MEMORANDUM
CITY OF LANGLEY PUBLIC WORKS DEPARTMENT
112 Second St./PO Box 366 Langley, Washington 98260 (360) 221-4246

To: Mayor Larry Kwarsick and Members of the City Council
From: Challis Stringer, Director of Public Works
Date: May 11, 2012
Re: 2012 Comprehensive Water System Plan

This staff report presents a public hearing and a draft ordinance for the proposed updated 2012 Comprehensive Water System Plan.

Background

Draft 2012 Comprehensive Water System Plan
The city’s water system is required by Washington Administrative Code (WAC) 246-290-100 to submit a water system plan for review and approval by the Washington State Department of Health (DOH) every six years that plans for and demonstrates the capacity of the water system for a period of at least twenty years into the future. The plan shall address the following elements:

♦ Description of the water system, including:
  ♦ Ownership and management
  ♦ System history and background
  ♦ Related plans
  ♦ Service area maps, characteristics, agreements, and policies

♦ Basic Planning Data, including:
  ♦ Current population, service connections, water use, and equivalent residential units
  ♦ Sufficient water production and consumption data to identify trends
  ♦ Designated land use, zoning, future population, and water demand for a consecutive six-year and twenty-year planning period within the water system service area

♦ Demand Forecasts for a consecutive six-year and twenty-year planning period

♦ System Analysis, including:
  ♦ System design standards
  ♦ Water quality analysis
  ♦ System inventory description and analysis
  ♦ Summary of system deficiencies
Water resource analysis, including:
- A water use efficiency program (WAC 246-290-810)
- Source of supply analysis
- A water shortage response plan
- Water right self-assessment
- Water supply reliability analysis
- Interties

Source water protection (WAC 246-290-135)
Operation and maintenance program (WAC 246-290-415 & WAC 246-290-654)
Improvement Program, including a six-year capital improvement schedule
Financial program, including demonstration of financial viability by providing:
- A summary of past income and expenses
- Six-year balanced operational budget
- A plan for collecting the revenue necessary to maintain cash flow stability and to fund the capital improvement program and emergency improvements
- An evaluation that has considered the affordability of water rates

Other documents such as:
- Documentation of SEPA compliance
- Agreements
- Comments for each local government with jurisdiction and adjacent utilities

City staff met with DOH on January 24, 2011 to discuss the preparation of the Water System Plan and agreed upon the scope and content of the plan during this meeting. City staff, to save on costs, chose to update and prepare the plan with the modeling data and updated maps to be done through the contract with Ryan Goodman, as the city does not have the programs for those two tasks. The staff agreed to have the draft plan to the Department of Health by March of 2012. As part of the planning, staff completed a water rate study, which was presented to council during a workshop held on March 5, 2012. In addition, the draft plan was handed out to council members at the regularly schedule March 5, 2012 council meeting. Grammatical and other small changes have been made to the draft plan since the council meeting and the modeling data has been added in.

The city sent out letters, at the beginning of March 2012, to surrounding water purveyors notifying them of the update to the plan and gave them an opportunity to review and comment on the plan. At this time, we have received no comments.

The Island County Planning Department has reviewed the draft plan and found it to be consistent with: the adopted land use and zoning within the applicable service area; the six-year growth projection with the adopted county’s population growth projections; the policies for new service connections are consistent with the adopted local plans and adopted development regulations of the county; and the elements related to water supply are addressed in relation to the coordinated water system plan.

City staff submitted the plan to the DOH on March 26, 2012. The DOH sent a copy to the Washington State Department of Ecology (DOE) for their review and comments. On
May 1, 2012, the DOE submitted their comments to DOH finding the plan not inconsistent with the adopted watershed plan for the Island Water Resource Inventory Area (WRIA 6) and had no changes to the draft plan. The DOH will review and respond to the city within 90 days of April 2, 2012, unless additional time is needed in which they will notify the city.

The city received a State Environmental Policy Act Determination of Nonsignificance (SEPA-DNS) on April 26, 2012. The comment period was open until May 10, 2012. The appeal of this DNS decision is open until May 20, 2012. This appeal period will have closed by the time the city holds a public hearing on May 21, 2012 at the regularly scheduled council meeting.

On April 17, staff held an open house for the public from 3pm to 7pm at City Hall to present, through information boards, the details of the updated plan and the water rates. City staff was present to answer questions.

**Water Rate Study**

Staff presented three options to the council at the March 5 workshop. After this meeting, staff looked into other possible rate scenarios including:

- An inverted rate structure for commercial uses
  - This is a structure which the more you use, the lower the cost per gallon. It was found that a majority of the businesses would not benefit from this rate structure and those businesses’ that would benefit would only benefit minimally during one billing period.

- A rate structure that would include either 5,000 or 7,500 gallons in the base fee
  - This would be more in line with our average usage, however because of the small amount of users between 7,500 and 10,000 this would be a negligible cost savings across all of the rate payers. Lowering the amount included in the base rate to 5,000 would not be beneficial to the average user. In addition, staff had a public comment during the open house about keeping the gallons included in the base rate higher to facilitate those with small food production gardens.

After reviewing all possible options, staff supports the following rate structure.

<table>
<thead>
<tr>
<th>Single Family Residential Inside City</th>
<th>Single Family Residential Outside City</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Monthly</td>
<td>Block one</td>
</tr>
<tr>
<td>Includes 10,000 gallons for two month period</td>
<td>10,001-30,000 gallons for two month period</td>
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<tr>
<td>$39.56</td>
<td>.50 per 100 gallons</td>
</tr>
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<td>$48.26</td>
<td>.61 per 100 gallons</td>
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Recommended Action

Staff recommends the council adopt the draft 2012 Comprehensive Water System Plan with changes as required by DOH. Staff recommends the council adopt, as shown in chapter 9 of the water plan: the water rate option 2; implementation of a low-income senior and other low income citizen water rate reduction; and implementation of a hydrant meter permit with a refundable deposit.
EXECUTIVE SUMMARY

This Water System Plan is an update of the existing plan to determine the adequacy of the system and identify any improvements needed to meet projected demands over the planning period, as well as position the system to meet future demands. The plan supersedes the city’s previous 2002 Comprehensive Water Plan and serves as a guide for future planning and operation of the water system. The analysis provides guidance to the Langley City Council and city staff in preparation for the next 20 years of utility service. The plan should be considered a living document, in that specific actions and recommendations may need to be tailored or modified to future needs and growth as they occur. The plan does, however, provide the necessary framework for the city to respond to changes.

The Langley water system service area is approximately 2.5 square miles. In 2010, the city served 954 Equivalent Residential Units, a unit defined in the WSDOH Design manual. The city had 980 connections in 2010. Future growth projections indicate that the City will ultimately serve more than 1,130 people by the end of this study’s 6 year planning period (short-term) and approximately 1,400 by the year 2030.

The city’s present source of water is from three primary wells (well #1, #3, and #6) which provide water to the system during normal operating demands. An additional well (well #5) provides emergency standby supply. Currently, the most significant issue regarding the city’s water system is distribution system main replacement and improvements required to meet minimum standards.

The city is currently permitted for 301 acre-feet a year and future planning projections through 2030 predict that withdrawals will remain below the permitted amount, with the demand estimated at 188.57 acre-feet in 2030. The city has 1,372 approved residential connections, with an estimated 1,346 by 2030. The city has the system capacity for the next 20 year period.

The total cost of the capital improvement program, through 2017, is estimated at $1,686,000. The financial status of the city’s water utility is currently able to provide funds for the proposed improvements through the participation fees to connect, and the water rate increases over the 6 year planning period. Chapter 9 of this plan provides recommendations and procedures for conservation rate structures which will enable funding of the water system’s operations, maintenance, and capital projects.