Segment Length: 4:51 minutes

Lesson Description:

Why have wildfires become so devastating? Is climate change to blame, or are government policies at fault? This video uncovers how poor forest management and fire suppression have worsened the fires and emphasizes the need for better practices to prevent future disasters.

Objectives:

Students will be able to:

- Identify the key arguments presented in the video about the causes of California wildfires
- Analyze the impact of government policies on the frequency and severity of wildfires
- Evaluate the effectiveness of various forest management practices in preventing wildfires
- Create a plan for implementing improved forest management strategies to reduce the risk of future wildfires

Concepts & Key Terms:

Apocalypse: A term used to describe a catastrophic event or disaster

Catastrophizing: Exaggerating or predicting the worst possible outcomes of a situation

Prescribed (Controlled) burning: A forest management technique where controlled fires are intentionally set to reduce excess vegetation and prevent larger wildfires

Selective cutting: A forestry practice involving the removal of certain trees to improve the health and growth of the remaining forest

Preview Activity:

Use Think, Pair, Share to have students answer and discuss one or more of these preview questions: 1) What do you know about the causes of wildfires in places like California? 2) How might government policies affect wildfire management? 3) What role do you think climate change plays in natural disasters like wildfires? **OR**

Distribute copies of the K-W-L worksheet to the class. Have students fill in the K and W sections. After showing the video, have students complete the L section and answer the questions at the bottom of the worksheet.

Viewing Guide:

We recommend that teachers show the video twice: first to allow students to view the video and focus on the issues presented, and second to allow them time to complete the viewing guide. After they complete the viewing guide, allow students a few minutes to work in pairs to share and verify answers.

Answers to Viewing Guide

- 1. environmental
- 2. naturally
- 3. biodiversity

- 4. mentality
- 5. catastrophe

Viewing Guide

Name Per			Date
		Per	Teacher
<u>Di</u>	<u>rectio</u>	ns: As you watch the video, f	ill in the blanks with the correct words.
1.		te change is real, it's not the problem.	end of the world, it's not our most serious
2.	years This i	or so in lots of fires, with smale or so in lots of fires, with smale or some some some some some some some some	burned every 10 burned every 10 burned every 10 burned every 10 aller flames. But we put most of those out. accumulating in these forests for the past putting out fires instead of letting them burn
3.		ribed burning and frequent fir	e is a must if we're going to maintain the plant life.
4.	You h	, ,	t of the tree-hugging u know it's the classic not seeing the forest
5.	A sm	all change in temperature is n	ot the difference between normalcy and
	ow, pl		o reflect on the video and answer these
WI	nat go	vernment policies have contri	buted to wildfires?
WI	nat red	duces the severity of wildfires	?
WI	ny mig	tht politicians promote a policy	that actually causes more wildfires?

Discussion and Analysis

- 1. What are the main causes of California wildfires mentioned in the video?
- 2. According to the video, how has climate change affected wildfire severity?
- 3. Why do some people blame climate change for the wildfires?
- 4. What specific government policies have contributed to the wildfire problem?
- 5. Did you know that forests needed to be managed? What does forest management even mean?
- 6. How does poor forest management make wildfires worse?
- 7. Why is prescribed burning important for forest health?
- 8. How do controlled burns prevent larger, more destructive fires?
- 9. What evidence is there that proper forest management can reduce wildfire damage?
- 10. How do the video's arguments challenge the common perception of climate change as the main cause of wildfires?
- 11. What are the pros and cons of selective cutting in forest management?
- 12. Do you think there is a reason for climate change to be blamed for wildfires? Why?/Why not? If so, what do you think the reason is?
- 13. How can government policies be changed to better manage forests and prevent wildfires?
- 14. How does the video suggest balancing environmental protection with wildfire prevention?
- 15. What steps can communities take to reduce the risk of wildfires?
- 16. Why might environmental journalists not report about the importance of forest management?
- 17. What did the forest service ecologist mean when he said, "We have to get away from just sort of the tree hugging mentality. You have to look at the whole"?
- 18. How can you apply the information from the video to propose a wildfire prevention plan for your local area?

Discuss These Lines from the Video:

All of this catastrophizing around climate change is just a huge distraction.

Climate change is real, it's not the end of the world, and it's not our most serious environmental problem.

If all you have is a hammer, everything looks like a nail.

Governor Newsom tweeted out that last year, we had one-tenth of the area burned as we're having this year, and therefore it's climate change. It's like, well, what did climate change happen between last year and this year?

Native Americans were burning huge amounts of land.

Nobody's more alienated from the natural environment, and really nobody's more apocalyptic than environmental journalists.

Natural disasters aren't getting worse, in fact, they're getting better.

A small change in temperature is not the difference between normalcy and catastrophe.

Quotes for Discussion:

The creation of a thousand forests is in one acorn. — Ralph Waldo Emerson

The very idea of "managing" a forest in the first place is oxymoronic, because a forest is an ecosystem that is, by definition, self-managing. — Bernd Heinrich

There are no passengers on spaceship earth. We are all crew. – Marshall McLuhan

A nation that destroys its soils, destroys itself. Forests are the lungs of our land, purifying the air and giving fresh strength to our people. — Franklin D. Roosevelt

Advice from a tree: stand tall and proud, sink your roots into the earth. Be content with your natural beauty, go out on a limb, drink plenty of water, remember your roots and enjoy the view.

— Ilan Shmia

We must protect the forests for our children, grandchildren, and children yet to be born. We must protect the forests for those who can't speak for themselves such as the birds, animals, fish, and trees.

— Chief Qwatsinas

Activities:

- 1. Have students complete the K-W-L chart in class or for homework.
- 2. Have students complete the political cartoon activity in class or for homework.
- 3. Have students complete the PMI chart in class or for homework.
- 4. Have students complete and submit the Exit Ticket as they leave class.
- 5. Have students work in pairs create a storyboard for a short (3 minutes or less) educational video that explains the main points of the Stossel video. Focus on clear, visual communication of the causes and prevention of wildfires.

- 6. Have students find and analyze recent news articles about wildfires. Compare their explanations of the causes and solutions with those presented in the video.
- 7. In small groups, students create an informative poster explaining different forest management techniques discussed in the video. Include pros and cons for each method.
- 8. Have students write an essay explaining the primary causes of California wildfires and how those fires can be mitigated. Use evidence from the video to support their points.
- 9. Hold a debate on whether climate change or poor forest management is the main cause of wildfires. Place students into groups. Each group should prepare arguments and counterarguments based on information from the video.
- 10. Students will research the practice of prescribed burning and write a report detailing its benefits and challenges. Compare the findings with the information presented in the video.
- 11. Have students analyze maps of wildfire-prone areas in California. Identify regions where poor forest management practices are evident and suggest improvements based on the video's content.
- 12. Does the impact of wildfires on people and their homes have to do with increasing severity of wildfires, or does it relate more to people building in areas that are prone to wildfires? Research this question and report to the class via a slideshow.
- 13. Students individually write a letter to a local politician explaining the importance of proper forest management and suggesting policy changes based on the video's recommendations.
- 14. In groups, students will research and present on how Native American practices of land management, such as controlled burns, helped prevent large wildfires. Compare these practices to modern methods discussed in the video.
- 15. In pairs, students prepare questions and conduct a video or phone interview with a local forestry expert or firefighter about wildfire causes and prevention.
- 16. Have students read the poem "What do we plant when we plant the tree?" by Henry Abbey and then re-watch the video on wildfires. In a short essay, students will compare the poem's portrayal of trees as essential to human life and infrastructure with the video's emphasis on the importance of proper forest management. Students should reflect on how the loss of trees to wildfires impacts both the environment and human society, drawing connections between the poetic imagery and real-world consequences discussed in the video.

What do we plant when we plant the tree? We plant the ship, which will cross the sea. We plant the mast to carry the sails; We plant the planks to withstand the gales—The keel, the keelson, and beam and knee; We plant the ship when we plant the tree.

What do we plant when we plant the tree? We plant the houses for you and me. We plant the rafters, the shingles, the floors, We plant the studding, the lath, the doors, The beams and siding, all parts that be; We plant the house when we plant the tree.

What do we plant when we plant the tree? A thousand things that we daily see; We plant the spire that out-towers the crag, We plant the staff for our country's flag, We plant the shade, from the hot sun free; We plant all these when we plant the tree.

Henry Abbey, Feb. 1890, The Poems of Henry Abby (1895), 262.

https://todayinsci.com/QuotationsCategories/F_Cat/Forestry-Quotations.htm

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Name		Date	
Class	Per	Teacher	

Cloze Activity Answer Key

Directions: Read the entire passage first. Then fill in the blanks with words from the box.

thinning	store	excessive	management
overgrown	vulnerable	reducing	products
worse	wildfires	declined	catastrophic
controlled	wildlife	reduce	before

Active forest management, including thinning fire-prone forests, is a good way to reduce the risk of forest fires.

Decades of lack of management have left federal forests overstocked with disease and insect ridden trees and standing dead timber that fuel catastrophic wildfires.

Over 80 million acres of national forests are at risk of severe wildfire and need active forest management. Proven, science-based forest management tools like logging, thinning, and controlled burns reduce excessive vegetation that fuel catastrophic wildfires. Active management protects the environment by helping forests adapt to changing conditions, reducing massive carbon emissions from wildfire, and creating renewable building materials that store carbon.

Why are today's forest fires so severe in the West?

- Aggressive wildfire suppression, combined with forest non-management, have
 led to unnaturally dense and <u>overgrown</u> forests that are also no longer meeting
 the nation's needs for wood <u>products</u>, and instead are burning up.
- On many national forests throughout the west, the intense competition among trees have left the forests unnaturally overgrown, weakened and <u>vulnerable</u> to severe wildfire, insects and disease.
- As timber harvests on national forests have been reduced, average annual net growth (calculated as gross growth minus mortality) has <u>declined</u>. Meanwhile, average annual mortality has nearly doubled from 2006-2016. These patterns

reflect aging forests and combinations of wildfire, drought, and insect infestations.

- Millions of acres of national forest lands are at risk of <u>catastrophic</u> wildfire. In a good year, we are only managing a fraction those acres to reduce risks.
- And climate change has made the situation far worse, by contributing to drought
 and other conditions that further weakened our forests' natural ability to
 withstand fire.

What is active forest management?

- Forest management is the use of forestry tools including logging, thinning and controlled burning - to achieve certain objectives on a given landscape.
- These tools are often used for timber production, but also for forest restoration,
 wildfire mitigation, wildlife habitat enhancement and many other purposes.
- Logging itself doesn't prevent forest fires. Nothing can. But logging is a tool that
 can be used to <u>reduce</u> the fuels that make fire burn hotter and faster.
- Forest management tools can also provide access, fuel breaks and other strategies that give firefighters better and safer opportunities to contain fires <u>before</u> they get out of control.

Name		Date
Class Period		Teacher
	Government Fueled Fires K-W-L Chart	
Directions: Complete the K and W sections prior and answer the questions below the K-W-L chart.	Directions: Complete the K and W sections prior to watching the video. After you have seen the video, complete the L section and answer the questions below the K-W-L chart.	seen the video, complete the L section
¥	A	_
What I know about the causes of wildfires	What I want to know about the causes of wildfires	What I've learned about the causes of wildfires
How has your understanding of the causes	How has your understanding of the causes of wildfires changed after watching the video?	خ -
What surprised you most about forest mar	What surprised you most about forest management practices discussed in the video?	

Name		Date
Class Period		Teacher
Gove P = Plus: What might be some posit M = Minus: What might be some neg I = Interesting: What is interesting	Government Fueled Fires PMI Chart P = Plus: What might be some positive effects of managing forests with selective cutting and other techniques? M = Minus: What might be some negative effects of managing forests with selective cutting and other techniques? I = Interesting: What is interesting about managing forests with selective cutting and other techniques?	hart ctive cutting and other techniques? elective cutting and other techniques? utting and other techniques?
+ Plusses +	- Minuses -	Ι
How has your understanding of wildfire causes chan	ses changed after watching the video?	
If you were managing a forest in your area, would you use selective cutting? Why/why not?	would you use selective cutting? Why/why	not?

Name		Date
Class	Period	Teacher

Political Cartoon Activity

<u>Directions</u>: Use the political cartoon to answer the questions.



Briefly describe what is happening in the cartoon.
How does this cartoon relate to the video's discussion on the importance of forest management practices?
What do you think the term "Rural California Scofflaw" implies about the resident's behavior and attitude toward wildfire risks?
In what ways could better policies and individual actions, as suggested in the video help prevent situations like the one depicted in the cartoon?