

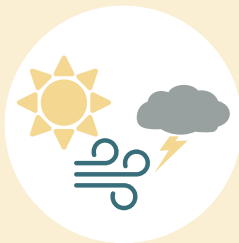
CWFIS Data Products



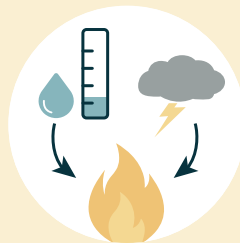
Supporting wildland fire management and responses
Information current as of April 1, 2026

The Canadian Wildland Fire Information System (CWFIS) provides data products and services to monitor wildfire occurrence, current and forecasted wildfire conditions, as well as archived data for historical analysis and reporting. National data is updated multiple times per day (for most products), and forecasts from multiple models are available.

The framework organizes publicly available data products into six data themes:



Weather



Fire Weather



Fire Behaviour



Fire Mapping & Monitoring



Fire Impacts



Forest & Fuels Characterization

Accessing Data Products

From the [CWFIS landing page](#), navigate to the **services, tools & applications** section below the interactive map. You can browse the data catalogue or use a keyword search. You can filter your results by theme, spatial representation type, update frequency, format and resource type.¹



Disclaimer: The information, maps and data services available through the Canadian Wildland Fire Information System are approximations based on available data, and may not show the most current fire situation. Additional information and maps of current conditions are [available on the website of the fire management agency](#) for your region of interest (Province, Territory or National Park).

¹ Additional [guidance](#) is available that explains how to access CWFIS data services.



Data Products by Theme

Weather

Focus: Current, historical and forecasted weather and venting conditions

Data Products/Services:

- Forecasted Weather
- Relative Humidity
- Wind Speed
- Ventilation Index
- Temperature
- Mixing Height
- Atmospheric Dispersion Index
- Precipitation
- Wind Direction
- Transport Wind Vector
- Pasquill - Gifford - Turner Stability

Includes inputs to Canada's [Fire Weather Index \(FWI\) system](#).



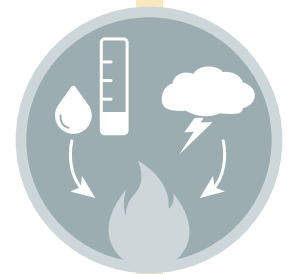
Fire Weather

Focus: Current, historical and forecast fire weather index (FWI) system outputs

Data Products/Services:

- Fine Fuel Moisture Code
- Duff Moisture Code
- Drought Code
- Initial Spread Index
- Buildup Index
- Fire Weather Index
- Daily Severity Rating
- Fire Danger
- Seasonal/monthly forecasts produced during the first week of the month (March–Sept)

New Fire Weather products/services will be available as part of the FWI2025 updates.



Fire Behaviour

Focus: CFFDRS fire behaviour prediction (FBP) system outputs, fire growth modelling inputs/outputs, and experimental burn datasets

Data Products/Services:

- Crown Fraction Burned
- Head Fire Intensity
- Foliar Moisture Content
- Surface Fuel Consumption
- Fire Type
- Rate of Spread
- Total Fuel Consumption



Fire Mapping & Monitoring

Focus: Fire locations, fire perimeters and burned area, and satellite-detected hotspots

Data Products/Services:

Current Fire Season

- [Agency-reported fires](#)
 - Information on current fires as reported by fire management agencies, including active fire locations and attributes.
 - Used to derive statistics throughout the current fire season.
- FireM3 ([Satellite-detected hotspots](#) and [fire perimeter estimates](#))
 - Information on fire location, fire progression and generalized area burned estimates as derived by coarse resolution satellite imagery.

Annual Data Products/Services

- [National Burned Area Composite \(NBAC\)](#)
 - Annual area burned polygons using the best available data for each fire event for each year since 1972.
 - This dataset includes attributes for each fire event as provided by fire management agencies (as compiled in the CNFDB).
 - Useful for area burned [analysis and statistics](#).
- Canadian National Fire Database ([point](#) and [polygon](#) data)
 - Collection of historical/annual fire locations and fire perimeter maps as provided by fire management agencies.
 - Includes additional attributes associated with each reported fire event.
 - Useful for [annual statistics](#) (number of fires and area burned) as reported by agencies.



Fire Impacts

Focus: Impacts of fire, including smoke, air quality and evacuations due to wildfire

Data Products/Services:

- Surface smoke PM2.5 observations and forecasts
- [Canadian Wildland Fire Evacuations Database \(CWFEDB\)](#)
 - Evacuation locations are updated throughout fire season for internal reporting, but current season data are **not** available publicly.
 - Historical data (1980 up to year previous to current) has limited availability. General summary statistics are available (estimates for total evacuation events and evacuees by year). Historical data available upon signed data sharing agreement arranged between parties. The CWFIS welcomes inquiries from researchers, governmental departments and other stakeholders.



Forest & Fuels Characterization

Focus: Characterizing forest attributes and Canada's [Fire Behaviour Prediction \(FBP\) system](#)

Data Products/Services:

- Green-up (updated daily)
- Grass curing (updated daily)
- FBP fuel type (updated annually)

