

Estimated duration: Two 1.5 hour sessions, with additional time for writing assignment as needed.

ELA Common Core Content Standards:

Reading Standards for Literature 1, 7 Speaking and Listening Standards: 1, 2, 4 Reading Standards for Literacy in Social Studies 1, 2, 3, 7, 8, 9 Reading Standards for Literacy in Science 1, 2, 7, 9 Writing Standards 9

Goal: Students will explore how they might broaden their understanding of the causes and effects of climate change as well as contemporary and historic land management practices by drawing parallels to another Karuk origin story with a fundamental fire theme: how the Karuk People came to get back the fire that they had lost. This lesson represents a synthesis of English Language Arts, Social and Environmental Sciences, and Native American Studies.

Background: The topic of fire is used as a literary device in many traditional Native American stories, including several stories that discuss the origins of fire, how it should be respected and used, and how its careful teachings can have disastrous consequences when unheeded. To the Karuk, these stories and teachings have been passed orally from the *ikxaréeyav*¹ (Spirit People) from generation to generation, helping us understand our connection to each other and to the world. Traditional stories remind us of who we are, tell us what roles we have to play on this earth, and speak to an earlier time in our history when animals and humans talked to one another. They remind us that we are equals; we are related to all of the creatures that walk this earth and the Spirit People who went before us and live with us today. They are also often used to teach youth lessons about the world, its fundamental elements, the creatures and plants that inhabit it, and the role they play within.

A traditional Karuk origin story, like many other traditional Native American stories, is only told in the winter. In our area, this means that these stories are told when it is cold enough for snow

¹ Pronounced, Ick-xah-RAY-yahv – the "x" is a "h" sound made at the very back of the throat. See Karuk Pronunciation Guide in Curriculum Binder.

to be in the high mountains. In times of late fall seasons, shortened winters, dry springs and hot summers, the time for telling stories is very limited. According to the 2014 National Climate Assessment report¹, the "consequences of observed and projected climate change have and will undermine indigenous ways of life that have persisted for thousands of years." Not only do the effects of climate change seriously impact the traditional education of our Youth, but they also have profound ramifications on our region's Native food, fiber and regalia species. For subsistence cultures such as the Karuk, impacts include physical and emotional health, economic stability, social relations, cultural and ceremonial practice, and political status.

One of the key factors exacerbating current conditions is the move away from traditional land management practices, i.e. eliminating fire from the landscape, to the fire suppression politics of the past century. Ongoing drought, higher temperatures in waters and air, encroaching forest pathogens, and other changes in our region are serious conditions in and of themselves, but the potential for increased fire size and severity in the face of climate change creates vulnerabilities to cultural survival and community safety.

In this lesson, students will draw from the literary genre of the Karuk origin story to reframe the history of fire management in the mid Klamath region. In learning more about the social values and resource management codes of the Karuk people, Students will be encouraged to reflect on how popular culture, federal politics and social structure shapes their own perspectives.

Important to note: Many individuals consider their beliefs and ways of life as important everyday elements that contribute to rich tradition and cultural heritage. The stories and song that convey those of Native peoples are considered by many to be recounting truths, and not simply to be disregarded or labeled as "myths" or "fairy tales." Respect for others' beliefs and ways of life will make this a lesson in cultural sensitivity.

Theme/Big Idea:	Origin stories help us understand our world throughout our lives
Big Questions:	What is the connection between climate change and land management practices? Can we learn from indigenous oral tradition?
Vocabulary:	Learned through context and self-motivated discovery

Materials:

Indigenous Peoples, Lands, and Resources: 2014 National Climate Assessment, excerpt (included)

Theft of Fire, translated from Julia Starritt's original Karuk telling, published in Kroeber, A. L., & Gifford, E. (1980). Karok Myths, University of California Press (included)

¹ Retrieved April 17, 2017: <u>http://nca2014.globalchange.gov/report/sectors/indigenous-peoples</u>

Comprehension: Questions to Catching Fire, worksheet (included) Catching Fire: Prescribed Burning in Northern California, DVD (included) Writing Assignment (included)

Preparation: For the first session, make copies of the excerpt, Indigenous Peoples, Lands, and Resources: 2014 National Climate Assessment and Comprehension: Questions to Catching Fire worksheet for each student. Prepare projector and DVD player for viewing Catching Fire: Prescribed Burning in Northern California. For the second session, make copies of the lesson text Coyote Steals Fire and Writing Assignment for each student. Prepare projector and DVD player to finish watching the video presentation

Session One

Preparing to Read: Tell students that the lesson text is taken from the full report of the National Climate Assessment, published in 2014 and available online at the following URL: <u>http://nca2014.globalchange.gov/report</u>. This is an excellent in-depth look at climate change impacts on the U.S. and covers a multitude of factors, regional differences, and impacts. The 12 report findings detail the multitude of ways climate change is already affecting and will increasingly affect the lives of Americans. The Chapter excerpt is taken from that which discusses climate change impacts on Native Americans.

Reading: Allow time for students to read the three-page excerpt silently first, and encourage them to highlight words or content that they have difficulty understanding. Then have students take turns reading each paragraph aloud, stopping to clarify meaning when needed.

Discussion: Prompt discussion by asking the following:

- What is climate change? (Oxford Dictionary definition: a change in global or regional climate patterns, in particular a change apparent from the mid to late 20th century onwards and attributed largely to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels).
- Why does the report imply that indigenous peoples are particularly vulnerable to climate change?
- How does climate change seem to be affecting the mid-Klamath region (Some possible answers might be: *increased drought and temperatures, more variable weather, stronger storm systems, decreased snowpack, flooding, and increase in invasive species*).
- How might this affect the frequency and severity of our wildfire season?
- Do you think that the effects of wildfire can be influenced by land management practices? Why and why not?

Preparation for Activity: Pass out the worksheet, **Comprehension: Questions to Catching Fire.** Students should read through the first set of questions and prepare to take notes during the video presentation.

Video Presentation: Show the first 26.5 minutes of **Catching Fire: Prescribed Burning in Northern California.** In order not to miss any important information, students should just take notes when they recognize the answers to some of the questions they've just read.

Comprehension: Give students time to discuss the answers to the Comprehension worksheet among themselves and fully answer each question. They will turn this, along with their writing assignment, in at the end for grading.

Session Two

Preparation for Activity: Have students look over the second set of questions in their **Comprehension: Questions to Catching Fire.** Students should prepare to take notes during the video presentation.

Video Presentation: Show the final half of **Catching Fire: Prescribed Burning in Northern California.** Remind students to simply take notes when they recognize the answers to some of the questions they've just read.

Comprehension: Give students time to discuss the answers to the Comprehension worksheet among themselves and fully answer each question.

Preparing to Read: Tell students that the next text they will read is a version of the well-known Karuk story of the **Theft of Fire**. A traditional Karuk origin story, like many other traditional Native American stories, is only told in the winter. In our area, this means that these stories are told when it is cold enough for snow to be in the high mountains. Ask them why they think this might be important. Ask them if they know what the purpose of origin stories are. If needed, read the following aloud to help clarify:

The Karuk way of life is known to us through origin stories (*píkva*) that have been told and re-told, heard and re-heard for countless generations. Listening to the stories together, we again re-imagine "the times before" human existence, "when the animals, plants, rocks were people." These First People are called the *ikxaréeyav* (or often in English, "Spirit People"). The stories are dramatic retellings of the ancient actions and interactions of these First Peoples, who understood their responsibility to figure out how the yet-to-come humans should live.¹

Tell students that while the form and content of origin stories may seem simple and/or rough to a person raised in Western cultures, these stories usually carry a great deal of cultural

¹ This figuring of the *ikxareeyavs* has been called "laying down the world."

Fire and Climate

weight. Hearing the stories, we learn that the First People fulfilled that responsibility through repeated sequences of contemplation, discussion, inspiration, and both collaborative and random experimentation. As human re-hearers, we inherit the same ancient responsibilities of the First People, each of us in our own way trying to figure out "how people should be living."

Reading: Pass out the lesson text, Theft of Fire. Students should read silently. Discuss the text, if desired, but remind students that there are as many ways to tell a story as there are storytellers. Likewise, each listener will have his or her own understanding of what the text may mean. This, too, will change over time as the listener matures, has new experiences, or is in a particular stage of life.

Writing: Pass out the writing assignment and allow students the rest of the period to draft an outline of their essays. Circulate to allow students the opportunity to solicit feedback or ask clarifying questions. Assign the essay as homework, and have student return their Comprehension worksheets with their final papers.

Indigenous Peoples, Lands, and Resources: 2014 National Climate Assessment, excerpt

Forests, Fires, and Food

Climate change impacts on forests and ecosystems are expected to have direct effects on culturally important plant and animal species, which will affect tribal sovereignty, culture, and economies.^{1,2} Warmer temperatures and more frequent drought are expected to cause dieback and tree loss of several tree and plant species important for Native artistic, cultural, and economic purposes, including tourism.³ Tribal access to valued resources is threatened by climate change impacts causing habitat degradation, forest conversion, and extreme changes in ecosystem processes.⁴

Observed impacts from both the causes and consequences of climate change, and added stressors such as extractive industry practices on or near Native lands, include species loss and shifts in species range.^{5, 6} There have also been observed changes in the distribution and population density of wildlife species, contraction or expansion of some plant species' range, and the northward migration of some temperate forest species.⁷ For example, moose populations in Maine and similar locations are expected to decline because of loss of preferred habitat and increased winter temperatures, which are enabling ticks to survive through the winter and causing damage from significant infestation of the moose.

¹ Lynn, K., J. Daigle, J. Hoffman, F. Lake, N. Michelle, D. Ranco, C. Viles, G. Voggesser, and P. Williams, 2013: The impacts of climate change on tribal traditional foods. Climatic Change, 120, 545-556, doi:10.1007/s10584-013-0736-1.

² Voggesser, G., K. Lynn, J. Daigle, F. K. Lake, and D. Ranco, 2013: Cultural impacts to tribes from climate change influences on forests. Climatic Change, 120, 615-626, doi:10.1007/s10584-013-0733-4.

³ Daigle, J. J., and D. Putnam, 2009: The meaning of a changed environment: Initial assessment of climate change impacts in Maine – indigenous peoples. *Maine's Climate Future: An Initial Assessment*, G.L. Jacobson, I.J. Fernandez, P.A. Mayewski, and C.V. Schmitt, Eds., University of Maine, 37-40.

⁴ Ryan, M. G., S. R. Archer, R. Birdsey, C. Dahm, L. Heath, J. Hicke, D. Hollinger, T. Huxman, G. Okin, R. Oren, J. Randerson, and W. Schlesinger, 2008: Ch. 3: Land Resources. *The Effects of Climate Change on Agriculture, Land Resources, Water Resources, and Biodiversity. A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research*, P. Backlund et al., Ed., U.S. Environmental Protection Agency, pp 75-120.

⁵ Cochran, P., O. H. Huntington, C. Pungowiyi, S. Tom, S. F. Chapin, III, H. P. Huntington, N. G. Maynard, and S. F. Trainor, 2013: Indigenous frameworks for observing and responding to climate change in Alaska. *Climatic Change*, **120**, pp 557-567.

⁶ Rose, K. A., 2010: Tribal Climate Change Adaptation Options: A Review of the Scientific Literature. U.S. Environmental Protection Agency Region 10, p 86.

⁷ Voggesser, G., K. Lynn, J. Daigle, F. K. Lake, and D. Ranco, 2013: Cultural impacts to tribes from climate change influences on forests. *Climatic Change*, **120**, pp 615-626.

Fire and Climate

Loss of biodiversity, changes in ranges and abundance of culturally important native plants and animals, increases in invasive species, bark beetle damage to forests, and increased risk of forest fires have been observed in the Southwest, across much of the West, and in Alaska (see also Appendix 3: Climate Science Supplement, Ch. 7: <u>Forests</u>; Ch. 8: <u>Ecosystems</u>). Changes in ocean temperature and acidity affect distribution and abundance of important food sources, like fish and shellfish (Ch. 2: <u>Our Changing Climate</u>; Ch. 24: <u>Oceans</u>).

Rising temperatures and hotter, drier summers are projected to increase the frequency and intensity of large wildfires (see Ch. 7: <u>Forests</u>). Warmer, drier, and longer fire seasons and increased forest fuel load will lead to insect outbreaks and the spread of invasive species, dry grasses, and other fuel sources (see Ch. 7: <u>Forests</u>). Wildfire threatens Native and tribal homes,



safety, economies, culturally important species, medicinal plants, traditional foods, and cultural sites.

"Fire affects the plants, which affect the water, which affects the fish, which affect terrestrial plants and animals, all of which the Karuk rely on for cultural perpetuity."¹

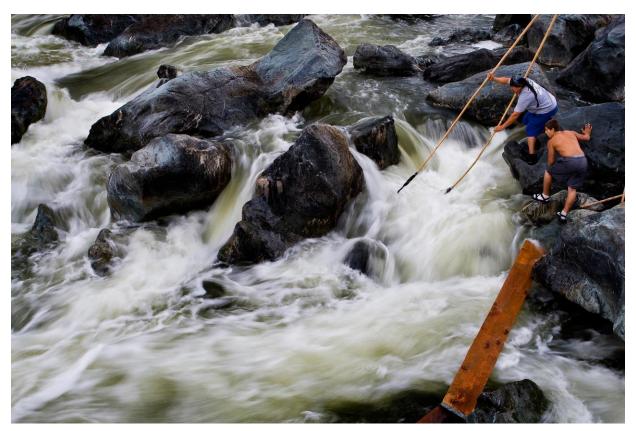
Mudslide due to high severity wildfire blows out salmon bearing creek. Photo: Stefan Dosch

In interior Alaska, rural Native communities are experiencing new risks associated with climate change related wildfires in boreal forests and Arctic tundra (see also Ch. 22: <u>Alaska</u>). Reliance on local, wild foods and the isolated nature of these communities, coupled with their varied preparedness and limited ability to deal with wildfires, leaves many communities at an increased risk of devastation brought on by fires. While efforts are being made to better coordinate rural responses to wildfires in Alaska, current responses are limited by organization and geographic isolation.

Indigenous peoples have historically depended on the gathering and preparation of a wide variety of local plant and animal species for food (frequently referred to as traditional foods), medicines, ceremonies, community cohesion, and economic health for countless generations.

A changing climate affects the availability, tribal access to, and health of these resources. This in turn threatens tribal customs, cultures, and identity.

¹ Karuk Tribe, 2010: Department of Natural Resources Eco-Cultural Resource Management Plan. 171 pp., Karuk Tribe of California, Department of Natural Resources.



Human-caused stresses such as dam building have greatly reduced salmon on the Klamath River.

Medicinal and food plants are becoming increasingly difficult to find or are no longer found in historical ranges.¹ For example, climate change and other environmental stressors are affecting the range, quality, and quantity of berry resources for the Wabanaki tribes in the Northeast.² The Karuk people in California have experienced a near elimination of both salmonids and acorns, which comprise 50% of a traditional Karuk diet.³ In the Great Lakes region, wild rice is unable to grow in its traditional range due to warming winters and changing water levels, affecting the Anishinaabe peoples' culture, health, and well-being.⁴

Climate change is likely to amplify other indirect effects to traditional foods and resources, including limited access to gathering places and hunting grounds and environmental pollution.

¹ Riley, R., P. Blanchard, R. Peppler, T. M. Bull Bennett, and D. Wildcat, 2012: Oklahoma Inter-Tribal Meeting on Climate Variability and Change: Meeting Summary Report. 23

² Michelle, N., 2012: Uses of Plant Food-Medicines in the Wabanaki Bioregions of the Northeast; a Cultural Assessment of Berry Harvesting Practices and Customs. Universityof Maine, Orono.

³ Norgaard, K. Marie, 2005: The Effects of Altered Diet on the Health of the Karuk People. 110 pp., Karuk Tribe of California.

⁴ MDNR, 2008: Natural Wild Rice in Minnesota. A Wild Rice Study Document Submitted to the Minnesota Legislature by the Minnesota Department of Natural Resources. 114 pp., Minnesota Department of Natural Resources, St. Paul, MN.

Fire and Climate

Grade 10, Lesson 4



Long ago, the **ikxaréeyav**¹, the Spirit People, roaming the lower region of the Klamath Basin liked to gamble. One day, some of the **ikxaréeyav** from upriver came to visit, and so they decided to sit down and play a friendly game between upriver and downriver teams. After many hours and much **ishpuk**² and other valuables changing hands, the upriver People beat them completely. Then what were the downriver people to bet? They talked amongst themselves, now not feeling so friendly anymore, and then said, "Let's bet for fire."

The upriver **ikxaréeyav** won that, too, and so they took away the fire. When they left for home, all the fire went out in the mid and lower Klamath villages. The ikxaréeyav living there tried everything to make fire, but they couldn't get anything to burn. As time went on, they grew desperate. What were they to make fire with? They were freezing.

Pihnêefich³ said, "Let me go upriver. I'll get the fire back." The others agreed: "chími man!⁴"

So he gathered together all the swiftest People, and he told the runners where to sit. Frog sat down in first place, on the river bank, and Turtle sat down on a mountain-top. All the other runners were placed at intervals further on up the way.

Then **pihnêefich** traveled upriver to the end of the world. And when he got closer, he saw lots of fire in the mountains. There was a lot of smoke, and there were forest fires. When he finally arrived, he saw only children there. So he asked the children, "Where are the men?"

¹ Spirit People/Spirit Person. This is pronounced something like "ick-xah-RAY-yahv," with the "x" like the Spanish sound, e.g. an "h" sound made at the very back of the throat. See Karuk Pronunciation Guide in Curriculum Binder ² Dentalium shells (used as money). Pronounced something like "ish-pook."

³ Coyote. Pronounced something like "pee-NAY-fich." Listen to soundfile at: <u>http://linguistics.berkeley.edu/~karuk/audio-words/MP3/pihneefich_ShD.mp3</u>

⁴ Fine, alright. Pronounced something like "CHI-me".

Karuk Tribe: Nanu'ávaha

The children answered, "They're hunting in the mountains." This made **pihnêefich** smile, and he made up his plan. "Let me paint you on your faces!" he said brightly. "I'll make you pretty."

But the children were suspicious of him. Finally, one said, "Maybe you're **pihnêefich**. Your ears are red."

Pihnêefich laughed and replied convincingly, "No, I'm not **pihnêefich**. I don't know where he is." So they let him paint their faces. When he had done them all up, he told them, "Look in here." He made a big show of pouring water into in a basket so that they could see their reflections, and he called for them to gather around. "All of you look at yourselves!" he cried. "You look pretty."

Then **pihnêefich** lay down and said in a tired sounding voice, "I'm going to sleep." As he ducked down and entered the door of the sweathouse, he put a piece of oak bark in his toes. Then he settled himself close to the fire. And as he lay there pretending to sleep and snoring loudly, he wiggled his feet slyly into the fire. When at last the bark had burned well, he had a big coal wedged between his toes.

Pihnêefich listened for the children and he heard them playing not far off. All at once, he jumped up, ran back outside, and started to run – all the while holding fast to the coal. He ran and ran. And when he got tired, he gave the fire coal to the next one of the downriver People waiting for him. This one ran and ran, and when he got tired, he gave it to another one.

Then all the fire went out in the upriver mountains, and the Spirit People there cried, "They've taken the fire away from us!" They began to chase after **pihnêefich** and all the others who had stolen it from them. Each time they got close to one of the thieves, the next one would take off with fresh energy. They ran and ran, all the way from upriver to the territory of the downriver People. Two of their runners were left at the end. Turtle was sitting on a mountain-top when he was passed the fire. The upriver **ikxaréeyav** were drawing close, but as soon as he had the fire coal secure, he started to roll downhill to the edge of the river.

And there he spotted Frog. The upriver People were scrambling down the mountain just upslope from them, so when Turtle passed along the coal, Frog put it into his mouth and dove into the river. He swam below for a long time, and the upriver **ikxaréeyav** frantically searched the surface of the water for any sign of him. Finally, Frog he came up on the other side of the river and spat out the fire under a willow.

All of a sudden, dogs began to howl. And when the upriver **ikxaréeyav** looked across-river, they saw that there was smoke in the willow-grove. They knew it was the time of the great transformation: Mankind came into existence.



MASTER

Comprehension: Questions to Catching Fire

Session One

- 1. Fuel loading and climate change have combined to overwhelm the most technologically advanced firefighting force in history, making wildfire suppression one of the most expensive land management undertakings in modern times.
- 2. In the absence of controlled fires, there will be wildfires that are uncontainable and inherently more dangerous.
- 3. The primary goal of the Weeks Act was fire suppression, and it made the traditional lowintensity fires set by both Natives and non-Natives illegal.
- 4. The best way to get rid of the Indian, whose land you covet, is to rob them of the resources upon which they depend to survive. This means excluding fire criminalizing the act of setting fire.
- 5. Historically, fires returned to the landscape every 5 to 15 years. One of the first things the Euro-Americans did after coming here was to log the most fire-resistant trees.
- 6. Since World War II, we have been accumulating a fire-deficit.
- 7. Climate change, combined with high-fuels loading, has led to wildfire seasons costing over 1 billion dollars per year. This is not sustainable.
- 8. Smokey the Bear campaign has ingrained the idea that all fire is bad into the minds of the people. Even today, despite the scientific evidence that shows that we need fire back on the ground, this message continues to be conveyed.
- 9. People think they own a piece of land? Nobody owns anything but a responsibility.
- 10. Restoring historic fire regimes is tied directly to the protection of communities from wildfire.
- 11. Fuel breaks the beauty of these are to start fires, not to stop them.
- 12. What is the most important thing to do with burned areas? Not replant them, but embrace a landscape that can support fire. Then, let it burn again before it grows up and "resets" brush.

MASTER

Comprehension: Questions to Catching Fire

Session Two

- 13. Tribal perspectives? Coming from a long history of experience and survival, we know that all things are connected. This is the basis of our world renewal ceremonies.
- 14. In order to survive, we need our resources to thrive.
- 15. Our knowledge of traditional resource management practices has evolved from this place.
- 16. Heat and smoke interrupt the lifecycle of the weevil that destroys acorn production.
- 17. Forest ecology: this is dependent upon place, and the only constant is change.
- 18. One must live with the fact that fire is a part of the social and natural environment.
- 19. Oak woodlands and grasslands need fire to persist on the landscape. Soon after a lowintensity burn, you see moisture on the ground. Then grass starts growing, and elk and deer move in to feed.
- 20. Eco-system restoration has been slow since the current regimes still base their activities on the profit margin.
- 21. What factors impede fire managers from introducing prescribed fire? Liability issues, public's general fear of fire, growing general concern over carbon emissions in a changing climate, irritations with smoke, and increasing regulations.
- 22. Lenya Quinn-Davidson states that while most people in her home town understand that fire is a needed and natural part of the eco-system, they one thing in order to feel comfortable about letting someone conduct prescribed burns: trust.
- 23. Because of long periods of dry weather, high oscillation between dry and wet periods, and overall warmer temperatures, we are going to see a much higher frequency of large fires. So steps we can take now through prescribed fire will build intact forests, which in turn will sequester that carbon.
- 24. Policy on paper is one thing, getting those actions on the ground is another.
- 25. Small groups of people coming together to do good things will be the catalyst of change on a national level.

Name:_____

Comprehension: Questions to Catching Fire

Session One

- Fuel loading and climate change have combined to overwhelm
 _____, making wildfire _____,
 one of the most expensive land management undertakings in modern times.
- 2. In the absence of ______, there will be wildfires that are uncontainable and inherently more dangerous.
- 3. The primary goal of the ______ was fire suppression, and it made the traditional low-intensity fires set by both Natives and non-Natives ______.
- The best way to ______, whose land you covet, is to rob them of the resources upon which they depend to survive. This means ______ criminalizing the act of ______.
- 5. Historically, fires returned to the landscape every _____ years. One of the first things the Euro-Americans did after coming here was to log the most _____ trees.
- 6. Since World War II, we have been accumulating a ______.
- 7. Climate change, combined with ______, has led to wildfire seasons that cost over 1 billion dollars per year. This is not ______.
- 8. Smokey the Bear campaign has ingrained the idea that ______ into the minds of the people. Even today, despite the scientific evidence that shows that we need ______, this message continues to be conveyed.
- 9. People think they own a piece of land? Nobody owns anything but a ______.
- 10. Restoring ______ is tied directly to the protection of communities from wildfire.
- 11. ______ the beauty of these are to start fires, not to stop them.
- 12. What is the most important thing to do with burned areas? Not replant them, but embrace a landscape that ______. Then, let it burn again before it grows up and ______.

Comprehension: Questions to Catching Fire

Session Two

13. Tribal perspectives? Coming from a long history of experience and survival, we know that ______. This is the basis of our world renewal ceremonies.

14. In order to survive, we need ______.

15. Our knowledge of traditional resource management practices has evolved from

16. ______ interrupt the lifecycle of the weevil that destroys acorn production.

17. _____: this is dependent upon place, and the only constant is change.

18. One must live with the fact that fire is a part of the ______.

 19. _______and ______need fire to persist on the landscape. Soon after a low-intensity burn, you see _______on the ground. Then grass starts growing, and ______and _____and _____move in to feed.

20. _____ has been slow since the current regimes still base their activities on (whether they will produce a) profit.

21. What five factors impede fire managers from introducing prescribed fire?

- 22. Lenya Quinn-Davidson states that while most people in her home town understand that fire is a needed and natural part of the eco-system, they one thing in order to feel comfortable about letting someone conduct prescribed burns: ______.
- 23. Because of long periods of dry weather, ______ between dry and wet periods, and overall ______, we are going to see a much higher frequency of large fires. So steps we can take now through ______ will build intact forests, which in turn will ______.

24. Policy on paper is one thing, getting those actions ______ is another.

25. Small groups of people coming together to do good things will be the ______ on a national level.

Writing Assignment

Based on your informed understanding and personal opinion of the causes and effects of climate change, as well as on contemporary and historic land management practices, draw parallels to the Karuk origin story, the Theft of Fire, in your two page essay. The overall content should reflect some type of summary of the historic movement away from the indigenous peoples' traditional practice of setting low-intensity fires to the Euro-American's drive to suppress all fires, which may or may not conclude with the most current movement toward an integrative land management regime.

Please cite references to secondary literature, using the style recommended by your teacher, and remain respectful of differing opinions and cultures while maintaining your own opinion. Format your double-spaced typed essay in 12 point font with one-inch margins on all letter size (8.5x11 inch) pages.