

# Warning and Outreach for Wildfire Smoke

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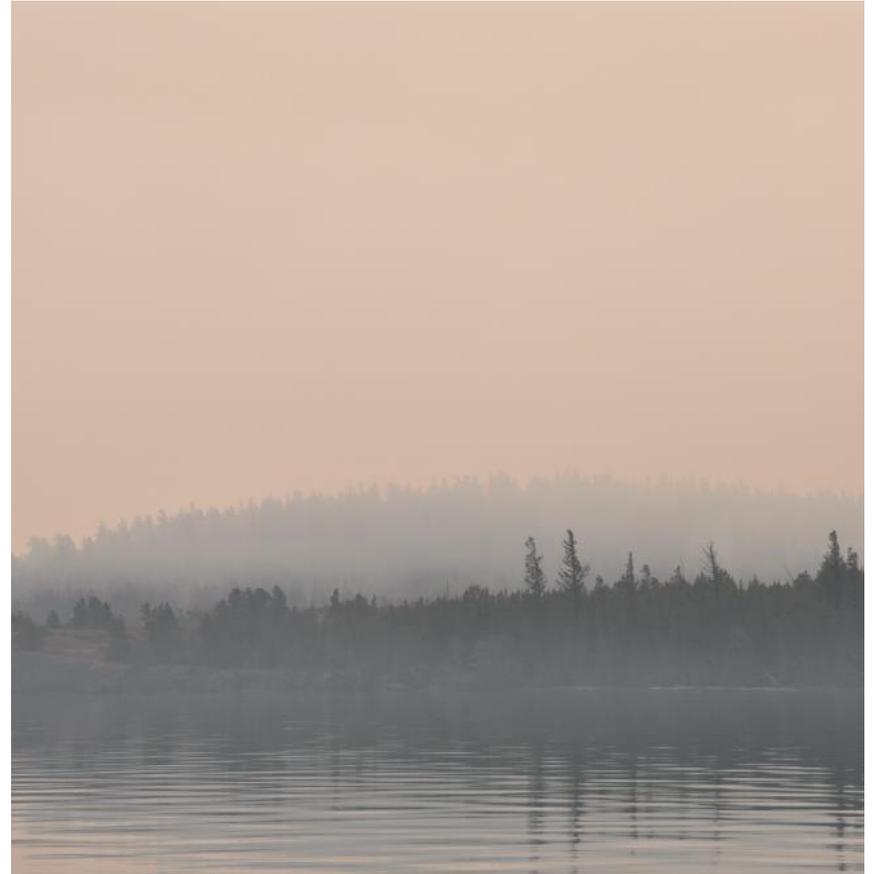
GB/PS International Airshed Strategy Coordinating Committee Meeting

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# Overview

- “Air quality alerting” responsibility during wildfire season falls to our Regional Operations Branch.
  - Covers entire province outside of the Lower Fraser Valley
- Air Quality Section - seven air quality meteorologists and one Section Head
- During wildfire season there is 7 day/week coverage.
- Each week has a rotating “Met 1” and “Met 2”.
- Met 1 leads wildfire response in that week, Met 2 supports and takes over Met 1 role the following week.



# Seasonal workflow (1)

- Met 1 and Met 2 attend regional wildfire briefings (often held concurrently in multiple regions) and provincial briefing (if scheduled).
  - Fire weather forecast
  - Key active fires
- Review current information and forecasts:
  - AQ monitoring network (including small sensors)
  - Observer reports
  - Satellite imagery – NASA Worldview (hotspots and plumes)
  - Blue Sky and Firework smoke forecasts
- Discussions with ECCC and Metro Vancouver when needed

# Seasonal workflow (2)

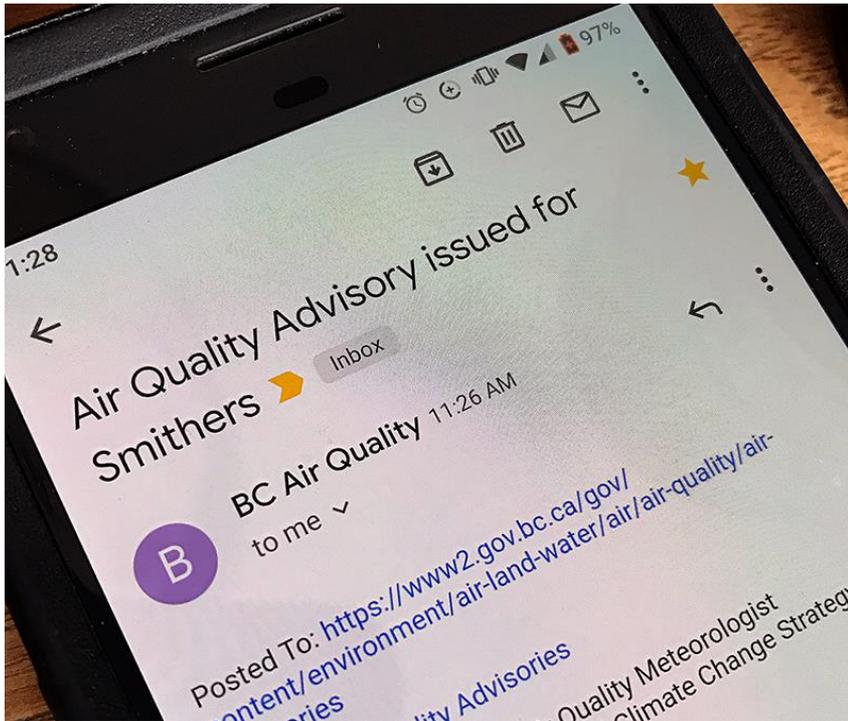
- Met 1 sends internal smoke update with request for feedback.
- Met 1 issues/amends/ends Smoky Skies Bulletins\* by noon.
  - Forecast areas aligned with ECCC weather regions
  - ECCC issues “Special Weather Statements” for these regions
- Bulletins are transmitted via the ministry’s air quality subscription service <https://aqss.nrs.gov.bc.ca/>.
- Participate on working groups as needed with Emergency Management BC and regional health authorities.
- Media requests dealt with in afternoon
- Information requests from the public
- Advise colleagues/partners of delays to other non-wildfire related work

# Bulletins vs Advisories?

- Ministry has moved exclusively to “Smoky Skies Bulletins” for summer wildfire episodes.
- Advisories are still issued for winter PM and summer smog as appropriate when monitored concentrations exceed or are predicted to exceed provincial AQOs
- Bulletins recognize that wildfire smoke will vary widely in space and time and that monitoring is limited over the expanse of BC.
- Bulletins always apply to regions while advisories may apply to quite limited locations.



# Dissemination of Smoky Skies Bulletins



- Only through the Air Quality Subscription Service and BC Government website
- Notice of bulletins by email and or SMS
- <https://www2.gov.bc.ca/gov/content/environment/air-land-water/air/air-quality/air-advisories/air-quality-subscription-service>
- Picked up by print and broadcast media



## Smoky Skies Bulletin - September 10, 2020

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The Regions of BC highlighted on the map are being impacted or are likely to be impacted by wildfire smoke over the next 24-48 hours. The smoky skies advisory remains in place for southern BC. Wildfire smoke concentrations have continued to drop over the past 24 hours except for a few isolated areas. However, smoke forecast models indicate potential for intermittent long-range transport of smoke from the United States in the next day. With falling temperatures overnight, temperature inversions in mountain valleys can increase the likelihood of smoke being trapped near the ground. Localized impacts from the Talbott Creek, Woodbury Creek, and Doctor Creek fires continue to be expected.

The next bulletin update will be available September 11, 2020.

The bulletin can be accessed online at: <https://www2.gov.bc.ca/gov/content/environment/air-land-water/air/air-quality/air-advisories>.

# Be informed

During a wildfire, smoke conditions can change quickly over short distances and can vary considerably hour-by-hour.

Wildfire smoke is a natural part of our environment but it is important to be mindful that exposure to smoke may affect your health.

People with pre-existing health conditions, respiratory infections such as COVID-19, older adults, pregnant women and infants, children, and sensitive individuals are more likely to experience health effects from smoke exposure.

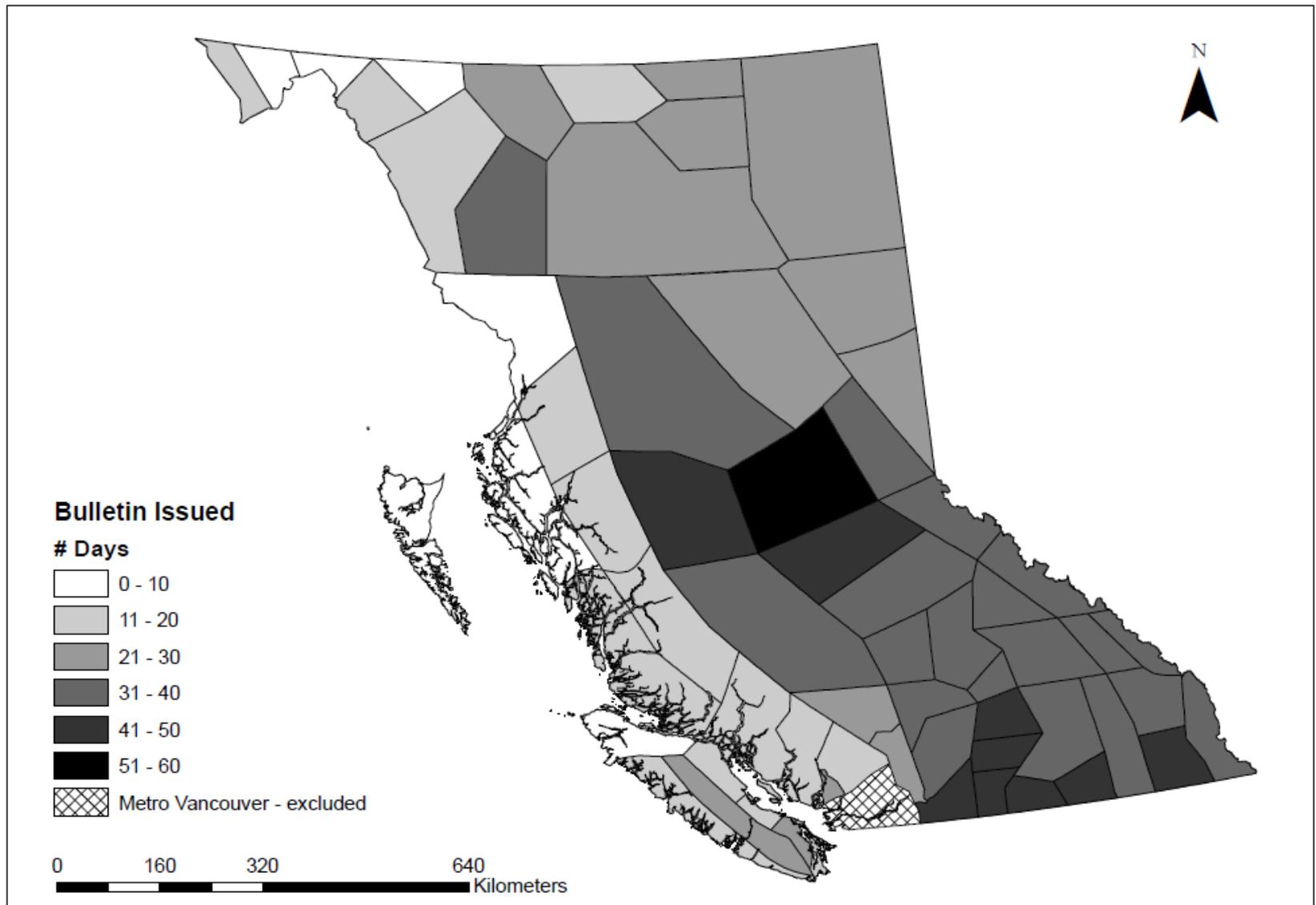


Figure 1: A description of highlighted region(s) are provided at the end of the bulletin.

# Additional Bulletin Content

- Page 2 – Health and exposure advice
  - Drawing on expertise of health partners
- Page 3 – Links to additional information
  - Current AQ Data
  - Smoke Forecasts
  - BC Centre for Disease Control landing page for 9 smoke factsheets
  - Health Link BC
  - WorkSafe BC
- Page 4 – Media and Public contacts
- Page 5 and 6 - text description of forecast regions
  
- COVID related information

# 2018 Smoky Skies Bulletin - Regional Summary

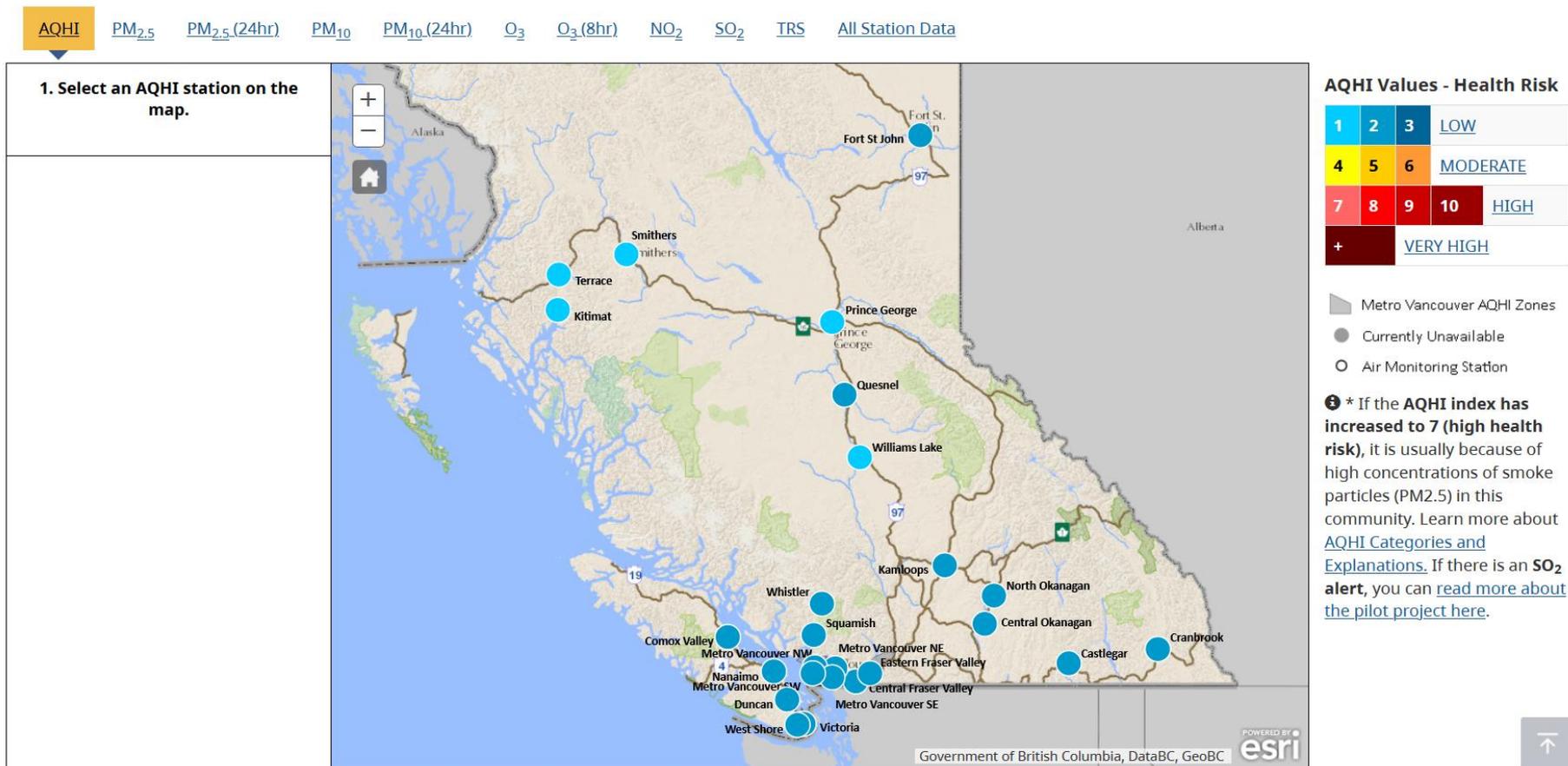


# Media and Public Inquiries

- Media requests all routed to Met 1 (Met 2 if needed)
- Public requests come in by multiple routes during heavy smoke events
  - Direct to Met 1 - [AQReporting@gov.bc.ca](mailto:AQReporting@gov.bc.ca) (the preferred route)
  - BC Air Quality Inbox - [BCAirQuality@gov.bc.ca](mailto:BCAirQuality@gov.bc.ca)
  - Minister and Deputy Minister offices
  - Other public ministry emails and phone numbers
- Air Quality Inbox now has a contact form <https://www2.gov.bc.ca/gov/content/environment/air-land-water/air/contact-bc-air-quality> and an auto-response that deal with some of the most common wildfire smoke questions.

# Other Resources

- Website - current air quality – clickable map for AQHI, PM2.5 and other parameters



# Related Work

- Ministry is key supporter of the BlueSky smoke forecast system
- Ministry collaborates with partners on the production and updating of wildfire outreach information such as BCCDC factsheet series
- AQHI-Plus tweak to the AQHI formula now implemented year round in BC.
  - Reported AQHI is the higher of the classic multi-pollutant formula (O3, NO2, PM2.5) and a PM2.5 only calculation
  - Better reflects health effects and public perception than previous implementation
  - AQHI health messaging is largely supportive of the more specific wildfire messaging