

Revised GFCs Adopted January 23, 2018

**TECHNICAL MEMORANDUM**

TO: WHATCOM COUNTY WATER DISTRICT 13  
FROM: ROGER KUYKENDALL, P.E.  
DATE: ~~OCTOBER 2, 2017~~  
SUBJECT: NEW WATER GENERAL FACILITIES  
CHARGE  
WHATCOM COUNTY WATER  
DISTRICT 13, WASHINGTON  
G&O #17509.00

---

This technical memorandum provides the results of the calculation of the General Facility Charge (GFC) for the water utility. In accordance with RCW 57.08.005, a Right-to-Connect or “General Facilities Charge” may be charged to a property owner seeking to connect to the system in order that those property owners bear their equitable share of the cost of the system. A GFC includes a pro rata share of the cost of existing facilities (existing facility component), facilities planned for construction within the next 10 years and contained in an adopted comprehensive plan (future facilities component), and other costs borne by the District which are directly attributable to the improvements required by property owners seeking to connect to the system. The cost of existing facilities cannot include portions of the system that were donated or paid for by grants. Also, the connection charge may include interest charges applied from the date of construction of the system until the connection or for a period not to exceed 10 years, whichever is shorter.

The existing facility component offsets the historical contributions from existing customers used to acquire existing assets of benefit to a new customer. The future facility component contributes toward capital improvement costs needed to serve future customers and is intended to minimize the impact to existing customers for the construction of facilities that may only be required due to growth. If new facilities are included in a 10-year Capital Improvement Program (CIP) that replace existing facilities, the cost of the older facilities must be removed from the calculation. GFCs cannot be used to pay operating and maintenance costs.

**EXISTING FACILITY COMPONENT**

- Known original (1977) facility costs are provided in the attached Table 1. These costs are derived from the 1987 complaint filed in Whatcom County Superior Court regarding a class action lawsuit against the Peaceful Valley developers and the District. The allowable accrued annual interest on the



Technical Memorandum – New Water GFC  
October 2, 2017

\$455,320

original assets is 8.5 percent, based upon the bond interest rate identified in the complaint. Total eligible GFC costs for the original facilities equal ~~\$556,471~~.

- Known new assets and facilities, added since 1977, are provided in the attached Table 2. The allowable accrued annual interest on the new assets is approximated at 5.0 percent, based upon current commercial interest rates. Total eligible GFC costs are ~~\$252,176~~.

### FUTURE FACILITY COMPONENT

\$244,826

- The 2012 Small Water System Plan includes a CIP that identifies several different types of capital projects:
  - Capacity Improvement – These projects are intended for the sole purpose of increasing existing system capacity to accommodate growth and are eligible for the GFC calculation.
  - Regulatory – Money spent on activities or projects to meet regulatory requirements is an eligible cost.
  - Repair and Replacement – These projects are not eligible for the GFC calculation unless they replace an existing facility with a facility that has an increased capacity. However, the existing facility must be removed from the existing facility cost basis.
  - Growth Related/Developer Extensions – These projects are for the sole purpose of providing sewage collection and conveyance for developing properties. They are typically funded entirely by developers, becoming donated facilities, and hence are not eligible for the GFC calculation.
- Table 3 identifies the capital projects scheduled for completion over the next 10 years. The total eligible GFC costs are estimated at \$66,800.

OK

### GFC CALCULATION

- The pro rata share of the cost of the existing facilities is determined by dividing the calculated cost of existing facilities *that will benefit future customers* by the number of current customers. The current number of customers (residential customer equivalent or RCE) is  $393 - 3.5 = 389.5$ .



Technical Memorandum – New Water GFC  
October 2, 2017

Please note that the number of sewer RCEs is more than the number of water RCEs due to the fact that the EWRRRC has 6.0 sewer RCEs and 2.5 water RCEs.

- The pro rata share of the cost of the future facilities is determined by dividing the calculated cost of future facilities *that are required to serve growth* by the number of customers that component is expected to serve (existing and future customers). All of the eligible projects in the 10-year CIP are considered to serve growth for the number of RCEs anticipated in the tenth year (2027). In accordance with Appendix F in the Small Water System Plan, planning data is taken from the 2012 Comprehensive Sewer Plan. It is our understanding that the RCE projections in Table 3.3 of the Comprehensive Sewer Plan were assembled prior to 2010, and were not updated prior to the Plan's adoption in 2012. Since adoption, there has been very little growth within the District, with the existing number of RCEs equal to the number expected in 2010 ( $393 - 3.5 = 389.5$ ). Therefore, the GFC calculation will look ahead 10 years and use the 2021 RCE projection ( $477 - 3.5 = 473.5$ ) as the number of anticipated RCEs at the end of the current 10-year period.
- Table 4 provides a breakdown of the GFC calculation for the existing and future components. The resulting GFC is calculated as \$2,076 (existing component) plus \$141 (future component) for a total GFC of \$2,217.

\$1,798

**RECOMMENDATION**

OK

\$1,939

We recommend the District consider for adoption a GFC at or below the GFC calculated and presented Table 4. We also recommend that the calculation be reviewed by the District's attorney.

**Table 1 - Revised**  
**Original Water Facilities**  
**Whatcom County Water District 13**

Original Facilities	Initial Cost (1)	Year Completed	Allowable Interest (2)	Total Existing Cost Basis	Facility to Benefit New Customers?	Eligible Existing GFC Cost Basis (3)
Division 1 Water Distribution Pipe	\$ 85,398	1977	\$ 72,588	\$ 157,986	Yes	\$ 157,986
Division 1 Engineering, Financing, Admin	\$ 27,240	1977	\$ 23,154	\$ 50,394	Yes	\$ 50,394
Distribution Pipe to Serve Lots on Road from Div #1 to WWTP	\$ 25,900	1977	\$ 22,015	\$ 47,915	Yes	\$ 47,915
Well No. 1 & Storage Tanks	\$ 68,000	1977	\$ 57,800	\$ 125,800	Yes	\$ 125,800
Comp Plan, Engineering, Financing, Admin	\$ 39,581	1977	\$ 33,644	\$ 73,225	Yes	\$ 73,225
<b>Total for Original Facilities</b>	<b>\$ 246,119</b>			<b>\$ 455,320</b>		<b>\$ 455,320</b>
			\$ 209,201			

NOTES:

- (1) Initial costs based upon 1987 Whatcom County Superior Court complaint
- (2) Allowable interest based upon 8.5% bond interest stated in Superior Court complaint
- (3) Eligible costs are based upon existing facilities that will benefit future development

**Table 2 - Revised**  
**New Water Assets**  
**Whatcom County Water District 13**

<b>New Assets</b>	<b>Initial Cost (1)</b>	<b>Year Completed</b>	<b>Allowable Interest (2)</b>	<b>Total New Asset Cost Basis</b>	<b>Asset to Benefit New Customers?</b>	<b>Eligible New Asset GFC Cost Basis (3)</b>
Well No. 2 Installation (4)	\$ 56,234	2003	\$ 28,117	\$ 84,351	Yes	\$ 84,351
Fencing/Security Around Well Sites	\$ 3,000	2012	\$ 750	\$ 3,750	Yes	\$ 3,750
2012 Small Water System Plan	\$ 7,500	2012	N/A	\$ 7,500	Yes	\$ 7,500
Developer Extension Manual	\$ 2,500	2012	N/A	\$ 2,500	Yes	\$ 2,500
Add New Valves System-Wide	\$ 3,000	2014	\$ 450	\$ 3,450	Yes	\$ 3,450
2015 Rate Study	\$ 7,200	2014	N/A	\$ 7,200	Yes	\$ 7,200
Emergency Backup Power Study	\$ 5,931	2014	N/A	\$ 5,931	Yes	\$ 5,931
Existing Cash	\$ 130,144	2017	N/A	\$ 130,144	Yes	\$ 130,144
<b>Total New Assets Since 1977:</b>	<b>\$ 215,509</b>			<b>\$ 244,826</b>		<b>\$ 244,826</b>

NOTES:

(1) Initial costs based upon actual data

(2) Allowable interest assumed at 5.0% based upon current commercial interest rates. Not applicable to non-facility assets.

(3) Eligible costs are based upon new assets/facilities that will benefit future development

(4) Well No. 2 Estimated cost in 2015 was \$74,250, adjust by ENR to 2003 = \$56,234.05

**Table 3**  
**Water 10-Year Capital Improvement Projects**  
**Whatcom County Water District 13**

Project	2017 Estimated Cost (1)	Schedule (2)	2017 Estimated Cost (3)	To Serve Future Growth in next 10 years?	Eligible Future GFC Cost Basis
Emergency Backup Power	\$ 61,800	2017	\$ 61,800	Yes	\$ 61,800
Replace/Add Valves	\$ 5,000	2014	\$ 5,000	Yes	\$ 5,000
<b>Total Capital Projects Cost:</b>	<b>\$ 66,800</b>		<b>\$ 66,800</b>		<b>\$ 66,800</b>

NOTES:

- (1) Estimated costs based upon 2012 Small Water System Plan
- (2) Schedule based upon 2012 Small Water System Plan/2015 Water Rate Study

**Table 4 - Revised**  
**Water GFC Update**  
**Whatcom County Water District 13**

General Facilities Charge Calculation	10 Year CIP: Year 2021 RCEs (473.5)
Existing General Facility Component	
Original Plant in Service (incl. interest)	\$455,320
Less: Facilities replaced in 10-Year CIP	\$0
New Assets/Facilities added since 1977 (1)	<u>\$244,826</u>
Total Existing Asset Cost Basis	\$700,146
Existing RCEs (2017)	389.5
<b>Existing Facility Charge per RCE</b>	<b>\$1,798</b>
Future General Facility Component	
10-Year CIP to Serve Growth (2)	\$66,800
RCEs for 10-Year CIP to Serve Growth (3)	473.5
<b>Future Facility Charge per RCE</b>	<b>\$141</b>
<b>TOTAL GFC PER RCE</b>	<b>\$1,939</b>

NOTES:

(1) New assets/facilities includes engineering studies and items added since 1977

(2) See CIP Table

(3) Reflects 10 years of growth from current RCE count, based on Comp Plan growth rate (1.78%)