2001 to October 1, 2051.
- Make the extension of time subject to certain conditions as set forth below.

ACRONYM QUICK REFERENCE

Application – Application for Extension of Time
Department – Oregon Department of Water Resources
City – City of Nehalem
ODFW – Oregon Department of Fish and Wildlife
PFO – Proposed Final Order
WMCP – Water Management and Conservation Plan
UGB – Urban Growth Boundary

Units of Measure

cfs – cubic feet per second
gpm – gallons per minute
mgd – million gallons per day

AUTHORITY

Generally, see ORS 537.230 and OAR Chapter 690 Division 315.

ORS 537.230(2) provides in pertinent part that the Oregon Water Resources Department (Department) may, for good cause shown, order and allow an extension to complete construction or perfect a water right. 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 WMCP Plan under OAR Chapter 690, Division 86 which grants access to water under this extended permit.

FINDINGS OF FACT

Background

1. Permit S-45008 was issued by the Department on September 19, 1980. The permit authorizes the use of up to 4.0 cfs of water, being 1.5 cfs from West Branch Coal Creek, 1.0 cfs from an unnamed stream, and 1.5 cfs from Coal Creek, a tributary of the North Fork Nehalem River, for municipal use. The permit specified that actual construction was to begin by September 19, 1981, construction of the water development project was to be completed by October 1, 1982, and that complete application of water was to be made on or before October 1, 1983.
2. Four prior permit extensions have been granted for Permit S-45008. The most recent extension request resulted in the completion dates for construction and full application of water being extended to October 1, 2001.
3. Due to an ongoing permit extension rulemaking, in 1998 the Department stopped processing pending Applications for Extension of Time for municipal and quasi-municipal permits, and did not require municipal and quasi-municipal water use permit holders to submit Applications for Extension of Time during the rulemaking process.
4. Municipal and quasi-municipal water use permit extension rules OAR 690-315-0070 through 690-315-0100 became effective on November 1, 2002. The rules were subsequently amended, and the amended rules became effective on November 22, 2005.
5. On May 8, 2003, City of Nehalem (City) submitted an "Application for Extension of Time" (Application) to the Department requesting the time to complete construction and the time to apply water to full beneficial use under the terms and conditions of Permit S-45008 be extended from October 1, 2001 to October 1, 2051.

6. On October 1, 2008, the City submitted a Water Management and Conservation Plan (WMCP) in response to a financial award that was received from the Safe Drinking Water Revolving Loan Fund.
7. On January 30, 2009, Final Order Approving WMCP, Special Order Volume 77, Page 137, was issued by the Department.
8. Notification of the City's Application for Extension of Time for Permit S-45008 was published in the Department's Public Notice dated May 20, 2003. No public comments were received regarding the extension application.
9. On April 21, 2016, the City submitted update revisions to their pending Application for Extension of Time.

Review Criteria for Municipal and 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(1). 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)]

10. On May 8, 2003, the Department received a completed application for extension of time and the fee specified in ORS 536.050.

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

11. Permit S-45008 was issued prior to June 29, 2005; therefore, the permit holder 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) and (1)(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.

12. The remaining work to be accomplished under Permit S-45008 consists of completing construction which includes installing pipe, a 20,000 gallon storage tank, meters, and a power line extension, and designing and constructing a water treatment plant, and

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(3)(d).

diversion structure at the West Fork Coal Creek Development; and applying water to full beneficial use.

13. As of October 1, 2001, the permit holder had not diverted any water authorized under Permit S-45008 for municipal purposes. There is an undeveloped portion of 4.0 cfs of water under Permit S-45008 as per OAR 690-315-0010(6)(g).

14. In addition to the 4.0 cfs of water authorized under Permit S-45008 the City holds Certificate 8480 for 2.0 cfs of water from Bob's Creek, tributary of the Nehalem River, for Municipal use.

These water rights and permits total 6.0 cfs of live flow (surface) water. City of Nehalem has not yet made use of 4.0 cfs of water under Permit S-45008.

15. According to the Application updates, the City does not anticipate, or have plans to, expand the water service within the UGB area, and the industrial or commercial area.

16. According to the Application, in 2015, the population within the service boundary of City of Nehalem was 943. The City estimates the population will increase at a projected growth rate of 1 percent per year, reaching an estimated population of 1371 by the year 2051.

17. The City's peak water demand within its service area boundaries was 0.33 cfs in 2015.

18. The City's peak day demand is projected to be approximately 0.49 cfs of water by the year 2051.

19. According to the Application update revisions, the City does not have any agreements for water that will be supplied from other entities that the City will depend on to meet its own current or anticipated future water needs.

20. Full development of Permit S-45008 is needed to address the present and future water demand of City of Nehalem, including system redundancy and emergency use.

21. Based on Findings of Fact 12 through 20, the Department finds that the City's request for an extension of time until October 1, 2051, to complete construction and to apply water to full beneficial use under the terms of Permit S-45008 is both reasonable and necessary.

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

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

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.

22. Since October 1, 2001, the City has accomplished the following:

- Installed 5,700 feet of 12" water main;
- Obtained an easement to gain access to water from Coal Creek and its tributaries;
- Submitted a WMCP to the Department in October 2008, which was approved on February 2, 2009;
- Submitted a Water Master Plan Draft November 2015; and
- Submitted a WMCP draft November 2015.

The Department finds that work has been accomplished since the beginning of the last authorized extension time period, which provides evidence of good cause and reasonable diligence in developing the permit.

23. According to the amendment, as of April 21, 2016, they have invested approximately \$100,000, which is about 2 percent of the total projected cost for complete development of this project. The City estimates a \$4,580,972 investment is needed for the completion of this project. The City's 1995 Master Water Plan determined the cost associated with perfecting the water rights under Permit S-45008. The costs identified in the amended application submitted on April 21, 2016, have been adjusted to reflect the cost in 2015 dollars.
24. According to the Application, no water has been diverted under Permit S-45008 for municipal purposes. Beneficial use of water has not yet been demonstrated under this permit because no water was appropriated by October 1, 2001.
25. The Department has considered the City's compliance with conditions, and did not identify any concerns.

Financial Investment and Cost to Appropriate and Apply Water to a Beneficial Purpose

[OAR 690-315-0080(3)(b)]

26. According to the Application, as of May 8, 2003, they have invested approximately \$100,000, which is about 2 percent of the total projected cost for complete development of this project. The City estimates a \$4,580,972 investment is needed for the completion of this project.

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

27. As described in Findings 13 through 21 above, the City has indicated, and the Department finds that the City must rely on full development of their Permit S-45008. Currently, the City's sole source of water is authorized under Certificate 8480 and the source is from Bob's Creek. The City needs an alternative supply source.
28. The City estimates an annual population growth rate of 1 percent per year over a 36 year period, being the years 2001 to 2051. The Department calculates a growth rate of 1.04 percent over the same period.
29. 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 Permit S-45008.
30. OAR 690-315-0090(3) requires the Department to place a condition on this extension of time to provide that diversion of any water up to 4.0 cfs under Permit S-45008 shall only be authorized upon issuance of a final order approving a Water Management and Conservation Plan(s) (WMCP) under OAR Chapter 690, Division 86 that grants access to a greater rate of diversion of water under the permit consistent with OAR 690-086-0130(7). 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)]

31. The City expects to obtain a fair and reasonable return on investment by continuing development of Permit S-45008.

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

32. None have been identified.

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

33. Delay of development under Permit S-45008 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. According to the amended application, delay in the development of this project was caused, in part, by the inability of the City to secure financing to perfect the water rights as contained within the permit. Assuming that the cost estimates as contained in the City's 1995 Master Water Plan are accurate, it will cost the City over \$4.6 million (in 2015 dollars) to fully develop and perfect the water under this permit. The City also does not have an immediate need for water supply from Coal Creek. Currently the City's sole source of water comes from surface water rights on Bob's Creek. It is in the public's best interest for the City to have an alternative supply source which can meet the City's future water demands. Should the City require water from Coal Creek, emergency

funding would be sought to construct infrastructure to perfect Permit S-45008.

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.

34. The pending municipal Application for Extension of Time for Permit S-45008 was delivered to ODFW on December 14, 2012, for ODFW's review under OAR-690-315-0080.
35. Notification that the pending municipal Application for Extension of Time for Permit S-45008 was delivered to ODFW for review was sent to the City.
36. Notification that the pending municipal Application for Extension of Time for Permit S-45008 was delivered to ODFW for review was published in the Department's Public Notice dated December 18, 2012. No public comments were received regarding this notice.
37. On February 8, 2016, the Department received ODFW's Division 315 Fish Persistence Evaluation for Permit S-45008.
38. Summary and Excerpts of Advice from ODFW:

Use of water under the portion of this permit that is undeveloped as of October 1, 2001, should be conditioned to maintain the persistence of listed fish species in the portions of waterways affected by water use under the permit. ODFW finds that an unnamed stream, tributary to Coal Creek, West Fork Coal Creek and Coal Creek 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 long term 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.

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.

ODFW recognizes that Permit S-45008 is subject to regulation if minimum perennial streamflows for MF 28⁵, which are senior in priority to the permit, are not met downstream on the North Fork of the Nehalem River.

Instream water right IS-70957 (junior in priority date) was used as the basis for developing target flows at the three points of diversion under Permit S-45008. The target flows were estimated using a ratio of the drainage area for each source compared to the drainage area of the Nehalem basin and applying this ratio as a percentage⁶ to the flows identified in IS-70957.

Table 1

ODFW'S RECOMMENDED FISH PERSISTENCE TARGET FISH FLOWS			
Source	West Fork Coal Creek	Unnamed Stream	Coal Creek
<i>Month</i>	<i>Cubic Feet per Second</i>	<i>Cubic Feet per Second</i>	<i>Cubic Feet per Second</i>
Jan - April	7.8	0.6	7.8
May	4.0	0.3	4.0
June	2.7	0.2	2.7
July	1.4	0.1	1.4
August	0.7	0.06	0.7
Sept	0.7	0.05	.07
Oct	1.6	0.11	1.6
Nov - Dec	7.8	0.6	7.8
Undeveloped Portions	1.5	1.0	1.5

Streamflow Measurement Points

ODFW finds that actual flows used to determine if target flows are being met need to be measured at the point of diversion located on each source being diverted.

39. Department's Findings Based on Review of ODFW's Advice:

When ODFW's recommended target flows are not met, the Department's proposed conditions will reduce the permit holder's access to the maximum total amount of the

⁵ ODFW's advice references the North Coast Basin Program OAR 690-501-0010, Table 1, for flows in the North Fork Nehalem River to be maintained from the confluence of Soapstone Creek (SW 1/4, Section 22, T4N, R9W, W.M.) to the confluence with the Nehalem River (NW 1/4, Section 23, T3N, R10W, W.M.). This instream priority date is May 5, 1973.

⁶ West Fork Coal Creek is 3.09% of the Nehalem drainage area, the unnamed stream 0.25%, and Coal Creek 3.09%.

undeveloped portion of Permit S-45008 that legally can be diverted. The conditions are based on the following findings:

There is an undeveloped portion of 4.0 cfs of water under Permit S-45008 as per OAR 690-315-0010(6)(g), being 1.5 cfs from West Fork Coal Creek, 1.0 cfs from an unnamed stream, and 1.5 cfs from Coal Creek, all tributary to North Fork Nehalem River. Authorization to use any water under this permit 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 missed, the Department's proposed conditions may result in no diversion, a limit on diversion, or a proportional reduction of the undeveloped portion of water from the named sources of water authorized under Permit S-45008. The proposed conditions in this extension of time are based on the following findings:

- a. The streamflows needed to maintain the persistence of fish must be determined or measured by the water user at each point of diversion (POD) where water is being diverted. The POD on West Fork Coal Creek is authorized within the NE¼ SW¼ of Section 2, Township 3 North, Range 10 West, W.M. The POD on the unnamed stream is authorized within the NE¼ NE¼ of Section 2, Township 3 North, Range 10 West, W.M. The POD on Coal Creek is currently authorized within the NE¼ SE¼ of Section 35, Township 4 North, Range 10 West, W.M.
- b. Determinations on whether or not recommended target flows are missed must be made independently for the three sources of water authorized under Permit S-45008, being the unnamed stream tributary to Coal Creek, West Fork Coal Creek, and Coal Creek.
- c. **West Fork Coal Creek and Coal Creek – October through June**
At these two sources, during these nine months the undeveloped portion of the extension (E) is *less* than the target flow (Q_T). When target flows are not met, use of the undeveloped portion must be reduced in proportion to the degree to which the recommended streamflows are being missed. ODFW's formula for determining the percent shortfall, or missed target flow is defined as:

$$1 - [(Q - E) / Q_T],$$

where Q is the flow at the point of interest, Q_T is the target flow for a given source of water (from Table 1), and E is the undeveloped portion of the permit as of this extension as shown in Table 1.

- d. **Unnamed Stream – Jan through Dec; West Fork Coal Creek and Coal Creek – July through September**
At these three sources, during the months specified the undeveloped portion of the extension (E) is *greater than* the target flow (Q_T), therefore,
 - i. When $Q \leq Q_T$ at a named source:

No water may be diverted, being West Fork Coal Creek, the unnamed stream, or Coal Creek.

ii. When $Q > Q_T$ at a named source:

The maximum amount of the undeveloped portion that could be diverted would equal the difference of $(Q - Q_T)$, not to exceed the amount of the undeveloped portion (E), and is defined as:

$$(Q - Q_T), \text{ not to exceed } E,$$

where Q is the flow at the point of interest, Q_T is the target flow for a given source of water (from Table 1), and E is the undeveloped portion of the permit as of this extension as shown in Table 1.

- e. ODFW's advice recognized that the use of the undeveloped portion of the permit from Coal Creek represents most or all of the natural stream flow during the summer months.
40. The Department finds, based on ODFW's advice, that in the absence of conditions, the use of the undeveloped portion of Permit S-45008 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, stream flows would be a limiting factor for the listed fish species.
41. 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 S-45008, 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.)⁷
42. On February 8, 2016, ODFW notified the Department that the proposed "Conditions to Maintain the Persistence of Listed Fish" for Permit S-45008 are consistent with their advice.
43. On March 9, 2016, the Department notified the City as per OAR 690-315-0080(2)(f) of ODFW's written advice and the "Conditions to Maintain the Persistence of Listed Fish" proposed in this PFO for the pending municipal Application for Extension of Time for Permit S-45008.

⁷ The Department, based on advice from the ODFW, finds 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.

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 537.230(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 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. Pursuant to ORS 540.510(3)(a) and (b), water under Permit S-45008 may be applied to beneficial use on land to which the right is not appurtenant.
5. The time requested to complete construction and apply water to full beneficial use is reasonable, as required by OAR 690-315-0080(1)(c).
6. Completion of construction and full application of water to beneficial use can be completed by October 1, 2051⁸, as required by OAR 690-315-0080(1)(d).
7. 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 finds that the City has shown good cause for an extension of time to complete construction and to apply the water to full beneficial use pursuant to OAR 690-315-0080(1)(e).
8. As required by OAR 690-315-0090(3) and as described in Finding 30, above, and specified under Item 1 of the "Conditions" section of this PFO, the diversion of any water up to 4.0 cfs under Permit S-45008 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 grants access to a greater rate of diversion of water under the permit consistent with OAR 690-086-0130(7).

⁸ For permits applied for or received on or before July 9, 1987, upon complete development of the permit, you must notify the Department that the work has been completed and either: (1) hire a water right examiner certified under ORS 537.798 to conduct a survey, the original to be submitted as required by the Department, for issuance of a water right certificate; or (2) continue to appropriate water under the water right permit until the Department conducts a survey and issues a water right certificate under ORS 537.625.

9. In accordance with OAR 690-315-0080(1)(f), and as described in Findings 38 through 43, above, the persistence of listed fish species will not be maintained in the portions of the waterways affected by water use of the undeveloped portion under this municipal use permit, in the absence of special conditions. Therefore, the diversion of any water up to 4.0 cfs under Permit S-45008 will be subject to the conditions specified under Item 2 of the "Conditions" section of this PFO.

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 under Permit S-45008 from October 1, 2001 to October 1, 2051.

Extend the time to apply the water to beneficial use under Permit S-45008 from October 1, 2001 to October 1, 2051.

Subject to the following conditions:

CONDITIONS

1. Development Limitations

No diversion of water is currently allowed under Permit S-45008. Diversion of any water (not to exceed the maximum amount authorized under this permit, being 4.0 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 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 S-45008 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-45008 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**

A. **Fish Persistence Target Flows**

- a. Fish persistence target flows as recommended by ODFW are in Table 1, below; flows are to be measured at the POD at the named source.

Table 1

ODFW's RECOMMENDED FISH PERSISTENCE TARGET FISH FLOWS (Q_T) MEASURED AT THE POD^a			
Source	West Fork Coal Creek	Unnamed Stream	Coal Creek
<i>Month</i>	<i>Cubic Feet per Second</i>	<i>Cubic Feet per Second</i>	<i>Cubic Feet per Second</i>
Jan - April	7.8	0.6	7.8
May	4.0	0.3	4.0
June	2.7	0.2	2.7
July	1.4	0.1	1.4
August	0.7	0.06	0.7
Sept	0.7	0.05	.07
Oct	1.6	0.11	1.6
Nov - Dec	7.8	0.6	7.8
Undeveloped Portion (E)	1.5	1.0	1.5

^a The POD on West Fork Coal Creek is authorized within the NE¼ SW¼ of Section 2, Township 3 North, Range 10 West, W.M. The POD on the unnamed stream is authorized within the NE¼ NE¼ of Section 2, Township 3 North, Range 10 West, W.M. The POD on Coal Creek is currently authorized within the NE¼ SE¼ of Section 35, Township 4 North, Range 10 West, W.M.

b. **Alternate Streamflow Measurement Point(s)**

The location of a 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 finds 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**

- a. Determinations on whether or not recommended target flows are missed must be made independently for each of the three sources of water authorized under Permit S-45008, being the unnamed stream tributary to Coal Creek, West Fork Coal Creek, and Coal Creek. Two different methods are used to determine water use reductions or limitations. Where the undeveloped portion is less than the target flows, reductions are determined

in proportion to the amount by which target flows are missed (see 2.B.b., below). Where the undeveloped portion is greater than the target flows, use of the undeveloped portion must be reduced or cut-off in order to maintain the target flows (see 2.B.c., below).

b. West Fork Coal Creek and Coal Creek – October through June

The maximum amount of the undeveloped portion of Permit S-45008 that can be diverted from these two sources as a result of these fish persistence conditions is determined in proportion to the amount by which the flows shown in Table 1 are missed based on a seven day rolling average⁹ of mean daily flows as determined or measured by the water user at the POD of the named source. The percent of missed target flows is defined as:

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

where Q_A is the actual flow measured at the POD¹⁰ based on the seven day rolling average, E is the undeveloped portion of the permit at the named source, and Q_T is the target flow (from Table 1) at that source.

The percent by which the target flow is missed applied to the undeveloped portion at the named source provides the maximum amount of undeveloped portion of the permit that can be diverted from that source 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 shown in Table 1.

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

c. Unnamed Stream – January through December

West Fork Coal Creek and Coal Creek – July through September

The maximum amount of the undeveloped portion of Permit S-45008 that can be diverted from a named source as a result of this fish persistence condition is based on a comparison of the target flows (Q_T) at that named source to the corresponding actual flows (Q_A) at that source.

i. When $Q_A \leq Q_T$ at the POD of a named source:

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

¹⁰ Q_A should include any amount of the undeveloped portion being diverted that may have been excluded from the measurement; this would apply if an undeveloped portion is being diverted at the time of the measurement and the measurement is taken just below the point of diversion.

No water may be diverted from the named source under the undeveloped portion of this permit when $Q_A \leq Q_T$, where Q_A is the actual flow measured at the POD¹¹ and Q_T is the target flow (from Table 1). Q_A is based on a seven day rolling average¹² of mean daily flows.

- ii. When $Q_A > Q_T$ at the POD of a named source:

The maximum amount of undeveloped portion of the permit that can be diverted from a named source is defined as:

$$(Q_A - Q_T), \text{ not to exceed } E,$$

where Q_A is the actual flow measured at the POD¹³ and Q_T is the target flow (from Table 1). Q_A is based on a seven day rolling average¹⁴ of mean daily flows. E is the undeveloped portion of the permit as shown in Table 1.

- iii. When $Q_A - Q_T \geq E$, the undeveloped portion of the permit that can be diverted from a named source would not need to be reduced.

C. Summary of Formulas Used for Fish Persistence Condition Calculations

Months	Formulas for West Fork Coal and Coal Creeks
Oct - June	$1 - [(Q_A - E) / Q_T] = \% \text{ by which target flows missed}$
July - Sept	When $Q_A \leq Q_T$: No Diversion of the Undeveloped Portion Allowed
	When $Q_A > Q_T$: $Q_A - Q_T$, not to exceed E

Months	Formulas for the unnamed Stream
Jan - Dec	When $Q_A \leq Q_T$: No Diversion of the Undeveloped Portion Allowed
	When $Q_A > Q_T$: $Q_A - Q_T$, not to exceed E

¹¹ See fn 2.

¹² Alternatively, the water user may use a single daily measurement.

¹³ See fn 2.

¹⁴ Alternatively, the water user may use a single daily measurement.

D. Examples (showing various sources)

West Fork Coal Creek or Coal Creek – October through June

Example 1: Target flow met on Coal Creek

On May 15, the last seven mean daily flows in Coal Creek at the POD were 5.5, 5.6, 5.6, 5.8, 5.9, 6.0 and 5.9 cfs. The seven day rolling average (Q_A) is 5.8 cfs.¹⁵ Given that the undeveloped portion of this permit (E) from this source is 1.5 cfs, then the 7 day average of mean daily flows minus the undeveloped portion is greater than the 4.0 cfs target flow (Q_T) for May 15. In this example, $Q_A - E \geq Q_T$.

$$5.8 - 1.5 \geq 4.0$$

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

Example 2: Target flow missed on West Fork Coal Creek

Step 1: Given that the undeveloped portion of this permit (E) from West Fork Coal Creek is 1.5 cfs, if on May 15, the average of the last seven mean daily flows (Q_A) at the POD was 5.3 cfs, and the target flow (Q_T) is 4.0, then the target flow would be missed by 5.0%.

$$(1 - [(5.3 - 1.5) / 4.0]) \times 100\% = 5.0\%$$

Step 2: Given that the undeveloped portion of this permit (E) from West Fork Coal Creek is 1.5 cfs, and the undeveloped portion of the permit from this source needs to be reduced by 5% (from Step 1), or 0.08 cfs, then the maximum amount of the undeveloped portion of Permit S-45008 from this source that could be diverted as a result of this fish persistence condition would be 1.42 cfs. (This maximum amount may be limited as illustrated in Step 3, below.)

$$(1.5 \times 5.0\%) / 100\% = 0.08$$

$$1.5 - 0.08 = 1.42$$

Step 3: The calculated maximum amount of water that could be diverted under the permit from this source is due to the fish persistence condition may

¹⁵ Q_A should include any amount of the undeveloped portion being diverted that may have been excluded from the measurement; this would apply if an undeveloped portion is being diverted at the time of the measurement and the measurement is taken just below the point of diversion.

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 from this source is 1.0 cfs (for example, authorization provided through a WMCP), then 1.0 cfs would be the maximum amount of diversion from West Fork Coal Creek allowed under this permit, rather than the 1.42 cfs from Step 2.

(Conversely, if the amount of water legally authorized for diversion under this permit from this source the full rate of 1.5 cfs, then 1.42 cfs (from Step 2) would be the maximum amount of diversion allowed under this permit from this source.)

Unnamed Stream – Jan through December; or West Fork or Coal Creek – July through September

Example 3: Target flows met in Coal Creek at the POD ($Q_A > Q_T$), no reduction needed.

On August 15, the last seven mean daily flows at the POD on Coal Creek were 2.1, 2.4, 2.5, 2.6, 2.6, 2.7 and 2.6 cfs. The seven day rolling average (Q_A) is 2.5 cfs.¹⁶ Given that the undeveloped portion of this permit (E) from this source is 1.5 cfs, then the 7 day average of mean daily flows minus the 0.7 cfs target flow (Q_T) for June 15 is greater than undeveloped portion of the permit (E) at this named source. At this source, $Q_A - Q_T \geq E$.

$$2.5 - 0.7 \geq 1.5$$

In this example, the maximum amount of the undeveloped portion of the permit from Coal Creek that could be diverted would be 1.5 cfs.

Example 4: Target flows met in the unnamed stream, reduction needed

Formula: $(Q_A - Q_T)$, not to exceed E

Step 1: On November 15, the average of the last seven mean daily flows (Q_A) from the unnamed stream was 1.4 cfs. Given that the undeveloped portion from this source is 1.0 cfs and the target flow (Q_T) for November is 0.6 cfs, then the maximum amount of the undeveloped portion of the permit from this source that could be diverted would be 0.8 cfs. (This maximum amount may be limited as illustrated in Step 2, below.)

$$1.4 - 0.6 = 0.8 \text{ (does not exceed 1.0 cfs)}$$

¹⁶ Q_A should include any amount of the undeveloped portion being diverted that may have been excluded from the measurement; this would apply if an undeveloped portion is being diverted at the time of the measurement and the measurement is taken just below the point of diversion.

Step 2: The calculated maximum amount of water that could be diverted under the permit from the unnamed stream 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 from this source is 0.5 cfs (for example, authorization provided through a WMCP), then 0.5 cfs would be the maximum amount of diversion allowed under this permit from the unnamed stream, rather than the 0.8 cfs from Step 1.

(Conversely, if the amount of water legally authorized for diversion under this permit from this source is the full rate of 1.0 cfs, then 0.8 cfs (from Step 1) would be the maximum amount of diversion allowed under this permit from this source.)

Example 5: Actual flows are less than the target flows ($Q_A < Q_T$) on West Fork Coal Creek

If on September 15, the average of the last seven mean daily flows (Q_A) at the POD on West Fork Coal Creek was 0.5 cfs, and the target flow (Q_T) is 0.7, then $Q_A < Q_T$.

In this example, no water may be diverted from West Fork Coal Creek under the undeveloped portion of this permit as a result of this fish persistence condition because the flow target is missed at this source.

DATED: June 7, 2016


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 **July 22, 2016**, 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.
3. Within 60 days after the close of the period for requesting a contested case hearing, the Director shall:
 - a. Issue a final order on the extension request; or
 - b. Schedule a contested case hearing if a protest has been submitted, and:
 - 1) Upon review of the issues, the Director finds there are significant disputes related to the proposed agency action; or
 - 2) The applicant submits a written request for a contested case hearing within 30 days after the close of the period for submitting protests.

Notice Regarding Service Members: Active duty service members have a right to stay proceedings under the federal Service Members Civil Relief Act. 50 U.S.C. App. §§501-597b. You may contact the Oregon State Bar or the Oregon Military Department for more information. The toll-free telephone number for the Oregon State Bar is: 1 (800) 452-8260. The toll-free telephone number of the Oregon Military Department is: 1 (800) 452-7500. The Internet address for the United States Armed Forces Legal Assistance Legal Services Locator website is: <http://legalassistance.law.af.mil>

If you have any questions about statements contained in this document, please contact Corey Courchane at 503-986-0825.

If you have questions about how to file a protest or if you have previously filed a protest and you want to know the status, please contact Patricia McCarty at 503-986-0820.

If you have any questions about the Department or any of its programs, please contact our Water Resources Customer Service Group at 503-986-0801.

Address any correspondence to: Water Right Services Division
725 Summer St NE, Suite A
Fax: 503-986-0901 Salem, OR 97301-1266
