

METRO VANCOUVER REGIONAL DISTRICT WATER COMMITTEE

REGULAR MEETING

Thursday, February 13, 2020 1:00 pm 28th Floor Committee Room, 4730 Kingsway, Burnaby, British Columbia

AGENDA1

1. ADOPTION OF THE AGENDA

1.1 February 13, 2020, Regular Meeting Agenda

That the Water Committee adopt the agenda for its regular meeting scheduled for February 13, 2020 as circulated.

2. ADOPTION OF THE MINUTES

2.1 November 14, 2019 Regular Meeting Minutes

That the Water Committee adopt the minutes of its regular meeting held November 14, 2019 as circulated.

3. DELEGATIONS

4. INVITED PRESENTATIONS

5. REPORTS FROM COMMITTEE OR STAFF

5.1 2020 Water Committee Priorities and Work Plan

Designated Speaker: Marilyn Towill, General Manager, Water Services
That the Water Committee:

- a) endorse the work plan as presented in the report dated January 27, 2020 titled "2020 Water Committee Priorities and Work Plan"; and
- b) receive for information the Water Committee 2020 Terms of Reference as attached to the report dated January 27, 2020 titled "2020 Water Committee Priorities and Work Plan".

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 $^{^{1}}$ Note: Recommendation is shown under each item, where applicable.

5.2 Water Use by Sector

Designated Speaker: Inder Singh, Director, Policy, Planning and Analysis, Water Services

That the Water Committee receive for information the report dated January 14, 2020, titled "Water Use by Sector in Metro Vancouver: 1985 – 2017".

5.3 Manager's Report

Designated Speaker: Marilyn Towill, General Manager, Water Services

That the Water Committee receive for information the report dated January 14, 2020, titled "Manager's Report".

6. INFORMATION ITEMS

7. OTHER BUSINESS

8. BUSINESS ARISING FROM DELEGATIONS

9. RESOLUTION TO CLOSE MEETING

That the Water Committee close its regular meeting scheduled for February 13, 2020 pursuant to the *Community Charter* provisions, Section 90 (1) (e), (i) and (k) as follows:

- "90 (1) A part of the meeting may be closed to the public if the subject matter being considered relates to or is one or more of the following:
 - the acquisition, disposition or expropriation of land or improvements, if the board or committee considers that disclosure could reasonably be expected to harm the interests of the regional district;
 - (i) the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose; and
 - (k) negotiations and related discussions respecting the proposed provision of a regional district service that are at their preliminary stages and that, in the view of the board or committee, could reasonably be expected to harm the interests of the regional district if they were held in public; a request under the *Freedom of Information and Protection of Privacy Act*, if the board is designated as head of the local public body for the purposes of that Act in relation to the matter."

10. ADJOURNMENT/CONCLUSION

That the Water Committee adjourn/conclude its regular meeting of February 13, 2020.

Membership:

Brodie, Malcolm (C) - Richmond Elford, Doug (VC) - Surrey Asmundson, Brent - Coquitlam Baird, Ken - Tsawwassen First Nation Belenkie, Neil - Belcarra Bell, Don - North Vancouver City Bligh, Rebecca - Vancouver Dingwall, Bill - Pitt Meadows Froese, Jack - Langley Township Guichon, Alicia – Delta Keithley, Joe - Burnaby McEwen, John - Anmore Svendsen, Ryan - Maple Ridge

METRO VANCOUVER REGIONAL DISTRICT WATER COMMITTEE

Minutes of the Regular Meeting of the Metro Vancouver Regional District (MVRD) Water Committee held at 9:02 a.m. on Thursday, November 14, 2019 in the 28th Floor Committee Room, 4730 Kingsway, Burnaby, British Columbia.

MEMBERS PRESENT:

Chair, Mayor Malcolm Brodie, Richmond Vice Chair, Councillor Doug Elford, Surrey Chief Ken Baird, Tsawwassen Mayor Neil Belenkie, Belcarra Councillor Don Bell, North Vancouver City Councillor Rebecca Bligh, Vancouver Mayor Bill Dingwall, Pitt Meadows Mayor Jack Froese, Langley Township Councillor Alicia Guichon, Delta Councillor Joe Keithley, Burnaby Mayor John McEwen, Anmore Councillor Ryan Svendsen, Maple Ridge

MEMBERS ABSENT:

Councillor Brent Asmundson, Coquitlam Mayor Brad West, Port Coquitlam

STAFF PRESENT:

Tim Jervis, General Manager, Water Services Janis Knaupp, Legislative Services Coordinator, Board and Information Services

1. ADOPTION OF THE AGENDA

1.1 November 14, 2019 Regular Meeting Agenda

It was MOVED and SECONDED

That the Water Committee adopt the agenda for its regular meeting scheduled for November 14, 2019 as circulated.

CARRIED

2. ADOPTION OF THE MINUTES

2.1 October 17, 2019 Regular Meeting Minutes

It was MOVED and SECONDED

That the Water Committee adopt the minutes of its regular meeting held October 17, 2019 as circulated.

CARRIED

3. DELEGATIONS

No items presented.

4. INVITED PRESENTATIONS

No items presented.

5. REPORTS FROM COMMITTEE OR STAFF

5.1 Summer 2019 Water Supply Performance

Report dated October 30, 2019 from Inder Singh, Director, Policy, Planning and Analysis, and Marilyn Towill, Director, Operations and Maintenance, Water Services, providing a review of water use and water supply system performance during summer 2019.

It was MOVED and SECONDED

That the GVWD Board receive for information the report dated October 30, 2019, titled "Summer 2019 Water Supply Performance".

CARRIED

5.2 Regional Water Conservation Campaign and Water Regulations Communications 2019 Results

Report dated October 17, 2019 from Larina Lopez, Corporate Communications Division Manager, External Relations, providing an update on the 2019 regional water conservation campaign and regional communications to support the watering regulations.

It was MOVED and SECONDED

That the GVWD Board receive for information the report dated October 17, 2019 titled "Regional Water Conservation Campaign and Water Regulations Communications 2019 Results."

CARRIED

5.3 Water Wagon Program 2019 Results

Report dated October 17, 2019 from Larina Lopez, Corporate Communications Division Manager, External Relations, providing results of Metro Vancouver's 2019 engagement activities with the Water Wagon Program and Tap Water Team.

It was MOVED and SECONDED

That the GVWD Board receive for information the report dated October 17, 2019 titled "Water Wagon Program 2019 Results".

CARRIED

5.4 Award of Contract Resulting from Request for Proposal No. 19-267: Construction Management Services for the Annacis Water Supply Tunnel

Report dated October 21, 2019 from Roy Moulder, Director, Purchasing and Risk Management, Financial Services and Murray Gant, Division Manager, Major Projects, Water Services, advising the GVWD Board of the results of Request for Proposal (RFP) No. 19-267: Construction Management Services for the Annacis Water Supply Tunnel and recommending the Board award the contract, in the amount of up to \$12,786,046 (exclusive of taxes), to McMillen Jacobs Associates

Members were provided with a presentation regarding the Annacis Water Supply Tunnel highlighting project overview, aerial plan view, cross-section profile, schedule, and construction management services.

Presentation material titled "Annacis Water Supply Tunnel Water Committee Presentation" is retained with the November 14, 2019 agenda.

It was MOVED and SECONDED

That the GVWD Board:

- a) approve the award of a contract in the amount of up to \$12,786,046 (exclusive of taxes) to McMillen Jacobs Associates resulting from Request for Proposal No. 19-267: Construction Management Services for the Annacis Water Supply Tunnel; and
- b) authorize the Commissioner and the Corporate Officer to execute the contract.

CARRIED

5.5 Watershed Reservoir Limnology Program Update

Report dated October 30, 2019 from Mike Mayers, Acting Director, Watershed and Environmental Management, Water Services, providing information on the limnology program for the Capilano, Seymour and Coquitlam Reservoirs.

It was MOVED and SECONDED

That the GVWD Board receive for information the report dated October 30, 2019, titled "Watershed Reservoir Limnology Program Update".

CARRIED

5.6 Ultraviolet Disinfection Optimization Projects

Report dated October 30, 2019 from Marilyn Towill, Director, Operations and Maintenance, Water Services, providing information on the ultraviolet disinfection optimization projects at the Seymour Capilano Filtration Plant and Coquitlam Water Treatment Plant.

It was MOVED and SECONDED

That the GVWD Board receive for information the report dated October 30, 2019, titled "Ultraviolet Disinfection Optimization Projects".

CARRIED

5.7 Manager's Report

Report dated October 30, 2019 from Tim Jervis, General Manager, Water Services, updating the Water Committee on Metro Vancouver's average per day per capita water use compared to other jurisdictions in BC and Canada and on the Committee's 2019 Work Plan.

It was MOVED and SECONDED

That the Water Committee receive for information the report dated October 30, 2019 titled "Manager's Report".

CARRIED

6. INFORMATION ITEMS

No items presented.

7. OTHER BUSINESS

No items presented.

8. BUSINESS ARISING FROM DELEGATIONS

No items presented.

9. RESOLUTION TO CLOSE MEETING

It was MOVED and SECONDED

That the Water Committee close its regular meeting scheduled for November 14, 2019 pursuant to the *Community Charter* provisions, Section 90 (1) (e), (i) and (j) and Section 90 (2) (b) as follows:

- "90 (1) A part of the meeting may be closed to the public if the subject matter being considered relates to or is one or more of the following:
 - the acquisition, disposition or expropriation of land or improvements, if the board or committee considers that disclosure could reasonably be expected to harm the interests of the regional district;
 - (i) the receipt of advice that is subject to solicitor-client privilege, including communications necessary for that purpose;
 - information that is prohibited, or information that if it were presented in a document would be prohibited, from disclosure under section 21 of the Freedom of Information and Protection of Privacy Act; and
 - 90 (2) A part of the meeting must be closed to the public if the subject matter being considered relates to or is one or more of the following:

(b) the consideration of information received and held in confidence relating to negotiations between the regional district and a provincial government or the federal government or both and a third party."

CARRIED

ADJOURNMENT/	CONCLUSION
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<u>It was MOVED and SECONDED</u> That the Water Committee adjourn its regular meeting of November

That the Water Committee adjourn its regu	ular meeting of November 14, 2019.
	CARRIED
	(Time: 9:18 a.m.)
Janis Knaupp,	Malcolm Brodie, Chair
Legislative Services Coordinator	

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To: Water Committee

From: Marilyn Towill, General Manager, Water Services

Date: January 27, 2020 Meeting Date: February 13, 2020

Subject: 2020 Water Committee Priorities and Work Plan

RECOMMENDATION

That the Water Committee:

- a) endorse the work plan as presented in the report dated January 27, 2020 titled "2020 Water Committee Priorities and Work Plan"; and
- b) receive for information the Water Committee 2020 Terms of Reference as attached to the report dated January 27, 2020 titled "2020 Water Committee Priorities and Work Plan".

EXECUTIVE SUMMARY

The work plan presented in this report conveys the priorities and terms of reference for the Water Committee in 2020 and aligns with the 2020 Business Plans and Budget for the Greater Vancouver Water District function, approved by the MVRD and GVWD Boards.

PURPOSE

To provide the Water Committee with the priorities and work plan for the year 2020.

BACKGROUND

At its October 17, 2019 meeting, the Water Committee endorsed the 2020 Budget and Annual Work Plans for the Water function, which served as the basis for the 2020 Budget approved by the GVWD Board on November 1, 2019. The 2020 Annual Work Plan(s) included a list of key actions that has been used to develop the Water Committee's work plan presented in this report.

The work plan presented in this report is consistent with the Water Committee's terms of reference (Attachment 2) and with the *Board Strategic Plan* and is being brought forward for the Committee's information, review and endorsement.

2020 WORK PLAN

The Water Committee is the standing committee of the Metro Vancouver Board that provides advice and recommendations on policies, bylaws, plans, programs, budgets, and issues related to the Water function.

Key actions in the 2020 Work Plan for the Committee are described below and listed according to the Committee responsibilities in its Terms of Reference.

 Reviewing and endorsing the annual budget and five-year financial plan for the Water function;

- Overseeing and monitoring implementation of strategic utility plans included the *Drinking* Water Management Plan;
- Overseeing implementation of GVWD capital programs, including award of contracts (over \$5 million) for engineering services, materials supply, and construction;
- Reviewing and receiving the annual Quality Control report for the GVWD;
- Overseeing implementation of the water conservation program and tap water campaign; and
- Monitoring water supply forecasts, water consumption trends, and annual system performance.

The 2020 Work Plan for the Water Committee is provided in Attachment 1, including the expected time frame for reports to this Committee. The Committee will be updated on the status of the actions and projects in this work plan on a monthly basis per the Committee's schedule.

ALTERNATIVES

- 1. That the Water Committee:
 - a) endorse the work plan as presented in the report dated January 27, 2020 titled "2020 Water Committee Priorities and Work Plan"; and
 - b) receive for information the Water Committee 2020 Terms of Reference as attached to the report dated January 27, 2020 titled "2020 Water Committee Priorities and Work Plan".
- 2. That the Water Committee:
 - endorse the work plan as presented in the report dated January 27, 2020 titled "2020 Water Committee Priorities and Work Plan" with amendments provided at the February 13, 2020 Water Committee meeting; and
 - b) receive for information the Water Committee 2020 Terms of Reference as attached to the report dated January 27, 2020 titled "2020 Water Committee Priorities and Work Plan".

FINANCIAL IMPLICATIONS

The priorities in the 2020 Work Plan of the Water Committee are consistent with the 2020 Budget approved by the GVWD Board on November 1, 2019 and with key actions included in the 2020 Annual Work Plans.

CONCLUSION

The work plan presented in this report conveys the priorities for the Water Committee in 2020 and is consistent with its terms of reference and the 2020 Budget approved by the GVWD Board. Staff recommends that Alternative 1 be approved.

Attachments

- 1. Water Committee 2020 Work Plan
- 2. Water Committee Terms of Reference

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Water Committee 2020 Work Plan

Report Date: January 27, 2020

Priorities

1st Quarter	Status
Water Use-by-Sector Report	In Progress
Annual Energy Management Program Update	In Progress
First Nation Engagement Updates	Pending
Seymour Salmonid Society 2019 Annual Report	Pending
GVWD Development Cost Charge Update	In Progress
Long Term Financial Plan	Pending
Contract Approvals – Contracts > \$5 Million (as applicable)	Pending
Water Policies (as applicable)	Pending
2nd Quarter	
GVWD Water Quality Annual Report	Pending
Water Supply Update for Summer 2020	Pending
Status of GVWD Capital Expenditures	Pending
Lawn Water Regulations communication & Regional Water Conservation Campaign	Pending
2020 Water Wagon Schedule	Pending
Water Services Watershed Wildfire Preparedness Update	Pending
Annual Dam Safety Program Update	Pending
Contract Approvals – Contracts > \$5 Million (as applicable)	Pending
Water Policies (as applicable)	Pending
3rd Quarter	
Status of GVWD Capital Expenditures	Pending
Contribution Agreement Renewal – Seymour Salmonid Society	Pending
Drinking Water Management Plan Update	In Progress
Contract Approvals – Contracts > \$5 Million (as applicable)	Pending
Water Policies (as applicable)	Pending
4th Quarter	
Coquitlam Intake No. 2 Project Definition Report & Engagement Results	Pending
Reservoir Limnology Program Report	Pending
Watershed Fisheries Initiatives Annual Update	Pending
Environmental Management System Update	Pending
Status of GVWD Capital Expenditures	Pending
Capilano Hydropower Project Business Case Assessment	In Progress
Annual Budget and 5-year Financial Plan – Water Services	Pending
Summer 2020 Water Supply Performance	Pending
Water Wagon Program 2020 Results	Pending
Regional Water Conservation Campaign and Water Regulations Communications 2020	Pending
Update on Capilano Main No. 5 – Stanley Park Water Supply Tunnel	Pending
Annual Energy Management Program Update	Pending
Contract Approvals – Contracts > \$5 Million (as applicable)	Pending
Water Policies (as applicable)	Pending



Water Committee

Terms of Reference

The Water Committee is the standing committee of the Metro Vancouver Board that provides advice and recommendations on policies, bylaws, plans, programs, budgets and issues related to water management under the GVWD service.

Committee Responsibilities

Within the scope of the *Board Strategic Plan*, *Drinking Water Management Plan*, *Drinking Water Conservation Plan*, and *Metro Vancouver Financial Plan*, the Committee provides guidance and oversight to staff on the implementation of the annual work plan and business plans for the service. Specific Committee responsibilities include:

- Reviewing and endorsing the annual budget and five-year financial plan for the Water function;
- Overseeing and monitoring implementation of strategic utility plans including the *Drinking*Water Management Plan;
- Overseeing implementation of GVWD capital programs, including award of contracts (over \$5 million) for engineering services, materials supply, and construction;
- Reviewing and receiving the annual Quality Control report for the GVWD;
- Overseeing implementation of the water conservation program and tap water campaign; and
- Monitoring water supply forecasts, water consumption trends, and annual system performance.

Committee Membership and Meetings

The Chair, Vice Chair, and members are appointed annually by the Chair of the Metro Vancouver Board. The Committee meets monthly, except for August and December, and has special meetings as required. Members of the Committee must be a member of the GVWD. A quorum of 50% plus one of the Committee membership is required to conduct committee business.

Committee Management

The Committee Chair, or in the absence of the Chair, the Vice-Chair is the chief spokesperson on matters of public interest within the Committee's purview. For high profile issues the role of spokesperson should rest with the Board Chair or Vice-Chair. On technical matters or in cases where an initiative is still at the staff proposal level, the Commissioner or a senior staff member may be the appropriate chief spokesperson. Where necessary and practical, the Board Chair, the Committee Chair and the Commissioner confer to determine the most appropriate representative to speak.

The Chief Administrative Officer assigns a Committee Manager for the Committee. The Committee Manager is responsible for coordinating agendas and be the principal point of contact for Committee members.



To: Water Committee

From: Inder Singh, Director, Policy, Planning and Analysis, Water Services

Date: January 14, 2020 Meeting Date: February 13, 2020

Subject: Water Use by Sector in Metro Vancouver: 1985 – 2017

RECOMMENDATION

That the Water Committee receive for information the report dated January 14, 2020, titled "Water Use by Sector in Metro Vancouver: 1985 – 2017".

EXECUTIVE SUMMARY

The "GVWD and Local Government Water Use by Sector Report 1985 – 2017" outlines the trends in water use by sector in the Metro Vancouver region. Data was compiled from metered end-user billing records provided by local governments receiving water from the GVWD and the resulting water use statistics provide valuable information for utility planning and the development of water conservation and efficiency programs. Historical water use patterns in the region can inform planning and implementation of GVWD and local government water management practices.

PURPOSE

To provide the Water Committee with information on water use trends and statistics, by sector, in the Metro Vancouver region.

BACKGROUND

A water supply and water consumption update report is provided each spring, followed by a summer water supply performance update in the fall. Water consumption data is also available from the "Water Consumption Statistics Report" and the "Peak Day Report", which are published annually and posted on Metro Vancouver's website.

As per the Committee's 2020 Work Plan, this report is being brought forward to provide additional information on water use within the region based on water consumption data collected from local governments as well as GVWD billing data. The information within this report can be used to assist with regional and local government utility planning and facilitate the development and implementation of water conservation and efficiency programs.

This report includes statistics on water use by sector from the "GVWD and Local Government Water Use by Sector Report 1985 – 2017", dated November 2019. The first edition of this report was compiled in 1997 and has since been updated on a regular basis, appending additional years of data to each new edition. This November 2019 report is the eighth update and includes data from 1985 to 2017.

The draft results from the Water Use by Sector Report were shared with members of the REAC Water Subcommittee and their comments were incorporated into the final document.

WATER USE BY SECTOR IN METRO VANCOUVER

The majority of drinking water in the region is supplied by the GVWD and originates from the Capilano, Seymour, and Coquitlam watersheds. GVWD water is treated and delivered to local governments, who in turn distribute water to individual residences and businesses. The Township of Langley, District of West Vancouver, and City of Delta have additional local water supplies, which made up approximately three percent of the total drinking water supplied in the Metro Vancouver region in 2017. Furthermore, approximately one percent of the region's population within the Township of Langley, District of West Vancouver, District of North Vancouver and City of Maple Ridge are serviced by private water sources. The Water Use by Sector Report characterizes total water use from GVWD and municipal water sources and does not include statistics associated with private sources.

Data Analysis Methodology

Data for the Water Use by Sector Report was compiled from metered end-user billing records provided by local governments who receive water from the GVWD. In addition to individual consumption records, local governments were requested to provide the BC Assessment Authority Actual Use Codes (AUC) standard classification for each property account. AUCs classify each water connection based on building use and were used to classify water consumption by sector.

The Water Use by Sector Report groups AUCs into eight sectors:

- 1. Single-Family Residential
- 2. Multi-Family Residential
- 3. Commercial
- 4. Institutional
- 5. Industrial
- 6. Agricultural
- 7. Other
- 8. Unknown

The "Other" sector represents transportation, communications, utilities, and other accounts where an appropriate sector could not be determined. Beginning in 2013, water consumption data for accounts with no corresponding AUC provided were classified as "Unknown".

All bulk water sold by the GVWD to its customers, predominately local governments, is metered. The annual difference between the total water billed by the GVWD and the metered water consumed by end-users on the municipal distribution systems is categorized as unmetered water consumption. The majority of unmetered municipal water consumption can be attributed to unmetered residential water consumption. Other components of unmetered water consumption include a small fraction of unmetered industrial, commercial, and institutional (ICI) water consumption, unmetered consumption at some municipal facilities and parks, and municipal system losses. Estimates for municipal system losses were self-reported by each local government and include distribution system leaks and water used for firefighting needs, water main flushing, and reservoir cleaning.

Trends in Water Use by Sector

For 2017, the total consumption of GVWD and local government supplied water was 398 billion litres, representing an average total water use of 486 litres per capita per day (L/capita/day). Per capita water consumption has steadily declined since 1985, keeping annual average water consumption relatively

steady despite a growing regional population. In more recent years, overall water use has been gradually increasing as the rate of population growth and associated water demand begins to exceed the per capita water use reductions. This emphasizes the need for continued effort on water conservation initiatives.

Figure 1 shows overall water use trends by sector in the region from 1985 to 2017. During the early years, starting in 1985, only a limited number of local governments were able to submit water consumption data and as such, data pre-1993 may not by representative of actual water use trends during those years. By 1994, the majority of the regional water consumption data was made available. In the past 15 years, there has been a gradual increase in the portion of water consumption associated with the metered single-family and multi-family residential sectors. The portion of metered ICI water use has remained relatively steady. Categorization of unmetered water consumption by sector is not possible.

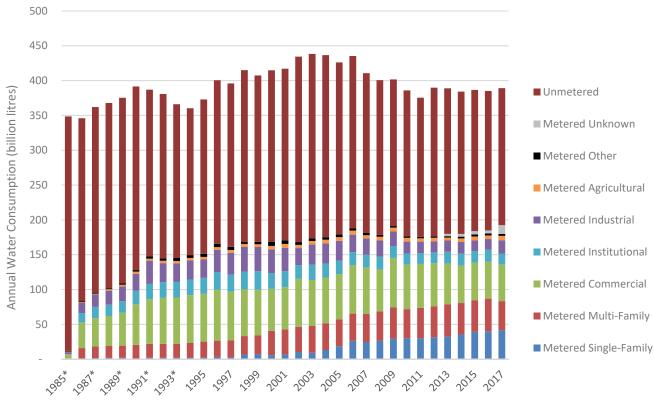


Figure 1: Water Use by Sector Trends from 1985 to 2017

Figure 2 shows a breakdown of water use by sector in 2017. Using estimates of unmetered residential water use within each local government, residential water use per capita was determined to be approximately 263 L/capita/day, or 58 percent of the total water consumed in the region in 2017. As residential water metering increases in the region, more accurate estimates of residential water use, system losses within the region as well as specific water use trends within each sector can be determined.

^{*}Years when not all local government water consumption data was available; results may not be representative of actual water use trends during these years.

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Within the ICI sectors, the majority of the water consumption was associated with commercial use, followed by institutional and industrial use. Agricultural consumption accounted for a small percent of the total ICI water use. Industrial, commercial, institutional, and agricultural sectors accounted for approximately 5, 13, 5, and 2 percent of total water use, respectively.

Figure 2: Breakdown of Water Use by Sector in 2017

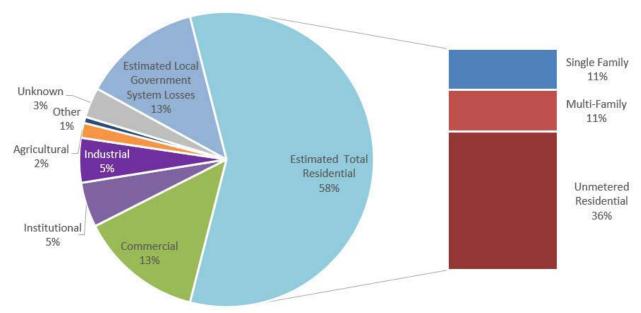
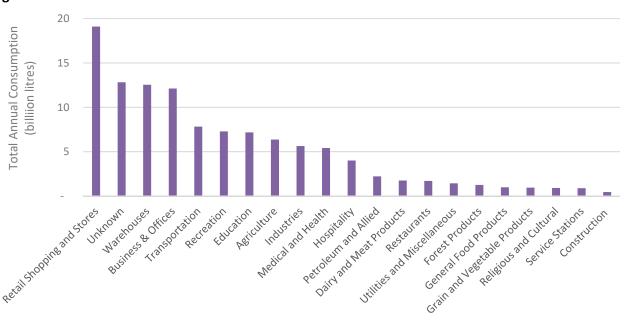


Figure 3 illustrates a further breakdown of 2017 water use for the ICI sectors into twenty-one subcategories. Retail stores, businesses/offices and warehouses were among the top users of water within the ICI sectors.

Figure 3: Metered ICI Water Use in 2017



ALTERNATIVES

This is an information report; no alternatives are presented.

FINANCIAL IMPLICATIONS

There are no financial implications associated with receipt of this report for information.

CONCLUSION

The "GVWD and Municipal Water Use by Sector Report 1985 – 2017", dated November 2019 was developed in conjunction with local government staff and provides data on water use in the Metro Vancouver region.

During 2017, the total GVWD and local government supplied water consumed in the region was 398 billion litres, representing an average total water use of 484 litres per capita per day. Of the total water consumed in the region, the average residential use was approximately 263 litres per capita per day. Per capita water consumption has steadily declined since 1985, keeping annual average water consumption relatively steady despite a growing regional population. In more recent years, there are indications that per capita reductions are stabilizing, resulting in a gradual overall increase in annual water consumption emphasizing the need for continued effort on water conservation initiatives.

In 2017, it is estimated that the residential sector accounted for approximately 58 percent of the total water use in the region. Industrial, commercial, institutional, and agricultural sectors accounted for approximately 5, 13, 5, and 2 percent of total water use, respectively. Within non-residential sectors, retail stores, businesses/offices and warehouses were among the top end users of water in the region.

Water use by sector trends in the region provide valuable information for utility planning and the development of water conservation and efficiency programs. Historical water use patterns in the region can inform planning and implementation of GVWD and local government water management practices.

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To: Water Committee

From: Marilyn Towill, General Manager, Water Services

Date: January 14, 2020 Meeting Date: February 13, 2020

Subject: Manager's Report

RECOMMENDATION

That the Water Committee receive for information the report dated January 14, 2020, titled "Manager's Report".

1. Attendance at 2020 Standing Committee Events

Participation by Water Committee members at external events provides important learning and networking opportunities. The following events fall under the purview of the Water Committee and were included in the 2020 Leadership and Engagement budget. For the following events, up to two spots are available for Committee members:

• AWWA – Sustainable Water Management

Place and Date: Minneapolis, Minnesota, March 29 – April 1, 2020

Number of Attendees: 2

Presenting solutions for balancing the benefits of conservation with the costs, managing water resources, sustainable utilities and infrastructure, urban planning and design, energy efficiency, water conservation, stormwater and reuse.

AWWA Annual Conference (ACE 2020)

Place and Date: Orlando, Florida, June 14 – 17, 2020

Number of Attendees: 2

Foremost drinking water industry conference in the world. A large trade show highlights the latest water technology, and a multitude of professional theme sessions deliver education concurrently throughout the week. Tours of local water supply and treatment facilities are also available, if desired.

Please notify the Committee Chair or Committee Manager as soon as possible, but not later than February 26, 2020 if you are interested in attending either of the above noted events. As the funds for these events are budgeted in general government, the Finance and Intergovernment Committee will consider approval of the events, but final approval on attendance rests with the Board Chair.

2. Water Metering Evaluation Tool Training Session

At its October 4, 2019 meeting, the GVWD Board endorsed the *Residential Water Metering in Metro Vancouver Best Practices Guide for Local Governments*. This key deliverable included the development of a residential water metering evaluation tool (the "Tool") using triple-bottom-line criteria that will assist local governments in assessing the business case under conditions specific to their jurisdictions.

On November 27, 2019, Metro Vancouver coordinated a training session on the Tool, which was attended by 25 local government staff representing engineering and finance. The training session was well received and feedback was incorporated into the final Tool and accompanying User Guide.