

Building Climate Change Resilience in the Outdoor Industry

Wilderness Risk Management Conference 2026

Wilderness Climate Action Lab

01

Brendan Madden

Girl Guides of Canada

02

Shana Tarter

University of Colorado
Climate & Health Program

03

Jeff Jackson

Jeff Jackson Professional Services

04

Stuart Slay

Slay Risk Solutions



Learning goals



Share

Learn about the impact of climate change on outdoor programs and industry preparedness levels.

Translate

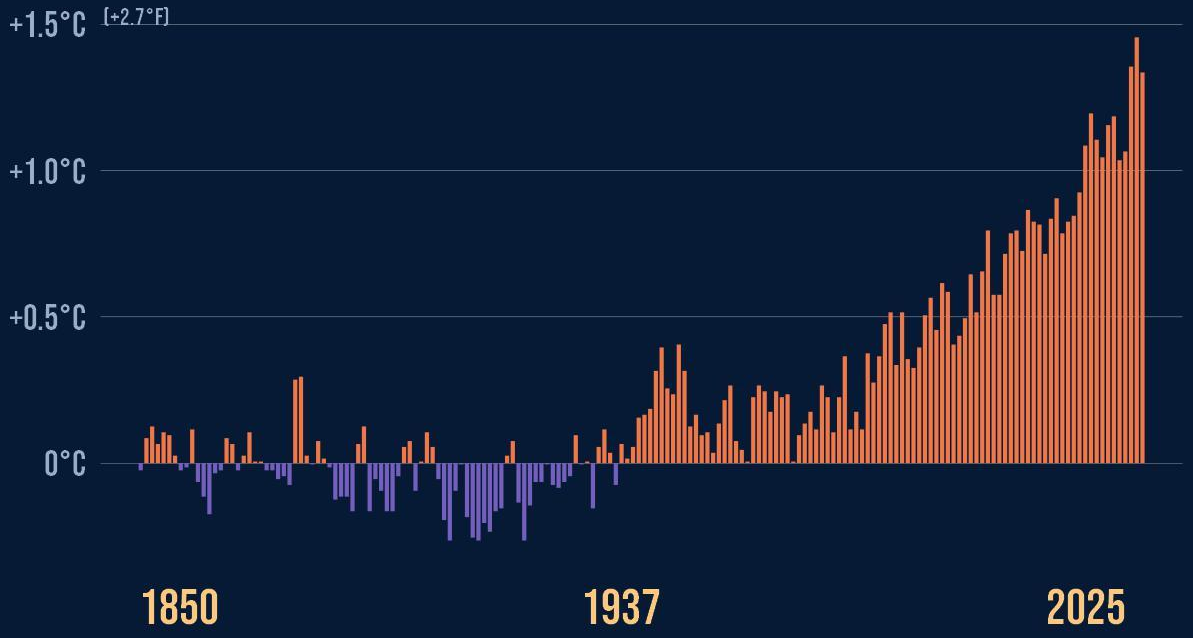
Prepare to utilize risk reduction tools, strategies, and decision-making changes to build a climate resilience plan.

Activate

Inspire collective action to improve industry preparedness and collaboration.

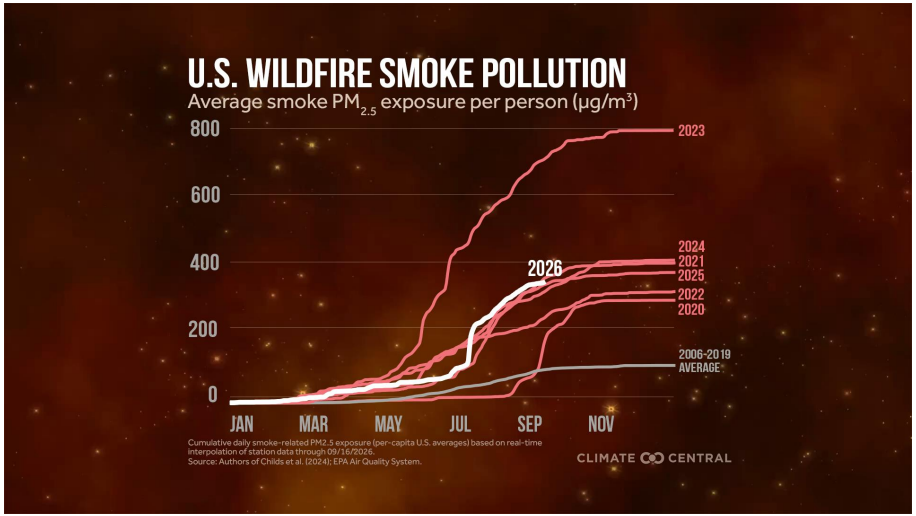


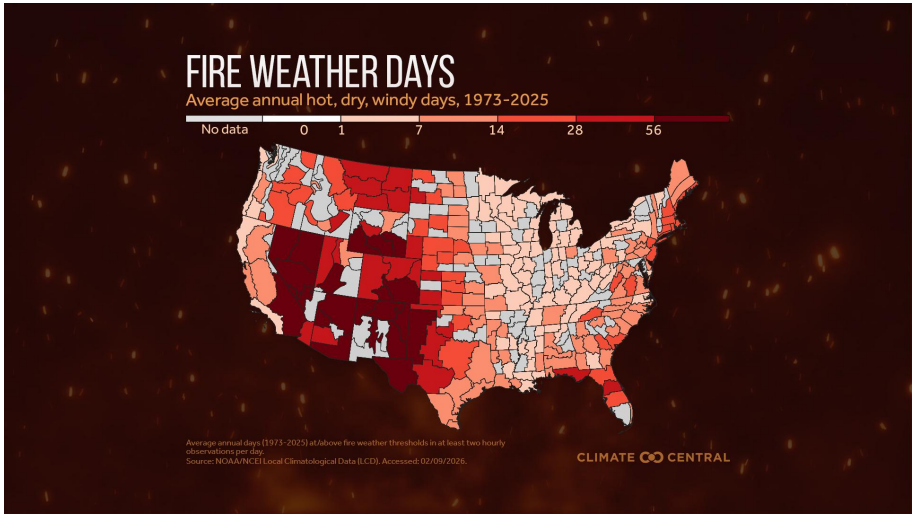
GLOBAL TEMPERATURE



Global land and ocean temperature departures (°C) from the pre-industrial (1850-1900) average.
Source: NOAA (NCEI). Data as of 01/14/2026.

CLIMATE CENTRAL

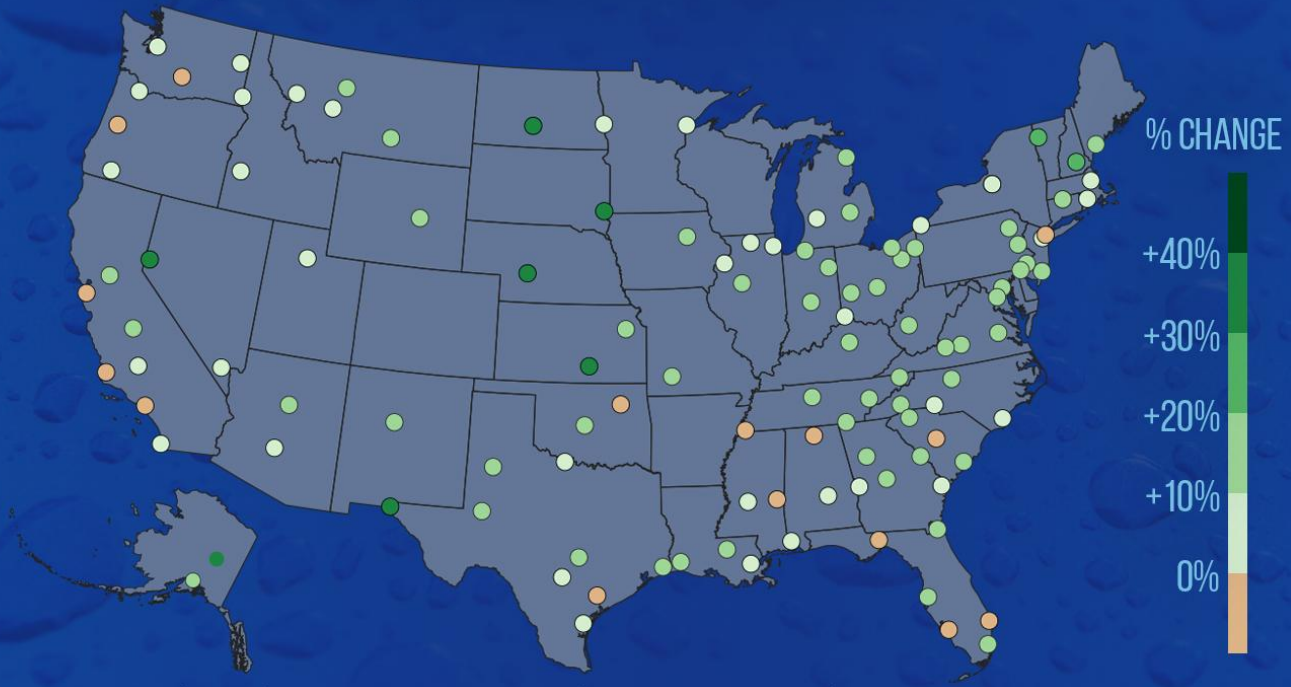

U.S. WILDFIRE SMOKE POLLUTION
Average smoke PM2.5 exposure per person (µg/m³)
800
600
400
200
0
JAN
MAR
MAY
JUL
SEP
NOV
2023
2026
2024
2021
2025
2022
2020
2006-2019 AVERAGE
Cumulative daily smoke-related PM2.5 exposure (per-capita U.S. averages) based on real-time interpolation of station data through 09/16/2026.
Source: Authors of Childs et al. (2024); EPA Air Quality System.
CLIMATE CENTRAL


FIRE WEATHER DAYS
Average annual hot, dry, windy days, 1973-2025
No data
0
1
7
14
28
56
Average annual days (1973-2025) at/above fire weather thresholds in at least two hourly observations per day.
Source: NOAA/NCEI Local Climatological Data (LCD). Accessed: 02/09/2026.
CLIMATE CENTRAL


AirNow
AirNow
AQI & Health
Fires
Maps & Data
Education
International
Resources
Español
Beta
Wildfires in MN
75 °F
AQI Legend
50
100
150
200
300
Hazardous
Current Air Quality
1134
Pollutant: PM2.5
6 PM CDT Jul 16
24 Hours | 7 Days | 30 Days
ZIP Code, City, or State
Duluth, MN
Duluth Area Reporting Area
Fire & Smoke Map
Monitors Near Me
Recent Trends
Forecast AQI
Today
Tomorrow
Hazardous
Hazardous
EPA and PARTNERS
Data courtesy of
Minnesota Pollution Control Agency

HIGHER RAINFALL INTENSITY

Change in hourly rainfall rate, 1970-2025



Trends (1970–2025) in the simple hourly rainfall intensity index (average inches of rainfall per hour) were computed using linear regression.
Source: NOAA (NCEI, ACIS). Accessed: 02/01/2026.

CLIMATE CENTRAL

The Survey Spring 2024

Research Questions

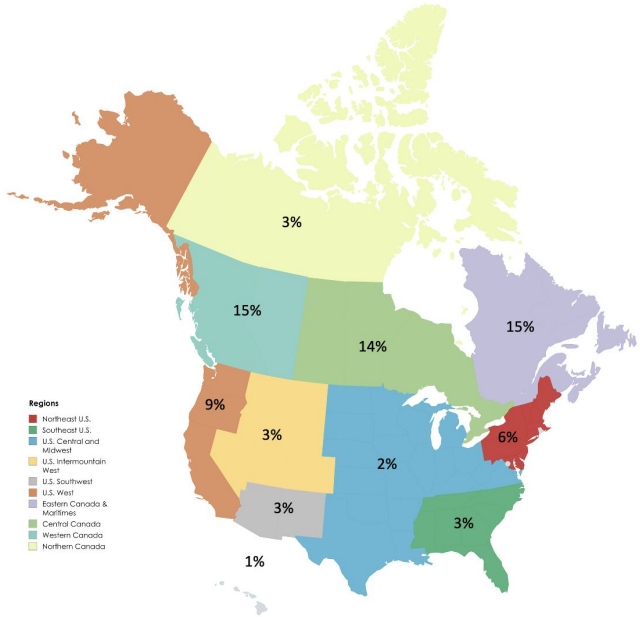
- What is the impact of climate change on outdoor organizations at present?
- How are outdoor organizations making decisions regarding extreme weather and a changing climate?
- What is the level of readiness of outdoor organizations for a future with extreme weather and a changing climate?

Climate Change Impacts Upon Outdoor Education and Recreation Providers

Jackson, J., Slay, S., Tarter, S. (2024). Present-day Impact of Climate Change on Outdoor Organizations (in press). Journal of Wilderness and Environmental Medicine

Respondent Demographics

Education	42
Guide Services	30
Facilities (Ski, OE Center, Climb Gym)	11
Youth Programs	11
Summer Residential Camps	9
Parks & Land Management	8
Expedition Education	8
Conservation Groups	8
Total Organization	**127**



* Plus an additional 14% from outside North America

50% of respondents have worked in the outdoor education or recreation sector for 21+ years

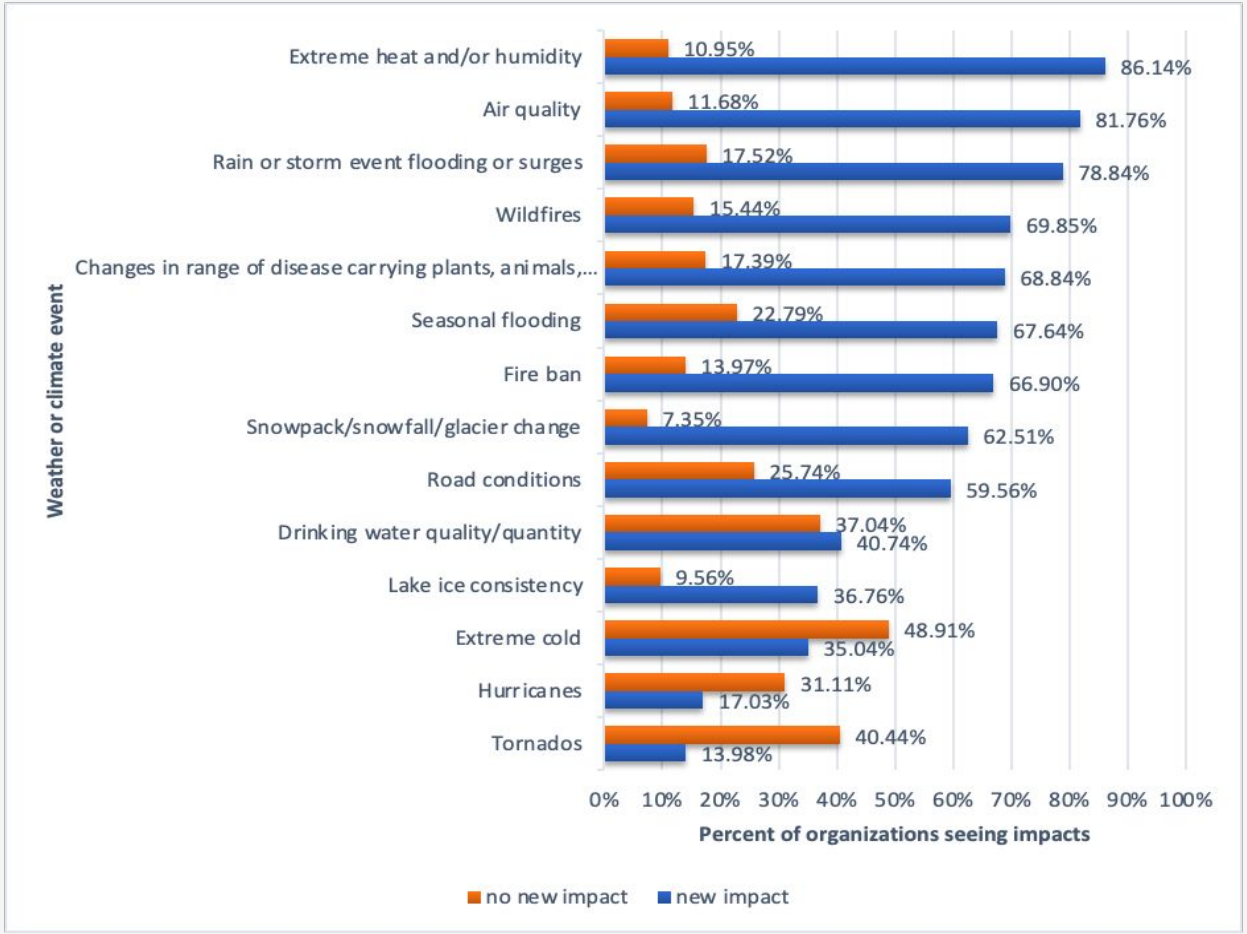
Do not edit
How to change the design



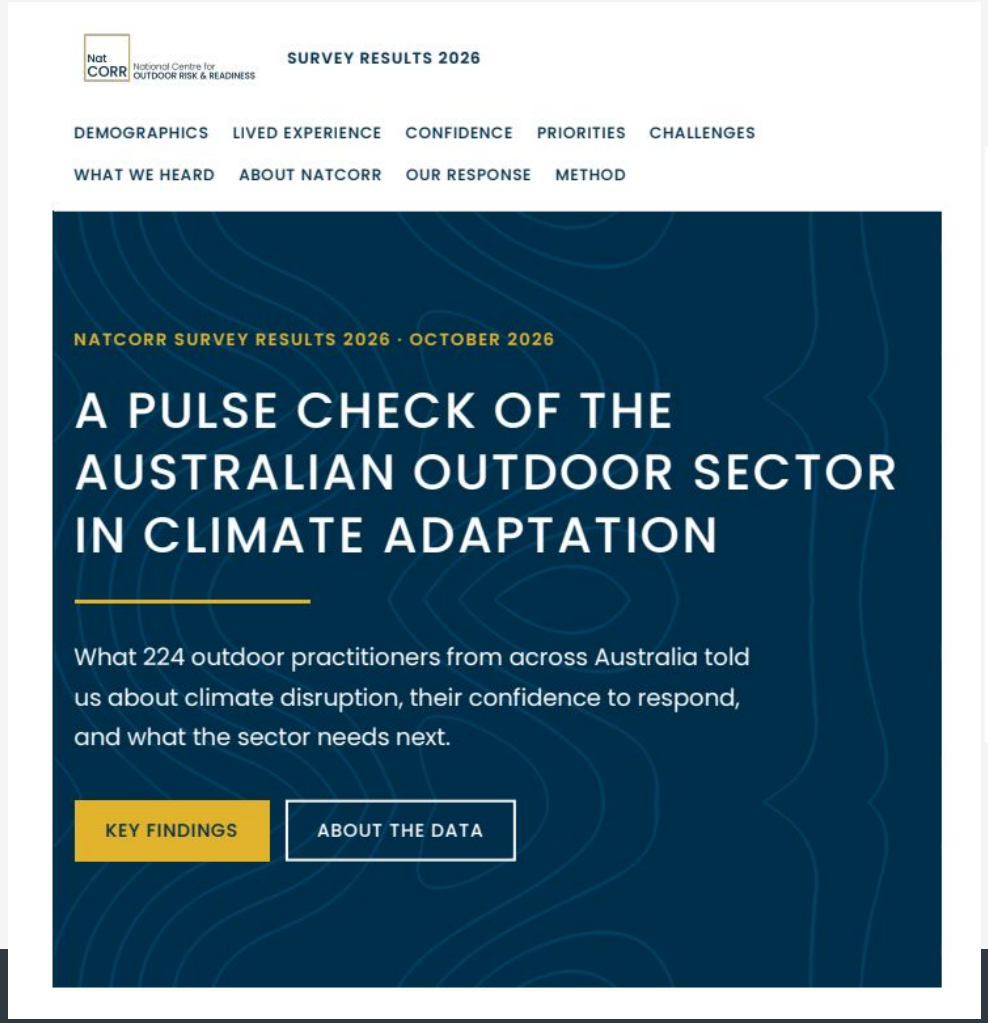
In the past two years, which type of adverse event has impacted your program the most?

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slido



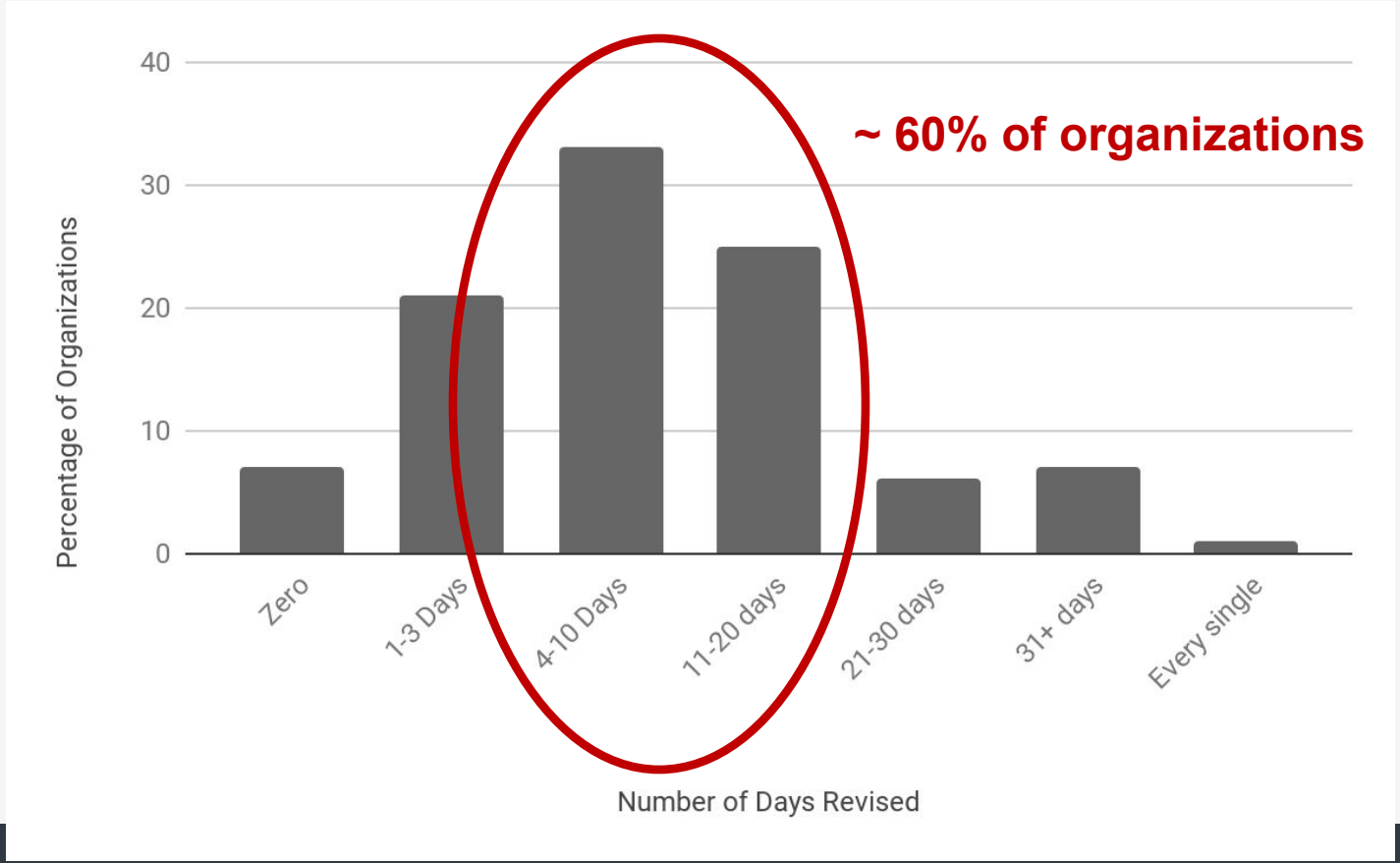
Percent of organizations seeing impacts from weather or climate events in 2023 compared to previous three years





https://natcorr.org.au/wp-content/uploads/2026/09/2026-NatCORR-Outdoor-Sector-Survey-Report.pdf

Number of days in 2023 plans had to be revised due to severe weather



Greatest Knowledge Gap in Climate Resilience

- Forecasting the impacts of climate change
- Is leadership prioritizing climate preparedness
- Staff competencies with new realities
- Identifying trusted information sources
- Managing participants
- Financing
- Alternatives when programming is disrupted
- Don’t know what we don’t know
- New legal exposures

“The health and medical implications of short- and long-term exposure to the above hazards appeared repeatedly as uncertainty that undermined decision-making confidence.”

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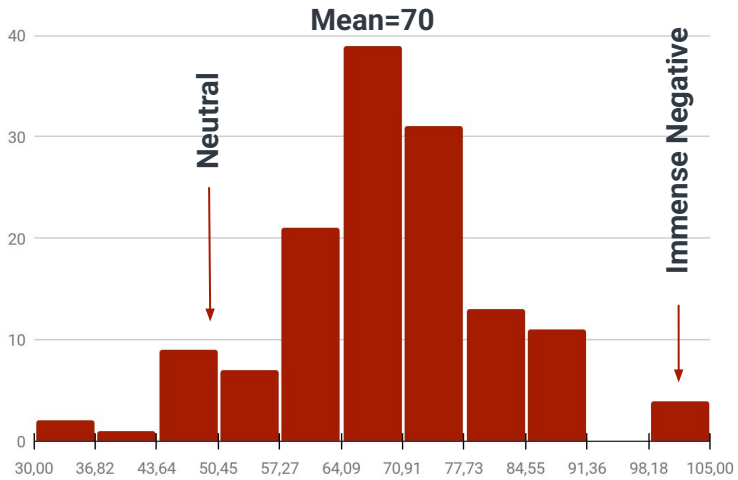
How prepared is your organization to adapt to increasing severe weather events and the impacts of a changing climate?

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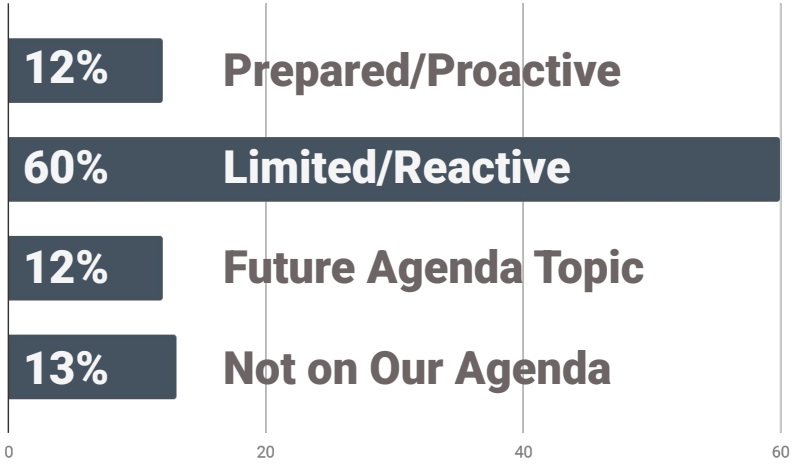
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Organization impact & preparedness

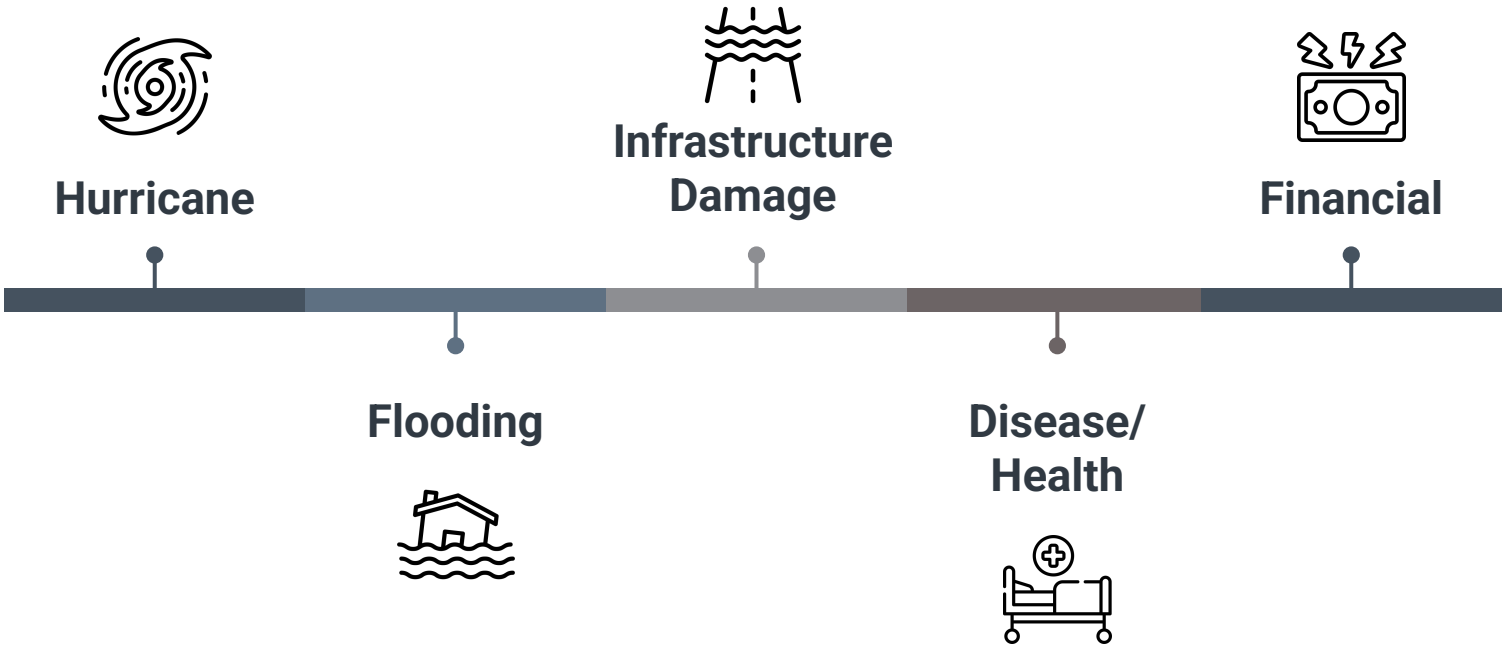
How much is the changing climate impacting your operations?



How prepared is your organization to adapt to changing climate realities and more frequent severe weather?



Cascading Crises a disaster within a disaster





A New Tool

01

Emergency Response Plan

02

Crisis Plan

03

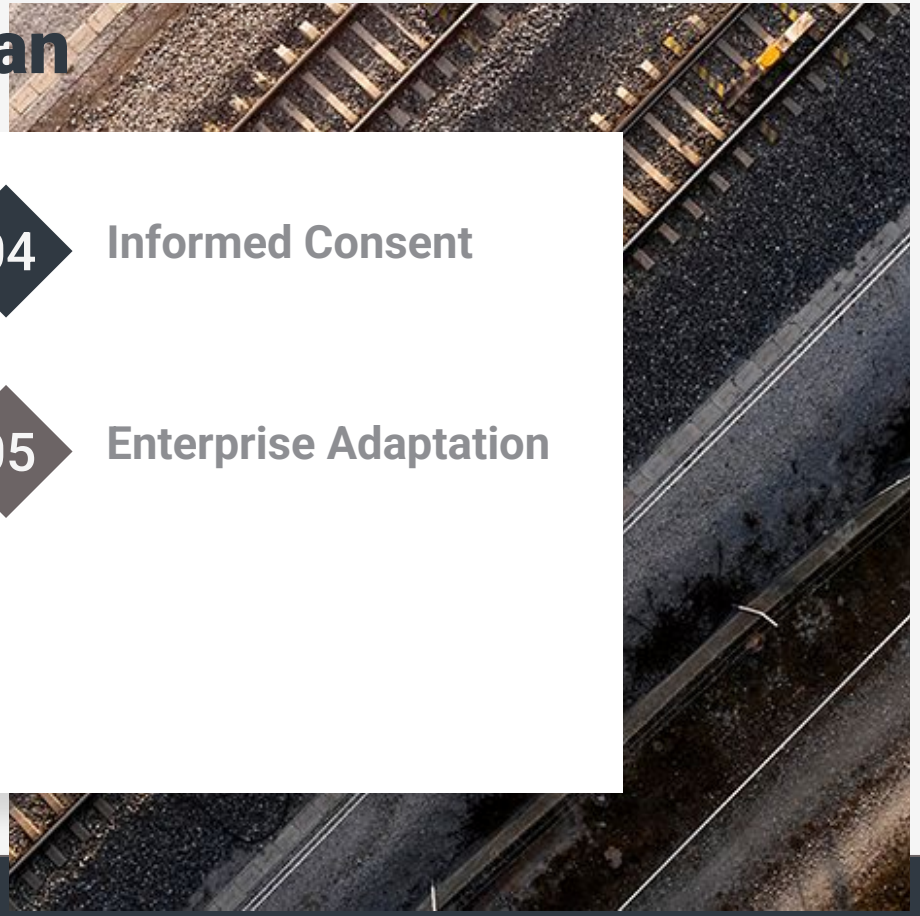
Climate Resilience Plan



Sendai Framework for Disaster Risk Reduction 2015 - 2030

United Nations

Climate Resilience Plan



01 Risk Assessment

02 Operational Resilience

03 Emergency Planning & Response

04 Informed Consent

05 Enterprise Adaptation

Definitions



Adaptation

The process of adjusting to new climate conditions in order to reduce risks.

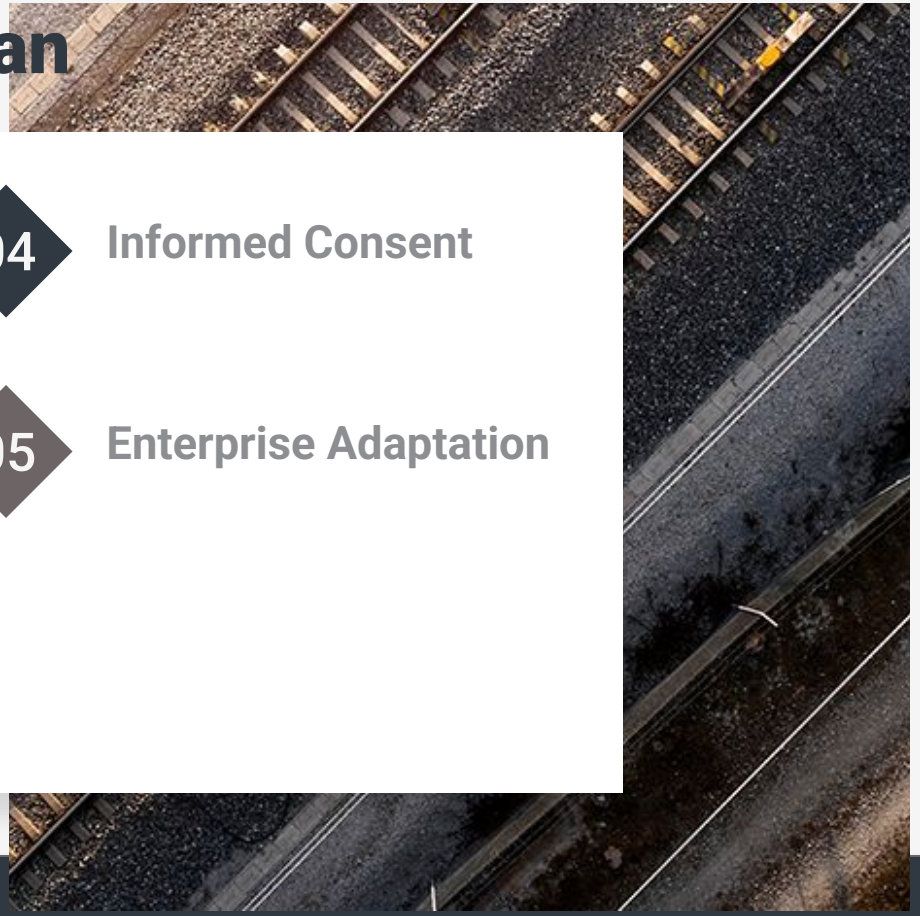
Resilience

The capacity of a community, business, or natural environment to prevent, withstand, respond to, and recover from a disruption.

From the U.S. Climate Resilience Toolkit



Climate Resilience Plan



01 **Risk Assessment**

02 Operational Resilience

03 Emergency Planning & Response

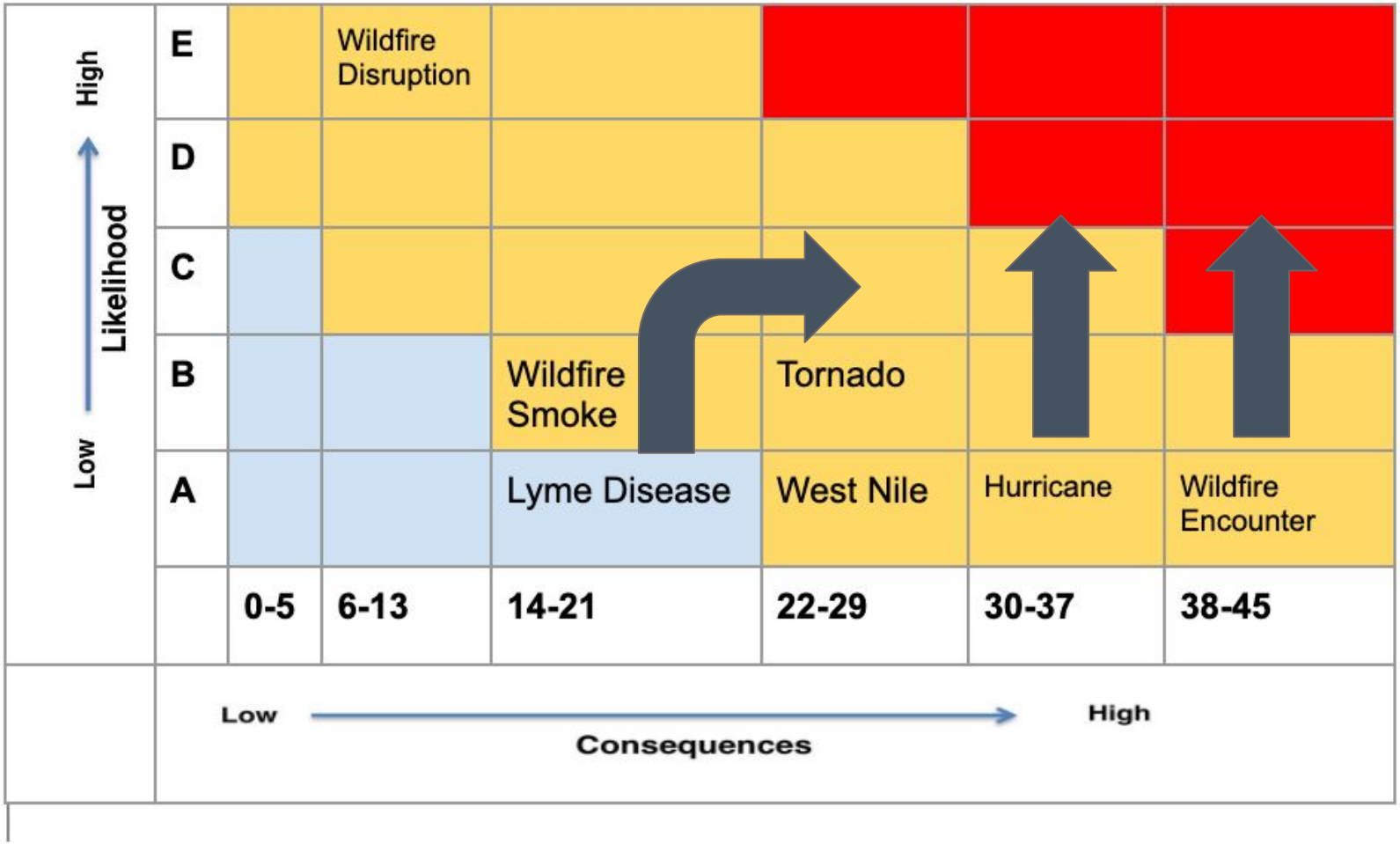
04 Informed Consent

05 Enterprise Adaptation

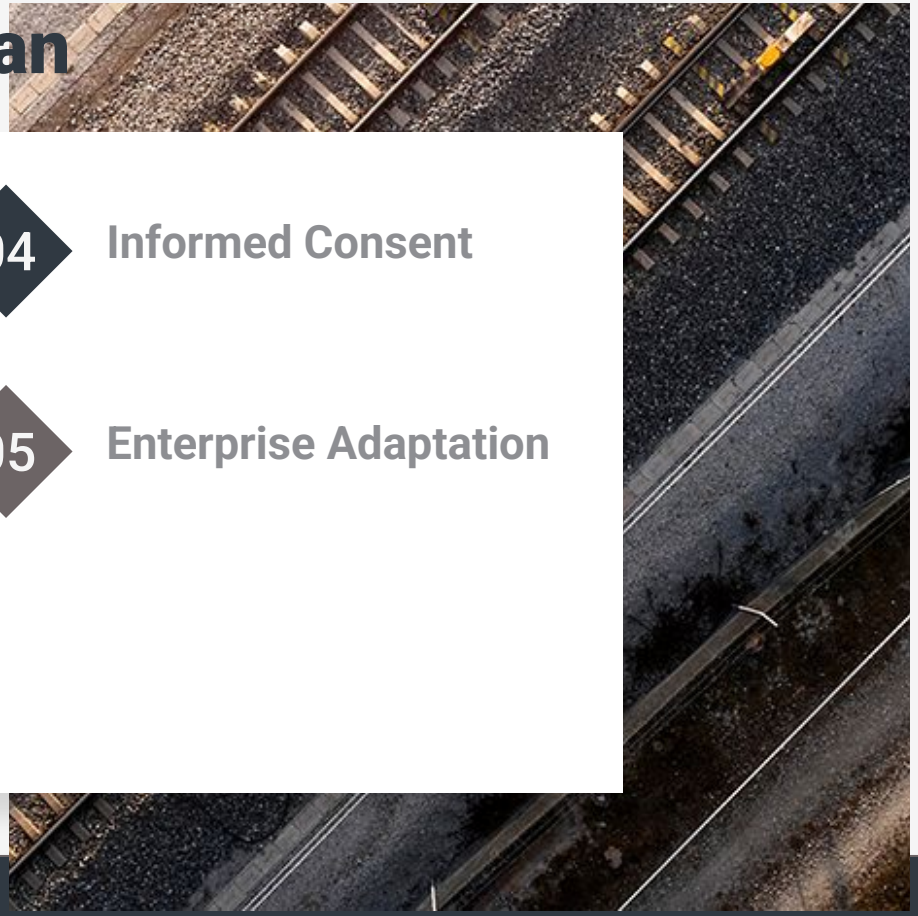
Risk Assessment

- Update your hazard/risk assessment of activities and facilities
  - What's new?
  - What's old but changing?
  - Where are our single points of failure?
  - What's your plan for regular updates?
- Run drills for multi-hazard scenarios
- Understand what agencies have impact or control over your operational ability
- Engage with land managers about their risk assessment tools and approaches
- Work with contractors to understand their plans and approach

Risk Matrix


High
Likelihood
Low
E
D
C
B
A
Wildfire Disruption
Wildfire Smoke
Tornado
Lyme Disease
West Nile
Hurricane
Wildfire Encounter
0-5
6-13
14-21
22-29
30-37
38-45
Low
Consequences
High

Climate Resilience Plan



01 **Risk Assessment**

02 **Operational Resilience**

03 **Emergency Planning & Response**

04 **Informed Consent**

05 **Enterprise Adaptation**

OPINION > COMMENTARY

Doctors: Wildfire smoke will return. Illinois needs a better plan for its kids.



…the air quality index was still in the 130s…

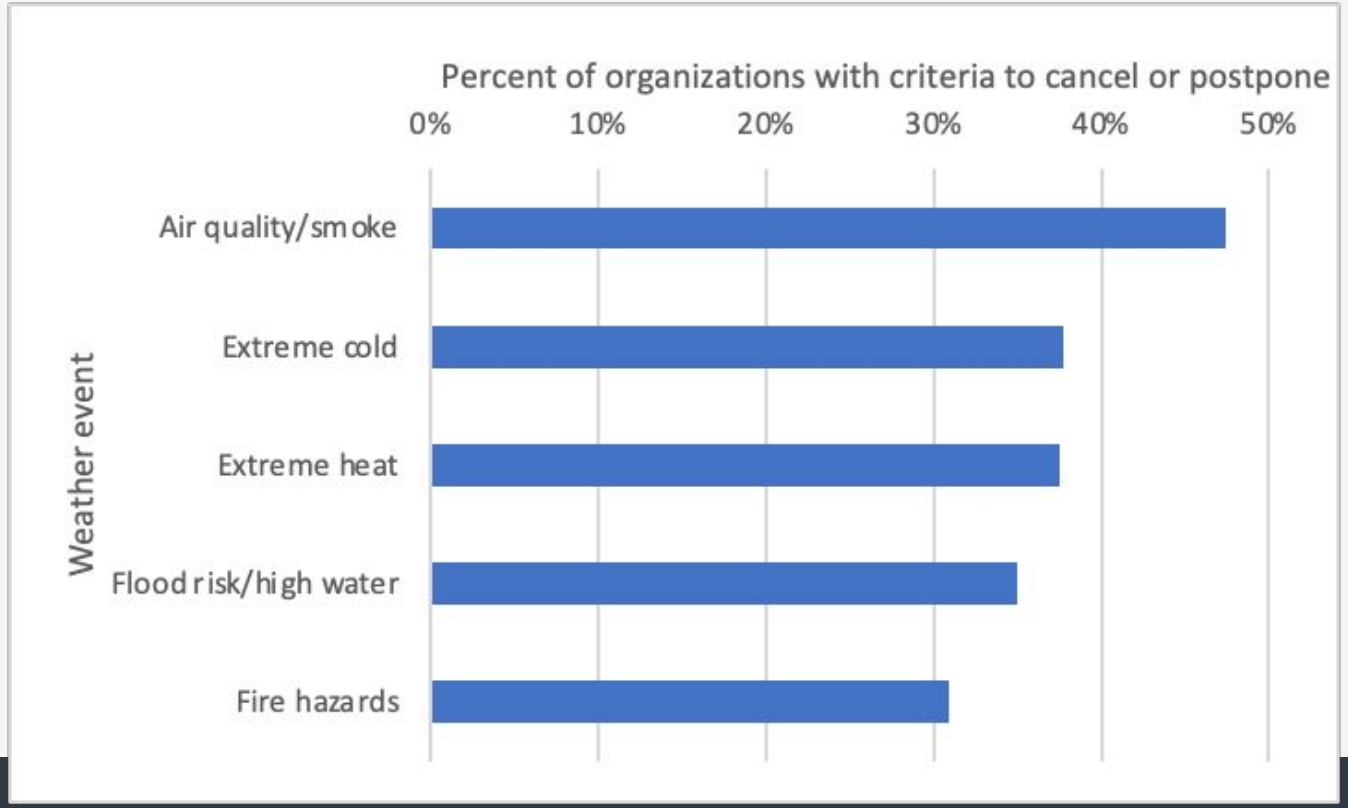
My 4-year-old's camp had moved activities completely indoors with windows closed and an air purifier running. My 7-year-old's camp had made no changes, with outdoor time as scheduled. I sent my 4-year-old in and kept my 7-year-old home.

That morning, I became my kids' air-quality officer . But that's a job no parent should have to do.

Local organizations are doing their best…but with no statewide standard in Illinois for children's outdoor activity in poor air quality, program policies represent a patchwork.

Chicago Tribune, July 31, 2026

Organizations with established criteria to cancel or postpone field activities due to extreme weather



"We had to cancel over 20 days last summer because of weather conditions and we only operate about 80 days."

Heat: consolidated operating-response matrix

Interpretation: green = strong convergence; yellow = common direction but unresolved implementation; red = conflicting decisions

Risk tier	Residential	Day	Overnight / multi-day
Low			
Moderate			
High			
Very high			
Extreme			

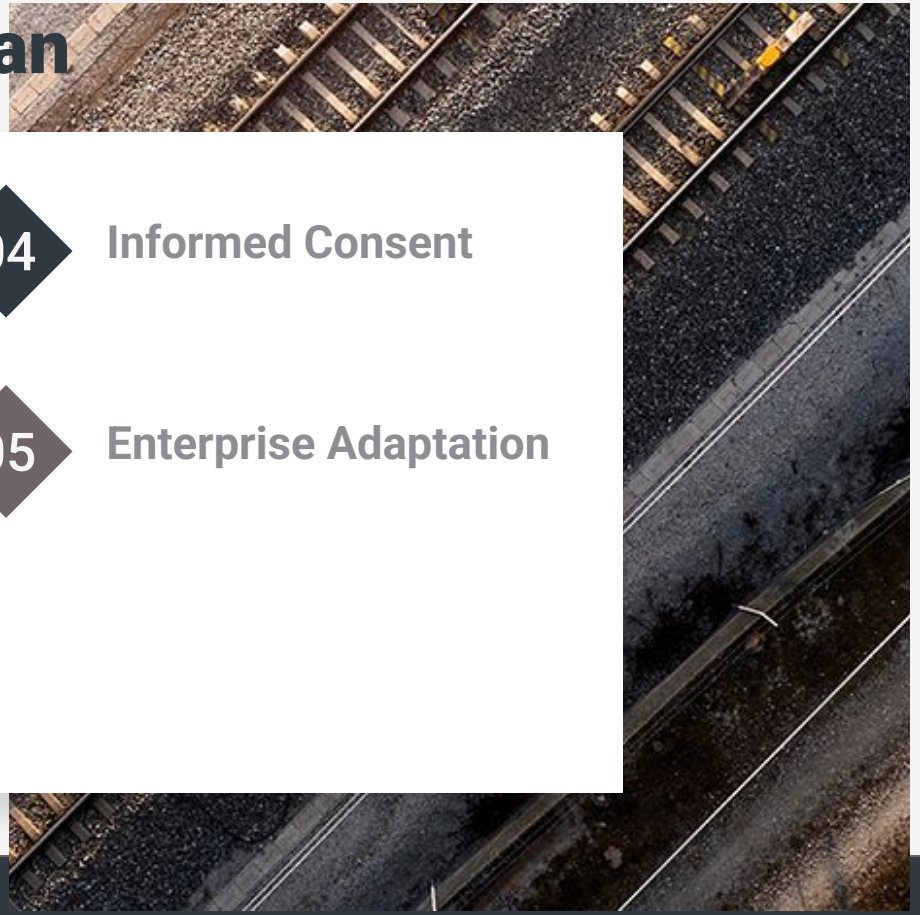
Operational Resilience

- *Past patterns are no longer a reliable predictor of future risks -UNDRR*
- Capacity building
- Education and training
- Redundancies
- Program delivery alternatives
- Check out NatCORR!

Resilient Program Planning

- Predetermined decision-making thresholds for air quality, heat, wildfire risk, etc
- Route plans cross-referenced with hazard forecasts
- Pivot Power! Backup location/time/program structure options
- Consider
  - Multiple ground evac options
  - Air evac options
  - In field safety zones
- Prepare to re-evaluate in dynamic situations

Climate Resilience Plan



01 Risk Assessment

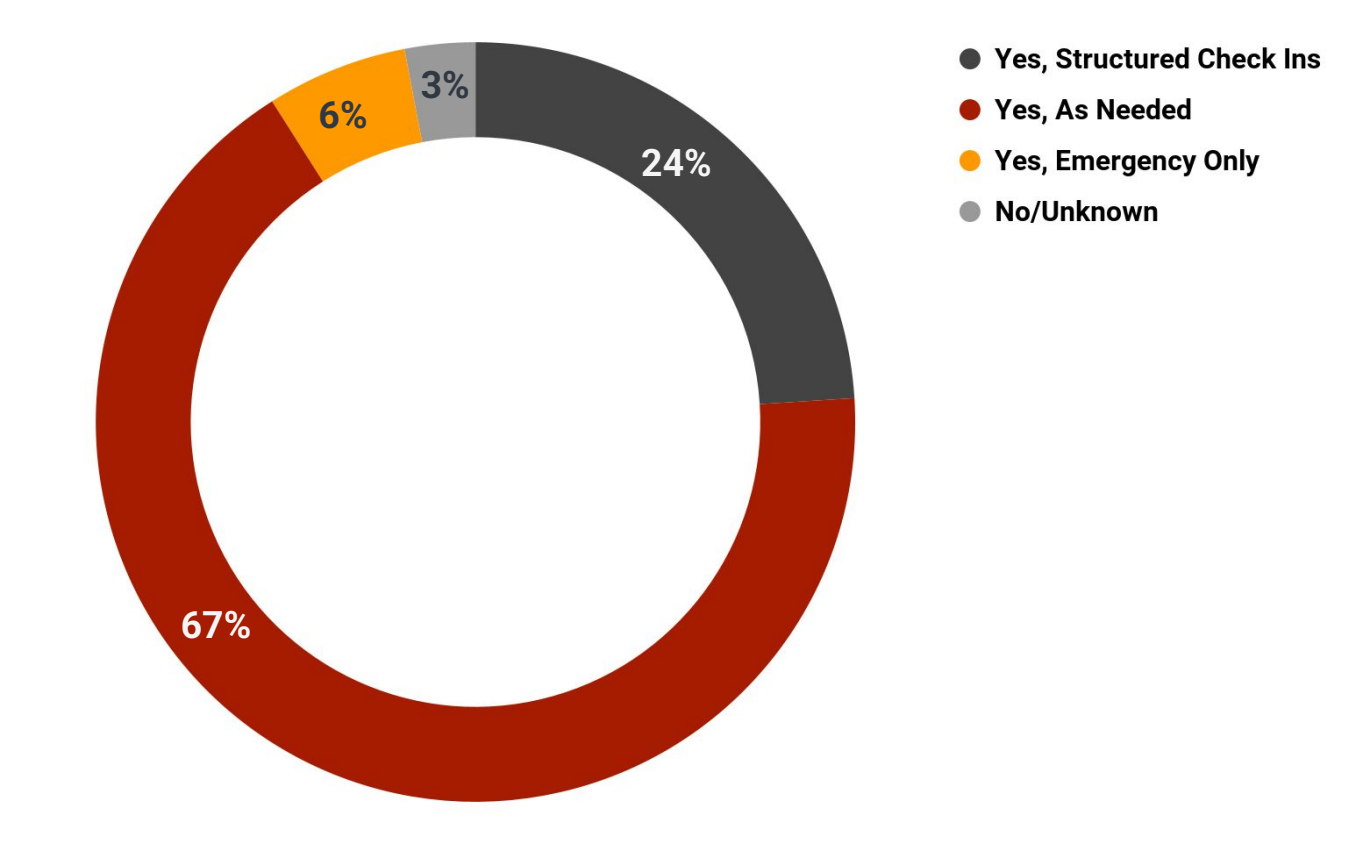
02 Operational Resilience

03 **Emergency Planning & Response**

04 Informed Consent

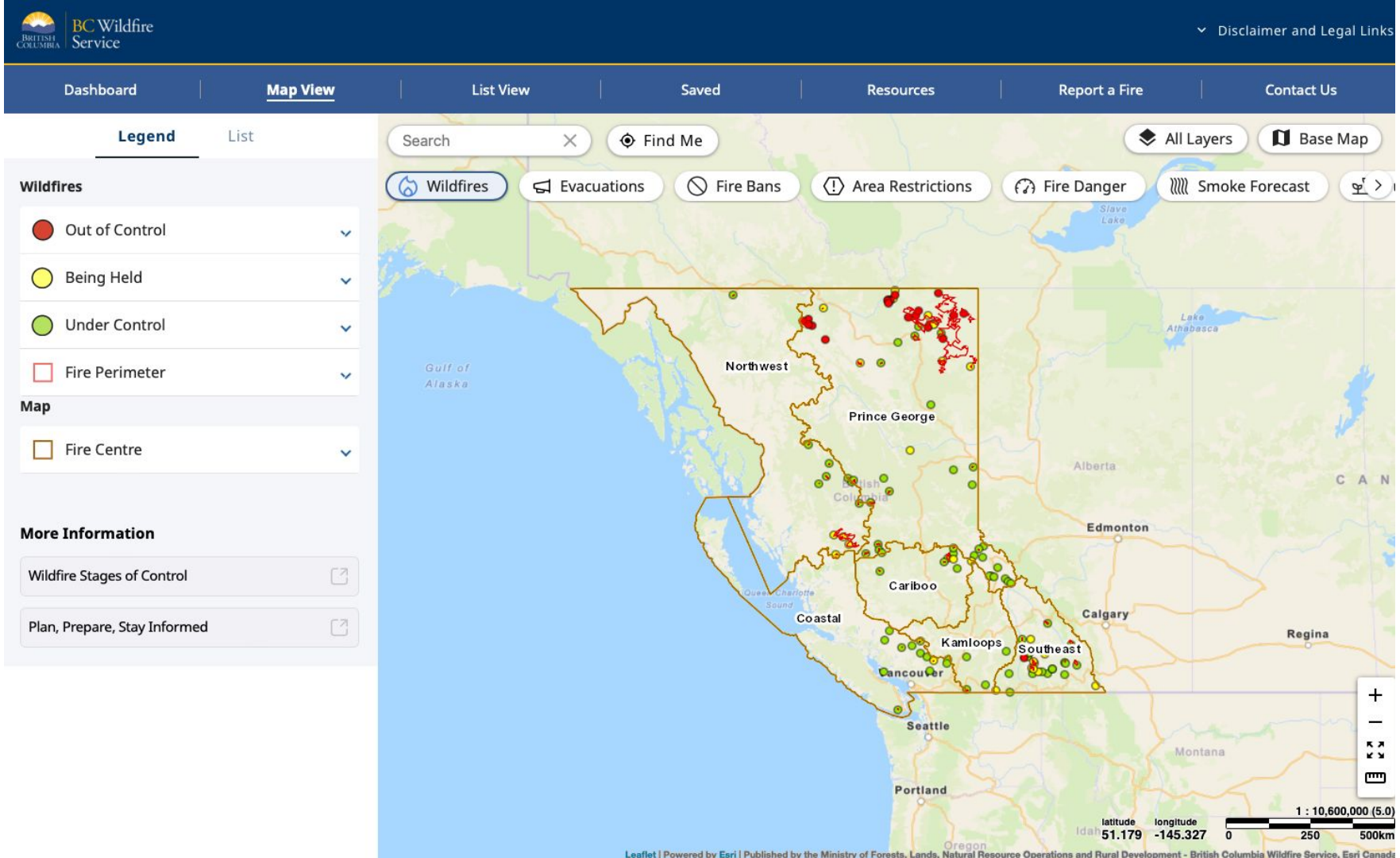
05 Enterprise Adaptation

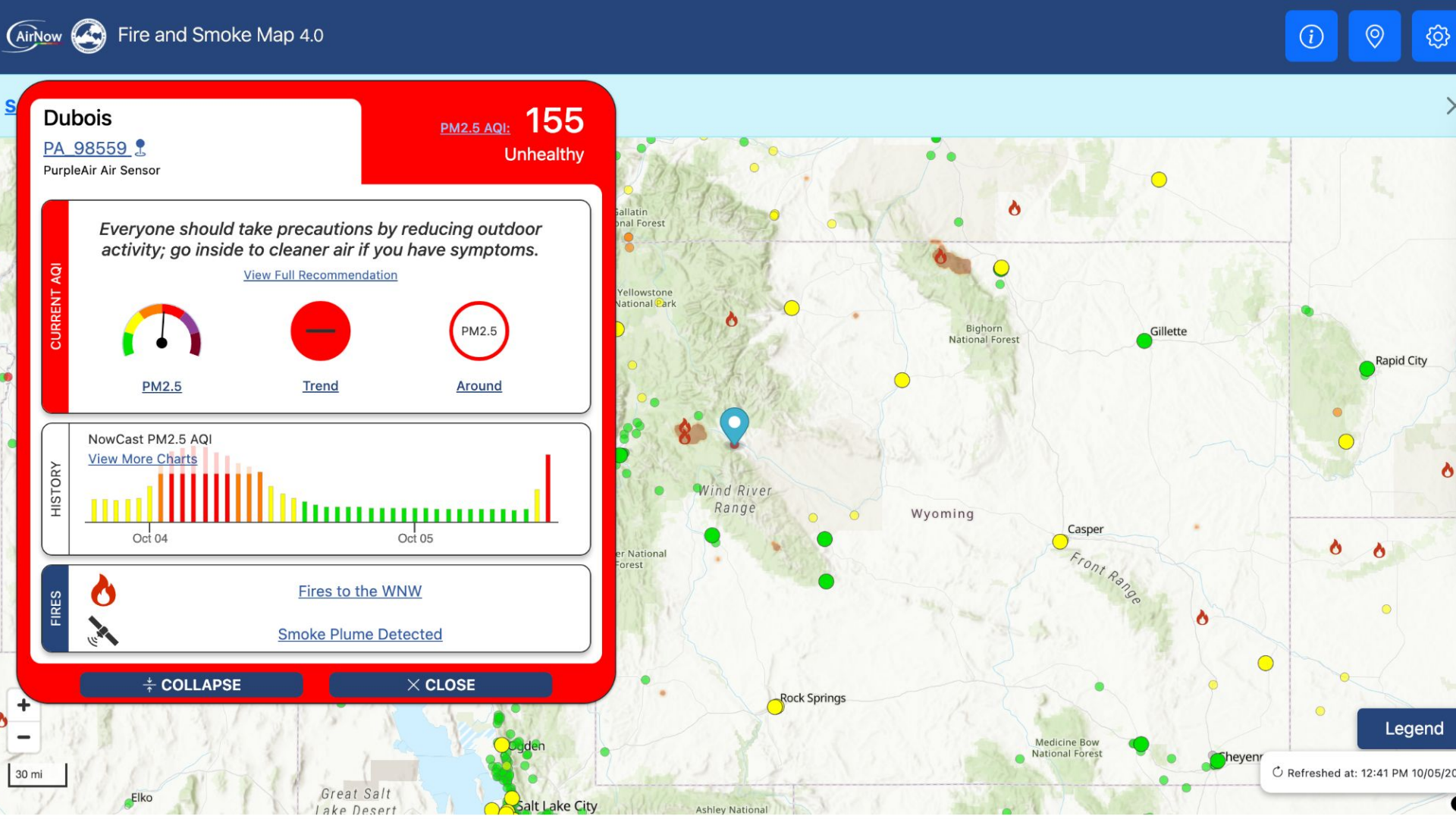
Do your trips or activities have some means to communicate between field groups and home base regarding weather forecasts or changing conditions?

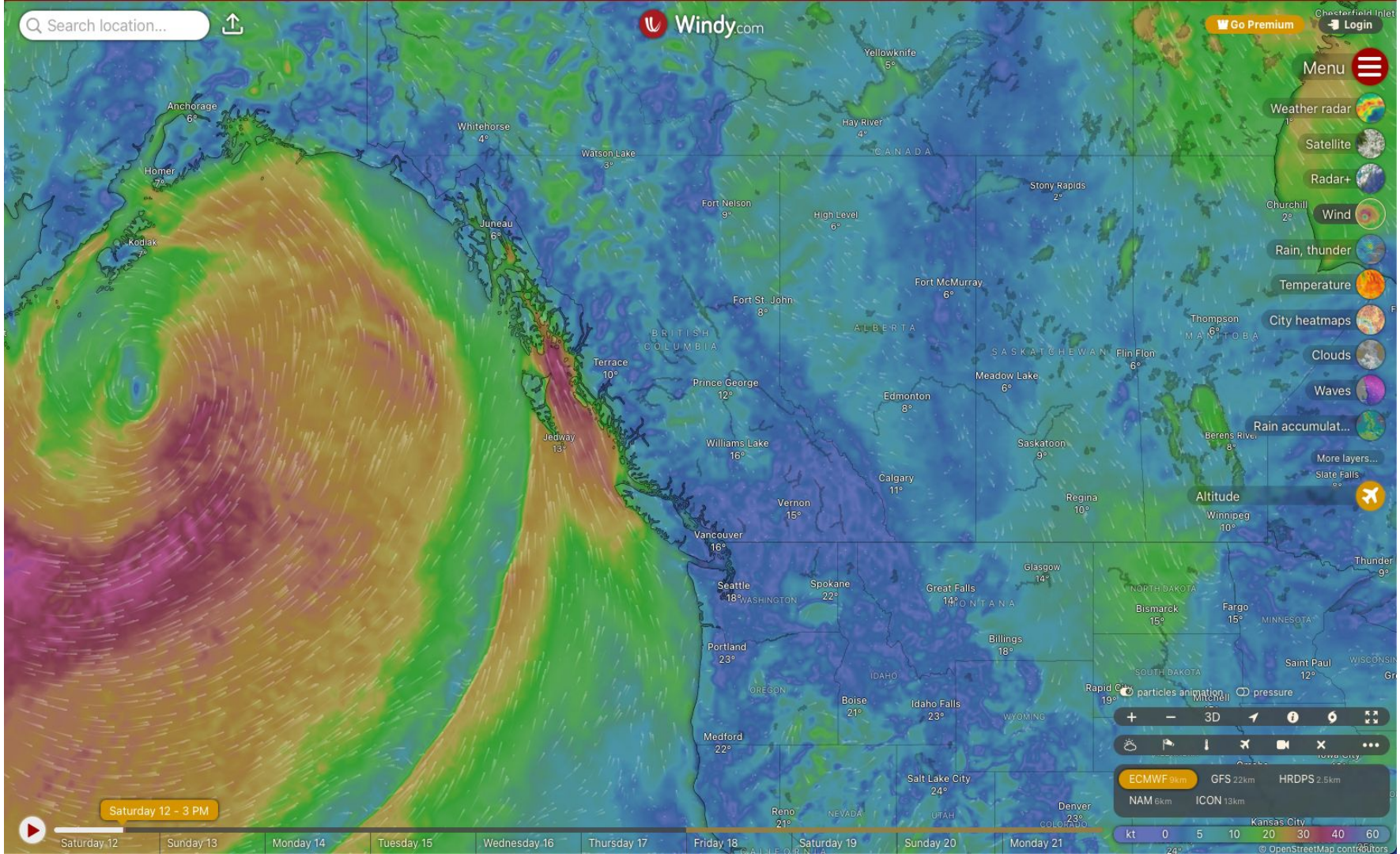


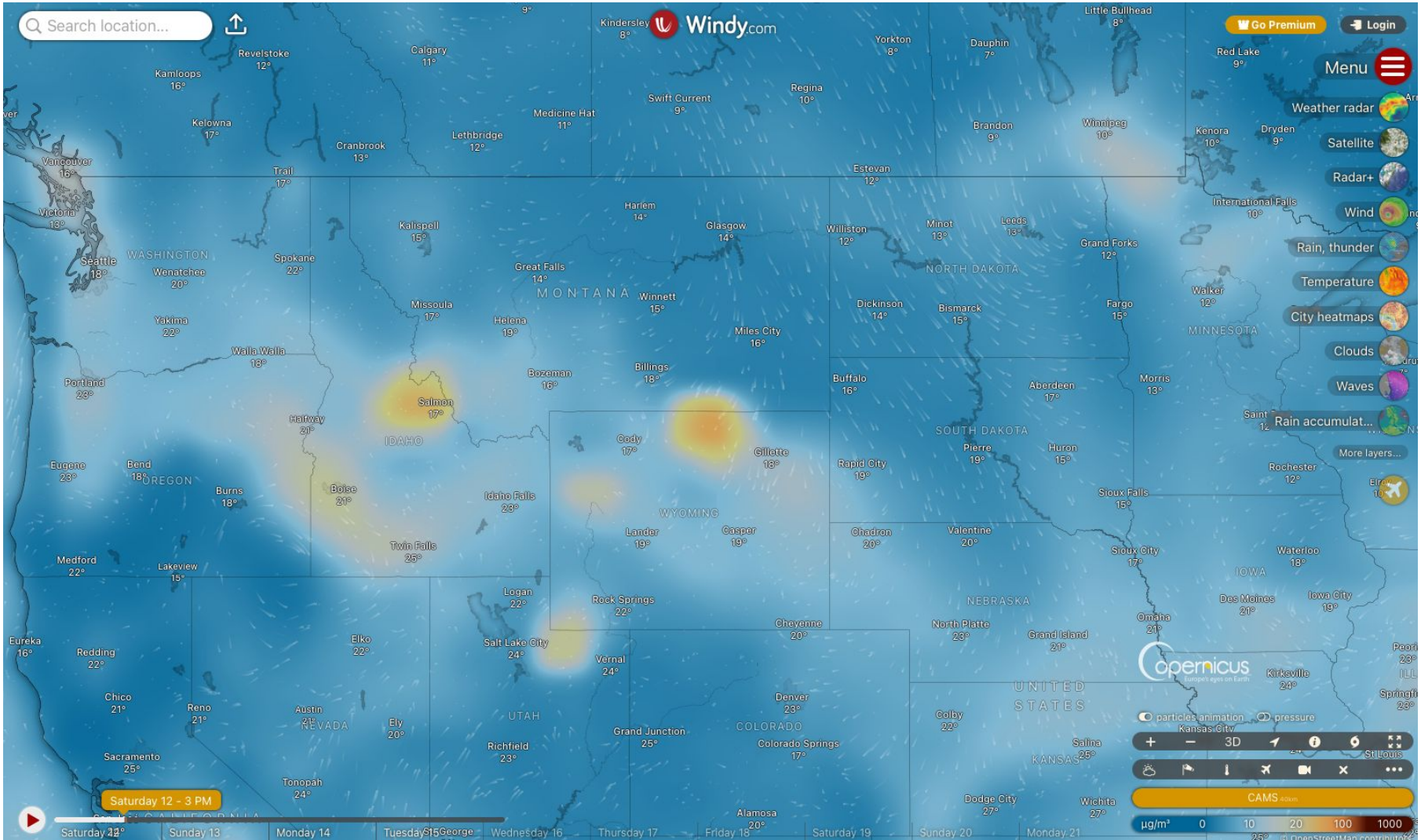
Emergency Planning & Response

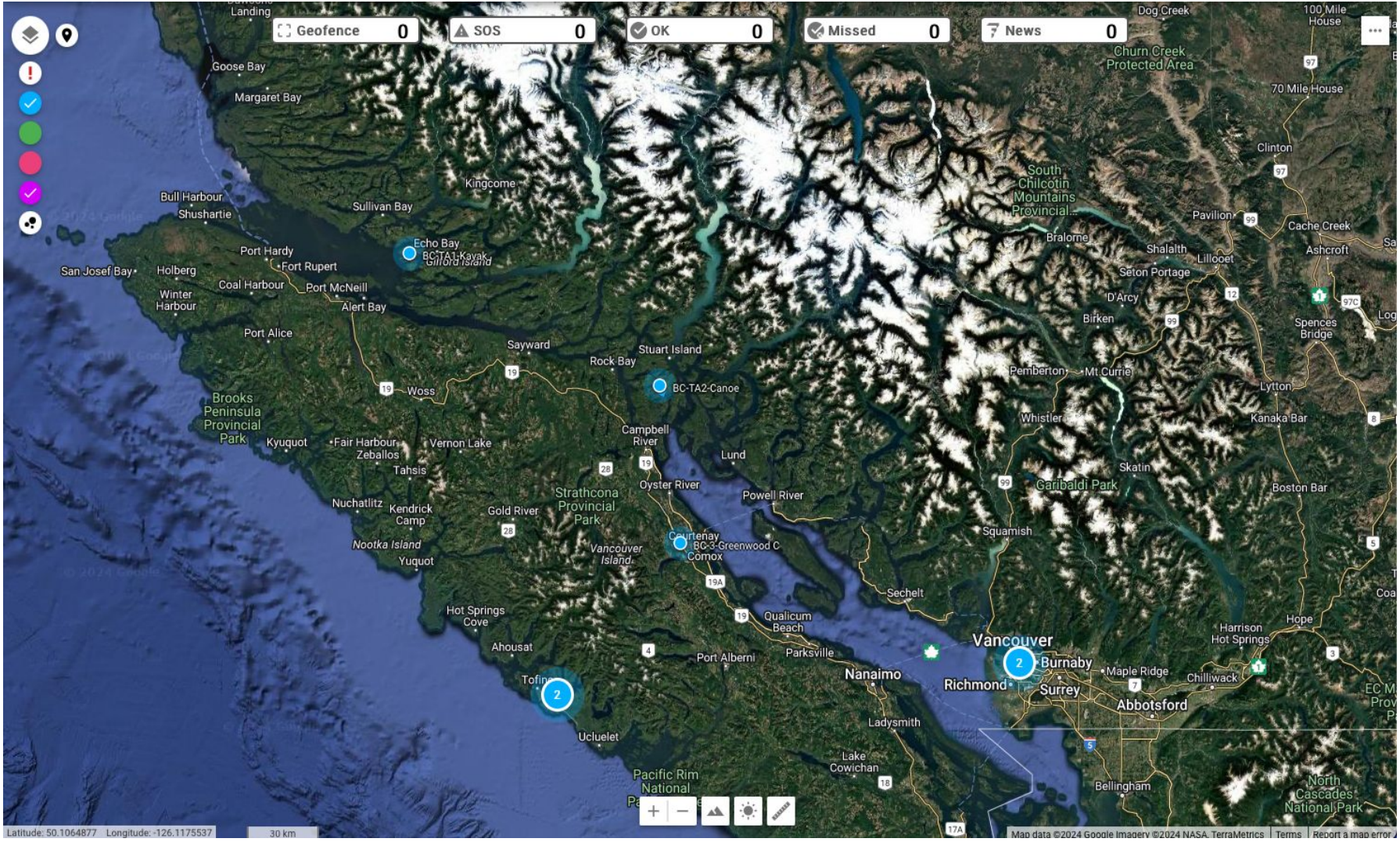
- Hazard Monitoring System & Frequency
- Data Triggers & Thresholds
- Field + In-Town Monitoring Harmonized
- Evac, Safe Zone, Shelter-in-Place Plans
- Robust Comms Systems & Frequency
- “Always On” Comms?
- Group Location Tracking System
- Know Incident Command System

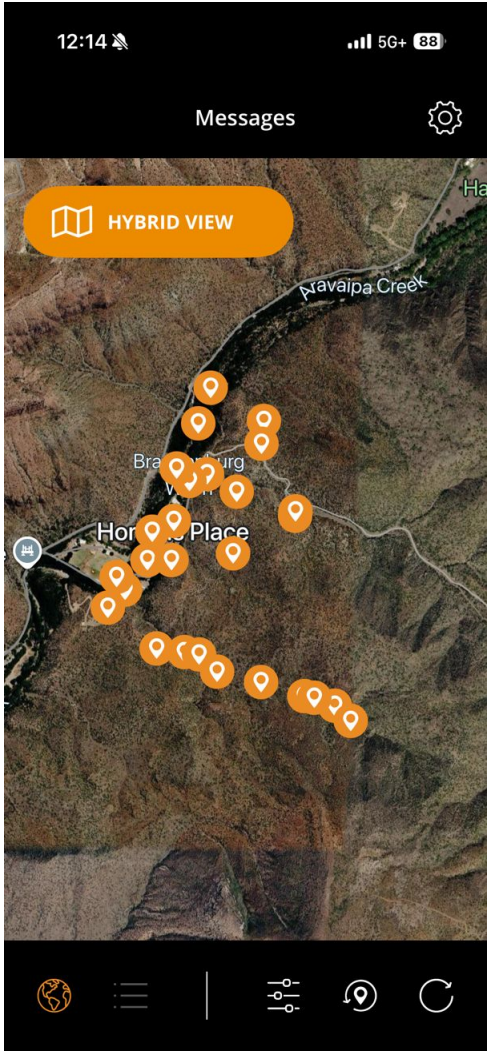

BC Wildfire Service
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Map View
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Saved
Resources
Report a Fire
Contact Us
Legend
List
Wildfires
Out of Control
Being Held
Under Control
Fire Perimeter
Map
Fire Centre
More Information
Wildfire Stages of Control
Plan, Prepare, Stay Informed
Search
Find Me
All Layers
Base Map
Wildfires
Evacuations
Fire Bans
Area Restrictions
Fire Danger
Smoke Forecast
Northwest
Prince George
Cariboo
Coastal
Kamloops
Southeast
Vancouver
Seattle
Portland
Edmonton
Calgary
Regina
Alberta
Montana
Gulf of Alaska
Lake Athabasca
Slave Lake
latitude 51.179
longitude -145.327
1 : 10,600,000 (5.0)
0
250
500km
Leaflet | Powered by Esri | Published by the Ministry of Forests, Lands, Natural Resource Operations and Rural Development - British Columbia Wildfire Service, Esri Canada


AirNow
Fire and Smoke Map 4.0
Dubois
PA_98559
PurpleAir Air Sensor
PM2.5 AQI: 155
Unhealthy
CURRENT AQI
Everyone should take precautions by reducing outdoor activity; go inside to cleaner air if you have symptoms.
View Full Recommendation
PM2.5
Trend
PM2.5
Around
HISTORY
NowCast PM2.5 AQI
View More Charts
Oct 04
Oct 05
FIRES
Fires to the WNW
Smoke Plume Detected
COLLAPSE
CLOSE
Yellowstone National Park
Bighorn National Forest
Gillette
Rapid City
Wind River Range
Wyoming
Casper
Front Range
Rock Springs
Medicine Bow National Forest
Ogden
Salt Lake City
Great Salt Lake Desert
Elko
Ashley National
30 mi
Legend
Refreshed at: 12:41 PM 10/05/20


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Satellite
Radar+
Wind
Rain, thunder
Temperature
City heatmaps
Clouds
Waves
Rain accumulat...
More layers...
Altitude
Yellowknife 5°
Anchorage 6°
Whitehorse 4°
Hay River 4°
Watson Lake 3°
Homer 7°
Fort Nelson 9°
Stony Rapids 2°
High Level 6°
Churchill 2°
Juneau 6°
Kodiak 7°
Fort McMurray 6°
Fort St. John 8°
Thompson 6°
Terrace 10°
Flin Flon 6°
Prince George 12°
Meadow Lake 6°
Edmonton 8°
Jedway 13°
Williams Lake 16°
Saskatoon 9°
Calgary 11°
Regina 10°
Vernon 15°
Winnipeg 10°
Vancouver 16°
Thunder 9°
Glasgow 14°
Seattle 18°
Spokane 22°
Great Falls 14°
Bismarck 15°
Fargo 15°
Billings 18°
Portland 23°
Saint Paul 12°
Rapid City 19°
Boise 21°
Idaho Falls 23°
Mitchell
Medford 22°
Salt Lake City 24°
Reno 21°
Denver 23°
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GFS 22km
HRDPS 2.5km
NAM 6km
ICON 13km
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ALBERTA
SASKATCHEWAN
MANITOBA
WASHINGTON
OREGON
IDAHO
MONTANA
WYOMING
NORTH DAKOTA
SOUTH DAKOTA
MINNESOTA
NEVADA
UTAH
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Satellite
Radar+
Wind
Rain, thunder
Temperature
City heatmaps
Clouds
Waves
Rain accumulat...
More layers...
Kindersley 8°
Little Bullhead 8°
Yorkton 8°
Dauphin 7°
Red Lake 9°
Revelstoke 12°
Calgary 11°
Kamloops 16°
Swift Current 9°
Regina 10°
Medicine Hat 11°
Kelowna 17°
Lethbridge 12°
Brandon 9°
Winnipeg 10°
Kenora 10°
Dryden 9°
Cranbrook 13°
Vancouver 16°
Trail 17°
Estevan 12°
Victoria 18°
Harlem 14°
International Falls 10°
Kalispell 15°
Glasgow 14°
Williston 12°
Minot 13°
Leeds 13°
Grand Forks 12°
Seattle 18°
WASHINGTON
Spokane 22°
Wenatchee 20°
Great Falls 14°
NORTH DAKOTA
MONTANA
Winnett 15°
Walker 12°
Missoula 17°
Dickinson 14°
Bismarck 15°
Fargo 15°
Yakima 22°
Helena 19°
Miles City 16°
MINNESOTA
Walla Walla 18°
Billings 18°
Portland 23°
Bozeman 16°
Buffalo 16°
Aberdeen 17°
Morris 13°
Salmon 17°
Halfway 21°
SOUTH DAKOTA
IDAHO
Cody 17°
Pierre 19°
Huron 15°
Gillette 18°
Eugene 23°
Bend 18°
Rapid City 19°
Rochester 12°
OREGON
Burns 18°
Boise 21°
Idaho Falls 23°
Sioux Falls 15°
WYOMING
Twin Falls 25°
Lander 19°
Casper 19°
Chadron 20°
Valentine 20°
Medford 22°
Lakeview 15°
Sioux City 17°
Waterloo 18°
IOWA
Logan 22°
Rock Springs 22°
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Des Moines 21°
Iowa City 19°
Cheyenne 20°
Omaha 21°
Eureka 16°
Redding 22°
Elko 22°
Salt Lake City 24°
North Platte 23°
Grand Island 21°
Vernal 24°
Kirksville 24°
Chico 21°
Reno 21°
Austin 21°
Denver 23°
UTAH
UNITED STATES
Colby 22°
NEVADA
Ely 20°
Grand Junction 25°
COLORADO
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Richfield 23°
Salina 25°
KANSAS
Sacramento 25°
Tonopah 24°
Dodge City 27°
Wichita 27°
Alamosa 20°
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SOS 0
OK 0
Missed 0
News 0
Echo Bay
BC-TA1-Kayak
BC-TA2-Canoe
BC-3-Greenwood C
Comox
Courtenay
Vancouver
Burnaby
Richmond
Surrey
Abbotsford
Nanaimo
Port Alberni
Parksville
Qualicum Beach
Tofino
Ucluelet
Port Hardy
Port McNeill
Port Alice
Woss
Campbell River
Oyster River
Powell River
Sechelt
Squamish
Whistler
Pemberton
Mt Currie
Lillooet
Lytton
Hope
Chilliwack
Maple Ridge
Ladysmith
Lake Cowichan
Bellingham
Brooks Peninsula Provincial Park
Strathcona Provincial Park
Garibaldi Park
South Chilcotin Mountains Provincial...
Churn Creek Protected Area
Pacific Rim National Park
North Cascades National Park
Latitude: 50.1064877 Longitude: -126.1175537
30 km
Map data ©2024 Google Imagery ©2024 NASA, TerraMetrics
Terms
Report a map error


12:14
5G+
88
Messages
HYBRID VIEW
Verde Creek



ELEVATION PROFILE

Manitoba

Youth camp organizers coming to grips with new wildfire reality

Canoe trip participants evacuated by float planes due to nearby blazes

Justin Fiacconi · CBC News · Posted: Jul 17, 2026 7:49 PM MDT | Last Updated: July 17

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Estimated 6 minutes



Flames and smoke are seen above Namaygoosisagagun First Nation on Monday, southeast of where young canoe trippers from Camp Stephens were evacuated by plane because of wildfires in and around Wabakimi Lake in northwestern Ontario on Wednesday. (Submitted by Wayne Wastaken)

Do not edit
How to change the design

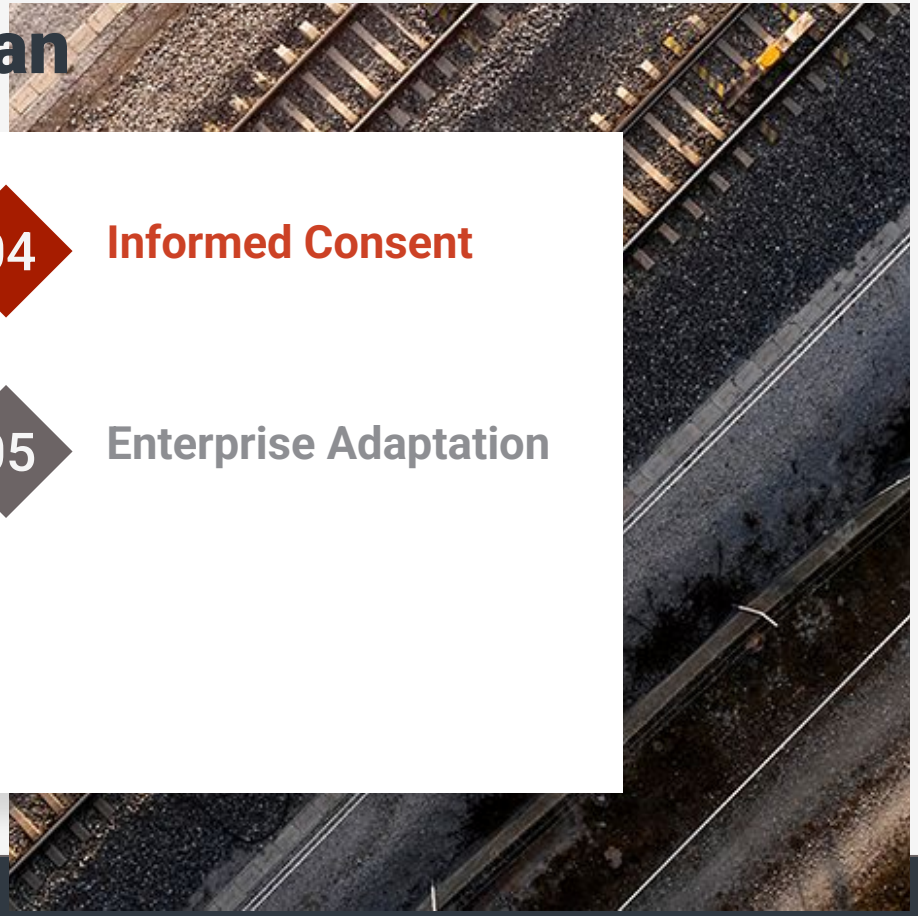


In the past 12 months, have you run a drill/table-top exercise to test your emergency plans against a climate hazard?

Presenting with animations, GIFs or speaker notes? Enable our Chrome extension

slido

Climate Resilience Plan



01 Risk Assessment

02 Operational Resilience

03 Emergency Planning & Response

04 Informed Consent

05 Enterprise Adaptation

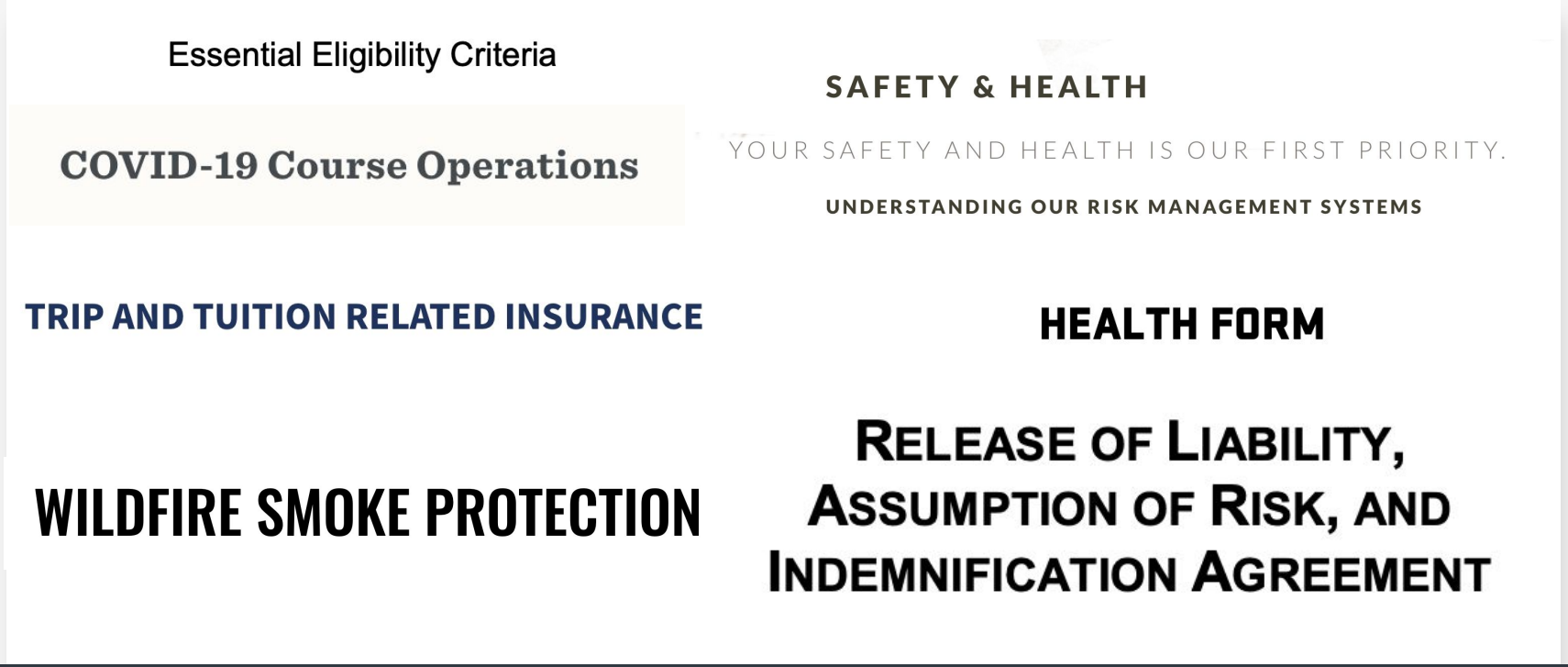
Do your participant pre trip or pre visit materials include information regarding severe weather, trip alterations, or cancellations (specific to weather events)?

Fewer than 50% of respondents replied Yes.

If you ask for participant or visitor information before they arrive (i.e. medical conditions, preparedness) have you changed your questions/profile to account for changing climate conditions?

Fewer than 10% of respondents replied Yes.

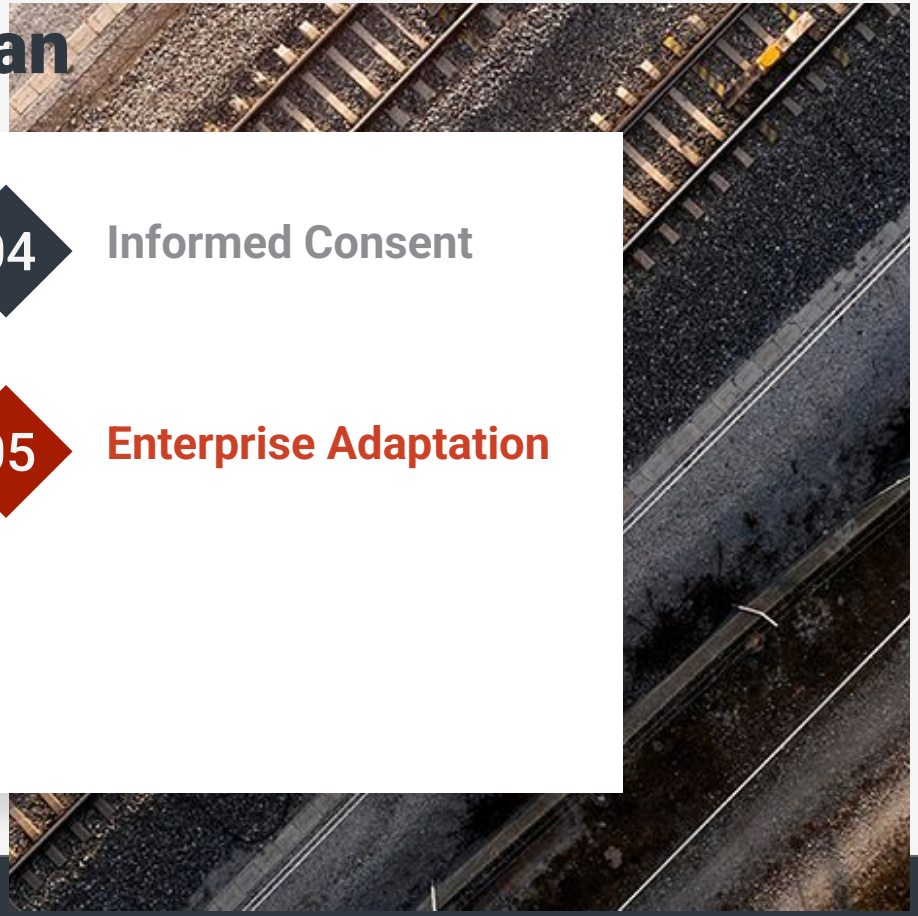
Adapt what you already have



Informed Consent

- Include updated hazards in relevant customer facing materials and paperwork
- Create flexibility in trip descriptions to include contingency planning
- Review screening, cancellation, and other relevant policies
- Encourage trip interruption/trip cancellation insurance from providers covering key risks
- Define communication channels and expectations
- Balance transparency of your internal decision-making policies with a self imposed standard
- Articulate the dynamic nature of risk management and indicate your policies will change and more information becomes available

Climate Resilience Plan



01 Risk Assessment

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04 Informed Consent

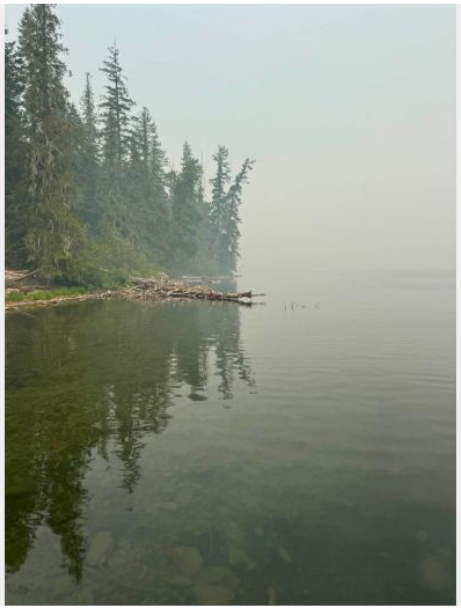
05 Enterprise Adaptation

Sunday, October 18, 2026

The Leavenworth Echo

MAIN MENU

Wildfire smoke threatens Camp Zanika's summer season and finances



WENATCHEE —- A local summer youth camp in Lake Wenatchee is facing financial challenges after wildfire smoke forced the early closure of multiple summer camp sessions, threatening its future operations.

Camp Fire North Central Washington says **it needs $31,875 to meet payroll and $126,125 to take care of affected camp families** without putting the future of Camp Zanika at risk.

The organization is raising money through an online campaign…

REPORT ON THE CAMP MYSTIC FLOOD DISASTER OF JULY 4, 2025

SENATE
GENERAL INVESTIGATING COMMITTEE
ON THE JULY 2025 FLOODING EVENTS

Senator Pete Flores, Chair
Senator Charles Perry, Vice Chair
Senator Bryan Hughes
Senator Lois Kolkhorst
Senator José Menéndez

HOUSE
GENERAL INVESTIGATING COMMITTEE
ON THE JULY 2025 FLOODING EVENTS

Representative Morgan Meyer, Chair
Representative Joe Moody, Vice Chair
Representative Drew Darby
Representative Paul A. Dyson
Representative Erin Elizabeth Gámez

JUNE 2026

The New York Times

NEWSLETTER
Climate Forward

High School Sports in the Heat

High temperatures and new safety rules are transforming practice as a new school year begins.

Listen · 5:53 min

Share full article



About 9,000 high school athletes get treatment for heat-related illnesses each year in the United States. Chitose Suzuki/The Dallas Morning News, via Getty Images

Most respondents (64%) did not know if their organization's insurance covered severe weather, climate impacts, or business interruption, but 12% did confirm that they were covered for these losses, and 7% confirmed that their coverage excluded these losses.

Prepare Your Camp for Wildfire Season



Wyoming Outdoor Council



Dear Shana,

Decisions made in legislative meetings and state agency hearings may feel far out of our sphere of influence. But trust us when we say **you can make a difference for Wyoming in just a few clicks.**

Healthy People 2030 Seeks Public Input on Proposed New Objectives

Posted on October 8, 2024 by ODPHP

Print

HHS is seeking written comments on 12 proposed new objectives for Healthy People 2030. HHS invites members of the public — both individuals and organizations — to provide comments about the new objectives for HHS to consider. HHS previously added four new objectives to Healthy People 2030 to reflect feedback from public comments received in January 2022 and changed the status of an additional objective reflecting comments solicited in October 2022.

Public comments informed the development of Healthy People 2030. Continuing to solicit and receive periodic public input throughout the decade will ensure the initiative reflects current public health priorities and areas of public interest.

HHS will accept written comments through 11:59 p.m. ET, October 31, 2024. All written comments must be submitted by email to HP2030Comment@hhs.gov. For complete details about this request for comments, please review the full Federal Register Notice (FRN).

The Nature Conservancy

Your Trust Matters to Us

Tell Congress: Protect Conservation Funding



TELL YOUR FRIENDS

17,850 SUPPORTERS | 82,150 REMAINING

Your message will be delivered to:

YOUR U.S. SENATORS
YOUR U.S. REPRESENTATIVE

Please stand up for nature by preserving conservation and climate funding

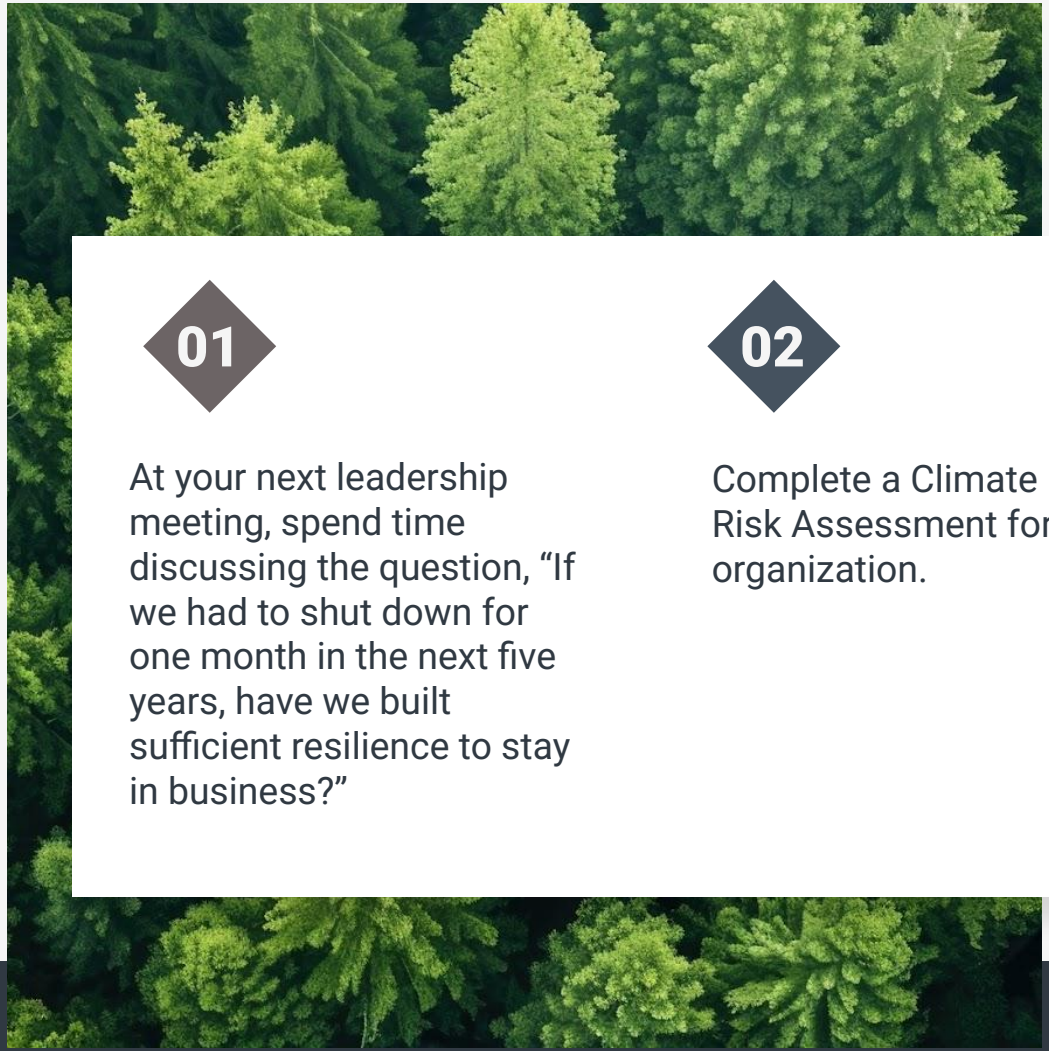
GHG reduction strategies

Perform an energy audit	May qualify for a 30% tax credit in the U.S.
Electrify vehicles and appliances	May qualify for federal or state/provincial tax credits
Shift to non-fossil fuel energy sources	Consider solar, wind, geothermal with battery storage
Promote a plant forward diet	Greatest impact is from reducing or eliminating beef and beef products
Measure and track emissions	Set a goal and monitor your progress
Advocate for climate-smart policies	Monitor state and local initiatives, engage with advocacy organizations

Triple bottom line: People, Profit, Planet.

Enterprise Adaptation

- Diversify ways to deliver your mission, adjust staffing models for consistency
- Review insurance coverage
- Set a goal for days of operating cash in reserve consistent with an extended crisis
- Invest in facility/infrastructure hardening, greening, and electrification
- Take advantage of local, regional, federal funding support
- Advocate for local and regional policies that help the organization adapt and support planetary health
- Identify your role in the community, build partnerships
- Actively reduce your GHG emissions



Action Steps

01

At your next leadership meeting, spend time discussing the question, “If we had to shut down for one month in the next five years, have we built sufficient resilience to stay in business?”

02

Complete a Climate Hazard Risk Assessment for your organization.

03

Update your public facing materials and participant paperwork to include references to climate change, extreme weather, and disasters and strive for transparency in explaining how you will respond in the face of these events.

Resources

Forecasting Tools
AirNow: https://www.airnow.gov/
Windy: https://www.windy.com/
Environment Canada EQHI: https://weather.gc.ca/airquality/pages/index_e.html
CDC Heat Risk: https://ephtracking.cdc.gov/Applications/HeatRisk/
NOAA Heat Index: https://www.weather.gov/ama/heatindex
National Weather Service: https://www.weather.gov/

Monitoring Tools
Watchduty: https://app.watchduty.org/
DisasterAwarePro: https://disasteraware.pdc.org/
InciWeb: https://inciweb.wildfire.gov/

Air Quality Decision Making Tools
University of California AQI-Based Decision-Making Matrix for Wildfire Smoke Events:
https://www.ucop.edu/enterprise-risk-and-resilience/_files/uc_aqi_based_decision_matrix.pdf

Resources (continued)

Climate Change and Adaptation
U.S. Climate Resilience Toolkit: https://toolkit.climate.gov/
Climate Adaptation: https://www.nrdc.org/stories/climate-adaptation-101
Free Visual Resources for Climate Change Education: https://www.climatecentral.org/resources
National Centre for Outdoor Risk & Readiness: https://natcorr.org.au/
Sendai Framework: https://www.undrr.org/implementing-sendai-framework/what-sendai-framework
British Columbia Risk Assessment Template: https://www2.gov.bc.ca/gov/content/governments/services-for-government/information-management-technology/information-security/defensible-security/security-prerequisites/risk-assessment
Project Drawdown: https://drawdown.org/

Surveys
Climate Change Impact on Outdoor Organizations Today, Jackson, et. al.
A Pulse Check of the Australian Outdoor Sector in Climate Adaptation

THANKS!

Do you have any questions?

maddenbd@gmail.com

shana.tarter@gmail.com



CREDITS: This presentation template was created by **Slidesgo**, and includes icons by **Flaticon**, and infographics & images by **Freepik**

Timing Notes 2026

Time	Minutes	Slides	Topic
3:00-3:10	10	1-6	Intro/Framing (SLT)
3:10-3:20	10	7-17	Survey-New Tool (SLT)
3:20-3:25	5	14-17	Climate Plan (SLT)
3:25-4:00	35	18-41	Points 1-3 (BM)
4:00-4:20	20	42-52	Points 4-5 (SLT)
4:20-4:25	5	53-56	Resources and Action Steps (SLT)

Inflation Reduction Act

Clean Energy Overview and Highlights



The Inflation Reduction Act (IRA) is the largest climate bill in U.S. history. A main policy focus of the IRA is supporting tax credits and rebates for **clean energy, electric vehicles, and efficiency updates**. Below are some highlights of how this bill can benefit you and/or your business.



RESIDENTIAL CLEAN ENERGY CREDIT

30% Tax Credit

for residential installations of clean energy (including solar, storage, etc.), offered through the end of 2034

HOMES REBATE PROGRAM

Allocates **$4.3B** for state-level rebates for energy-saving residential retrofits offered through the end of 2031

HIGH-EFFICIENCY ELECTRIC HOME REBATE PROGRAM

Allocates **$4.5B** for state-level rebates for home electrification investments, specifically for low- and moderate-income households

ENERGY EFFICIENT HOME IMPROVEMENT CREDIT

30% Tax Credit

for residential efficiency investments (including home energy audits, windows, energy efficient appliances, etc.) offered through the end of 2032

CLEAN-VEHICLE CREDIT

$7,500 Tax Credit

for the purchase of new electric vehicles offered through the end of 2032

PREVIOUSLY-OWNED CLEAN-VEHICLE CREDIT

$4,000 Tax Credit

for the purchase of used electric vehicles



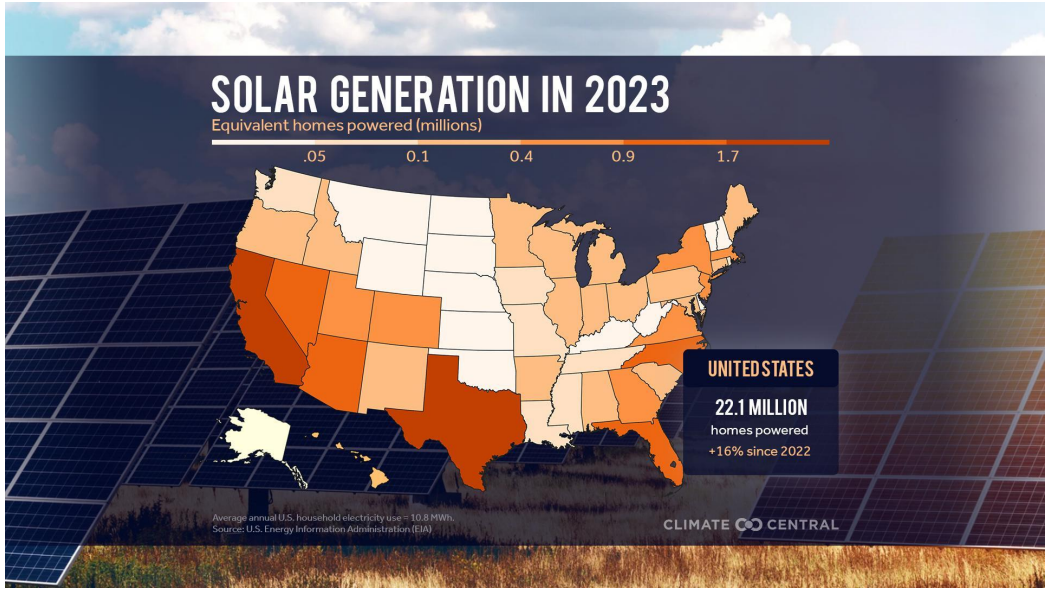
All of these policy incentives are projected to increase the deployment of clean energy, electric vehicles, and energy efficiency investments. This is an unprecedented level of policy support from the U.S. federal government.

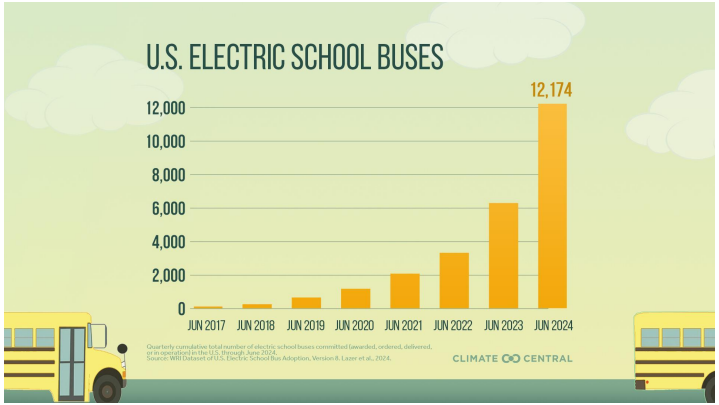
Please note that not all households are eligible for all credits and rebates. Consult with state-specific program specialists, tax accountants, and energy professionals about potential savings for your household.

For more information, please see By the Numbers: The Inflation Reduction Act press release from the White House and What the Inflation Reduction Act does for green energy article by PBS.

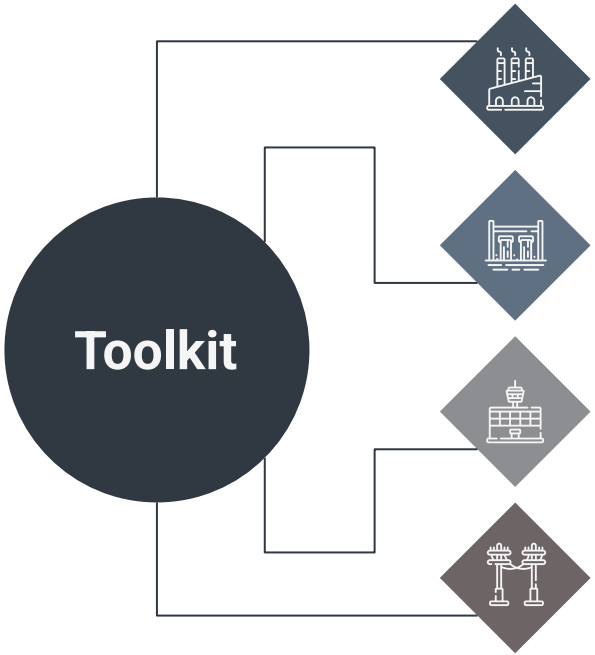
For further questions, please post on the Ask a Renewable Energy Expert forum at community.ases.org.

AMERICAN SOLAR ENERGY SOCIETY





Our Capabilities (aka Superpowers)



Adaptability

Decision-making in dynamic environments

Communication

Briefing for clarity, allowing for input

Technical Skills

Self-sufficiency in austere environments

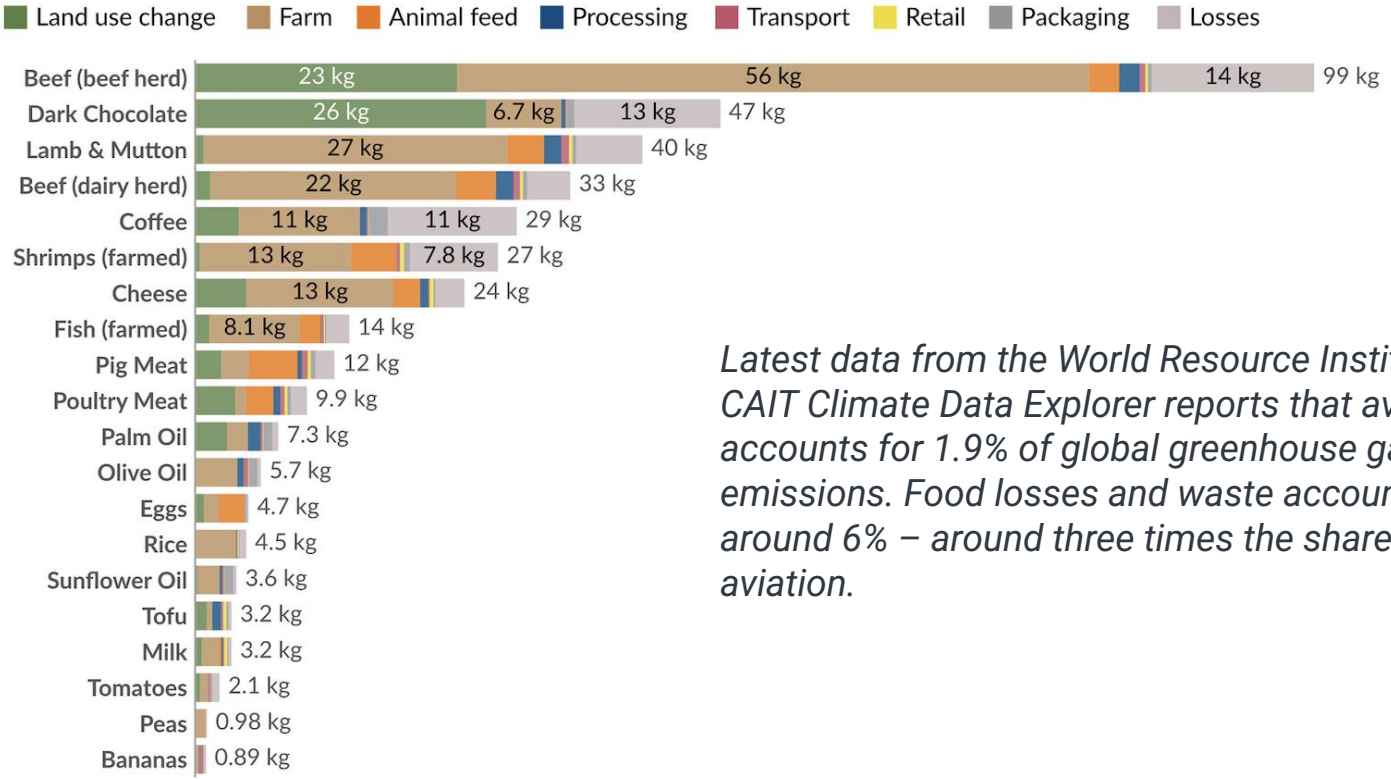
Mission Aligned

Centered on the why not the what

Food: greenhouse gas emissions across the supply chain

Our World in Data

Greenhouse gas emissions[1] are measured in kilograms of carbon dioxide-equivalents (CO_2eq)[2] per kilogram of food.



Latest data from the World Resource Institute's CAIT Climate Data Explorer reports that aviation accounts for 1.9% of global greenhouse gas emissions. Food losses and waste accounts for around 6% – around three times the share from aviation.

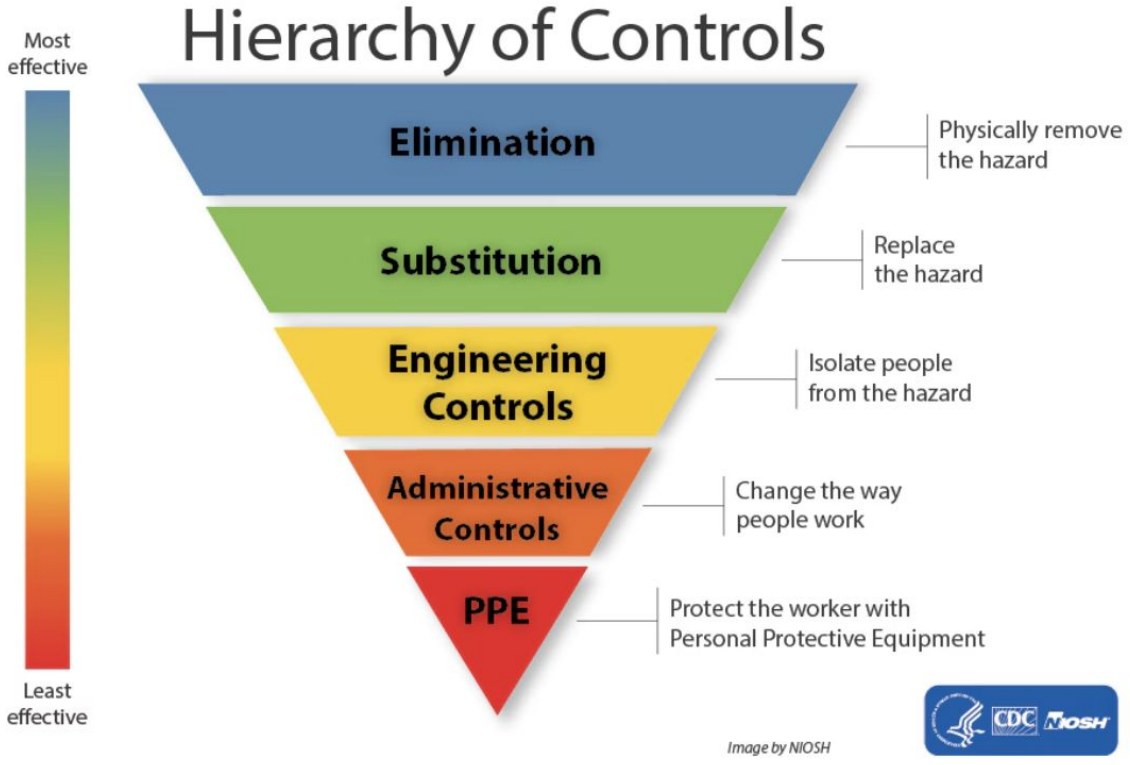
Data source: Joseph Poore and Thomas Nemecek (2018).

OurWorldinData.org/environmental-impacts-of-food | CC BY



Reduce Greenhouse Gas (GHG) Emissions

Using this hierarchy can lower worker exposures and reduce risk of illness or injury.



Heat & Health Tracker

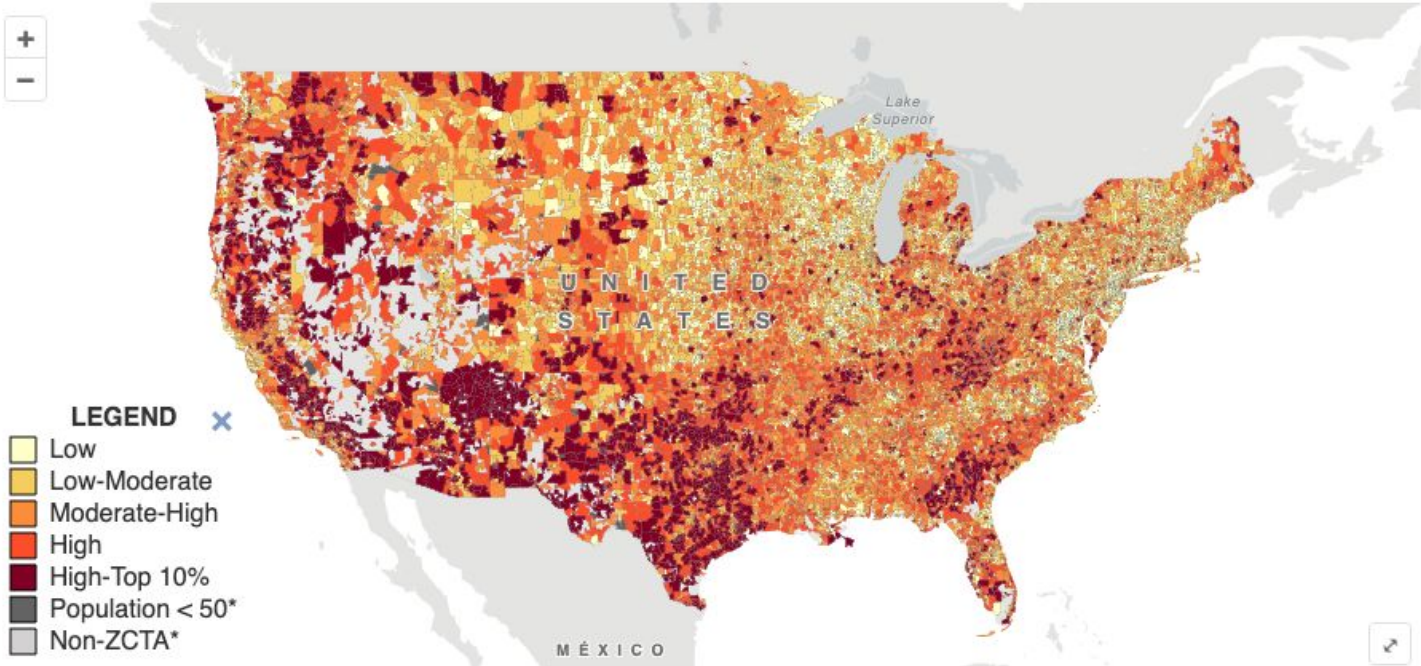
Heat and Health Index

Explore the Heat and Health Index

The Heat and Health Index (HHI) helps identify communities where people are most likely to feel the effects of heat on their health, in order to build towards a healthier and more heat-resilient future for all. Enter a ZIP code in the text box on the right or select a ZIP Code Tabulation Area (ZCTA)* in the map below to learn more about how different factors influence the way heat affects your community.

Search for ZIP code here

Enter ZIP code here

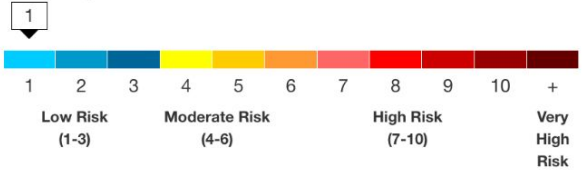


Victoria/Saanich - Air Quality Health Index

Observed Conditions

Past 24 hr

Calculated at: 3:00 PM PDT Friday 11 October 2024



At-Risk Population:

- Enjoy your usual outdoor activities.
- Find out if you are at risk

General Population:

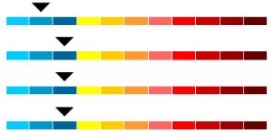
- Ideal air quality for outdoor activities.

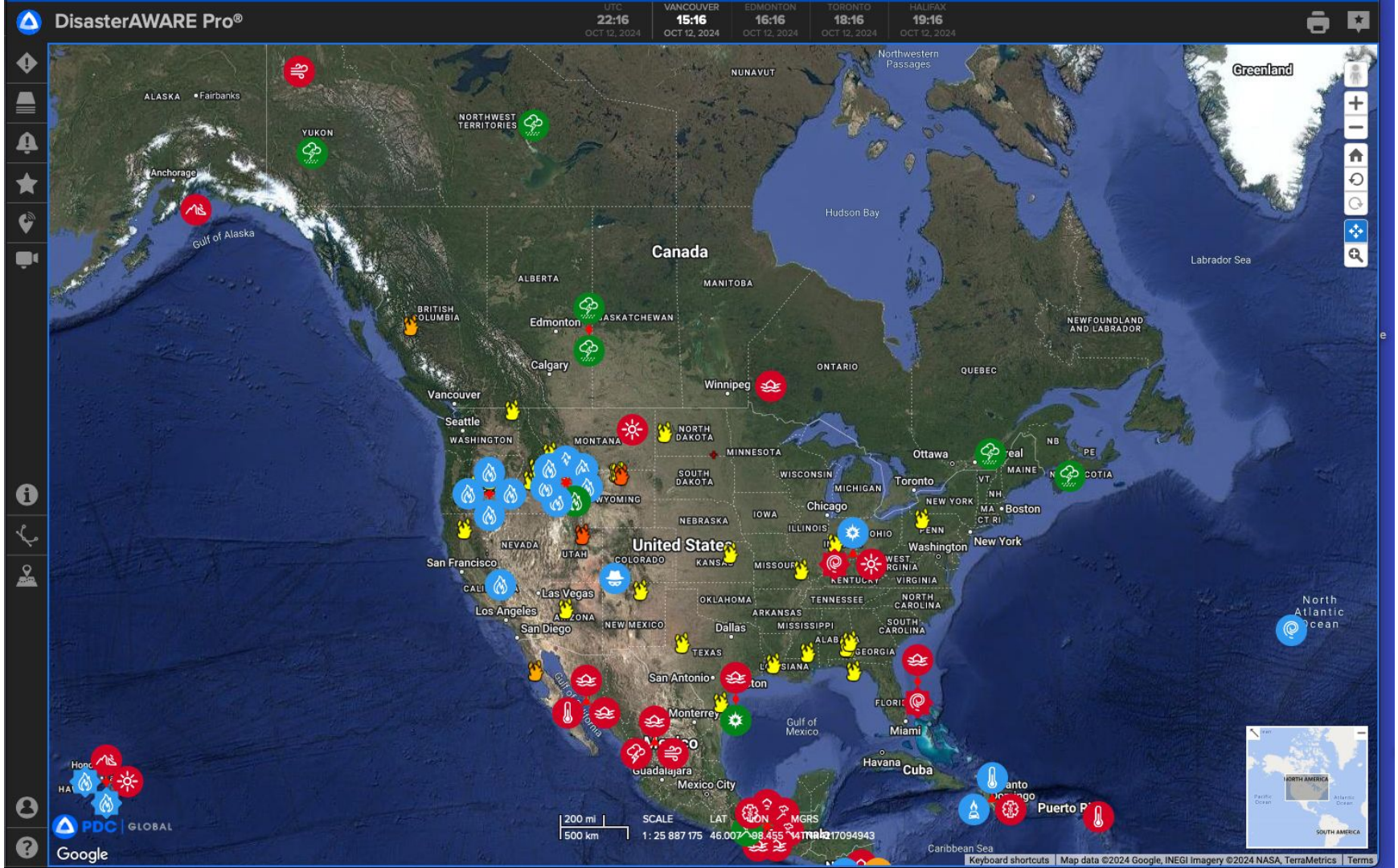
Forecast Maximums

Next 24 hr | Health Message

Issued at: 6:00 AM PDT Friday 11 October 2024

Friday	**2** - Low Risk
Friday night	**3** - Low Risk
Saturday	**3** - Low Risk
Saturday night	**3** - Low Risk




DisasterAWARE Pro®
UTC 22:16 OCT 12, 2024
VANCOUVER 15:16 OCT 12, 2024
EDMONTON 16:16 OCT 12, 2024
TORONTO 18:16 OCT 12, 2024
HALIFAX 19:16 OCT 12, 2024
Northwestern Passages
Greenland
NUNAVUT
ALASKA
Fairbanks
YUKON
NORTHWEST TERRITORIES
Anchorage
Gulf of Alaska
Hudson Bay
Labrador Sea
Canada
ALBERTA
MANITOBA
BRITISH COLUMBIA
Edmonton
Calgary
ONTARIO
QUEBEC
NEWFOUNDLAND AND LABRADOR
Winnipeg
Vancouver
Seattle
WASHINGTON
MONTANA
NORTH DAKOTA
MINNESOTA
SOUTH DAKOTA
WISCONSIN
MICHIGAN
Ottawa
Toronto
NEW YORK
Chicago
Boston
NEBRASKA
IOWA
ILLINOIS
OHIO
New York
Washington
NEVADA
UTAH
COLORADO
KANSAS
MISSOURI
San Francisco
United States
Las Vegas
Los Angeles
San Diego
OKLAHOMA
TENNESSEE
NORTH CAROLINA
ARKANSAS
NEW MEXICO
Dallas
MISSISSIPPI
SOUTH CAROLINA
TEXAS
GEORGIA
San Antonio
Monterrey
Gulf of Mexico
Miami
Havana
Cuba
Guadalajara
Mexico City
Puerto Rico
Caribbean Sea
North Atlantic Ocean
200 mi
500 km
SCALE
1 : 25 887 175
LAT
MGRS
PDC | GLOBAL
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Timing Notes

Time	Minutes	Slides	Topic
3:00-3:06	7	1-3	Intros/Goals (BM)
3:07-3:16	10	4-15	Survey-New Tool (SLT)
3:17-3:25	8	14-16	Climate Plan (SLT)
3:26-3:56	30	17-32	Points 1-3 (BM)
3:57-4:12	15	33-44	Points 4-5 (SLT)
4:13-4:28	15	45-52	Capabilities, Action Steps (BM)