

I. I & I costs in Turners Falls, Montague City, and Montague Center

A Cost to remove grit contained in I & I

9.71% I & I solids as percent of total solids (calculation below).

14,240 Total cost to remove grit - estimated at FY21 total payments to Waste Management for grit removal

1,383 Est cost to remove grit due to I & I

B Increased electrical costs for increased pumping

163,000 Budgeted Electricity

0.08 Document's estimated % of electricity used for primary screw pump

27.96% I & I as % of total flow (calculation below)

3,646 Electricity x % for pump x I & I %

C Increased amount of chlorine in primary clarifier and chlorine contact tank

27.96% I & I as % of total flow (calculation below)

15,339 Estimated FY22 Chlorine cost for primary clarifier and chlorine contact tank

[FY21 total chlorine purchases = 13,257.6. Estimating 75% used for above purpose per info in document]

4,289 Cost of chlorine for primary clarifier and chlorine contact tank for I & I flow

D Increased labor due to grit handling, equipment maintenance, chlorine handling, and process control modifications

Document says this is estimated at 1 FTE employee. FY22 Budget has 8 FTE, so 1 FTE = 1/8 total labor costs

481,993 5110 Regular Wages

45,000 5132 OT Wages

12,000 5172 Workers Comp

174,000 5174 Health Insurance

136,308 5191 Retirement

849,301

106,163 1/8 total labor costs

II. Increased fee from Erving due to I & I from Millers Falls

36,121,824

Trombley called this MF WWTP flow from Montague, what we're calling Erving's flow from Millers Falls. (For FY21 used two calendar year avg 2018-2019)

(11,336,000)

Less the Millers Metered Flow-2 year avg of the TFWD metered flow to MF

24,785,824

total I & I from Millers Falls going to Erving

68.62%

as a %, rounded to 6 decimal places

220,000

Assessment to Montague from Erving for treating wastewater from MF, 2.5% increase/yr.

150,958

Cost of treating I & I from Millers Falls by Erving

TOTAL COST TO TOWN TO TREAT I & I IN FY23

266,439

Calculation of I & I as % of total Montague WPCF Flow

287,620,000 2 calendar year average Montague WPCF flow

(207,206,600) Less Montague metered flow (MC = 7,310,000, LP = 3,445,175, TF+Mcity= 193,004,700)

80,413,400 Total I & I coming into Montague WPCF

27.96% I & I as % of total flow

Calculation of I & I solids as % of total solids

1,035,729

Montague WPCF influent solids in pounds/year. This is a 2 year average.

100,597

pounds of solids due to I & I. This uses the I & I flow calculated above, and 150

mg/l as the percentage of solids in the I & I

9.71%

I & I solids as percent of total solids. This % will be used in other calculations.

Total I & I Town Cost \$266,439 as % of

Total 440 #REF! #REF!

Total 661 #REF! #REF!