**Teaching Notes**

 **TRIBES COMBAT CLIMATE CHANGE—GOING BACK TO THE BURN**

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**Learning Objectives**

1. Understand the impacts of the wildfire on tribal natural resources
2. Identify the broad cultural and physical impacts on the indigenous populations when a wildfire escapes public lands onto tribal lands.
3. Ability to discuss the concept and practice of cultural burns
4. Understand how prescribed burn policy on public lands affects tribal lands.
5. Ability to explore the differences between the Forest Service approach to prescribed burning and the indigenous approach.
6. Articulate an understanding of indigenous knowledge and why it is important to prescribed burning including environmental and cultural factors involved in planning and implementing a prescribed burn.
7. Develop the ability to describe the decision systems, institutional arrangements and power imbalances that act as barriers to tribal cultural burns.
8. Develop the ability to discuss ways to problem-solve and overcome barriers.

**Audience**

This case can be adapted for senior high school, college, and graduate classes by choosing one of the teaching techniques described here and editing the case to focus on the main themes. It is most appropriate for higher education classes in Forestry, Natural Resources, Environmental Studies, Wildlife Management, Botany, Native Studies, Anthropology, Ecology, Political Science, Social Studies, Geography and Public Administration and Tribal Governance. In all classes, students should read the case before class. The status of cultural burning suggests questions about how to design effective remediation and forest restoration plans that respect the rights of indigenous peoples and the relationship of indigenous practices as ways to manage lands and the relationships between communities.

**Additional Information and Updates**

Some articles and reports in the reference section may be helpful in providing background of developing further assignments. The Inter-tribal Timber Council will be publishing their national assessment of tribal forest resources, known as the IFMAT in 2023. Tribes with forested areas have Forest Management Plans. Analyzing and comparing these major detailed documents for responses to climate change could form an advanced lesson. Speakers like tribal or agency wildfire managers, planners or fire scientists can ignite a classroom and expose students to potential career opportunities from science to planning and management to the legislative process. Evolving plans and actions from Tribes in response to climate change may lead to better understandings of applied indigenous knowledge and planning as critical steps in thinking about controlled burning as an effective strategy that respects tribal rights and the forest ecosystems threatened by climate change and drought. The United Nations continues to make statements and craft policies on the concerns and rights of Indigenous Peoples.

**Discussion Questions** (organized by level of complexity with tier one questions emphasizing the interpretation and application of factual material)

**Tier One Questions**

1. What is prescribed burning? What happened to stop it in history?
2. What is cultural burning and what objective does it share with prescribed burning? What are some other objectives of cultural burning?
3. What are the three points that form the crux, or main features of cultural burning?
4. Discuss what two different Tribes are doing with cultural burns.
5. Why are the decisions made by federal agencies like the Forest Service on fire prevention and suppression important to Tribes?
6. What were some of the findings in the National Prescribed Fire Review completed by the Forest Service and what was not fully included?
7. Describe what a healthy forest should be like after careful management with prescribed fire.
8. Should the right of self-determination give Tribes the right to manage tribal forests for goals as they see fit?
9. What remediation actions would you prioritize as first steps that could be accomplished with limited funding and effort?

**Tier Two.** More advanced questions

1. What are some administrative barriers to tribal cultural burning?
2. What other kinds of barriers can make tribal cultural burning difficult? Be sure to include public perception of risk and legal requirements.
3. Discuss the impacts from climate change that can increase risk from prescribed burning while making it all the more necessary.
4. Currently most funds for fire prevention come through the BIA and other agencies: Tribes must compete through various grants and proposals to gain funds. Would it be better for Tribes to receive direct funding for prevention activities?
5. What are some of the negative elements of current national fire policy for Tribes that result in unjust outcomes?
6. What were the major requirements discussed in the National Prescribed Burn Review by the Forest Service? .
7. How do the training requirements and recruitment for certified firefighters affect prescribed burning? What are some possible solutions to the lack of available personnel?
8. How does the Tribal Forest Protection Act create collaboration?
9. What can Tribes do to demystify the complex problem of fire-dependent ecosystems under conditions of climate change?

**GROUP ACTIVITY SCENARIOS**

Participants move to tables that are marked with the names of different groups that represent different positions and views about prescribed burning. Each group will work together to discuss their questions and explain their position. One person should record their answers on the large format paper so it can be posted on the wall. Each group will present their position to the whole group.

**GROUP I --- LOCAL COMMUNITY GROUPS**

 Local community groups and individuals that live near the proposed prescribed burn are concerned about risks to their homes, schools, ranches and lifestyles. They are joined in their concerns with recreation cabin owners who have cabins located on Forest Service lands. Local politicians have taken a position against the proposed burns. Realtors and homeowner associations have raised questions about risks. They are unsure about the Forest Service’s relationship to the Tribe.

1.. What kinds of special relationships and responsibilities does the Forest Service have towards Tribes? Are they different than the federal responsibility towards communities?

2. What should the Forest Service do to minimize risk to our communities? What about the recreation cabins that are so close to the planned prescribed fire?

3. What if the prescribed burn leads to an escaped wildfire? Who will compensate us if our communities and ranches are burned? Would it even happen in our lifetimes?

4. They claim that wolves and beavers benefit the environment---how is that so? What if an escaped fire damages the hunting and fishing that community members enjoy?

5. What are the changes recommended by the Final Report on the escaped fire in New Mexico? What changes do they need to implement before they even think about setting a fire near our community?

**GROUP 2 TRIBAL DIVISION OF FORESTRY**

The Tribe’s division of forestry adopts a dual strategy of using science and traditional knowledge towards prescribed burns. Tribal forestry employees earn college degrees in forestry but their practice is informed by cultural knowledge that comes from indigenous knowledge based on hundreds of years of living in close relationship to the forest. Using specific tried and true practices and understanding long term cycles of weather and forest seral stages, they select from a full set of adaptive tools.

1. Explain our history of the special Trust relationship to federal agencies.

2. List some of the traditional tribal goals for prescribed burns. What is a cultural burn and why is it important?

3. How did Tribes reduce risk of escaped fire when they planned prescribed burns? Give examples.

4. What is the relationship between tribal forestry management and the Bureau of Indian Affairs? Why can’t the government just send us the funds?

5. What has been going on with the east side of Washington State that should help people understand why change in federal policy is necessary under conditions of climate change?

**GROUP** **3 USDA FOREST SERVICE PRESCRIBED FIRE TEAM**

The Forest Service manages large areas of forested lands, often surrounding local communities. Professional foresters make up teams to review and monitor forest practices like prescribed burns. After the New Mexico escaped fire, the Forest Service is faced with the need to continue prescribed burns as the most reasonable practice to avoid megafires in most places while facing the need to find better ways to communicate with local areas who have lost trust in some places. Climate changes has made this a critical challenge.

 1. What are we changing in our forest management strategies with regards to fire management?

 2. How do we explain what happened with the escaped fire in New Mexico? What were the key mistakes and how can we avoid them?

3. How do we show our local communities how our new strategy for prescribed burning under conditions of climate change will actually minimize their risks?

 4. What do we need to do to improve communication with the local community? With Tribes? How can we explain to the local politicians why climate change without prescribed fire presents the greatest risk?

5. How can the Final Report on the New Mexico escaped fire help us explain to the local community how we can reduce risk?

**GROUP 4 MISSOULA FIRE SCIENCE LAB**

Fire scientists working at the lab are constantly studying wildfire. The lab is a major complex of buildings that is part of the federal interagency Rocky Mountain Research Institute. Much of the work has been based on complex mathematical models that are aimed at predicting and managing fire behavior. Climate change has challenged some of the models and long term data about fire cycles can be difficult to match with so many changing variables. In recent years, the Lab has turned to projects to understand traditional knowledge as a way to understand wildfire.

1. Why are fire scientists and federal agencies showing increased interest in tribal forest management strategies for prescribed burns, especially under conditions of climate change?

2. What kinds of indigenous knowledge strategies are being practiced by the Confederated Tribes of Salish and Kootenai?

3. Forest management and prescribed burning is localized and based on local conditions and environments. What other Tribes in different regions offer knowledge about these practices?

4. What kind of training do tribal prescribed burn crews and planners need in order to integrate their work into the federal system?

**SCENARIOS FOR APPLIED LEARNING**

**Scenario One**---**Prescribed Burn Task Forces**

This scenario includes four different groups of 7-10 people. For larger classes, set up two of each group, or even three of each. Comparing results from similar groups creates increased learning opportunities. The groups need about 45 minutes to have an initial discussion and complete their tasks. They record their responses on blackboards or on large blank paper they post on the walls. Heavy pens or markers are useful. If class time is short, each group can elect a member to post their written policy statement online and presentation and discussion can take place in the following class meeting. Group Presentations take about 5-8 minutes each with 5 minutes for questions. Groups should know their presentation time limits before presenting.

In this scenario, different tribal groups are working on developing a national policy statement on cultural burning in its many aspects. Several different groups are working independently in the hopes of contributing to a final statement. They will each write up a draft policy statement using whatever examples, laws, policies, or events that they find most useful.

Each group works producing a one-page statement on the importance of prescribed burning under conditions of climate change.

1. The Intertribal Timber Council—this group representing a national tribal nonprofit organization that will describe the current situation under climate change and look at all the kinds of values in forests ranging from medicinal to tipi poles to timber value.
2. National Congress of American Indians Task Force—this group made up of tribal leaders and one staff attorney tasked by the NCAI to advocate for Tribes on a national basis. They may recommend additional federal legislation or policy to protect tribal forests under conditions of climate change.
3. Eastern Washington Tribe. Faced with extreme wildfire threat from climate change, their statement identifies key environmental systems (forests, riparian, grasslands, etc) and the actions that need attention on an emergency basis. They also look at longer-term actions necessary to protect tribal lands in their policy statement including support and participation from Washington State and federal government agencies.
4. Tribal college academics develop a policy statement that outlines how they will seek information to support informed decisions about the use of western science, traditional knowledge and cultural priorities, and restoration of security and cross-border relationships.
5. United Nations Task Force on Indigenous Peoples and Wildfire. This group will create a statement that looks at the global impacts of climate change that are responsible for lost indigenous lands due to increasingly severe, frequent, and larger wildfires. They discuss the use of prescribed or cultural burning as a mechanism for reducing threats and supporting the lifeways of indigenous people and their rights.ec

**Summary questions for full class participation**

1. After listening to the different policy statements, what things should be prioritized?
2. Who should provide funding and certified fire fighters to achieve policy aims? Who has the funds, authority, and responsibility to do so?
3. Who is qualified to conduct cultural burns? Should qualification be connected to direct authority and funding?
4. What are some ways that these different kinds of organizations can work together?

**Scenario Two: The Well Tribe Plans a Prescribed Cultural Burn**

This Scenario is designed for a more advanced group that has some experience and knowledge about Tribes and more advanced analytical skills. It is probably not suitable for high school level.

The Well Tribe in Eastern Washington (fictitious name) is creating a detailed plan for cultural burning. The vegetation fuel loads on their forested southern flank grow dangerous with the threat of climate change that leads to larger and more severe wildfires. Historically, the Tribe burned smaller areas more frequently to benefit plants, trees, and wildlife and to create an open forest with lower fire risk and greater resilience. Cultural burns were traditionally less than 10 acres here. The proposed area for burning ranges from grasslands to foothills and has a 30 miles border with USDA Forest Service lands. It is habitat for deer and elk and other important food species. Wild tobacco, sage and camas are gathered in some areas. These areas would normally burn about every 10 years, but no burning occurred in the last 18 years due to difficulty in getting an appropriate window, getting cooperation from the neighboring agencies, and assembling enough firefighters with prescribed burn fire certification. The Tribal Natural Resources Department would like to conduct three small cultural burns: one on grasslands and two in the forested foothills. They are hoping that the Forest Service will also do three limited prescribed burns on their slightly higher elevation lands. The dual combination of burn plots would help to protect a riparian corridor that runs through the boundaries. Tribal residences are scattered closer to the grasslands. Two small towns exist just outside tribal borders. The Forest Service manages 20 recreation residences on land leased to their owners in close proximity to the border adjacent to the Tribe’s prescribed burn plans.

INSERT MAP

This scenario includes two different groups of 7-10 people. For larger classes, set up two of each group, or even three of each. Comparing results from similar groups creates increased learning opportunities. The groups need about 45 minutes to have an initial discussion and complete their tasks. They record their responses on blackboards or on large blank paper they post on the walls. Heavy pens or markers are needed. If class time is short, each group can elect a member to post their written strategy online and discussion can take place in the following class meeting. Presentations take about 10 minutes each with 5 minutes for questions.

Group One. The tribal planning team was assembled including at least one tribal council member, one certified firefighter, one elder with indigenous knowledge of cultural burns, one tribal hunter, one wildfire chief and the tribal natural resource director. One USDA Forest Service tribal liaison is present who will leave this team mid-project and join the Forest Service team to assist them.

Team tasks include:

1. Make a detailed list including internal tribal members who may be affected by the burns and various institutions, officials, and external contacts, including external local communities, governments, and external agencies
2. Discuss and determine the objectives of cultural burns—wildlife, plants, trees?
3. Write a justification for the recommended prescribed burning
4. Determine how to get enough trained fire personnel to conduct a prescribed burn
5. Determine preferred fire window---imagine a group of dates like April 1-12 or use the snowpack line or other indicator. Note what dates the burns would occur and what the objectives will be. Name the proposed fires or give them one name as a fire complex.
6. Give an estimate of size of prescribed fires and environmental location. (grasslands, forested foothills)
7. Layout what collaboration that is needed from the USDA Forest Service especially for
an escaped fire plan and/or a proposal to conduct burns on Forest Service lands too.
8. Consider possible concerns from the Forest Service.
9. Achieve consensus in the group for the plan: agreement is critical for success.

Group Two. This team is mainly composed of USDA Forest Service representatives who are discussing how to respond to the Well Tribe’s request for collaboration in controlled burning on public land borders. The Forest Service is responding after a major internal report that outlines numerous steps for reducing fire threat during burning. Priorities of some of these representatives are different than some of the Tribe’s priorities. For examples, one of the forest timber managers would prefer to do thinning, on the idea it carries less fire threat and produces the smaller logs that can be milled in the newer small timber mills, creating economic value. Forest Supervisors, where the decision rests, are somewhat nervous. All representatives are familiar with the Tribe’s land base and the area they hope to conduct a cultural burn. The team includes one member of the US Fish and Wildlife Service. The tribal liaison will join them mid-meeting. They will work on how they could locate the most needed and accurate information as a basis for better decisions to collaborate while staying in line with their goals. in line with their goals.

The USDA Forest Service group includes two Forest Supervisors who make the actual decision on Forest Service actions, one timber forester, one forest ecologist and/or a botanist, one fire chief and/or fire boss, one anthropologist, one botanist, at least one prescribed burn fire planner plus one US Fish and Wildlife Representative. They will be joined halfway through their meeting by the Forest Service tribal liaison.

They discuss the main points of the case and to make responses for the following list of tasks and questions.

1. Where can they locate the most essential and accurate information on burning in this area? What experts do they need? Can they get credible indigenous knowledge? They list what information that they will need and where they will get it.
2. Will the tribal cultural burn benefit the Forest Service? Would it be more beneficial if they did companion burning on federal lands? With fewer crews available in the era of massive wildfires, should they use valuable resources?
3. How should they plan for the ever-present risk of an escaped fire that might go on adjacent Forest Service lands?
4. Should the Forest Service do thinning instead? What are the plus and minus results of thinning?
5. If they go ahead with the prescribed burns, how should they inform and handle complaints from the recreation residence owners at the border?
6. Even if the Forest Service does not directly participate by using tribal crews or experts, should they have an escaped fire plan in common with the Tribe?
7. After the tribal liaison arrives with information, prepare to integrate that information, and use it in the final assessment.
8. What are the hurdles to this kind of collaboration? Different laws, rules, bureaucracy, traditions? Can they be overcome?
9. Create a benefits and losses matrix as a basis for your decision using a table to demonstrate actions:

|  |  |  |
| --- | --- | --- |
| Chosen action | Benefits | Losses |
| Participate in implementing prescribed burn plan with Tribe |  |  |
| Do not participate in implementing prescribed burn plan with Tribe |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Add more rows to the table as needed

1. Write up a short assessment in a paragraph covering the decision of the two Forest Supervisors on what this group needs to press for as critical actions and responses that need to take place, regardless of hurdles, to meet the federal trust responsibility to Tribes.
2. Is there something else the USDA Forest Service needs to know here?

The groups respond to each of the tasks and questions in the light of how a good strategy for understanding the science, security and cultural and environmental exigencies behind the situation that could help them make better decisions.

**Summary questions for the full class after completing the scenario**

1. What were some of the differences and opportunities between the Well Tribe and the USDA Forest Service as they consider the Tribe’s cultural burn proposal? Will they be able to agree?

2. Who is holding key information?

3. How would greater decision authority for Tribes for cultural burning suggests questions about how to design effective plans that respect the rights of indigenous peoples and the relationship of indigenous practices as ways to manage lands and the relationships between communities?

4. How does the loss of rights to self-determination and systemic discrimination play into decisions as communities who suffer the greatest consequences are left out of federal actions? What did these two groups do or not do to assure that tribal benefit is not lost through miscommunication or failure to overcome barriers?