

# Scientist: Fires in Sierra Nevada to worsen

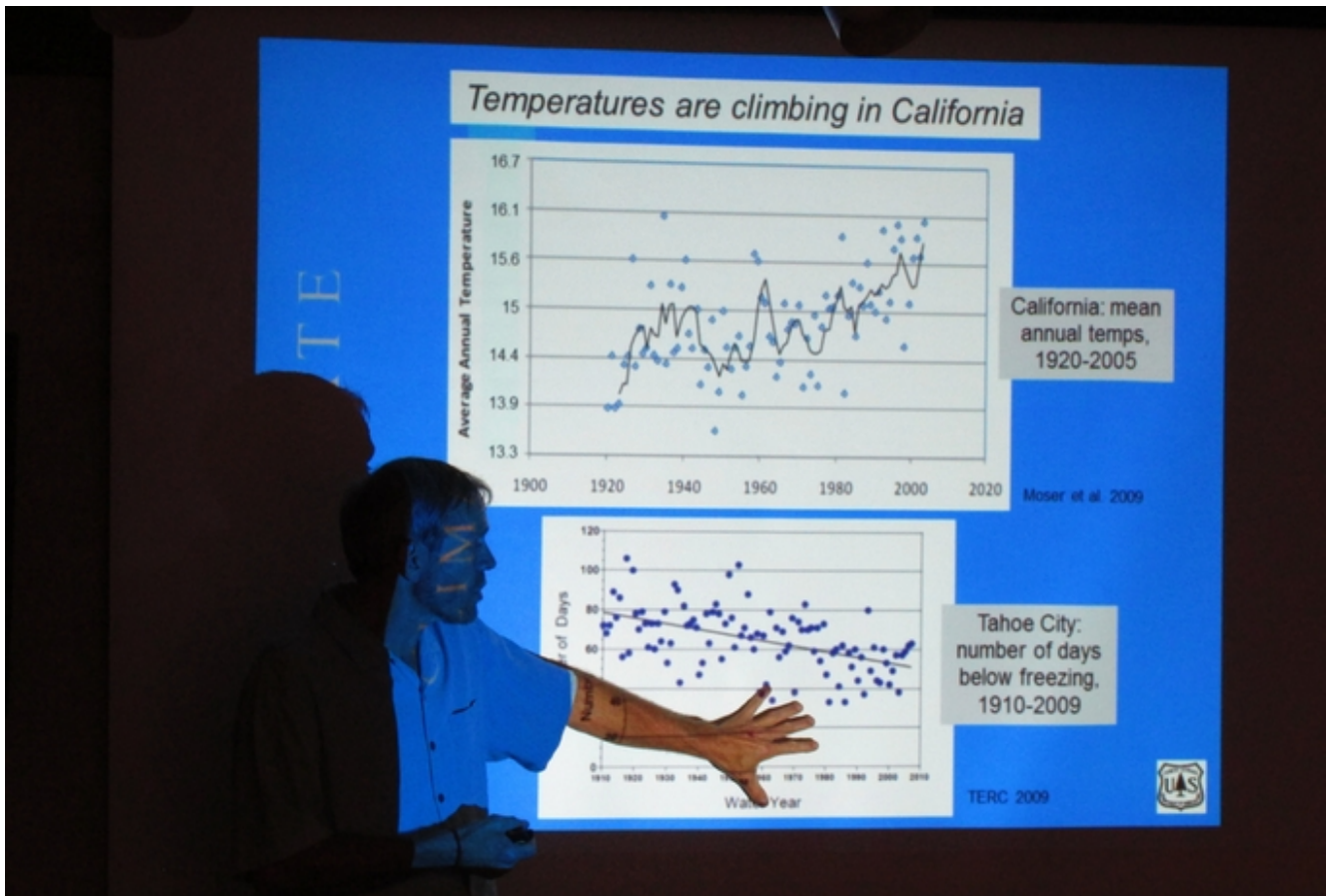
By Kathryn Reed

No one thing can be blamed for the proliferation of catastrophic fires, but there are some things that could be done to help combat them.

“So much is driven by politics. As a scientist, I’m not sure I have much control, Hugh Safford said.

Safford, a regional ecologist with the U.S. Forest Service, gave a talk Aug. 4 at the South Lake Tahoe Library about what is going on in the Sierra Nevada when it comes to managing the forest as well how fire and climate change play a role.

Suppression and the lack of fire are equally devastating to the ecosystem, he said. He believes more fires should be managed instead of immediately extinguished. This will create a more natural forest that is healthier. He’s also an advocate of controlled burns.



Hugh Safford, a USFS ecologist, talks about fire and the ecosystem of the Sierra Nevada on Aug. 4. Photo/Denise Haerr

Fires are burning hotter than ever before because there is so much fuel as well as other changes like air temperature.

"Sixty-eight percent of the conifer stands have not burned since 1900," Safford said.

Areas used to burn about every 10 years. They did so with less intensity and consumed small swaths.

The increase in overnight temperatures is having a huge affect with the growth of fires and the inability to quickly contain them. Humidity is not rising overnight with the higher temps, which means the fires are not dying down at night. This is when crews could get a handle on a fire. It is difficult for firefighters to work at night because of the lack of visibility.

"Precipitation is growing, but the snowpack is going down.

That is driven by temperatures,” Safford said.

He said the indicators are that temps will increase 5 to 9 degrees by the end of the century. That would be like Davis having summer temps equivalent to Phoenix’s. For Lake Tahoe it will be like being in Nevada City.

“Poison oak will be here, oaks, algae in the lake. It is going to be a very different place,” Safford said.

The higher temps also mean less dew is forming. That little bit of moisture is what some animals rely on as their water source.

Fire is also impacting wildlife because animals’ homes are destroyed and won’t be “rebuilt”. The heat intensity is such that trees won’t grow because there are no seeds to naturally sow, and most often replanting has failed.

What ends up growing are shrubs. If shrubs are what burned, then it’s grass that sprouts. The landscape is changing because of catastrophic fires. That in turn impacts everything associated with what was once a forest of trees. This includes water quality and clarity.

Safford would like to be more experimental when it comes to dealing with managing the forests. He said his agency plans too much and doesn’t take enough risks. He also acknowledged those plans get challenged with lawsuits without ever being put to the test to see if they work.