

A scenic landscape featuring a winding asphalt road that curves through a rural area. To the right of the road is a fence line, and beyond that, rolling hills and fields. The sky is bright with some clouds, and the overall lighting suggests a warm, sunny day. The text is overlaid on the lower half of the image.

Farm Emergency Planning for Extreme Heat, Wildfires and Smoke

July 8, 2021

RESULTS OF HEAT MAPPING PROJECT SHOW INEQUITABLE IMPACT OF HOTTER SUMMERS, WILL INFORM ACTIONS BY KING COUNTY AND CITY OF SEATTLE



Applying data to reduce heat impacts

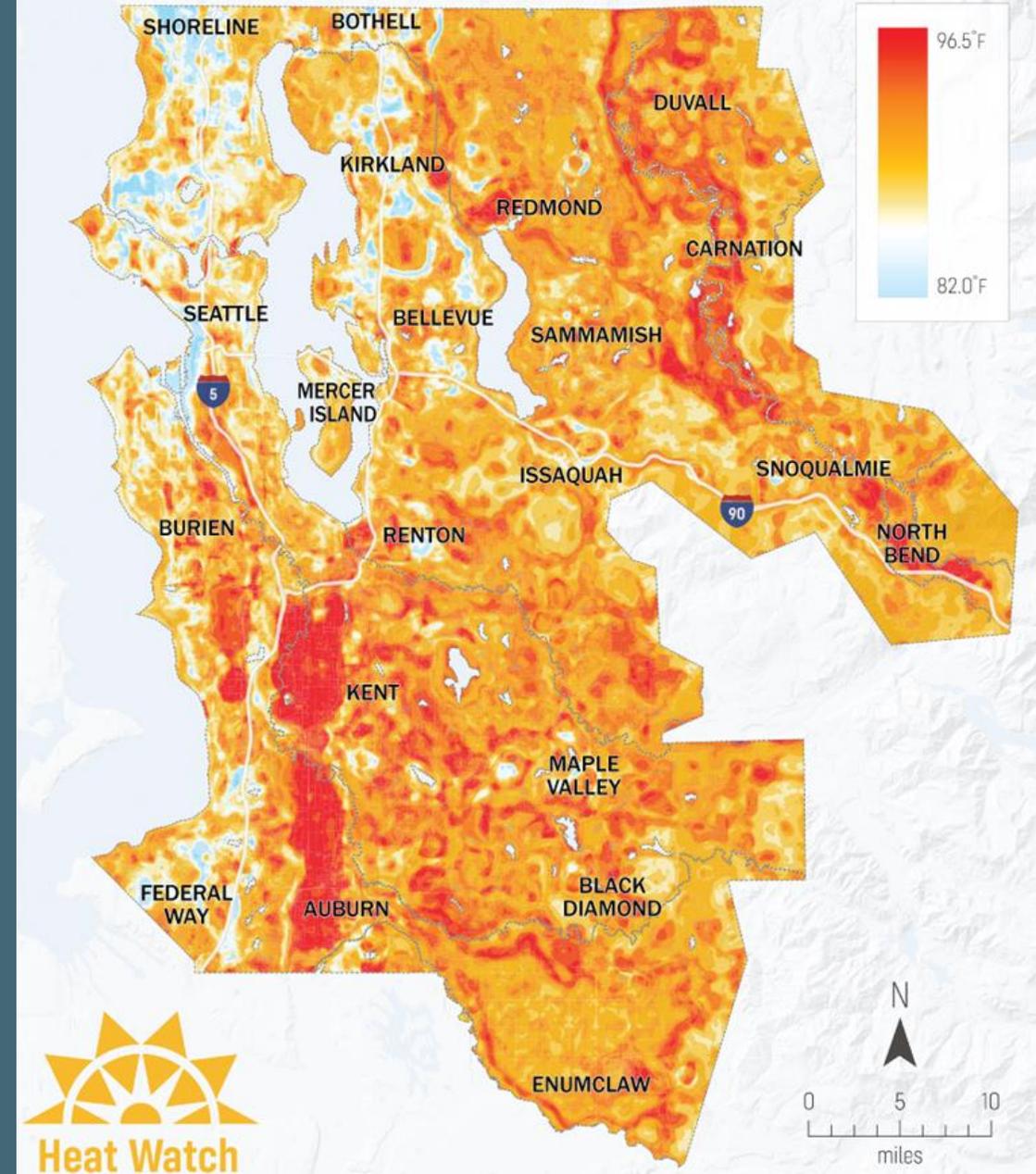
[https://kingcounty.gov/elected/executive/constantine/news
/release/2021/June/23-heat-mapping-results.aspx](https://kingcounty.gov/elected/executive/constantine/news/release/2021/June/23-heat-mapping-results.aspx)

King County and City of Seattle today announced the results of a groundbreaking heat mapping project that quantifies the harmful, inequitable impact that hotter summers are having on the region. **The data show that surface-level temperatures in areas with paved landscapes, less tree canopy, and industrial activity are substantially higher during summer heat events compared to less urbanized areas.**

Heat is evenly distributed during the afternoon



Afternoon Study Results

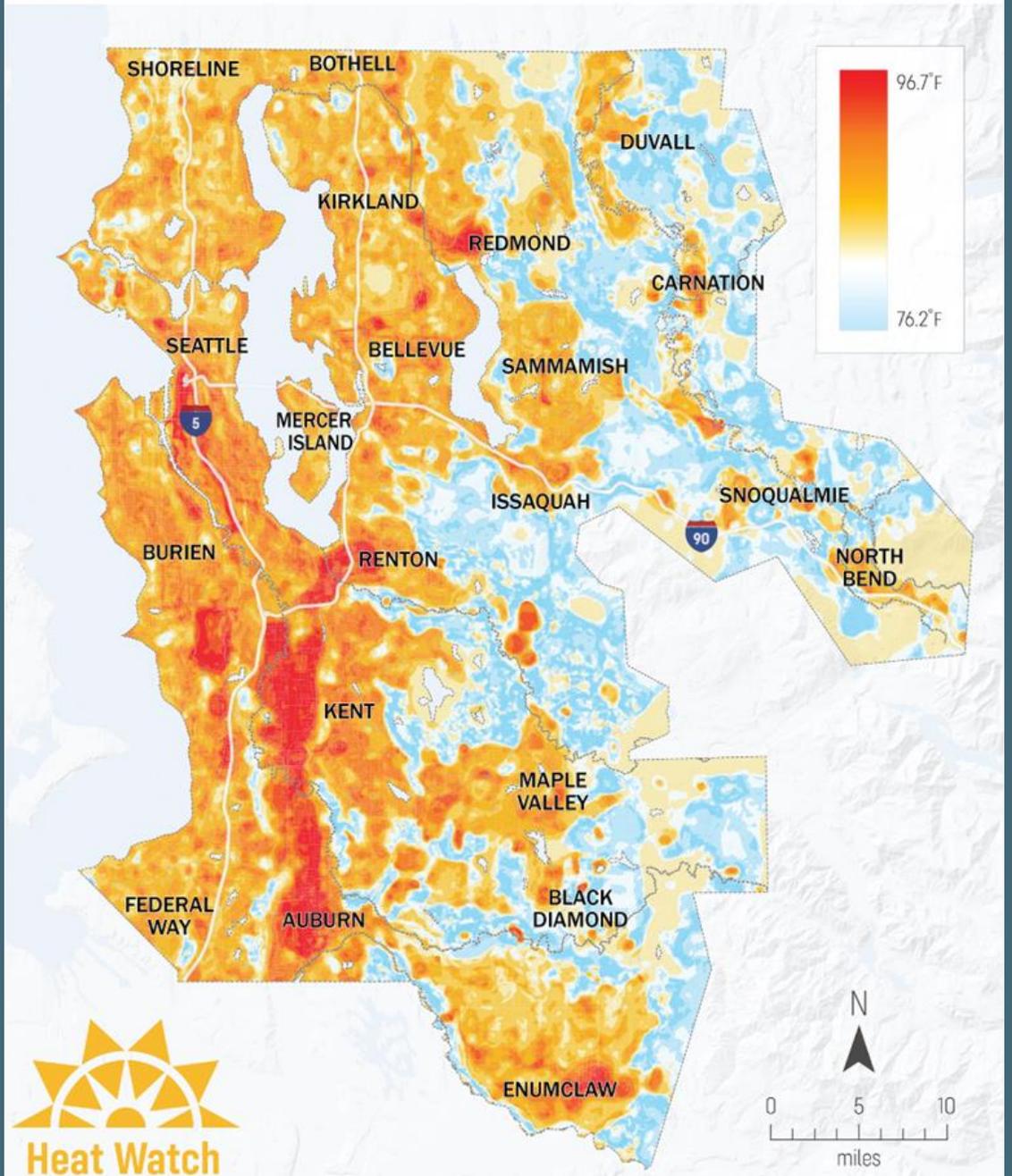


Volunteers helped King County and City of Seattle record more than 110,000 temperature measurements at three different times of the day during a one-day extreme heat event in July 2020. Temperature data were collected at one-second intervals while driving designated routes in different locations around the county.

Areas with more natural landscapes retain less heat



Evening Study Results



Farm Emergency Planning for
WILDFIRES AND SMOKE



Plan



Monitor
Situation



Monitor
Farm



Recovery



The Seattle Times

Pacific Northwest's record-smashing heat wave primes wildfire, buckles roads; health toll not yet known

June 28, 2021 at 7:11 pm Updated June 29, 2021 at 9:37 am

3 of Seattle's 4 hottest days on record just happened
June 29, 2021 at 4:17 pm Updated June 29, 2021 at 5:00 pm



[Pacific Northwest heat wave 'tip of the melting...](#)

In an interview with The Seattle Times, Gov. Jay Inslee said this month's record-breaking heat... New 4:20 pm



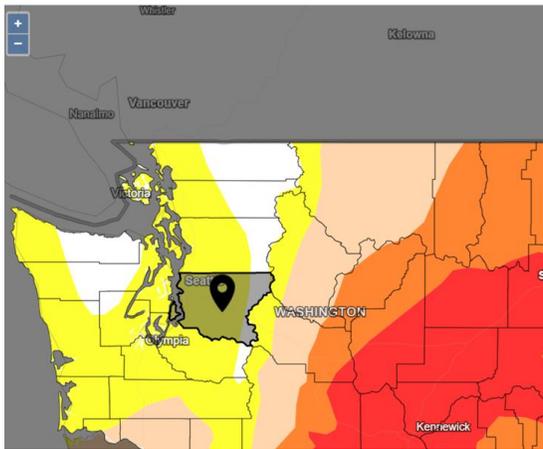
Seattle's biggest difference between one day's high temperature and the next day's low temperature is 43 degrees, according to Joe Boomgard-Zagrodnik, a postdoctoral researcher in agricultural meteorology at Washington State University.

Farm Emergency Planning

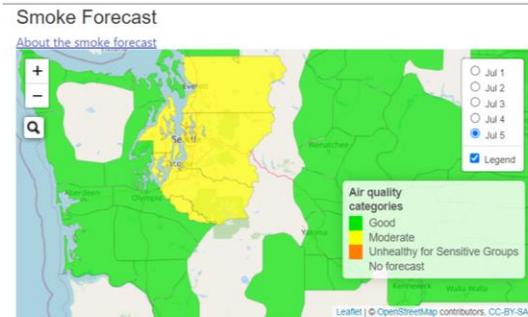
KEY INDICATORS TO MONITOR SITUATION



Drought



Smoke/Air Quality



Local Burn Bans

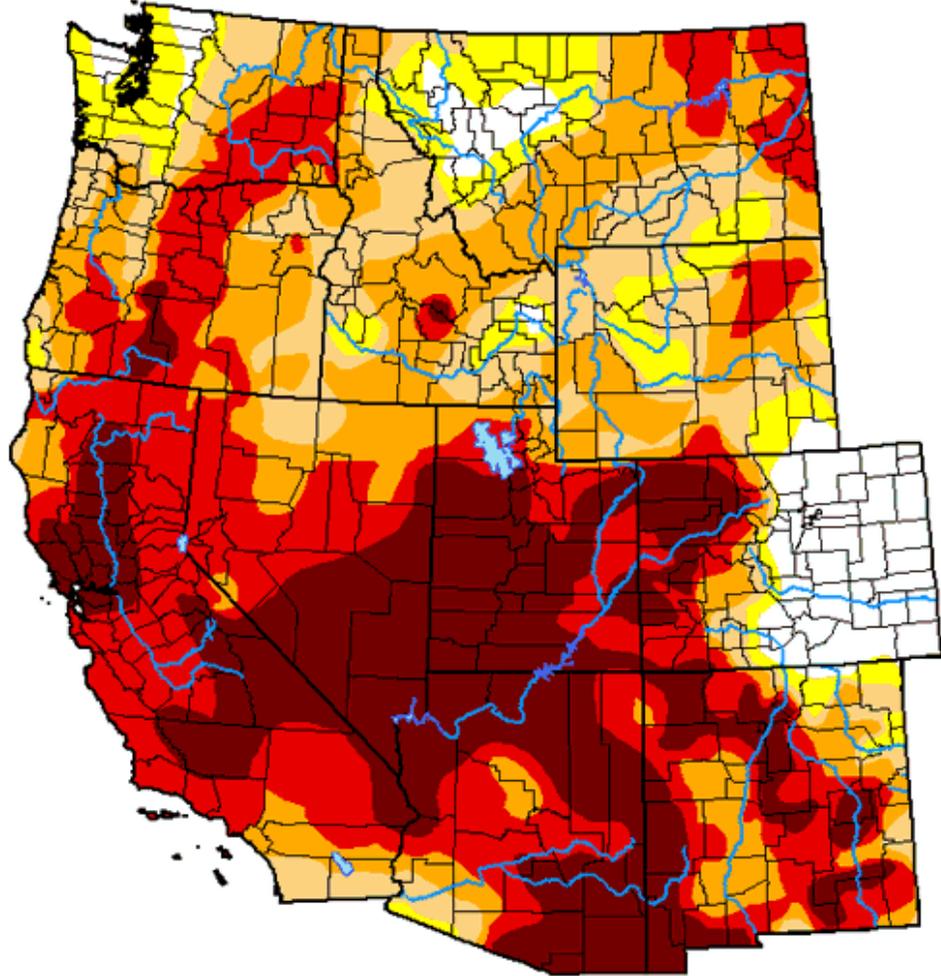


Observation



U.S. Drought Monitor Western U.S.

June 22, 2021
(Released Thursday, Jun. 24, 2021)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	6.73	93.27	85.58	71.52	49.71	23.72
Last Week 06-15-2021	7.51	92.49	83.10	67.67	48.85	23.75
3 Months Ago 03-23-2021	11.44	88.56	74.50	58.66	39.49	20.61
Start of Calendar Year 12-29-2020	11.57	88.43	78.63	65.18	46.49	22.16
Start of Water Year 09-29-2020	8.51	91.49	76.07	54.55	33.11	2.31
One Year Ago 06-23-2020	33.43	66.57	46.03	21.34	4.86	0.00

Intensity:



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

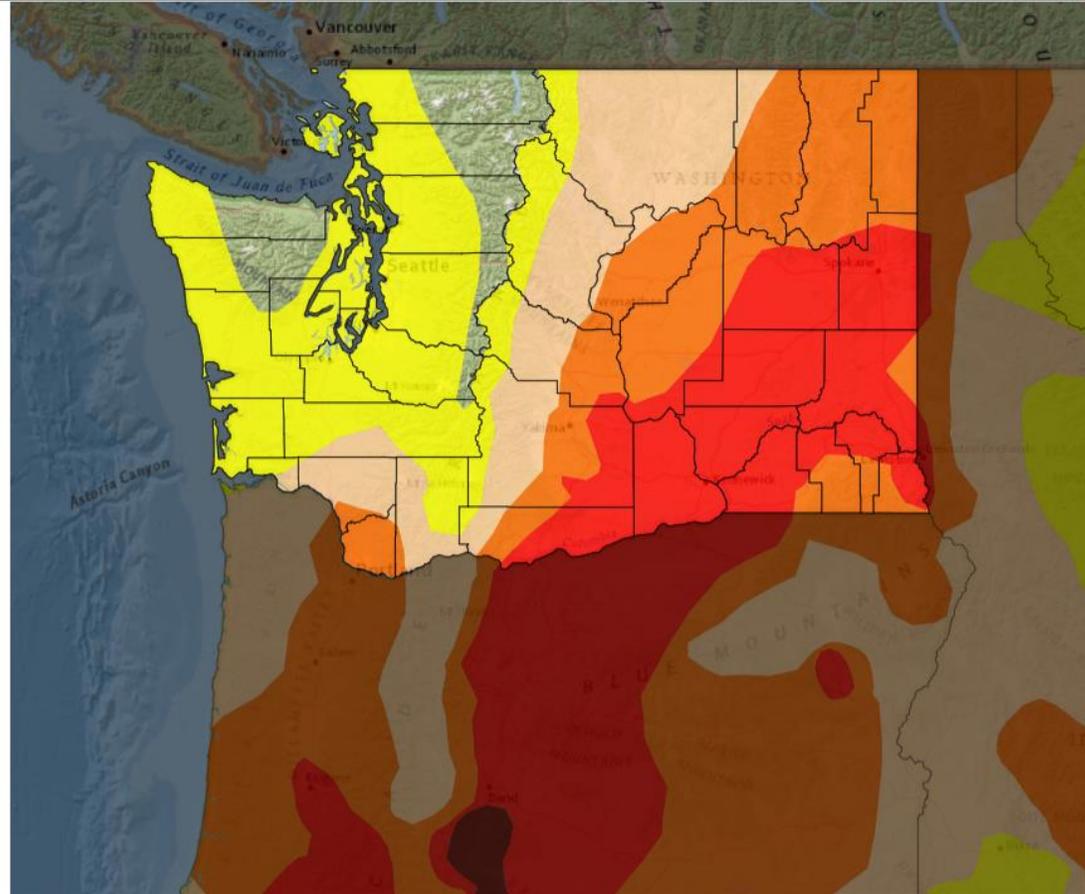
Curtis Riganti
National Drought Mitigation Center



droughtmonitor.unl.edu

- 76.5 Million acres of crops in U.S. are experiencing drought conditions this week.
- 27.7% since last week
- 27.7% since last month

The following state-specific drought impacts were compiled by the [National Drought Mitigation Center](https://www.drought.gov). While these impacts are not exhaustive, they can help provide a clearer picture of drought in Washington.



[HTTPS://WWW.DROUGHT.GOV/STATES/WASHINGTON](https://www.drought.gov/stat/washington)

Current U.S. Drought Monitor Conditions for Washington

Current Conditions for King County

[View More National Drought Map](#)

[U.S. Drought Monitor](#)

[Temperature \(30-Day Departure from Normal\)](#)

[Precipitation \(30-Day % of Normal\)](#)

The U.S. Drought Monitor (USDM) is updated each Thursday to show the location and intensity of drought across the country using a five-category system, from Abnormally Dry (D0) conditions to Exceptional Drought (D4). The USDM is a joint effort of the National Drought Mitigation Center, USDA, and NOAA. [Learn more.](#)



D0 - Abnormally Dry

- Ski season is shortened; visitation is lower

82.02%
of King
County
(D0-D4)



D1 - Moderate Drought

- Fire danger increases
- Possible dust storms
- River flow is low

0.00%
of King
County
(D1-D4)

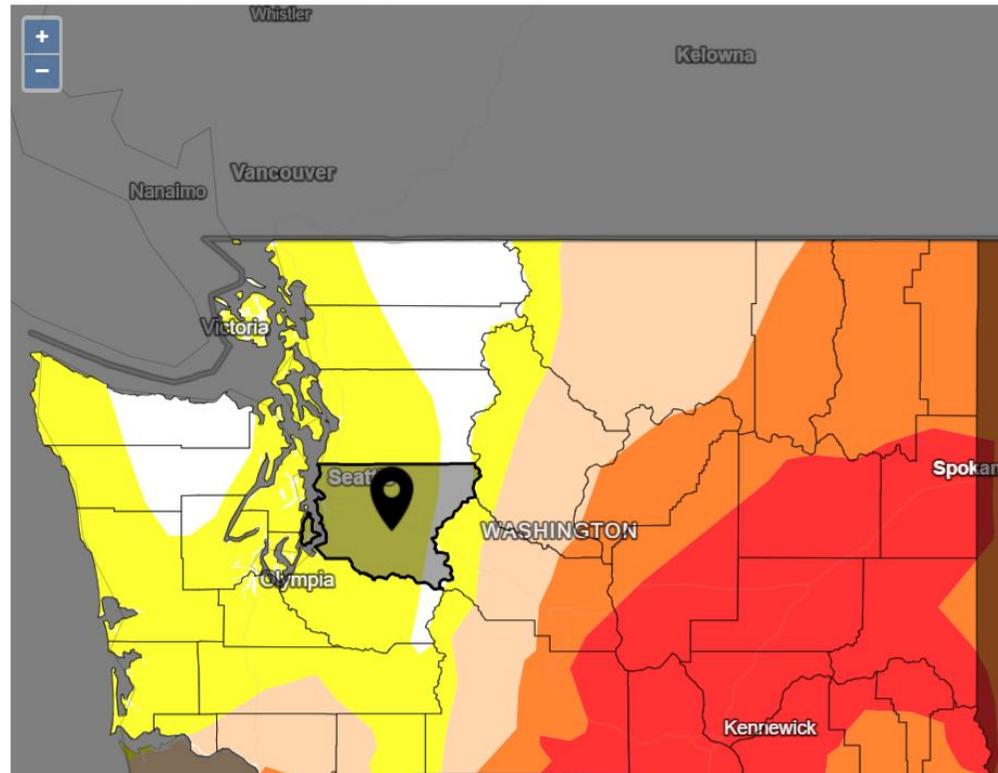


D2 - Severe Drought

- Wheat and corn are stunted; harvest is early
- Producers feed cows earlier; silage is harder to find
- Number of wildfires increases; grasses are brown

0.00%
of King
County
(D2-D4)

D3 - Extreme Drought

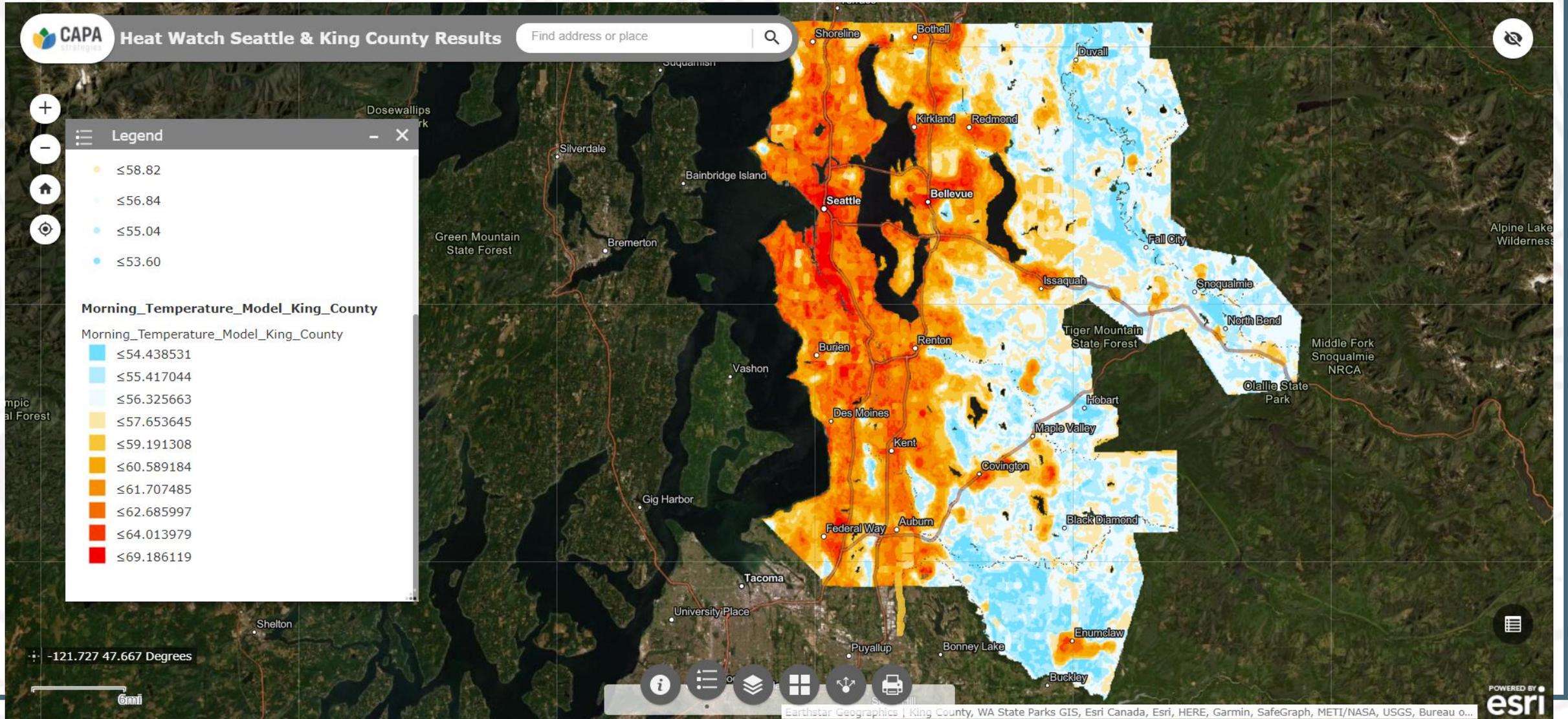


[HTTPS://WWW.DROUGHT.GOV/STATES/WASHINGTON/COUNTY/KING](https://www.drought.gov/stat/washington/county/king)

Current U.S. Drought Monitor Conditions for King County

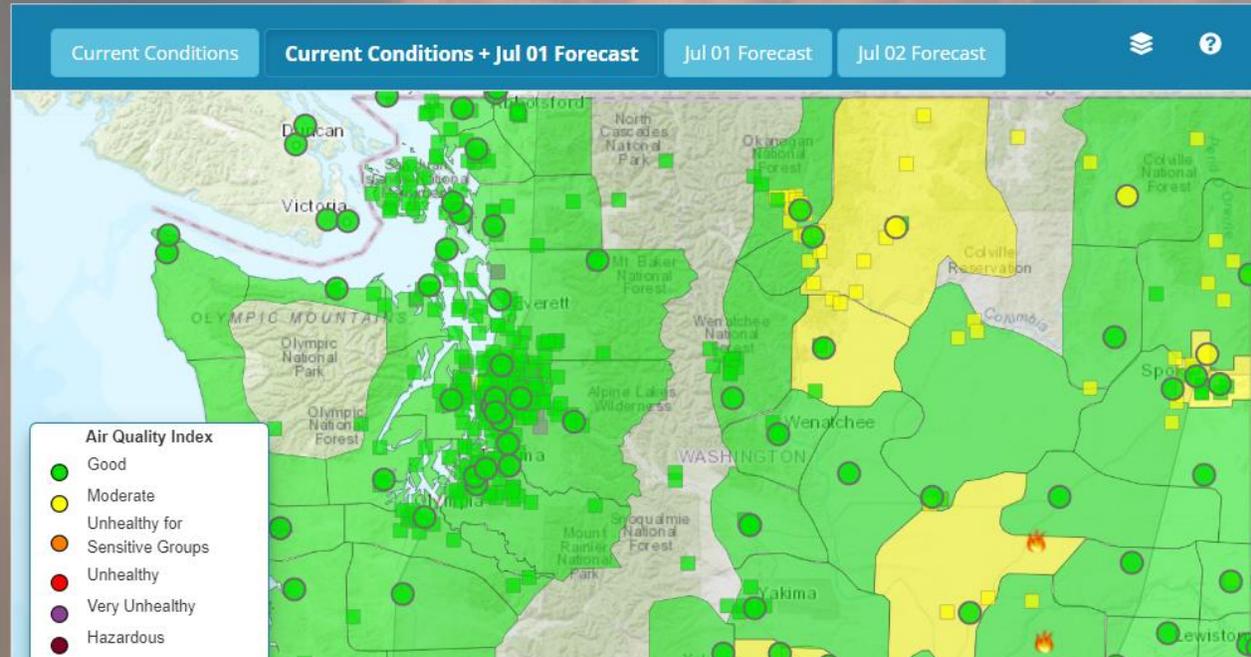
Find your location:

<https://www.arcgis.com/apps/webappviewer/index.html?id=84709c65c08a40bbb47d0723ef1c797a&extent=-13604644.7965%2C6019787.1095%2C-13561266.7829%2C6046616.5065%2C102100>



Washington Smoke Information

Welcome to the Washington Smoke blog, a partnership between state, county, and federal agencies, and Indian Tribes. We coordinate to collectively share info for Washington communities affected by wildfire smoke. If the air monitoring map doesn't display here, links to additional monitoring maps can be found under the 'Monitoring & Forecasting' tab.

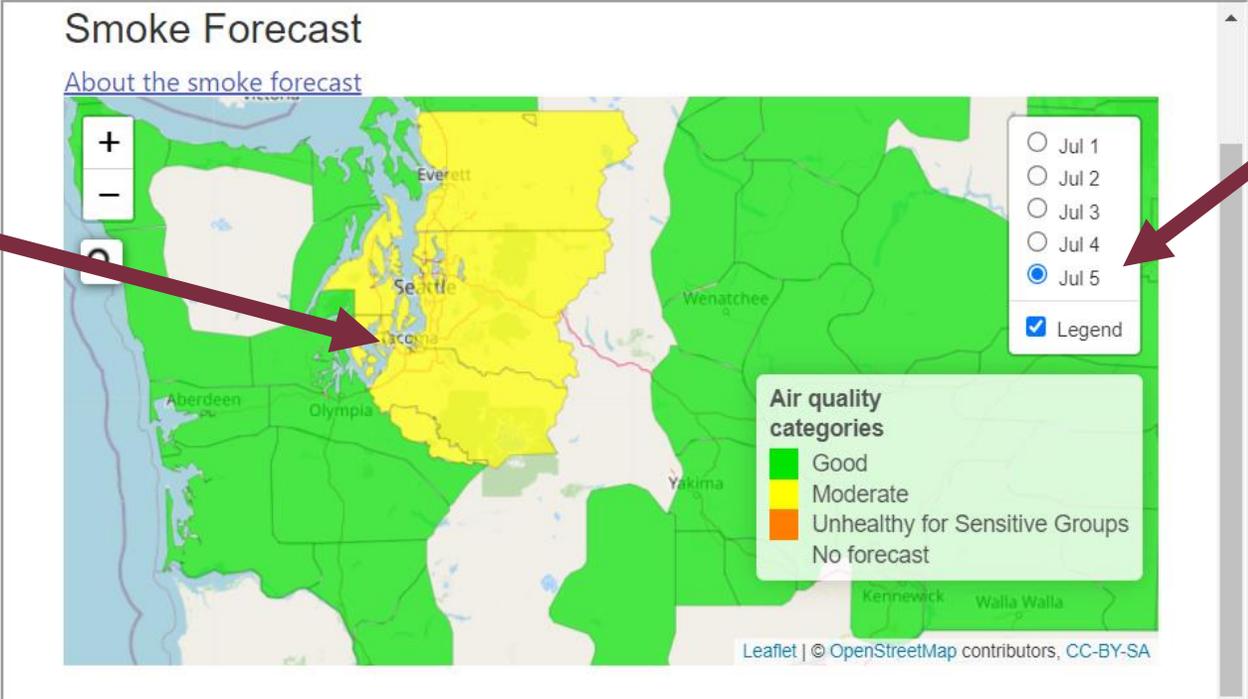


WILDFIRE SMOKE

Air Monitoring Map:
<https://wasmoke.blogspot.com/>



This map shows a five-day forecast for smoke levels across Washington. The forecast can help you plan outdoor activities and reduce your exposure to air pollution. [Colors on the map](#) refer to levels of air pollution and related health warnings.



WILDFIRE SMOKE

Smoke Forecast Map:
<https://ecology.wa.gov/Air-Climate/Air-quality/Smoke-fire/Wildfire#colors>



Burn ban in effect

Fire safety burn bans are issued by King County Fire Marshal due to fire danger during dry weather conditions and there is low moisture in trees and vegetation.

With high temperatures forecast through the weekend, Fire Marshal issues Stage 1 fire safety burn ban starting Thursday, June 24

June 23, 2021

Summary

King County Fire Marshal Chris Ricketts has issued a Stage 1 fire safety burn ban for the unincorporated areas of King County starting Thursday. The ban will remain in effect until further notice.

Story

The weather forecast calls for temperatures in the mid-90's throughout the weekend, with readings climbing to nearly 100 degrees Sunday. The National Weather Service has issued an [Excessive Heat Watch](#) for King County.

The Stage 1 fire safety burn ban applies to all outdoor burning, except for barbecues and small recreational fires in established fire pits at approved campgrounds or private property with the owner's permission.

"Extreme heat and especially dry conditions have increased the risk of wildfire dramatically," Ricketts says. "People in both rural

**KING COUNTY
FIRE MARSHAL**

<https://kingcounty.gov/depts/local-services/permits/fire-safety/burn-bans-fireworks.aspx>

Farm Emergency Planning

PLANNING AND RECOVERY RESOURCES



Livestock
and Triage



Livestock
Emergency
Planning



Emergency
Loans and
Crop
Insurance



Livestock Evac
Locations





WASHINGTON STATE UNIVERSITY



- Home
- Wildfire Status Updates
- Agencies
- Agriculture and Natural Resources**
- Economics
- Families and Youth
- Health and Safety
- Homes
- Wildfire Preparedness
- In the News



Wild Fire Recovery

WASHINGTON STATE UNIVERSITY EXTENSION

Agriculture and Natural Resources

This page is designed to provide resources and information to those who are involved in agriculture and forestry. The links below will provide resources and information regarding Agricultural and Forestry recovery.

Livestock Health and Management Resources

Livestock movement and housing during an emergency

- [Disaster Preparedness for Livestock Producers](#)
- [Practical Livestock Evacuation](#)
- [Handling Livestock During Disaster](#)



Ag-Focused Emergency Resources

County Conservation Districts

Contact your county conservation district to report losses and find information on reseeding, replacing deer fencing, animal feed needs, grazing land permits, and more:

- [Ferry County Conservation District](#)
- [Okanogan County Conservation District](#)



Figure 3. Water supplied to livestock by local fire crews.

Livestock injury assessment and health

- Wildfires, Smoke, and Livestock
- Assessing Burns in Livestock
- Animal Triage Procedures
- Fire Retardant Impacts on Livestock





save the whole family

**SMOKE HURTS
ANIMALS, TOO**

<https://www.avma.org/resources/pet-owners/emergencycare/large-animals-and-livestock-disasters>

AVMA:

- **Livestock natural disaster planning and checklists**
 - Livestock identification
 - **Equine and livestock evacuation kit**
 - Evacuating backyard poultry
 - **Backyard poultry evacuation kit**
-
- Keep a list of the species, number and locations of your animals near your evacuation supplies and note animals' favorite hiding spots. This will save precious rescue time.
-
- Some items in the evac kit
 - 7-10 day supply of feed, supplements, and water
 - Bandanas (to use as blindfolds)
 - Batteries (flashlight, radio)
 - Blankets
 - Copies of veterinary records and proof of ownership
 - Cotton halter
 - Duct tape

SMOKE symptoms in animals

If any of your animals are experiencing any of these signs, please consult your veterinarian.

Coughing or gagging

Difficulty breathing, including open mouth breathing and increased noise when breathing

Eye irritation and excessive watering

Inflammation of throat or mouth

Nasal discharge

Asthma-like symptoms

Increased breathing rate

Fatigue or weakness

Disorientation or stumbling

Reduced appetite and/or thirst

Tips to protect livestock

- Limit exercise when smoke is visible. Especially don't require animals to perform activities that substantively increase airflow into and out of the lungs.
- Provide plenty of fresh water near feeding areas.
- Limit dust exposure by feeding low-dust or dust-free feeds and sprinkling or misting the livestock holding area.
- Plan to give livestock 4 to 6 weeks to recuperate after the air quality returns to normal. Attempting to handle, move, or transport livestock may delay healing and compromise your animals' performance.
- Have a [livestock evacuation plan](#) ready in advance. If you don't have enough trailers to quickly transport all of your animals, contact neighbors, local haulers, farmers, producers, or other transportation providers to establish a network of reliable resources that can provide transportation in the event you need to evacuate your animals.
- Good barn and field maintenance can reduce fire danger for horses and other livestock. Make sure barns and other structures are stable, promptly remove dead trees, clear away brush, and maintain a defensible space around structures.

USDA CROP AND LIVESTOCK INSURANCE



Risk Management Agency

Triggered by natural
disasters?
Yes.

Whole-Farm Revenue Protection (WFRP)

Insurance coverage against the loss of revenue that you expect to earn during the insurance period under one insurance policy.

- Designed for small, diversified farms that sell direct or wholesale;
- Based on your own production and sales;
- Federally subsidized means lower premium cost to farmers
- A range of coverage levels from 50-85 percent to fit the needs of more farming and ranching operations;
- Replant coverage for annual crops, except Industrial Hemp;
- The ability to consider market readiness costs as part of the insured revenue and expenses;
- Provisions to adjust the insurance guarantee to better fit expanding operations;
- An improved timeline for farming operations that operate as fiscal year filers; and
- Streamlined underwriting procedures based on the forms used for WFRP.

USDA CROP AND LIVESTOCK INSURANCE



Farm Service Agency

Disaster Assistance Programs

- Livestock Forage Program
- Livestock Indemnity Program
- Emergency Assistance for Livestock, Honeybees, and Farm-Raised Fish
- Tree Assistance Program (orchards, bushes, vines)
- 2017 Wildfires and Hurricanes Indemnity Program 

Loans for losses to crops, trees, livestock, farmland and farm property

[Emergency Loan Program](#)

[Disaster Set-Aside Program](#)

[Emergency Conservation Program \(ECP\)](#)

Crop Losses

[Noninsured Disaster Assistance Program \(NAP\) *](#)



Can a farmer participate in the Non-Insured Assistance Program (NAP)* as well as WFRP?
Yes.

DROUGHT DECLARED IN WA

By USDA; USDA FSA and US SBA loans being made available

Date: 06/30/2021



U.S. Small Business
Administration

U.S. SMALL BUSINESS ADMINISTRATION FACT SHEET – ECONOMIC INJURY DISASTER LOANS

(SBA DISASTER DECLARATION DUE TO DESIGNATION BY THE SECRETARY OF AGRICULTURE)

WASHINGTON Declaration #17015

(Disaster: WA-00094)

Incident: DROUGHT

occurring: April 1, 2021 & continuing

in the Washington counties of: **Adams, Asotin, Columbia, Franklin, Garfield, Grant, Kittitas, Klickitat, Lincoln, Spokane, Stevens, Walla Walla, Whitman & Yakima;**

the contiguous Washington counties of: **Benton, Chelan, Douglas, Ferry, King, Lewis, Okanogan, Pend Oreille, Pierce & Skamania;**

the contiguous Idaho counties of: **Benewah, Bonner, Kootenai, Latah & Nez Perce;**

and the contiguous Oregon counties of: **Gilliam, Hood River, Morrow, Sherman, Umatilla, Wallowa & Wasco**

Application Filing Deadline: February 22, 2022

Disaster Loan Assistance Available:

Economic Injury Disaster Loans (EIDLs) – Working capital loans to help small businesses, small agricultural cooperatives, small businesses engaged in aquaculture, and most private, non-profit organizations of all sizes meet their ordinary and necessary financial obligations that cannot be met as a direct result of the disaster. These loans are intended to assist through the disaster recovery period.

Credit Requirements:

- Credit History – Applicants must have a credit history acceptable to SBA.
- Repayment – Applicants must show the ability to repay the loan.
- Collateral – Collateral is required for all EIDL loans over \$25,000. SBA takes real estate as collateral when it is available. SBA will not decline a loan for lack of collateral, but SBA will require the borrower to pledge collateral that is available.



Farm Service Agency

U.S. DEPARTMENT OF AGRICULTURE

When a tornado, flood, or drought strikes, or a quarantine is imposed by the Secretary of Agriculture, or when other natural disasters occur, FSA's Emergency loan program is there to help eligible farmers and ranchers rebuild and recover from sustained losses.

Governor must also declare disaster.

Meanwhile

Farmers: jot down temps and losses as they happen on a calendar.

LIVESTOCK SHELTER LOCATIONS

If you have to evacuate or seek shelter for animals



King County's Natural Disaster Emergency
Livestock Facility is the **Enumclaw
Expo & Event Center**



Snohomish County's Natural Disaster
Emergency Livestock Facility is the
**Evergreen State
Fairgrounds, Monroe**



Washington State Animal Response Team

Emergency Phone: 425-681-5498

[Home](#)[WASART Stories](#)[About WASART](#) ▾[Volunteer](#) ▾[Training & Events](#)[Donate](#)[Documentation](#) ▾

You are here: [Home](#) / [Emergency Animal Cooling Shelter](#)

Emergency Animal Cooling Shelter

June 28-29, 2021

King County animals not coping well with the heat may be brought to an air-conditioned emergency animal cooling shelter located at the [Enumclaw Expo Center](#), South Parking Lot. The shelter is being set up and staffed by volunteers from the Washington State Animal Response Team and King County Search and Rescue.

Animal owners may drop off companion animals and other pets, where they will be taken care of while their owners take care of themselves. Pets that are not dogs or cats must be in their own enclosures such as crates or aquariums.

A big thanks to King County Sheriff's Office for delivering fuel for us and lending us some extra shelter for the staff and for King County Office of Emergency Management for the support!

Hours

Monday 8 am – 10 pm

Tuesday 8 am – 8 pm

Coming Up

July 24: [Emergency Animal Sheltering](#)

All upcoming events are tentative due to [COVID-19](#)

[Calendar](#)

Farm Emergency Planning for
WILDFIRES AND SMOKE

Questions?



Plan



Monitor
Situation



Monitor
Farm



Recovery



SMOKE PREPAREDNESS FOR PEOPLE

Addison Houston, Environmental Health Mitigation & Response Planner, Public Health – Seattle & King County



FIRE RISK EVALUATION OF BUILDINGS

Matthew Axe, Wildfire and Forest Resiliency Coordinator, KCD

KCD King Conservation District ...e and community? It is never too late to prepare for wildfire.

See what KCD Wildfire and Forest Resiliency Program Coordinator [Matt Axe](#) looks for in a Wildfire Home Risk Evaluation Walk.

