Whitefish Water Impact Fee Issue Expanded Water Treatment Plant Costs Revised 18 April 2023

The Whitefish City Manager made a significant omission when calculating water impacts fees in November 2018. Earlier that year, Whitefish contracted FCS to produce an update to its impact fees. Within just days after FCS submitted its report, Whitefish increased the water impact fees by adding \$10M to the water projects, including \$5M for the water treatment plant expansion.

But the City Manager failed to show any increase in capacity at the water treatment plant in the calculations, resulting in much higher impact fees. The FY 2020 Capital Improvement Plan (CIP), published just a few months later, showed a capacity increase from 5.5 mgd (million gallons per day) found in the FCS study to 8 mgd.

Simply stated, The City Manager added a significant cost (\$10M) to the impact fee calculation, with little to no documentation, without adding the appropriate benefit of this expenditure (2.5 mgd water treatment capacity increase). By omitting the benefit, the \$10M was shared by fewer residents and developers when assessed water impact fees.

This serious omission cost every new homeowner in Whitefish at least **\$1654** in overcharges. Building additions and remodels were likewise affected along with commercial developers.

Here is the step by step process that demonstrates this significant problem.

FCS USES CAPACITY AND ESTABLISHES ERUs

• August 2018, FCS produces Impact Fee Update which includes water impact fee calculations. FY 2019 CIP includes \$5M to expand the water treatment plant.

#	Project Name	Description & Justification	Total Cost			
	Treatment/Supply					
T1	South Water Reservoir South Water Reservoir South Water Reservoir South Water Reservoir South Water Reservoir South Of HWY 40 - Total Cost \$3.5M (\$200K for modeling and siting, \$500K for land acquisition & preliminary engineering, \$800K for watermain extension (eliminated Karrow), \$2M for final engineering & construction). Assumes \$100K paid in FY18.		\$3,400,000			
T2	Water Treatment Plant Expansion	Expand treatment capacity (\$4M for construction and \$1M for design)	\$5,000,000			
тз	Reinstate First Creek Supply	Possible diversion structure to put First Creek back online \$100K (\$25K Design and Sampling, \$75K Construction)	\$100,000			

• FCS, from information provided by Whitefish determined that the \$5M is spent to increase capacity of current water treatment plant from 3.5 mgd to 5.5 mgd. Using this number and the demand per ERU (Equivalent Residential Unit) numbers provided by City, FCS calculates the number of new homes this increased capacity will support (2,747, page 7, FCS) which appears below.

ERU Calculation Explanation

III.A. SYSTEM CAPACITY & CUSTOMER BASE

The Water Impact Fee calculation expresses the customer base in terms of Equivalent Residential Units (ERUs), recognizing the potential demand that each meter imposes on the City's water system. 2018 customer data provided by the City, indicates that the City currently serves 4,644 ERUs. Table ES-1 of the City's 2006 Water Master Plan provides a planned capacity of 5.5 million gallons per day (MGD). Data provided by the city indicates that the current Maximum Daily Demand on the system is 3.46 (MGD). The average ERU within the city thus consumes 744 gallons per day (3,460,000 / 4,644 ERUs). Assuming this remains constant, the future supported capacity of the system will be 7,391 ERUs, leaving 2,747 ERUs in remaining planned capacity.

The FCS calculated water impact fee is \$1163 which is the maximum fee the City can charge. It uses 2,747 ERUs to calculate these fees.

Water Impact Fee Calculation	Reimbursement Fee	Improvement Fee	Administrative Fee	Total
Total Costs	\$235,699	\$2,806,538	5%	\$3,194,349
Growth in ERUs	2,747	2,747		2,747
Charge per ERU	\$86	\$1,022	\$55	\$1,163

Table III-4: Summary of Updated Water Impact Fee

CITY MANAGER INCREASES COST BUT OMITS NEW CAPACITY

• Aug 2018, City Manager simply adds \$10M and recalculates impact fees. In Oct 2018 a new CIP is created including an additional \$5M for the water

treatment plant expansion. This CIP does not the description from the original FY 2019 CIP and does not explain what the additional \$5M.

#	Project Name	Description & Justification	Total Cost			
	Treatment/Supply					
71	South Water Reservoir	New reservoir south of HWY 40 - Total Cost \$8.5M (\$200K for modeling and siting, \$500K for land acquisition & preliminary engineering,\$800K for watermain extension (eliminated Karrow), \$7M for final engineering & construction). Assumes \$100K paid in FY18.	\$8,400,000			
T2	Water Treatment Plant Expansion	Expand treatment capacity (\$9M for construction and \$1M for design)	\$10,000,000			
тз	Reinstate First Creek Supply	Possible diversion structure to put First Creek back online \$100K (\$25K Design and Sampling, \$75K Construction)	\$100,000			

• Nov 6 2018, City Manager creates the Addendum to FCS Update in which she increases the water impact fee total cost by the \$10M she added to the CIP. This includes an additional \$5M for the water treatment plant, raising it to \$10M.

Capital Project	Year	Current Cost (Uninflated)	% Utility- Funded	% Allocable to Growth	Amount in Cost Basis
South Water Reservoir	2019	8,400,000	100.0%	42.9%	\$3,603,600
Water Treatment Plant Expansion	2019	10,000,000	100.0%	50.0%	\$5,000,000
Reinstate First Creek Supply	2019	100,000	100.0%	37.2%	\$37,200
Cast Iron Water Main Replacement	2019	500,000	100.0%	0.0%	
Karrow Avenue Loop - Design & Construction	2020	1,000,000	100.0%	0.0%	
Whitefish Urban Project - US 93 - Design & Construct	2022	1,000,000	100.0%	0.0%	
Armory Road Watermain Railroad Crossing	TBD	TBD	100.0%	0.0%	
Flathead Watermain Extension	2019	190,000	100.0%	37.2%	\$70,680
Suncrest Conversion Pumping Station	2019	75,000	100.0%	0.0%	
Whitefish Lake Pump Station	TBD	TBD	100.0%	0.0%	
Lower Grouse Pumps	2019	15,000	100.0%	0.0%	
Less: Existing Water Impact Fee Fund Balance					(\$1,052,163)
Total		\$21,280,000			\$7,659,317

The City Manager does not show any increase in capacity in the water treatment plant and does not re-calculate the additional number of new homes this will support, keeping the 2,747 number from the FCS Update in her calculation. The water impact fee is increased to \$3018 (page 2, Addendum). She effectively increases total costs without increasing the Growth in ERUs that will result from this increased spending.

Addendum Water Impact Fee Calculation

Water Impact Fee	Reimbursement	Improvement		
Calculation	Fee	Fee	Fee	Total
Total Costs	\$235,699	\$7,659,317	5%	\$7,859,016
Growth in ERUs	2747	2747		2747
Charge per ERU	\$86	\$2,788	\$144	\$3,018

• Several months later, the FY 2020 CIP lists water projects, including the same \$10M cost for increasing capacity at the water treatment plant. However, the new description states "Expand water treatment plant to 8 mgd" among other things.

#	Project Name	Description & Justification	Total Cost		
	<u>Treatment/Supply</u>				
T1	South Water Storage & Production	Variety of projects to increase water capacity in South Whitefish including groundwater production and/or additional storage south of HWY 40 - Assumes \$400K spent in FY19.	\$ 7,600,000		
T2	Water Treatment Plant Expansion	Variety of projects to increase current water production and treatment capacity (Expand water treatment plant to 8 MGD, upgrade Whitefish Lake pumping station, extend Whitefish Lake	\$ 10,000,000		

The **Description & Justification** above states: "Variety of projects to increase current water production and treatment capacity (*Expand water treatment plant to <u>8 MGD</u>, upgrade Whitefish Lake pumping station, extend Whitefish Lake intake line)." (my emphasis added).*

At the time of the 2018 FCS Update, the capacity of the water treatment plant was projected to be 5.5 MGD. Thus adding \$5 M in new costs would increase capacity by 2.5 MGD.

The City Manager failed to include this statement in her interim CIP and failed to adjust the Growth in ERUs that would result from the City spending an additional \$5M on the water treatment plant. This omission resulted in a significant overcharge to new residents in Whitefish.

ERUS NEED TO BE RECALCULATED BASED ON NEW CAPACITY

Using the new capacity of 8 mgd confirmed above, the number of new homes supported MUST be re-calculated.

Using the method described in the **ERU Calculation Explanation** above, substitute 8 mgd for the 5.5 mgd and divide by the 744 gpd consumed by 1 ERU,

leaving 10,753 total ERUs that the water treatment plant can support. Subtract the current number of ERUs in the city (4644), leaving 6048, which is the future capacity, not 2747.

Now substitute 6048 for the 2747 in the chart identified as **Addendum Water Impact Fee Calculation**. Using this number would reduce the max water impact fee from \$3018 to \$1364. More new residents will be sharing the increased cost, resulting in lower impact fees per resident.

The average overcharge for each new home built in Whitefish after Jan 2019 is **\$1654**.