

# Improving Efficiency, Equity and Effectiveness of Wildfire Impacts on Tribal Trust Resources

Prepared for



Intertribal Timber Council  
1112 NE 21st Avenue, Suite 4  
Portland, OR 97232

Vincent Corrao, Northwest Management, Inc.  
Jim Erickson, Erickson & Associates LLC  
Jim Durglo, Wildland Fire Technical Specialist, ITC Contractor

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# Executive Summary

Five topics posed by the Intertribal Timber Council were investigated regarding the impacts of wildfire policies on Indian forests on reservations nationwide:

1. Allocation of Suppression Resources
2. Department of the Interior (DOI) Administrative Efficiencies
3. Emergency Stabilization, Rehabilitation and Restoration
4. Cost Avoidance and Proactive Management
5. Tribal Wildfire Priorities

## Methodology

Interviews with key fire specialists within the Bureau of Indian Affairs (BIA), Tribal, and other fire organizations across the United States.

## Findings

- It is critically important to the Tribes that resources are safeguarded through proactive management that protects the communities, economies and traditional uses. Effective management provides long-term stability to the health and welfare of families and supports ecological and cultural needs. Without changes in policies and investments in the Tribal lands equal to those on comparable non-Tribal lands, many areas will continue to experience extensive wildfires, significant economic and ecological losses, and community impacts at both local and regional scales.
- Issues identified in the 2016 study *Wildfire on Indian Forest: A Trust Crisis* and Indian Forest Management Assessment Team (IFMAT) reports over the past

*It is critically important to the Tribes that resources are safeguarded through proactive management that protects the communities, economies and traditional uses.*

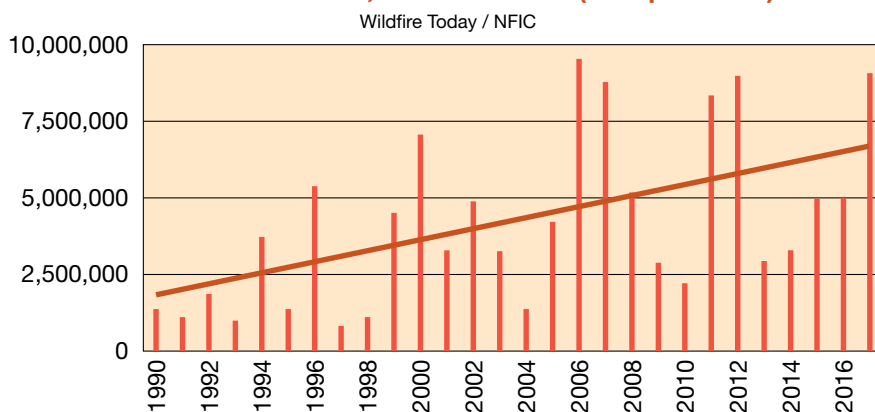
20 years continue to persist. Three times in the past 20-plus years, Indian Forest Assessment Teams (IFMATs I, II, III) have issued warnings about the dire current and future consequences of chronic federal failure to provide adequate resources to Indian forestry programs as mandated by Congress in the 1990 passage of the National Indian Forest Resources Management Act (NIFRMA) to ensure fulfillment of fiduciary trust responsibilities. This finding is especially urgent with respect to forestry and fire management.<sup>1</sup> Changes in policies, programs, analytical tools, and procedures are needed to protect the health and productivity of the 18.6 million acres of forest land held in trust for Indians.

<sup>1</sup> NIFRMA

Sec. 302. Congress finds and declares that ... (3) existing federal laws do not sufficiently assure the adequate and necessary trust management of Indian forest lands;

NIFRMA Sec. 305(b), management objectives: Indian forest land management activities undertaken by the Secretary shall be designed to achieve the following objectives: (1) the development, maintenance, and enhancement of Indian forest land in a perpetually productive state in accordance with the principles of sustained yield and with the standards and objectives set forth in forest management plans by providing effective management and protection through the application of sound silvicultural and economic principles...

**Total Wildfire Acres, U.S. 1990-2017 (Except Alaska)**





- Upfront federal consultation with Tribes about wildfire policy, departmental priorities, budgets and staffing needs is virtually non-existent; substantial changes are needed to conform with federal policy directives and provide substantive opportunity for Tribes to contribute to the development of a cohesive fire policy that reflects fiduciary responsibilities of the United States to protect the health and productivity of assets held in trust for the benefit of Indians.
- Service-first agreements between the Forest Service and the BIA need to be understood and evaluated as to their importance in improving operational efficiencies.
- Effective communication is paramount to interagency collaboration, including the BIA, intertribal organizations and Tribes, for effective project implementation. Success consistently follows open, collaborative partnerships.

Communication, cooperation and collaboration among land management entities are critical to efficient and effective management of resources, fires, personnel, and aviation.

- Nationally, we are reaching a crisis fire situation. Fires continue to grow in number and size while wildfire resources are in decline. Fewer people are pursuing careers in wildland fire disciplines at a time when retirements are frequent. Applications for participation on Incident Management Teams are dropping 25% per year.
- Tribal forests are diverse, and are managed under a variety of authorities such as direct services provided by the BIA, Self-Governance compacts, cooperative agreements, self-determination and buy-Indian contracts, and grants. Consequently, transferring federal funds to Tribes can be a very confusing and complex process. National direction and leadership

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*Since the passage of the National Indian Forest Resources Management Act (NIFRMA) in 1990, 4.8 million acres of Indian forest lands nationally have been burned by wildfire.*

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training are needed for BIA and Tribal personnel to expedite wildfire funding.

- Since the passage of the National Indian Forest Resources Management Act (NIFRMA) in 1990, 4.8 million acres of Indian forest lands nationally have been burned by wildfire. In 2015, a record 539,000 acres of Indian forests were severely impacted nationwide.

The 2015 fire season burned 338,110 forest acres on the five subject reservations, damaging 1.2 billion board feet of Tribal trust timber. The five western Tribes suffered an estimated



\$521 million in timber losses as a result of the wildfire in 2015. To date, approximately 50% of the marketable MMBF has been recovered, and the unrecovered portion represents a significant loss in value to the respective Tribes.

- The Office of Wildland Fire (OWF) Risk Based Wildland Fire Management (RBWFM) model, designed to guide future distribution of OWF Preparedness and Fuels Management funding among Interior agencies, does not give adequate weight to the Tribal trust forest lands and adjacent non-DOI federal lands that pose a risk to Tribal lands. The current formula is flawed in that it considers all acres burned to be equal even though rehabilitation of grasslands is costly and ineffective when compared to forest and woodlands.

## Recommendations

- Recognize and treat Indian Forest Trust Lands as “property” when prioritizing suppression resources. The “life and property first” policy must be interpreted in a manner that recognizes the unique trust responsibility that the federal government has to protect Indian resources, treating Tribal communities and Indian trust forests as tangible property.
- The biggest opportunity to improve operational administrative effectiveness for combatting wildfire would be for the federal government to pass a national budget for forest and fire management before the beginning of the fiscal year. This budget should reflect the recognition that wildfires must be considered an integral part of forest management and need to include reliable funding for preparedness, fuels, prevention and suppression, as well as unknown restoration costs.

- The Intertribal Timber Council (ITC) should seek an amendment to NIFRMA allowing the BIA to request supplemental Burned Area Rehabilitation (BAR) funding for Tribes during times of need similar to the USDA/ DOI supplemental suppression funding process.
- Federal allocation formulas must recognize the federal trust obligations to Tribes and that the agencies must first meet their trust responsibilities.
- Interagency fund transfer mechanisms, such as charge codes, are needed to allow crews to assist in cross-boundary treatments such as prescribed burning across agencies and regions.
- Protection of Tribal forests requires training and workforce development to ensure adequate resources are available to manage forests and wildfire successfully on reservation lands. This includes recruitment, education and leadership training that encourages employment that requires a stable funding source to address workforce issues.
- Emergency Stabilization (ES) and Burned Area Emergency Rehabilitation (BAER) funding needs to prioritize successes based upon previous post-fire rehabilitation efforts. Significant

amounts of funding are being utilized on BLM lands with little apparent positive impact on the resource. The allocation of BAER funds have not gone through Tribal consultation processes required in DOI policy.

- The Bureau of Indian Affairs should establish and maintain a pool of funds and resources to assist in immediate emergency post-fire salvage, rehabilitation, and restoration activities.
- The Department of Interior’s OWF and BIA need to conduct an in-depth assessment to identify adequate funding for the BIA for preparedness, fuels and prevention.
- Tribal fire, forestry and natural resource management position descriptions need to incorporate participation in fire management activities as a core job responsibility. Natural resource managers need to recognize this joint responsibility to encourage and incentivize participation.
- Tribes and the BIA need to emphasize the priority of fire management over fire suppression. Reducing administrative impediments to prescribe burning is essential to allow Tribes to practice traditional fire management in their quest to restore healthy, adaptive fire ecosystems.



# Overview

The Intertribal Timber Council requested Northwest Management, Inc., and the associated authors of this report to investigate five areas of concern relating to wildfire and provide recommendations to the Department of the Interior and Congress to improve efficiency, equity and effectiveness of federal wildland firefighting and outline opportunities for Tribal participation in wildland firefighting.

Wildland fire continues to be a disruptive force across Indian country. This has been shown through the number of fires, the burn severity and the acres burned, which continue to increase each year. It is essential to understand the role fire plays in maintaining healthy ecosystems and to prioritize investments to optimize benefits

and minimize unwanted fire impacts. This report identifies and analyzes recommendations and opportunities that can streamline processes for the Tribes and the BIA.

The federal government has chronically failed to fulfill its trust obligations to Indian forestry as identified by Congress in the preamble to the National Indian Forest Resource Management Act (NIFRMA), Title III Sec 302. Fulfillment of the federal trust duty depends on standards against which performances can be evaluated. Standards must have adequate oversight for their execution, and must be enforced. An effective mechanism for enforcing standards does not exist, and the third-party oversight as recommended by past IFMAT teams

has not been implemented. The trust responsibility imposes fiduciary duties on the federal government and in the absence of any Act of Congress to the contrary, the federal courts will hold the government to a strict standard of compliance with those duties. When viewed in its entirety, the legislative history and plain language of NIFRMA clearly evince a Congressional intent to embrace the trust responsibility and to apply it strictly. (Eberhard D. Eric, IFMAT III 2013).

The purpose of the trust is and always has been to ensure the survival and welfare of Indian Tribes and people. This includes an obligation to provide those services required to protect and enhance the health and productivity of Indian lands, resources, and self-





government, and also includes those economic and social programs that are necessary to raise the standard of living and social well-being of the Indian people to a level comparable to the non-Indian society. (A Quiet Crisis, P3).

Since the establishment and enactment of the Indian Self Determination and Education Assistance Act in 1975 (PL 93-638), Tribes have managed their lands through self-determination efforts under Tribal sovereignty that guided choices for their people and for natural resources. One of those choices is traditional and cultural burning practices across the landscape that have been suppressed for many years. IFMAT III introduced the concept of FIT (fire, investment, and transformation), which embodies the opportunities and challenges related to forest health issues using fire. Investments are required to achieve Tribal vision, and the transformation of Tribes to self-governance will promote the emergence of Indian forestry as a model for landscape stewardship.

### Methodology

Findings and recommendations are based largely on information gained through interviews with a diverse group of fire professionals throughout the country and subsequent analysis to provide a clear understanding of how each of the five questions impact Tribal resources. Specific concerns dealing with fire suppression systems, effective communication, Tribal values and priorities were a key focus of the study.

Deliverables include different funding sources and recommendations for supporting funding to meet federal trust obligations to the Tribes. The report also focuses on alternative processes that reduce the unwanted impacts of severe wildfire on Tribal resource values. The analysis documents the expressed concerns



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over administratively imposed rules and regulations guiding the allocation and use of fire funding. The findings also summarize the top three most restrictive administrative policies that reduce the flexibility of Tribes to provide and perform trust services.

The Indian Forest Management Assessment Team (IFMAT III 2013) developed key findings and recommendations for each of the NIFRMA mandated questions, which included addressing the rising cost of suppression across the nation and the lack of federal agency funding for preparedness and fuels treatment. Tribes have more management flexibility to deal with these issues than their federal neighbors but it is not enough to address the magnitude of the growing problem. As the previous IFMAT reports found, investment in Indian forestry is substantially lower than for other land ownerships. Indian forests require minimum annual appropriation of \$254 million to bring per acre funding up to par with comparable forest management agencies. Annual funding for Indian forestry needed to be increased

by \$100 million, with an additional \$13 million for staff development and training, to fulfill federal trust obligations to Tribes and match the per-acre rates provided for public and private programs. This assessment focuses on the existing policies and opportunities that could be implemented to better provide services to the Tribes and those that should be revised to meet Tribal resource needs for management and fire programs.

This analysis shows Tribes and the BIA as land managers will be required to contend with increasing fire risk and acreage burned with changing climate. The decision space of managers resides in acceptable goals and objectives that continue to meet the needs of the people: periodic less intense ground fires or stand-replacing crown fires. Tribes can expect to experience both but can influence the frequency of each through adaptable and applied land management practices. Managing fire fuels at a meaningful scale has been a more cost-effective strategy than firefighting and suppression.

# Five Study Questions

Each of the five questions below was analyzed separately to provide a summary narrative of the information collected during the study.

## 1 Allocation of Suppression Resources

### How are resources allocated?

The NMAC are made up of representatives from the BIA, BLM, USFS, FEMA, USFWS, and NASF. Their role is to allocate Type I Hotshot crews, Incident Management Teams and aircraft to the regions. All other fire suppression resources are allocated locally or regionally. Fire suppression resource allocation is a bottom-up process and the needs are identified at the field level and passed up from level to level (i.e. LMAC, GMAC, NMAC), with the use of closest available resources being the priority. Communication is the key to all aspects of effective interagency fire management programs.

### Concerns addressing suppression allocation system

The allocation of suppression resources begins with preseason meetings to establish working relationships with adjacent agencies and to coordinate effectively with neighbors.

Resource shortages occur during extreme fire seasons and will continue as acreage burned and fire severity increase over time. Problems with distribution of limited resources can be intensified without adequate BIA/Tribal Geographic Area Coordination Center (GACC) representation when BIA regional staff are dispatched to incidents. BIA/Tribal staff must commit to performing regional duties and trust responsibilities during times of high severity. Current administrative

restrictions placed on severity funding has led to unnecessary burned acres in some cases. Severity funds should be allocated based upon historic trends and current conditions for specific ecosystems, not as a result of administrative policy.

Some resource shortages are due to Incident Management Teams over-ordering resources during extreme fire seasons and agencies hoarding resources. Development of the future firefighting workforce is a high priority for all federal agencies. Lack of adequate recruitment and retirement of an aging workforce are bringing this issue to crisis stage.

One challenge for GACCs is the ability to get approved severity funding to pre-stage resources for coming events. Resource allocation varies by GACC with differing ecosystems such as forest versus grasslands. During times of scarce resources, resources that are allocated do not always meet the needs (i.e. structural fire engines for wildland fire suppression).

For incidents over 100 acres, the 209 forms are a daily requirement that Tribes and agencies sometimes hit and miss in completing daily.

Frustration comes at the agency level in repeatedly filling out reports when no resources are available or when local values at risk, such as Tribal Trust Timber are a lower priority than other pre-identified values.

It is important to have an effective local dispatch program when utilizing aviation and in dispatching resources in protection of trust assets.

### Recommendations

Tribes and agencies need to develop a staff succession strategy to recruit, train and retain future fire management staff from all natural resource disciplines.

Tribes and agencies need to nurture and develop local collaborative partnerships to share fire management resources (staff and equipment). Strong leadership, effective interagency communication and coordination of resources are critical to meeting the needs of future forests.

Tribes and agencies need to file daily fire reports to keep GMAC aware of their situation and needs. The Tribes and agency FMOs need to participate in the LMAC







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and GMAC process to effectively communicate and ensure their needs are known and understood.

Members of regional fire staff need to remain in their offices during high regional fire danger. In serving other regions, there is a need to limit incident management team participation to off-peak fire seasons.

Tribes and agencies need to make their suppression concerns and resource priorities known to their regional BIA and GACC during off-season meetings.

## 2 DOI Administrative Efficiencies

### **Concerns over administratively imposed rules and regulations in the allocation of fire funding**

Administrative rules that hinder allocation and use of fire funding are a function of the federal budget allocation system, which does not recognize and treat Indian Forest Trust Lands as “property” when prioritizing suppression resources. The delayed availability

of approved national budgets creates significant conflicts for national and regional offices in the allocation of resources to Tribes and agencies. The DOI is primarily a land management focused agency. The BIA is tasked with land management responsibilities plus caring for people and communities including disciplines of law and order, health, anthropology, sociology, history and the cultural uses of native people.

Administrative initiatives (Hazardous Fuels Prioritization and Allocation System (HFPAS), Risk Based Wildland Fire Model (RBWFM)) that consume significant time and resources frequently lead nowhere. There is an obvious need for more up-front Tribal consultation and involvement in initiatives that affect Tribes and their resources.

### **Prioritized allocation of funding based on programmatic (operational/permanent salaries) over projects and the impacts on acres accomplished**

Fragmentation of fuels money into many special pools with additional applications and reporting

requirements leads to inconsistent fuel funding and fluctuations in accomplishments. Small Tribes and agencies such as Pueblos are often disadvantaged in acquiring and processing funding due to limited staff.

The lack of competition for fire positions in Indian country equates to lower quality candidates than other DOI bureaus. This puts the BIA representatives at a disadvantage when dealing with other agencies.

The Reserved Treaty Rights Lands (RTRL) funding is restricted to non-trust, off-reservation acres and creates coordination challenges for Tribes.

There is a need for a better process for approval of severity funding.

The task book process is inconsistent across agencies and programs, making qualifications difficult to complete.

### **Identify and analyze the top three most restrictive administrative policies**

Current federal funding procedures have significant negative impact on the productivity and stability of Tribal fire programs. Continuing resolutions inject uncertainty into program operations and



add unnecessary and disruptive multiple allocation steps. This is further compounded by the multiple funding arrangements utilized by Tribes (direct service, contracts, cooperative agreements, and self-determination grants). Budget levels that fluctuate from year to year have a delayed effect on program productivity due to additional uncertainty on how to staff and implement programs of work. Recommendations on how the federal government and Tribes can address these concerns include:

- Passage of the annual federal budget before the beginning of the fiscal year would provide some certainty for resource managers developing and scheduling program activities. In addition, this would eliminate repeated and unnecessary budget allocation steps in an already complex system.
- Training for DOI, BIA and Tribal representatives on the policies

and procedures for transfer of federal funding to the Tribe/ agency is badly needed to expedite fund transfer, reduce agency carryover and improve program operation.

- The federal government needs to review the impact of parcelling federal allocations on operational efficiency and effectiveness. Current fuel funding is a prime example, as it is divided into three separate pots of money: Agency fuel allocations, Reserve Treaty Rights Lands and Resilient Landscape projects. This process adds extensive and excessive application and reporting procedures to understaffed and overworked programs. The impact is especially burdensome on small Tribes and Pueblos.

Pooling resilient landscape funds back into the fuel funding pool would provide more efficiency for fuel programs.

- Severity funding is a critical component of all regional fire programs; yet determining when it is needed and how much is needed varies greatly among geographic regions. Grasslands, woodlands and forests all possess unique conditions that require unique analysis to determine need. Historic conditions could provide a more effective guidance for allocation.

Tribes and the BIA are facing a serious and steady loss of qualified resource managers due to changing demographics of the millennial generation and retirement of baby boomers.

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The situation for fire managers is further compounded by a lack of interest and participation in fire management. Lack of understanding and respect for wildland fire by all resource disciplines often leads to management strategies that perpetuate and exacerbate the crisis of overstocked, unhealthy forest and woodlands that are faced with changing climatic conditions. Recruitment, training, career development, leadership development, and commitment and incentives to participation in wildland fire management are key challenges that must be addressed if the current tide is to be reversed.

- Consistent, stable funding is essential to building, developing and maintaining quality workforces now and into the future. Stable funding is critical if Tribes/agencies are to attract and retain the workforce needed to adequately manage career staff.
- Federal agencies and Tribes need to acknowledge the role of fire in their ecosystems and develop position descriptions and individual development plans that reflect the responsibility of all natural resource staff to support and participate in wildland fire management.

Administrative policies are often developed at the national level by individuals far removed from the realities of those operating at the field level. Political appointees and Washington federal employees often come in with agendas that unintentionally impede and hinder program staffing and project implementation. Special projects like Emergency Management Decision Support (EMDS) and HFPAS are prime examples that consumed tremendous staff time while leading

to uncertainty and animosity with staff and between bureaus. These exercises devolved into game playing to see which agency could steal funding from the others. Eventually neither of these models were adopted or implemented.

- Federal departments and agencies should review current policies and regulations for their impact on program efficiency and effectiveness. Engagement of all levels of the organization is critical to finding cost-effective victories that provide greater results on the ground.
- Current federal policy and procedures are an impediment to Tribes' ability to practice traditional fire management strategies. Qualifications, development of fire plans, smoke management and line officer approval all increase the complexity for Tribes and delay or discourage the traditional use of fire as a management tool. Federal agencies need to work with Tribes to re-establish this valuable skill to help address our

nation's wildland fire crisis. Tribes have to make prescribed burning and other active management strategies a priority.

- Performance metrics often do not measure progress toward the goals identified in the National Cohesive Wildland Fire Management Strategy. Measuring fires suppressed and total acreage burned does not clearly delineate whether we are collectively moving toward the goal of safe and effective use of fire. Suppressing all small fires might be in direct conflict with actions to help restore healthy, fire-adapted ecosystems. Perhaps under specific conditions these fires should be allowed to reduce unwanted, excess stocking of trees and shrub as well as reduce excess fuels. Metrics that delineate between unwanted severe acreage burned and acreage that burns under acceptable conditions are an important delineation that tells us much about whether we are moving toward or away from healthy, fire-adapted forests and woodlands. Using fire to achieve desired conditions is the most cost effective tool available to resource managers.



The future distribution of OWF Preparedness and Fuels Management funding among Interior agencies needs to be re-evaluated to give more weight to the Tribal trust forest lands and adjacent federal lands that pose a risk to Tribal lands.

Tribes are diverse and are managed under different authorities such as Direct services, compacts, cooperative agreements, contracts and grants, creating a very confusing and complex process for transferring federal funds to Tribes. National direction and leadership training is needed for BIA and Tribal personnel involved in the transactions.

HR and contracting could be incentivized to serve fire needs by recording their work hours on wildfire suppression events to those respective budgets.

The biggest opportunity to improve operational administrative effectiveness would be for the federal government to pass the national budget before the beginning of the fiscal year. To increase stability for wildland fire management, no programs for preparedness, prevention and BAER should be reduced by more than 10% from the previous year's budget.

There are conflicting agency goals such as protecting trust assets versus suppression under the protect lives and property dogma.

Wildfire is an integral component in managing and protecting the health and productivity of Tribal

forest. Changing the paradigm from fire suppression to applying fire on the ground as a tool will improve forest health and achieve land management objectives with less financial resources. Embracing traditional Tribal fire strategies will require revisiting restrictive administrative policies and procedures. On a landscape scale, mechanisms are needed to allow crews to assist in burning across agencies and regions by providing charge codes or cost share mechanisms.

### 3 Emergency Stabilization, Rehabilitation and Restoration

#### **Understand the current logic for distribution of ES, BAER, and BAR funds to DOI bureaus based upon historic average needs instead of the current fire needs**

Findings from the 2016 report *Wildfire on Indian Forest — A Trust Crisis* describe the uses and current process utilized by the DOI. The findings remain valid and are summarized below for convenience.

Emergency Stabilization (ES) — actions designed to prevent degradation of natural/cultural resources immediately post-fire and to protect life and property within the burn area and surrounding properties based primarily on erosion, landslides, and flooding. Mulching and seeding are common stabilization actions, as well as road grading and culvert cleaning. Funds are tied to suppression dollars and are available up to one year plus 21 days post-fire, with an option

to extend to two years. There are few delays in ES funding and timely action is the norm.

Burned Area Rehabilitation (BAR) — actions to repair and improve burned landscapes consistent with the intended management plans before burning, and typically associated with long-term protection of timber/water resources, soil productivity, wildlife habitat and minor facilities. These actions commonly include planting and seeding (native trees, plants and wildlife food sources), invasive species control, road relocation, culvert replacement, and stream restoration. These funds are tied to wildland fire management annual budgets and are available for up to five years post-fire. In contrast to ES funding, BAR funding is often delayed or absent. In the past, allocations were not available until after October (end of FY) thereby preventing rehabilitation of early-season fires where efforts would benefit from autumn treatments given the favorable environmental conditions in September and October. Alternatively, some funding allocations were simply not available given the priority associated with other national endeavors such as sage-grouse habitat rehabilitation.

BIA estimated a need for \$55 million for OWF BAR funding over five years for post-fire recovery from 2015 wildfires on Indian trust forests, with \$9 million needed in this fiscal year (FY 2016). But OWF only designated \$3.4 million of its \$19 million BAR FY '16 budget for Indian trust forest recovery. In the much less destructive 2014 fire season, Indian trust forests received \$4 million in BAR funds. Although the DOI knew of the catastrophic extent of 2015's Indian forest fires while FY 2016 appropriations were still being developed, they made no request for any additional funds. Congress, at the specific request of Tribes, added \$2 million to BIA (not

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OWF) for post-fire recovery, but the DOI has done nothing to respond to the severity of the 2015 reservation fires. Finally at the urging of Washington Senator Maria Cantwell, DOI re-appropriated \$3.8 million for rehabilitation-reforestation on the Colville reservation. For FY 2016, as in past years, BLM continued to be the recipient of the majority of OWF's BAR funding, carrying over extensive amounts that could have benefitted affected Tribes. Interior's inadequate response for Indian forest rehabilitation adds insult to injury, further crippling the recovery of these trust resources and compounding the losses inflicted by the fires themselves.

The currently adopted DOI OWF policy for BAR distribution is based upon a 10-year rolling average and not current rehabilitation needs. Several DOI bureaus have carried over BAR funding instead

of re-allocating to address known Tribal restoration needs.

There is a need for monitoring of natural regeneration to better forecast the real needs versus the perceived regeneration needs and to include local knowledge in addressing restoration issues.

#### **Funding sources and appropriate application**

Efforts to restore and rehabilitate forests, whether pre-fire or post-fire require innovative and creative funding strategies and timely implementation of actions. Traditional federal funding for management and restoration rarely meets Tribal needs. The fragmented funding sources various Tribes rely on increase administrative burdens and complicate integration of funding. Funding sources include:

- Emergency Stabilization: Immediately post-fire, charged to suppression account
- Burned Area Rehabilitation: Five years post-fire, Appropriated funds
- Forest Development Backlog Funds
- Natural Resources Conservation Service (NRCS) Programs
- Bureau of Reclamation
- Army Corp of Engineers
- Department of Defense
- FEMA
- Ecosystem credits: Carbon and water credits
- Public/private grants
- Tribal funds



### **Develop recommendations and supporting logic for funding ES, BAER, and BAR projects based upon need and federal trust obligations to Tribes**

Large-scale wildfire damage assessments should be prescriptive and sufficient to authorize immediate large-scale salvage and corresponding rehabilitation efforts. Comprehensive and precise measurements of fire damage take time and effort, both of which are better directed toward immediate salvage efforts to recover perishable value. However, when insufficient resources compromise needed investments in burned area rehabilitation (BAR) the long-term value and sustainability of Indian trust forest resources are compromised.

### **Recommendations**

The DOI OWF funding for agencies needs to be re-evaluated to determine actual need and appropriate funding levels to accomplish rehabilitation and mitigation. The evaluation should give more weight to Tribal trust forest lands and adjacent federal lands that pose a risk to Tribal lands.

The current DOI OWF formula is based upon a 10-year rolling average and not actual needs. The DOI should consider a hybrid formula based partially on the 10-year average needs while maintaining flexibility to meet current needs.

The current formula is flawed in that it considers all acreage burned as equal (grasslands, shrub-steppe, woodlands, and forests). Rehabilitation of grasslands is much less costly but less effective than regeneration of forests and woodlands.

The allocation of BAER funds has not gone through the consultation process outlined in the DOI policy.

### **Identify alternative funding sources for post-fire emergency stabilization/rehabilitation/restoration needs. Alternative funding sources include fire suppression, post fire emergency stabilization, BAER, BAR, NRCS, FEMA and others**

ITC should seek an amendment to NIFRMA allowing the BIA to request supplemental BAR funding for

Tribes during times of need similar to the USDA/DOI supplemental suppression funding process.

DOI OWF needs to verify rehabilitation effectiveness for various treatments and factor effectiveness into allocation strategies (i.e. seedlings for reforestation versus grassland rehabilitation).

All funding allocation formulas must recognize that the DOI bureaus have a trust obligation to Tribes that supersedes agency obligations.

ES and BAER spending successes need to be ranked in post-fire areas; large amounts of funding are being utilized on BLM lands with little positive impact on the rangeland resources.

## **4 Cost Avoidance and Proactive Management**

Wildfire can have long term negative impacts to Tribal communities. The immediate loss of timber value and future tree growth are often the only losses considered. Communities suffering a high severity wildfire also



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experience the impacts of roads damaged by high erosion and soil loss due to the snow and rain runoff following the loss of vegetation after the fire is out. Water quality is affected as are wildlife habitat and traditional foods from the forest. The loss of employment opportunities can be felt for many years as the forest regrows and is re-established. Active management can avoid many of the serious impacts of wildfire and can reduce the amount of high severity wildfire. Fuels treatments and thinning operations can mitigate the high cost of fire suppression and the post-wildfire impacts.

The Santa Clara Pueblo is a prime example of how Tribes are affected by the lack of active management from neighboring land management agencies. In their case Tribal lands were severely impacted by three wildfires originating on neighboring Forest Service lands. The fires include the Oso fire of 1998, the Cerro Grande Fire of 2000, and the Las Conchas Fire of 2011. Each fire was larger and more devastating to Pueblo lands, severely burning over 70% of the Pueblo's watershed. The Las Conchas fire devastated the Santa Clara canyon. This caused serious erosion and impacted the Pueblo's water resources, destroying four reservoirs that provided water and recreation to the Pueblo and its membership. These effects will impact the Santa Clara Tribe for a long time into the future, perhaps altering these lands forever.





**Identifying “Avoided Cost” realized by proactive land management treatments**

Wildland fire plays a natural and important role in maintaining and sustaining healthy ecosystems. Suppressing natural fires over the past 120 years has led to unhealthy, high-risk ecosystems that are doomed to burn under conditions that are unnaturally severe in relation to historical patterns. Since fires will continue to play a major role across all ecosystems, it is imperative that we restore natural healthy fire regimes, integrating traditional native fire strategies. Unfortunately, the loss of traditional burning due to ever-more restrictive federal policies has reduced effective acres burned and increased intensively burned acreage. It is imperative that operations shift the current suppression paradigm to a proactive fire management focus to restore natural fire regimes and healthy ecosystems. Adequate and consistent funding is key to effective implementation and staffing.

Suppression tactics will remain a management option in concert with forestry and fire strategies.

Left unchecked, wildfires can create an urgent need for suppression to

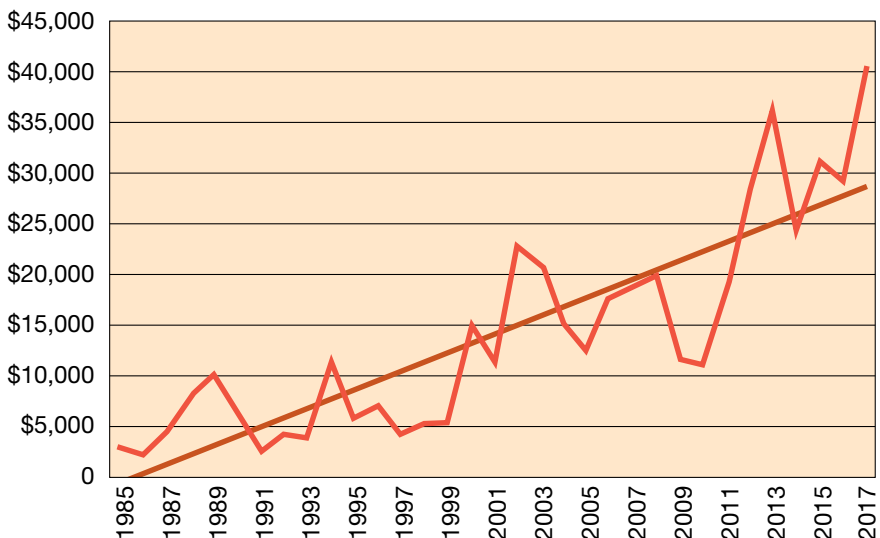
contain the fires, limit damages and contain risks of long term ecologic and economic damage. Delay or insufficient suppression response leads to rapid spread of wildfires with consequential increases in costs and loss of resources. Similarly, a forest fire creates an urgent need for salvage and rehabilitation efforts to recover as much value as possible, while limiting the negative environmental consequences of the fire. Another wildfire can transition vegetation to non-forest and increase soil erosion. Proactive land management

treatments can reduce the impacts of wildfire and provide improved initial attack effectiveness, thus lowering fire suppression and rehabilitation costs while decreasing wildfire damages.

While structure protection has been a priority for federal agencies due to public outcries and political sensitivity to the crisis, it happens too often at the expense of natural resources. These resources cannot be replaced in the short term, especially on Tribal lands. Homes and businesses can be insured and quickly replaced, while resources on the reservations most often cannot without extensive timelines and economic and social impacts. Loss of businesses and employment affect human health, putting pressure on families and the communities and increasing social service needs. On all lands and ownerships across the landscape, proactive management is good business as it protects communities and makes sense economically, ecologically and culturally.

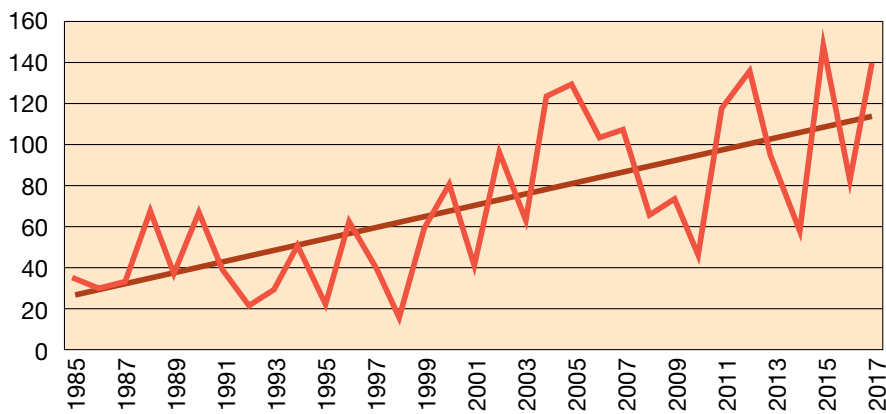
Calculating avoided costs provided by proactive management treatments can help Tribes and federal agencies quantify and justify funding for active land management. Proactive treatments

**Average Suppression Cost Per Fire**





### Average Acres Per Fire



can significantly reduce suppression cost and rehabilitation activities. Developing an avoided cost model would allow Tribal resource managers a tool to systematically plan and analyze the impact and role of wildland fire across all fire regimes. This process would provide Tribes, BIA, DOI and Congress with an analysis tool to objectively compare proactive management treatments versus suppression and rehabilitation efforts. Instead of having suppression activities driving federal fire budgets, there would be sound information to support greater proactive management, preparedness and fuel treatments.

#### Examples of fires on Tribal lands

There are savings that can be realized and costs avoided with adequate upfront management. The May 2011 Wallow fire in Northeast Arizona is the largest fire in state history, burning 538,049 acres at an estimated cost for suppression of \$109 million. The fire originated in the Apache-Sitgreaves National Forest and eventually burned onto the White Mountain Apache (12,929 acres) and San Carlos Apache (9,162 acres) reservations. Long histories of active forest management, including timber harvest, mechanical fuel treatments, prescribed burns and managed wildfires were instrumental in the fire burning as low intensity ground fires on Tribal lands. Extensive acreage

on the National Forest in contrast involved high severity crown fires that resulted in significant tree mortality and serious soil impacts.

Once the fire entered the White Mountain Apache reservation, crews were able to under burn previous management treatments and contain the fire before it caused serious damage to the Tribes' Sacred Mount Baldy, headwaters to many streams supporting the endangered Apache trout. Dugger Hughes, Southwest Area Incident Commander, estimated these treatments were critical to preventing a much larger fire and prevented what would have been a 25% increase in suppression costs (\$27 million) had they not worked. In addition, many millions of dollars in Tribal resources were protected and many more millions of dollars in rehabilitation costs avoided.

The San Carlos Apache Tribe practices traditional fire management, utilizing fire to control stocking, reduce excessive fuels and stimulate the fire ecosystem, reinvigorating the vegetation across the landscape. The Tribe's management style provides a model for the Southwest and our nation to effectively minimize unwanted resource damage and promote ecosystem restoration. This management style has brought the affected fire ecosystems closer to an historic range of variability

that accommodates regular, periodic wildfire.

Tribal fire prevention programs have been shown to provide a savings of 5 to 30 times the cost of suppression for the fires avoided. Effective BAER and ES can prevent additional resource damage. Fuels reduction through increased timber harvest, prescribed fire and managed wildfire have also been shown to reduce fire suppression costs.

#### Develop a draft avoided cost model/format for Tribes to use to justify fire/forest management funding

The BIA and ITC should develop an avoided cost model based on Tribal-specific criteria. The template for the avoided cost/benefit cost analysis should be developed specifically for Indian country use to avoid the conflict and delay of working with other DOI agencies. Past DOI efforts at developing department-wide models (HFPAS, EMDS, RBWFM) have excluded Tribal participation and led to non-productive agency posturing and gamesmanship of models that eventually were scratched before being implemented.

Avoided cost could mirror benefit/cost analysis any time the ratio exceeds 1:1 (the benefits equal or exceed the cost the project provides for a net gain from the funding provided. The studies on avoided cost have identified much higher cost benefits returns, and investing resources in specific local and regional areas can maximize effectiveness. Monitoring the severity in these treated sites once a fire has occurred can improve effectiveness and maximize efforts to protect communities and resources. A standardized analysis would provide clear and positive documentation for Congressional appropriators to justify funding to the BIA and Tribes.



## 5 Tribal Wildfire Priorities

Wildfire losses can significantly impact employment, environment and social values for the Tribes and the regions that contain them. They have substantial consequences on the regional infrastructure, employment, wages, soil stabilization and water.

As a future of greater fire danger and extent unfolds, Indian forests need to get state-of-the-art fire management, protection and post-fire rehabilitation if their environmental, economic, and cultural benefits are to be maintained, and the federal government's trust obligation is to be met adequately. Interior's wildland firefighting policy is to protect life and property first, at the expense of Tribal natural resources. DOI has not considered Indian trust resources as property, instead prioritizing privately-owned

structures like cabins, homes, and barns over life-sustaining Tribal natural resources. As a result, when new fires are burning on and off reservations, firefighting resources are prioritized to protect private property while Tribal trust natural resources are allowed to burn. In some instances, firefighting resources on Indian land were directed to leave a Tribal fire to go protect private residences off reservation. As a result, fires on Indian trust forests were allowed to grow, getting beyond control, leaving Tribes to bear the losses, while private property owners, often with insurance, received the benefits of federal fire protection.

The "life and property first" policy needs re-evaluation to acknowledge the unique trust responsibility that the federal government has to protect Indian resources and to include Indian trust forests as high-priority property. Tribes, and often the regions around them, rely

upon their forests for a wide range of essential functions, and the U.S.'s unique fiduciary obligation to protect these assets needs to be recognized in federal firefighting policy. Tribal communities live, work and reside on their lands and rely on their forests.

### **Tribal wildfire priorities fall into two major areas**

Protection of Tribal resources requires adequate funding along with training and workforce development to ensure that adequate current and future firefighting resources are available to manage wildfire successfully on reservation lands. Education, training and retention of a modern, stable workforce are contingent on an adequate funding source. Fluctuations in federal funding are detrimental to maintaining an effective workforce and successfully applying management objectives to the land.

Suppression resources need to be prioritized to meet the trust responsibilities of the federal government in protecting trust assets that are vital to the economic interests and well-being of Tribal communities, members and homelands.

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*As a future of greater fire danger and extent unfolds, Indian forests need to get state of the art fire management, protection and post fire rehabilitation if their environmental, economic, and cultural benefits are to be maintained, and the federal government's trust obligation is to be adequately met.*

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# Summary

This report combines assessments of operational, policy and administrative actions. The goal of this study is to focus efforts on providing an effective process to promote positive change through the use of policies already in place and to look at others that need improvement. If these changes and investments are not made, increasing fire risk and damage will continue to degrade Tribal forests, Tribal communities and the neighboring regions across the nation.

Opportunities to improve the relationship between Tribes and the federal government exist through increased Tribal consultation, workforce training, a higher level of leadership training and increased overall communication. This would lead to more effective and meaningful successes in resource management and protection for the valuable economic, social, and environmental resources of the Tribes.

The DOI's allocation of BIA rehabilitation funding for damage resulting from the 2015 fire season was not sufficient for fire rehabilitation and recovery needs. Independent studies show rehabilitation costs are equal to suppression cost and up to as much as three times suppression

cost, far beyond the support DOI has provided. Funding post-fire rehabilitation does not take into account the loss of older regeneration, legacy trees, cultural sites, wildlife and fish habitats damaged by fires or additional site preparation and administration costs, all of which lengthen the recovery period. Significant road damage and loss of transportation infrastructure has resulted from many of the 2015 fires as a result of inadequate funding to treat burned areas.

Fire is an integral and essential force of nature. Fighting fire in order to tame it is a battle never to be won. Wildfires are increasing in severity and size and funding is increasingly devoted to suppression activities, reducing resources for preparation, mitigation and restoration. Policies relating to fire exclusion and fragmentation of federal forest lands increase risks to Indian forests and impede their ability to produce ecosystem services such as protection of water, soils and habitats for fish, wildlife and plants. Fire must be integrated as an effective tool into forest management strategies to sustain healthy, productive ecosystems across Indian country and our nation. National policies and regulations have increasingly rendered the use of prescribed fire

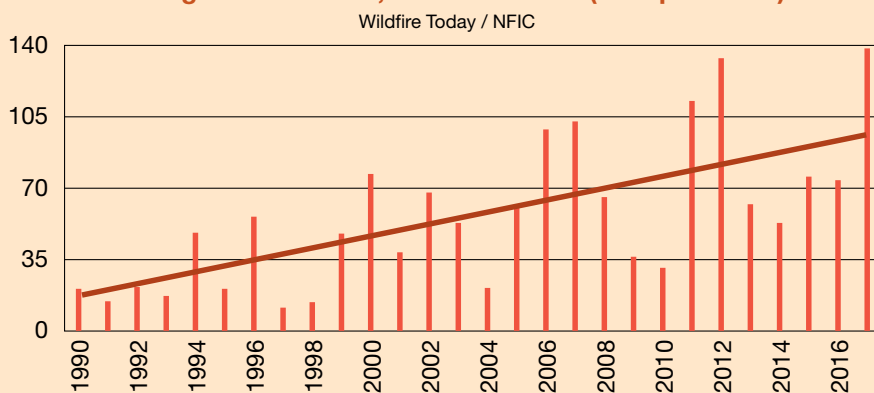


ineffective and nearly impossible to use as a management tool. Traditional Tribal fire management strategies are at risk of being lost. Tribal communities, their economies, and their livelihood depend on natural resources encompassing the forest, traditional foods, wildlife, water, and spiritual harmony with the land on which they live.

Tribal management strategies involving fuels treatments continued to show significant savings in fire suppression cost as supported by numerous studies. These avoided costs provide examples of the value of investing in proactive management. Such management reduces risks from insects, disease and wildfire, and cuts costs of resource protection while providing employment opportunities and a higher rate of return for expenditures.

A changing climate will continue to increase the frequency and magnitude of stand-replacing fires, which have already blackened over 25% of Indian forests nationwide. The government must take steps to minimize damage and protect the values of Tribal forests from wildfire. This will in turn increase the benefits to Tribal nations, local communities and the nation as a whole. There remains today a great urgency to restore and rehabilitate many of the forest lands across Indian country and the nation before they are lost.

**Average Wildfire Size, U.S. 1990-2017 (Except Alaska)**



# Implementation Strategy

Federal consultation with Tribes about wildfire policy, departmental priorities, budgets and staffing needs is virtually nonexistent and substantial changes are needed to

conform to federal policy directives. Substantive opportunities should be provided for Tribes to contribute to the development of a cohesive fire policy that reflects the fiduciary

responsibilities of the United States in protecting the health and productivity of assets held in trust for the benefit of Indians.

ACTION	PURPOSE	REASON
<p><b>National leadership training is needed for BIA and Tribal personnel.</b></p> 	<p>Improve collaborative partnerships and communication between agencies.</p>	<p>Effective communication is key to interagency collaboration. Innovation, adaptation and success come from collaborative partnerships that are better able to utilize ideas, experience, and resources to apply efficient and effective principles to the management of resources, fires, personnel, and aviation. Tribes and agencies need to make their suppression concerns and resource priorities known to their regional BIA and GACC during off-season meetings.</p> <p>Problems with distribution of limited resources can be intensified without adequate BIA/Tribal GACC representation. BIA/Tribal staff needs to be committed to performing regional duties and trust responsibilities during times of high severity. For incidents over 100 acres, the 209 forms are a daily requirement that Tribes and agencies sometimes hit and miss in completing and filling out daily.</p>
<p><b>A workforce strategy needs to be implemented across Indian Country.</b></p>	<p>To improve wildland fire training, monitoring, retention and succession planning.</p>	<p>Fewer people are pursuing careers in wildland fire at a time when retirements are frequent. Participation on Incident Management Teams is facing fewer applications, decreasing by 25% per year on average. Tribes and agencies need to develop a staff succession strategy to recruit, train, and retain future fire management staff from all natural resource disciplines. Protection of Tribal forestland requires these actions to ensure adequate resources are available to successfully manage reservation lands.</p>
<p><b>The BIA to develop an avoided cost model based on Tribal-specific criteria.</b></p>	<p>There are significant amounts of funding utilized on federal lands with largely unknown impacts on the resource.</p> 	<p>The BIA needs to emphasize the priority of fire management over fire suppression and specifically reduce administrative impediments to prescribe burning to allow Tribes to practice traditional fire management in their quest to restore healthy, adaptive fire ecosystems. Left unchecked wildfire creates an urgent need for suppression action leading to large resource investments with limited effects on long-term ecologic and economic damages. Examples of Tribal forestry and fuels treatment have continuously demonstrated significant savings in fire suppression cost and ecosystem damage reductions. Additionally, wildland fire training and education programs require stable funding resources to address workforce issues.</p>



ACTION	PURPOSE	REASON
<p><b>Initiate a nationally available Trust Symposium.</b></p>	<p>To recognize and treat Indian Forest Trust Lands as property while correcting administrative issues and interpretations when prioritizing fire suppression resources.</p>	<p>The “life and property first” policy must be interpreted in a manner that recognizes the unique trust responsibility that the federal government has to protect Indian resources, communities and Indian trust forest as tangible property. Suppression resources for Tribes need to be prioritized in a way that meets these fiduciary trust obligations across Indian country to protect the economic and community viability and stability of Tribal members and their homelands.</p>
<p><b>Pass a national budget for forest management through the Department of the Interior or Congress.</b></p>	<p>Wildfire must be considered an integral part of forest management and include reliable funding for prevention and rehabilitation.</p>	<p>Annual funding for Indian forest is comparably less than that appropriated to other nationally recognized lands and would require appropriations to bring the per acre funding up to par with other comparable forest management agencies. The current Department of the Interior – Office of Wildland Fire formula is inaccurate in that calculations are based upon a 10-year rolling average, not actual needs, and it considers all acres burned equal even though rehabilitation for grasslands is much less costly and ineffective than forest and woodland acres. Additionally, ITC should seek an amendment to NIFRMA allowing the BIA to request supplemental Burned Area Rehabilitation (BAR) funding for Tribes during times of need similar to that of the USDA/DOI supplemental suppression funding process. The Department of the Interior, Office of Wildland Fire, and Bureau of Indian Affairs need to collaboratively identify adequate funding for preparedness, fuels, and prevention.</p>
		
<p><b>Interagency policy changes needed.</b></p>	<p>Interagency fund transfer mechanisms, such as charge codes, are needed to allow crews to assist in burning across agencies and regions.</p>	<p>Fragmentation of fuels money into many special pools with additional application and supporting requirements leads to inconsistent fuel funding and fluctuations in accomplishments.</p>
<p><b>More Tribal consultation is needed.</b></p>	<p>Fulfill Executive Order, Secretarial Order, and federal policy requirements.</p>	<p>Executive Order 13175, Department of the Interior Policy on Consultation with Indian Tribes, Secretarial Order 3317-Department of the Interior Policy on Consultation with Indian Tribes, and the Background Paper on Tribal Consultation and Tribal Sovereignty of August 2009 and the White House Meeting with Tribal Leaders need to be emphasized.</p>
<p><b>Update position descriptions and job duties of HR and Administrative staff for wildfire.</b></p>	<p>Include human resource and administration staff in wildfire planning and budgeting.</p>	<p>Tribal fire management, forestry and natural resource position descriptions need to incorporate participation in fire management activities as a core job responsibility. Natural resource managers need to recognize this joint responsibility to encourage and incentivize participation and influence collaboration and communication efficiencies across organizations for the efficient and effective use of resources.</p>



## Acronyms

### **BAR**

Burned Area Rehabilitation

### **BAER**

Burned Area Emergency Rehabilitation

### **BIA**

Bureau of Indian Affairs

### **BLM**

Bureau Land Management

### **DOI**

Department of Interior

### **ES**

Emergency Stabilization

### **EMDS**

Emergency Management Decision Support

### **FEMA**

Federal Emergency Management Agency

### **GACC**

Geographic Area Coordination Center

### **GMAC**

Geographic Multi-Agency Coordinating Group

### **HFPAS**

Hazardous Fuels Prioritization and Allocation System

### **IFMAT**

Indian Forest Management Assessment Team

### **ITC**

Intertribal Timber Council

### **LMAC**

Local Multi-Agency Coordinating Group

### **NASF**

National Association State Foresters

### **NIFC**

National Interagency Fire Center

### **NIFRMA**

National Indian Forest Resource Management Act

### **NMAC**

National Multi-Agency Coordinating Group

### **OWF**

Office of Wildland Fire

### **RBWFM**

Risk Based Wildland Fire Model

### **RTRL**

Reserved Treaty Rights Lands

### **USFS**

United States Forest Service

### **USFWS**

US Fish and Wildlife Service

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# Improving Efficiency, Equity and Effectiveness of Wildfire Impacts on Tribal Trust Resources

Prepared for:  
**Intertribal Timber Council**



Prepared by:  
**Northwest Management, Inc.**  
[www.NorthwestManagement.com](http://www.NorthwestManagement.com)

