



INCOMING RESOURCE BRIEFING GUIDE

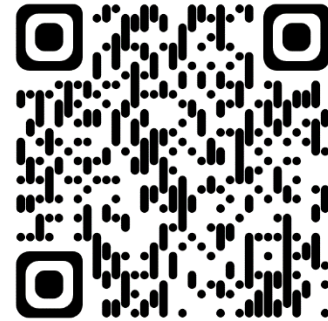
2024

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Introduction

Welcome to the Shasta-Trinity National Forests; we are thankful for your help!

Please take the time to read this guide and receive a thorough briefing before making your module available to Redding ECC for initial attack.

Mobilization Center

Unless specified on your Resource Order, you will check in at the SHF Mobilization Center (Mob Center). For 2024, the Mob Center address is 2370 Twin View Blvd, Redding, CA.

Steps to check in:

1. Notify Redding ECC (phone number on your resource order) and your home unit that you have arrived at the Mobilization Center safely and are about to check in.
2. Tell the Status/Check-In person at the front door that you are ready to get checked in. Give them a copy of your resource order. They will then direct you to the Ground Support Unit.
3. Get vehicles inspected by the mechanic. If they do not pass, we cannot proceed with checking you in.
4. After passing, go back to the Check-in person with your Inspection papers.
5. Check-in will have you complete an online check-in at <https://bit.ly/SHFCheckin>. This will also be the portal to which you will send all your times, manifests, contracts, etc.

At the Mob Center, mechanics will inspect your vehicles, the Finance section will post rosters and times into e-Isuite, and you will receive hard copies of this Briefing Package and a Forest Map (QR codes for digital maps are in Section 8—Maps).

Ensure you are well-briefed on local fuel conditions, weather, interface situations, fire behavior, etc., and always have current weather forecasts.

The Forest and local CALFIRE Units aggressively suppress fires, so don't be surprised at the pace of initial attacks, especially along the major highway corridors. Ensure you get a thorough briefing on the different tones used by the SHF and CALFIRE.

Good legal descriptions and fire size-ups are essential if we assign you as an Initial Attack IC. Relay this information through dispatch; they or the Forest Duty Officer (FDO) will, in turn, give you further instructions regarding management direction for the fire. The local unit's initial briefing will provide more direction. The letter of Delegation of Authority for Federal incident commanders can be found in the Appendices Folder at <https://bit.ly/3XJekPK>.

Please remember that you represent your agency and the local unit to which you are assigned. The public will not make any distinction. The locals will remember positive or negative experiences with you, and the local agency will have to live with that for the long term. Your role in maintaining good interactions with the local community is crucial and highly valued.

Upon arrival and departure, mechanics and Agency Fleet personnel will thoroughly inspect your vehicles, engines, etc. Except for cases of driver error, any damage due to your assignment here will be paid for by the fire, severity, etc. and not the home unit. You will also be able to restock engines, etc. after fires, either from local caches or fire orders, ensuring your equipment is always ready for the next operation.

If you are not receiving the information or services described above or do not understand something, please let us know. Your questions and feedback are crucial for our preparedness. Make sure you get any questions answered, services needed, weather or fire info, etc. before you leave for your assignment. Anticipate future needs ahead of time so we can take care of them, empowering you to handle any situation effectively.

About the Shasta-Trinity National Forest

The Shasta–Trinity National Forest is the largest National Forest in California, at 2.2 million acres, and it covers parts of Trinity, Shasta, Siskiyou, Tehama, Modoc, and Humboldt counties. Redding is the largest city near the Forest, with a population of 91,794 in 2017, and it is also the location of the Forest Headquarters. From its southern border along Interstate 5, the Shasta-Trinity National Forest is 160 miles north of Sacramento, California, and 60 miles from the Oregon State border to the north. It encompasses five designated wilderness areas (Castle Crags, Chanchellulla, Mount Shasta, Trinity Alps, and Yolla Bolly-Middle Eel), hundreds of mountain lakes, and over 6,278 miles of streams and rivers. Major features include:

- Shasta Lake (the largest human-made lake in California with 365 miles of shoreline).
- Mount Shasta at an elevation of 14,179 feet.
- A 154-mile section of the Pacific Crest Trail.

Fire Organization

The Shasta-Trinity National Forest (SHF) fire personnel are part of a much larger group of agency cooperators which combine and share resources to accomplish the fire suppression and management objectives on Forest Service and private lands. This group consists of State (CALFIRE), Local Government, Park Service, Bureau of Land Management, Fish and Wildlife, Bureau of Indian Affairs, as well as multiple volunteer districts.

There are three main protection agencies with wildland fire responsibility. They include Federal, State, and Local Government. These geographic areas are identified as Direct Protection Areas.

<https://gacc.nifc.gov/oscc/cwccg/gis.php>.

The Forest is organized as four Management Units and Seven Battalions:

- South Fork Management Unit (SFMU)
 - Battalion 1 – Yolla Bolla District
 - Battalion 2 – Hayfork District
- Trinity River Management Unit (TRMU)
 - Battalion 3 – Big Bar District
 - Battalion 4 – Weaverville District
- Shasta Lake Management Unit (SLMU)
 - Battalion 5 – Shasta Lake District
- Shasta-McCloud Management Unit (SMMU)
 - Battalion 6 – Mt. Shasta District
 - Battalion 7 – McCloud District

Each management unit has a Division Chief, and each Battalion has at least one Suppression Battalion Chief. Fire resources include 20 engines, two hand crews, two dozers, three water tenders, nine prevention/patrol units, one helicopter, and six lookouts.

The following briefing guide has more in-depth information that should be reviewed. If you have any questions or concerns, please contact the District Fire Management Officer (DFMO) on the unit you are assigned.

Battalion-specific supplements to this guide can be found in the [“5 – Appendices”](#) folder.

Section 1 – Communications and Radios

Please make sure to remember the following information:

The initial briefing will cover communications and radio frequencies. If you are unsure about which frequencies to use, how to contact Redding Dispatch (RICC), repeater locations, or anything else, do not hesitate to ask questions.

The SHF's radio plan is divided into groups, with each District having its own set of frequencies. During your incoming briefing, you will be briefed on at least two groups: Group 1 (the most common Forest Frequencies) and the Group of the District that you are being assigned to (for example, if you are assigned to Shasta Lake, you would need to have Group 5 information).

Different counties and local fire departments have different frequencies. Your host unit will inform you about the required frequencies and what they are. It is important to remember that CALFIRE uses Tone 16 for all its Tactical and Air-to-Ground frequencies, and CALCORD must be used with Tone 6.

A general Forest frequency group and a map of the NF areas with repeaters can be found on the following two pages. A complete radio guide for the Forest is available at <https://bit.ly/3JMLRmp>. Ensure you have a copy of the radio guide and are briefed on frequencies and groups corresponding to the area where you will be working.

Radio discipline is not only important; it is critical. In Type-3, extended attack, or fires transitioning to a Type-1 or Type-2 incident, it becomes even more crucial. Each Division, Group, etc. should be on separate frequencies as soon as possible. There are several tactical channels that can be requested through Dispatch. The regular Forest frequency will be used as the Command Net during the initial stages of the fire. Adhering to these protocols is what makes our operations effective and safe.

Cell phone coverage is poor in many places in the Forest. If there is no radio or cell phone coverage at your fire location, human repeaters are necessary.

Remember, communications must be established before engaging the fire.

Link to Shasta-Trinity Frequencies and Repeater Maps:



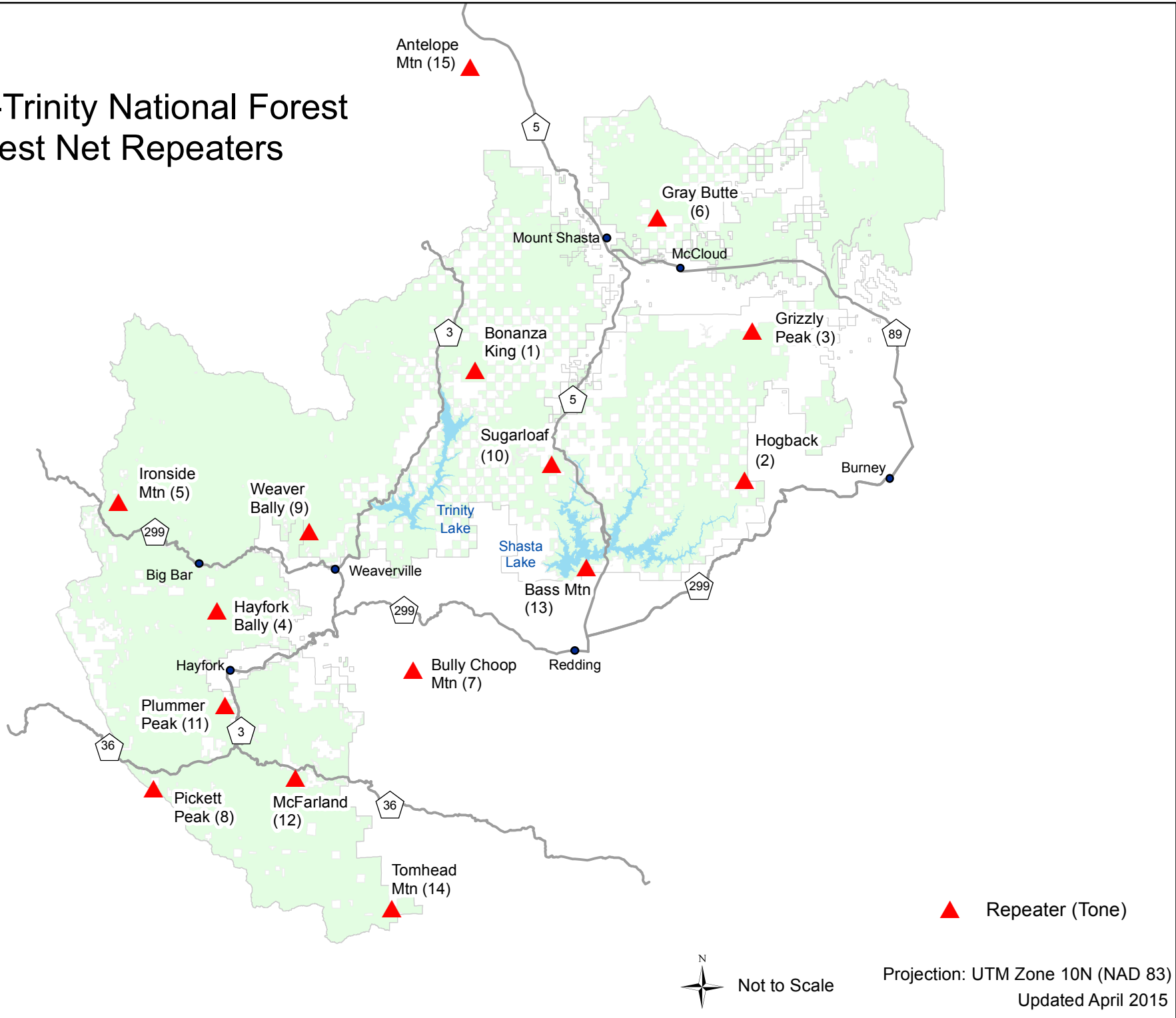
Shasta-Trinity NF Group 1 Radio Frequencies

CH	Alpha ID	Use	Receive	Transmit	Tone(s)	Group(s)	Band-Width
1	SHF-DIR	Shasta-Trinity NF -Direct	171.5750	171.5750		1,13	N
2	SHF-R	Shasta-Trinity NF- Repeater	171.5750	165.0125	1-16	1-4,6,7,13	N
3	SFMU	South Fork Mgt. Unit Net	167.2250	167.2250	7	1,2	N
4	TRMU	Trinity River Mgt. Unit Net	168.9625	168.9625	7	1,3	N
5	SMMU	Shasta McCloud Mgt. Unit Net	166.9875	166.9875	7	1,6,7	N
6	SLMU	Shasta Lake District Net	167.7250	167.7250	7	1,4	N
7	SERV-D	Shasta-Trinity NF Service Net DIR.	171.5000	171.5000		1,13	N
8	SERV-R	Shasta-Trinity NF Service Net Rpt.	171.5000	164.8250	1,4,6,12	1-4,6	N
9	R5 TAC4	R5 Tactical 4	166.5500	166.5500		1-4,6,8-11	N
10	R5 TAC5	R5 Tactical 5	167.1125	167.1125		1-4, 6,8,9,11	N
11	R5 TAC6	R5 Tactical 6	168.2375	168.2375		1-4,6,8-11	N
12	R5 TAC7	R5 Tactical 7	167.9625	167.9625		1-4,6,8-11	N
13	CALCORD	CALCORD - TAC	156.0750	156.0750	6	1-7	N
14	R5 AG08	Air to Ground, CA, North Secondary	166.8750	166.8750		1-6,8-11	N
15	R5 AG43	Air to Ground, CA, North Primary	167.6000	167.6000		1-6,8-11	N
16	AIRGUARD	AIRGUARD	168.6250	168.6250	1	1	N

Shasta-Trinity NF Tones

Tone	CTCSS	Repeater Name
1	110.9	Bonanza King
2	123.0	Hogback
3	131.8	Grizzly Peak
4	136.5	Hayfork Bally
5	146.2	Ironsides
6	156.7	Grey Butte
7	167.9	Bully Choop
8	103.5	Pickett Peak
9	100.0	Oregon
10	107.2	Sugarloaf
11	114.8	Plummer Peak
12	127.3	McFarland
13	141.3	Bass Mtn
14	151.4	Tomhead Mtn
15	162.2	Antelope
16	192.8	Used for CALFIRE TAC & A/G

Shasta-Trinity National Forest Forest Net Repeaters



▲ Repeater (Tone)



Not to Scale

Projection: UTM Zone 10N (NAD 83)

Updated April 2015

Section 2 – Forest Fire Organization

Headquarters

Rachel Birke	Forest Supervisor	
Kari Otto	Deputy Forest Supervisor	
Todd Mack	Forest Chief	CH-1
Alex McBath	Deputy Chief - Operations	CH-2
Pat Bell	Deputy Chief- Fuels (detail)	CH-3
Ira Graves	Zone Aviation Officer	CH-4
Cole Wallace	Forest Aviation Officer	DIV-9
Richie Reposa	Workforce Development	DIV-81
	Fire Ecologist	DIV-82
Steve Clark	Fire Planner	DIV-83
Natalie Maynard	Training Officer	BC-81
Ben Sundal	Forest Safety Officer	SOF-1
Ryan Reginato	Safety Specialist	SOF-2
Sheila Linden	Fire Admin Clerk	

Dispatch

Jason Colby	ECC Center Manager	DIV-8
Joni Olson	ECC Battalion Chief	BC-84
Thomas Buckner	ECC Battalion Chief	BC-85
Shay Farmer	Dispatcher	Capt-86
Erik Feyling	Dispatcher	Capt-89

Air Attack Base

Kelly Mathis	Air Tanker Base Manager	BC-91
Justin Jeude	Asst Air Tanker Base Manager	

Superintendents

Josh Wilson	Trinity Helitack Superintendent	Supt-506
Tristan Dias	Trinity IHC Superintendent	Supt-11
Joe Bogdan	Shasta Lake Crew 5 Superintendent	Supt-5

South Fork Management Unit

Tara Jones	SFMU/TRMU Ranger	Ranger-4
Ben Sundal	Deputy R	DIV-2
Randy Jennings	Division Chief	DIV-2
Mike Anderson	Battalion Chief – Yolla Bolla	BC-11
Jason O'Bannon	Battalion Chief – Hayfork	BC-21
Keith Rohrs	Fuels Officer	Fuels-21
Janice Brown	Fire Admin Clerk	

Trinity River Management Unit

Glen Tingley	Division Chief	DIV-3
Josh Wright	Battalion Chief	BC-31
Cheveyo Munk	Battalion Chief	BC-41
	Battalion Chief – Fuels	BC-42

Shasta Lake National Recreation Area

Sara Acridge	SLMU Ranger	Ranger-5
Tim Ritchey	Division Chief (detail)	DIV-5
Brandon Dethlefs	Fuels Planner	DIV-51
Robert Holt	Battalion Chief	BC-51
Justin Regelin	Battalion Chief – Fuels	BC-52
Andrea Shuster	Fire Admin Clerk	

Shasta-McCloud Management Unit

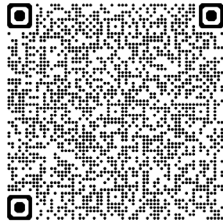
Joseph Rodarme	SMMU Ranger	Ranger-6
Anna Wright	Division Chief (detail)	DIV-7
Drew Graham	Battalion Chief – Mt Shasta	BC-61
Josiah Obst	Battalion Chief – McCloud	BC-71
Hanne Meyers	Battalion Chief - Fuels	BC-72
Dave Wolfe	Fire Admin Clerk	

Section 3 – Duty Officer and Dispatch Contact Info

The Mobilization Center Manager will provide you with the appropriate Duty Officer contact information.

There is a companion contact list document “[SHF Duty Officer Contact List \(Password Protected\)](#)” located in the “[1 – Briefing guide for Incoming Resources](#)” folder that is password protected. The Mobilization Center Manager can provide you with the password.

QR Code for Contact List:



Section 4 – Fire Behavior & Weather / Terrain / Fuels

Shasta-Trinity NF Fire Behavior Summary

The Shasta-Trinity National Forest encompasses a highly variable landscape ranging from the low foothills of the northern Sacramento Valley at 1,000 ft elevation to alpine areas of the Southern Cascades on the slopes of Mt. Shasta, at an elevation of 14,179 feet. This wide variation in elevation brings with it a diversity of fuel types and weather patterns. As a result, it is very important for firefighters to understand where they are on the forest to understand factors that influence local fire behavior.

Given the wide variations in weather, fuels, topography, and ignition sources across the forest, there are still consistent factors that apply across the entire landscape.

Forest-Wide Fire Behavior Factors

Weather

a. Weather Summary

The Shasta-Trinity NF has a mediterranean climate, with cool wet winters and hot dry summers, with most precipitation falling from November through March. Precipitation drops off quickly April through June, with late spring and summer precipitation typically coming only from thunderstorms. The very hot and dry summer weather of the mediterranean climate results in a peak fire season that runs from July through September in a typical year.

b. Weather Service Office and Forecast Zone

The Forest is covered by three National Weather Service forecast offices – Medford, Eureka, and Sacramento. Refer to your specific area summary for information on forecast zone and NWS office. Weather forecasts are read on Forest net via radio briefing twice daily during periods of active fire potential.

c. Remote Automated Weather Stations (RAWS)

There are 14 RAWs stations managed by the Shasta-Trinity NF. Numerous additional stations are located nearby and are managed by other land management agencies or Forest Service units. Refer to FDRA summaries for RAWS specific to each unit.

d. Weather Watchouts

Each area of the forest has specific weather scenarios that can influence fire behavior. However, there are patterns to watch out for across the forest:

- North wind events are common from late summer/early fall through the winter. These are typically dry, offshore North to East winds that bring very poor overnight recoveries and strong gusty winds.
- Poor overnight humidity recoveries are common during strong high-pressure ridges and result in rapid drying of fuels and increases in fire behavior. Strong thermal belts are also associated with high pressure ridges and often result in areas of very poor overnight humidity recovery and extended periods of fire activity. Forest-wide, if overnight recovery is below 60%, large fire growth potential is elevated.
- Outflow winds from summer thunderstorms are unpredictable and are common when either frontal or convective driven storms develop. Dry thunderstorms occur across the forest during the dry summer and fall months.
- Large river canyons are present in all FDRAs and present specific local challenges to fire management, see summary for the local area for specifics within each FDRA.

Fuels

a. Fuels Summary

Though fuel types are highly variable across the landscape, fuel moisture is an important driver of fire behavior across the forest. Generally, live fuel moistures in brush species below 100% is an indicator that fire activity may be elevated and brush species will be available to burn. Live fuel moistures in brush (specifically manzanita) below 80% are critical and rapid spread in brush fuels is likely. Even in timber fuels, the availability of the brush component is often a driver of fire growth across the forest.

b. Fuel Moisture Sites

Live fuel moistures are collected twice a month (1st and 15th) at 11 sites throughout the forest to assist in understanding current moisture levels and seasonal trends in fuel moisture. Refer to specific FDRA summary for information on fuel moisture sites relevant to a particular area of the forest. Fuel moisture information is loaded twice monthly to the national fuel moisture database (<http://www.wfas.net/index.php/national-fuel-moisture-database-moisture-drought-103>).

Topography

Topography across the forest is highly variable, with the steep, dissected terrain of the Klamath Mountains dominating the western portions of the forest, foothill and river canyons dominating the areas bordering the Sacramento Valley, and tall peaks / individual mountains and volcanic flats typical of the southern Cascades dominating the northeastern portion of the Forest. See individual FDRA summaries for more details.

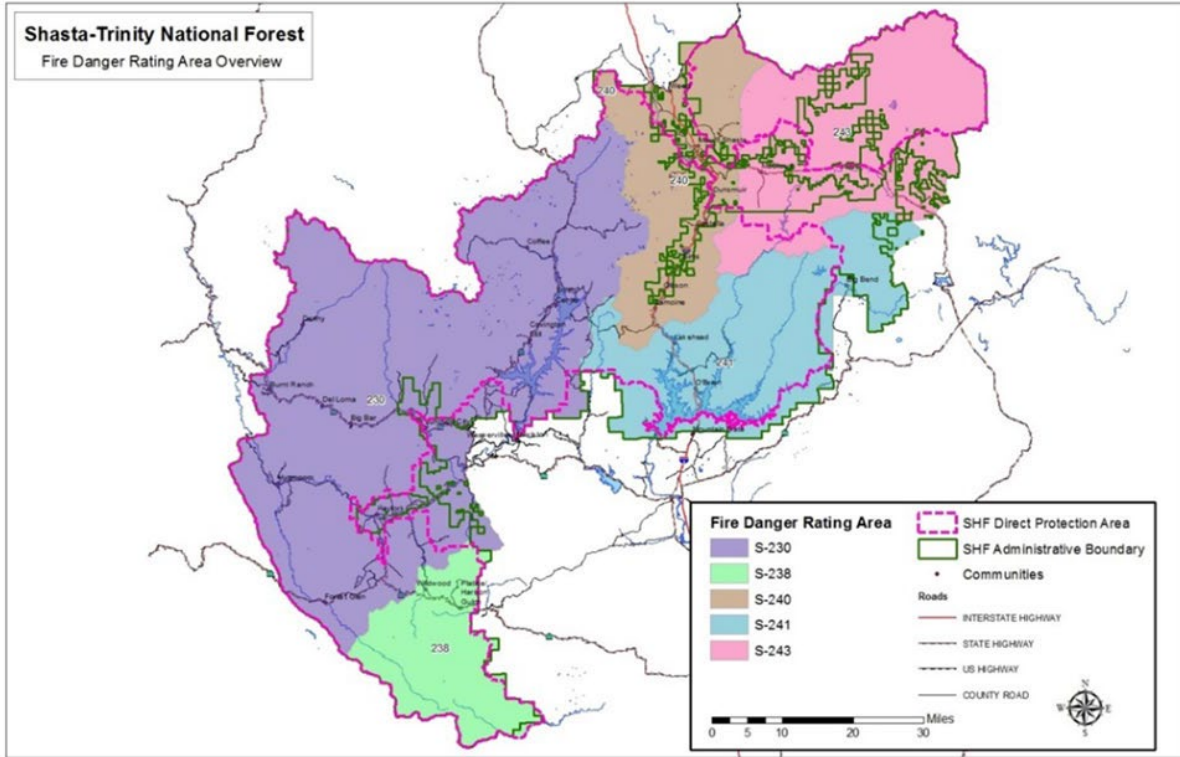
Ignition Sources

The entire forest has high potential for summer dry lightning events, with all areas of the forest having historically been impacted by lightning fires. Human ignitions are strongly associated with highway corridors, areas of high-density recreation, and high use areas.

Fire Danger Rating Areas

The forest is broken into 5 Fire Danger Rating Areas (FDRAs), each representing areas of generally similar fuels, topography, and weather. The table and map on the following page illustrate the location of these FDRAs

FDRA Boundaries on the SHF



Fire Danger Rating Area	District / Location	Acreage	% of Forest
FDRA S-230	Weaverville, Big Bar, & Hayfork	1,379,686	45%
FDRA S-238	Yolla Bolla / Platina	242,414	8%
FDRA S-241	Shasta Lake	382,570	13%
FDRA S-240	Mt. Shasta / Weed / Dunsmuir	493,560	16%
FDRA S-243	McCloud	548,212	18%

Pocket Cards

The Shasta-Trinity NF also has Pocket Cards that can assist firefighters in understanding local fire behavior thresholds and watch outs. There are 3 Pocket Cards for the forest, each covering one or more of the Forest's FDRAs:

1. SHF West - FDRA S-230 and S-238 (Trinity River Management Unit & South Fork Management Unit)
2. SHF Shasta Lake, which covers FDRA S-241 (Shasta Lake Ranger District)
3. SHF Northeast, which covers FDRA S-240 and S-243 (Shasta-McCloud Management Unit)

SHF West - FDRA S-230 and S-238
Trinity River Management Unit & South Fork Management Unit



<https://bit.ly/3Ny4ThA>

SHF Northeast – FDRA S-240 and S-243
Shasta – McCloud Management Unit



<https://bit.ly/3D1ztew>

SHF Shasta Lake – FDRA S-241
Shasta Lake Management Unit



<https://bit.ly/3pHSVdf>

The pocket cards can also be found in the 2023 SHF Briefing Guide Box root folder: [“4 – Pocket Cards”](#)

The next section will describe each FDRA's Pocket Card in detail.

FDRA S-230 Description – SHF West Side Pocket Card

1. **Weather**

- a. Weather Service Office and Forecast Zone: NWS Eureka, [FWZ 283](#)
- b. RAWS: From NE to SW, Scorpion, Trinity Camp, Five Cent, Backbone, Big Bar, Underwood, Hayfork & Friend Mountain.
- c. Weather Watchouts

Fire season is driven by the hot and dry summer weather typical of the Mediterranean Climate. Large fire growth in this FDRA is often fuels and topography driven, not needing a critical fire weather trigger other than an ignition source. Critical fire weather events in this FDRA are:

- Dry lightning events result in numerous fires that overwhelm initial attack capacity. Large growth may occur days to weeks after initial ignition.
- Diurnal canyon winds in the main stem of the Trinity River create potential for large fire growth. These winds are influenced by the thermal low in the Sacramento Valley and the intrusion of cooler air from the Pacific coast to the west. These winds are often not captured by local RAWS and not always predicted in local forecasts.
- Diurnal canyon winds flowing up and down the South Fork of the Trinity River can pull fire downhill towards the river from canyons perpendicular to the river.

2. **Fuels**

- a. Fuels Summary

Fuels at low elevations are dominated by pine and brush species. Vegetation transitions to mixed conifer at higher elevations and true fir and alpine meadow systems at the highest elevations of the Trinity Alps Wilderness. The lowest elevations near communities and along the major travel routes dry out ahead of the high elevations. Early season lightning fires in the low elevation will be more active than fires high up in the wilderness, but by late summer, fuels at all elevations are typically available for fire growth.

- b. Fuel Moisture Sites

In the northern portion of the FDRA, Rush Creek, Mule Creek and Big Bar are representative fuel moisture sites. In the southern portion, Ewing Reservoir, Hayfork Compound, and Friend Mt. are representative fuel moisture sites.

<http://www.wfas.net/index.php/national-fuel-moisture-database-moisture-drought-103>

3. **Topography**

The area is dominated by steep, rugged terrain dissected by numerous drainages and creeks. The Trinity River and South Fork of the Trinity River are the main drainages, with many large canyons and creeks feeding into them. Main canyons leading into the main stem of the Trinity River generally run North to South, but the terrain includes drainages running in almost every direction with many bends and changes in aspect. Elevation ranges from a low of 682 feet at the bottom of the river canyon to a high of 9,025 feet in the Trinity Alps Wilderness.

4. Ignition Sources

Fires in this FDRA are dominated by lightning, with large dry to mostly dry lightning storms resulting in several fires that rapidly overwhelm initial attack resources. The large, and generally inaccessible nature of the northern portion of the FDRA within the Trinity Alps Wilderness also presents fire control difficulties when fires start there during the typically hot, dry summer. 1987, 2008, and 2015 are years that exemplify the growth of fires that were given low priority because of remote location in comparison to other starts near values at risk.

In addition to lightning, the Hwy 299 corridor and its associated communities and infrastructure is a notable source of ignitions. State Highway 299 runs roughly through the middle of this FDRA and is also a wind corridor that can fuel growth of human starts along the highway. Such fires have come from vehicles as well as powerlines and other community related sources. Vehicle related fires include the Flat Fire in 2012 and Oregon fire in 2014. The Helena Fire, in 2017, is an example of a human caused fire driven by strong canyon winds the resulted in significant suppression effort and loss of property within this FDRA.

FDRA S-238 Description – SHF West Side Pocket Card

1. Weather

- a. Weather Service Office and Forecast Zone: West half, NWS Eureka, [FWZ 283](#), East Half NWS Sacramento [FWZ 263](#)
- b. RAWS: Yolla Bolla, Pattymocus, Arbuckle Basin
- c. Weather Watchouts

The western portion of the FDRA dominated by the South Fork of the Trinity River and the high mountains of the Yolla Bolla - Middle Eel Wilderness to the eastern half of the FDRA is influenced strongly by the north end of the Sacramento Valley.

- Strong down canyon winds can pull fires downhill towards the Sacramento Valley. These winds are enhanced when heating in the valley creates a thermal low and air flows down into the valley to replace the hot, rising air. Fires in the eastern ½ of this FDRA will move eastward, particularly in east-west drainages such as Begum Creek and Cottonwood Creek.
- Diurnal canyon winds flowing up and down the South Fork of the Trinity River can pull fire downhill towards the river from canyons perpendicular to the river.
- Like FDRA 230, dry lightning events are a common occurrence and can result in multiple starts that grow large because of fuels- and topography-driven fire growth.
- Offshore/north wind events impact the higher ridges of the FDRA and can also enhance downslope winds into the Sacramento Valley when valley winds are stronger than ridge winds.

2. Fuels

a. Fuels Summary

The vegetation in FDRA S-238 is similar to that of FDRA S-230 but trending towards the drier and brushier versions of the vegetation types due to the more southerly location resulting in slightly warmer temperatures, the narrowing of the coast range resulting in more foothill and valley influence from the Sacramento Valley to the east, and the overall lower elevation.

Mixed conifer forest is present across the majority of the FDRA, with denser and more continuous stands present in drainage bottoms and on north and east facing slope. The east side of the FDRA is much drier, resulting in more brush components. As you head south in the FDRA, brush transitions from the montane chaparral of FDRA S-230 to chamise dominated, low elevation chaparral. Throughout the FDRA, large areas of serpentine soil significantly alter the vegetation, resulting in sparse stands dominated by grey pine and stunted mixed conifer. Hardwoods are a major component of stands in the area, with live oak and black oak more prominent on arid or rocky slopes and Pacific Madrone present throughout.

b. Fuel Moisture Sites

Fuel Moisture samples are collected twice monthly at Yolla Bolla RAWS.

(<http://www.wfas.net/index.php/national-fuel-moisture-database-moisture-drought-103>)

3. Topography

Elevation in FDRA S-238 ranges from 1,590 ft. in canyon bottoms to 7,830 ft. in the highest parts of the wilderness areas. The FDRA is dominated by steep canyons and ridges, with the somewhat south to north oriented South Fork Trinity River forming the main drainage on the western end of the FDRA. In the central portion of the FDRA, higher peaks and broken terrain in the Yolla Bolla Middle Eel Wilderness continues north past the wilderness boundary, resulting in canyons oriented in a wide array of directions and aspects. The eastern side of the FDRA is dominated by east-west running canyons leading out to the foothills of the Sacramento Valley.

4. Ignition Sources

Lighting accounted for just over 75% of ignitions in this FDRA over the past 15 years. Human caused fires in this FDRA are driven by starts along CA State Highway 36 and clustered near the small rural communities in the area. Large fires are most often associated with lightning events that result in more starts than initial attack forces can secure or starts in locations that cannot be reached before they become established. The large fires of 2008, 2015 and 2020 are examples of fires that grew large when multiple starts overwhelmed initial attack resources.

FDRA S-240 Description – SHF Northeast Pocket Card

1. Weather

- a. Weather Service Office and Forecast Zone: Southern half - NWS Sacramento [FWZ 213](#), Northern half NWS Medford [FWZ 282](#)
- b. RAWS: North to South - Bolam, Weed Airport, Mt. Shasta, Sims
- c. Weather Watchouts

The southern 2/3 of the FDRA are dominated by the canyon winds that flow up and down the Sacramento River corridor. On the north end of the FDRA, strong down slope winds from Mt. Shasta can drive fires to north and northwest. As in the rest of the forest, dry lightning events can produce multiple starts.

2. Fuels

- a. Fuels Summary

Vegetation within the FDRA varies by elevation, with more mixed conifer-hardwood present in the lower locations along the Sacramento River, grading to true fir forests at higher elevation and finally true alpine vegetation above the tree line within the Mt Shasta Wilderness. The majority of the FDRA is mixed conifer or mixed conifer-hardwood, with many of the typical Klamath Mountain species (madrone, black oak, live oak, and montane chaparral) present in mid to low elevations. The eastern portions transition to more Cascade Mountain type vegetation, as this FDRA is a transition between the Klamath Mountains to the west and the southern end of the Cascade Mountains to the east.

- b. Fuel Moisture Sites

The Mount Shasta fuel moisture site is within this FDRA and is representative of the northern portions of the FDRA near Dunsmuir, Mt Shasta City and weed. The Sugarloaf site is more representative of the southern half of the FDRA.

<http://www.wfas.net/index.php/national-fuel-moisture-database-moisture-drought-103>

3. Topography

Ranging in elevation from 1,090 ft. near the entrance of the Sacramento River in Shasta Lake to 14,130 ft. near the summit of Mt Shasta, this FDRA has the widest range of elevations of any in this plan. The dominant geographic features in the FDRA are Mt. Shasta, the over 9,000 ft summit of Mt Eddy, immediately west of Mt Shasta and the Sacramento River Canyon. Along the river canyon, the FDRA stretches east and west to the summit of major ridges that define the drainages that flow into the Sacramento within the canyon.

4. Ignition Sources

The most important driver of fire activity in FDRA S-240 is the I-5 Corridor. Starts along the corridor come from vehicles on the interstate, activities associated with the railroad, powerlines that share the corridor and other ignitions associated with human activity in the small communities along I-5. The density of human activity along the I-5 corridor has also resulted in

some intentionally ignited fires along and near the interstate. Fire ignitions are also associated with the larger communities within the FDRA because of human activities. Because of the proximity of most ignitions to the interstate or community infrastructure, rapid response of initial attack resources is often highly successful, though there are examples that exceed initial attack. Notable examples are the Delta Fire in 2018 and Salt Fire in 2021. Lightning storms do happen in this FDRA but are far less of a contributor to starts than in other FDRAs.

The frequency of starts along the I-5 corridor and near the major communities, and the fact that they can occur at any time, regardless of weather and fire conditions, make human ignitions the largest concern in FDRA S-240. **Exercise Extreme caution when responding to fires on or along the I-5 corridor due to heavy traffic, high rate of speeds, and numerous blind corners.**

FDRA S-243 Description – SHF Northeast Pocket Card

1. **Weather**

- a. Weather Service Office and Forecast Zone: NWS Medford, [FWZ 282](#) and [FWZ 284](#)
- b. RAWS: Ash Creek and Round Mountain
- c. Weather Watchouts

The McCloud Flats are the major feature in this FDRA. This is the largest and highest elevation portion of the forest. This results in the shortest fire season of forest FDRAs, with later green up and typically earliest season ending events.

- Wind driven fires are typical on the flats, though high road density frequently aids initial attack.
- Outflows from thunderstorms have been the cause of erratic and dangerous fire activity on similar terrain on adjacent forests.

2. **Fuels**

- a. Fuels Summary

Vegetation in the area is characteristic of the southern Cascade Mountains, dominated by ponderosa pine and areas of chaparral at the lower elevations and mixed conifer dominated by true fir species at higher elevation. Large areas of lodgepole pine are present in the eastern portions of the FDRA. At lower elevations across the McCloud flats, pockets of aspen remain where past hydrologic flow allowed for them to outcompete conifers. Meadows and patches of black oak are also prevalent across the McCloud flats and throughout the low to mid elevations. Grazing and extensive logging have played a major role in the current vegetation of the area. The history of logging has resulted in large areas of plantations, many of which are nearly pure pine.

b. Fuel Moisture Sites

Fuel moisture collections take place at the McCloud SHF site as well as the McCloud CALFIRE site.

(<http://www.wfas.net/index.php/national-fuel-moisture-database-moisture-drought-103>)

3. **Topography**

This FDRA averages the highest elevation of the 5 FDRA's in this plan, ranging from 1,540 ft. at the lowest point in the McCloud River to 14,150 ft near the summit of Mt Shasta. The McCloud flats are a dominant but largely flat feature situated to the southeast of Mt Shasta and east of the community of McCloud. This feature is the largest largely flat feature on the Shasta-Trinity NF. East of the McCloud flats there are large lava flows that have minimal road access but also have limited vegetation. The southern portion of the FDRA follows the McCloud River, and south of Lake McCloud there is a substantial change from the McCloud Flats to much more topographic relief. Tall ridges parallel the relatively steep and incised McCloud River canyon and its tributaries, forming the boundary with FDRA S-240 to the west and S-241 to the south. The northern and north-eastern boundaries of the FDRA are dotted with the more isolated peaks typical of the Cascade mountains. A somewhat continuous series of peaks and ridges running roughly north-northwest from Mt Shasta forms the northern boundary of the FDRA as well as the northern border of the Shasta-Trinity NF.

4. **Ignition Sources**

Fires in FDRA S-243 are dominated by lightning ignitions. However, human caused fires do occur and result from timber production, vehicle traffic and recreation across the FDRA. Lightning events are common the summer months and are associated with convective mountain thunderstorms as well as low pressure systems that break down the upper-level ridge and bring in an unstable air mass. The gentle terrain and relatively high road density allow for rapid and successful initial attack across the majority of the FDRA much of the time, resulting in limited large fire history. The exception is the southern end of the FDRA near the lower McCloud River below Lake McCloud, where terrain is much steeper and more dissected. This southern portion of the FDRA has been impacted by recent large fires that burned into the FDRA from neighbouring FDRA S-241: the Bagley Fire in 2012 and the Hirz Fire in 2018.

FDRA S-241 Description – SHF Shasta Lake Pocket Card

1. **Weather**

- a. Weather Service Office and Forecast Zone: NWS Sacramento [FWZ 213](#)
- b. RAWS: Sugarloaf (SHF), Oak Mountain, Redding, Mule Mountain, & Whiskeytown HQ
- c. Weather Watchouts
 - Alignment of wind & slope contributes to large fire growth, particularly where canyons enhance wind flow, such as along I-5 / Sacramento River Canyon.
 - North to northeast winds in late summer and fall can be very strong and result in large fire growth. Local RAWS do not always capture these offshore winds. Potential for 24-hour staffing in this FDRA during strong offshore wind events.
 - This is the warmest and driest zone of the forest; fuels are available much earlier than other areas and the typical fire season in this area can last a month or more longer than higher elevation areas of the forest.

2. **Fuels**

a. Fuels Summary

Vegetation in this FDRA ranges from oak woodland in lower elevations at the southern end of the FDRA near Shasta Lake and the Pit River into mixed conifer-hardwood on drier slopes and aspects to true mixed conifer at the highest elevations and in the wetter creek drainages in the northern end of the FDRA. Gray pine and knob cone pine is prevalent throughout much of this FDRA, particularly at lower and mid elevations where precipitation is lower and average temperatures are warmer. Manzanita and ceanothus dominated hard chaparral are a major component of lower elevations throughout the FDRA, particularly on south and west aspects near Shasta Lake.

b. Fuel Moisture Sites

Sugarloaf and Lakeshore are the 2 active fuel moisture sites within this FDRA.

<http://www.wfas.net/index.php/national-fuel-moisture-database-moisture-drought-103>

3. **Topography**

Topography is dominated by Shasta Lake and the tributaries that flow into it. The elevation in the FDRA is 567 ft, south of Shasta Lake and outside of the watershed that feeds into the lake. The highest elevation in the FDRA is 6,240 ft, which occurs at the northern end of the FDRA near its border with FDRA S-243 and the McCloud ranger district. The main tributaries to Shasta Lake within the FDRA are, from east to west, the Pit River, Squaw Creek, and the McCloud River. All three run generally north to south, trending slightly from east to west. The three drainages, along with the upper Sacramento River, are separated by high ridges running parallel to the watercourses. The western and central portions of the FDRA are steep and dissected by the three tributaries mentioned and the many creeks that flow into them. In this area the FDRA resembles the topography and vegetation of the Klamath Mountains that border it to the west. The far eastern portion of the FDRA is flatter and more closely resembles the Cascade Mountains in character and vegetation.

4. Ignition Sources

Human ignitions are the major driver of fire activity in this FDRA. There are numerous sources of ignitions associated with the substantial recreation use associated with Shasta Lake, including recreation residences, private inholdings, campfires, and other ignitions around the lake from recreators and ignitions from human activities associated with the communities and access routes dotted around the lake.

Additionally, much like FDRA S-240, the I-5 corridor and associated railroad and utility infrastructure are responsible for a significant number of ignitions. Ignitions from the I-5 corridor are often readily accessible to initial attack forces, though large fires have occurred, such as the Coal (2012), Salt (2012), and Salt (2021). **Exercise Extreme caution when responding to fires on or along the I-5 corridor due to heavy traffic, high rate of speeds, and numerous blind corners.**

Lightning fires are also a concern in the area. The significance of lightning fires in this area is dependent upon the precipitation received with the lightning, with wetter storms resulting in higher initial attack success rates. The further north and east into the FDRA, the more significant the role lightning plays in ignitions. The systems that produce lightning in northern California can miss this FDRA in part or entirely, as the higher mountains that surround it to the west, north and east often generate more thunderstorm activity and lightning.

Section 5 – Fire Suppression

If you are not assigned to a specific district in its Lightning Plan, all fire assignments will be dispatched through Redding Dispatch. Make sure you have accurate location details and directions from the Dispatch. Redding Dispatch uses an automatic dispatch response system based on the location and the Dispatch Level.

It's important to remember that even if you are not an Incident Commander, your role is crucial. Contract or non-IC qualified resources can provide an "Initial Assessment" upon arriving at the scene or a good vantage point. When relaying information to Dispatch, call it an "Initial Assessment" and not a "Size-Up"; the Incident Commander will provide the "Size-Up."

The Initial Assessment should include:

- Confirmation or clarification of the fire's location
- Best ingress and parking/staging
- Description of the fire's size, smoke characteristics, and behavior
- Details about fuels, terrain, and weather
- Any special considerations, such as values at risk or powerlines in the area.

Please remember the following information:

If you are not the Incident Commander, do not cancel or augment the resources being sent to the fire. The Duty Officer will adjust the resources based on the Initial Assessment until the Incident Commander arrives on the scene.

If you are a contract resource or not qualified as an Incident Commander, do not accept the IC role if Dispatch assigns it to you. Instead, inform Dispatch that you are not an Incident Commander but can continue to be a point of contact for incoming Agency resources.

If you are qualified as an Incident Commander, utilize the first page of the "SHF Incident Organizer" to relay a "Size-Up" to Dispatch. If you do not have the SHF Incident Organizer, you may use the Size-Up Report on the inside cover of your IRPG, but remember to include the best ingress, parking, staging area, and updated latitude/longitude for incoming resources. Effective communication with Dispatch is essential for managing the incident.

No matter which checklist you choose, relay the Size-Up to Dispatch as soon as you assess the fire scene. Longer times are usually associated with larger fire sizes or greater complexity.

Think ahead! Develop tactics/plans based on fuel conditions, weather forecasts, and expected fire behavior. Use air resources early on when they are most effective. Use them to get into or locate the fire. Request an air attack to manage multiple air resources. Request supervisory resources that match the production resources. Remember, it's easier to turn back resources you don't need than not to have them when you do, especially under high-end conditions.

It's crucial to underline the need for early development of the ICS organization. Many resources from outside the area have expressed surprise at the fast pace at which some initial attack fires on the SHF can occur. By building your ICS organization early on, you can effectively manage fast-moving fires and prevent being quickly overwhelmed.

Section 6 – Hazards and Potential

Environmental Factors

We would like you to conduct tailgate safety briefings before engaging in suppression or project work. Please ensure your module members are aware of the following common hazards on the Shasta-Trinity NF, as well as any hazards specific to the local area you are working in:

- **Heat Exhaustion/Stress/Stroke**

Dehydration accompanied by continuous exercise will cause heat exhaustion. Please monitor personnel, especially those working at lower elevations and grasslands with high temperatures. 6 Minutes for Safety – “Heat Disorders”: <https://bit.ly/44ckWss>
6 Minutes for Safety – “Heat Stress”: <https://bit.ly/44gDEPC>
- **Dehydration**

Lack of humidity and high elevations cause dehydration, even at lower temperatures; please drink lots and lots of water. If you are thirsty, it’s too late!!
6 Minutes for Safety has a great write-up about the importance of hydration that you can utilize as a tailgate safety session with your module: <https://bit.ly/3pB0anu>
- **Insects**

Gnats, mosquitoes, yellowjackets, and ticks are common in this area. Take precautions by using repellents. Check for ticks regularly, especially if working in oak brush, sagebrush, or lower elevations. Lyme disease, though not common, has been reported here.
6 Minutes for Safety– “Bees and Wasps”: <https://bit.ly/3JNOu7F>
The Center for Disease Control (CDC) is a great source of information about tick identification, bite prevention, removal, and tick-borne diseases. In our work areas, the most common tick is the Western black-legged tick, which can carry Lyme Disease. The Brown dog, American dog, and Rocky Mountain wood ticks, all carriers of Rocky Mountain Spotted Fever, have also been found here, but they are not as common as the Western black-legged tick.
CDC – “Ticks”: <https://bit.ly/3JNcNCx>
- **Snags**

Snags are common in many locations, from insect/disease outbreaks to drought and large fires. Adjust tactics and line locations as appropriate. Ask local units about areas with known concentrations of snags. The folder “4- SHF Fire History Maps” can help identify areas where fire-caused snags will be likely: <https://bit.ly/3XGvcqs>
6 Minutes for Safety has multiple entries dedicated to hazard trees and felling safety: <https://bit.ly/3rIENXJ>
- **Snakes**

Common snakes, although relatively rare, can be found at most elevations. Rattlesnakes are typically found at around 7000 feet and below. Most rattlesnakes on the Forest are of the Northern Pacific Rattlesnake species; the Great Basin rattlesnake may occasionally be found in the far eastern part of the McCloud District. Both are venomous pit vipers but are not known for being aggressive unless threatened. It's essential to remember that these types of rattlesnakes prefer to be left alone, so the easiest way to avoid being bitten is to leave them alone and not provoke them.

Rattlesnakes are an important part of the Forest ecology, and your role in preserving their population is crucial. Please refrain from killing them unless it is your last option to avoid being bitten. Gopher

snakes and rattlesnakes look very similar, with the main visual difference being that the rattlesnake has a diamond-shaped head, wider bands, and a rattle. Many gopher snakes have been mistakenly killed due to misidentification.

For more information and photos of all the reptiles and amphibians in California, you can visit the excellent source at Californiaherps.com. You can find their Northern Pacific rattlesnake page at <https://bit.ly/3JMRjWu>.

▪ **Poison Oak**

Poison Oak is the primary cause of personnel seeking medical attention on the Shasta-Trinity. It can grow as both a shrub and a vine and is widespread throughout the mountains and valleys of California, but generally does not grow at elevations above 5,000 feet. If you are not completely confident that you and your crew know what poison oak looks like in all stages of the year, please ask local personnel to point out the plant to you. Below are some informative web pages regarding poison oak:



“Pacific Poison Oak” by National Park Service
<https://bit.ly/3O2n3bj>



“Poison Oak” by Shasta-Trinity NF
<https://bit.ly/3pw9MzT>

▪ **Naturally occurring asbestos**

Although the associated health hazards are completely understood, there is a potential for exposure to asbestos fibers in California's national forests due to naturally occurring asbestos. Activities such as natural processes and regular human activities can disturb rocks or soil containing asbestos, releasing asbestos fibers into the air. Activities that can cause dust include, but are not limited to:

- Driving over unpaved roads, trails, or soils.
- Recreational activities on unpaved roads, trails, or soils where dust may be generated, such as riding off-road vehicles, riding bicycles, running, or hiking.
- Digging or shoveling dirt.

The USFS has more information on naturally occurring asbestos at <https://bit.ly/3zh1T8i>. There, find the Shasta-Trinity Map and the [Visitor Information Sheet](#).

▪ **Marijuana Grows**

If you come across a cannabis grow site, do not enter the area. Quietly leave the same way you came in. You are being watched!

Don't:

- Look around or explore.
- Take a sample.
- Take a GPS location while you are in the grow site.
- Use your camera, radio, or cell phone while you are in the grow site.

Do:

- Return to your vehicle and leave as soon as possible.
- Call Dispatch via phone (530) 226-2400 and report your location when you are a safe distance away and sure you are not being watched.

Visit [Illegal Cannabis Cultivation on California National Forests](#) for more information.

Section 7 – Directions to Stations

Below are locations of the common stations on the SHF. If you have the Google Maps app loaded, these QR Codes will give you driving directions from your location.

Use your camera to scan these QR Codes- don't use a dedicated QR reader app.

Redding

SHF Headquarters



North Ops (NCSC)



Air Tanker Base



South Fork Management Unit (SFMU)

Harrison Gulch
(E-311, E-312, E-313, WT-16,
Trinity IHC)



Forest Glen



Hayfork
(E-321, E-322)



Trinity River Management Unit (TRMU)

Weaverville District Office
(E-343, WT-246)



Mule Creek
(E-341)



Coffee Creek



Junction City
(E-332)



Big Bar
(E-331)



Burnt Ranch
(E-334)



Shasta Lake National Recreation Area (NRA)

Shasta Lake District Office
(E-352, E-353)



Big Bend
(Cover Station with CALFIRE)



Lakeshore
(E-351, Shasta Lake Crew-5)



Shasta-McCloud Management Unit (SMMU)

Sims
(E-363)



Mount Shasta District Office
(E-361, E-362, WT-66)



McCloud District Office
(E-371)



Ash Creek
(E-372, E-373)



There is also an online Google map of all SHF CAD points, Station locations, Repeater locations, etc. at:



<https://bit.ly/43lcGoX>

Section 8 – Maps

Use the QR Code reader function in Avenza. The QR icon is in the upper-right corner of the Import Map section. We recommend putting each category of map into collections, so Avenza smoothly transitions from one map to the other.

If you are having problems downloading the maps, ask the Mobilization Center Manager if they can AirDrop them to you.

Hard copy SHF Forest Visitor maps are available at the Mobilization Center. We ask that non-local Federal resources return the hardcopy maps to the Mobilization Center during demobilization.

Map Descriptions:

- Visitor Maps are the same as the hardcopy Forest maps available to the public. They are good for large-scale orientation. Minor spur roads are often not labeled on Visitor maps.
- Transportation Maps are similar to the Visitor Maps but are in a smaller scale and contain much more detail than the Visitor Maps. Most spur roads are labeled on the transportation maps, but in small print.
- Motor Vehicle Use Maps (MVUM) are simple greyscale maps that are excellent for finding spur road names. They also differentiate between Forest Service and Non-FS property. Because of the lack of detail, they should not be used for strategic planning, but are excellent for orientation.

SHF Visitor Maps

SHF Visitor Map - East



<https://bit.ly/44b2sIM>

SHF Visitor Map - West



<https://bit.ly/44w9FTy>

SHF Transportation Maps

Yolla Bolla (Battalion 1) Transportation Map



<https://bit.ly/3JFBvEQ>

Hayfork (Battalion 2) Transportation Map



<https://bit.ly/44wcXpN>

Big Bar (Battalion 3) Transportation Map



<https://bit.ly/3XFIHrM>

Weaverville (Battalion 4) Transportation Map - North



<https://bit.ly/3r3h8uT>

Weaverville (Battalion 4) Transportation Map - South



<https://bit.ly/3OOPEiN>

Shasta Lake (Battalion 5) Transportation Map - North



<https://bit.ly/3NDldxz>

Shasta Lake (Battalion 5) Transportation Map - South



<https://bit.ly/435mZxj>

SMMU (Battalion 6 & 7) Combined Transportation Map



<https://bit.ly/3r5BqE2>

Mt Shasta (Battalion 6) Transportation Map - North



<https://bit.ly/43cLmsG>

Mt Shasta (Battalion 6) Transportation Map - South



<https://bit.ly/449PjQa>

McCloud (Battalion 7) Transportation Map - North



<https://bit.ly/3XFnf54>

McCloud (Battalion 7) Transportation Map - South



<https://bit.ly/3XzZVFy>

Motor Vehicle Use Maps (MVUM)

Yolla Bolla North and Hayfork MVUM



<https://bit.ly/3JKIPiL>

Yolla Bolla South MVUM



<https://bit.ly/3JH5Eno>

Big Bar MVUM



<https://bit.ly/3NZwhXi>

Weaverville North MVUM



<https://bit.ly/3rkmsKr>

Weaverville South MVUM



<https://bit.ly/44bM76H>

Shasta Lake East MVUM



<https://bit.ly/3D50iN7>

Shasta Lake West MVUM



<https://bit.ly/436DzNj>

Mt. Shasta North MVUM



<https://bit.ly/3XGAQsS>

Mt. Shasta South MVUM



<https://bit.ly/44ciaUf>

McCloud North MVUM



<https://bit.ly/43dsuKn>

McCloud South MVUM



<https://bit.ly/3XBltlo>

Neighboring Forest Maps

Klamath NF East



<https://bit.ly/3XJSz2A>

Klamath NF West



<https://bit.ly/449brKt>

Lassen NF



<https://bit.ly/3CZdvsj>

Mendocino NF



<https://bit.ly/3D0G600>

Modoc NF East



<https://bit.ly/3NHhJtM>

Modoc NF West



<https://bit.ly/3pBaVWO>

Six Rivers NF North



<https://bit.ly/3Q0nCW7>

Six Rivers NF South



<https://bit.ly/3XAgYrb>

Section 9 – Appendices Index
