



Lesson 1

Why do we have wildland fires?

MAIN CONCEPT OF UNIT: Residents of the foothills of California are historically, currently and in the future in danger of wildfire. Students should know what to do BEFORE, DURING and AFTER a fire in order to keep themselves, their family and neighbors safe.

CONCEPT OF LESSON: “Living in the California foothills, you are annually at risk from wildfire. The damage and destruction caused by these fires can be devastating. It is important to understand the role fire has in foothills and how it travels. Through this understanding steps can be taken to prevent loss of human life, property and wildlife. The issue is not IF but when will the wildfire occur.” (from “Living in the Foothills,” Natural Resources Conservation Service publication, 2004)

STORY LINK: This lesson will open with an overview of the Lassen County community in regards to the geographic location, vegetation, climate, history of area. This will be the “big picture” of the foothills in which the students live.

OVERVIEW (METHOD) OF LESSON'S PRESENTATION: The students will be in a classroom setting where there will be a presentation using the overhead projector, with student dialogue encouraged. There will be a short video to view; then the class will receive their student folders to briefly look through. Homework will be assigned as noted in the “Closure” section of this lesson plan.

Lesson 1

State Curriculum:

Eng./LA Read Comp.2.0

Listening & Speaking 1.0

Hist./S.S. 6th-8th grades

Hist. & S.S. Analysis

Science Shaping the Earth 2.0

Heat 3.0, 4.0

Resources 6.0

Invest. & Exp. 7.0

Math Algebra 2.0

Statistics 1.0, 2.0

Materials:

Transparencies labeled "Less. #1"

Overhead projector

DVD "Two Sides of Fire"

Class set Student Folders

Class set:

1) Student folders

2) "Living in the Foothills" booklets

3) "Two Sides of Fire" worksheet

4) Cover Letter to Parents

5) "Homework"

Time: (approx. 60 min.)

(30 min.) Overhead presentation

(14 min.) View Video "Two Sides of Fire"

(16 min.) Closure and Connections

Grouping:

Classroom setting with students facing front to

View overhead and video

Vocabulary:

Climate: the characteristic atmospheric condition in a given area determined by averaging over a long period of time all meteorological quantities, such as temperature, pressure, winds, moisture and evaporation.

ridge: a range of hills or mountains, which generally have a valley or canyon on the downward slope.

watershed: the entire drainage region that supplies water to a lake or river; also called drainage basin

Wildland Urban Interface: this is where the wildland area meets the residential area.

topography: The study and description of the physical features of the earth's surface including their representation on maps, also, the physical features themselves.

ADVANCE PREPARATION:

- 1) Locate class set of worksheet for “Two Sides of Fire” in teaching kit.
- 2) Set up overhead projector with transparencies labeled “Lesson 1.”
- 3) Set up DVD player with the video “Two Sides of Fire.”
- 4) Have student folders at hand, to be passed at appropriate time.

TEACHER BACKGROUND: *Where is Lassen County; how large is it; what are the major towns; what is its elevation?*

Lassen County is located in the northeast section of California. It has a total of 4,557 square miles with 163 square miles of water. The land reaches from a desert basin to timberland. According to the 2010 census, the population of the county is 34,895 people. The county includes the towns of Bieber, Doyle, Herlong, Janesville, Litchfield, Madeline, Milford, Nubieber, Ravendale, Standish, Susanville, Termo, Wendel and Westwood. Lassen County is within the national forests of Lassen, Plumas and Modoc.

The elevation of the county varies between 3,924 feet to 8,737 feet from sea level.

What are the names of the school districts? There are nine school districts in Lassen County: Big Valley Joint USD; Fort Sage USD; Susanville SD; Westwood Unified; Janesville Union; Johnstonville Elementary; Ravendale/Termo Elementary; Richmond Elementary; and Shaffer Union Elementary.

In which mountain range is the county?

When attempting to determine where a community is located in the Pacific Mountain System, it is best to know the latitude and longitude of that community. The Cascade Range enters from Canada, trending southward across international boundaries, through Washington and Oregon to a latitude of 41 degrees. The Sierra Nevada extends 400 miles from Fredonyer Pass (*near Eagle Lake*) in the north, to Tehachapi Pass in the south. It is bounded on the west by the California Central Valley and on the east by the Great Basin. It extends to the latitude of 35 degrees. NOTE: SUSANVILLE is at Latitude 40°24'59"N and Longitude 120°39'11"W.

To complicate the question, Lassen County is a mixture of the Sierra Nevada and the Cascade Range materials. If you were set down in an area and had to determine in which range of mountains you were located, it would be possible. The Sierra Nevada is dominated by granite and the Cascades are dominated by mudflows and volcanic activity, with basalt formations.

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There are a number of references on this subject: 1) Roadside Geology of Northern California, by Alt and Hyndman; National Geographic's "California-Seamless USGS Topographic Maps" on CD-Rom; various sites on the internet.

Incidental information: TERMO is at Latitude 40.921124 and Longitude 120.622652. MILFORD is at Latitude 40.169038 and Longitude 120.378154, MOUNT LASSEN (which is partially in Lassen County, at Cinder Cone) is at Latitude 40.5 degrees N and Longitude 121.5 degrees W.

What is the average rainfall/snowfall in Lassen County?

The average annual precipitation at Susanville is 15.26 inches of rainfall. It is fairly evenly distributed throughout the year, with the wettest month being January, with an average of 2.36".

What is the County Seat in Lassen County?

The city of Susanville is the county seat of Lassen County. It is the only incorporated city within the county. According to the 2010 census, the population is 17,974 people. It has an elevation of 4,258 feet above sea level. It is referred to as the "Gateway to Reno," which is 86 miles to the east; it is 221 miles north of Sacramento. The city has a total area of 8.0 sq. ml. The Susan River flows through Susanville. The second largest natural lake in California, Eagle Lake, is 15 miles north of town.

What is the typical weather in Susanville?

According to Tim I. Purdy in his book At a Glance...A Susanville History, "The weather is truly a universal topic. In the mountains, such as Susanville, the weather can be very unpredictable. Susanville's unique location on the eastern slope of the Sierra Nevada and the Great Basin to the east, are contributing factors to its extreme weather conditions. The one season that has a more profound impact than any other is winter. A wet winter is beneficial for farmers. A dry winter not only harms the farmers, but also the timber industry, as it creates extreme fire dangers." Susanville's climate is mild during the summer when temperatures tend to be in the 60's, and very cold during the winter when temperatures tend to be in the 30's. The warmest monthly average (*July*) is 88.40 degrees Fahrenheit. The coldest month is December, when the average is 20.70 Fahrenheit.

From which direction do the prevailing winds come in the county?

Southwest

What are the major sources of income in Lassen County?

The major sources of income in Lassen County are 1) government related jobs, 2) Agriculture, 3) tourism and 4) power from regeneration plants.

What are the natural resources of Lassen County?

The forest continues to be the greatest natural resource, as well as 163 square miles of water. Wind energy is becoming important to the county residents.

What flora and fauna can be found in Lassen County?

This depends on the location of the vegetation to water, the availability of light, space available and elevation. Below are some of the flora and fauna commonly found throughout Lassen County:

FLORA

Ponderosa Pine

Jeffrey Pine

Sugar Pine

White Fir

Manzanita

Gooseberry

Red Fir

Western White Pine

Mountain Hemlock

Lodgepole Pine

Black Oak

Iris

Potted Coralroot

Pyrola

Violets

Indian Paintbrush

Rabbitbrush

Mule-ears

Asters

Larkspur

Lupine

Columbine

FAUNA

Rubber Boa

Garter snake

Rattlesnake

California Ground Squirrel

Golden-mantles Ground Squirrel

Yellow Pine Chipmunk

Skunk

Brush Rabbit

Deer

Elk

Pronghorn Antelope

Coyote

Snowshoe Hare

Pine Marten

Pygmy and Great Horned Owl

White-headed and Downey Woodpecker

Golden-crowned Kinglet

Stellar Jay

Fox Sparrow

Canada Geese

Red-tail Hawk

Osprey

Bald Eagle

Sand-hill Crane

Mountain Lion

Historically, who developed Lassen County?

In the summer of 1850, William H. Nobles came to California to find a direct route across the mountains into the state. In 1852, he successfully led a group of Shasta businessmen over the route he had discovered. Nobles was paid \$2000; he then returned to Minnesota.

In 1850, Isaac N. Roop came to Shasta County to help his brother operate a store. He remained after his brother's death. There was a fire that destroyed Shasta, so Roop looked for a new location for the store. He came to Honey Lake Valley, and claimed the land that eventually became Susanville.

(More information about the history of Susanville and Lassen County can be found in: [At a Glance...A Susanville History](#) by Tim I Purdy, Lahontan Images, 2005.)

More Historical Information as found on the Lassen County Office of Education's website:

Bieber: Bieber is in the northwest part of Lassen County in Big Valley on the Pitt River. This was the best place to cross the Pitt River. In May 1873, Theodore Pleisch claimed 160 acres and built a house. It was known as Chalk Ford until 1877, when Nathan Bieber opened a store and a post office there. He purchased the town from Pleisch for \$600. People started calling it Bieber. By 1882, there were 43 people, two stores, two hotels, a restaurant, barbershop, two saloons, a livery stable, a post office, a weekly newspaper, and lodges.

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Doyle: This area was settled by John Doyle in 1859. He had lived there all of his life. Doyle boomed because of the railroads. In 1888, the Nevada-California-Oregon railroad came there and the Western Pacific railroad came in 1909.

Herlong: Herlong was originally built to serve as the junction for the Nevada-California-Oregon and Western Pacific railroads. Stanley Rayl wanted the post office named Rayl, but the president of the Nevada-California-Oregon railroad wanted it named after his mother-in-law, Clara Hackstaff Adams. The Postmaster General decided on Rayl. When Rayl left in 1921, the post office was taken care of by Cyrus Helman. Rayl later sued Helman for stealing funds. In 1930, the court dismissed the lawsuit because no trial date was ever scheduled. The post office name was changed to Hackstaff on March 18, 1922. It operated until that December and was closed because the Western Pacific moved its crew to Doyle.

The area was known as Hackstaff until the Sierra Army Ordinance Depot was established in 1942. It was named after Captain Henry W. Herlong, the first ordinance officer killed in World War II. The post office was operated in 1942 with a problem; all the stamps, money orders and equipment were stamped with the name "Hurlong." The error was corrected within 5 days.

Janesville: The present day town of Janesville was originally claimed by Thomas Mitchell in 1856. Malcolm Bankhead purchased the property from Mitchell. In 1857, he built a 20 feet X 30 feet two story building out of hewn logs. He turned it into a small hotel. Bankhead then returned to Missouri to bring his wife and four children out here to live. His father, brother, William and two nephews joined in the journey.

There are two stories about the naming of Janesville. Some claim that it was named after Malcolm Bankhead's wife Jane. Others state it was named after his granddaughter, Jane Agnes, born on May 17, 1862, born to Susan Bankhead and Smith J. Hill. Asa Fairfield (1916) reported that the early settlers are "equally positive that this is right. All of them are reliable people and the reader is left to judge for himself which 'Jane' the place is named after."

Throughout the early years, more people began to build in the Janesville area. There was a store, a shoe shop, sawmill, blacksmith, and a school house. The first post office was established in 1869. In 1864, Janesville and Susanville were the two communities suggested for the county seat to be voted on in the second day of May in 1864. Susanville prevailed.

In 1860, many of the Janesville area residents were worried about Indian troubles in Nevada. So, on Bankhead's property, Fort Janesville was built. They built a stockade sixty-three by ninety feet and twelve or fourteen feet high around a log house. It was loop holed for rifles. Some people stayed one or two nights and left the next day for Quincy. Others went back to their ranches, and others stayed all summer.

Fort Janesville was never used as a fort and was abandoned. People looted the windows, doors, wood, and anything else of interest. By 1867, the house was gone,

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but the stockade stood until it gradually fell down. In 1989, the Nataqua Parlor of the Native Daughters of the Golden West erected a monument to the historic fort.

The Janesville Cemetery is the oldest in the county. Charles Crawford was the first person buried there in May, 1858. The cemetery is now called the Lake Cemetery. It is no longer used.

Janesville continues to grow and more homes are being built. Janesville has a post office and a school.

Johnstonville: Johnstonville was named after Robert Johnston. It was nicknamed Toadtown because of a large number of toads seen there after a rain storm. Johnston and his brother-in-law Eber Bangham traded a cow and a calf to William Dow for the land in 1858. In 1864, the Lassen County Board of Supervisors changed the name from Toadtown to Johnstonville.

Litchfield: The Shaffer Brothers Ranch and Station was purchased by Andrew Litch and Thomas French in 1868. In 1874, the partnership ended and Litch received the western part of the property. He moved to Reno. In 1895, his daughter Clara married B.F. Gibson and moved to the ranch.

In 1912, the Fernley-Lassen Railroad came through and the area was called "New Standish." Free home lots were offered to residents of Standish if they would move their home and business to the new town. In 1913, the area became known as Litchfield named for Andrew Litch. The post office opened in 1914.

Westwood: Thomas Barlow Walker built the town of Westwood as a company town for the Red River Lumber Co. in 1913. The area was known as Walker's Camp, Forestville and Meadows. The town was only meant to exist twenty years or so – until all the lumber in the area was harvested. Then the Red River Lumber Company would move to another forest and begin again. In 1923, the company announced it would be a permanent town.

PROCEDURE: *(Note: there are 3 continuous parts to this presentation: overhead transparencies, video and student folders.)*

- 1) **Show Transparency #1 Location of Lassen County in California**
- 2) **Show Transparency #2 Location of Lassen County in the Pacific Mountain System.** - There is considerable discussion about which mountain range the county belongs. We often hear that Lassen County belongs in the Sierra Nevada Mountain range, while others are sure that Lassen is part of the Cascade Range. It is safe to say that the county shows evidence of each of the two ranges.

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The Sierra Nevada Mountains are dominated by granite formations and the Cascade Range is dominated by mudflows and volcanic activity with basalt formations.

3) Show Transparency #3 Typical Lassen County Scene

When we arrive at this scene, we know that we are home.

4) Show Transparency #4 Vegetation

In this overhead, we see typical vegetation at lower elevations.

5) Show Transparency #5 Vegetation

As you travel up in elevation, you will see a change in the vegetation.

6) Show Transparency #6 Fire Ladder

Different levels of close growing vegetation can cause “fire ladders” which result in continuing the progress and destruction of fires.

7) Show Transparency #7 Wildland Urban Interface

Notice in this picture where the red and the yellow areas meet. This is the “Wildland Urban Interface,” where communities and wildlands meet. We call this area the WUI (*pronounced “woo- ee”*).

8) Show Transparency #8

Can you see the WUI behind the school?

9) Show Transparency #9 Fire History of Lassen County

10) Show Transparency #10 Lightning Strike over Paradise Lake

Although this picture is from Paradise in Butte County, you can imagine what it is like when lightning strikes the ground. It can strike water as well as trees. Count the number of strikes the camera caught.

11) Show DVD “Two Sides of Fire: (16 min.)

Have the students view the video while taking notes on the worksheet. When the video is over, have students comment on their responses to the key questions.

12) Before showing Transparency # 11, ask the students what they believe is the major cause of fire. After receiving a few answers **look at Transparency #12 A&B Causes of Fire in Lassen County.**

13) Show Transparency #13 California Lightning Strikes - 6/30/08-0700 hr.

This information was collected within a short period of time. It may be hard to see the legend, but it shows that from midnight to noon in one area there had been 512 lightning strikes. Refer back to the “Triangle of Fire.”

CLOSURE:

Student folders will be used by the students throughout the Unit for storing materials from each lesson. They should be careful to keep their notes in the folder and bring it to class each day. The folder and contents will be the student’s at the completion of the unit. It can be used to help educate the family about what to do **BEFORE, DURING AND AFTER** a fire.

Distribute the student folders and the booklet “Living in the Foothills,” “Firewise in the Foothills” Homework Sheet and the Lassen County Fire Safe Council Parent Letter. The students will need these for homework. Refer to the homework sheet for assignments throughout the unit. The student folders should be used to transport pamphlets and homework throughout the five lessons. Return the folder and “Living in the Foothills” tomorrow.

EXTENSION: Have students bring in newspaper articles regarding fire in the community or any foothill areas of California.

CONNECTIONS: *(How will this connect with the next lesson?)* Remember when the firefighters visited your classes in the lower grades and you learned about “Stop, Drop and Roll,” and “Exit Drills in the Home?” Sometimes fires are **BIGGER** than a single house fire; these are called “wildland fires,” or “wildfires.” Tomorrow we will be learning about what we can do **BEFORE** a wildfire so that we can minimize our risks.

RESOURCES:

- 1) Visit the local museum. There are extensive displays that adults and children will enjoy viewing. Books are available for purchase. One that is especially informative is At a Glance...A Susanville History.
- 2) Visit the website: www.forestsfuture.fs.fed.us.
- 3) Visit websites in Parent Letter at end of this lesson. (www.usfa.fema.com and www.ready.gov.)
- 4) 2010 U.S. Census information
www.quickfacts.census.gov/qfd/states/06/06035.html

Answers to Student Worksheet (next page)

Q1 - Fuels, weather and topography

Q2 - Heat, Oxygen, Fuel

Q3 - Up to 44,000 strikes per day on planet Earth

Q4 - Sunlight, Water and Soil Nutrients

Q5 - An ecosystem dominated by trees

“Two Sides of Fire”

Name _____

Q1 What determines fire behavior?

Q2 What 3 elements are necessary for fire to exist in the ecosystem?

Q3 How many thunderstorms occur each day on our planet?

Q4 For what do trees compete?

Q5 Ecosystem...a natural system made up of living organisms, reacting with each other, their physical environment and the relationship among them. What is a forest?

Lassen County Fire Safe Council

P.O. Box 816 • Susanville, CA 96130 • (530) 251-5560 • www.lassenfiresafecouncil.org



Dear Parents and Guardians;

Today your child began a series of five one-hour lessons entitled "Firewise in the Classroom". Grant funds and financial support from the Lassen County Board of Supervisors obtained by the Lassen County Fire Safe Council were used to develop the curriculum for this classroom instruction module. Residents of the foothills of California, specifically the Wildland Urban Interface of Lassen County, historically, currently, and in the future, will be living with the dangers posed by wildfires." Students will learn to know what to do before, during, and after a wildland fire event in order to keep themselves and their families safe.

Your student will bring home written material to show ways the family can make their home safer while living in communities subject to our high wildland fire risk. Your family will be guided through the development of a "Family Disaster Plan" which is critical for communication within your family unit.

During the lessons, your child will be provided a "Student Folder" specific for transporting materials and homework assignments. Please assist him/her in keeping these materials together in the folder as it should be returned to school each day. Attached you will also find a homework sheet, please see that your student completes their assignments when required and ensure their return to the classroom.

At the conclusion of the unit, the materials in the Student Folder will belong to the child. These can and should be shared with family and neighbors. Thank you in advance for your helping with this important project designed to empower your child and family with valuable information necessary to provide you guidance should a wildland fire occur in your area.

Sincerely,
The Lassen County Fire Safe Council
and their Education Team



We are an active member of "FIREWISE Communities USA"

“FIREWISE IN THE CLASSROOM” HOMEWORK

Lesson 1

- Give parent/guardian the parent letter.
- Read together chapters 1-3 in "Living in the Foothills." These chapters give an overview of the lessons.
- Chapters 4 and 5 tell about the environment and wildlife safety and are optional reading.

Lesson 2

- Review the "Homeowner's Guides" with a parent.
- Complete the "Watch Outs" together.
- Use the information from the pamphlets and your own observations of your home to complete the worksheet "Risk Reduction."
- Read with your parents "Are you doing the "Right Thing the Wrong Way?"

Lesson 3

- Lesson materials and the student folder will remain in the classroom. There is no homework tonight.

Lesson 4

- Use the information in the student folder to create a family disaster plan. Each family's situation is unique. Consider special situations such as the child or elderly person who is home alone.
- Fill out the communication card and place in the magnetic envelope pocket. Use other cards for wallet or vehicle. Please copy for additional cards.
- Fill the red magnetic envelope with your Family Disaster Plan. Place it on the side or front of the refrigerator. Keep this personal information at home.
- The "Emergency Supply List," "If you become trapped" and the "Returning Home" pamphlets will help you plan to keep your family healthy and safe.
- Practice your part for the town meeting.
- Bring your student folder to class tomorrow.

Lesson 5

- Share with your parents the folder you put together during these lessons.
- Please complete any unfinished parts of your Family Disaster Plan.

Please make sure you return your "parent survey" upon completion of the program so that the Lassen County Fire Safe Council may assess how well the program is working.



Lesson 2

State Curriculum

Eng./LA Word Anal.(Voc. Devel.) 1.0, 1.4

Science Shaping Earth's Surface 2.0

Heat 3.0

Energy 4.0

Ecology 5.0

Inv. Exp. 7.0

Math Statistics 3.0

Materials:

Transparencies labeled "Less. #2"

Overhead projector

DVD "Living with the Forest: FIRE SAFE"

Class set:

- 1) "Homeowner's Guide to Firewise Landscaping" (appropriate Grassland, Brushland or Timberland
- 2) "Homeowner's WATCH OUTS!"
- 3) "Risk Reduction" homework sheet
- 4) "Where is this home...embers..."
- 5) "EQUIPMENT USE – Equipment Use Safety"

Time: (approx. 60 min.)

(30 min.) Overhead Presentation

(15 min.) video

(15 min.) closure

Grouping:

Classroom setting with students facing front to view overhead and video.

Vocabulary:

Ordinance: a law enacted by governmental authority

Defensible space: an area around a building where the landscaping has been modified to allow firefighters to defend the structure.

Fire ladder: when neighboring vegetation of varying heights are close together during a fire, they can cause the fire to climb up to the taller trees.

Lesson 2

What can we do before a wildfire to reduce risks?

MAIN CONCEPT OF UNIT: Residents of the foothills of California are historically, currently and in the future in danger of wildfire. Students should know what to do BEFORE, DURING and AFTER a fire in order to keep themselves, their family and neighbors safe.

CONCEPT OF LESSON: Residents living in the foothills are responsible for reducing fire risks on their own property.

STORY LINK: In our previous lesson we learned about the environmental characteristics of the foothills. In this lesson we will explore ways in which foothill residences can be made more fire safe.

OVERVIEW (METHOD) OF LESSON'S

PRESENTATION: The students will be in a classroom setting where they will view a video and study Fire Safe Council pamphlets about creating a safe home environment.

ADVANCE PREPARATION:

- 1) Set up overhead projector with transparencies labeled "Lesson 2."
- 2) Set up DVD player with video "Living with the Forest: Fire Safe."
- 3) Have pamphlets and worksheet ready to distribute.

Lesson 2 (Page 2)

TEACHER BACKGROUND: The fire problems facing our community are not unique. They are shared with other communities living in the California foothills. When wildlands and cities are next to each other, the methods of fighting fire differ. This area is called “Wildland Urban Interface,” (WUI pronounced “woo ee”).

Some families are renters and, therefore, unable to control some factors such as tree cutting, road access, some landscaping. However, they can control debris, wood piles, and many items mentioned in today's lesson. Renters, landlords and owners should be aware that there are town and county ordinances that they should be aware of. Renters should notify landlords of fire hazards. That is in everyone's best interest. To find out more about these ordinances, they should contact the Lassen County Building Department, 707 Nevada Street, Room 236; Susanville, CA 96130 or call (530)251-8269.

PROCEDURE:

- 1) Collect “Living in the Foothills.” Then, distribute “Homeowner's Guide.” Read the first panel together. Help students to see the connection between wind and fire.
- 2) Show **Transparency #1**. Focus on the dwellings pictured in your pamphlet and the caption below the picture. “**Red Flag**” weather is of great concern to all residents. Susanville has a Changeable Message Board at the County Fairgrounds that will display this information. In Lesson #3 you will be given information on how to receive emergency information.
- 3) Show **Transparency #2**. Discuss the **3 zones** around the dwelling. Students can refer to their pamphlet to discuss key points of each of these. Sometimes, the home may be the source of a fire that spreads to the wildland. At other times, a fire coming from the wildland may ignite a home. Tell the students that the law regarding defensible space has changed from a minimum of 30 feet from the house and outbuildings to 100 feet. Have the students change the information at the top of the page
- 4) Show **Transparency #3** - This is an actual picture of a home that was saved because they put this plan into action. (*Briefly discuss.*)
- 5) Show **Transparency #4 - Fire Triangle**. Fires need fuel, heat and oxygen to burn. By removing one of these elements, fires will be extinguished.

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- 6) Show **Transparency #5 - Fire Behavior Triangle** - Weather greatly influences when fires occur and how they spread. What can hot dry winds do to fuels to make them more likely to burn? How can a thunderstorm affect a wildfire? Topography includes hills, canyons, valleys, meadows. How would these affect a fire?
- 7) Show **Transparency #6 - When reducing the fuel load around your house**, the cut vegetation needs to be taken to the local landfill at Bass Hill as “Green Waste.” If the waste is clean, without any household garbage mixed in it, it can be dumped at the landfill for a minimal cost.
- 8) Show **Transparency #7 - “Are you doing the right thing the wrong way?”** Using what you know about fire environment, what probably went wrong?
- 9) **View the DVD.** Mention that this was filmed in El Dorado County. Do we share similar problems? Discuss key points of video, especially “defensible space.”
- 10) **Discussion – Ask:**
 - 1) If a fire should start in your house, does your family have a plan?
 - 2) How are house fires and wildland fires different?
 - 3) Would you know what to wear to protect your skin from burns and life-long scars? (*Wear cotton or wool long pants, long-sleeved shirts or jackets. Wear gloves for extra protection; wear closed shoes or boots. Do not wear short-sleeved shirts or synthetic fabrics.*)

CLOSURE: For homework, the students will need the pamphlets:

- a) “Homeowner’s Guide to Firewise Landscaping, Grasslands, Brushlands, and Timberlands,
- b) “Homeowner’s WATCH OUTS,”
- c) “Where is this home vulnerable to ember attack?”
- d) "Equipment Safety - Are you doing the right thing the wrong way?"
- e) The worksheet “Risk Reduction.”

These should be taken home in the student folder and returned tomorrow.

EXTENSION: Students could:

- 1) Visit websites or contact listings on “Other References” on the “Homeowner’s Guide.”
- 2) For those parents who show high interest in risk reduction, the DVD "Controlling Nature's Wrath" and the CD "Solving the Wildfire Crisis" are available. (*contact the Lassen Fire Safe Council at www.lassenfiresafecouncil.org or call (530) 251-5560*)

CONNECTIONS: Even with defensible space, wildfires may threaten communities. Agencies are aware of the needs of community members BEFORE, DURING and AFTER a fire. We will learn more tomorrow about how our community plans to keep us safe.

RESOURCES:

For more information:

Lassen County Fire Safe Council, P.O. Box 816, Susanville, CA 96130 or www.lassenfiresafecouncil.org

Contact your local fire department for guidance in making your home and property Firewise, defensible space regulations and burn permits:

Calif. Department of Forestry (CALFIRE – Lassen, Modoc, Plumas Unit)

697-345 Highway 36, Susanville, CA

(530) 257-4171

City of Susanville Fire Department, 1505 Main Street, Susanville, CA 96130

(530) 257-5152

Susan River Fire Dept., 705-145 Highway 395 N., Susanville, CA 96130

(530) 257-7477

Janesville Fire Department, 463-390 Main Street, Janesville, CA 96114

(530) 253-3737

Lake Forest Fire Department, 619-200 Janet Way, Susanville, CA 96130

(530) 257-9593

Clear Creek Fire Department, 666-975 Highway 147, Clear Creek, CA 96137

(530) 256-2240

Westwood Fire Department, 206 3rd Street, Westwood, CA 96137

(530) 256-3589

Doyle Fire Department, 283 Main Street, Doyle, CA 96109

(530) 827-2681

Standish-Litchfield Fire Dept., 472-250 Chappius Lane, P.O. Box 96128 Standish, CA

(530) 254-6601

Milford Fire Department, 450-075 Laufman Grade Road, Milford, CA 96121
(530) 253-3699

Stones-Bengard Community Services, 509-695 Stone Rd., Susanville, CA
(530) 825-3350

Bieber Fire Department, Market and Park Streets, Bieber, CA 96009
(530) 294-5720

ON THE WEB:

- <http://lassenfiresafecouncil.org>
Home site for Lassen Fire Safe Council, Lassen County and Northeastern California, Landscape Plant Guide
- <http://www.firewise.org>
National Wildland/Urban Interface Fire Program
- <http://ceres.ca.gov/foreststeward>
California Forest Stewardship
- <http://www.tree-pruning.com>
Information on tree pruning techniques
- <http://www.fire.ca.gov>
Calif. Dept. of Forestry and Fire Protection; includes forest management info
- <http://www.firesafecouncil.org>
Calif. State Fire Safe Council

OTHER RESOURCES:

- *Will your Home Survive?* by R.D. Harell and William Teie (Deer Valley Press, 2001); (800) 455-1950
- *California Wildfire Landscaping: How to Comply with the High Fire Hazard Law* by Maureen Gilmer (Taylor Publishing, 1994)
- *Sunset Western Landscaping Guide* (Sunset Publishing)
- *Pruning Mature Trees* International Society of Arboriculture, P.O. Box 3129, Champaign, IL 61826

Lesson 2
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Contact your local community nursery and Native Plants Society for landscaping ideas for fire resistant plants.

The Lassen County Fire Safe Council has published a **“Northeastern California Landscape Plant Guide;”** for your information on recommended plant choices around your home. The guide is included in your classroom kit and is available on the Lassen County Fire Safe Council web site at www.lassenfiresafecouncil.org and is also available at Every Blooming Thing plant nursery located at 705-670 Highway 395 East in Johnstonville.

“Risk Reduction”

Name _____

WE CAN REDUCE OUR RISK OF FIRE IN THE HOME IGNITION ZONE BY DOING...

1) _____

2) _____

OUR DEFENSIBLE SPACE ZONE CAN BE IMPROVED BY DOING...

1) _____

2) _____

EQUIPMENT MISUSE CAUSES THE GREATEST NUMBER OF FIRES EACH YEAR. OUR FAMILY CAN USE EQUIPMENT THE RIGHT WAY...

1) _____

2) _____

***The second part of your homework is to:**

- 1) Complete the pamphlet “Homeowner’s WATCH OUTS!”, and
- 2) Please read “Equipment Use - Are you doing the Right Thing the Wrong Way?” and return these in your student folder tomorrow.



Lesson 3

State Curriculum:

Hist./S.S. 6th-8th grades
Hist. & SS Analysis Skills
Science Heat 3.0
Energy 4.0

Materials:

Transparencies labeled "Less. #3"
Overhead projector
Class set:

- 1) "How do I get the Latest Information?"
- 2) "Wildland Fire Safety...Livestock..."
- 3) Local maps (1 map per 2 students)

Time approx. (60 min.):

(40 min.) Review homework & map work
(15 min.) Overhead presentation
(5 min.) Closure directions

Grouping:

Map work could be done in pairs on desks or on the floor.
Remainder of lesson... in desks facing front

Vocabulary:

Evacuate: to remove or withdraw from a dangerous area

Aerial retardant: chemicals that are dropped from an aircraft onto fire to put it out

Lesson 3

What should we do during a wildfire to stay safe?

MAIN CONCEPT OF UNIT: Residents of the foothills of California are historically, currently and in the future in danger of wildfire. Students should know what to do BEFORE, DURING and AFTER a fire in order to keep themselves, their family and neighbors safe.

CONCEPT OF LESSON: Local, state and national agencies have plans to assist residents to prepare for a wildland-urban interface fire before it happens. All family members must understand and be ready to use the community wildland fire disaster plans when it is announced, as well as their own Family Disaster Plan, which they should have in place. (*Family Disaster Plan will be developed in Lesson 4.*)

STORY LINK: Even if everyone does his/her part to reduce the risks of fire, there may still be a wildfire. There will be agencies to help the residents.

OVERVIEW (METHOD) OF LESSON'S PRESENTATION:

There will be a brief discussion of "Risk Reduction" and "Watch Outs" (*homework*) in order to find common themes the students encountered. The emphasis for the lesson will be on locating the student's home on the town map and becoming aware of how they can get information about fire.

ADVANCE PREPARATION: Distribute local maps and "Are you Prepared? Wildland Fire Evacuation Plan" handout.

TEACHER BACKGROUND:

A **Family Disaster Plan** is critical to a family's well-being during a fire. The advanced planning will be a peace-of-mind to the entire family, as their emergency phone numbers and other communication means will be within reach. When the sheriff's department develops and informs the public of a Community Plan, it should be kept in the red-vinyl envelope along with the Family Disaster Plan. There will be terms like "assembly point" (*where residents can originally go and get the next update*) and "shelter" (*where the Red Cross has determined that it can safely house people temporarily while they are unable to return home.*) It is realistic to know that a fire's behavior dictates that plans must be flexible. However, it is best to have a basic plan in order to promote a sense of security. The Family Disaster Plan remains critical.

The Chester Air Attack Base is at the Chester Airport. It is a base for 2 helicopters and an air attack plane. During a fire incident air tankers are also stationed here. There are many models of air tankers which are capable of dropping between 800 to 20,000 gallons of retardant. The latter are referred to as **VLAT** or Very Large Air Tankers; there are only 3 in the country. During a fire, an **Air Attack Plane** flies over all aircraft and gives directions where to drop the retardant. Its purpose, too, is to make sure the tanker can get in and out of the fire area. **Helicopters** ("*Rotary Blades*") and **airplanes** ("*Fixed Wing*") fly at different elevations to keep safe and to be the most efficient. **When mixing retardant** a 2000 pound bag of powder is mixed with 1650 gallons of water. It is stored in 25,000 gallon tanks. **Smoke Jumpers** are men and women who are highly trained; they are flown to fires located in areas with no roads. The nearest team is in Redding. **Over a 10 year period**, the average annual amount of retardant dropped is: USFS 399,151 gallons; CDF 187,956 gallons; BLM 325,441gallons; and the National Park Service 3,283 gallons.

THE PURPOSE OF THIS LESSON IS NOT TO SCARE THE CHILDREN,
BUT RATHER TO IMPRESS ON THEM THAT THEY WILL NEED TO KNOW
WHAT TO DO.

PROCEDURE:

- 1) Show **Transparency #1 "What will happen when a wildfire threatens?"**
Teacher, guide the students in understanding that this process has taken communication and cooperation amongst agencies within the community, the County, the State, and even the National level. Most communities use the same process to insure maximum safety of residents.
- 2) Two students will share a local map. They should find the location of the school and trace the route to the main highway. Find a second route. NOW find your home and trace a route to the main highway. Find a second route. *(Repeat this so that both students have a chance.)* Refold the map and return it to the teacher.
- 3) Show **Transparency #2** - Here we see the **Sheriff's Department waiting with PG&E** crews for their directions. This picture is from a Southern California fire, but the idea of coordinating agency efforts is the same in smaller communities.
- 4) Show **Transparency #3 - Animal sheltering** - Here we see group of volunteers from North Valley Animal Disaster Group caring for rescued animals. There is shelter space at the Fairgrounds; there will be further directions available from the Sheriff's Department in the event of a disaster.
- 5) Show **Transparency #4 - "How do I get the latest Emergency Information?"**
In Susanville, this information will be displayed on the **Lassen County Fair Changeable Message Board** at the corner of Main Street and Fairgrounds Drive, next to Walgreens.

All County residents are advised to tune in their radios and televisions to get information. The Sheriff's Office and other emergency response agencies use the Emergency Alert System (EAS) to provide updates, information and orders of what needs to be done. **The primary EAS radio stations in Lassen County are: KJDX 93.3 FM or KSUE 1240 AM** both in Susanville. In addition, **KCNO 94.5 FM** and **KCFJ 570 AM** out of Alturas may be used. The Lassen County Sheriff's Office urges you for your own protection and wellbeing to stay alert during wildfire season listen for EAS messages during a fire and follow directions of Law Enforcement and Fire Personnel.

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- 6) Show **Transparency #5 - USFS operates the Chester Air Attack Base** at the Chester Municipal Airport. Firefighting aircraft such as air tankers and command planes are termed “fixed wing aircraft.” **Show #6** - They constitute one part of the aerial firefighting resources. The other aerial component is helicopters, which are referred to as “rotary wing aircraft.” Both are critical elements utilized for effective wildfire suppression. Historically, fast spreading wildfires require 3-8 air tankers. (*See “Teacher Background” if more information is requested.*)
- 7) Show **Transparency #7** - This striking photo is actually of a home on top of a hill. The bomber is down in the canyon, where the bomber dropped the retardant. Amazing picture!
- 8) Show **Transparency #8** - Fire Equipment from out of the area will arrive to help the community in trouble. You may notice the colors of the engines vary. Some may be painted green or light green so that it can be seen in grass fires. Where do you think these engines might be based?
- 9) **Show Transparency #9** - This is a dangerous job which requires great skill and serious training.
- 10) Show **Transparency #10** - Fire fighters are highly trained men and women who risk their lives to protect life, property and wildland. Many have been trained at Lassen Community College.
- 11) **Show Transparency #11** - Here is a USFS firefighter using a Pulaski tool to knock down the fire on the ground.
- 12) Show **Transparency #12** - Men and women can be firefighters. Here is Nicole Scott of Novato Fire Dept. after many hours of fighting the Butte Lightning fires.
- 13) **Hand out** “Wildland Fire Safety for your Livestock and Pets,” and “How do I get the Latest Emergency Information?” The students should place them in their take-home folders.

CLOSURE: There is no homework for tonight. Leave student folders at school to be sure that the students have them for tomorrow's lesson.

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EXTENSION: Share some of the collected news clippings mentioned in Lesson 1. Some students may want to research the training required to become a firefighter.

CONNECTIONS: By knowing our community and our family's disaster plan, we are able to better protect ourselves during a fire. Tomorrow, we will learn how to develop a Family Disaster Plan.

RESOURCES: Lassen Community College Career Center; FEMA website www.ready.gov; www.usfa.fema.gov; www.lassenfiresafecouncil.com; www.firewise.com

Lassen County

How do I get the latest **EMERGENCY INFORMATION?**



Listen to AM KSUE 1240, or
FM KJDX 93.3

In addition, listen to:
AM KCFJ 570 out of Alturas, or
FM KCNO 94.5
AM KSUE 1240



The Sheriff's Department also uses Reno station
AM KKOH 780

*Check the Lassen County Fair message sign
located at the corner of Main Street &
Fairgrounds Drive in Susanville
...next to Walgreens Drugstore*





Lesson 4

State Curriculum:

Eng./LA Listening & Speaking 1.0
Hist./S.S. Hist. &SS Analysis

Materials:

Transparencies labeled "Less. #4"

Overhead projector

Class set:

- 1) "Family Disaster Plan"
- 2) "Your Family Disaster Supplies Kit"
- 3) Red, vinyl envelope
- 4) Red index card "If you become trapped"
- 5) Yellow index card "Check List for Residents Returning Home"
- 6) 4 each - Communication cards
- 7) 1 each "5 P's" cards
- 8) "Lassen Sheriff's H.O. Checklist"
- 9) 2 sets of Team Role Playing sheets

Time (Approx. 60 min.)

(25 min.) Explain "Family Disaster Plan" and red, vinyl envelope contents

(10 min.) Look over pamphlets

(10 min.) Overheads

(15 min.) Introduce concept of Lesson #5 and assign roles. Team planning.

Grouping:

"Procedure" can be done facing front
Team Practice – informal groups around room.

Vocabulary:

Evacuate to withdraw from a dangerous area; vacate

Lesson #4

What is our family's plan for surviving a wildfire?

MAIN CONCEPT OF UNIT: Residents of the foothills of California are historically, currently and in the future in danger of wildfire. Students should know what to do BEFORE, DURING AND AFTER a fire in order to keep themselves, their family and neighbors safe.

CONCEPT OF LESSON: A Family Disaster Plan is vital for surviving a wildland fire. When the family writes its plan, the community plan should be considered. These plans should work together. If it becomes necessary to act on these plans, each family member should be prepared to respond in an age-appropriate manner.

STORY LINK: In Lesson 3, the students learned about how to find information about fire. They learned where their own home is in relationship to the main highway.

In Lesson 4, they will learn what should be included in a Family Disaster Plan. They will be encouraged to work with their family to develop a written plan that is posted for all members of the family to see and use in case of a disaster. They will learn what to expect at a shelter and what young people can do to help after a wildfire.

OVERVIEW (METHOD) OF LESSON'S PRESENTATION:

The students will be in a classroom setting where there will be an overhead presentation. They will **read** together "The Family Disaster Plan." This will be taken home tonight and the parent will be encouraged to fill out the

Lesson 4
(Page 2)

information. Students will receive printed cards to help the family with communication and evacuation. They will be taught how to fill the red, vinyl envelope with the cards and evacuation information. This will not be returned to school. Four transparencies will be shown to acquaint them with a shelter and agencies that they may see during a fire. At the conclusion of this lesson, the students will make plans for team presentations for Lesson #5. This will serve as a review of Lessons 1-4.

ADVANCE PREPARATION:

- 1) Set up overhead projector with transparencies labeled “Lesson 4.”

- 2) Have stacks of:
 - a) “Family Disaster Plan”;
 - b) Red, vinyl envelopes;
 - c) Four “Wildland Fire Communication” cards;
 - d) “Five P’s” card;
 - e) “Emergency Supply List;”
 - f) “If you become trapped;” and,
 - g) “Checklist for returning home.”
 - h) Sheriff’s Evacuation Checklist

- 3) In preparation for the 4 teams of role players, you will need 2 copies of each team's role assignments. One copy will be cut apart and a role given to each student on the team. The other copy will be filled in with the student's name and kept by the teacher.

TEACHER BACKGROUND: When families develop a Disaster Plan, there is less chance of panic during a wildfire. If they are separated from each other, family members have a way to communicate. They know what to expect during an evacuation; they know where to go to rejoin their family. Since every fire is different, those who have planned have more options than those who are just reacting to the disaster. The Family Disaster Plan included in this lesson is from the old website for Paradise. The new website is designed around FEMA website which is designed for Homeland Security. This plan is only a suggestion, but it covers most of the needs for a wildfire disaster plan.

Lesson 4 (Page 3)

Yankee Hill, in 2001, experienced devastating fires in their small community. Many people lost their homes, and the property damage was in the millions; but there was no loss of life. Prior to the fire, several neighborhoods had a communication process in place. They had developed evacuation plans and a group of trained volunteers. Agencies from all over Butte County and the north state came to help the residents of Yankee Hill and to prevent the fire from spreading to neighboring communities. Unfortunately, the fire was not officially considered a “state or federal disaster,” which meant that State and Federal financial assistance was not provided.

However, for those people who were affected, this WAS a disaster. The community reacted to save themselves during the fire; many did lose their animals. Homes and automobiles were, in many cases, gone. But what this little community did in the cleanup phase of the recovery has set them aside as leaders for their neighboring communities. As you may expect, not everyone joined the efforts. Many were too upset about their losses, or were unable to help in the efforts because of their health or they no longer lived in the area. But there was a cadre of hard workers who stepped forward and did the dirty work. They literally got dirty! They wore old clothes, boots, gloves, and safety gear to collect broken metal, glass, debris to be hauled away. They cut down burned vegetation and got it ready for the chippers. They encouraged their neighbors, even those they did not know. There were various groups who organized to assist others; this was usually based on their personal interest and/or ability. The North Valley Animal Disaster Group organized to rescue and shelter animals during a disaster. These people became proactive spokespeople for fire safety. Their efforts have not gone unnoticed.

In June and July of 2008, Paradise, Concow and other Butte County communities experienced terrible fires caused by lightning and arson. The firefighting efforts of thousands of skilled firefighters and volunteers saved the communities. After years of dodging the bullet, the Ridge became victims of fire. But no one will forget the unselfish efforts of everyone who stepped up to help. There were hundreds of evacuees who were taken into other people’s homes and cared for with no expectations of payback. There were thousands of animals rescued and cared for on private property and at the university. Everyone pitched in to save the community. Donations were collected and distributed to help people relocate after the fire. Signs were everywhere telling the firefighters how appreciative the community was. Several months later, people were returning to rebuilt homes; 60,000 daffodil bulbs were planted by the Paradise Garden Club to instill hope among the residents; the town set up a cadre of disaster volunteers for “the next time.” Now the community

knows with certainty: **It is not if but when that a wildfire will occur in the foothills.**

This section may be upsetting for some students. It is important to instill a positive “can do” attitude in these young people. If the student has been involved in clearing vegetation to create “defensible space,” he or she will have a positive sense of involvement **before the fire**. If the Family Disaster Plan is posted in a special place, and if everyone knows what to do **during a fire**, it will make it easier for the student and his/her family to respond in a safe way and to help prevent panic. Even **after a fire**, they can assist their family by helping their siblings stay calm and busy while the parents are involved in adult jobs like talking with agencies, insurances companies, etc. Under supervision they can help with the cleaning up of debris, replanting, and many other jobs. At this point, sixth graders are responsible people, capable of helping.

It is important to remember that your students may be the ones who are entrusted with their siblings when the parents are at work or away from home. A fire can happen anytime; these young people’s role cannot be minimized because they “are just little kids.”

PROCEDURE:

- 1) Link the “Community Plan” (*pamphlet “Are You Prepared?” Lesson #3*) with today's Lesson 4 which is the “Family Disaster Plan.” The fire-fighters need to focus on putting out the fire, so it is important that the residents know what to do to stay safe. A family needs to make decisions before a fire starts, rather than when it is happening. Each fire is different, so plans may need to be adjusted; however, their original plan gives them a starting place. Once the students understand the need for both plans, pass out the “Family Disaster Plan.” Read it together, but do not fill in the information. This will be done with the parent at home tonight.
- 2) Hold up a red, vinyl envelope and explain to the students that this is a magnetic envelope that will hold information for the family's safety during a fire. Tell them that the form “Family Disaster Plan” should be placed into this envelope. Also, in the envelope there will be phone numbers for getting information about shelters, road conditions, etc. There are “Wildland Fire Communication” cards to be filled out at home (*4 cards per student*) and the “Five P’s” (*1 card per student*). **DO NOT FILL THESE OUT AT SCHOOL.** Distribute the cards to each student.

Lesson 4
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- 3) Give students “Emergency Supply List” along with the Sheriff’s Checklist and encourage them to read these with their parent. In a wildland fire situation, the most needed supplies should be kept in a bag or box that is easy to carry. This is called a “Go Bag.” It should contain items such as on the “Five P’s.” They should think about what they would need if they were going to be away from home for several days. An “At Home” disaster kit would be more complete. It might be useful when the family returns home after a fire and finds that all services are off. Place the pamphlet in the red envelope.
- 4) There are 2 half-sheet index cards. One is red and is entitled “If you become trapped.” The other is yellow and is entitled “Checklist for Residents Returning Home.” Read these over with the students, but do not dwell on them. They should discuss these with their parents. **THESE ARE TO BE KEPT IN THE RED VINYL ENVELOPE WHICH THEY WILL TAKE WITH THEM IN CASE OF FIRE.**
- 5) Take out the student folder and:
 - 1) Place the blank “Family Disaster Plan” into it. Add,
 - 2) “How do I get...” and,
 - 3) “Wildland Fire Safety for your Livestock...” into the red student folder, with all of today’s information, and the red vinyl envelope should be taken home and shared with the parents. Post the red, vinyl envelope on the refrigerator after the “Family Disaster Plan” is completed.
- 6) Show **Transparency #1 - Red Cross Shelter** when the safest location is determined, the Red Cross will open “Shelters.” There you can expect a cot, food and water. Medical needs will be addressed. The latest information will be available to residents about the extent of the damage and if they may return home. Families will have a place to reunite with each other. Counselors will be there for anyone who needs them. Some people may be very upset and scared. Remember, it is okay to speak to a counselor or a trusted adult about how you are feeling. Most people do not stay in a shelter long; however, they may return to get the latest information about their home and conditions.
- 7) **Transparency #2 - Red Cross helpers** also stay in the shelters while they help the people who are staying at the shelter. They sleep in cots, eat the same food. Many of these helpers are many miles from home.

Lesson 4
(Page 6)

- 8) **Transparency #3** - There will be many agencies and volunteer groups doing the work of their specialty. There will be groups who are paid to be there and those who are working without pay (*volunteers*). “Let’s see how many of their jobs we can figure out.”
- 9) **Transparency #4** - There will even be volunteer firefighters from other communities who come to help, just like this group. Here you see them proudly standing next to their engine. Some of these people do not fight fire. They are the dispatchers and office people.
- 10) **Announce that tomorrow the students will be making presentations at a “Town Hall Meeting.” Today, they will need to prepare for this by working in one of 4 teams, choosing a role to play, and planning props or costumes to help them enact their part.** The purpose of the “Town Meeting” is to review important ideas from Lessons 1-4. Each student will portray a person who has something important to do or say about:
- 1) Why do we have wildland fires?
 - 2) What can we do before a fire to reduce risks?
 - 3) What should we do during a fire to stay safe? and,
 - 4) How can we help people recover after a wildfire?

The teacher will pass 2 role play sheets to one student in each team. That student should cut apart 1 sheet and allow the team members to choose a role to play. Each student should keep this paper to remind him/her of the chosen character he/she is to portray. The second sheet should be used to record the students’ names next to the parts, so that the teacher has a record of each student’s choice.

- 11) As time allows, have students work together on their skit. Each person needs to have something to say. Encourage the students to have props, scripts or what it takes to present a **group** effort. At least 3 major points should be made by the group to provide a review of the lesson. Some groups might decide to change the suggested roles to provide a cohesive skit. The suggested roles are just that, a suggestion. However, the object of the skit is to review the concept taught in each lesson.

Lesson 4
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CLOSURE: For homework:

- 1) The students should continue to jot down ideas about their role and how they could help their team during the “Town Meeting”.
- 2) Ask students to meet with an adult in their family to create a “Family Disaster Plan”. This may take more than one evening as some decisions may need to be made concerning the plan.

EXTENSION: The students could make props or costumes for their characters during free time in class or after school.

CONNECTIONS: In our final lesson we will see how people of all ages work together for the good of the entire community.

RESOURCES: Suggest the websites www.ready.gov , www.usfa.fema.gov and www.redcross.org for families that want more information on disaster preparedness.

FAMILY DISASTER PLAN

ADDRESS: _____

PHONE NUMBER: _____

Meet with your family and discuss with your children and grandparents what disasters are, what types may affect you, and what each member of the family needs to do to remain safe. You should put a copy of this plan in every automobile, by your home phone, and at work.

Regroup the Family:

In the event of a house fire, we will meet at: _____
_____ *(location outside the home, such as a neighbor's house):*

Determine the best escape routes out of your house. Make sure you have two ways to get out of every room.

In a larger scale event, such as a wildland fire, we will all meet at _____

_____ *(Outside of your neighborhood, such as a church or school; make sure to include a phone number.)*
Public assembly points may be available.

If we must evacuate _____ *(our city)*, we will meet at: _____

Phone number: _____

_____ *(location in neighboring town or city, such as a restaurant or a friend's house):*

In most disasters it is often easier to call long distance than in the same town. After an emergency, all family members should call the family contact to tell them where they are and let that contact know they are okay. An out-of-area relative or friend to be a family contact is:

Their phone number is: _____

Other important phone numbers:

Mom's work phone: _____ Mom's cellular: _____

Dad's work phone: _____ Dad's cellular: _____

Grandparent's phone number: _____

Other family members: _____

Pets:

Due to health regulations, animals are usually not allowed inside emergency shelters.

During a disaster, we can take our animals to: _____

If we must evacuate our town, we can take our animals to: _____

Disaster Planning:

Find out about the disaster plans for your work, your children's school or day care, or any other place where your family spends time. If both parents work out of town, a local contact should be named to take care of children and pets in the event that roads are closed into your town, due to snow, wildfire or other disaster.

Local contact (neighbor or relative): _____

Out of area contact: _____

School phone number: _____

Day Care phone number: _____

Church phone number: _____

When a disaster strikes, the Public Safety resources such as Police and Fire are stretched very thin. You can help emergency responders by identifying any elderly or disabled people in your neighborhood, and assign someone to help them in the event a disaster strikes. Neighbors that may need help are:

Emergency Phone Numbers for Lassen County School Districts are:

Lassen County Sheriff	911	or (530) 257-6121
California Highway Patrol (CHP)	911	or (530) 257-2191
Fire Department- all communities	911	
Ambulance	911	
Lassen County Public Works	(530) 251-8288	
Lassen County Red Cross		

Shasta Area Chapter - Serving Lassen County (530) 244-8000
20264 Sky Park Drive, Suite B
Redding, CA 96002

Website: <http://shasta.redcross.org>

Mailing Address:

P.O. Box 991569
Redding, CA 96099-1569

Teach children how and when to dial 911. Children need to be instructed that 911 should be dialed only when the situation threatens human life or property, and demands immediate attention. Parents, please do not dial 911 to inquire about road conditions or other non-emergency requests for information. Practice and maintain your plan. Quiz your kids and grandparents about emergency instructions every change of season (*from winter to summer*) and practice evacuation drills.

TEAM 1

Lesson 4

Why do we have wildland fires?
NEWSCASTER (*relates local fire history*)

Why do we have wildland fires?
FORESTER (*"Fires are more intense because forests are crowded with trees & underbrush*

Why do we have wildland fires?
ARSONIST (*"I know I will go to jail for doing this. I just love to see fire engines."*)

Why do we have wildland fires?
POLICEMAN (*"There are a lot of careless smokers who toss their cigarettes out the car windows."*)

Why do we have wildland fires?
HOMEOWNER DOING THE RIGHT THING THE WRONG WAY

Why do we have wildland fires?
CHILD OF HOMEOWNER DOING THE RIGHT THING THE WRONG WAY

Why do we have wildland fires?
WEATHERMAN (*"When it is hot, dry, and windy, do not use mowers, chain saws, or any equipment that could spark. Cars should stay off of dry grass."*)

(Suggestion: prop could be a Red Flag)

Why do we have wildland fires?
BICYCLIST (*"I've been riding up Gold Run Road for a long time. I know how steep it is! Sometimes I stop at Diamond Mountain and I look down the mountain side at all of the brush."*)

TEAM 2

Lesson 4

How can we reduce the risk of fire?

DOORYARD VISITOR (*"Let's look at the clearance around the house and check for fuel ladders in your landscaping."*)

How can we reduce the risk of fire?

TREE EXPERT (*"The trees in your yard need to be limbed up higher and away from your chimney."*)

How can we reduce the risk of fire?

GARDENER (*"Give us a call at (made up phone number) and we'll help clear your lot and get the cuttings off to the Green Waste, No Air Pollution!"*)

How can we reduce the risk of fire?

NURSERYMAN (*"Eliminate the 'broom' and dead bushes. Ask your nursery what would be less flammable plants to grow."*)

How can we reduce the risk of fire?

HOMEOWNER DOING THE RIGHT THE RIGHT WAY (*"Cut tall grass while it is still green making the place look nice and safe. Equipment like mowers cause fires."*)

How can we reduce the risk of fire?

CHILD OF HOMEOWNER DOING THE RIGHT THING THE RIGHT WAY (*"I like helping my folks in the yard and before the weather gets hot and dry"*).

How can we reduce the risk of fire?

FIREMAN (*"We make home inspections and point out violations that the homeowners must fix or they'll be cited."*)

How can we reduce the risk of fire?

(*Student: create a person to role play.*)

TEAM 3

What should we do during a fire to stay safe?
RADIO ANNOUNCER (*Remember that people are relying on you for clear and accurate information. You need to act as a reporter of information from a legitimate source such as the local Fire Captain. People may be evacuating, so road information will be essential.*)

Lesson 4

What should we do during a fire to stay safe?
TELEVISION ANNOUNCER (*Remember that people will need accurate, updated information. You may be the first warning that residents receive, so speak clearly, giving them the facts, which have been verified. You may be their "lifeline" with rescue teams.*)

What should we do during a fire to stay safe?
FIREMAN (*"Every family should have a 'Family Disaster Plan.' You should go to where your family has posted your plan. Take this information and gather the family together. Move quickly and calmly to do what you have planned as a family to do. Follow the directions of Emergency Personnel."*)

What should we do during a fire to stay safe?
POLICEMAN (*"Every family should have a 'Family Disaster Plan.' That way your family will know where you plan to be. Keep together; follow the direction of Emergency Personnel."*)

What should we do during a fire to stay safe?
PERSON WHO CAN GET TO A SHELTER (*"Now that I am at the shelter, I see the Red Cross and other volunteers. They have made us feel welcome; they are trying to reassure us that everything will be okay. When I look around I see..."*)

What should we do during a fire to stay safe?
PERSON WHO CAN NOT GET TO A SHELTER (*"I know that I am supposed to stay inside, away from the outside wall and from the area of fire. I need to keep all the doors closed, but leave them unlocked. It's hard to stay calm, but I have to try hard so that I can think clearly!"*)

What should we do during a fire to stay safe?
VOLUNTEER AT FAIRGROUNDS (*"Our job is to help families care for their animals during a disaster. We have been trained so that we know how to safely care for frightened animals that need someone to help them until they can get back home."*)

What should we do during a fire to stay safe?
RED CROSS WORKER (*"Our team has been trained to set up a shelter for people who need a temporary place to stay. We have clean cots for them to rest on, showers, clothing, food, telephones and communication systems for people to locate each other."*)

TEAM 4

How can we help people recover after a fire?

RED CROSS WORKER (*After the fire, Red Cross workers visit residents at their homes to see if they need any help, such as: cleanup, food, water, shelter, clothes.*)

Lesson 4

How can we help people recover after a fire?

FIREMAN (*After the fire has passed, a team of firemen inspect property to see if families can return safely to their homes.*)

How can we help people recover after a fire?

OLDER NEIGHBOR UNABLE TO DO PHYSICAL LABOR (*He/she can help the Red Cross with the phone, distribute supplies at a central location.*)

How can we help people recover after a fire?

INSURANCE AGENT (*The agent can contact their clients to help them organize information about items lost in the fire and assist them in replacing them.*)

How can we help people recover after a fire?

VOLUNTEER CLEANING UP DEBRIS (*Neighbors get together to help each other load dumpsters with burned items from garages, houses and yards. Everyone wears gloves, sturdy shoes and heavy work clothes.*)

How can we help people recover after a fire?

MEMBER OF YOUTH GROUP LIKE 4H, SCOUTS, CHURCH GROUPS... (*Some things that young people can do are: help replant after people have cleaned up, babysit during community meetings, help with the cleanup with adult supervision*)

How can we help people recover after a fire?

LMUD WORKER (*All power lines need to be checked for fire damage. The wires from the poles to the house may have been damaged.*)

How can we help people recover after a fire?

OLDER CHILD IN FAMILY (*babysit while adults are busy, help more with the household chores, make sure the animals are safe and secure.*)



Lesson 5

State Curriculum:

Eng./LL Listening & Spk.1.0

Hist./S.S. Hist. & SS Analysis

Materials:

Transparencies labeled "Lesson #5"

Overhead Projector

2 sets each of 3 interviews

Class set of:

- 1) "Homeowners Checklist"
- 2) "WILDFIRE ACTIONS – Before, During, and After a Wildfire"
- 3) "EVACUATION TIPS"

Have available "Role Playing" sheets from Lesson #4

Time: (approx. 60 min.)

(45 min.) "Town Hall" presentation & interview

(15 min.) Closure

Grouping:

Chairs facing front

Vocabulary:

Recovery Return to a former normal state.

County Supervisor an elected official who represents the interest of people from a certain area of the county

Lesson #5

How can a community work together before, during and after a wildland fire?

MAIN CONCEPT OF UNIT: Residents of the foothills of California are historically, currently and in the future in danger of wildfire. Students should know what to do **BEFORE, DURING AND AFTER** a fire in order to keep themselves, their family and neighbors safe.

CONCEPT OF LESSON: Residents, community groups and public agencies all play important roles during planning, surviving and recovering from a wildfire.

STORY LINK: In lesson 4 the students formed 4 teams that will answer questions related to wildfires (*before, during and after*). In lesson 5 they will stage their role playing as a town meeting.

OVERVIEW (METHOD) OF LESSON'S

PRESENTATION: The students will role play a "Town Meeting" as a review of the entire unit.

During the town meeting, there will be 3 interviews read which were given by 3 local, young people who actually survived wildland fires.

Lesson 5
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ADVANCE PREPARATION:

- 1) Arrange student chairs facing the front of room, to simulate a Town Meeting. Chairs for the presenting team could be placed in the front of room, facing the group.
- 2) Set up overhead projector with transparencies labeled “Lesson 5.”
- 3) Teacher should have copies of the team role sheets. These could be used to record teacher comments and/or grades for students' presentations.
- 4) There should be 2 sets of each of the 3 student interviews. Place them in folders to protect them for future use.

TEACHER BACKGROUND: During this final lesson, the students assume a role as a member of a team. Each team attempts to answer the question asked in each lesson's title. This will help to provide a review of the unit. A town meeting is often used as a viable way of communicating information and receiving community input.

In the classroom town meeting, the teacher will play the role of moderator of the meeting. The teacher will call the meeting to order and welcome the guest speakers and residents of the community. He/she can state that the focus of the meeting is to learn how to create a Firesafe community. Expert guests have been invited to help us answer important questions. Community members will also be able to share their experiences and viewpoints. Teams need to be called in the order of the lessons so that the “before, during and after” theme is in place.

After the “meeting,” the students should be reminded to continue work on their Family Disaster Plan. It cannot be stressed enough that this plan is critical; posting it in a prominent place is a key to the family's survival if such an emergency happens. It is very important that the students recognize that agencies can help, but there are responsibilities that the residents may have to assume. The individual families need to know how to use the information in their red, vinyl envelope. Students will need teacher encouragement to work with their families to complete their disaster plans.

PROCEDURE:

- 1) **Show Transparency #1** - Town Meeting setting. Notice the different ages of the people in the audience. There are maps and display boards. The people have been given an agenda and pertinent information about the meeting. Cal Fire is providing the audience an overview of current fire behavior on the Moonlight Fire of 2007. Our class will be having a “town meeting” to answer some very important questions.

Lesson 5
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- 2) Call Team #1 to the front of the room. Show **Transparency #2** – “**Why do we have wildfires?**” The projector can stay on or off, as team needs. The teacher should act as moderator and direct the team's presentation as needed. (*The background picture is helpful, but the projector can be noisy.*)
- 3) Call Team #2 to the front of the room. Show **Transparency #3** – “**How can we reduce the risk of wildfire?**”
- 4) Call Team #3 to the front of the room. Show **Transparency #4** – “**What should we do during a fire to stay safe?**”
- 5) Call Team #4 to the front of the room. Show **Transparency #5** – “**How can we help people recover after a fire?**”
- 6) After all teams have presented, show **Transparency #6** - After the Town Hall Meeting, several individuals are shown reviewing the maps of the 2007 Moonlight Fire.
- 7) We had invited some **special guests** who were not able to attend today's meeting. They were kind enough to be **interviewed** about their wildfire experiences. (*Teacher, please choose students to read the 3 interviews; one student will take the part of the young person and the other will be the interviewer. Change students with each interview. It is best to ask confident readers to do this task.*)

CLOSURE:

- 8) As a brief reflection, ask the students, “**Why did we study this unit?**” (*e.g. “stay safe,” “plan ahead,” etc.*) We all hope that if there is a wildland fire or we have to evacuate because of a fire, we will be able to return safely to our own homes. Show **Transparency #7** “**Time to go home.**”
- 9) **Show Transparency #8** - This is a reminder to you to be sure your family has a “**Family Disaster Plan**” in your red, vinyl envelope, on the refrigerator.
- 10) There is a sense of relief in knowing that we have a plan that includes all members of our family, including our pets. Show **Transparency #9**. HOME, SWEET HOME!

Lesson 5
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- 11) There is a sense of relief in knowing that we have a plan that includes all members of our family, including our pets. Show **Transparency #9. HOME, SWEET HOME!**
- 12) Tell students that they may take home their student folders. The material in the folders will be useful to their families and may be shared with their neighbors. Remind them to continue to work on the “Family Disaster Plan.”

(N.B.) TEACHERS: *(This step is important to the program in order to determine if improvements are necessary as well as to determine how well the program is/is not working.)*

Please distribute the Evaluation sheets. Give the students time to complete them in class. Collect them and return in the “Firewise in the Classroom” kit.

Please distribute the Parent Evaluation sheets and have the students ask their parents to complete and return to the classroom. Collect them and return in the “Firewise in the Classroom” kit.

Please complete the Teacher Evaluation and place it in the classroom Teacher’s Manual and return in the “Firewise in the Classroom” kit.

Please call the Lassen County Fire Safe Council Education Director at (530) 251-3347 for the return of the kit or have the school courier return the kit to the Superintendent of Schools Office in Johnstonville.

KATY'S INTERVIEW:

Lesson 5

Following is an interview of an 8th grade Yankee Hill girl, Katy, who was in the 5th grade at the time of a devastating fire. During the fire, her family lost their home and all of their possessions.

Q = Interviewer

A = Katy's response

Q How did you learn that a wildfire was threatening your neighborhood?

A Our neighbor came over and told us we needed to "leave right now!"

Q How did you feel at that moment?

A I just thought that it couldn't happen to us. We had evacuated once before when I was younger and nothing had happened.

Q What did you take?

A I grabbed some clothes and some of my favorite jewelry. There were five of us in the little car, so we couldn't fit much in it. I wish I had taken my pictures. We couldn't find the cats.

Q Where did you go?

A We went to our friend's house in the valley. Sometimes we went to the school where the Red Cross Shelter was, to find out what was happening. After a couple of weeks we found another place to live nearer home.

Q When did you find out that your house had burned?

A Bob (*our neighbor and volunteer fireman*) told us we were burned out. That was 2 or 3 days after the fire. I still couldn't believe it.

Q What was it like when you got back to your house?

A When we finally were able to go back we found all our burned stuff. I really wasn't sad; I just felt shocked and lost. Emma was in the first grade and she was sad when she saw her burned bike. We couldn't find the cats either. Emma was upset more about that than losing her possessions. Matthew was 18 months old. He looked at the garden where he played and he cried because all the flowers were gone.

Q How did you help during this difficult time?

A I behaved myself and watched my little brother. My Mom and grandma were so busy all the time we just felt kind of left in the dust.

Q Can you share any memories you have about the experience?

A I always painted really bright pictures with lots of colors. But, after the fire and for a long time I only used black, gray and white. I would dream about being back in my old house. I was given some clothes that I really didn't like, but then my friends gave me some better ones.

Q What would you tell other young people your age?

A I would tell them that it really can happen to them. Clear your brush and water around your house. Think about what is important because you can't take it all with you. Take pictures or videos of your house and stuff for the fire insurance company. I wish we had.

Q How are you doing now?

A All right. We have our new house and things, and we have our flower garden again. I think my Mom would listen to my opinion more now that I am older, but it was okay then. She helped me through it all, so that was good. I still help my family and I have my social life.

TEACHER:

What do you think of Katy's advice?

Was there anything that surprised you about the family's evacuation and their return home?

How do you feel about taking advice from another person your age?

What was her greatest contribution to the recovery?

GARRETT'S INTERVIEW:

Lesson 5

Following is an interview with a 5th grade boy whose family lives in Jordan Hill area. His family went through a wildfire scare when he was in the 2nd grade. One year later, they experienced a house fire that could have been a disaster for the neighboring community. However, the quick response of the fire department and the fact that they had defensible space around their home averted a disaster.

Q=Interviewer

A=Garrett's response

Q How did you know that your house was on fire?

A I had just walked out of our house to do my chores when my mom drove up. She had heard the water heater explode. She said, "Get the 2 kids and the dogs and get outside!"

Q What did you do next?

A I got the kids and all of the dogs. Mom ran in to get stuff and one of the dogs went back in. My little brother kept trying to run in and get the dog. I held on to him no matter how hard he tried to get back in.

Q What did the family do next?

A The fire department was coming so we had to move to clear the driveway. Mom moved our car and I had to stay in the car with my brother and baby sister.

Q Were you able to stuff out?

A Not really. My mom and dad got a lot of antique stuff out.

Q What did you lose?

A My clothes, my toys, my Play Station, our TV and stuff...

Q How did you feel about that?

A Pretty sad.

Q What do you remember about the fire department?

A They came up and blocked off the road for a while. They got there by the time I was in the car with my little brother and sister. They got water out of our swimming pool into their tanker.

Q Did anyone other than the fire department come to help?

A A lot of people came. The Red Cross was there when it was still burning. Other people came when I was gone to my mom's friend's house. Lots of friends came to bring things. One friend brought a huge ice chest with food; he brought pots and pans, toothbrushes and toothpaste, toilet paper.

Q What about school?

A I missed about 2 weeks, but I had to make up the work.

Q How did your school friends treat you?

A They were really nice; they kept asking how I was.

Q I hear you got a special award. What was it and where did you get it?

A I got it from the Butte County Fire Department, at school in front of everybody at the school. There were teachers, kids, friends and firemen. The person who presented the award was Janet Marshall from the California State Forest Service. I got it for keeping my brother from going back into the house.

Q What advice would you give kids about surviving a fire?

A Stay out of a burning house. If you catch fire, STOP, DROP, ROLL!

Q When your house burned it was destroyed. Your home is in the woods. How come no wildfire started?

A The fire department got there fast. We also had defensible space around the house where the goats ate down all the vegetation.

TEACHER: Ask questions as you feel appropriate.

ORION'S INTERVIEW:

Lesson 5

Orion was actually involved in 2 fires. One occurred when he was at school, in the 8th grade at Concow School. The second happened the following year very near to his home. He and his family had to be alert all night and be prepared to evacuate.

Q=Interviewer

A=Orion's response

Q How did you know that your school was in danger?

A One of the kids in my class looked out the window during class. He spotted smoke and told the teacher. The teacher went outside to check. It was about 200 yards away. The teacher took us outside the building and we were in the buses in five minutes. The kids were pretty good; we even got ice cream as a reward for moving so fast.

Q Had you been trained at school as to how to evacuate?

A We had fire drills where we went to the basketball courts, and we had a couple where we had to go to the bus. There was no panic.

Q Did anyone cry or get overly excited?

A One of my friends had a panic attack. He had a hard time breathing, but no tears. He stayed with the teacher.

Q Where did the bus go?

A It took us to Spring Valley School, about 4 ½ miles from our school.

Q What did you do there?

A We waited. Then we got signed out by our parents. The Red Cross brought us peaches.

Q Was your little brother at that elementary school?

A Yes, that's his school. I waited there with him and we hung out together until my Mom came to sign us out.

Q How long was it before you returned to Concow School?

A Two or three weeks...There was no school until then because they had to fix the power lines and the telephone. It would take too long to go to school in Oroville.

Q One year later you were in a 2nd fire. Where were you?

A I was at home. Our house wasn't in immediate danger, but we could see the orange glow at night. We didn't know if we had to evacuate.

Q Was there a lot of smoke?

A Yes. And the helicopters flew to Concow Lake to fill up with water. They filled their buckets and we could see some water leaking out. When they flew over us, we could feel the water like raindrops.

Q I hear you were written up in the newspaper. Why?

A I was recounting the fire to a reporter. Governor Grey Davis declared 5/13/01 as "National Wildfire Awareness Week." This was the same year as our school fire. They chose me because the principal knew I wouldn't exaggerate.

Q Were you ever in the paper again?

A I was on TV for replanting trees in a burned area next to Concow Pool. My friend Heather was helping, too. There were about 20 kids from my school helping. It was our PE class giving back to the community.

Q Do you have any advice for young people who might be in a fire?

A Yes! KEEP YOUR COOL! STAY COLLECTED! It doesn't do anyone any good to lose your cool. When you have responsibility for another person, you go to another level. You grow up quick. Your decisions affect someone else.

TEACHER: "What do you think of the way these 3 young people handled themselves during the fires? What reaction did you have to these students' stories?"

Teacher: ask questions you believe would get the students to relate to the three young people in the interviews.

PLEASE RETURN YOUR KIT AS SOON AS POSSIBLE AFTER COMPLETION OF THE PROGRAM TO:

Dan Douglas, Lassen County Fire Safe Council Education Director at (530) 251-3347 OR *you can have the School Courier return your kit to the Superintendent of Schools Office in Johnstonville. Please call 251-3347 and let Dan know if you use this option.*

Be sure to include: *(All items that were not used)*

Manila Folders for each unit

“Ziplock” bags for each unit

2 videos (VHS or DVDs) *(We must purchase these and they are very expensive. If nothing else gets returned at least return these!)*

Vinyl Envelopes that were not distributed to students

Maps

Very important - *EVALUATIONS *(teachers, students & parents)*

You may keep the Red Tote bag for your own use, *and to help you to remember to call us for next year’s materials for the program.* Your kit for next year will be filled and ready for your use when you call.

If you have any pictures of your students involved in these lessons or in an activity related to them, please place them in the kit as well. Label them with your name, school and date. These types of things are very valuable when writing for grants and seeking funding for the program.

Thank you for your participation in preparing your community for a possible wildland fire!

The Lassen County Fire Safe Council

OVERHEAD TRANSPARENCIES backing pages

Lesson 1

- (L1) TRANSPARENCY #1 LASSEN COUNTY IN CALIFORNIA**
- (L1) TRANSPARENCY #2 LOCATION OF LASSEN COUNTY IN CASCADE AND SIERRA NEVADAS**
- (L1) TRANSPARENCY #3 LASSEN/SUSANVILLE**
- (L1) TRANSPARENCY #4 LOWER ELEVATION VEGETATION**
- (L1) TRANSPARENCY #5 VEGETATION CHANGES/ HIGHER EL.**
- (L1) TRANSPARENCY #6 FIRE LADDER**
- (L1) TRANSPARENCY #7 WUI**
- (L1) TRANSPARENCY #8 CAN YOU SEE...JANESVILLE SCHOOL**
- (L1) TRANSPARENCY #9 FIRE HISTORY OF LASSEN CO.**
- (L1) TRANSPARENCY #10 LIGHTNING STRIKE / PARADISE LAKE**
- (L1) TRANSPARENCY #11 CAUSES OF FIRE 1999-2008**
- (L1) TRANSPARENCY #12 CAUSES OF FIRE GRAPH**
- (L1) TRANSPARENCY #13 LIGHTNING STRIKES 6/30/08**

Lesson 2

- (L2) TRANSPARENCY #1 RED FLAG DAY**
- (L2) TRANSPARENCY #2 DEFENSIBLE SPACE**
- (L2) TRANSPARENCY #3 ACTUAL PICTURE OF HOME SAVED BECAUSE OF DEFENSIBLE SPACE**
- (L2) TRANSPARENCY #4 THE FIRE TRIANGLE**
- (L2) TRANSPARENCY #5 THE FIRE BEHAVIOR TRIANGLE**
- (L2) TRANSPARENCY #6 REDUCING THE FUEL LOAD**
- (L2) TRANSPARENCY #7 ARE YOU DOING THE RIGHT THING AT THE RIGHT TIME?**

Lesson 3

- (L3) TRANSPARENCY #1 WHAT WILL HAPPEN WHEN A WILDFIRE THREATENS?**

(L3) TRANSPARENCY #2	SHERIFF'S DEPARTMENT /PG&E WORKING TOGETHER
(L3) TRANSPARENCY #3	CARING FOR PETS AND LIVESTOCK
(L3) TRANSPARENCY #4	EMERGENCY INFORMATION
(L3) TRANSPARENCY #5	USFS AIR ATTACK BASE/ CHESTER
(L3) TRANSPARENCY #6	TWO DIFFERENT AIR ATTACK UNITS
(L3) TRANSPARENCY #7	VLAT
(L3) TRANSPARENCY #8	FIRE EQUIPMENT FROM OUT OF AREA
(L3) TRANSPARENCY #9	A DANGEROUS JOB
(L3) TRANSPARENCY #10	FIRE FIGHTERS TRAINING
(L3) TRANSPARENCY #11	FIREFIGHTER USING PULASKI
(L3) TRANSPARENCY #12	NICOLE SCOTT, NOVATO FIREFIGHTER

Lesson 4

(L4) TRANSPARENCY #1	RED CROSS SHELTER
(L4) TRANSPARENCY #2	RED CROSS VOLUNTEERS
(L4) TRANSPARENCY #3	VOLUNTEER AND AGENCY LOGOS
(L4) TRANSPARENCY #4	VOLUNTEER FIRE FIGHTERS

Lesson 5

(L5) TRANSPARENCY #1	TOWN HALL MEETING RE: MOONLIGHT FIRE
(L5) TRANSPARENCY #2	WHY DO WE HAVE WILDFIRE?
(L5) TRANSPARENCY #3	HOW CAN WE REDUCE THE RISK OF WILDFIRE?
(L5) TRANSPARENCY #4	WHAT CAN WE DO DURING A WILDFIRE?
(L5) TRANSPARENCY #5	HOW CAN WE HELP AFTER A WILDFIRE?
(L5) TRANSPARENCY #6	LOOKING AT MAPS AT TOWNHALL MEETING
(L5) TRANSPARENCY #7	TIME TO GO HOME
(L5) TRANSPARENCY #8	REMINDER
(L5) TRANSPARENCY #9	HOME SWEET HOME