



CITY OF KIRKLAND
Department of Public Works
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www.kirklandwa.gov

MEMORANDUM

To: Kurt Triplett, City Manager

From: Kathy Brown, Public Works Director
Erin Devoto, Public Works Superintendent
Greg Neumann, Water Division Manager

Date: March 3, 2015

Subject: COMPREHENSIVE WATER SYSTEM PLAN (WSP), ADOPTION

RECOMMENDATION:

Staff recommends that the City Council take the following action:

- Approve the Resolution adopting the WSP, subject to any minor changes occurring as a result of final review from the Washington State Department of Health.

BACKGROUND DISCUSSION:

The adoption of this six year WSP is in accordance with Washington State Department of Health (DOH) regulations set forth in the Washington Administrative Code (WAC) 246-290-100. The primary use of the WSP is to present a description of the existing water system and service area, a forecast of future water demands, policies and design criteria for water system operation and improvements, the operations and maintenance program, staffing requirements, a schedule of improvements, and a financial plan to accomplish the improvements. The WSP also includes a Water Use Efficiency plan, a water quality monitoring plan, and a cross-connection control plan.

The City's last WSP update was approved by the DOH in 2007. Below is brief summary of the changes that have occurred since the last approved update:

- On January 22, 2007, the DOH Water Use Efficiency (WUE) Rule became effective. The rule is intended to ensure that water systems have a reliable supply and that water is used efficiently.
- In December, 2009, the DOH Water System Design Manual was updated. Revisions focused on water demand requirements and physical system capacity analysis.
- Miscellaneous rules have been updated or revised, including additional water quality monitoring requirements, revisions to groundwater regulations, and rules regarding byproducts of disinfectants.

The City of Kirkland is a member of the Cascade Water Alliance (Cascade). The Interlocal Contract between the City and the Cascade states that Cascade will provide a full supply commitment to the City for current and future water supply needs.

The City provides water service to over 12,300 customer accounts, servicing a population of over 40,000 people. Residential customers make up about 84 percent of all customer accounts, and use about 52% of all water supplied. Kirkland also operates several joint use facilities that provide water to areas of the cities of Kirkland, Redmond, and Bellevue. All three cities are proportionally responsible for the cost of maintaining and operating the joint facilities.

Total system-wide usage has decreased approximately 5 percent from 2005 to 2013, primarily due to water use efficiency practices and an increase in the number of homes with water-efficient plumbing. The City's WUE Program presents a goal of saving 53,000 gallons per day annually from 2014 through 2019, based on the City's portion of the Cascade Water Alliance's regional goal.

A component of the WSP is an evaluation of the City's water system to determine its ability to meet the policies and design criteria of the City, along with those mandated by the DOH. Below is a brief summary of the evaluation:

- The City's existing reservoirs and supply stations have adequate capacity for the next 20 years.
- Two supply stations (Supply Stations S1 and S3) should be upgraded for improved operability and ease of maintenance.
- The North Reservoir Booster Pump Station should be upgraded with larger pumps. Access and heating/ventilation improvements are needed as well.
- Several water mains need replacement.
- Telemetry, operation, and control improvements are needed to provide access to historical data and to improve data backup procedures. Improvements will also simplify the operation of the water system and optimize control of the facilities.

The projects identified in the adopted WSP will be incorporated into the 2015–2020 Capital Improvement Program and the City's 2035 Comprehensive Plan.

The WSP was developed with City staff and RH2 Consultants. It was submitted to DOH in September of 2014. DOH returned comments in December of 2014. Final plan revisions incorporated comments and answers by the cities of Bellevue, Redmond, Woodinville Water District, Cascade Water Alliance, Northshore Water and Sewer District, and King County. Final plan revisions were submitted to DOH on March 3, 2015. Responses to DOH's comments will be available on the City website.

The draft plan was made available on the City's website and a public hearing was held on October 7, 2014. There were no comments made or submitted by the public.

DOH will issue final approval of the WSP once Council has approved it.

The WSP Update is available at this link for your convenience:

http://www.kirklandwa.gov/depart/Public_Works/Utilities/Water/kir2014WSP.htm

RESOLUTION R-5116

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF KIRKLAND
ADOPTING THE 2014 CITY OF KIRKLAND WATER SYSTEM PLAN.

1 WHEREAS, the Washington State Department of Health requires
2 updates of water system plans every six years; and
3

4 WHEREAS, the Kirkland Department of Public Works has
5 prepared and recommended the "City of Kirkland Water System Plan,"
6 dated August 2014 ("Plan"), for the City's water service area; and
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8 WHEREAS, on August 6, 2014 the Plan was discussed at the
9 Parks/Public Works Council Committee, and on October 7, 2014, the City
10 Council held a public hearing on the Plan as required by Washington
11 Administrative Code Section 246-290-100(8); and
12

13 WHEREAS, the Plan has been submitted to all neighboring
14 agencies and cities for their review and comment for consistency with
15 their respective plans; and
16

17 WHEREAS, The Plan has been submitted to the Washington
18 State Department of Health; and
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20 WHEREAS, the Council has determined the Comprehensive
21 Water System Plan should be adopted.
22

23 NOW, THEREFORE, be it resolved by the City Council of the City
24 of Kirkland as follows:
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26 Section 1. The Plan, dated August 2014, is hereby adopted as
27 the water system plan for the Kirkland water service area.
28

29
30 Passed by majority vote of the Kirkland City Council in open
31 meeting this ____ day of _____, 2015.
32

33 Signed in authentication thereof this ____ day of _____, 2015.

MAYOR

Attest:

City Clerk