

## **TRIBES COMBAT CLIMATE CHANGE- BACK TO THE BURN**

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**ABSTRACT** This case explores ways that Tribes can proceed on all fronts to benefit American forest management not only for tribal lands, but for federal land management and related agencies that deal with health, economics, clean air, and water. Tribes used prescribed burning as a means of ensuring a resilient and healthy relationship to the forest ecosystems of North America centuries before European colonization largely stopped the practice. Today, Tribes seek increased authority to conduct prescribed burns on tribal lands, authority made critical with climate change and the resulting increase in forest acreage lost to wildfire. Tribes have concerns about fire strategies on federal lands like long-term fire suppression and lack of controlled burns on lands adjacent to Indian land that result in escaped fires on Indian lands. Federal agencies carry a trust responsibility to Tribes, especially on ceded lands now incorporated as federal lands, where cultural needs such as gathering forest materials for health, food and cultural needs are met. Forests also provide habitat for wildlife and clean water.

Definition:

The Trust. The federal government, in its claim of partial dominance over Indian lands through treaties, court decisions and certain legal theories, assumed a trust responsibility for protecting tribal lands and for key resources on federalized lands that Tribes ceded or were forced to give up. This was recognized in the courts. The Department of the Interior (DOI) is the fiduciary agent for the Trust who speaks for the Executive. Trust responsibility applies to all agencies. The title to Indian Reservation lands is held in trust for the Tribes by the Department of the Interior. The terms trust lands, reservation lands and Indian lands are used interchangeably here. The legal concept of trust extends to federal lands, many areas of which are lands ceded by treaty and where cultural and natural resources important to Tribes exist. Tribes and tribal members also hold title to other types of land title in fee simple or other kinds of status in addition to trust lands.

### **PART ONE: TRIBAL FORESTS AND PRESCRIBED BURNS**

Historically and prehistorically, tribal forest management included an active seasonal calendar of activities that included prescribed burns. In fact, the open nature of the forests in the American West at the time of European contact existed on a foundation of prescribed burns. (Pyne, 1997, Boyd, 2021) Prescribed or controlled burning is simply setting fire to avoid fire. Tribes usually used controlled burns in smaller plots at low fire intensity to create mosaics that supported diversity and reduced fire danger. Prescribed burns are intentionally set fires that are calculated to reduce the risk of larger, catastrophic burns that might occur when risk from fuel loads, weather conditions and winds and drying effects are high. Historically, forests managed under tribal regimes provided open areas for grazing animals, beneficial growth conditions for plants and trees used for medicines, basketry, construction and other purposes, and a managed prescribed fire regime. . Indigenous management continues to be effective:

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Tribal fire prevention strategies have been shown to provide a savings of 5 to 30 times the cost of fire suppression. (Carrao, 2018)

When the Spanish arrived in California and the Southwest, they attempted to stop tribal prescribed burning by making it a criminal offense with harsh punishments. To the European mind of the time, operating without long-term knowledge of the North American fire-dependent forests, prescribed burning seemed an irrational, wasteful act. And yet prescribed burning was the very basis of the open forests stocked with Native foods and wildlife that they exclaimed was a “paradise.” In 1850, the U.S. government passed the Act for the Government and Protection of Indians, which outlawed intentional burning in California. Later, the U.S. government continued with programs to fight fire, not manage it.

In 1888, Congress authorized the sale or disposal of dead and down timber on Indian lands. Fire suppression over the last hundred plus years combined with climate change led to the current conditions. Other factors like the extirpation of wolves (*Canus lupus*) and beaver (*Castor canadensis*) added to imbalances in the forested ecosystems. Both species are keystone species that shape landscapes. Expanded wolf populations would lead to thinning out herds of elk and deer that impact forest regeneration when they graze on tender young trees. (Ripple et al, 2022) Grey wolves (*Canus lupus*) also contribute to the health of these herds by culling the weaker animals and in some cases, moving herds away from lingering around streambanks and impacting riparian areas.

Beavers affect stream and river flows by building dams that create spongy areas and wetlands that absorb water during rains and slowly release it in drier times to protect a variety of species and flowering plants and enhance fish habitat. (Ripple et al 2022) The slow-release work performed by the beavers is particularly important for adding to water flows during the warmer season, when the snowpacks are reduced due to climate change and don't continue to release water later in the season.

Significantly, the Tulalip Tribe has long held the goal of beaver reintroduction and entered a major multi-year program under the Forest Protection Act to restore beavers to the South Fork Stillaguamish watershed on USDA Forest Service lands in 2020. In addition to prescribed burning and wildlife reintroduction, mechanical thinning is another method of reducing overgrowth on forested lands that raises the climate change induced threat of major wildfires. Thinning requires a significant labor force, can be controversial, and sometimes results in piles of debris that can be a fire hazard.

The BIA (Bureau of Indian Affairs) relationship to tribal forested lands was formally established through the BIA Department of Forestry in 1910. Over the years, it has been embroiled in many controversies and criticism for paternalism, weakness in confronting the whims of Congress, and the influence of special interests and the Executive Branch. In 1980, the BIA set up the Indian Forester Intern Program supporting education in forestry management and related skills for tribal members. Many Tribes with forested land still have a parallel BIA Forestry Division as well as a Tribal Forestry Division. This continues partially because a great deal of fire suppression, aviation and other fire operation funding continues to come through the BIA. The BIA also signs off on tribal Forest Management Plans, although this is becoming more of a formality in some places. The BIA now has a branch of Tribal Climate Resilience. Since 2011, it has distributed 700 awards totaling more than 74 million dollars. It also supports Regional Tribal Resilience Liaisons affiliated with Universities and tribal organizations like the Affiliated Tribes of Northwest Indians.

Fire suppression itself contributed to increased fuel loads and larger fires. Timber programs aimed at logging old growth forests where the biggest profits lay or changing landscapes to facilitate the growth of more commercial species often ended with increased fire threat. Old growth forests are more fire resistant, and they act as repositories for carbon storage and watershed health. As large, catastrophic fires became more common, money to fight fires, airplanes and more technology came into play. Still, Congress remained reluctant to fund significant programs for fire prevention including prescribed burning and thinning. Wildfires got larger and jumped federal boundaries onto Indian lands. Federal fire suppression actions prioritized structures over life-sustaining Tribal resources. As fires grew and intensified under conditions of climate change, Tribes bore the losses, while private property owners, often insured, gained the benefit of fire suppression resources. (Corrao, et al 2018, p. 16)

Wildfires continued to increase since 1980 due to previous fire suppression and climate change. (Eisenberg, 2019) Today recent wildfires show increased size, severity, and more extreme fire behavior that threatens ecosystem function and conservation of plant and animal species important to natural and cultural functioning (Dennison, et al 2014.) The fires threaten access to clean water and lead to flooding in unstable watersheds. Wildfires on federal land continue to spill onto tribal lands doing enormous damage. The Intertribal Timber Council (ITC) estimated damages in 2018 at 4.8 million acres of Indian forested lands burned by wildfire since the passage of the National Indian Forest Management Act in 1990 and 400,000 acres of Indian trust lands were burned in 2022, not including other state tribal reservations and other tribal lands. (Corrao, 2018) In addition, important tribal cultural and natural resources that met tribal needs, from tipi poles to medicinal herbs, from wildlife habitat to Native foods, were burned on federal lands.

### **Traditional Ecological Knowledge and Fire Management**

Prescribed burns are intentional burns set to reduce the threat of large wildfires and to create balanced ecosystems. The term is used interchangeably with the term controlled burns and RX burns. Cultural burns are controlled burns based on indigenous/traditional ecological knowledge for cultural objectives and where planning and practice, seasonality and implementation are based on that knowledge. Traditional fire management uses that knowledge to apply fire to control stocking, reduce fuels and stimulate the fire ecosystem, reinvigorating vegetation across the landscape. Traditional ecological knowledge is passed orally through multiple generations: it is knowledge that is informed by cultural memory systems and sensitivity and observation of change and reciprocity. (Kimmerer, 2000) Some use the term “cultural burns” rather than prescribed burns to specifically identify a form of land management passed down by indigenous knowledge keepers. Specifically, cultural burns are controlled burns based on indigenous/traditional ecological knowledge for cultural objectives and where planning and practice, seasonality and implementation are based on that knowledge when specific environmental variables are present. The knowledge passed through the generations includes the spiritual and cultural importance to indigenous communities and because cultural burns are designed to cultivate the biodiverse, sustainable growth that makes landscapes more resilient. By implementing traditional fire management using prescribed fire, the San Carlos Apache Tribe developed a model to reduce unwanted resource damage and promote ecosystem restoration that brings ecosystems closer to the historic range of variability. (Corrao, et al 2018). A major factor in this strategy is a powerful Council of Elders recognized by the Tribe that reviews forest management actions.

Numerous examples of how prescribed burns work have been chronicled by scientists in recent years. At Waterton Lakes National Park, the extreme Kenow wildfire of 2017 showed shifts in structural change and biodiversity in the ecosystem in contrast to the area where prescribed burns on the Eskerine complex prairie area were completed to reduce aspen encroachment linked to fire suppression with the goal of restoring grasslands for bison. (Eisenberg, et al 2019) The prescribed burn area did not show the same structural change or loss of biodiversity as the Kenow wildfire area. The area treated with prescribed burns differed from the wildfire in three major areas: phenological timing (seasonality) in line with thinking for seven generations in the future, scale and severity. These three areas form the crux of a culturally based prescribed burn strategy based on traditional ecological knowledge.

Cultural burns using traditional ecological knowledge aim to restore the land, resources, and water. Traditional ecological knowledge, sometimes referred to as traditional indigenous knowledge or indigenous ecological knowledge, is key to Tribal Forest Management under conditions of climate change. It presents the need to further tribal authority to plan, implement and review prescribed burns on Indian lands. Inside and outside tribal lands, forest managers have included that knowledge, especially in the three areas of phenological timing, scale and severity into their forest plan. Knowledge from extensive interviews with Chumash cultural knowledge holders was included in prescribed burn plans on the Las Padres National Forest, Santa Barbara District.

### **Tribal Practices in Prescribed Burning**

The practice of prescribed burning was not confined to one area of the United States- it reached beyond the mountain and coastal West. The study of prescribed burning is both broad and deep. It is broad across regions, and deep in terms of internal social and cultural structures and objectives. Cultural fire is part of a larger strategy that ensures resilience and future ecological health. Thumbnail descriptions demonstrating the three characteristics of broad multi-regional use, significant social and cultural development and actions within a larger strategy to ensure resilience follow:

#### **Anishinaabeg—People, Pines and Fire---Boundary Waters and Beyond**

The Anishinaabeg shaped the area around the Boundary Waters through the use of prescribed fire. Anthropologists establish human habitation of the area going back 2000 years with signs of trading, travel, and inter-tribal relationship. (Boerigter, 2022) Tree ring studies going back 500 years combined with evidence from fire scars near campsites uncovered a history of 159 fires within a period from 1700 to 1909. After 1909, when access was increasingly denied, there was evidence of only 9 fires in the following 100 years. (Kipfmueller et al 2021) Ancestors of the Sault St. Marie Band of Chippewa and Fond du Lac Band of Lake Superior Chippewa used fire ecologically, spiritually and relationally. The early period fires were far more frequent than would have been caused by lightning and indigenous foods like blueberries flourished. The dense forests were opened by cultural burning, opening them up for more successful hunting and gathering, and more open trails for portage. Today, without cultural fire, both red pines and blueberries, indigenous foods and medicines are in decline.

In 1899, prescribed fire was criminalized. After indigenous access was denied, things began to change. The Treaties signed from 1847 to 1854 had already reduced indigenous access. What followed can cause one to revisit Western ideas about wilderness. The towering red pines of this region were critical to the ecology and to the wilderness beauty of Boundary Waters. They are a species that naturally dropped

lower limbs leaving the understory more open and increasing visibility while suppressing some undergrowth that forms fire ladders.

Boundary Waters became a protected area under the Wilderness Act. The pines were a part of the justification for the wilderness area. Today, with the exclusion of prescribed fire, barriers to prescribed burning and policies that prioritize the protection of homes from fire create new conditions in the forest that challenge the very character of wilderness and fuel a trajectory leading to less resilience. . The exclusion of prescribed fire followed by climate change led to fewer stands of red pines when they are replaced by understory. Ironically, The removal of frequent smaller cultural fires led to the reduction of healthy stands of red pine that were part of the wilderness character. (Kipfmueller, et al 2021) Fond du Lac Forest Manager Damon Parek remarks that "returning to the landscape isn't just about the landscape---it's about our (Anishinaabag) identification as a people connected to a landscape, with fire." (Kipfmueller et al 2021).

### **Salish Kootenai—Deep Commitments, Long-term Strategies**

Each tribal forest has unique ecological and cultural condition and represents specific forest ecology types and impacts from climate change. Climate change impacts on the lands of the Confederated Tribes of Salish and Kootenai (CSKT) in Montana were fueled by increasing temperatures, lower summer stream flows, and earlier and greater spring runoff. Climate change at CKST led to shifts in species ranges, increased likelihood of intense forest fires and increased spread of invasive species. (US Climate Change Resilience Toolkit, 2021) Indigenous Knowledge of the locations, availability, status of populations and physical characteristics of plants, fish and animals was held through the generations. Within the framework of values taught by their ancestors, CKST implemented a series of steps to understand exposure, assess vulnerability and risks, investigate options, prioritize and plan, and take action.

Long in a leadership role with land and wildlife management, CKST established Salish Kootenai Tribal College early on with strong programs in forestry and wildlife. With a good foundation in science and indigenous knowledge, they created a Strategic Climate Change Plan that recognizes the impacts of intensive fire under conditions of climate change, The plan points to "Widespread changes in the fire regime, vegetation composition, structures, functions and the extent of impacted area with increased wildland fire behavior impacts define the geographical impact of climate change on the Forestry Sector." (CSKT 2016) Specific areas are identified for treatment with re-introduction of periodic prescribed burn and maintain hazardous fuel mitigation. There is special consideration for the timberline fire regime for whitebark pine with prescribed fire and wildland fire response activities. The use of prescribed fire is targeted to achieve diverse fuel mosaic conditions.

### **Larger Strategies to Ensure Cultural/Ecological Health**

Highway 93 in Montana crosses through CSKT lands. It is an infamously dangerous two-lane highway that engendered a bumper sticker "Pray for me-I drive Highway 93." The state responded by proposing a highway expansion to four lanes. With an awareness of the climate change vulnerability of whole ecosystems and the animals within them, CSKT applied their sovereign power to leverage changes in highway 93 expansion plans as they passed through the reservation. The result was the creation of a "The Peoples" Way Project- the construction of a highway expansion with 42 wildlife crossings protecting thousands of animal crossings for mountain lions bears, deer coyotes, lynx, bobcats and other

animals. Built with tribal knowledge and verified by monitoring cameras, it resulted in a significant reduction in vehicle/wildlife collisions. (Christy, 2022) Elders plus data resulted in fewer accidents, roadkill of vulnerable animals and the largest network of wildlife crossings in the U.S.

The Confederated Tribes of the Salish and Kootenai engaged in deep indigenous research on how the Tribes set fire to shape the land, forests and animal habitat. They produced a documentary “Fire on the Land” based on the narratives of tribal elders, and they led the way as they integrated climate change into their official Forest Plan both in CD form and presented on their website. (Confederated Tribes of Salish and Kootenai, 2021) The Confederated Tribes of Salish and Kootenai complete from 300-5000 acres of prescribed burning a year based on cultural knowledge, and they implement a major program of collecting cultural information from elders and knowledgeable tribal members. The renewed controlled fire regime resulted in a return of the camas, an important food plant, to many treated areas. These are a few examples of how tribal controlled burns are informing forest management.

### **Examples of Prescribed Fire From the East Side of Washington State**

Fires severity and frequency increased, especially in the interior of the West, as climate change and drought intensified the number of acres burned. Climate change brings a sense of irony into the situation. At the same time that more prescribed burning is needed, burn conditions are more dangerous. Tribal controlled burns were based on watching and monitoring and founded on a data set that was thousands of years old that was attached to the continued monitoring. Emily Washines, faculty at Yakama Valley College and CEO of Native Friends, notes that tribal members were noticing when food plants were becoming weak or invasives were coming in, or if plants weren’t regenerating, then a traditional cultural burn would be implemented. (Secaira, 2019)

Yakama Nation takes a leadership role in prescribed burns. Laurel James, manager at the Yakama Nation Program for Wildlife, Vegetation and Range Management notes that Yakama conducted controlled burns for thousands of years. As people moved down from the hills after the first snow, they set fires behind them to encourage the growth of cultural plants and reduce fire danger. (Herrera, 2020) Even so, mild winters and reduced snowpack are reducing those traditional windows. Further, Yakama Nations Fire Manager Don Jones also notes that resources today are thin and experienced fire fighters may be hard to find. (Herrera, 2020) Low pay, limited funds and lack of incentives makes it difficult to recruit. Creating partnerships through the Tribal Forest Protection Act of 2004 and partnering to assist other organizations like the nonprofit Mt. Adams Resources Stewards in prescribed burns are key strategies for Yakama. Even with funding and resources on the downward slide, Yakama Nation’s leaders are rising to the challenge with strategic forest management and outreach to vulnerable communities. (Washington Nature, Dec. 19, 2019)

The Spokane Tribe suffered two catastrophic fires in 2015-16 that burned almost half of the tribal lands. Elders there spoke of the Tribe’s traditional use of fire for clearing dead brush to prevent large wildfires. Cody Desautel, Natural Resource Director of the Colville Tribe, remembers that it was common to do a lot of burning in the spring on the Colville reservation and many community members did it, burning off grass and brush to reduced fire risk—it was a normal thing to burn in the spring and let it burn to the snowline. (Secaira, 2019) Further Desautel suggests that fire policy needs to shift from fire suppression to making sure that fuels treatments and forest health treatments are ongoing throughout the year to assure a future resilient landscape that can respond to fire. (Secaira, 2019). Once reservation lands at

Colville were populated by pine and larch, which were more fire and drought resistant than current assessments that show more Douglas fir. (Intertribal Timber Council, IFMAT, 2012) The Colville Tribe does a lot of forest stocking and species manipulation to increase fire resistance, along with prescribed burning and mechanical thinning.

Steve Rigdon, former Yakama Forest Products Manager and current Yakama Natural Resource Director, sees some hope with an opportunity opening to recreate pathways that “support our culture and resiliency through our traditional practices that support native foods, medicines, language, songs.” (Secaira, 2019). Tribes located within Washington have a dream of renewed and resilient landscapes with wide open patches with huckleberries and culturally significant species and grazing for wildlife within a forest ecosystem that maintains resilience in the face of climate change.

### **Prescribed Fire Under Review in the USDA Forest Service**

Actions by the USDA Forest Service are important to Tribes due to thousands of miles of adjacent boundaries and the tendency of increasingly large mega-fires to escape onto tribal lands and ceded homelands that hold critical natural and cultural resources. The USDA Forest Service completed a major review of its prescribed burn policy after a recent poorly planned prescribed burn that escaped in 2022 contributed to the largest forest fire in New Mexico history that destroyed hundreds of homes and many thousands of acres of forest products, timber and grassland that supported local communities. Prescribed burning on federal USDA Forest Service lands was paused in May 2022 until the completion of the review.

“Effects of climate change and mega-droughts in many parts of the country are causing both wildfires and prescribed fires to behave in ways we have never seen before, a reality that will shape how we adapt as an organization” stated Randy Moore USFS Chief. “(USDA Forest Service, July 13, 2022) The downside in the 90 day pause was that many other prescribed burns that were much needed and better planned were held up leaving the mega-fire risk in those areas to grow. The Final Report, released in September 2022, placed more safeguards through higher levels of administrative involvement and layers for approval for prescribed burns. This led to fears that it might add bureaucratic layers making it increasingly difficult to implement prescribed fire.

The review used data from past escaped prescribed fires. A century of scientific prescribed fire - prescribed fire data has shown it to be essential for reducing forest fuels, stated Moore and Tribes as “representatives for current and traditional ecological knowledge” as team members for the review. (USDA Forest Service, July 13, 2002) Although indigenous knowledge is mentioned, the key points for data collection to decide if existing policies and authorities are adequate to make sound decision on the ground for the review were to 1) use current information, climate models for on the ground, 2) review what in burn plans needs to change, 3) gain access to accurate weather data, and 4) ensure enough personnel matched to risk. There was no direct description of a strategy to obtain indigenous knowledge using accepted methods of tribal consultation and respecting tribal authorities within such a short 90-day period. The Report did emphasize the need for decision-makers to review prescribed fire plans and complexity analyses to ensure they reflect current conditions—something that was not done in the New Mexico mega-fire, but is done by Tribes. In addition, Forest Service administrators approving fire ignitions will be present and conditions reviewed on the day of the burn, not in advance.

Local community members critiqued the plan hoping that the Forest Service would be more cognizant of local people and their knowledge of the land. The New Mexico prescribed burn was ignited even though local ranchers warned they never burned in windy months; the burn went ahead even though 25 mile an hour winds were forecasted. Some other criticisms of the New Mexico and other prescribed burns that were reviewed included inaccurate characterization of fuel types, failure to consider adjacent fuel types and values at risk, insufficient use of local weather conditions and forecasts, not using available indigenous models for forecasting, inadequate patrol and mop-up, underrating the complexity of burn, burning at the upper end of prescription, lack of in-time engagement of decision-makers and gaps in communication with partners and adjacent landowners (USDA Forest Service, 2022). Most of these problems can be substantially avoided with better consultation with Tribes and the inclusion of indigenous knowledge specific to the areas to be burned.

The USDA Forest Service's Final Report on Prescribed Burning does not really recognize the problem of tribal cultural values that are different from agency values that support prescribed burning. (fs.usda.gov Sept. 2022) This is particularly important because prescribed burning is oriented to objectives as value-based outcomes. The report identifies two areas of need; 1) Forest Service's NEPA Planning that emphasizes silviculture treatments at project levels and limits attention to resources for fuel treatments and 2) the current lack of skill sets in the agency for prescribed burn planning and implementation. (USDA Forest Service, 2022, p. 41-42) Even in the recommendation for increasing avenues for partners to implement across boundaries, it notes reducing barriers to collaborative prescribed burning with State agencies and partners, with no mention of Tribes, despite the agency's greater administrative ability to collaborate with Tribes under legislation and the fact that tribal crews are called up for wildfire on federal lands through the Incident Command System. (USDA Forest Service, 2022, p. 46) The Report is highly focused on internal agency improvement in decision-making but does not touch upon meaningful collaborative decision-making or co-reporting with Tribes. It does not reflect the trust responsibility in significant and meaningful ways. At the same time, some local Forest Service Managers continue to collaborate closely with adjacent Tribes on prescribed burning. In the end, the catastrophic fire in New Mexico resulted in a national pause and the subsequent report may cause further public concern over prescribed burns.

The Final Report did offer the promise of increasing training opportunities in 2023 through the establishment of a National Prescribed Fire Training Curriculum with the interagency fire and research community and partners, including incorporating "the knowledge and experience of Tribes". (USDA Forest Service, Sept 2022 p.4) The Infrastructure Act of 2022 and the Inflation Reduction Act of 2022 will contribute to the agency's abilities in workforce development for prescribed burning. Still, the idea of training people, like tribal and residents outside the Forest Service on fire response and prescribed burning was not included in the Report's recommendation. Understanding prescribed fire, particularly cultural burns, requires a great deal of knowledge, expertise, and on-the-ground observation and experience—experience that Tribes have. Robert Essenhigh, Professor Emeritus, Mechanical and Aerospace Engineering, Ohio State University summarized the complexity: "Fire science is not rocket science—it's way more complicated." (Gabbert, 2022)

### **A Selection of Federal Laws, Policies and Organizations Relating to Tribal Forests**

The history of laws, policies, executive orders and actions relating to tribal forestry make tribal forest management, and thus responses to climate change, enormously complex. A few of the major influences are listed below.

Indian Self-Determination and *Education Act of 1975* (PL 98-638) or ISDEAA- reaffirms the federal government's trust responsibilities while granting tribal governments more power to provide services and determine tribal destinies. Under this law, tribal governments can assume the management of reservation forestry resources with funds provided through contracts with the BIA and perform the full range of forestry management tasks. Self-governance amendments to ISDEAA modified the Act and open up to a greater degree of tribal negotiation and discretion. Through the 638 contracting system set up through ISDEAA, the USDA Forest Service can contract tribal crews under the Tribal Forest Protection Act to work on Forest Service lands to achieve shared objectives.

*American Indian Religious Freedom Act of 1978* reflected the growing concern about forestry developments that damage sacred sites, religious values and access. Although the law has failed to stop some damaging projects, it can be used to at least delay and perhaps publicly shame some proposed governmental actions.

*National Indian Forest Resources Management Act PL 101-630, 1990* set out major goals to consolidate the role of tribal governments in managing and developing Indian forests through education and training, participation in administering and managing forest lands, better knowledge of the value and extent of resources, and integration into Integrated Natural Resource Plans that emphasize goals beyond commercial interests. (Davis, 1993)

*Tribal Forest Protection Act (PL 108-278, 2004)* authorizes Secretaries of Interior and Agriculture to give special consideration to tribally proposed Stewardship Contracting (under 638) or other projects on Forest Service or BLM land bordering or adjacent to Indian trust land to protect Indian trust resources from fire, disease or other threats.

*Executive and Secretarial Orders.* Presidents and Secretaries of the Interior have passed orders under Clinton and Obama affecting tribal forests. Clinton's Executive Order of 13084 on Consultation and Coordination with Indian Tribal Governments of Nov. 9, 2000 and Secretarial Order 3206 American Indian Tribal Rights, Federal-Tribal Trust Responsibilities and the Endangered Species Act of June 5, 1997 set forth frameworks of nation to nation consultation, directed agencies to include indigenous knowledge, and made a statement that Tribes should not have to take extra burdens. This was important because many endangered species exist on forested tribal lands.

President Biden passed Executive Orders on forests and old growth and signed a special Memorandum of Understanding for tribal relationships to federal agencies including the use of indigenous knowledge. Under the Biden administration, Joint Secretarial Order 3403 The Fulfillment of the Trust Responsibility to the Tribes in the Stewardship of Federal Lands and Waters was issued pertaining to the US Departments of Agriculture and Interior.

*The Intertribal Timber Council* established in 1979 represents many Tribes from all over the continental US and Alaska. It provides a focal point for advocating for Indian forestry interests, sharing information on forestry issues, completing major assessments, and improving forest management through science, education, and indigenous knowledge.

*The National Congress of American Indians* is the largest organizations representing tribal governments and advocating for tribal causes. They pass resolutions, participate in congressional hearings and pass resolutions including those covering natural resources, wildfire response and forest issues.

## **PART TWO: WHO DECIDES?**

Under drought and climate change, better decisions prioritize fire management and prevention over fire suppression. “It becomes essential to reduce administrative impediments to allow Tribes to practice traditional fire management in their quest to restore healthy, adaptive fire systems.”(Corrao, et al 2018 p3) Prescribed burning to reduce fuel loads of brush and ladder fuels mitigates the risk of catastrophic fires but funding and policy have not followed up to match the need from increased of wildfire threat under conditions of climate change(Miller, et al 2020). The federal government has chronically failed to fulfill its trust responsibilities to Indian forestry as identified by Congress in the preamble to the National Indian Forest Resource Management Act of 1990 (NIFRMA) Title II Section 302. The purpose of the trust is, and always has been, to ensure the survival and welfare of the Indian Tribes and people.”(Corrao, 2018 p 4) Because the laws affecting Indian Forestry offer no mechanisms for enforcing standards or effective oversight, neither internal nor court review has benchmarks to rely on. These factors support the need to return greater forest management authority to the Tribes. Nature doesn’t wait for a permit.

Decisions about prescribed burns can be influenced by multiple factors. Barriers include risk, liability, fear, and lack of education about prescribed burns. Other barriers are a lack of integration into fire planning, limited resources in the areas of funding, crew, experience and certification. Regulatory laws governing weather, smoke, and general environmental regulations can limit decisions. Finally, federal, state and local policies and regulations (weather, environmental regs, smoke) and shifting federal, state and local policies can also be barriers. Some potential avenues for solutions are as follows:

### **1. Increasing Tribal Authorities**

**The authority of Indigenous knowledge.** Tribes hold traditional ecological knowledge and with it, experience, observation and skill to conduct prescribed burns. Their long stewardship of the lands and waters is a strong foundation of their authority and a return of decision-making to Tribes. Traditional governance systems, tribal laws and arrangements ensure implementation. Cultural burns restore landscapes and ecosystem function that supports cultural practices and livelihoods for Indigenous Nations. (Hoffman et al, 2022) It is also important that other agencies, especially adjacent agencies, recognize this. The need for Tribes to activate this authority in decision-making on prescribed fire extends to public lands. The recent USDA Forest Service Final Report includes the recommendation to promote information exchange with Tribes acknowledging that Tribes have knowledge of traditional burning practices that benefit landscapes and that the Forest Service has generally failed to incorporate traditional ecological knowledge into Forest Service practices. The report emphasizes incorporating tribal perspectives of what vegetative assemblages are best burned at different times throughout the year to engage more in patchwork burning even within the burn cycle.” (USDA, 2022 p.47) Although the recognition is there, this is listed as a long-term recommendation without specific action items.

**Reducing administrative hurdles.** There are multiple examples of the need to expand tribal authority to plan, implement and review prescribed burns on tribal trust lands. Budget cycles create restraints that affect the ability to conduct low fire burns at appropriate times. Funding for tribal

prescribed burns should be direct to Tribes, without the necessity of constantly competing for grants in programs often not designed for specific tribal conditions and objectives. Larger sums need to be allocated for fire prevention: the Biden administration unveiled a \$50 billion dollar plan to address areas most at risk, including parts of Washington. Washington State added \$350 million and passed legislation to provide fire certification courses for potential employees at a low fee. Still, much of the funding for tribal fire operations comes through the BIA. Direct funding to Tribes would be more efficient and effective rather than delays from the endless round of applying for funds, writing grants and creating proposals to match federal guidelines. In addition, federal funding legislation has often left specific mention of Tribes out, making agencies unsure if they can share or allocate funds to Tribes as they do to federal and state agencies. In response to the current gap in personnel, Colville works with volunteer crews like the Rubicon, composed of retired veterans, and the Mt. Adams volunteer crew. Still, more trained personnel are needed.

Finally, performance standards and supervisory influence may put pressure on federal agency personnel to burn more and faster working at the very outside of permissible conditions and increasing the threat of an escaped controlled burn as occurred in New Mexico. The major administrative restraint includes limits in recruitment and retention of prescribed fire and firefighter certification. Tribes must compete with state and federal agencies for trained personnel. The BIA maintains only 3 agency and 4 tribal Hotshot crews who are highly trained.

Government policies have long term impacts. Historically the reduced number of Native peoples left living on their lands has impacts. Cody Desautel notes how colonization and disease dramatically reduced the number of Native people who lived in the homelands and were actively conducting burns, knowing from generations of practice when and where it was appropriate. (Phillips, July 12, 2021) The indigenous forest conditions were the opposite of today's forests with high fuel loads built up over the years and high severity wildfires that crown in the trees and kill seeds and microbes in the soil important for forest resilience. Expense and time delays from environmental reviews may have negative effects on the capacity of tribal prescribed burning. Better science, and the inclusion of indigenous knowledge, along with the ability to choose more appropriate levels of local review reduce the environmental review barrier. The Council on Environmental Quality that regulates environmental reviews could move to provide Tribes with certain exemptions and broader authority for choosing levels of review that would help mitigate this situation and return more decisions home. State policy also affects prescribed burns. Especially strong air quality and smoke regulations in Washington State further close the windows of opportunity for prescribed burns. At the same time, the catastrophic wildfires that ensue create huge, unmanaged waves of air, smoke and water pollution.

2. **Participatory and collaborative decision-making with federal agencies.** Fires, including prescribed fires, know no borders unless they are carefully planned and controlled. Multi-agency collaboration between Tribes and agencies in reducing fuel loads is key. Agencies need to embed indigenous knowledge into their forest management plans not only for practical purposes but to avoid impacts to tribal trust lands and to assure tribal cultural and natural resources are protected on federal lands, especially ceded lands where the trust responsibility is clear. Some concerns have arisen that the recommendations of the USDA Forest Service's Final Report on Prescribed Burning, done in response to an unfortunate and poorly planned prescribed burn that ripped through nearly 500,000 acres in New Mexico, may slow the

implementation of burns through adding layers of decision making. On the other hand, the report offers obvious and needed recommendations to pay attention to immediate conditions, updated science and forecasts. Under the Tribal Forest Protection Act (PL 108-278, 2004) contracting can be helpful, but only if the federal agencies have strong prescribed burn plans and accept tribal contracting proposals that incorporate traditional ecological knowledge. Embedding that knowledge into agency forest management and prescribed burn plans would be a good first step. Eventually, the power imbalance needs to be adjusted by institutional change.

3. **Insurance and liability.** With a history of criminalization and fines, cultural burning requires a significant education program to underline returning decision authority to Tribes. Making better connections between post-fire recovery and fire prevention would help adjacent communities improve their understanding and decisions that would lead to more resilient conditions and a better understanding of cultural burns.(Hoffman, et al 2022) How insurance is provided for new construction at the high wildfire danger interface with tribal and public lands needs review. Fire resistant construction requirements are also important at the interface. Repeated rebuilding in areas of extraordinary and repeated risk that costs billions needs review.

#### **Nation to nation consultation and indigenous rights.**

Consultation done right that integrates planning processes and reviews in their first stage is key. The U.N. Declaration on the Rights of Indigenous Peoples that the U.S. has agreed to support calls for free, prior and informed consent in government relations with Indigenous Peoples. UNDRIP underlines the right of Indigenous Nations like Tribes to manage their homelands in accordance with their own practices and values. This leads to fuller discussions and better collaborative decision-making about funding, cooperative agreements and better collaboration between agencies and Tribes.

Examples of more successful consultation are the new agreements with the Office of Fire Management in the Department of Interior that seek to improve wildfire management across tribal and federal lands especially since the two authorities have 6.5 million acres managed by Interior agencies within 50 miles of tribal lands. The USDA Forest released an interactive Tribal Connections Map in 2015 that illustrates 4,000 miles of shared boundaries between Tribal Trust Lands and Forest Service lands and special Forest Service administered lands. (USDA Forest Service Press Office, Oct.1 2015) (USDA Forest Service Press Office, Oct. 1, 2015) The fact that 574 Tribes manage 56.2 million acres as federal Indian Reservations, not including state reserves or other tribal lands, makes collaboration essential.

Cody Desautel, Natural Resource Director of the Colville Tribe and President of the Inter-tribal Timber Council, notes that with climate change and drought, fire management has transitions from fire seasons to year-round fire years. (McDuff, 2021) The new Memorandum Understanding from the Department of Interior's Office of Wildland Fire and the Intertribal Timber Council places cooperation between the BIA, BLM(Bureau of Land Management, NPS(National Park Service, and U.S. Fish and Wildlife Service as a priority and covers coordination and sharing in the areas of technology, and decision-making, highlighting conservation priorities to combat the greater demands of climate change with workforce development, joint analysis and reports and information

exchange.

The Trust Responsibility and the ISDEAA forms a basis for moving decision authority and resources to Tribes. Current trends in Congressional and executive action do show improvements in understanding the trust relationship and the obvious need for collaboration in the face of catastrophic fires that understand no borders. Significant Infrastructure funding will go to Tribes and planning and reporting processes, particularly in the Department of the Interior, show progress. As agency cultures move from an emphasis on fire suppression to an emphasis on fire prevention under conditions of climate change, more opportunities should arise.

### **Summary**

Some current federal policies and procedures are an impediment to Tribes' ability to practice fire management strategies. (Corrao, et al 2018 p. 9) Firefighter qualifications and access to training and certifications, development of fire plans, smoke management, clean air and smoke regulation and line officer approval all create barriers and delays. The valuable skill and traditional knowledge of local variables need to be reinstated and recognized as key to restoring ecosystems. Margo Robbins (Yurok) of the Cultural Fire Management Council explains the collaboration with TRES—a hands-on system of training and certifying fire fighters for prescribed burns-- to restore cultural burns to the ecosystem. The Council partnered with the Nature Conservancy to bring the TRES program to tribal land so they could legally conduct prescribed burns. The Council is establishing a family burn program that trains community members, establishes a tool-lending cache and community help in putting in firelines, providing a fire engine as a safety measure and integrate a fire education program into school curriculum. A Cal Grant has helped with funding, as they successfully use fire to bring back the hazel bush for basketmaking. Robbins notes that they adapt prescribed burns according to ecological areas, burning larger areas on the flats, and smaller areas in the steep mountainous areas with heavy fuel load where they reside. (McCann, 2020) Robbins also refers to the burns as cultural burns, noting a difference between the approach to time from a general prescribed burn. Karuk and Yurok Tribes have attracted significant academic attention for their cultural burns and led to the creation of potential expansion of such burns on federal and private lands. (Miller, et al, 2020)

The USDA Forest Service's Final Report on Prescribed Burning highlights the problem of failure to recognize that tribal cultural values may be different from agency values that support prescribed burning. This is particularly important because prescribed burning is very objective oriented towards valued outcomes. The report identifies two areas of need; 1) Forest Service's NEPA Planning emphasizing silviculture treatments at project levels and limits attention to resources for fuel treatments and 2) the current lack of skill sets in the agency for prescribed burn planning and implementation. (USDA Forest Service, 2022, p. 41-42) The Report has limited mention of Tribes. Even in the recommendation for increasing avenues for partners to implement across boundaries, it notes reducing barriers to collaborative prescribed burning with State agencies and partners, with no mention of Tribes ((USDA Forest Service, 2022, p. 46) despite the greater administrative ability to collaborate with Tribes under legislation and the fact that tribal crews are called up for wildfire on federal lands through the Incident Command System. The Report is highly focused on internal

agency improvements in decision-making but does not touch upon collaborative decision-making or reporting with Tribes and so does not reflect the trust responsibility in significant and meaningful ways. At the same time, some local Forest Service Managers continue to collaborate closely with adjacent Tribes on prescribed burning.

The Trust Responsibility continues as a basis for action. Current trends in Congressional and executive action show improvements in understanding the trust relationships and the obvious need for collaboration in the face of catastrophic fires that understand no borders. Significant Infrastructure funding will go to Tribes and planning and reporting processes, particularly in the Department of the Interior, show progress. As agency cultures move from an emphasis on fire suppression to an emphasis on fire prevention under conditions of climate change, more opportunities should arise.

Strong reasons exist for preventing wildfire beyond national borders due to the international linkages and impacts of climate change. By 2022, the world lost over one-third of its forested areas according to the UN, down from 6 million hectares to 4 million hectares that represents an area about twice the size of the United States. (Kirkpatrick, Rebecca 3/21/22) With climate change and increased threats, indigenous forests need state-of-the-art fire management and post-fire rehabilitation if their environmental, cultural and economic benefits are to be maintained. Education, training and workforce development to ensure a stable workforce and adequate resources for current and future management of wildfire is critical. Tribes offer successful models for conducting controlled burns. When Congress prioritizes suppression funding that meets the federal government's responsibilities to protect tribal trust resources vital to the economic interests and well-being of tribal communities, members and homelands it will, in turn, benefit public lands.

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