



SAANICH PENINSULA WATER COMMISSION

Notice of Meeting on **Thursday, January 17, 2019 at 9 a.m.**

Saanich Peninsula Treatment Plant Meeting Room, 9055 Mainwaring Road, North Saanich, BC

R. Barnhart	C. McNeil-Smith	P. Wainwright	R. Windsor
M. Doehnel (TBC)	G. Orr	M. Weisenberger	M. Underwood (TBC)
C. Graham	M. Thompson	K. Wing	

AGENDA

1. Introductions and Commission Representatives Discussion
2. Election of Chair and Vice-Chair
3. Approval of Agenda
4. Adoption of Minutes 2
5. Chair’s Remarks
6. Presentations/Delegations
 - No one has registered to speak.
7. Commission Business
 - 7.1. Saanich Peninsula Water Commission – Commission Orientation
 - 7.2. Water Watch..... 6
8. New Business
9. Adjournment

Note: Next Meeting: March 21, 2019

To ensure a quorum, advise Denise at 250.360.3087 if you or your alternate cannot attend.



Making a difference...together

MINUTES OF A MEETING OF THE SAANICH PENINSULA WATER COMMISSION
Held Thursday, October 4, 2018 in the Saanich Peninsula Treatment Plant Meeting Room,
9055 Mainwaring Road, North Saanich, BC

PRESENT: P. Wainwright (Vice-Chair); R. Barnhart; M. Doehnel; Z. King (9:04 a.m.); M. Lougher-Goodey; C. Stock (8:34 a.m.); M. Thompson; M. Weisenberger; R. Windsor

STAFF: T. Robbins, General Manager, Integrated Water Services; M. McCrank, Senior Manager, Infrastructure Operations; I. Jesney, Senior Manager, Infrastructure Engineering; C. Lowe, Environmental Protection; D. Green, Environmental Protection; L. Xu, Senior Financial Advisor; B. Semmens, Senior Financial Analyst; T. Duthie, Manager, Administration Services; D. Dionne (recorder)

ABSENT: M. Williams (Chair); M. Underwood

The meeting was called to order at 8:30 a.m.

1. APPROVAL OF AGENDA

MOVED by Commissioner Lougher-Goodey, **SECONDED** by Commissioner Windsor,
 That the Saanich Peninsula Water Commission approve the agenda as circulated.

CARRIED

2. ADOPTION OF MINUTES

MOVED by Commissioner Lougher-Goodey, **SECONDED** by Commissioner Windsor,
 That the Saanich Peninsula Water Commission adopt the minutes of the June 21, 2018.

CARRIED

3. CHAIR'S REMARKS

The Chair made the following remarks:

- He noted that this is the last meeting of this Commission until after the election.
- He advised that any of the Citizen appointments who wish to continue on this Commission need to submit an application.
- He recognized and thanked Commissioner Lougher-Goodey for his service on the Commission, noting this will be his last term of service.

4. PRESENTATIONS/DELEGATIONS

There were no presentations/delegations.

5. 2019 CAPITAL AND OPERATING BUDGET (REPORT #SPWC2018-07)

T. Robbins provided an overview of the 2019 Saanich Peninsula Water Service operating and capital budget, highlighting the changes from the 2018 budget and the proposed 2019 budget figures as detailed in the staff report. He reminded the Commission of the Capital

Regional District (CRD) Board budget approval process. Some of the items he highlighted were:

- a) To balance the budget at year end, the proposed transfer to the capital reserve fund has been increased by \$124,315 to \$574,315. He noted that the budgeted operating, repair and maintenance costs have been 2 to 4% under budget and that there was not a lot of unplanned repair/maintenance work.
- b) The recommended Saanich Peninsula Bulk Rate is \$0.9815 per cubic metre, a 2% increase over the 2018 rate.
- c) The 5 year Capital Plan total value is just over \$3.3 million for a number of smaller capital projects.
- d) There are four major projects planned over the next 5 to 10 years and there is some grant funding available. Staff are planning ahead by moving funds to reserve to fund these projects later. He noted that a staff report would be presented in the New Year to review the planned projects.
- e) Staff are completing the agricultural land use and water demand review. Once all the field work is complete an agricultural water demand model will be developed. Staff are expecting to see the preliminary report by the end of the year with a final report by March 2019. The final report can be brought to the Commission for information once it is received.

There was discussion regarding the use of Capital Reserves versus debt financing to fund major projects and the following motion was made:

MOVED by Commissioner Windsor, **SECONDED** by Commissioner Stock,
That the Saanich Peninsula Water Commission request that staff report back with a cost comparison of debt financing versus cash reserve funding with annual reserve fund contributions for long-term capital expenditures, with a focus on critical infrastructure.

CARRIED

MOVED by Commissioner Lougher-Goodey, **SECONDED** by Commissioner Windsor,
That the Saanich Peninsula Water Commission recommend that the Capital Regional District Board:

- a) Approve the 2019 operating and capital budget;
- b) Approve the 2019 Saanich Peninsula bulk water rate of \$0.9815 per cubic metre, and the Agricultural Research Station water rate of \$1.0167 per cubic metre, adjusted if necessary by any changes in the CRD Regional Water Supply wholesale water rate;
- c) Balance the 2018 actual revenue and expense on the transfer to capital reserve fund; and
- d) Amend the Bulk Water Rates Bylaw accordingly.

CARRIED

6. DISASTER MITIGATION AND ADAPTATION FUND – GRANT APPLICATION UPDATE

T. Robbins noted that at its June 21, 2018 meeting, the Saanich Peninsula Water Commission approved a recommendation for staff to prepare a grant application to Infrastructure Canada for funding to replace vulnerable water mains.

He reported that the Disaster Mitigation and Adaptation funding grant is a ten-year two-billion dollar program aimed at projects that strengthen the resilience of public infrastructure against the impacts of natural hazards including earthquakes. Projects must have a minimum \$20 million value and ideally have a regional benefit and a First Nations component. The deadline for Expression of Interest (EOI) was the end of July.

The CRD submitted an EOI with a proposal to replace the vulnerable sections of the No. 4 transmission main (map handed out) which feeds water supply to portions of Langford, Highlands, Saanich and the Saanich Peninsula including the First Nations reserves. The project was valued at \$87 million.

The Federal share under the grant program would be about \$36.9 million. The CRD share, which would be cost-shared between Regional Water and Saanich Peninsula Water, would be about \$48.6 million, with about \$1.5 million in funding from the First Nations.

The next step will be for the Province to invite shortlisted EOI's to submit a detailed application. Staff have not yet received a response to the EOI.

7. POST DISASTER WATER SUPPLY PLAN UPDATE

T. Robbins provided an update on the initiative, reviewing the hydrant distribution points. He noted that installations were centered on the bulk supply hydrants. The plan for 2018 was to have six installed and staff have completed five to date. He reviewed the various hydrant locations and noted that the sixth installation point proved to be complex and expensive and staff are reviewing a new location and hoping to have it installed by the end of the year. The plan is to have another five installed in 2019.

He provided an update on the completion of the two pilot distribution centres being built; 1) mobile distribution trailer that can be relocated; and 2) a container distribution centre to be stored at Panorama Recreation Centre.

Discussion ensued regarding communication with municipalities, other emergency services and First Nations groups about the distribution centres and the bulk supply hydrants and the following motion was put forward:

MOVED by Commissioner Thompson, **SECONDED** by Commissioner King,
That the Saanich Peninsula Water Commission request that staff make presentations on the CRD's post disaster water supply plan, to Saanich Peninsula municipal staff, First Nations groups, the Airport Authority and BC Ferries, by the end of the first quarter 2019.

CARRIED

8. WATER WATCH

MOVED by Commissioner Lougher-Goodey, **SECONDED** by Commissioner Stock,
That the Saanich Peninsula Water Commission receive the report for information.

CARRIED

9. NEW BUSINESS

There was no new business.

10. ADJOURNMENT

MOVED by Commissioner King, **SECONDED** by Commissioner Weisenberger,
That the Saanich Peninsula Water Commission meeting be adjourned at 9:41 a.m.

CARRIED

CHAIR

SECRETARY

DRAFT

CAPITAL REGIONAL DISTRICT - INTEGRATED WATER SERVICES

Water Watch

Issued January 07, 2019

Water Supply System Summary:

1. Useable Volume in Storage:

Reservoir	January 31 5 Year Ave		January 31/18		January 6/19		% Existing Full Storage
	ML	MIG	ML	MIG	ML	MIG	
Sooke	89,882	19,774	92,727	20,400	92,727	20,400	100.0%
Goldstream	8,584	1,888	8,584	1,888	6,869	1,511	69.9%
Total	98,466	21,662	101,311	22,288	99,597	21,911	97.1%

2. Average Daily Demand:

For the month of January	95.7 MLD	21.06 MIGD
For week ending January 06, 2019	95.2 MLD	20.94 MIGD
Max. day January 2019, to date:	99.5 MLD	21.90 MIGD

3. Average 5 Year Daily Demand for January

Average (2014 - 2018)	95.6 MLD ¹	21.04 MIGD ²
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¹MLD = Million Litres Per Day ²MIGD = Million Imperial Gallons Per Day

4. Rainfall January:

Average (1914 - 2018):	271.2 mm
Actual Rainfall to Date	193.8 mm (71% of monthly average)

5. Rainfall: Sep 1- Jan 6

Average (1914 - 2018):	841.4 mm
2018 - 2019	1,127.2 mm (134% of average)

6. Water Conservation Action Required:

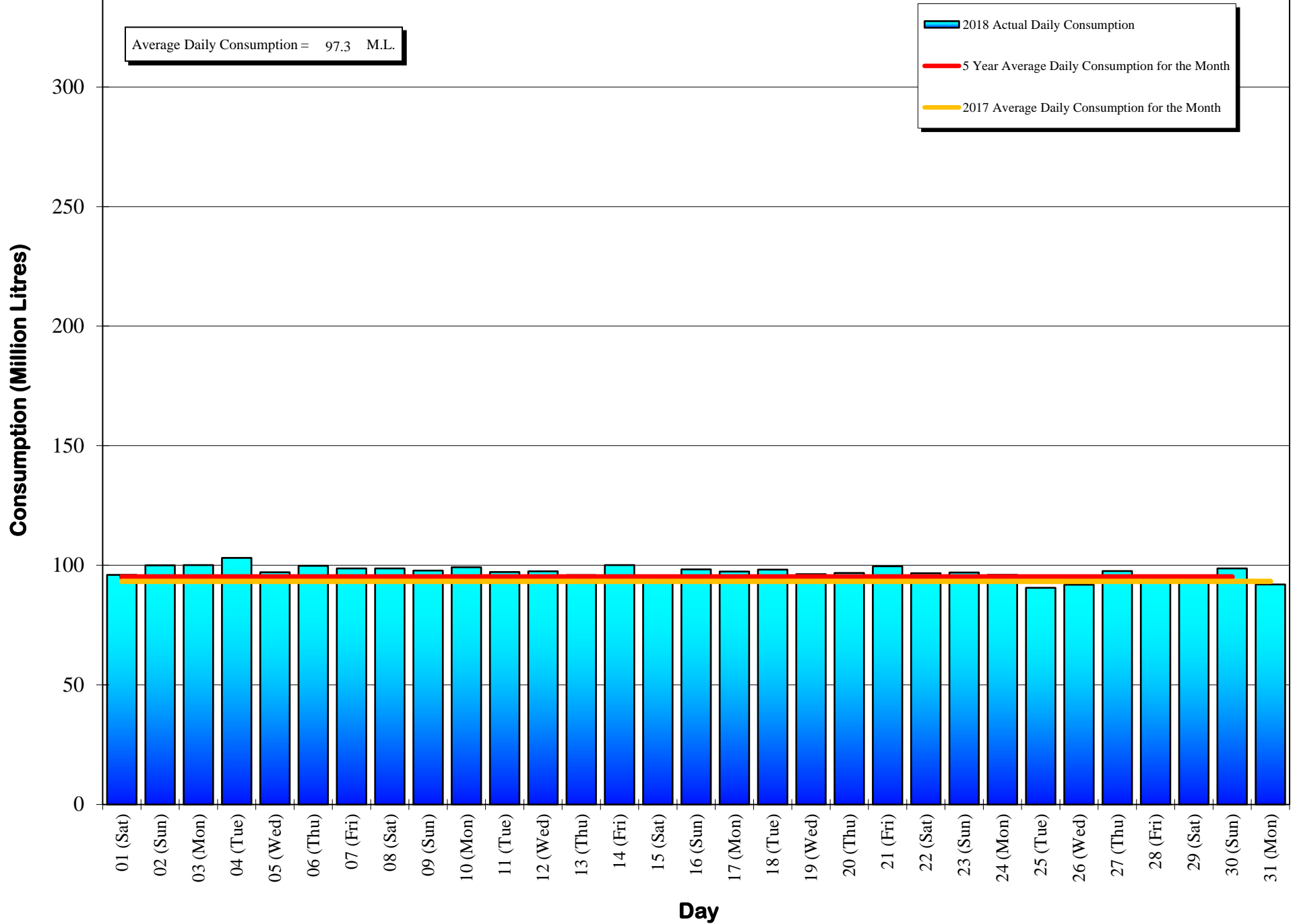
If each of us saves a little, together we can save a lot.
Check our website at www.crd.bc.ca/water for more information.

If you require further information, please contact:

Ted Robbins, B.Sc., C.Tech
General Manager, CRD - Integrated Water Services
or
Glenn Harris, Ph D., RPBio
Senior Manager - Environmental Protection

Capital Regional District Integrated Water Services
479 Island Highway
Victoria, BC V9B 1H7
(250) 474-9600

Daily Consumption December 2018



Daily Consumptions: - December 2018

Date	Total Consumption		Air Temperature @ Japan Gulch		Weather Conditions	Precipitation @ Sooke Res.: 12:00am to 12:00am			
	(ML) ¹	(MIG) ²	High (°C)	Low (°C)		Rainfall (mm)	Snowfall ³ (mm)	Total Precip.	
01 (Sat)	96.0		21.1	7	4	Cloudy / Showers / P. Sunny	1.3	0.0	1.3
02 (Sun)	100.0		22.0	6	1	Sunny / P. Cloudy	0.0	0.0	0.0
03 (Mon)	100.1		22.0	5	0	Sunny / P. Cloudy	0.0	0.0	0.0
04 (Tue)	103.1	<=Max	22.7	3	-2	Sunny	0.0	0.0	0.0
05 (Wed)	97.1		21.4	4	-2	Sunny	0.0	0.0	0.0
06 (Thu)	99.8		22.0	3	-3	Sunny	0.0	0.0	0.0
07 (Fri)	98.7		21.7	3	-3	Sunny / P. Cloudy	0.0	0.0	0.0
08 (Sat)	98.7		21.7	6	1	Cloudy / Showers	3.1	0.0	3.1
09 (Sun)	97.8		21.5	6	3	Cloudy / Rain	18.3	0.0	18.3
10 (Mon)	99.2		21.8	6	4	Cloudy / Showers / P. Sunny	4.8	0.0	4.8
11 (Tue)	97.2		21.4	9	4	Cloudy / Rain	62.7	0.0	62.7
12 (Wed)	97.5		21.4	6	2	Cloudy / Rain	34.8	0.0	34.8
13 (Thu)	95.9		21.1	8	5	Cloudy / Rain	36.3	0.0	36.3
14 (Fri)	100.1		22.0	8	3	Cloudy / Showers	5.3	0.0	5.3
15 (Sat)	95.2		21.0	7	3	Cloudy / Showers / P. Sunny	1.5	0.0	1.5
16 (Sun)	98.3		21.6	9	6	Cloudy / Rain	23.9	0.0	23.9
17 (Mon)	97.4		21.4	8	5	Cloudy / Rain	30.2	0.0	30.2
18 (Tue)	98.2		21.6	9	6	Cloudy / Rain	37.6	0.0	37.6
19 (Wed)	96.3		21.2	8	6	Cloudy / Rain	22.1	0.0	22.1
20 (Thu)	96.8		21.3	10	3	Cloudy / Showers	21.3	0.0	21.3
21 (Fri)	99.6		21.9	4	0	Cloudy / P. Sunny	0.0	0.0	0.0
22 (Sat)	96.7		21.3	5	3	Cloudy / Rain	20.8	0.0	20.8
23 (Sun)	97.0		21.3	7	3	Cloudy / Rain	20.6	0.0	20.6
24 (Mon)	96.0		21.1	6	3	Cloudy / P. Sunny	0.0	0.0	0.0
25 (Tue)	90.6	<=Min	19.9	5	2	Cloudy / Showers / P. Sunny	0.3	0.0	0.3
26 (Wed)	91.9		20.2	5	1	Cloudy / Showers / P. Sunny	7.1	0.0	7.1
27 (Thu)	97.6		21.5	5	0	Cloudy / Showers	0.8	0.0	0.8
28 (Fri)	93.3		20.5	5	4	Cloudy / Rain	17.3	0.0	17.3
29 (Sat)	94.8		20.9	10	4	Cloudy / Rain	36.8	0.0	36.8
30 (Sun)	98.7		21.7	5	1	Sunny	0.0	0.0	0.0
31 (Mon)	92.0		20.2	3	0	Sunny / P. Cloudy	0.0	0.0	0.0
TOTAL	2820.9 ML	620.57 MIG					406.9	0	406.9
MAX	103.1	22.68	10	6			62.7	0	62.7
AVE	97.3	21.37	6.2	2.2			13.1	0	13.1
MIN	90.6	19.94	3	-3			0.0	0	0.0

1. ML = Million Litres

2. MIG = Million Imperial Gallons

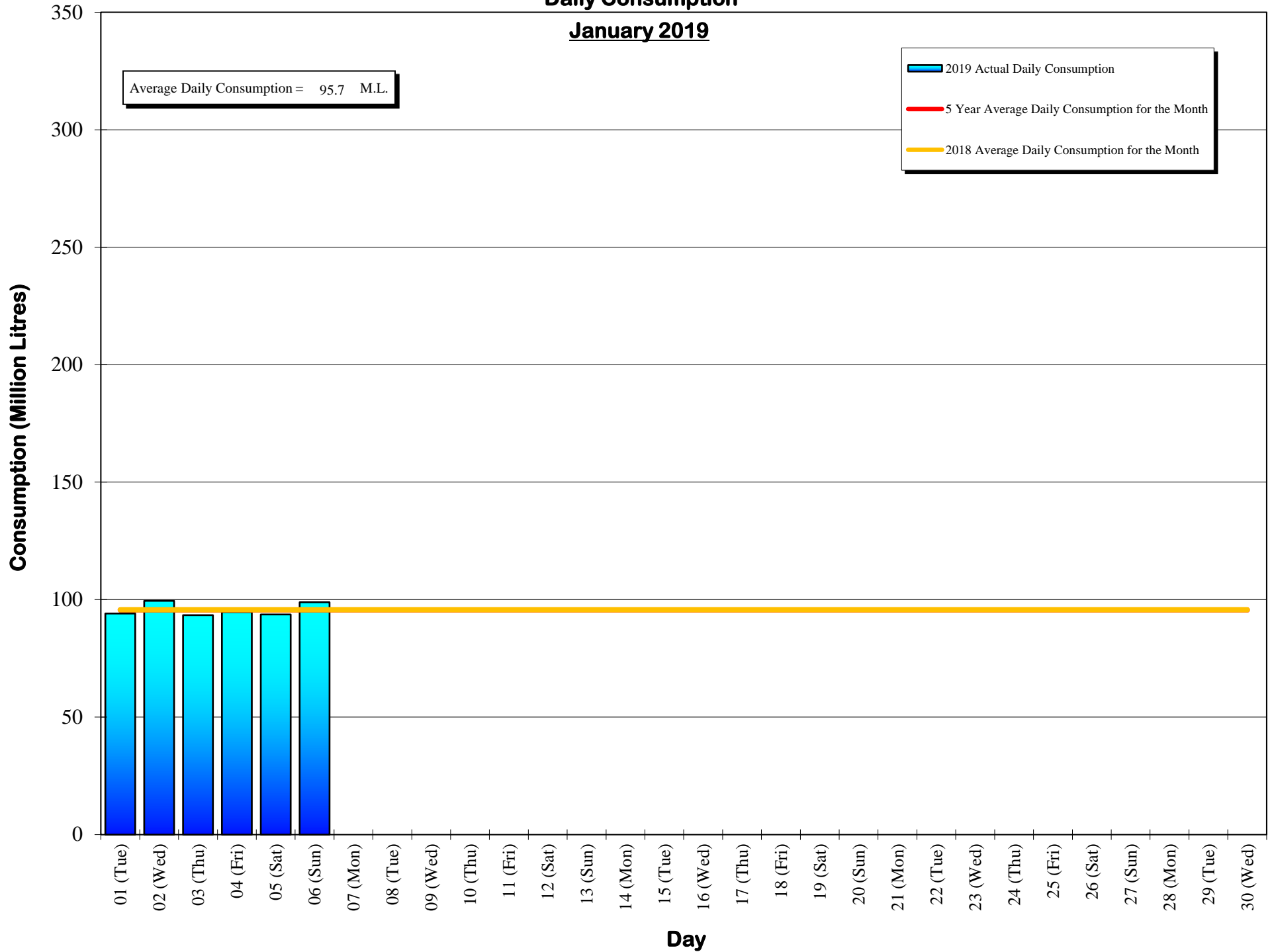
3. 10% of snow depth applied to rainfall figures for snow to water equivalent.

Average Rainfall for December (1914-2017)	292.9 mm
Actual Rainfall: December	406.9 mm
% of Average	139%
Average Rainfall (1914-2017): Sept 01 - Jan 06	786.6 mm
Actual Rainfall (2018): Sept 01 - Jan 06	933.4 mm
% of Average	119%

Number days with precip. 0.2 or more
21

Water spilled at Sooke Reservoir to date (since Sept. 1) = **0.40 Billion Imperial Gallons**
 = **1.80 Billion Litres**

Daily Consumption January 2019



Daily Consumptions: - January 2019

Date	Total Consumption		Air Temperature @ Japan Gulch		Weather Conditions	Precipitation @ Sooke Res.: 12:00am to 12:00am			
	(ML) ¹	(MIG) ²	High (°C)	Low (°C)		Rainfall (mm)	Snowfall ³ (mm)	Total Precip.	
01 (Tue)	94.1		20.7	5	1	Sunny / P. Cloudy	0.0	0.0	0.0
02 (Wed)	99.5	<=Max	21.9	4	2	Cloudy / Rain	36.1	0.0	36.1
03 (Thu)	93.4	<=Min	20.5	10	4	Heavy Rain	125.2	0.0	125.2
04 (Fri)	94.7		20.8	9	5	Cloudy / Showers	14.7	0.0	14.7
05 (Sat)	93.7		20.6	7	5	Cloudy / Showers	2.3	0.0	2.3
06 (Sun)	98.9		21.8	6	1	Cloudy / Rain	15.5	0.0	15.5
07 (Mon)									
08 (Tue)									
09 (Wed)									
10 (Thu)									
11 (Fri)									
12 (Sat)									
13 (Sun)									
14 (Mon)									
15 (Tue)									
16 (Wed)									
17 (Thu)									
18 (Fri)									
19 (Sat)									
20 (Sun)									
21 (Mon)									
22 (Tue)									
23 (Wed)									
24 (Thu)									
25 (Fri)									
26 (Sat)									
27 (Sun)									
28 (Mon)									
29 (Tue)									
30 (Wed)									
31 (Thu)									
TOTAL	574.3 ML	126.34 MIG					193.8	0	193.8
MAX	99.5	21.90	10	5			125.2	0	125.2
AVE	95.7	21.06	6.8	3.0			32.3	0	32.3
MIN	93.4	20.54	4	1			0.0	0	0.0

1. ML = Million Litres

2. MIG = Million Imperial Gallons

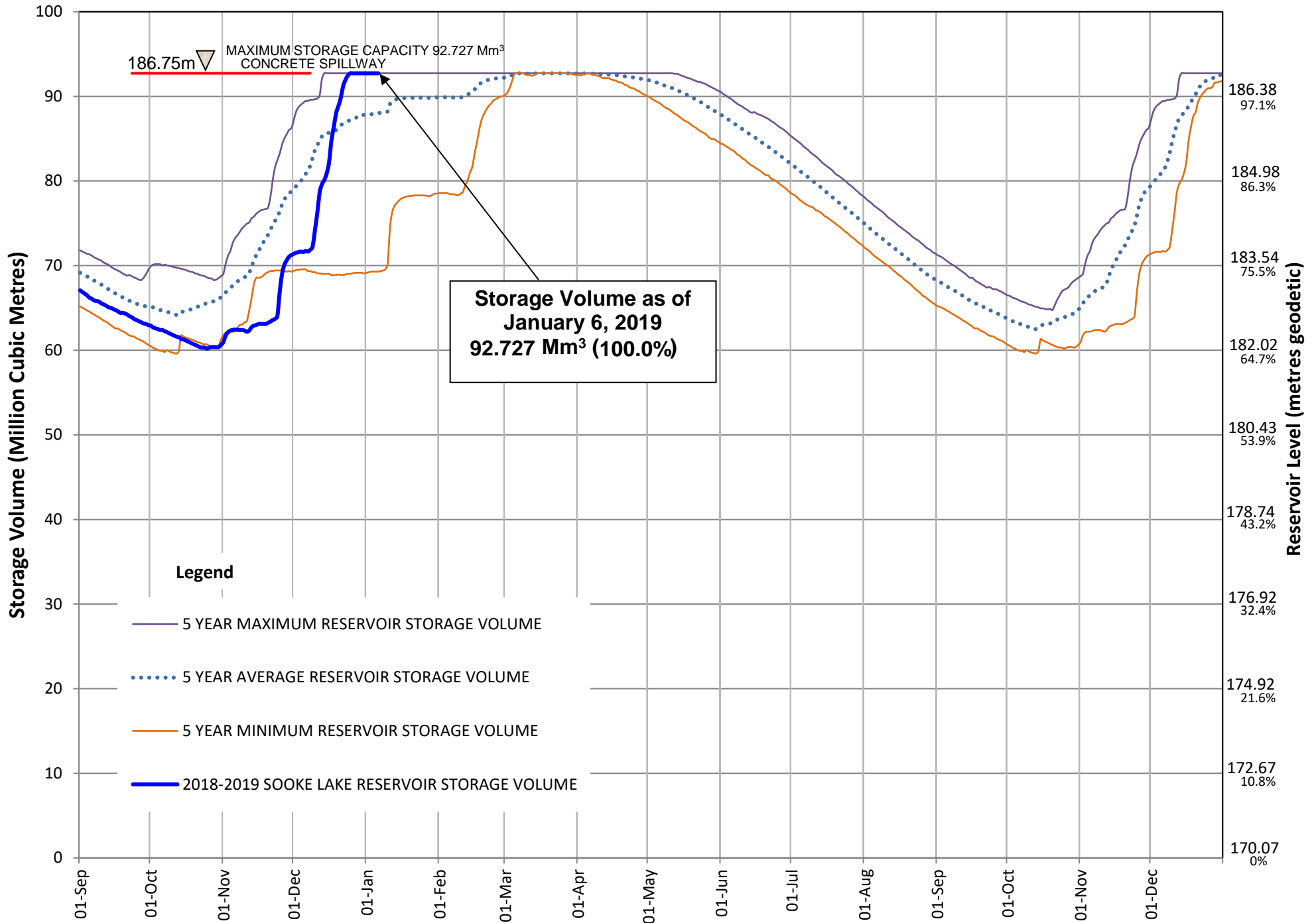
3. 10% of snow depth applied to rainfall figures for snow to water equivalent.

Average Rainfall for January (1914-2018)	271.2 mm
Actual Rainfall: January	193.8 mm
% of Average	71%
Average Rainfall (1914-2018): Sept 01 - Jan 06	841.4 mm
Actual Rainfall (2018-2019): Sept 01 - Jan 06	1,127.2 mm
% of Average	134%

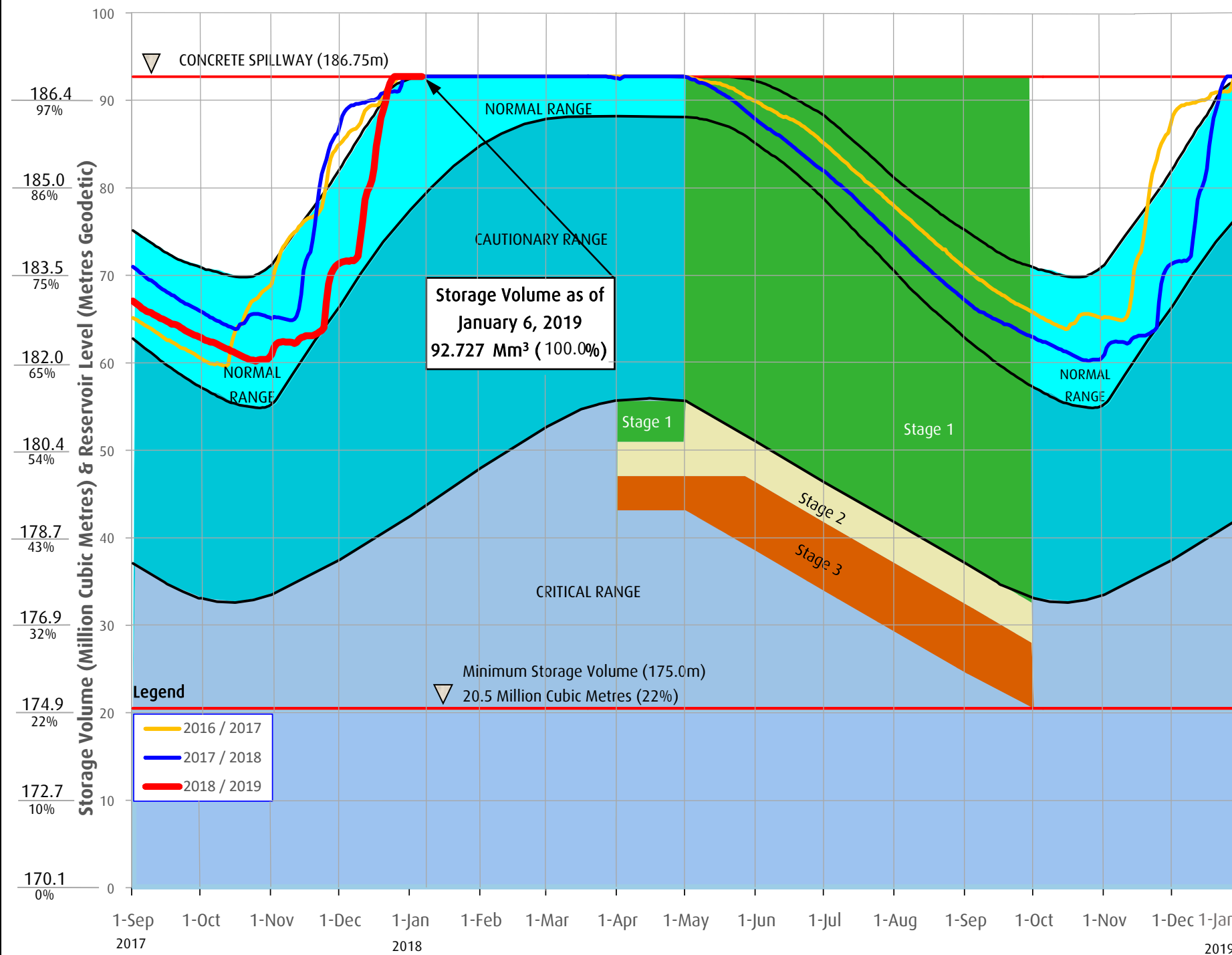
Number days with precip. 0.2 or more
5

Water spilled at Sooke Reservoir to date (since Sept. 1) = 2.77 Billion Imperial Gallons
 = 12.60 Billion Litres

SOOKE LAKE RESERVOIR STORAGE SUMMARY 2018 / 2019



Sooke Lake Reservoir Storage Level Water Supply Management Plan



FAQs

How are water restriction stages determined?

Several factors are considered when determining water use restriction stages, including,

1. Time of year and typical seasonal water demand trends;
2. Precipitation and temperature conditions and forecasts;
3. Storage levels and storage volumes of water reservoirs (Sooke Lake Reservoir and the Goldstream Reservoirs) and draw down rates;
4. Stream flows and inflows into Sooke Lake Reservoir;
5. Water usage, recent consumption and trends; and customer compliance with restriction;
6. Water supply system performance.

The Regional Water Supply Commission will consider the above factors in making a determination to implement stage 2 or 3 restrictions, under the Water Conservation Bylaw.

At any time of the year and regardless of the water use restriction storage, customers are encouraged to limit discretionary water use in order to maximize the amount of water in the Regional Water Supply System Reservoirs available for nondiscretionary potable water use.

Stage 1 is normally initiated every year from May 1 to September 30 to manage outdoor use during the summer months. During this time, lawn watering is permitted twice a week at different times for even and odd numbered addresses.

Stage 2 is initiated when it is determined that there is an acute water supply shortage. During this time, lawn water is permitted once a week at different times for even and odd numbered addresses.

Stage 3 is initiated when it is determined that there is a severe water supply shortage. During this time, lawn watering is not permitted. Other outdoor water use activities are restricted as well.

For more information, visit www.crd.bc.ca/drinkingwater