Answers to “Need to Know”

  The simplest way to stop fire is to prevent a fire from ever getting started. The earlier a fire is detected, and the sooner firefighters can get to a fire when it is still small, is the best way to stop a fire.

  The most common way fires start is from humans. Last year we saw many fires start from target shooting. Unattended campfires and cigarettes are another common way fires start.

  The quickest way to put out a forest fire is to douse it with water, smother the fire, or remove the fuel.

  Controlled burns are done for many reasons. Most often controlled burns are done to reduce the amount of fuels and reduce future wildfire risk. Controlled burns are also done to improve habitat. Many vegetation communities evolved with fire and fire is needed in these vegetation types to improve habitat, reduce insects and disease, promote new vegetation growth, and cycle nutrients.

  Forest fires contribute to air pollution. The type and amount of vegetation burning, and wind and weather patterns, will affect how much air pollution occurs. The Rim Fire outside of Yosemite, California in 2013 put out more pollution into the air then the entire city of San Francisco generates in an entire year. Forest fires can pollute water as ash, charcoal, and soil can run into waterways after a fire.

  The US Forest Service will start a burn ban on forest service land when wildfire danger becomes too high. The Bureau of Land Management will typically follow suit.

  Pollution can increase the severity or size of a wildfire if the pollution is bad enough to cause die back of shrubs or trees. In the southern Sierra Nevada pollution from southern California can be bad enough to cause needle die back on conifer trees.

  The federal government is constantly testing firefighting equipment and creating new, more efficient prototypes. The government then tests the prototypes, and if successful, the prototypes become new equipment available to firefighters.

  If you don’t play with fire, then you won’t get hurt & you won’t start a wildfire. Fire is a force of nature. We should all respect fire and you should only work with fire after you have been taught by someone with more fire experience and who respects fire.

  Who pays for fighting fires depends on where the fire starts. If a fire starts on US Forest Service land, then the US Forest Service pays to fight the fire. If a fire starts on BLM land, then the BLM will pay. If it starts on state land, then the state pays. If it starts on private land, it depends. Some counties will pay for fires that start on private land. Some counties pay the state a type of insurance policy (called a Wildfire Protection Program in NV) to fight fires on private land. Sometimes if the fire was started intentionally or even by accident, the person who started the fire may be responsible for the cost of fighting the fire (depending on the circumstances).

  Yes, animals are affected by wildfire, both positively and negatively. The larger the wildfire the more animals will be impacted. Many animals can outrun, fly away from, or burrow underground during a wildfire. Some will not be able to escape & will get burned or die. Some animals will lose their habitat (home) and will move elsewhere to find food and shelter. Some animals will benefit from fire as fire creates new vegetation growth that the animals can eat, or the fire creates new habitat for the animals to live in.

  How do fires affect the ecosystem? It really depends on the ecosystem, how healthy the ecosystem is, and what type of fire burns through the ecosystem. Fire can be very destructive to sagebrush ecosystems if it turns the sagebrush into a cheat grass monoculture. Fire can be very beneficial to ponderosa pine ecosystems if it reduces fuel loads, reduces insect and diseases, and promotes pine regeneration. (I would love to come in & talk more about this to your class as it is one of my favorite topics!)

  The number one solution to prevent forest fires is education! After that is mitigation, to reduce fuel loads in the forest; and early detection to keep forest fires as small as possible.

  As many campaigns as you want! However, one unified message (like Smokey Bear) seems to be better.

  The thing that seems to grab the public’s attention the most is when the forest around them burns or they lose their homes to wildfire or they know someone who has. Visuals of fire (either in person or on tv) and smoke in the air really get people’s attention.

  Recruiting firefighters doesn’t seem to be a problem fortunately.

  Teaching people from an early age is the best way to get people to adopt the idea of preventing forest fires. After that, imposing penalties and fines is a deterrence as well.

  Good question! It depends on the year. Usually a big lightning “bust” without any rain will spark many fires. We see this every so often in Humboldt and Elko counties. However, it would be interesting to see which county humans cause the most fires. Washoe maybe?