



To: Board of Directors
From: Steve Leighton, Fire Chief
Date: March 16, 2022
Subject: Draft “Achieving Effective Fire Restrictions Communication”

Background:

As requested by the Board at the regular meeting held on February 16, 2022, Dan Canfield, Sierra District Superintendent, California Department of Parks and Recreation, provided a copy of the draft “Achieving Effective Fire Restrictions Communication” that is being developed by the Tahoe Fire and Fuels Team (“TFFT”) for all agencies in the Basin to use to coordinate fire restrictions.

Attached for the Board’s review is the draft report. It is not a finalized document, and the draft plan is subject to change.

Recommendation:

This is for informational purposes only. No Board action is required.

Achieving Effective Fire Restrictions Communication



**LIVING
WITH FIRE
TAHOE**

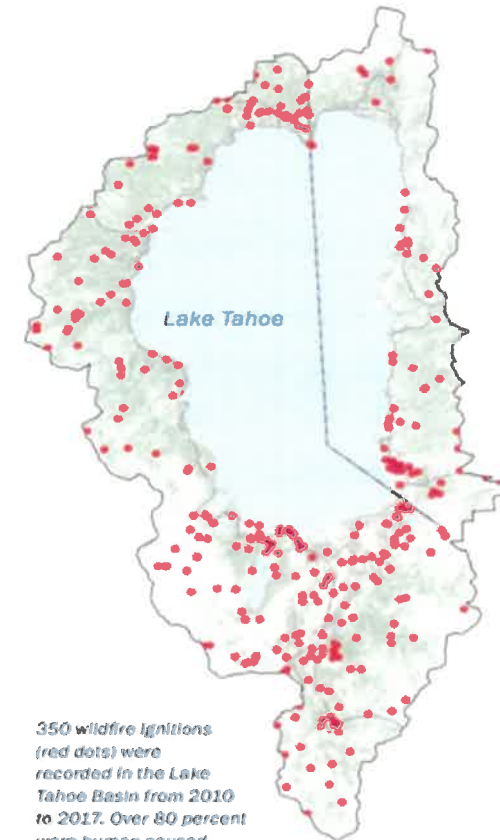


Seasonal Fire Restrictions

- Over 80% of wildfire ignitions in Tahoe are human caused*
- Seasonal fire restrictions are crucial in preventing wildfires within the Lake Tahoe Basin.

**Lake Tahoe Forest Action Plan*

LAKE TAHOE BASIN IGNITIONS 2010-2017



350 wildfire ignitions (red dots) were recorded in the Lake Tahoe Basin from 2010 to 2017. Over 80 percent were human caused.



Essential Fire Prevention Communication

The Fire Public Information Team (Fire PIT) communicates fire restrictions to:

- 40,000 residents*
- Up to 300,000 total population during peak days*
- 15 million visitors per year*

*Sustainable Recreation Committee | Tahoe Fund

**TRUCKEE-TAHOE AREA
WOOD AND CHARCOAL BANNED**

Hosted CA State Park campsites that permit wood and charcoal will ban them (not propane) during red flag weather.

OUTDOOR FIRE RESTRICTIONS BANNED

- Outdoor fires that burn anything other than gas
- BBQs that burn charcoal, wood, or lump charcoal
- Ceramic charcoal grills (i.e. Big Green Egg)
- Briquette fuel-based smokers
- Wood shavings added for flavor

ALLOWED


- Outdoor gas appliances
- Gas portable fire pits
- Gas BBQs
- Pellet burning devices
- Wood pellet fuel-based BBQs and smokers

The burning of any solid fuel, including pellet devices/BBQs, are never permitted at USFS beaches, general forest, or recreation sites in Lake Tahoe.



RED FLAG WEATHER = ALL FLAMES BANNED





BBQ with gas or you could ruin a lot more than dinner.











FIRE PREVENTION



Red Flag Warning for Today
→

Fire Danger Rating for Today
→

Most Fires are Preventable

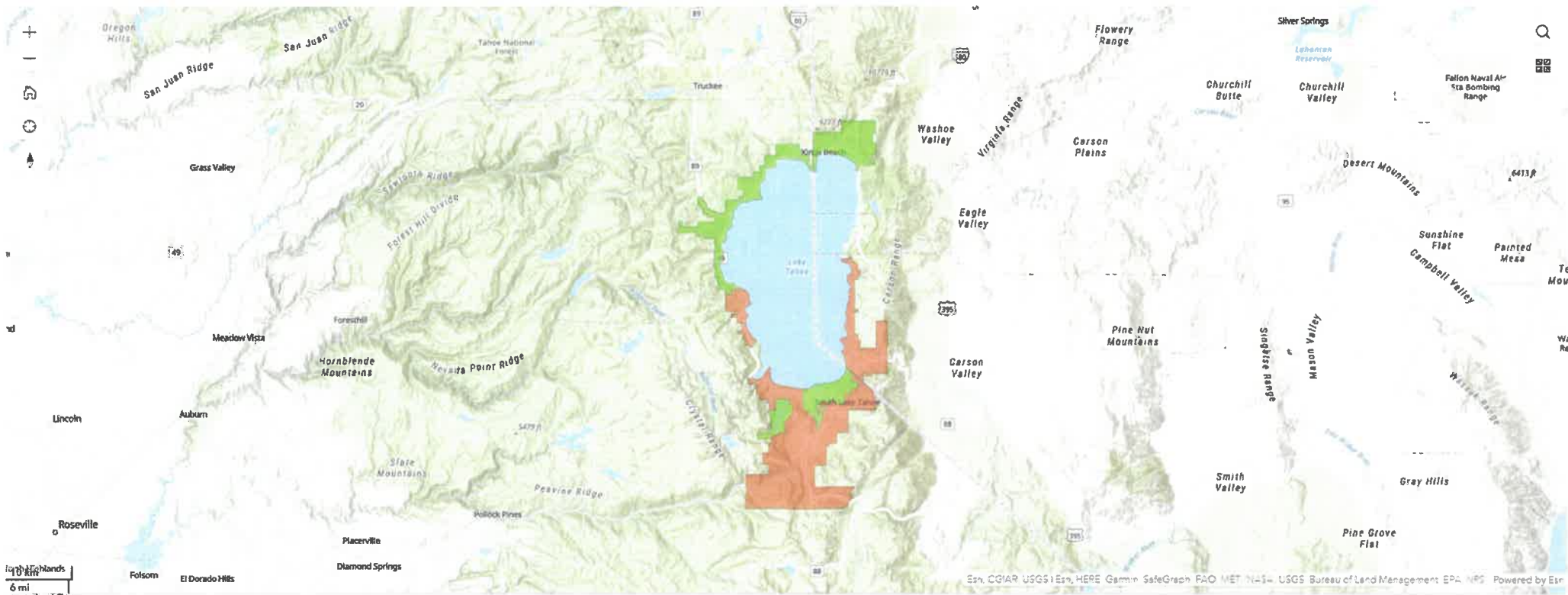
You come to Lake Tahoe to enjoy the great outdoors, which may involve a campfire. Stay safe by





Fire PIT Communication Challenges



Gas/LPG Outdoor Fireplace



Gas/LPG Outdoor Grill



Charcoal BBQ



Open Firepit Or Campfire



Properly Screened Woodburning Fireplace



Properly Screened Chimney



Smokers



Fire PIT Communication Challenges: *South Tahoe Now Public Comments*



Bruce [redacted] shared a link.



July 3 at 1:03 AM

I'm going to post this letter. We, the Tahoe basin need to let our Fire Chief's know that we are concerned. We have to have a unified front, a meeting of the minds between **ALL** Fire Chief's around the Lake Tahoe Basin as to what is allowed. We can't have charcoal BBQ's allowed in the City of SLT but not allowed in El Dorado County. We can't allow bonfires at Campgrounds By The Lake (across from Lakeview Commons) but not at an individual house or at the KOA Campgrounds in Meyers. Come on... we

COVID. We (as a community) feel that there should be more coherence between the fire agencies and regulations around the lake on both the NV and CA sides. Not only is it confusing to people visiting (which seems to be the majority of our population here) but it is truly mind blowing that we can have a burn ban for many places (including gas grills) and others are allowed to have wood bonfires just feet away from the places in which they are banned. The topography



August 2021: Effective Communication



Concise messaging at varying levels of restrictions when consistent:

- *“High Wildfire Danger: **No Fires in Tahoe**”*
- *“High Wildfire Danger: **No Wood Fires in Tahoe**”*
- *“High Wildfire Danger: in **No Wood or Charcoal Fires Tahoe**”*

DRAFT Lake Tahoe Basin Interagency Fire Restriction and Closure Guide

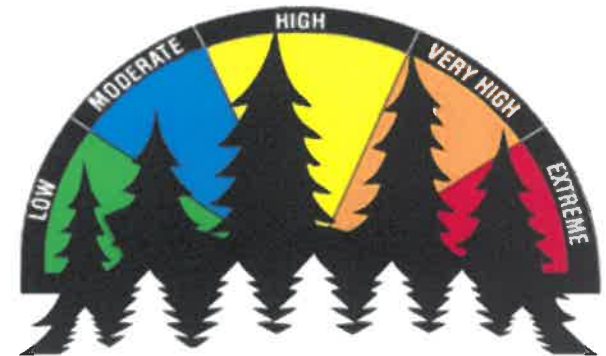


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- Derived from Southwest Interagency Fire Restrictions and Closure Operating Plan:
- Utilizes National Preparedness Level (1-5)
- Utilizes National Fire Danger Rating System (NFDRS)
 - Fuel moisture, relative humidity, energy release component, ignition component, burning index, spread component
- Based on social science

Southwest Interagency Fire Restrictions and Closure Operating Plan



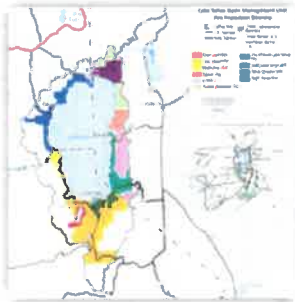
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DRAFT Lake Tahoe Basin Interagency Fire Restriction and Closure Guide

I. Introduction



This is a multi-jurisdictional guide outlining coordination efforts for fire restrictions and closures aligned with The National Cohesive Strategy, Lake Tahoe Basin Multi-jurisdictional Fuel Reduction and Wildfire Prevention Strategy and Community Wildfire Protection Plan. Wildfire has no boundaries therefore an interagency approach for initiating restrictions or closures helps provide consistency among the land management partners, while defining the fire restriction parameters so they are easily distinguishable to the public. Each fire restrictions division is encouraged to recruit any affected agency or landowner into fire restriction conversations whenever possible.

The intent is to facilitate interagency collaboration during the planning and implementation of fire restrictions, closures

and/or rescissions and provide consistent, coordinated fire restriction messaging to the public across jurisdictional boundaries. Additionally, provide direction for Lake Tahoe Basin agencies administrators, fire protection districts, fire staff and tribal nations to develop and implement fire restrictions and closures with cohesiveness and common language.

II. Signatures

All agencies signatory to the Tahoe Fire and Fuels Team within the Lake Tahoe Basin may be encumbered into the Lake Tahoe Basin Fire Restriction & Closure Guide. Unique signature page for this plan is not necessary. It is recommended that all agencies, fire protection districts, fire managers, fire restriction coordinators and tribal nations meet annually and review/revise this guide before each fire season. A lead fire restriction coordinator will be designated as the "Lake Tahoe Basin Fire Restriction Coordinator," and cohesively work with designated division fire restriction coordinators

III. Purpose

A. The Science: NATIONAL FIRE DANGER RATING (NFDRS)

The National Fire Danger Rating System (NFDRS) determines fire danger in a specific geographic area and based on this, managers may impose restrictions/closures, pre-position resources, and make fire management decisions. It sets the numbers that managers can use for limiting use, setting restrictions, and for fire planning. Fire behavior components are principle keys to fire danger rating: Fuel moisture, Relative humidity, Wind speed, Energy Release Component (ERC), Ignition Component (IC), Burning Index (BI), and Spread Component (SC) are key factors in determining Fire Danger.

- ERC: is based on the estimated potential available energy released per unit area in the flaming front, variations are caused by changes in fuel moisture contents, are derived from predictions of rate of heat release and defined as the potential available energy per square foot of flaming fire at the head of the fire and is expressed in British Thermal Units (BTU).
- IC: The ignition component is a number that relates to the probability that a fire will result if a firebrand is introduced into a fine fuel complex.
- BI: The burning index is a measure of predicted flame lengths for the representative fuel model for that day. The index number divided by 10 is the predicted flame length.
- SC: The spread component integrates the effects of wind and slope with fuel bed and fuel particles to compute the forward rate of spread at the head of the fire. Output is unit of feet per minute.
- Physical and Social Science influencing factors include and are not limited to the following: increased wildfire ignitions in geographic area, high risk periods (weather/holidays/events), seasonal influx of tourism, critical fuel conditions, drought, available resources, and staffing levels.

NFDRS is an important factor in the planning process for effective placement of Fire Danger Rating Signs and Fire Prevention signs which display seasonal messages. As Fire Danger Ratings and seasonal messages change, these two separate messages must be communicated effectively to our forest customers congruently. We have varying ways to notify our customers including: Media Press Releases, telephone hotlines, issuance of permits and exemptions, placing notifications at public locations (trailheads, community bulletin boards etc.) and in the absence of patrols, fire prevention signs strategically placed can be effective.



B. Fire Ban/Restrictions

Fire bans/restrictions are measures taken to reduce the risk of human-caused wildfire ignitions during unusually high fire danger and/or burning conditions, and when other prevention efforts have been exhausted. Fire restrictions impose many limitations on the general public and private landowners and should be implemented only as a portion of an ambitious and successful prevention program. They are primarily driven by a combination of the current NFDRS, indices, high occurrence of human-caused wildfires and fire causes, current and predicted weather, fuel moisture, current and predicted wildfire situations, and availability of resources to respond to any new fires. Forest personnel are faced with the possibility of having to develop, advise, implement, and/or coordinate fire and public use restrictions when these conditions merit.

Fire restrictions or closures call for altering, curtailment, and/or ceasing of normal activities on public lands. They should only be initiated when conditions warrant and be removed when conditions allow. Restrictions and closures should be activated after all other prevention efforts have failed, large fires are burning, or if extreme fire danger is predicted to continue. We must be able to communicate to our internal and external audience when fire restrictions are in effect.



IV. PROCESS FOR IMPLEMENTING FIRE RESTRICTIONS

Fire Restrictions

1. Preseason Planning

Prior to fire season annually, agency administrators, fire protection districts, fire managers, law enforcement personnel, public information personnel and tribal chairs will review and validate the restriction and closure plan and applicable documents. All press releases, description of stages, and other necessary agency documents should be available in template format before the start of the fire season. Coordination meetings with appropriate partners and collaborators should be established in advance. All phases of restrictions or closures should include a public awareness campaign, keeping the media and public informed of the possibility or status of restrictions or closures; dissemination of this information shall be

facilitated by the Tahoe Fire & Fuels Team Fire Public Information Teams (TFFT FirePIT) and local agencies (Appendix 8).

2. Development

The progression from "no restrictions" to "restrictions" to "partial closure" to "full closure" is viewed as a continuum. As fire danger and/or fire preparedness level changes, the jurisdictional agency evaluates risks and compares those risks to the potential costs and benefits of imposing varying degrees of restrictions and/or closures.

As conditions within an area approach threshold level, it's imperative that interagency cooperators communicate their intentions to each other. Discussion and evaluation of this need internally also should involve fire management, respective agency administrator/tribal chairs, fire prevention officers, public information specialists, and law enforcement. When restrictions or a closure is determined necessary by an agency/fire protection district, this should be communicated to the designated Lake Tahoe Basin Restrictions Coordinator or Chair, who will initiate a discussion with The Tahoe Fire & Fuels Team IC (Appendix 9).

The Lake Tahoe Basin Restrictions Coordinator will notify agency/fire protection district restrictions coordinators. Together they may document restriction and closure decisions using the Lake Tahoe Basin Area Fire Restriction and Closure Form (refer to appendix 5). Each agency/fire protection district shall have a designee with authority to either implement or rescind fire restrictions for their respective agencies. It is recommended that each agency/tribal representative complete Section 2 of the checklist for their respective agency/tribe prior to each call or meeting. This will facilitate consistency among



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1. What is the predicted fire potential for the next several weeks?

- Is the 7 Day Significant Fire Outlook showing consistently "Very Dry Fuels (brown color) or more than one "High Risk," day (orange or red color) per week?

YES NO

- Is the Monthly Area Outlook showing "Above Normal," Significant Fire Potential (red color) over or near the unit(s) under consideration?

YES NO

<https://gacc.nifc.gov/oncc/outlooks.php>

2. Is there an increase in number of fire starts within the Zone?

of Human Starts [H]: _____ Major Cause Category: _____

of Natural Starts [N]: _____

3. What is the daily fire occurrence situation?

- Are there multiple starts?
- Are fire occurrences and associated control problems increasing or decreasing?

YES NO

Increasing Decreasing

4. Are adequate fire resources available by Agency/Zone?

YES NO

If no, list resources:

National Preparedness Level: _____

5. Is supplemental fire funded resources or funds requested and/or approved for local/zone agencies?

YES NO

6. Is an increase/decrease in recreational visitor days, i.e., holidays and special events expected?

YES NO

If yes, example:

7. Are social, political, or economic impacts expected?

YES NO

If yes, example:

8. Are there preparations for the next phase, whether that would be a higher level of restrictions, closures or recessions of an order?

YES NO

If yes, explain:

Notes/Remarks:

9. Have the following individuals been contacted concerning area fire restrictions? YES NO

Agency Administrators: _____

Public Affairs/Public Information Officers: _____

Law Enforcement/Special Agents: _____

Fire Prevention Officers: _____

Adjoining Zone(s) Board Chairs:

Other: _____



Potential Permit System

- Depending on conditions, Districts could allow residents with a verified permit to burn charcoal, wood, etc.
- Could reduce public frustration and allow Districts to monitor who is burning



Thank you! Comments,
Suggestions, and Guidance?



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