



Robert A. Carmichael | Attorney
Bob@CarmichaelClark.com

To: Whatcom County Council
From: Robert Carmichael and Bridget Bryck, Attorneys for City of Lynden
Date: April 14, 2025
Subject: Proposed New Countywide Planning Policy #7 - Supplemental Memo

Chapter 6 of the City of Lynden's State Department of Health-approved Water System Plan (WSP) previously submitted into the Council record includes tables evaluating the City's municipal water rights and projected water system demand (see attached). These tables illustrate how differing interpretations of the City's water rights by the City and the Washington Department of Ecology (Ecology) lead to different conclusions about the City's capacity to meet future water demand. Under the City's longstanding interpretation, it has more than sufficient instantaneous and annual capacity to meet both existing and future demand. Ecology's interpretation indicates a shortfall in annual volume, despite adequate instantaneous capacity to meet current demand.

In 2014, the County adopted a non-binding multi-jurisdictional resolution allocating population growth of 6,403 to the City of Lynden. The 2019 Lynden WSP forecasted future water demand based on this population projection would reach 131% of the then-current demand by the end of the 2040 planning period (See Executive Summary, p. ES-4 of WSP). The 2014 growth allocation is similar to the OFM Medium growth projection allocated to the City of Lynden in the current planning cycle's multijurisdictional resolution (6,665).

Based on these tables, and an estimated increase in demand similar to that projected in the previous planning cycle (2018-2040), the City has more than sufficient water rights to meet future demand through at least 2050 based on its own interpretation of its water rights. Under Ecology's interpretation the City's water rights are not sufficient to meet current or future demand, which is why the City participates in ongoing collaborative efforts, like the Managed Aquifer Recharge Project. Differing interpretations of municipal water rights for all cities in Whatcom County will be litigated and decided in the water rights adjudication.

Lynden maintains that it has ample water rights for the planning period, as documented in its approved Water System Plan. We respectfully request that council carefully consider the challenges of assessing water resource system capacity amid conflicting interpretations of Lynden's water rights. This work was done by the State Department of Health when it reviewed and approved Lynden's Water System Plan. Any additional review conducted for Lynden would be required for all other cities in Whatcom County. Embarking upon such a path likely exceeds the county's time, expertise, and legal authority, and if not careful, may interfere with the current water rights adjudication in Whatcom County Superior Court.

Table 6-4
Existing Potable Water Rights Evaluation – City Interpretation

Description	Instantaneous Rights / Maximum Day Demand	Annual Rights / Average Day Demand	
	(gpm)	(afy)	(gpm)
Potable Water Rights minus EDB	9,744	6,646	4,120
Existing (2018) Water Demand minus EDB	3,441	2,235	1,386
Surplus (or Deficient) Rights	6,303	4,411	2,735

Table 6-5
Existing Potable Water Rights Evaluation – Ecology Interpretation

Description	Instantaneous Rights / Maximum Day Demand	Annual Rights / Average Day Demand	
	(gpm)	(afy)	(gpm)
Potable Water Rights minus EDB	5,355	1,904	1,180
Existing (2018) Water Demand minus EDB	3,441	2,235	1,386
Surplus (or Deficient) Rights	1,914	(331)	(205)

As shown in the tables, the City, under its water right interpretation, has sufficient instantaneous and annual water rights to meet the demands of its existing customers. However, under Ecology's interpretation, the City does not have sufficient annual volume under its water rights to meet the demand of its existing customers.

Table 6-6 and **6-7** summarize the results of the future water rights evaluation, which compares the potable water rights from the Nooksack River diversion, excluding the EDB right, with the system's future 10-year and 20-year demand projections, also excluding anticipated EDB demand. The EDB demand was 12.93 afy in 2018, which is approximately equal to an average day demand of 8 gpm. For its analysis, RH2 Engineering, Inc., has assumed that the EDB demand for all years will be 13 afy, with an average day demand of 8 gpm, and a maximum day demand of 18 gpm, based on the peaking factors calculated in **Chapter 4**. The EDB demands have been subtracted from the system-wide demands in the tables for comparison with the non-EDB water rights. The EDB water right is for 70 afy, so there is more than enough annual water right authorization to accommodate future increases in water use from the existing and any potential future customer base.

Table 6-6
Future Potable Water Rights Evaluation – City Interpretation

Description	Instantaneous Rights / Maximum Day Demand	Annual Rights / Average Day Demand	
	(gpm)	(acre-feet)	(gpm)
Year 2030 (+10 years) Without Conservation			
Potable Water Rights minus EDB	10,044	7,015	4,349
Projected Water Demand minus EDB	3,974	2,581	1,600
Surplus (or Deficient) Rights	6,070	4,434	2,749
Year 2040 (+20 years) Without Conservation			
Potable Water Rights minus EDB	10,044	7,015	4,349
Projected Water Demand minus EDB	4,650	3,020	1,872
Surplus (or Deficient) Rights	5,394	3,995	2,477
Year 2030 (+10 years) With Conservation			
Potable Water Rights minus EDB	10,044	7,015	4,349
Projected Water Demand minus EDB	3,854	2,503	1,552
Surplus (or Deficient) Rights	6,190	4,512	2,797
Year 2040 (+20 years) With Conservation			
Potable Water Rights minus EDB	10,044	7,015	4,349
Projected Water Demand minus EDB	4,509	2,929	1,816
Surplus (or Deficient) Rights	5,535	4,086	2,533

Table 6-7
Future Potable Water Rights Evaluation – Ecology Interpretation

Description	Instantaneous Rights / Maximum Day Demand	Annual Rights / Average Day Demand	
	(gpm)	(acre-feet)	(gpm)
Year 2030 (+10 years) Without Conservation			
Potable Water Rights minus EDB	5,655	2,273	1,409
Projected Water Demand minus EDB	3,974	2,581	1,600
Surplus (or Deficient) Rights	1,681	(308)	(191)
Year 2040 (+20 years) Without Conservation			
Potable Water Rights minus EDB	5,655	2,273	1,409
Projected Water Demand minus EDB	4,650	3,020	1,872
Surplus (or Deficient) Rights	1,005	(747)	(463)
Year 2030 (+10 years) With Conservation			
Potable Water Rights minus EDB	5,655	2,273	1,409
Projected Water Demand minus EDB	3,854	2,503	1,552
Surplus (or Deficient) Rights	1,801	(230)	(143)
Year 2040 (+20 years) With Conservation			
Potable Water Rights minus EDB	5,655	2,273	1,409
Projected Water Demand minus EDB	4,509	2,929	1,816
Surplus (or Deficient) Rights	1,145	(656)	(407)

The water right rate and volume in **Tables 6-6** and **6-7** were increased from the values shown in the existing water right tables (**Tables 6-4** and **6-5**) based on anticipated use of the rate and volume of the industrial condensate water currently being discharged from the Darigold facility (**Table 6-3**). As discussed above, the City will use all industrial condensate water produced. For planning purposes, the rate increase from the existing water right tables was 300 gpm and 369 afy. The analysis considered future demand projections with and without water use reductions from the City's planned water use efficiency efforts, as shown in the tables. The results of the future water rights evaluation show sufficient instantaneous rights to meet demand through 2040 under the City's interpretation, but insufficient annual volume to meet demand for Ecology's interpretation.

MEMORANDUM OF AGREEMENT COMPLIANCE

This section details some of the steps the City has taken, consistent with the requirement of the 2004 MOA, to try to expand its water right portfolio to meet existing and future demand.

Ongoing – The City and Ecology have met with the City of Bellingham to inquire about Bellingham's willingness to add an additional point of diversion to its Middle Fork Nooksack River water right (S1-00547C) to allow a portion of that water right to be diverted from the river by the City of Lynden. This potential solution was referred to as the "Bellingham Option" in the MOA. The City of