CRD IWS Core Area Wastewater System

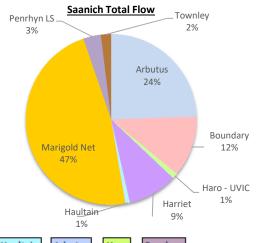
Monthly Wastewater Flow Report for Saanich - November 2020

Disclaimer: The data used in this report is considered preliminary. It may be further corrected in the annual cost requisition report.

1. Monthly Wastewater Flow Data: Nov 2020

This data summarizes the volume of flow measured from catchments contributing to Saanich's total flow (map on page 3).

Flow Motor Name	Total Monthly Flow		
Flow Meter Name	m ³	%	
Arbutus	235,905	24%	
Boundary	111,578	12%	
Haro - UVIC	10,113	1%	
Harriet	90,688	9%	
Haultain	8,351	1%	
Marigold Net	457,052	47%	
Marigold PS	511,005		
(Minus Hartland Leachate)	- 53,953		
Penrhyn LS	32,241	3%	
Townley	18,717	2%	
Monthly Flow	964,645	100%	



SAANICH FLOW = Marigold Net + Bounda

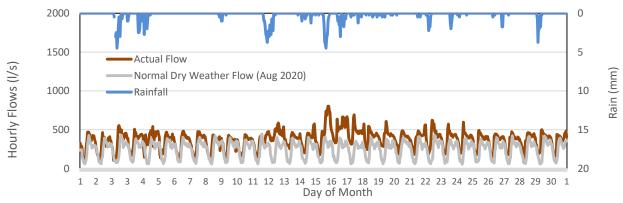
Boundary + Harriet + Townley

Haultain + Arbutus + Haro + P

ro + Penrhyn

2. Saanich Hourly Sewer Flows Nov 2020

This graph shows actual flow (brown) and rainfall (blue), per day, for the month and compares it to normal dry weather flow (grey).



3. Key Wastewater Flow Stats: Nov 2020

Overflows (monitored by CRD): Nov 2020

Metric	Flow (m ³) 1
Total Monthly Flow	964,645
Average Daily Flow	32,155
Minimum Daily Flow	25,752
Peak 24hr Flow (PWWF) 2	47,453
Peak 1hr Flow ³	69,441
Average Dry Weather Flow (ADWF) ⁴	22,118
Estimated Daily Domestic Flow 5	16,608

Location	Date
Finnerty Outfall	None

Excludes overflows that may have occurred (overflow volumes are not measured).

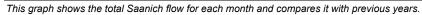
² Calculated as maximum rolling 24 hr flow for the month.

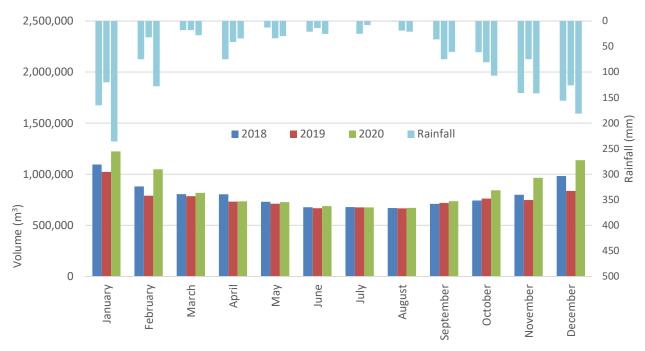
 $^{^{3}}$ Expressed as 24 hour flow (peak 1 hr flow x 24).

⁴ Average daily flow from most recent Jun 1 to Aug 31 data. Includes groundwater infiltration over that period.

 $^{^{5}\,\}text{Calculated}$ as ADWF minus summer groundwater (70% of minimum hourly flow x 24 hours).

4. Monthly Wastewater Flow: Historical vs. Current



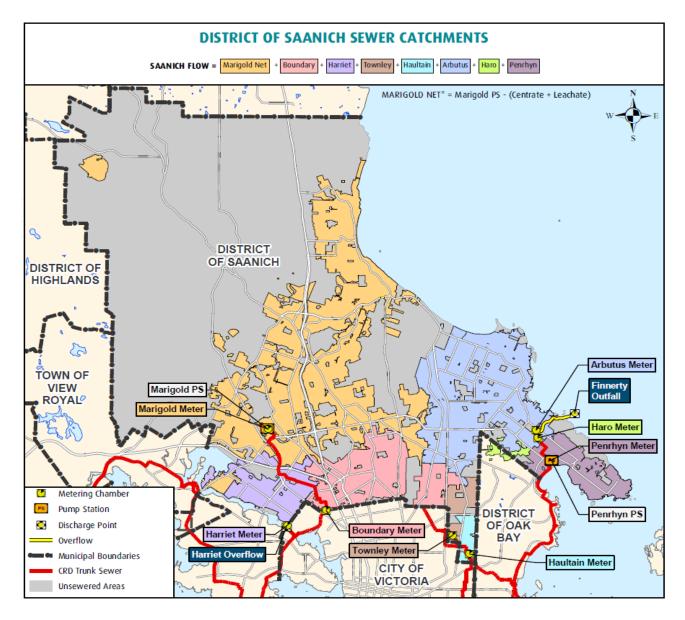


5. Inflow & Infiltration Flow Summary: Nov 2020

Key I&I Metrics	Value ¹	5.0	Peak 24hr Flow Factor of ADWF
Total Monthly Flow (m³)	964,645	5.0	
Estimated Domestic Flow for Month (m ³) ²	498,244		
I&I Volume for Month (m ³) ³	466,401	4.0	
I&I Volume for Month (% total flow)	48%		
Peak 24hr Flow (PWWF) 4	2.1 x ADWF	3.0	
Peak 1hr Flow ⁵	3.1 x ADWF		
¹ Excludes overflow volume		2.0	2.1
² Determined by (Est. Daily Domestic flow from section 3.) x (num	ber of days per month)		2.1
³ Determined by subtracting Estimated Domestic Flow from Total Monthly Flow		1.0	
⁴ Determined by dividing Peak 24hr Flow from section 3. by ADWF		1.0	
⁵ Determined by dividing Peak 1hr Flow from section 3. by ADWF		0.0	
		0.0	Peak 24hr Flow

6. Monthly Flows: I&I and Domestic Flow (2020)





7. Regional Flow Data: Nov 2020

Doutioinant Area	Total Monthly Flow		
Participant Area	m ³	%	
Colwood	108,796	3.3%	
Esquimalt	241,596	7.4%	
Langford	280,509	8.6%	
Oak Bay	326,535	10.0%	
Saanich	964,645	29.7%	
Victoria	1,224,481	37.7%	
View Royal	75,982	2.3%	
Esquimalt Nation*	2,725	0.08%	
Songhees Nation	23,902	0.7%	
Total	3,249,171	100.0%	

^{*}Flows are calculated based on engineering estimates

