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Oregon Water Resources Department  
725 Summer Street NE, Suite A  
Salem Oregon 97301-1266  
(503) 986-0900  
www.wrd.state.or.us

Application for  
**Extension of Time**  
for Municipal and Quasi-Municipal  
Water Use Permits

Make use of this form, *Application for Extension of Time for Municipal and Quasi-Municipal Water Use Permits*, only if the permit uses the word "Municipal" or "Quasi-municipal" in the description of the purpose or use to which water is to be applied.

TO THE DIRECTOR OF THE OREGON WATER RESOURCES DEPARTMENT

A separate extension application must be submitted for each permit as per OAR 690-315-0070(2). This page, with an original signature by the permit holder of record, must accompany the extension of time application.

*This application and a summary of review criteria and procedures that are generally applicable to this application are available at <http://www.wrd.state.or.us/OWRD/PUBS/forms.shtml>*

I, City of Warrenton

NAME OF PERMIT HOLDER [OAR 690-315-0070(1) and (3)(a)]

Linda Engbretson, City Recorder

NAME OF CONTACT

P.O. Box 250  
ADDRESS

Warrenton  
CITY

OR  
STATE

97146  
ZIP

503-861-0823  
PHONE

E-MAIL ADDRESS

the permit holder of:

Application Number S-7902

Permit Number S-5070  
[OAR 690-315-0070(3)(b)]

do hereby request that the time in which to:

complete construction (of diversion/appropriation works and/or purchase and installation of the equipment necessary to the use of water), which time now expires on October 1, 2000, be extended to October 1, 2050,

and/or the time in which to:

apply water to full beneficial use under the terms and conditions of the permit, which time now expires on October 1, 2000, be extended to October 1, 2050.

I am the permittee, or have written authorization from the permittee, to apply for an extension of time under this permit. I certify that the information I have provided in this application is true and correct to the best of my knowledge.

Kent Lutsch  
Signature

5/10/12  
Date

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[OAR 690-315-0070(3)]  
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1. Submit the appropriate extension of time fee (\$500), as specified under ORS 550.050

N/A – The City of Warrenton (City) submitted the required fee when it submitted its original extension application (April 11, 2003).

[OAR 690-315-0070(3)(c)]

2. For Quasi-Municipal water use permit holders, provide evidence of the actions taken to begin actual construction on the project if required under the applicable statute.

N/A – Permit S-5070 authorizes the use of water for municipal, not quasi-municipal, purposes. (See permit in Attachment 1.)

[OAR 690-315-0070(3)(d)]

3. For Municipal water use permits issued on or after June 29, 2005, evidence of the actions taken to begin actual construction on the project.

N/A – Permit S-5070 was issued on June 1, 1921.

[OAR 690-315-0070(3)(e) and OAR 690-315-0070(3)(i)]

4. Provide a description of financial expenditures and evidence of actions taken to develop the water right permit within the permitted time period and, if applicable, within the time period of the most recent extension granted. *Present the list in chronological order in Chart-I.*

CHART-I

INSERT DATES	ALL WORK AND ACTIONS ACCOMPLISHED BEFORE PERMIT WAS ISSUED <i>List work/actions done before the permitted was issued – e.g. Well drilled.</i>	COST
INSERT DATES	ALL WORK AND ACTIONS ACCOMPLISHED DURING PERMITTED TIME PERIOD (after permit was issued and prior to permit "C-date") <i>List work/actions done during the permitted time period.</i>	COST
6/1/1921	Date the permit was signed - find date above signature on last page of permit.	
6/1/1926	Date the permit specified "Actual Construction Work" shall begin ("A-Date") - not all permits contain this date.	
6/1/1926	Date the permit specified complete application of water to the use shall be made ("C-Date") - all permits contain this date.	
INSERT DATES	ALL WORK AND ACTIONS ACCOMPLISHED AFTER PERMIT "C-Date" and PRIOR TO THE MOST RECENT EXTENSION OF TIME REQUEST <i>For Other than the 1<sup>st</sup> Application for Extension of Time: List any work/actions done after the permit C-Date but prior to the most recent extension.</i>	COST
1942	Reconditioned and partially replaced pipelines from the four points of diversion, and expanded size of portion of pipeline.	\$92,000
1946	Replaced timber diversion dam with new, large concrete dam.	
1953	Completed a 1.6 MG peaking reservoir	

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2010	SE Marlin Ave 18" water main	WATER RESOURCES DEPT	\$ 139,704
2010	Rate study	SALEM, OREGON	\$ 40,000
2009-2011	Begin construction of 3.5 mg storage reservoir		\$3,972,000
2010-2011	Cullaby Lake Service Replacements		\$ 37,283
<b>Total Cost to Date</b>			<b>\$ 21,248,326</b>

5. Provide evidence of compliance with conditions contained in the original permit, in any previous extension(s), and/or in any permit amendments (Chart II), or the reason the condition was not satisfied (Chart III). [OAR 690-315-0070(3)(f)]

N/A – Neither Permit S-5070 nor previous extension orders for this permit contain conditions. (See permit and extension orders in Attachment 1.)

6. Provide evidence of the maximum rate (or duty, if applicable) of water diverted for beneficial use under this permit and/or prior extensions of time (if any) made to date. [OAR 690-315-0070(3)(g)]

6-A) For Surface Water Permit Extensions:

Maximum instantaneous rate used to date under this permit = 3.2 cfs

The City's June 1998 Water System Master Plan indicates that the City's maximum demand of 5.3 million gallons was supplied in a single day in 1996. (See Attachment 2.) At that time, the City's water treatment plant operated 24 hours per day. As a result, this volume equates to a rate of 8.2 cfs.

During times of maximum demand, the City uses water from the South Fork and Mainstem Lewis and Clark River. Due to system pressure, the City cannot use water from Camp C Creek during times when it is diverting water from the South Fork and Mainstem Lewis and Clark River. As a result, the 8.2 cfs maximum demand was met by using 5.0 cfs under the City's Certificate 29478 and 3.2 cfs under the City's Permit S-5070.

6-B) For Ground Water Permit Extensions: N/A

- 6-C) If the drilled location of a well is not authorized on this permit, please specify its location below, or provide a map showing its location. Has or will a permit amendment application been/be filed with OWRD? Yes  No  N/A

7. Provide an estimate of the current population served under this permit and a description of the methodology(ies) used to make the estimate. [OAR 690-315-0070(3)(h)]

Current Population: 7,350 as of Year: 2008

Methodology used to estimate current population served: The City serves water throughout the City of Warrenton, which also includes the City of Hammond because Hammond merged with Warrenton in 1991. The City also serves the population in Gearhart, and in unincorporated areas in the Clatsop Plains. The May 2009 NW Coastal Water Supply Task Force, Phase 1 – Water Supply Project report ("Water Supply Project") estimated Warrenton's 2008 service area population by multiplying the

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MAY 16 2012

1970	Constructed the original City water treatment plant	
<b>CHART-I (continued)</b>		WATER RESOURCES DEPT SALEM, OREGON
1971-72	Extended pipelines, constructed new concrete diversion dam and intake structure, improvements to water treatment facilities.	\$1,584,000
1973	Replacement of 14" wood stave pipeline	\$24,960
1985	Completed 16 MG reservoir near WTP, and extend water mains	\$1,200,000
1992	Installation of 0.25 MG reservoir, pump station, extension of water main.	\$294,456
1995	Pilot filter study	\$14,640
<b>INSERT DATES</b>	<b>ALL WORK AND ACTIONS ACCOMPLISHED DURING THE MOST RECENT EXTENSION OF TIME GRANTED</b> <i>For Other than 1<sup>st</sup> Application for Extension of Time: List any work/actions done during the time period most recent extension.</i>	<b>COST</b>
10/1/1995	Date of the last "Extended From Date" for complete application of water (used on the most recently approved extension of time).	
1998	Water System Master Plan	\$1,506
10/1/2000	Last "Extended To" date for complete application of water (resulting from the most recently approved extension of time).	
<b>INSERT DATES</b>	<b>ALL WORK AND ACTIONS ACCOMPLISHED AFTER THE MOST RECENT EXTENSION OF TIME GRANTED</b> <i>List work/actions done after the last authorized date for complete application of water has passed.</i>	<b>COST</b>
2001	North Coast Industrial Park 12" extension	\$ 725,142
2001	NE 5 <sup>th</sup> Street water main upgrade to 12"	\$ 462,338
2001-2003	Meter all water services inside the City Limits	\$ 345,000
2002	Rate Study Methodology	\$ 40,000
2002	Water microfiltration plant	\$9,144,000
2004	Inter-tie study with City of Astoria	\$ 9,955
2004	Marlin Ave. 18" water line	\$ 123,342
2004	Water lines and meters in Pinehurst and Highlands	\$ 30,000
2005	Fluoride system	\$ 18,099
2006	Aluminum Chlorohydrate system	\$ 27,950
2006	Camp Rilea 12" water main replacement	\$ 206,731
2006	Lewis Road water line	\$ 122,423
2006	Pressure reducing valve replacement	\$ 49,592
2007	Lewis and Clark Bridge 7 repairs to suspend water main from Lewis & Clark River	\$ 563,506
2007	Port of Astoria 18" transmission main	\$ 847,938
2007	Water treatment plant filter replacement	\$ 535,908
2008	Fresh water booster pump	\$ 14,294
2008	NW 5 <sup>th</sup> to NE 13 <sup>th</sup> 18" water mains	\$ 447,350
2008	Juniper Ridge water line	\$ 41,727
2008	Power supply and sump pump at PRV	\$ 5,416
2008	SE Dolphin and Highway 101 18" butterfly valve	\$ 13,964
2010	SW 9 <sup>th</sup> to Ridge Road 12" water main	\$ 73,102

3,000 service connections reported by City staff by 2.45, which is the average number of persons per household calculated using 2008 Portland State (PSU) University Population Research Center population projection within the City of Warrenton and number of service connections within the City. (See Attachment 3 ).

[OAR 690-315-0070(3)(p)]

8. **Report the current peak water demand of the current population served, and a description of the methodology(ies) used to make the estimate.**

**Current Peak Water Demand: 8.2 cfs in 1996**

Methodology used to estimate current peak demand: The City's June 1998 Water System Master Plan indicates that the City's maximum demand of 5.3 million gallons was supplied in a single day in 1996. (See Attachment 2.) At that time, the City's water treatment plant operated 24 hours per day. As a result, this volume equates to a rate of 8.2 cfs.

[OAR 690-315-0070(3)(k)]

9. **Provide a summary of any events that delayed completion of the water development or application of water to full beneficial use, including other governmental requirements (if any), relating to the project that have significantly delayed completion of construction or perfection of the right.**

The City has developed this water use permit based on its water demand and the available financing. Due to the size and scope of this project and the City's demand to date, the maximum authorized rate for this permit has not been required to date.

[OAR 690-315-0070(3)(l)]

- 10-A. **Provide an estimated demand projection and a description of the methodology(ies) used for the subject water right permit, considering the other water rights held by the municipal or quasi-municipal water use permit holder, and a date by which the water development is anticipated to be completed and water put to full beneficial use.**

a) **Inventory of Water Rights Held**

See inventory of the City's water rights in Attachment 4.

b) **Water Supply Contracts and/or Agreements**

Water agreements for water that will be supplied by the permit holder to other entities.

The City of Gearhart currently purchases its water from Warrenton. The City is currently in the process of executing a Memorandum of Understanding with Gearhart for providing short-term water service.

Water supply contracts or agreements for water that will be supplied from other entities that the permit holder will depend on to meet its own current or anticipated future water needs.

The City does not have water supply contracts or agreements to obtain water supply from other entities.

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c) Projected Population

**Population Growth Rate: Warrenton: 1.7%; Unincorporated Clatsop County: 0.2%**

**Projected Population: 11,740 as of Year: 2050**

Methodology used to estimate projected population and population growth rate: The 2009 Water Supply Project estimated that Warrenton would have a service area population of 11,740 in the year 2050. (See Attachment 3.) This population projection was developed using the Clatsop County Comprehensive Plan's projected populations and annual average growth rates for Warrenton and unincorporated Clatsop County. (The 2009 Water Supply Project report estimated the population of Gearhart separately.) The 2009 Water Supply Project used the Comprehensive Plan's projected population for Warrenton for the years 2015, 2020, 2025, and 2030. Population projections for Warrenton in 2040 and 2050 were developed by increasing the population by the Comprehensive Plan's average annual growth rate (2000-2030) for Warrenton (1.7 percent). The population in unincorporated Clatsop County served by the City was developed by applying the average annual growth rate for 2000-2030 from the County's Comprehensive Plan (0.2 percent) to the 2008 estimated population of 2,700 customers served outside of the City. The projected populations for the City's service area were developed by adding the projected populations for the City and the unincorporated areas of the County that are served by the City.

d) Future Peak Water Demands

**Projected Peak Water Demand: 25 cfs as of Year: 2050**

Methodology used to estimate peak water demand: The 2009 Water Supply Project estimated the City's maximum day demand for 2050 to be 5.6 mgd (8.7 cfs). This projected demand was developed based on the City's historical water demands as estimated in the 2009 report. The City's historical maximum day demand (MDD) was calculated by adjusting the highest "Monthly average maximum peak day use" by 10 percent to account for fluctuations in maximum flow throughout the month. The result was an estimated MDD of 3.5 mgd (5.4 cfs). The MDD was divided by the estimated population (7,350) to obtain a per capita MDD of 473 gallons per capita day (gpcd). The per capita MDD was multiplied by the projected populations for Warrenton's service area to obtain the projected 2050 MDD. (473 gpcd x 11,740 = 5.6 mgd.) (See Attachment 3.)

The City's 2050 MDD identified in the 2009 Water Supply Project is only slightly more than the City's maximum beneficial use to date (described above). Nonetheless, this MDD will be used to estimate the City's demand projections because the 2050 MDD represents the most recent documented evaluation of the City's future water demands. Further, this demand projection reflects reductions in the City's water demands since its maximum water demand of 8.2 cfs in 1996.

In addition, the City has a significant amount of undeveloped industrial land within its service area, which was not considered in the 2009 Water Supply Project. Although it is difficult to predict when this land will be fully developed and how much water will be required to meet the needs of new industries, the City has used the methodology described in more detail below to estimate that by 2050, it will need approximately 16.8 cfs to meet projected new industrial demands.

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The combined demand of typical municipal use and new industrial uses estimated to occur in 2050 would total approximately 25 cfs. (8.7 cfs 2050 MDD for typical municipal use + approximately 16 cfs for new industrial demands = approximately 25 cfs.) The City is expected to partially meet this demand through use of 5 cfs under Certificate 29478. The remaining 20 cfs of this demand would be met by the use of water under Permit S-5070. (The City is unable to use water from Camp C Creek under Certificate 9777 during times when water is diverted from South Fork and Mainstem Lewis & Clark River due to water pressure within the conveyance system.) As a result, the City anticipates that it will fully develop Permit S-5070 by October 1, 2050.

e) Potential Growth

City staff reviewed the lands within the Cities of Warrenton (and Hammond) to identify the acres zoned as "General Industrial" or "Water Dependent Industrial." City staff then determined the amount of industrial acreage that was undeveloped. Industrial lands were considered "undeveloped" if the land had an improvement value of less than \$10,000. Based on this analysis, City staff concluded that the City has a total of 1,006 acres of undeveloped land zoned as "General Industrial" and 393 acres zoned as "Water Dependent Industrial Shorelands," for a total of 1,399 acres of undeveloped industrial lands.

The undeveloped industrial acreage was reduced by 30 percent to estimate constraints such as steep slopes, delineated wetlands, and other factors, and an allowance for public facilities such as streets. As a result, the total potentially buildable industrial land was estimated to be approximately 980 acres.

Theoretical demand factors for industries in Oregon have been shown to vary from 0.01 mgd per acre to 0.28 mgd per acre. (See Port of Umatilla Water Management and Conservation Plan, Exhibit 5-5 in Attachment 5.) While it is difficult to precisely predict the amount of water that new industries will require, the following table shows the potential range of future industrial water use by applying the industrial use factors in different proportions.

**Potential Industrial Demand Scenarios for Industrial and Water Dependent Industrial Lands within City**

Scenarios	Division of Land (acres)		Amount of Water Use (mgd)		
	Low Water Use Industry	High Water Use Industry	Low Use (0.01 mgd/Ac)	High Use (0.28 mgd/Ac)	Total
<b>High Water Demand (10% / 90%)</b>	98	882	.98	247	248
<b>Low Water Demand (90% / 10%)</b>	882	98	.88	27	28
<b>Moderate Water Demand (70% / 30%)</b>	686	294	.69	82	83

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MAY 16 2012

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As shown above, under a "moderate water demand" scenario, in which low water demand industries occupy 70 percent of the 980 acres of potentially buildable industrial lands, and high water demand industries occupy 30 percent of this land within the City, the total projected industrial demand would be approximately 83 mgd or 128 cfs.

Although it is difficult to predict when industrial demand will occur, the City estimates that approximately 10 to 15 percent of its potentially buildable industrial land may be developed by 2050. The estimated water demand associated with this level of development would range from approximately 12.8 to 19.2 cfs (10 to 15 percent of 128 cfs, respectively), and have an average of 16 cfs.

f) Completion Date

Provide the date by which the water development is anticipated to be completed and water put to full beneficial use. **October 1, 2050**

[OAR 690-315-0070(3)(l)]

- 10-B. Application for Extension of Time requests for greater than 50 years must include documentation that the demand projection is consistent with the amount and types of lands and uses proposed to be served by the permit holder.**

The City is not requesting an extension of time greater than 50 years. Nonetheless, the City provides the following information. The water demands developed through the 2009 Water Supply Project were based on the Clatsop County Comprehensive Plan population projections and growth rates for the City of Warrenton and the unincorporated portions of the county. The water demands to serve future industrial uses are based on the amount of land currently zoned for "General Industrial" or "Water Dependent Industrial" within the City of Warrenton (and Hammond).

[OAR 690-315-0070(3)(j) and OAR 690-315-0070(3)(m)]

- 11. Provide an estimate of the costs to complete water development and summary of the future plan and schedule to complete construction and/or perfect the water right.**

**CHART-V**

APPROXIMATE DATE RANGE	WORK AND ACTIONS TO BE ACCOMPLISHED	ESTIMATED COST
2012	Replace sections of raw water main	\$ 150,000
2012	Hydrochloric acid storage building	\$ 50,000
2012	Replace hypalon lining and move intake of 16 MG raw water reservoir	\$ 298,000
2012	SE Neptune Ave connection to Pacific Ave	\$ 50,000
2012	DeLaura Beach upsize 8" to 12" water main	\$225,000
2012	Line replacement SE Marlin Ave	\$ 325,000
2012	Replace water main from Bridge 7 to old WTP	\$ 150,000
2013	NW Cedar Ct reconstruction engineering and construction	\$ 70,000
2013	Replace NW 13 <sup>th</sup> to Lake Dr. 18" water main	\$ 750,000
2013	Extend 8" water main on Tyee to Fort Stevens State Park	\$ 20,000
2013	Replace 4" water line with 8" from SW 4 <sup>th</sup> to SW 2 <sup>nd</sup>	\$ 50,000

MAY 6 1 2012

MAY 16 2012



2013	SW Main Ct replace water line	\$ 50,000
2013	Replace water line SE Anchor	\$40,000
2013	Replace water line SE 3 <sup>rd</sup>	\$ 40,000
2013	Replace Fourth Ave. water line	\$ 45,000
2013	Replace SW 4 <sup>th</sup> Street water line	\$ 25,000
2013	Pressure reducing valve a SWR booster pump station	\$80,000
2013-2018	Asbestos pipe replacement	\$300,000
2013-2018	Water treatment plant filter replacement	\$1,320,000
2014	Replace Jetty Street water line	\$ 30,000
2014	SE Galena water line replacement	\$ 80,000
2014	Ridge Road 18" upgrade Columbia Beach to Pacific	\$ 750,000
2014	Replace water main from Lewis & Clark dam to Bridge 7	\$150,000
2014	Install concrete walls in backwash pond	\$ 40,000
2014	Replace AC water line SW Birch Court	\$ 40,000
2015	PRV valve for raw water reservoir	\$ 60,000
2015-2017	24" raw water main replacements	\$ 600,000
2015	Sixth Ave. water line replacement	\$ 30,000
2016	SE Ensign 18" water line upgrade	\$ 800,000
2017	Fifth Ave. water line replacement	\$ 76,000
2017	Sixth Ave. water line replacement	\$ 120,000
2017-2018	18" transmission main project	\$ 1,000,000
2040-2050	Construct new water treatment plant	\$ 12,000,000
Year: 2050	Date intend to apply water to full beneficial use under the terms and conditions of this permit.	
<b>Estimated Total Cost to Complete Development</b>		<b>\$ 19,814,000</b>

[OAR 690-315-0070(3)(n)]

12. **Justify the time requested to complete the project and/or apply the water to full beneficial use.**

The City has moved toward development of Permit S-5070 based on its water demand and available financing. Due to the City's other existing water rights, and the size and scope of this project, use of this water right's maximum authorized rate of 20.0 cfs has not been required to date. However, based on the City's demand projections and the anticipated need to provide water to new industrial water users, the City anticipates a total demand of approximately 25 cfs, which would require beneficial use of the City's certificate 29478 (with a maximum authorized rate of 5.0 cfs) and the entire 20 cfs authorized by Permit S-5070, by 2050.

The City has a third water right (Certificate 9777), which authorizes the use of up to 2.0 cfs from Camp C Creek for municipal purposes. The pressure within the City's system prevents water from Camp C Creek from entering the City's system when the it is using water from the South Fork and Mainstem Lewis and Clark River. As a result, the City does not usually obtain water under Certificate 9777 during times of peak demand (the summer months). Consequently, to meet a peak demand of 25.0 cfs during the summer months, the City will need the maximum authorized rate of 20.0 cfs under is Permit S-5070.

For these reasons, an extension of time until 2050 is reasonable.

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[OAR 690-315-0070(3)(o)]

13. Provide any other information you wish OWRD to consider while evaluating the Application for Extension of Time

N/A

[OAR 690-315-0070(3)(q)]

14. For Municipal water use permits issued before November 2, 1998, for the first extension issued after June 29, 2005, provide a copy of any agreements regarding use of the undeveloped portion of the permit between the permit holder and a federal or state agency that include conditions or required actions that maintain the persistence of listed fish species in the portions of the waterways affected by water use under the permit.

The City has not entered into any agreements with federal or state agencies regarding use of the undeveloped portion of the permit that include conditions or required actions that maintain the persistence of listed fish species in the waterways affected by water use under this permit.

MAY 1 2012

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