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 S-45565, Water Right Application S-55010,)	PROPOSED FINAL ORDER
in the name of the City of Salem)	

Permit Information

Application File S-55010/ Permit S-45565

Basin 2 – Willamatte Basin / Watermaster District 16 Date of Priority: December 6, 1976

Authorized Use of Water

Source of Water:

Willamette River, a tributary of Columbia River

Purpose or Use:

Municipal

Maximum Rate:

200.0 cubic feet per second (cfs)

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-45565, water right Application S-55010.

Summary of Proposed Final Order for Extension of Time

The Department proposes to:

- Grant an extension of time to complete construction from October 1, 1997 to October 1, 2086.
- Grant an extension of time to apply water to full beneficial use from October 1, 1997 to October 1, 2086.
- 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 Salem
ODFW – Oregon Department of Fish and Wildlife
PFO – Proposed Final Order
WMCP – Water Management and Conservation Plan

<u>Units of Measure</u> 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.

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FINDINGS OF FACT

Background

- 1. Permit S-45565 was issued by the Department on April 15, 1981. The permit authorizes the use of up to 200.0 cfs of water from the Willamette River, a tributary of the Columbia River, for municipal use. It specified construction of the water development project was to be completed by October 1, 1983, and that complete application of water was to be made on or before October 1, 1984.
- 2. Three prior permit extensions have been granted for Permit S-45565. The most recent extension request resulted in the completion dates for construction and full application of water being extended to October 1, 1997.
- 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 September 26, 1997, City of Salem submitted an "Application for Extension of Time" 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-45565 be extended from October 1, 1997 to October 1, 2002.
- 6. Notification of the City's Application for Extension of Time for Permit S-45565 was published in the Department's Public Notice dated February 17, 2004. No public comments were received regarding the extension application.
- 7. On January 5, 2004, and on February 3, 2004, the City submitted supplemental information and update revisions to their pending Application for Extension of Time. The amendment requested the extended time to complete construction be changed from October 1, 2002 to October 1, 2145, and the extended time to apply water to full beneficial use be changed from October 1, 2002 to October 1, 2145.
- 8. On April 16, 2015, the City submitted additional information to supplement and update their Application for Extension of Time. The amendment requested the extended time to complete construction be changed from October 1, 2145 to October 1, 2086, and the extended time to apply water to full beneficial use be changed from October 1, 2145 to October 1, 2086.

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 537.230^{1} , 537.630^{2} and/or $539.010(5)^{3}$

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

9. On September 26, 1997, 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)]

10. Permit S-45565 was issued prior to June 29, 2005; therefore, the City 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.

- 11. The remaining work to be accomplished under Permit S-45565 consists of constructing the Willamette River Water Treatment plant and system expansions; installing transmission pipeline from the Willamette River Water Treatment Plant into the existing distribution system; completing construction and applying water to full beneficial use.
- 12. As of October 1, 1997, the permit holder has not diverted any water of the 200.0 cfs of water authorized under Permit S-45565 for municipal purposes. There is an undeveloped portion of 200.0 cfs of water under Permit S-45565 as per OAR 690-315-0010(6)(g).
- 13. In addition to the 200.0 cfs of water authorized under Permit S-45565 the City holds the following municipal use water right certificates, groundwater registrations, surface water registrations, permit and limited license for ASR:
 - Certificate 88641 for 60.0 cfs of water from the North Santiam River;
 - Certificate 88871 for 50.0 cfs of water from the North Santiam River;
 - Certificate 88872 for 12.0 cfs of water from the North Santiam River;
 - Certificate 87958 for 62.0 cfs of water from the North Santiam River;

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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).

- Certificate 87959 for 55.0 cfs of water from the North Santiam River;
- Claim SWR-626 for 10.0 cfs of water from the Willamette River;
- Certificate 87902 for 1.12 cfs of water from ASR Wells 1, 2, 4 and 5 in the Pringle Creek Basin;
- Certificate 87903 for 1.0 cfs of water from ASR Wells 1, 2, 4 and 5 in the Pringle Creek Basin;
- Certificate 87904 for 1.33 cfs of water from ASR Wells 1, 2, 4 and 5 in the Pringle Creek Basin;
- Certificate 87905 for 2.0 cfs of water from ASR Wells 1, 2, 4 and 5 in the Pringle Creek Basin;
- Certificate 57917 for 2.16 cfs of water from Jan Ree Wells 5 and 6 in the Willamette Basin;
- Certificate 66077 for 12.06 cfs from Jan Ree Wells 1-8, and Hayesville Wells 1 and 2 in the Willamette River Basin;
- Permit G-734 for 30.0 cfs of water from a well in the Willamette River Basin;
- Groundwater Registration GR-3502 for 12.38 cfs of water from Infiltration Gallery #1 in the North Santiam River Basin;
- Groundwater Registration GR-3503 for 0.8912 cfs of water from Orchards Heights Well in the Glen Creek Basin;
- Groundwater Registration GR-3504 for 0.89 cfs of water from Wallace Road Well in the Glen Creek Basin;
- Groundwater Registration GR-3505 for 0.56 cfs of water from West Salem City Hall Well in the Willamette River Basin;
- Groundwater Registration GR-3506 for 0.98 cfs of water from Market Street Well in the Pringle Creek Basin;
- Groundwater Registration GR-3507 for 3.45 cfs of water from Middle Well in the North Santiam River Basin;
- Groundwater Registration GR-3508 for 0.45 cfs of water from West Salem City Hall Well in the Willamette River Basin;
- Groundwater Registration GR-3509 for 2.45 cfs of water from West Well in the North Santiam River Basin;
- Groundwater Registration GR-3510 for 3.95 cfs of water from East Well in the North Santiam River Basin;
- Groundwater Registration GR-14 for 2.77 cfs of water from six wells in the Pringle Creek Basin; and
- Limited License LL-001 for Aquifer Storage and Recovery (ASR), for diversion from the North Santiam River at a rate of up to 26.0 cfs for injection, and

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recovery at a rate of up to 30.7 cfs from ASR Wells 1-15.

- 14. In addition to the above municipal water rights and certificates, the City of Salem also holds the following water right certificates:
 - Certificate 42199 for 0.05 cfs of water from Jan Ree Well 3 for quasi-municipal use;
 - Certificate 42202 for 1.08 cfs of water from Jan Ree Well 1 for quasi-municipal use;
 - Certificate 42222 for 1.08 cfs of water from Jan Ree Well 4 for domestic use;
 - Certificate 32221 for 0.22 cfs of water from Cascades Gateway Park Well for "public park use including chlorinization vehicle for bathing lake";
 - Certificate 35773 for 0.11 cfs of water from Cascades Gateway Park Well for public park use;
 - Certificate 34803 for 0.15 cfs of water from Hemlock Well for domestic use;
 and
 - Certificate 42200 for 0.37 cfs of water from Jan Ree Well 1 for domestic use.
- 15. The City's municipal use surface water rights (permits, certificates, and surface water registration) total 239.0 cfs of water from the North Santiam River, and 210.0 cfs from the Willamette River. The City relies almost entirely on the North Santiam River for its water supply. In addition, the City also holds ground water rights on Geren Island and has an ASR program the City uses as a redundant source to its surface water supply. Treated drinking water from the North Santiam River is transferred to the ASR wells, where water is stored to meet peak demands or for emergency use. The recovery rate of the City's ASR system is currently limited to 7.0 to 8 cfs at the end of the recovery period. (WMCP 2014, Page 2-25.) The transmission capacity from Geren Island is currently limited to 102 cfs. And finally, the City has several small capacity ground water wells throughout the City for emergency use.
- 16. The City of Salem provides water to three wholesale customers: The City of Turner, Suburban East Salem Water District and Orchard Heights Water District. Combined, these sales account for approximately 7.4 percent of Salem's total average water sales.
- 17. The City has intergovernmental agreements (IGAs) with two other municipal drinking water systems: the City of Stayton and City of Keizer. Under each of these agreements, the Cities of Stayton and Keizer can obtain water from the City during emergencies if surplus water is available.
- 18. The City of Salem currently has emergency interties with the Cities of Stayton and Keizer. Under the IGAs the Cities can supply a limited amount of water to the City of Salem in emergencies through the emergency supply interties. That supply is limited

due to the supplier's needs to serve their own populations. Thus, the City of Salem can depend these emergency supply interties to only supply a limited amount of emergency water to Salem.

- 19. According to the City, in 2012, the population within the service boundary of City of Salem was 187,863. As described in the City's approved 2014 Water Management and Conservation Plan (WMCP), the City provides water to its retail customers and three wholesale customers. The City estimates the population will increase at a growth rate of 2.36 percent per year for West Salem, 1.18 percent for East Salem and 3.63 percent for the City of Turner, reaching an estimated population of 540,967 by the year 2086.
- 20. According to the City, the City's peak day demand within its service area boundaries was 83.65 cfs in fiscal year 2007-2008.
- 21. According to the City, the City's peak day demand is projected to be approximately 201.0 cfs of water by the year 2086. This includes an Industrial Reserve allowance of 7.8 cfs (5mgd) for new industries that the City hopes to attract.
- 22. The City has been actively planning for growth of its service area. Most of the population growth and increased water demand will occur in the area between the urban service area and the urban growth boundary. The City anticipates that the City will experience annual employment growth and that overall irrigation will increase as residential and commercial/industrial properties, particularly newly developed ones, install automated irrigation systems.
- 23. According to the City of Keizer's 2009 WMCP, the City of Keizer plans to purchase water from the City of Salem before pursuing the Willamette River as a water source when its water demand exceeds it water supply capacity in the future. If so, the City of Salem may become a wholesale water supplier to the City of Keizer in the future.
- 24. The City is taking steps to increase the security of its water supply following a large-scale earthquake. The City's current transmission system from Geren Island is vulnerable to serious damage, which could limit the City's ability to provide water. In the event that the North Santiam River supply is not available due to a large scale catastrophe or unforeseen problems such as flooding, turbidity, algal fouling events, the City intends to use its supply from the Willamette River to meet its water demands. The City intends to initially develop 102 cfs under Permit S-45565 to provide a redundant water supply. The development will occur in phases. Permit S-45565 will also provide redundancy for the City's ASR system, which the City uses to meet peak demands or during water supply emergencies. A small portion of Permit S-45565 will also be required for operating the Willamette River Waste Treatment Plant. The City will use the remaining portion of Permit S-45565 to meet additional future water demand.
- 25. Full development of Permit S-45565 is needed to address the future water demand of the City of Salem, including system redundancy and emergency use.

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- 26. Based on the City's need for system redundancy, the City will need the entire 200.0 cfs of water authorized under Permit S-45565 when its projected demand is 201.0 cfs, which is projected to occur by 2086. To use Permit S-45565, the City will need to build a water treatment plant and associated infrastructure.
- 27. In accordance with OAR 690-315-0080(1)(d) and as described by Findings 22 26, the City demonstrated that their estimated demand projection is consistent with the amount and types of lands and uses proposed to be served by the water user.
- 28. The City's request for an extension of time until October 1, 2086, to complete construction and to apply water to full beneficial use under the terms of Permit S-45565 is both reasonable and necessary.

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

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.

- 29. Prior to the last extension period, the City completed a "Future Water Source, and Supply Distribution Plan (1997). The City also consulted with an engineering firm to analyze water treatment options and costs associated with using water from the Willamette River under this permit.
- 30. During the last extension period, being October 1, 1992 to October 1, 1997, the City developed a Water System Master Plan in 1994.
 - 31. Since October 1, 1997, the City has repaired and rehabilitated their water distribution systems; and submitted to the Department drafts of their WMCP in 2007 and 2014. The Department issued a final order approving the City's first WMCP on June 8, 2009, and approved its subsequent plan on December 5, 2014.
- 32. According to the City, as of April 20, 2015, they have invested approximately \$28,901,000, which is about 10 percent of the total projected cost for complete development of this project. The City estimates a \$250,000,000 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 S-45565, other costs included in this accounting are not partitioned out for S-45565 because (1) they are incurred under the development of a water supply system jointly utilized under other rights held by the City, and (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.
- 33. As of October 1, 1997, the City has not diverted any water of the 200.0 cfs allowed for beneficial municipal purposes under the terms of this permit.
- 34. The Department has considered the City's compliance with conditions, and did not identify any concerns.

<u>Financial Investment and Cost to Appropriate and Apply Water to a Beneficial Purpose</u> [OAR 690-315-0080(3)(b)]

35. According to the City, as of April 20, 2015, they have invested approximately \$28,901,000, which is about 10 percent of the total projected cost for complete development of this project. The City estimates a \$250,000,000 investment is needed for the completion of this project.

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

- 36. As described in Findings 13 through 26 above, the City has indicated, and the Department finds that the City must rely on full development of their Permit S-45565.
- 37. The City estimates the population will increase at a growth rate of 2.36 percent per year for West Salem, 1.18 for East Salem and 3.63 for the City of Turner, over an 89-year period, being the years 1997 to 2086. The City estimates reaching an estimated population of 540,967 by the year 2086.
- 38. Given the current water supply situation of the City, including current and expected demands, the need for system redundancy, emergency water supply, intergovernmental agreements, and interties with other communities, there is a market and present demand for the water to be supplied under Permit S-45565.
- 39. OAR 690-315-0090(3) requires the Department to place a condition on this extension of time to provide that any diversion of water up to 200.0 cfs under Permit S-45565 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)]

40. 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)]

41. Delays caused by any other governmental requirements in the development of this

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project have not been identified.

Events which Delayed Development under the Permit (OAR 690-315-0080(3)(q))

42. Development under Permit S-45565 has not yet been required to meet the City's current demands. Also, the size and scope of the project, which requires significant human and financial resources, have delayed development of this permit. The City has focused its resources on the development of it North Santiam water supply to date. The economic downturn in recent years has also constrained the City's budget, affecting development of water supply infrastructure.

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.

- 43. The pending municipal Application for Extension of Time for Permit S-45565 was delivered to ODFW on March 13, 2006, for ODFW's review under OAR-690-315-0080.
- 44. Notification that the pending municipal Application for Extension of Time for Permit S-45565 was delivered to ODFW for review was sent to the City on March 15, 2006.
- 45. Notification that the pending municipal Application for Extension of Time for Permit S-45565 was delivered to ODFW for review was published in the Department's Public Notice dated March 21, 2006. No public comments were received regarding this notice.
- 46. On January 2, 2008, the Department received ODFW's Division 315 Fish Persistence Evaluation for Permit S-45565. On March 25, 2009, the Department received ODFW's Division 315 Revised Evaluation of Fish Persistence. On November 16, 2009, the Department received ODFW's addendum to ODFW's Division 315 Revised Evaluation of Fish Persistence for Municipal Extension.
- 47. On January 27, 2010, the Department notified the City as per OAR 690-315-0080(2)(f) of ODFW's written advice and the proposed "Conditions to Maintain the Persistence of Listed Fish" for the pending municipal Application for Extension of Time for Permit S-45565.
- 48. Summary and Excerpts of Advice from ODFW:

Use of water under the portion of this permit that is undeveloped as of October 1, 1997, 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 Willamette 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 long term climatic variations will affect the amount of water the USACE will be able to release in any given year. 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 near Salem, Oregon, for maintaining the persistence of listed fish species in the Willamette 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. Such conditions would apply if the USACE is not able to maintain the recommended fish flows.

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

Table 1

ODFW'S RECOMMENDED FISH PERSISTENCE TARGET FLOWS IN THE WILLAMETTE RIVER NEAR SALEM, OREGON		
Month	Cubic Feet per Second	
July 1 – October 31	5,630	
November 1 – March 31	6,000	
April 1 – April 15	15,000 – 19,200	
April 16 – April 30	17,000	
May 1 – May 31	15,000	
June 1 – 15	12,600	
June 16 – 30	8,500	

Streamflow Measurement Point

After analysis of flow records and how the USACE stores and releases water from its facilities to meet mainstem Willamette River target flows, ODFW has determined that measuring flows on the Willamette River at the Salem gage is sufficient to ensure that target flows are met throughout the mainstem Willamette River in order to maintain the persistence of listed fish species. Therefore, ODFW advises the Department to establish the Salem gage as the measurement point for determining whether target flows are being met for this municipal permit extension.

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

There is an undeveloped portion of 200.0 cfs of water under Permit S-45565 as per OAR 690-315-0010(6)(g). Authorization to use any water under this permit can only be granted through the Department's review and approval of the municipal water user'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 S-45565 that can be diverted. The proposed conditions in this extension of time are based on the following findings:

- a. The target flows needed to maintain the persistence of fish must be measured in the Willamette River near Salem, Oregon, USGS GAGE No.14191000, or its equivalent.
- b. During the month of April, the target flow is expressed as a range. Because these flows are the ODFW recommended *minimum* target flows the lesser number in the range (for example, 15,000 cfs in the month of April) is used in developing conditions to maintain the persistence of fish species.
- c. When target flows are not met in the Willamette River, use of the undeveloped portion of the permit may need to be reduced in proportion to the degree to which the recommended streamflows are being missed.
- d. For the period of April through June, ODFW's advice recognized that the main influence on river flow levels is federal management of the dams and release of surplus storage water to meet listed fish flow needs. The advice also noted that withdrawal of water in the spring months will have minimal overall impact on streamflows. Full use of the undeveloped portion of Permit S-45565 represents from 1.1 to 1.5 percent of the April-June streamflows in the Willamette River near Salem.
- e. For the period of July through October, ODFW's advice recognized that the main influence on river flow levels continues to be the federal management of the dams. While the advice noted that withdrawal of water in these summer-fall months will have a proportionally greater effect on flows, it represents an only slightly higher impact compared to the April-June impact; the full use of the undeveloped portion of Permit S-45565 represents 3.6 percent of the July-October streamflows in the Willamette River near Salem.
- f. Consistent with ODFW's advice that the main influence of 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 to no more than 20 percent of the maximum total amount of the undeveloped portion of the permit that legally can be diverted.
- g. 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 maximum total amount of the undeveloped portion of Permit S-45565 that legally can be diverted should be adjusted by the monthly estimated percentage of the difference between the total water withdrawals and their return flows. The point of diversion structure for the City of Salem has not yet been constructed but is forecast to be located at river mile 84.4 and the return flow point located at river mile 78.25. ODFW has determined that if the point of diversion structure and return flows are located at the forecasted locations fish habitat between the two points will not be impacted significantly. Therefore, consistent with ODFW's advice, when applicable, the Department proposes to adjust any reduction by a "Consumptive Use Percentage," as generally determined by (1- [total municipal wide returned flows/ total municipal wide diverted flows]).
- 50. 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-45565, 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.)⁵
- 51. On May 11, 2015, ODFW notified the Department that the proposed "Conditions to Maintain the Persistence of Listed Fish" for Permit S-45565 are consistent with their advice.

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

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⁵ 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.

- 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), water under Permit S-45565 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, 2086. The estimated demand projection is consistent with the amount and types of lands and uses proposed to be served by the permit holder pursuant to 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 has determined 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 39, above, and specified under Item 1 of the "Conditions" section of this PFO, the diversion of any water up to 200.00 cfs under Permit S-45565 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).
- 9. In accordance with OAR 690-315-0080(1)(f), and as described in Findings 43 through 51, 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 200.0 cfs under Permit S-45565 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-45565 from October 1, 1997 to October 1, 2086.

Extend the time to apply the water to beneficial use under Permit S-45565 from October 1, 1997 to October 1, 2086.

Subject to the following conditions:

CONDITIONS

1. Development Limitations

Diversion of any water up to 200.0 cfs under Permit S-45565 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-45565 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-45565 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 on the Willamette River as recommended by ODFW are in Table 2, below; flows are to be measured on the Willamette River near Salem, Oregon (USGS Gage Number 14191000, or its equivalent).

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Table 2

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

b. Alternate Streamflow Measurement Point

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

B. Determining Water Use Reductions - Generally

The maximum amount of the undeveloped portion of Permit S-45565 that can be diverted as a result of this fish persistence condition is determined in proportion to the amount by which the flows shown in Table 2 are missed based on a seven day rolling average⁶ of mean daily flows measured in the Willamette River at the specified gage location. The percent of missed target flows is defined as:

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

where Q_A is the actual flow measured at the designated location based on the seven day rolling average, and Q_T is the target flow (from Table 2).

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

⁶ Alternatively, the water user may use a single daily measurement.

condition, and is defined as:

E - (E x % missed target flow),

where E is the undeveloped portion of the permit as of this extension, being 200.0 cfs.

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

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

B. "Consumptive Use Percentages"

a. Initial Consumptive Use Percentages

- i. Utilization of these "Initial Consumptive Use Percentages" is contingent upon (1) the point of diversion being located at river mile 84.4 and the return flow point located at river mile 78.25, or (2) upon the City providing evidence in writing that ODFW has determined that withdrawal points and effluent discharges are within reasonable proximity to each other, such that fish habitat between the two points is not impacted significantly.
- ii. The Initial Consumptive Use Percentages for the City of Salem to adjust water use reductions for the purpose of calculating the amount of the undeveloped portion of Permit S-45565 that can be diverted as a result of this fish persistence condition are shown in Table 3, below. Utilization of initial Consumptive Use percentages is subject to an approval period described in 2.C.e, below.

Table 3

Month	Initial ¹ Consumptive Use Percentages
January	0 %
February	0 %
March	10.6 %
April	7.7 %

May	24.7 %
June	40.6 %
July	49.7 %
August	46.3 %
September	34.2 %
October	31.4 %
November	9.4 %
December	0 %

¹Use of these initial percentages expires 10 years from the date of the Final Order for this Extension of Time

b. Consumptive Use Percentages Updates

Continuing the utilization of Consumptive Use Percentages for the purpose of calculating the amount of the undeveloped portion of Permit S-45565 that can be diverted as a result of this fish persistence condition beyond an approval period (as described in 2.C.e, below) is contingent upon the City submitting updated Consumptive Use Percentages and receiving the Water Resources Director's concurrence with the proposed Consumptive Use Percentages Updates. Utilization of Consumptive Use Percentages Updates is subject to an approval period described in 2.C.e, below.

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

c. <u>Changes to Wastewater Technology and/or Wastewater Treatment Plant</u> Practices

If there are changes to either wastewater technology, or the practices at the City's wastewater treatment facility, resulting in 25% or more reductions in average monthly return flows to the Willamette River, then the Consumptive Use Percentages in effect at that time may no longer be utilized for the purposes of calculating the amount of the undeveloped portion of Permit S-45565 that can be diverted as a result of this fish persistence condition. The 25% reduction is based on a 10-year rolling average of monthly wastewater return flows to the Willamette River as compared to the average monthly wastewater return flows from the 10 year period just prior to date of the first approval period described in 2.C.e., below.

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

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

If the point(s) of diversion(s) and/or return flows are relocated, Consumptive

Use Percentages in effect at that time may no longer be utilized for the
purpose of calculating the amount of the undeveloped portion of Permit

S-45565 that can be diverted as a result of this fish persistence condition.

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

e. Approval Periods for Utilization of Consumptive Use Percentages
The utilization of Consumptive Use Percentages for the purpose of
calculating the maximum total amount of the undeveloped portion of Permit
S-45565 that can be diverted as a result of this fish persistence condition may
continue for a 10 year approval period that begins from either (1) the date of
the Extension Final Order, or (2) the Water Resources Director's most recent
date of concurrence with Consumptive Use Percentages Updates as
evidenced by the record, unless sections 2.C.c, or 2.C.d. (above) are
applicable.

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

D. Examples

Example 1: Target flow met.

On July 15, the last seven mean daily flows in the Willamette River at the Salem gage were 7000, 6500, 6000, 5500, 5250, 5000 and 4750 cfs. The seven day rolling average (Q_A) is 5714 cfs. The amount of the undeveloped portion of the

permit that can be diverted would not be reduced because the 7 day average of mean daily flows is greater than the 5,630 cfs target flow (Q_T) for July 15. In this example, $Q_A \ge Q_T$.

Example 2: Target flow missed.

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

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

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

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

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

- Step 3: The overall reduction of 5.5% of the amount of the undeveloped portion of the permit does not exceed 20%.
- Step 4: Given that the undeveloped portion of this permit as of this extension (E) is 200.0 cfs, and the undeveloped portion of the permit needs to be reduced by 5.5% (from Step 2), or 11.0 cfs, then the maximum amount of the undeveloped portion of Permit S-45565 that could be diverted as a result of this fish persistence condition would be 189.0 cfs. (This maximum amount may be limited as illustrated in Step 5, below.)

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

$$200.0 - 11.0 = 189.0$$

Step 5: The calculated maximum amount of water that could be diverted due to the fish persistence condition may not exceed the amount of water to which the City is legally entitled to divert. In this example, if the amount of water legally authorized for diversion under this permit is 25.0 cfs (for example, authorization provided through a WMCP), then 25.0 cfs would be the maximum amount of diversion allowed under this permit, rather than 189.0 cfs from Step 4.

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

DATED: June 2, 2015

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 <u>July 17, 2015</u>, 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;
 - 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
 - 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 TO ACTIVE DUTY SERVICEMEMBERS: Active Duty Service members have a right to stay these proceedings under Federal Service members Civil Relief Act. For more information contact the Oregon State Bar at 800-452-8260, the Oregon Military Department at 800-452-7500 or the nearest United States Armed Forces Legal Assistance Office through http://legalassistance.law.of.mil

If you have any questions about statements contained in this document, please contact Machelle A Bamberger at 503-986-0802.

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