



Lesson 4: Community Wildfire Mitigation

Local Programs and Actions Making a Difference

Guiding Question: What actions are being taken around Butte County to build community wildfire resilience?

Goals:

- To show students examples of what wildfire mitigation looks like in practice.
- To give students confidence that people are working together to make Butte County more resilient to future wildfires.
- To encourage students to think about the ways they can contribute to making their home, school, or larger community more fire-safe.

Objectives:

Students will be able to:

- 1) Explain the purpose of wildfire mitigation.
- 2) Explain the methods and desired outcomes of at least three wildfire mitigation actions.
- 3) Collaborate with a group to propose a class wildfire mitigation project.

Materials and Preparation:

- *Community Service Project Ideas*, from the National Fire Protection Association's TakeAction teen program. Print or have devices to access the packet online.
<https://www.nfpa.org/-/media/Files/Public-Education/Campaigns/TakeAction/TakeActionProjectIdeas.ashx>
- Prepare PowerPoint slideshow for *Lesson 4: Community Wildfire Mitigation*.
- Students will need their wildfire journals in class.

Subjects: Listening and Speaking, Writing

Duration: 60 minutes

Setting: Classroom

Vocabulary:
Mitigation
Fuels Management

Standards:		
NGSS	Crosscutting Concepts	Cause and Effect Stability and Change
	Science and Engineering Practices	Asking Questions and Defining Problems Engaging in Argument from Evidence Analyzing and Interpreting Data
	Disciplinary Core Ideas	ESS3.B Natural Hazards ESS3.C Human Impact on Earth Systems LS2.A: Interdependent Relationships in Ecosystems

		LS2.C: Ecosystem Dynamics, Functioning, and Resilience
Environmental Principles and Concepts		Principle 2: People Influence Natural Systems Principle 3: Natural Systems Change in Ways that People Benefit From and Can Influence Principle 4: There are no Permanent or Impermeable Boundaries that Prevent Matter from Flowing Between Systems Principle 5: Decisions Affecting Resources and Natural Systems are Complex and Involve Many Factors

Lesson Overview:

Students learn about the important work being done in wildfire mitigation around Butte County. This lesson features some of the organizations and projects that reduce the community's risk from wildfires. After brainstorming what they already know about ways to reduce the severity of wildfires, students add to a chart summarizing new learning as the lesson progresses.

Organizations and local mitigation activities are featured through five short videos, filmed around Butte County in 2021. Video topics include the Butte County Fire Safe Council, CAL FIRE, fuels management, grazing, and prescribed fire. To break up the videos, students will add to a chart in their journals or on the whiteboard about the action and desired outcomes for each topic.

The video series ends by viewing Wildfire Ready Raccoon's music video, released in April 2021. This video, while fun and with a catchy tune, introduces important concepts about defensible space and home preparedness, which will be the focus of the next lesson. Education is essential to the BCFSC's mission and is pursued through community engagement with Wildfire Ready Raccoon and youth outreach.

At the end of the lesson, students work in a small group to suggest a wildfire mitigation project the whole class could participate in. Students will present their project proposal to the class, leading to the option of getting involved in a real class mitigation project.

Procedure:

1. Start presentation slides for *Lesson 4: Community Wildfire Mitigation*. Share the opening slide that reads, "There will always be fire on the landscape. We can't always control when and where, but we can be prepared." Explain that in this lesson we are going to learn about the actions happening all around us to make our community more fire resilient. All of us, from fire experts, to homeowners, to students, are a part of this important challenge and there are actions everyone can take to be wildfire ready. We

will learn about some of those community-wide actions making a difference in this lesson.

2. Continue through the presentation slides.



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Have you seen anything that looks like this happening around us?



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Mitigation definition on next slide. (6)

Mitigation:

The action of reducing the severity, seriousness, or painfulness of something.



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Have each student make a mind map in their journal. Add in ideas or actions they have seen or already know about. The pictures from slide four might remind them of things they have seen. Share ideas after two minutes.

Chart what you learn in the upcoming videos.

Name of mitigation action/program	What is being done?	What is the desired outcome?
Example: Youth Education: Wildfire in the foothills	Educate more Butte County 6th-graders about how they can help their community and family be more fire-safe.	Butte County residents are well prepared and stay safe during a wildfire.

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Set up charts in student journals for video segment notes and discussion. There is no need to fill in the example. As the videos progress, students can volunteer answers to fill in a class chart on the whiteboard, in addition to their journals.



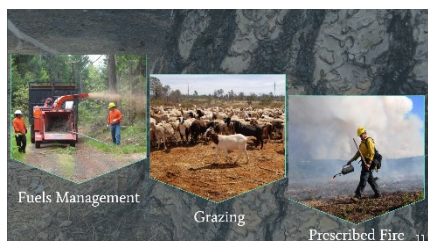
Fire Safe Councils are grassroots, community-led organizations that mobilize residents to protect their homes, communities, and environments from catastrophic wildfire.

Video Length: 5:54



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Meet the CAL FIRE team at Gridley Station 74 and learn about some of the equipment and methods firefighters use to protect and defend our communities. They also give some tips about what you can do to be prepared for a fire.
Video Length: 5:30



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Snapshots of what is ahead.



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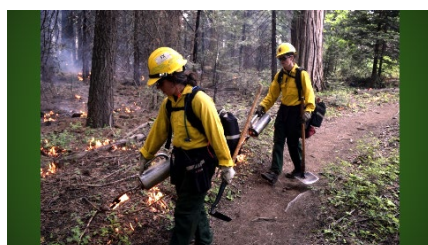
Visit an active project in Magalia, with BCFSC Assistant Director Taylor Nilsson, to witness how mechanical thinning and chipping contributes to healthier and more fire-safe forests.
Video Length: 5:04



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"A herd of 350 to 400 goats from Hanski Family Farms LLC were used to successfully reduce hazardous fuels in nearly five acres near Lake Oroville. The California Department of Water Resources (DWR) partnered with the Butte County Fire Safe Council on this grazing project to reduce the fire risk from grasses, leaves, invasive and non-invasive plants, and other vegetation."

This video was created by the DWR and released in 2021.
Video Length: 2:45



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- 1) What do you think is happening in this picture?
- 2) What do you notice about the people or their equipment?

This photo shows prescribed fire at Sequoia and Kings Canyon National Parks in June 2016, courtesy of the National Park Service.



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Learn about the ecological benefits and uses of prescribed fire with CSU Chico professor and fire practitioner, Dr. Don Hankins, at a recently burned area in Forest Ranch.
Video Length: 5:30



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Wildfire Ready Raccoon, created by Phil John after the 2008 Humboldt fire, has been an important part of the community ever since. Ready spreads his message of wildfire preparedness through his book, at events around Butte County, through social media, and now through music! Watch Ready Raccoon's music video for important tips about how to be prepared for a wildfire. It looks like he has some support from youth in the community too!



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Students add new strategies to the mind map in their journals or on the whiteboard.



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Small group or class discussion.
For the Stop category, have students reflect on Lesson 3 and review topics picked for the wildfire PSA activity.

3. Explain the student assessment activity.

Assessment: Students work in a small group to select and present an idea for a class community service project in fire mitigation, education, or recovery. Students will demonstrate their understanding of wildfire mitigation by using information from the lesson's videos, ideas from the past three lessons, and the resource packet from the TakeAction program.

Presentations should address the following four questions:

- What is the specific problem?
- What would your project work to accomplish?
- Why is this service project a good fit for our class to participate in?
- What skills, equipment, and time are needed to complete the project?



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Break into small groups. Have students access the Community Service Project Ideas packet through the National Fire Protection Association's website or through this link:
<https://www.nfpa.org/-/media/Files/Public-Education/Campaigns/TakeAction/TakeActionProjectIdeas.aspx>

Students can pick from any of the five project categories.

Propose a class wildfire mitigation project.

- 1) Read through the project ideas together for your category.
- 2) Decide in your small group which project you think would be the best choice for you class to work on.
- 3) Discuss, make notes in your journals, and be prepared to share with the class:
 - What is the problem?
 - What would your project help to accomplish?
 - Why is this a good project for the class to work on?
 - What knowledge, equipment, and time is needed to complete the project?

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Allow 10 minutes for group discussion and presentation planning that addresses the four questions on the slide. Each group has two or three minutes to present their project idea to the class and every person in the group should have a part in the presentation. Note student's project suggestions for later reference.

Some ideas that students present for a class project may be part of the next three lessons about personal and family preparedness, which is a great segue.

Evaluation:

Community Service Project Proposal	Good	Fair	Poor
Group Discussion and Preparation	Every student participated in a group discussion to select and prepare a two-minute presentation.	Some group members participated in a group discussion to select and prepare a two-minute presentation.	The group did not engage in a discussion or prepare for their two-minute presentation in the time allotted.
Presentation	Each member of the group participated in the presentation which answered all four questions.	Some group members participated in the presentation which answered three or fewer of the questions.	One group member presented ideas that answered two or fewer questions.

Lesson Extension Recommendation:

FireWorks: Northern California Oak Woodlands

M.3.1 *Once Upon a Wildfire* Reading and Discussion

<https://www.frames.gov/fireworks/curriculum/norcal-oak-woodlands>

Once Upon a Wildfire was written by the Butte County Fire Safe Council's Executive Director, Calli-Jane DeAnda, and illustrated by Jim Burch. Students read or listen to the story and discuss the actions the family in the story took to respond to a wildfire near their house.

Follow the link to our website to purchase or download a free copy of the book:

[Once Upon a Wildfire](#)