
To: Indigenous Relations Committee

From: Marino Piombini, Program Manager, Indigenous Relations

Date: September 12, 2022 Meeting Date: September 21, 2022

Subject: **Quarterly Update Report on Reconciliation Activities**

RECOMMENDATION

That the Indigenous Relations Committee receive for information the report dated September 12, 2022, titled “Quarterly Update Report on Reconciliation Activities.”

EXECUTIVE SUMMARY

This update report provides a summary of reconciliation events and activities undertaken by Metro Vancouver over the past several months as well as information on upcoming events and activities over the next few months. The average number of quarterly activities per quarter has been trending upwards over the course of 2022, with 20 activities per quarter. Twenty-two activities have taken place in this reporting period, including five training sessions and 17 meetings or events intended to strengthen relationships with local First Nations. The report also highlights that over the next quarter, there is one activity planned that relates to raising staff awareness of Indian Residential Schools (i.e. September 30th, National Day for Truth and Reconciliation and Orange Shirt Day), nine additional staff training sessions and 11 other meetings or events identified to date for strengthening relationships with First Nations. Over the course of 2022, Metro Vancouver has, to the date of this report, undertaken 82 Reconciliation-related activities.

PURPOSE

To provide the committee with a quarterly update report on reconciliation activities.

BACKGROUND

This quarterly update report on regional and local reconciliation activities and opportunities is part of the Indigenous Relations Committee’s annual work plan. This information report is intended to identify opportunities for Committee and MVRD Board members to learn about, and engage in, reconciliation activities in the region, and includes:

- Reconciliation events and activities that have been undertaken by Metro Vancouver over the past four months (Attachment 1); and
- Upcoming opportunities over the next few months for engaging in such activities (Attachment 2).

SUMMARY OF ACTIVITIES FOR THIS QUARTERLY REPORTING PERIOD

The charts in Attachment 1 and Attachment 2 of this report are based on the four objectives established by the Metro Vancouver Board in October 2015 in its review of the Truth and Reconciliation Commission’s (TRC) *Calls to Action*. The number of activities over the past quarterly reporting period as well as the next quarterly period are summarized in the table that follows.

Summary Table of Reconciliation-Related Activities Undertaken by Metro Vancouver in 2022

Metro Vancouver's TRC Calls to Action Objectives	No. of Activities Undertaken in this Quarter (and next Quarter)	No. of Activities Undertaken to date in 2022
1. Liaising with the TRC and Reconciliation Canada	0 (0)	0
2. Raising Awareness of Indian Residential Schools	0 (1)	3
3. Providing Training Sessions for Staff	5 (9)	21
4. Strengthening Relationships with First Nations	17 (11)	58
Totals	22 (21)	82

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

The various Metro Vancouver activities identified in 2022 have been included in the Indigenous Relations budget. There are no additional financial implications with respect to the items identified in this information report.

CONCLUSION

This report provides a quarterly update on reconciliation activities involving Metro Vancouver and local governments as per the Committee's recommendations and for members' information.

Attachments

1. Reconciliation Activities Undertaken: July 2022 to September 2022
2. Some Upcoming Reconciliation Activities: September 2022 to December 2022

Reconciliation Activities Undertaken:
July 2022 to September 2022

Objectives	Activity / Date	Notes
Strengthening Relationships with First Nations	Metro Vancouver-Tsleil-Waututh Nation meeting July 4, 2022 on Zoom	Metro Vancouver and Tsleil-Waututh Nation staff met to discuss interpretive design elements for a Water District project on the North Shore.
Strengthening Relationships with First Nations	Metro Vancouver-Kwantlen First Nation meeting July 6, 2022 on Zoom	Metro Vancouver and Kwantlen First Nation staff met to discuss ongoing and future communications and relationship opportunities at the staff and organizational levels.
Providing Training for Staff	Recap of the Lunch and Learn Session held on June 23 rd on the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) with Dr. Sheryl Lightfoot July 12, 2022	Indigenous Relations staff prepared an Intranet article summarizing the June 23 rd Lunch and Learn session with Dr. Lightfoot, a session co-hosted by Fraser Basin Council. A recording of the session is available for viewing.
Strengthening Relationships with First Nations	Metro Vancouver-Tsleil-Waututh Nation Meeting July 14, 2022 on Zoom	Metro Vancouver and Tsleil-Waututh Nation staff met to discuss Water District related emergency response planning updates within the Nation's territory.
Strengthening Relationships with First Nations	First Nations and Metro Vancouver Flood Resiliency Task Force Introductory Meeting July 14, 2022 on Zoom	Metro Vancouver hosted a session on for First Nations with the Flood Resiliency Task Force. The purpose of this meeting was to introduce the scope and purpose of the Task Force and ask how First Nations would like to engage with the Task Force. Staff representatives from five of the 10 local First Nations attended this meeting.

Objectives	Activity / Date	Notes
Providing Training Sessions for Staff	Presentation to Metro Vancouver's Air Quality and Climate Change Project Coordination Staff July 14, 2022 on Zoom	Indigenous Relations staff facilitated a 30-minute version of the three-hour Building Relations with Indigenous Nations training session to approximately 20 Metro Vancouver staff.
Providing Training Sessions for Staff	Presentation to Metro Vancouver's Regional Planning Advisory Committee (RPAC) July 15, 2022 on Zoom	Indigenous Relations staff facilitated a 30-minute version of the Building Relations with Indigenous Nations training session to approximately 25 regional and municipal staff members on RPAC.
Strengthening Relationships with First Nations	Indigenous representation at the 2022 Pacific National Exhibition (PNE) Fair July 20, 2022 on Zoom	Staff from External Relations and Indigenous Relations engaged Naut'sa mawt Event Management, a First Nation-owned event planning group that works with all local First Nation communities as well as Indigenous performers to help Metro Vancouver organize Indigenous representation at the 2022 PNE Fair.
Providing Training Sessions for Staff	Presentation to Metro Vancouver staff on Heritage/Archaeology Permits and First Nations Interests July 21, 2022 on Zoom	Indigenous Relations staff facilitated a 40-minute presentation to approximately 120 Metro Vancouver staff, particularly those working on large capital projects, on updated information and processes with respect to heritage and archaeological permits and First Nations' interests.
Strengthening Relationships with First Nations	Metro Vancouver participation at the Katzie Treaty Table Meeting July 25, 2022 on Teams	Metro Vancouver's Indigenous Relations Committee's elected representative to the Katzie Treaty Table and Metro Vancouver Indigenous Relations staff participated in the monthly treaty table meeting with representatives and negotiators from the BC Treaty Commission, the provincial government, the Federal government and Katzie First Nation government.

Objectives	Activity / Date	Notes
Strengthening Relationships with First Nations	Metro Vancouver-Squamish Nation Meeting July 27, 2022 on Zoom	Metro Vancouver and Squamish Nation staff met to discuss jointly working on a future Regional Park-related project within the Nation's territory.
Strengthening Relationships with First Nations	Metro Vancouver-Kwikwetlem First Nation Meetings A series of 9 meetings between July 1 and September 12	Metro Vancouver and Kwikwetlem First Nation, along with several other parties have undertaken regular meetings in the course of this year to discuss issues of mutual interests on an ongoing basis. Nine meetings have been held between July 1 and September 12. An additional nine meetings have been identified to be held during the next quarter.
Providing Training Sessions for Staff	Presentation to Metro Vancouver staff on the First Nations Monthly Working Group August 19, 2022 on Zoom	Indigenous Relations staff facilitated a one-hour presentation on Metro Vancouver's approach to archaeology to approximately 20 staff representing a cross-section of Metro Vancouver departments.
Strengthening Relationships with First Nations	Metro Vancouver-Kwantlen First Nation meeting September 12, 2022 on Zoom	Metro Vancouver and Kwantlen First Nation staff met to further discuss ongoing and future communications and relationship opportunities at the staff and organizational levels.

Some Upcoming Reconciliation Activities:
September 2022 to December 2022

Objectives	Activity / Date	Notes
Providing Training Sessions for Staff	Metro Vancouver's Approach to Archaeology training session September 13, 2022 on Zoom	Metro Vancouver staff from various departments will receive a training session from Indigenous Relations staff on Metro Vancouver's Approach to Archaeology. This two-hour training session includes information on Chance Find Protocols, Archaeological Overview Assessments and Archaeological Impact Assessments, and the province's Remote Access to Archaeological Data (RAAD) system.
Providing Training Sessions for Staff	Metro Vancouver's Chance Find Protocol training session September 15, 2022 on Zoom	Metro Vancouver staff from various departments will receive a training session from Indigenous Relations staff on Metro Vancouver's Chance Find Protocol training sessions.
Providing Training Sessions for Staff	Metro Vancouver's Chance Find Protocol training session September 20, 2022 on Zoom	Metro Vancouver staff from various departments will receive a training session from Indigenous Relations staff on Metro Vancouver's Chance Find Protocol training sessions.
Providing Training Sessions for Staff	Metro Vancouver's Approach to Archaeology presentation at the meeting of the Municipal Technical Advisory Committee (MTAC) on Indigenous Relations September 21, 2022 on Zoom	Municipal staff members on MTAC will receive a one-hour presentation from Indigenous Relations staff on Metro Vancouver's Approach to Archaeology.

Objectives	Activity / Date	Notes
Providing Training Sessions for Staff	National Day for Truth and Reconciliation 2022 (Orange Shirt Day) September 29, 2022 in person and on Zoom	In recognition of the National Day for Truth and Reconciliation/Orange Shirt Day in Canada on September 30, 2022, Indigenous Relations staff will host a Lunch and Learn session for Metro Vancouver staff, elected officials and municipal staff on the topic of Indigenous languages.
Raising Awareness of Indian Residential Schools	National Day for Truth and Reconciliation 2022 (Orange Shirt Day) September 30, 2022	Indigenous Relations staff will prepare a short Intranet article on the significance of the National Day for Truth and Reconciliation/Orange Shirt Day and reflect on the challenges faced by Indigenous Peoples who attended Indian Residential Schools in Canada.
Strengthening Relationships with First Nations	Metro Vancouver-Kwikwetlem First Nation Technical Working Group Meeting October 4, 2022 on Zoom	Metro Vancouver and Kwikwetlem First Nation staff will meet to discuss various regional district projects within the Nation's territory.
Providing Training Sessions for Staff	Metro Vancouver's Approach to Archaeology training session October 13, 2022 on Zoom	Metro Vancouver staff from various departments will receive a training session from Indigenous Relations staff on Metro Vancouver's Approach to Archaeology. This two-hour training session includes information on Chance Find Protocols, Archaeological Overview Assessments and Archaeological Impact Assessments, and the province's Remote Access to Archaeological Data (RAAD) system.
Providing Training Sessions for Staff	Metro Vancouver's Approach to Building Relations with Indigenous Nations training session October 20, 2022 on Zoom	Indigenous Relations staff facilitated a three-hour Building Relations with Indigenous Nations training session to approximately 25 staff from a cross-section of Metro Vancouver departments.

Objectives	Activity / Date	Notes
Providing Training Sessions for Staff	Indigenous Consultation and Accommodation training session from Indigenous Corporate Training October 25, 2022 on Zoom	Approximately 30 staff from a cross-section of Metro Vancouver departments will receive a facilitated awareness training session from the firm Indigenous Corporate Training on "Indigenous Consultation and Accommodation."
Providing Training Sessions for Staff	Annual Workshop of the Municipal Technical Advisory Committee (MTAC) on Indigenous Relations December 7, 2022 on Zoom	Indigenous Relations staff will organize a facilitated session for approximately 20 staff from Metro Vancouver-member jurisdictions, as well as interested regional district staff, on the <i>Declaration on the Rights of Indigenous Peoples Act</i> (DRIPA) Action Plan 2022-2027 in terms of actions identified that pertain to local governments.
Strengthening Relationships with First Nations	Metro Vancouver-Kwkwetlem First Nation Meetings A series of nine meetings are planned to take place in this quarter. Dates: TBA	Metro Vancouver and Kwkwetlem First Nation, along with several other parties have undertaken regular meetings in the course of this year to discuss issues of mutual interests on an ongoing basis. Nine meetings have been identified to be held during the next quarter.
Strengthening Relationships with First Nations	Metro Vancouver-Katzie First Nation Meeting Date: TBA	Metro Vancouver and Katzie First Nation staff will meet to discuss joint interests and working relationship with respect to a future Regional Park-related project within the Nation's territory.

DELEGATION EXECUTIVE SUMMARY

Name or Organization:	Austin Chhor, Vancouver Climbers Association
Subject:	Official Recognition & Trail Infrastructure
Presenting to:	Regional Parks Committee
Date of Meeting:	October 12, 2022

Our keystone goal is to work with MVRP to officially recognize rock climbing as a recreational activity in the Metro Vancouver Area. This recognition will allow us to pursue initiatives that drastically increase the safety of climbing areas and limit off-trail excursions that can damage ecologically significant habitat. For example, Sully's Hangout, a climbing area within the Lower Seymour Conservation Area, does not have any identifying signage or an established trail. Serious concerns have been raised within the climbing community regarding the ability of first responders to find and reach an injured climber should an accident happen.

Additionally, the lack of an established trail can lead to trail braiding, erosion, and trampling of vegetation. We are currently in consultation with the North Shore Mountain Bike Association regarding this goal, as they have consistently demonstrated that proper signage and trail maintenance results in a safer experience for trail users and less disturbance to off-trail areas.

Signage will include the name of the climbing area, the direction of the trail, and stewardship information such as the climber's code of conduct and leave no trace principles. This info will benefit all trail users and the initiative is our top priority for the upcoming season.

Outhouse Infrastructure

The goal of this initiative is to work with MVRP to fundraise and build outhouses in key high use climbing areas. With Sully's being the most popular crag in Metro Vancouver, we propose a plan to build an outhouse close to the base. VCA has resources to fundraise and volunteers to build this infrastructure in partnership with MVRP.

We point to a successful partnership between the Squamish Climbers Access Society, the District of Squamish, and BC Parks to install composting outhouses at various climbing areas in the Sea-to-Sky corridor. These efforts eliminated human waste in the surrounding areas dramatically improving visitor experience..

Community Engagement

One of our core tenets is to foster a sense of stewardship within the climbing community for our local climbing areas. In pursuit of this goal, the VCA hopes to organize monthly trash pickup days in areas such as the Lower Seymour Conservation Area, Lighthouse Park, Cypress Falls Park, and Lynn Headwaters Regional Park. We are also continuing our online reporting system that allows climbers to report potential hazards at climbing areas, such as worn and missing hardware, loose anchors and rocks, windblown danger trees, and wildlife sightings such as bears and cougars.

Long-term Goals

The VCA envisions a strong future for rock climbing in the Metro Vancouver Area, and is constantly thinking about new, innovative ways to serve the community. In the long-term, we hope our relationship with MVRP will enable us to implement systemic safety checks at Metro Vancouver climbing areas. Safety checks can be compiled into a biannual safety report to MVRP on the state of “Health Of MVRP Climbing Craggs” for example.

In addition, VCA has online reporting through our website and social media channels where climbers can be real-time stewards by reporting safety concerns. This will allow VCA and MVRP to respond to safety issues and identify areas that need more attention such as wildlife, anchors, and dangerous trees.

Long term we hope to partner with MVRP to establish and adopt a set of guidelines for creating new climbing routes. BC Parks “Best Practices For Establishing New Climbing Routes” can be found online. We can look at multiple other examples where climbing associations have worked together with local governments to adopt a set of guidelines.

Examples include:

- Climbers Access Society Of BC and BC Parks
- South Island Climbers Association and Greater Victoria Regional District
- South Island Climbers Association and The Municipality of Esquimalt
- Squamish Access Society and Ministry of Lands, Water, and Resource Management
- Fraser Valley Climbers Association and Chilliwack Regional District
- Revelstoke Climbers Association and Recreation Sites & Trails BC
- The Association Of Bow Valley Rock Climbers and Canmore Regional District

The VCA has also been working behind the scenes to support the inclusion of rock climbing areas within the planned Cypress Village development. Through the course of attending multiple stakeholder meetings with British Properties planners, VCA has ensured the Godman Creek boulders will be protected in the Village plan. Climbing has been worked into the Village plan as an outlet for locals and visitors to pursue an active, healthy lifestyle.

Other goals include installing First Aid caches near climbing areas, cataloging and mapping climber’s trails for First Responders, and developing a permitting process with MVRP for commercial guiding operations and club events. These are ambitious, yet crucially important goals that we are excited to tackle in the coming years.

To: Climate Action Committee

From: Geoff Doerksen, Air Quality Planner
Ken Reid, Superintendent, Environmental Sampling and Monitoring
Parks and Environment Department

Date: September 15, 2022 Meeting Date: October 14, 2022

Subject: **Air Quality Advisories During the Summer of 2022**

RECOMMENDATION

That the Climate Action Committee receive for information the report dated September 15, 2022, titled "Air Quality Advisories During the Summer of 2022".

EXECUTIVE SUMMARY

Metro Vancouver issued two air quality advisories during the summer of 2022, resulting in advisories being in effect for a total of 11 days.

From July 26 to August 1, the first air quality advisory of the year was issued due to elevated levels of ground-level ozone, coinciding with a heatwave with maximum daytime temperatures exceeding 35 degrees Celsius in parts of the region. Metro Vancouver has put in place actions and policies to mitigate ground-level ozone impacts, through the regional ground-level ozone strategy, but this strategy is now being updated in light of more extreme temperatures due to climate change, and emerging sources of emissions that contribute to ozone formation.

During a second advisory from September 10 to 15, high levels of fine particulate matter were primarily due to smoke from wildfires burning in BC and the US. Significant wildfire smoke impacts in six of the last eight summers demonstrate that Metro Vancouver's air quality program must continue to adapt to a changing climate that is expected to increase the frequency and severity of both wildfires and heatwaves.

PURPOSE

To provide the Climate Action Committee with information about air quality advisories issued by Metro Vancouver during the summer of 2022, historical trends, and implications for future air quality.

BACKGROUND

Metro Vancouver operates an air quality advisory service for the entire Lower Fraser Valley airshed, including Metro Vancouver and the Fraser Valley Regional District. Air quality advisories are issued to the public when air quality is degraded or is expected to become degraded relative to Metro Vancouver's ambient air quality objectives, which are benchmarks for acceptable air quality. The advisory service is delivered in collaboration with Environment and Climate Change Canada, BC Ministry of Environment and Climate Change Strategy (BC ENV), Fraser Valley Regional District (FVRD), Vancouver Coastal Health (VCH), Fraser Health Authority (FHA), First Nations Health

Authority (FNHA) and the BC Centre for Disease Control (BC CDC). BC ENV provides an air quality advisory service for the remainder of the province.

METRO VANCOUVER ADVISORY PROGRAM IN 2022

Metro Vancouver operates a comprehensive network of air quality monitoring stations. Data are available in real time on Metro Vancouver's website at airmap.ca and informs the air quality advisory service. The contaminants of primary concern for Metro Vancouver's air quality advisory service are:

- **Ground-level ozone (O₃)** - is produced when nitrogen oxides (emitted when fuels are burned) and volatile organic compounds (emitted from solvents and other sources) react in sunlight.
- **Fine particulate matter (PM_{2.5})** – is less than 2.5 microns in diameter (less than 1/30th the thickness of a human hair), allowing it to penetrate deep into the lungs and into the bloodstream. It can be emitted directly (primarily from fuel combustion and wildfires) or formed indirectly, such as when nitrogen oxides or sulphur oxides react with ammonia.

These contaminants have the greatest potential to reach levels in the region that may be harmful to human health. Metro Vancouver has established ambient air quality objectives for these contaminants, which indicate acceptable levels for different periods of exposure, such as 1-hour, 8-hour, 24-hour and annual.

Metro Vancouver works closely with health authorities and the BC CDC year to year to develop advisory messaging and public outreach materials with actions people can take to reduce their exposure to degraded air quality (e.g., taking shelter in public air-conditioned buildings with cleaner, cooler air, or reduce intensity of outdoor exercise). In preparation for advisories in the summer of 2022, Metro Vancouver undertook new activities, including a [public video](#) on 'What to Do When An Air Quality Advisory Is Issued' and a new subscription service that sends email updates on the status of air quality in the region in advance of an air quality advisory. The public video includes information on ways to reduce exposure to wildfire smoke; use of portable air cleaners; health advice; how to receive advisory notices; and where to find current air quality data and the Air Quality Health Index (AQHI).

To sign up to receive email updates on the status of air quality in the region in advance of an air quality advisory, people can follow the link below, enter an email address, check the box 'Air Quality Updates' and click 'Subscribe'.

<http://www.metrovancouver.org/services/air-quality/engagement/mailing-list/Pages/default.aspx>

SUMMER 2022 ADVISORIES

Two air quality advisories were issued during the summer of 2022, for a combined total of 11 days.

Ground-Level Ozone, July 26 - August 1, 2022

The first air quality advisory of 2022 was issued on July 26 and remained in place until August 1, coinciding with a heatwave with maximum daytime temperatures exceeding 35 degrees Celsius in parts of the region. The advisory was initiated for ground-level ozone in the eastern portions of Metro Vancouver and the Fraser Valley. Ground-level ozone is not emitted directly, but formed from atmospheric reactions between volatile organic compounds and nitrogen oxides in the presence of sunlight. Nitrogen oxides are emitted when fuels are burned, while volatile organic compounds are

emitted from a variety of sources including fossil fuels, cannabis production, agricultural activities, solvents like paint thinners and varnishes, as well as natural sources. While the frequency and severity of ground-level ozone advisories has been reduced in the last two decades with management actions (e.g. Regional Ground-Level Ozone Strategy), the high temperatures led to ozone concentrations that exceeded air quality objectives at numerous stations for both 1-hour and 8-hour concentrations. During the advisory, wildfire smoke from the BC interior contributed to hazy conditions over the region but there was no significant impact on measured fine particulate matter concentrations at ground level. The advisory was cancelled on August 1 with a return to cooler temperatures.

Wildfire Smoke Advisory, September 10 - 15, 2022

On September 10, an air quality advisory was issued for the entire region because of high concentrations of fine particulate matter (PM_{2.5}) throughout the region, due to smoke from wildfires burning in BC (the Heather Lake fire near Manning Park, the Flood Falls Trail fire near Hope and a number of fires near Chilliwack Lake) and the US (the Bolt Creek fire east of Seattle). Additionally, a local fire burning at a wood recycling facility in south Vancouver produced considerable smoke that was trapped near the surface by an inversion. Smoke from the fire impacted multiple municipalities including Vancouver, Burnaby, Richmond, New Westminster, Surrey, and Coquitlam.

By September 11, the entire region experienced smoky conditions with all PM_{2.5} monitoring stations in exceedance of Metro Vancouver's 24-hour PM_{2.5} air quality objective. The following day (September 12) fine particulate matter concentrations decreased (improved) in some parts of the region, especially near the coast, while other areas remained high. Over the next several days smoke concentrations varied widely across the region with changes in winds, temperature and wildfire behaviour. On September 14 the advisory was cancelled for Metro Vancouver and the Central Fraser Valley due to improved air quality, but continued for the Eastern Fraser Valley. The advisory was fully cancelled September 15 when a change in weather brought cleaner air into the entire region and helped reduce wildfire activity.

IMPLICATIONS FOR FUTURE AIR QUALITY

The attachment to this report provides information on historical trends related to air quality advisories, including contributing factors to advisory events.

In recent summers, the Metro Vancouver region has been impacted by air quality advisories related to both ground-level ozone and wildfire smoke. These advisories, and the occurrence of heatwaves, demonstrate that Metro Vancouver's air quality programs must continue to adapt in response to a changing climate and new challenges that are being presented.

The summer heat dome in 2021 saw a return to ground-level ozone levels not seen since the 1980s, and a heat wave in 2022 also resulted in elevated ground-level ozone concentrations. Metro Vancouver's air quality program has had a historical focus on ozone and smog, and the *Regional Ground-Level Ozone Strategy*, adopted in 2014 by the Metro Vancouver and Fraser Valley Regional District Boards, has used a science-based approach for management actions to reduce emissions within the airshed that contribute to ground-level ozone. However, more extreme temperatures and new sources of emissions, including wildfires, have necessitated an update to the Strategy, which will be part of the Committee's work plan in 2023.

Occurrences of wildfire smoke impacting Metro Vancouver has seen an upward trend in recent years. Six of the last eight summers have experienced widespread wildfire smoke throughout the region for many days. In 2022, the region was impacted by smoke from fires burning in BC as well as the US. Significant smoke can reach our region from wildfires in Washington, Oregon and California where similar trends are being observed. Climate projections for the region indicate increased risk of wildfire activity due to warmer temperatures, lesser snowpack and lower precipitation during the summer, longer fire seasons, and greater incidence of heatwaves.

Metro Vancouver's *Climate 2050* strategy has identified the need for adaptation to climate-related impacts on regional air quality. As *Climate 2050* actions are developed, co-benefits will be emphasized. An example from the Buildings Roadmap is the use of electric heat pumps to enable summer cooling in homes while also reducing GHG emissions. The recently adopted *Clean Air Plan* outlines strategies for continuous improvement in regional air quality, including actions for updating the *Regional Ground-Level Ozone Strategy* and better protections against wildfire smoke such as "clean air" shelters in public buildings, resources to help residents and businesses manage indoor air quality, and providing high quality information to the public during air quality advisories.

ALTERNATIVES

This is an information report. No alternatives are presented.

FINANCIAL IMPLICATIONS

Staff time for monitoring and analyzing air quality information, issuing air quality advisories and responding to requests from media and the public is included in annual operating budgets, including overtime for evening and weekend work during the summer period. In the last three advisory seasons (2020 to 2022), weekend staff coverage for the advisory program has been extended past the typical ending on Labour Day, by three to five weeks due to longer wildfire seasons and ongoing threats of wildfire smoke to the region. Consideration of increased resource levels is made during annual budget preparation and may be needed if wildfire activity continues to increase in the future.

CONCLUSION

Public notification of degraded air quality is delivered by Metro Vancouver's air quality advisory program. There is considerable public and media interest in air quality during the summer, especially when advisories are in place. In preparation for the summer advisory season in 2022, Metro Vancouver undertook new activities: the creation of a public video and a new web subscription service to provide air quality updates in advance of an advisory. Two air quality advisories have been issued in 2022. High levels of PM_{2.5} during September were primarily due to smoke from wildfires burning in BC and the US. The heatwave in July resulted in a ground-level ozone advisory. Wildfire smoke advisories in six of the last eight years emphasize how climate change is presenting new challenges for air quality management and the need for adaptation to climate-related impacts on regional air quality.

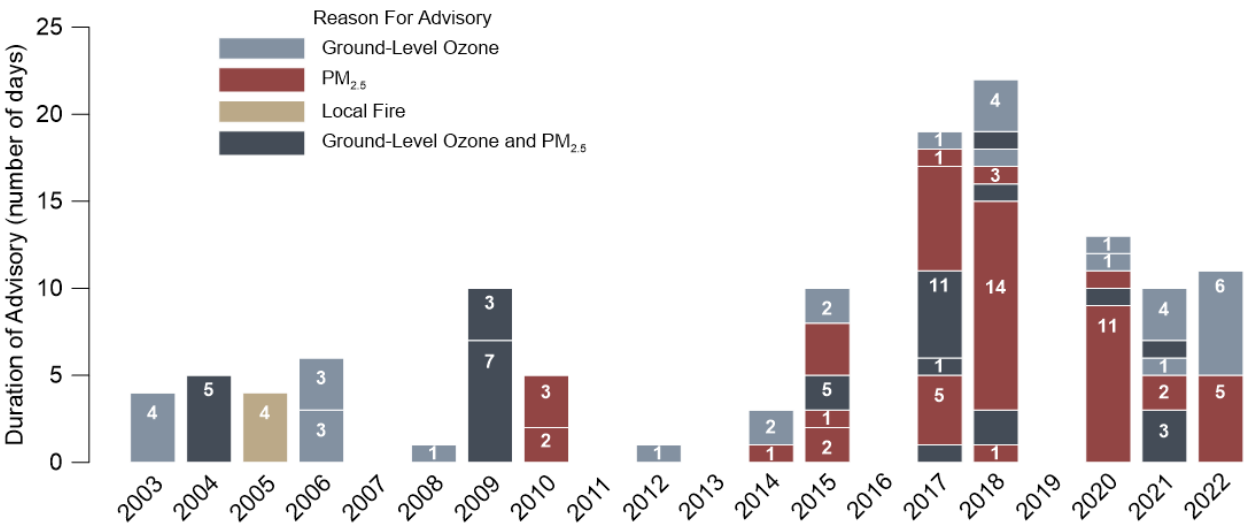
Attachment

Air Quality Advisory Trends

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Air Quality Advisory Trends

In the last twenty years, the number of days on which air quality advisories were in place has ranged from zero to twenty-two days annually. Shown in Figure 1 is the historical trend of the number of days the Lower Fraser Valley was under an advisory. The total number of advisory days is shown as a bar while the number of consecutive days of an advisory period is given by the number in white. The legend indicates the reason for the advisory being issued.



Notes:

- Trigger levels for advisories have changed over the years; care must be taken when interpreting advisory trends.
- The advisory in 2005 was the result of a large fire in Burns Bog.

Figure 1: Number of days of air quality advisories in the Lower Fraser Valley.