

How to Prepare for an Eruption

Scan the QR Code to the right to access helpful websites including state, county, and city emergency offices, USGS, FEMA and more!
<https://www.usgs.gov/cvo/prepare>



Review the map in this handout to see if you are in a hazard zone.

READY

- Turn on Wireless Emergency Alerts (WEAs) on your phone (if you get Amber Alerts, your feature is on).
- Make a reunification plan to meet back up with loved ones if you get separated.
- Pack a "Go Bag" <https://www.ready.gov/kit>.
- Sign up for your local emergency text alerts.

Pierce County Alerts: Call 253-798-6595 or text "PCALERT" to 888-777

East Pierce County:
<https://www.epiceoc.com/pages/alerts>

King County: <https://www.kingcounty.gov/alert>

Thurston County: <https://www.tcalert.org>

SET

If the Volcano Alert Level rises above the typical **Normal** level, get set to evacuate, especially if the Alert Level increases to a **Watch** or **Warning**.

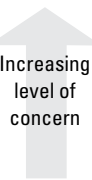
Volcano Alert Levels

Warning—Hazardous eruption imminent and/or underway

Watch—High unrest or minor eruption

Advisory—Elevated unrest above normal

Normal—Background, typical activity



GO



Act Immediately!

Be prepared to evacuate on foot, not by car. Roads can quickly become clogged during a sudden evacuation.

Move away from hazard zones and follow your emergency plans.



Aerial view of the May 18, 1980, eruption of Mount St. Helens as seen from the southwest. Columns of ash and volcanic gas reached heights of more than 15 miles (24 km) during the eruption.

Volcanic ash falls unpredictably depending on wind direction at the time of eruption. Ash most commonly blows eastward, but not always. Unlike wildfire ash, volcanic ash is dangerous because its tiny, sharp, rock and glass-like fragments can harm lungs, irritate eyes and skin, damage engines, and become heavy enough to collapse roofs.

During Volcanic Ashfall:

- Stay indoors with windows and doors closed.
- If you need to go outside, protect your lungs by wearing a mask (medical mask or N95).
- Bring pets inside and keep livestock inside, if possible.
- Avoid driving in heavy ash because of low visibility and to reduce damage to engines.
- Where possible, clear ash build up that is thicker than 4 inches (10 cm) from roofs to prevent collapse.

Get Help and Stay Informed:

Life/Safety Emergency: Call 9-1-1

Non-Emergency City Services (where available): Call 3-1-1

Emergency Travel Information: Call 5-1-1

FEMA Helpline: 1-800-621-3362 (4 a.m. to 9 p.m. PT)

Suicide and Crisis Lifeline: Call or text 9-8-8

Local TV stations: KOMO 4, KING 5, KIRO 7, FOX13

Radio stations: KIRO 97.3, KOMO 97.7

Thank you to our partners:



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MOUNT RAINIER VOLCANIC HAZARD INFORMATION



A distant view of Mount Rainier volcano over Puyallup Valley, near Orting, Washington.

U.S. Department of the Interior
 U.S. Geological Survey

GIP Brochure 265
 April 2026

Volcanic Eruptions at Mount Rainier

Eruptions at **Mount Rainier** produce **lava flows**, plumes of airborne **volcanic ash**, and avalanches of hot rock, ash, and gas—**pyroclastic flows**—that rush down the steep, ice-covered slopes of the volcano. Hot rock and ash ejected during an eruption can melt large quantities of snow and ice, forming huge, fast moving mudflows called lahars that travel 30+ miles, all the way to Puget Sound. Very large **lahars** can also form when weak and water-saturated rock high on the volcano collapses with or without volcanic activity.
Learn more inside!

Are You in a Hazard Zone?

Know your risk wherever you go:



Home



School



Work



Play

Ask your local safety officials, schools, park rangers, and workplaces about their eruption plans and evacuation routes.

USGS Alert Levels for Volcanic Unrest

The U.S. Geological Survey (USGS) provides updates about volcanic activity and alert level changes via email.

<https://volcanoes.usgs.gov/vns2>



If you get the alert – GO NOW!

- Listen to Officials 
- Grab your "Go Bag" 
- Do not return to the hazard area until officials say it's okay to do so 
- Stay informed (listen to radio, TV, and phone alerts)
- Remember, your location may be safe, but lahars may destroy roads and bridges that isolate your area

HOW TO USE THIS HAZARD MAP



Start by looking at the full map

It shows Mount Rainier and its volcanic hazard zones, with north at the top. Use the map legend to understand each zone—these match the hazard explanations listed on either side of the map.



Find and Circle the town closest to where you live

Circle it on the map.



Locate the nearest lahar hazard zone

Check whether your home, school, or regular travel routes fall inside any of the hazard zones.



Identify evacuation routes

Look for roads that lead out of the hazard zone and toward safe, high ground.



Add evacuation route to your emergency plan

Write down your safest route so you can act quickly during an emergency—internet and phones may not work.

LAHAR WARNING SIREN NETWORK

Lahars can form when weak and water-saturated rock high on the volcano collapses or as hot ash and lava mix with ice and snow during volcanic activity. Lahars can travel down valleys for many miles from Mount Rainier. An increase in the USGS Volcano Alert Level serves as a warning when a lahar is likely.

However—evidence shows that at least one past lahar at Mount Rainier began with no known eruption. A lahar without any volcanic activity to serve as a warning is known locally as **'no-notice'** lahar. Today, **'no-notice'** lahars are most likely to begin on the volcano's upper west side. Communities along the Carbon, Puyallup, and Nisqually Rivers are at risk of **'no-notice'** lahars and rely on outdoor warning sirens and other alerts to know when rapid evacuation is needed.

Scan the QR code to learn more about this unique lahar warning system



<https://www.piercecountywa.gov/5888/Outdoor-Warning-System>

Schools in East Pierce County practice lahar evacuation, do you?

<https://laharexercise.com>



MOUNT RAINIER VOLCANIC HAZARD MAP

IMPORTANT NOTE:

After an eruption, impacted areas can remain closed, inaccessible, or at risk for years.

Volcanic ash fallout is not shown on the map because ashfall depends on wind direction. See the back panel for information about ash fallout.

Hazard Zone Information

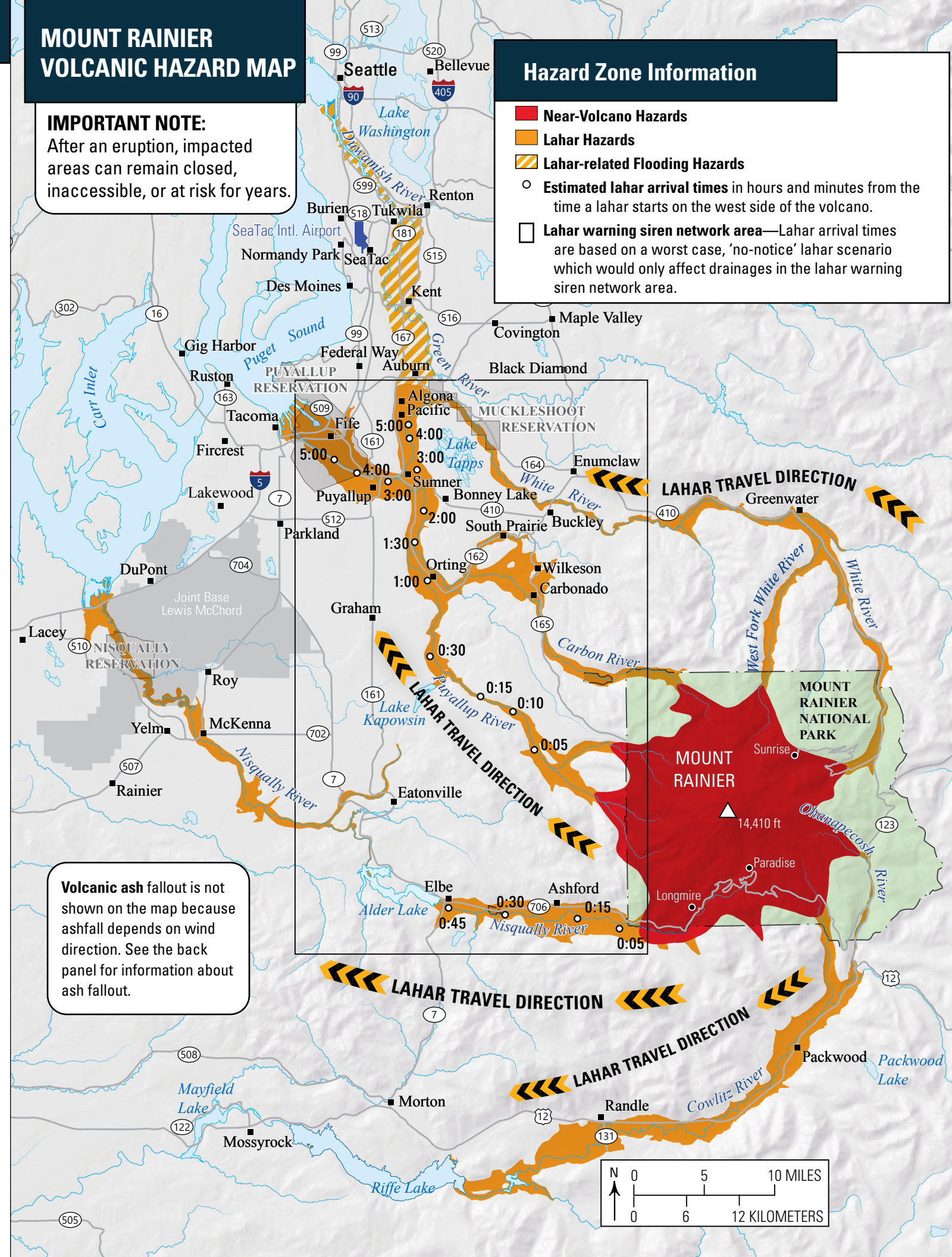
Near-Volcano Hazards

Lahar Hazards

Lahar-related Flooding Hazards

Estimated lahar arrival times in hours and minutes from the time a lahar starts on the west side of the volcano.

Lahar warning siren network area—Lahar arrival times are based on a worst case, 'no-notice' lahar scenario which would only affect drainages in the lahar warning siren network area.



UNDERSTANDING VOLCANIC HAZARDS

Volcanic hazards range from fast, destructive **near-volcano** hazards primarily occurring within Mount Rainier National Park, to **far-traveled** threats such as ashfall and lahars that can affect people miles away.

Near-Volcano Hazards

Avoid **Mount Rainier National Park** when the park is closed due to **near-volcano hazards**. Hazards like pyroclastic flows, debris avalanches, lava flows, and toxic gases can be deadly, even in areas that seem safe. Follow all closures and evacuation instructions to stay out of harm's way.

Lava Flows are molten rock that move downslope, burning or burying anything they cover and starting fires. At Mount Rainier, they are usually slow enough that people can move out of the way.

Pyroclastic Flows are fast-moving, extremely hot mixtures of gas, ash, and volcanic rock that race down volcano slopes at speeds up to hundreds of miles per hour, destroying nearly everything in their path.

Debris Avalanches are sudden, massive landslides of rock and soil from a volcano's flank and can occur without volcanic activity. Such avalanches can cause 'no-notice' lahars.

Lahar Hazards

Lahars are concrete-like mudflows that start on volcanoes and rush down valleys. If you spend time in a lahar zone, know the fastest route to high ground (at least 100 ft [30 m] above the valley floor). Evacuate immediately if you receive an alert or hear, see, or feel a lahar approaching. Avoid river channels during heavy rain or volcanic activity. Always have an evacuation plan and go-bag ready if you spend time in a lahar hazard zone.

Lahar-related Flooding Hazards

Lahars deposit significant amounts of mud, raising riverbeds and potentially causing streams to overflow during or long after a lahar. Such flooding can occur in all areas identified as lahar hazard and post-lahar flooding hazard zones. In low-lying areas, stay alert during heavy rain, monitor alerts, move to higher ground if necessary, protect important items, avoid driving through floodwater, and follow evacuation instructions. Flooding impacts can occur years or decades after a lahar.



Bridge destroyed by lahar in North Fork Toutle River during eruption of Mount St. Helens, May 18, 1980. Photograph by Richard Waitt, U.S. Geological Survey.