



1. Strategies to increase protection of traditional knowledge

Mechanisms to Increase Management of Off-Reservation Lands

Tribal traditional ecological knowledge is fundamentally a cultural practice. Tribal TEK is not a static rulebook, but a set of practices that to survive must be played out on a living landscape. Therefore the most immediate and efficient mechanism to achieving knowledge sovereignty is to remove barriers to Tribal sovereignty over traditional management, including management of off-reservation and/or concurrent jurisdiction lands.

One present limitation to exercising sovereignty is limits on Tribal capacity in the form of staff, and legal and economic resources. Definitions of sovereignty are in turn behind this situation. The ability of tribes to proactively engage in the active policy context of climate change is limited by lack of staff as well as economic and legal resources. Mechanisms to enhance Tribal capacity are therefore essential for the retention of knowledge sovereignty as well as other forms of sovereignty.

Actions Requiring Legal or Legislative Remedies

- Expand Federal Compacting Authority for Tribes to include all entities under the DOI, EPA and USDA. While the creation of new Compacting Authority requires an act of Congress, intermediate steps could include the authorization of transfer of funds from appropriations budget from the USFS to the DOI and directly to a specific Tribe for the purpose of gaining efficiencies in the wild land fire management program (2009 Omnibus Appropriations Act). Though this would not enable permanent compacting of these as recurring funds, and would require indirect costs to follow the transfer, it could



- **Tribes Should Exert Tribal Joint Tenancy Rights.** Within the public and Tribal trust frameworks, tribes can assert their standing as co-tenants and co-trustees of the forests, waterways or atmosphere, just as they do with a shared fishery and assert claims as co-trustees of the atmospheric trust.

Recognize the Scale of Native Sovereignty. Employ definition of Territorial rather than Reservation Sovereignty Expanded recognition of the scale of sovereignty would enable Tribes to secure the necessary resources to pursue traditional management on millions more acres of their traditional lands.

Note that these recommendations emerge from lessons learned by the Karuk Tribe where the US Forest Service is the major player. Tribes with off reservation lands managed by the BLM, NPS, FWS or others are encouraged to expand upon these ideas as needed.

- Tribal territory size rather than current use of Tribal reservation size. This concept builds on definitions of territorial based sovereignty so that it is for the territorial sovereignty rather than



reservation based sovereignty.

- Create and enforce serious repercussions for District level violation of Tribal Consultation agreements by the National USFS office in D.C.
- Develop new, unique, or combined set of Tribally specific funding transfer mechanisms. Present Environmental Stewardship Contracting blends Tribes with private companies or state and local government, posing negative legal implications for Tribal sovereignty. Note this recommendation is congruent with recommendations of the joint Intertribal Timber Council and USFS review of the Tribal Forest Protection Act to —Explore options and opportunities to advance use of Tribal contractors who can promote economic development, use of goods and services and increase Tribal employment (2013, 6).
- Authorize transfer of appropriation budget funds USFS to the DOI and then directly to Tribes for the purpose of wild land fire management as per 2009 Omnibus Act. Note this recommendation is congruent with recommendation of the joint Intertribal Timber Council and USFS review of the Tribal Forest Protection Act to —Explore options and opportunities to advance use of Tribal contractors who can promote economic development, use of goods and services and increase Tribal employment (2013, 6).
- Recognize humans as a critical component of ecosystems. Humans are vital for maintaining balance in fire process and function. Forest Service prioritization rubric should incorporate the guidance for categorizing natural versus anthropogenic emission sources from the 2005 Western Regional Air Partnership Fire Emissions Joint Forum. This document outlines how managed wildfire needs to occur in its interval. If a landscape is in condition class 1, fires should not be suppressed. If fires are in condition class 2 then perhaps prescribed fires or cultural burns should be used to maintain the condition class. Or cultural burns / managed wildfires should be used to bring it to a condition class 1. If lands are in condition class 3, then cultural burns should be readied and



- As per the recommendations of joint Intertribal Timber Council and USFS review of the Tribal Forest Protection Act: Clear USFS agency direction, guidance and support for implementation of the Tribal Forest Protection Act from the National level to the regional and local offices.
- As per the recommendations of joint Intertribal Timber Council and USFS review of the Tribal Forest Protection Act: USFS should assist in effective implementation of TFPA by identifying needed legislation and providing information and comments to the Administration. These should be formulated in consultation with tribes that applied but were denied or have had a difficult time implementing due to forest service barriers.

WHEREAS, traditional Tribal knowledge is a core part of our identity and ways of life, is highly spiritual and carries obligations for its appropriate use . . . the Federal government, in accord with the federal trust responsibility, should recognize the sovereign rights of tribes to control access to and the use of their traditional knowledge and the right to free, prior and informed consent to give or deny access to it .

– NCAI #REN-13-035 Request for Federal Government to Develop Guidance on Recognizing Tribal Sovereign Jurisdiction over Traditional Knowledge, 2013

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- Ensure that grants, partnerships and other federal-Tribal initiatives do not require mandatory disclosure of Tribal traditional knowledge.
- Agencies and other entities seeking to collaborate with Tribes should follow the 2014 Guidelines for Considering Traditional Knowledge in Climate Change Initiatives.

- Implement Sacred Sites Policy: determine potential for local application of recent interdepartmental MOU. The key to this is the language regarding taking sacred sites (cultural management areas) and funding section 110 activities at Tribal THPO departments to assess the sacred sites as TCP's then look to the identifiable family groupings associated with these sacred sites and ceremonies to tie the management of the land to principles maintained in our ceremonial processes. See the Karuk Draft Eco-Cultural Resources Management Plan. Among the primary goals of the USFS Sacred Sites Policy and the recently adopted Interdepartmental MOU is the development of effective plans and strategies for the long-term protection and management of sacred sites located on federal lands, thereby reducing conflicts with Tribes and Native American religious practitioners. Therefore, critical to achieving this goal is an implicit understanding and acknowledgement that sacred sites, wherever located, are sacred sites period. The Native American religious practitioners who access and utilize these sacred sites know what is important in terms of protecting that on-going use. Tribes and the individual practitioners are the experts, and are the only ones who can determine what constitutes effective protection measures and strategies. USFS should initiate dialog with Tribes, THPOs, and religious practitioners to evaluate and determine potential for local application of the recently adopted interdepartmental MOU. Collaborate with Tribes to explore pro-active measures to protect and manage sacred sites. Prioritize funding for Section 110 activities that engage Tribes and THPOs to assess and evaluate sacred sites



as Traditional Cultural Properties (TCPs). Collaborate with Tribes in the joint development of agreements and management plans to ensure the long-term protection, access, and culturally appropriate management of sacred sites.

- As per the recommendations of joint Intertribal Timber Council and US Forest Service review of the Tribal Forest Protection Act: Expand Forest Service understanding of the Tribal Forest Protection Act authority, as well as the process of proposal development, review, and implementation. TFPA may be an effective authority if the Agency concerned truly honors self- governance and self-determination. Agency interpretation in the interest of complete and perpetual control goes against these principles and will ultimately erode government to government relationships. Create a joint Tribal ITC-USFS working group to assist the agency in developing educational materials to enhance the understanding of the TFPA, and to help guide both the US Forest Service and their Tribal partners through the process of proposal development, project review, and implementation. The USFS should solicit participation in the joint working group from interested Tribes within each region. The U S Forest Service should foster and encourage greater collaboration with Tribes in the development and implementation of TFPA projects to ensure outcomes that fulfill the greatest mutual benefits to both parties.
 - As per the recommendations of joint Intertribal Timber Council and US Forest Service review of the Tribal Forest Protection Act: Expand Forest Service understanding of government-to- government relationships and agency trust responsibilities to Tribes. The Tribal relations program should be constructed as a means of building Tribal specific relationships with the sole intent of extending Forest Service programs and resources to tribes in a lasting and meaningful way. All too often this program merely serves as a means to check a consultation box or otherwise protect the agency interest. This approach will never be effective. Establish a joint Tribal-ITC-NCAI- USFS Task Force to develop



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national strategy aimed at expanding and enhancing USFS government-to-government relationships with and trust responsibilities to Tribes. This effort should be agency-wide and include district, forest, regional, and headquarter staff.

- As per the recommendations of joint Intertribal Timber Council and US Forest Service review of the Tribal Forest Protection Act: —The ITC and Tribes should explore ways to amend TFPA or other authorities to expedite consideration, approval, and implementation of TFPA projects by addressing environmental compliance categorical exclusions, alternative dispute resolution processes, and allowing for a greater range of management alternatives in specially designated land classification areas.¶ Amendment of the TFPA authority may benefit greatly from taking an integrated approach to connecting the dots between interrelated authorities, while outlining a process of piloting programmatic efficiencies/effectiveness, and enabling long term investments in success

Research Priorities

Tribal knowledge sovereignty and management are limited by a lack of existing knowledge in matters of importance to Tribes. This is true in part because research questions and priorities by non-Native agencies and Western scientists have perpetuated non-Native understandings of the world. We recommend that agencies including the BIA, NPLCC, USDA, and National Science Foundation fund research in the following areas. Research projects and questions should be initiated, designed and carried out by Tribes wherever possible.

- NPLCC is to fund peer reviewed socio-economic



research on some of these subjects. That could end up bringing funding back to us to start doing some of that. Local people need to do the work, Tribal people in particular. That is an institutional barrier (the lack of published material showing real socio-economic relationships).

- Expanded study of the complex impacts of multi-instructional agency responses to climate change and —the laws of other sovereigns on Tribal sovereignty, especially for Tribes seeking to manage off-reservation lands. In the face of rapidly changing policy terrain tribes without sufficient capacity face erosion of sovereignty.
- Identity the most effective combination of existing authorities for contracting and compacting to conduct a wide range of management activities from management to planning, to re-assessment as per recommendations in Phase II of the Wild land Cohesive Management Strategy.
- Research on relationships between Tribal forest management activities such as prescribed fire on carbon emissions.

Regional and Local Strategies to Enhance Tribal Knowledge Sovereignty

—Emphasis on the utilization of traditional knowledge should focus on support for its application by tribes to solve environmental and climate problems without the need for sharing it; and in those cases where traditional knowledge may be shared by the tribes, measures need to be developed to ensure that it is used appropriately, that tribes are protected in policy and law against its misuse and that the tribes are able to determine and receive benefits from its use. . . .

National Congress of American Indians Resolution #REN-13-035 Request for Federal Government to Develop Guidance on



Recognizing Tribal Sovereign Jurisdiction over Traditional Knowledge

In parallel to the National recommendations, we recommend three categories of action at the Statewide, regional and local levels to enhance Tribal knowledge sovereignty, 1) mechanisms to increase Tribal management of off-reservation lands, 2) mechanisms to enhance intergovernmental cooperation and 3) priorities for additional research.

Mechanisms to Increase Tribal Management of Off-Reservation Lands

Agency actions that provide the opportunity to expand Tribal traditional management are an efficient way to achieve shared goals, as well as fundamentally supporting the sovereignty of traditional knowledge.

- Expand interpretation of USFS Stewardship Agreements. These have been interpreted as contracts in the West, but in other parts of the US are interpreted more broadly. The local interpretation of stewardship management can and should be broadened.
- Development of long term fire management strategy. Implement existing national level USFS directive to work with local communities to plan for catastrophic fires, especially in the face of climate change. At present, when fires occur offices are understaffed and perpetually in —emergency mode.‖
- Honor Tribal Consultation Agreements. There are countless instances of the USFS and other agencies failing to follow through on agreements made during Government to Government Consultation.
- Evaluate how emerging policies and procedures related to climate change may affect Tribal sovereignty.
- Promote Use of the Tribal Forest Protection Act As outlined in the Intertribal Timber Council report; the



USFS can expand use of TFPA through performance incentives and accountability measures, budget direction, monitoring, reviews, and development of direction and guidance.

- Establish and maintain sustained personal relationships between individuals (NCAI, Walk Softly)
- As recommended by the Intertribal Timber Council report —Improve agency understanding of Tribal Forest Protection Act, government-to-government relationships and trust responsibilities by conducting joint training (i.e., general Tribal relations training currently in development by the USFS and adaptation of modules produced by the Intertribal Timber Council) and providing post- training technical support (2013).



Mechanisms to Enhance Intergovernmental Project Collaboration

—Expand collaborative land management, community and fire response opportunities across all jurisdictions, and invest in programmatic actions and activities that can be facilitated by Tribes and partners under the Indian Self-Determination and Education Act (as amended), the Tribal Forest Protection Act, and other existing authorities in coordination with the UN Declaration on the

Rights of Indigenous Peoples

- As recommended by the Intertribal Timber Council report Strengthen the partnership between the FS and Tribes through formal agreements to institutionalize working relationships, forums, exchanges, collaborative project planning, engagement in national forest plan revisions, coordinated federal hazard fuel funding, and collaborative efforts to maintain viable infrastructure for utilization of forest products
- As recommended by the Intertribal Timber Council report —Explore opportunities to develop intergovernmental agreements between FS and BIA to enable use of authorities such as self- determination contracts or self-governance compacts (2013,6)
- As recommended by the Intertribal Timber Council report local agencies should —Undertake a Tribal outreach effort to inform Tribes about the TFPA and encourage its use, including notice of training opportunities and distribution of technical assistance materials, such as templates for preparation of TFPA proposals along with descriptions of FS administrative guidance and proposal review processes
- Require Agency Trainings on working with Tribes, Cross-Cultural Communication, the Colonial legacy of the USFS, Tribal Management Priorities and the Public and Tribal Trust Responsibilities of Federal agencies.



Research Priorities

While research priorities are often set at the national level, statewide, regional and local agencies also participate in the conception as well as implementation of research projects. Local entities must design, conduct and carry out research priorities as mentioned in the National recommendations. Local actors must also seek out and use existing peer-reviewed research on the relationships between humans and nature in the forest landscape when preparing their NEPA analyses.

2. Global legal FORA for increasing protection of Indian Traditional Knowledge

Indian TK is now available to the United States Patent and Trademark Office (USPTO) and European Patent Office (EPO), who can access the database of TK, courtesy the Indian Government's permission. India's Council of Scientific and Industrial Research (CSIR), and the Department of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy developed the TK Digital Library (TKDL), a 30-million page searchable database of TK translated from several languages such as Hindi, Sanskrit, Arabic, Persian, Urdu and Tamil into English, Japanese, French, German and Spanish.

There are several other international legal platforms and mechanisms that currently address IP protection relating to TK, including the following:

The UN Draft Declaration on Rights of Indigenous Peoples (UNDRIP): Article 29 of this UN Draft Declaration specifically states that people from LICs are authorized to the recognition of the complete ownership, control and protection of their cultural and IP. They have the special rights to control, develop and protect their sciences, technologies and cultural expressions, including human and other genetic resources, seeds, medicines, wisdom of the characteristics of flora and



fauna, oral traditions, literature, designs and, visual and performing arts.

Global Guidelines: Another positive initiative is the inclusion of a set of draft corporate guidelines for businesses that want to use native plants and TK from LICs to make commercial drugs.

The CBD and the 2010 Nagoya Protocol establish the dominant international system for the recognition and protection of TK. Under Article 8(j) of the CBD, parties are required to respect and maintain knowledge held by LICs, and promote broader application of TK based on fair and equitable benefit- sharing. TK is further

recognized in Article 16 as a ‘key technology’ for effective practices of conservation and sustainable use of biodiversity, with procedural requirements established in Article 15(4–5) for access to genetic resources, including those based on prior informed consent and mutually agreed terms. The Nagoya Protocol, which became effective from 2014, broadens the CBD provisions establishing a concrete system determining access and benefit-sharing. Other relevant developments relating to TK that evolved simultaneously to progress in the CBD leading up to the Protocol include the establishment of:

- The International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) passed by the Food and Agriculture Organization Conference in 2001, effective from June 29, 2004. This treaty provides for protections relating to farmers’ rights’ including TK and traditional breeding practices.
- The Inter-Governmental Committee (IGC) on IP and Genetic Resources, TK and Folklore, established under the World Intellectual Property Organization (WIPO) in 2000, which provides a forum for negotiations on issues related to development of a binding international



mechanism on TK.

NEED FOR A 'SUI GENERIS' LEGISLATION IN INDIA

The protection of TK raises several policy issues, prominently the objectives and methods of such protection, and its impact and ramifications for intended beneficiaries. Such issues are extremely complex, since there are broad differences about the definition of the subject matter, the justification for protection, and the means for achieving its purposes. The issues pertinent to TK should be addressed in a comprehensive manner, including ethical, environmental and socio-economic concerns. Moreover, there are still several unresolved technical issues such as the problem of collective ownership and the modes of enforcement of rights.

The conviction that TK has helped the industry generate gargantuan profits has proved to be relentless. Of course, much of the international law governing access to genetic resources and benefit-sharing has been woven around this idea. TK should be protected on both human rights and utilitarian grounds, but the political strategy adopted by India for the past two decades needs to be seriously reconsidered. In terms of legal benchmark, this strategy has been

dichotomous. The first is the access and benefit-sharing path via the CBD and its Nagoya Protocol. The second is based on IP law and comprises:

- (i) Reforms aimed to reduce misuse of genetic resources and TK, such as by enhancing patent prior art searching, restricting the scope of the subject matter claims in patent law to biological, biochemical and genetic issues, and necessitating patent applicants to disclose the origin of genetic resources and TK that were useful or essential to an invention; and
- (ii) The enactment of *sui generis* TK protection laws, based partly on current forms of IPRs, but with some modern



features.

TK cannot flourish when decisions affecting LICs continue to be made by urban educated elites. We need to give up political space to allow LICs to formulate the rules of involvement. The 2007 UNDRIP affirms territorial rights and self-determination, and these must be essential elements of strategies, activities, laws and regulations.

The development of any system for the protection of TK should be established on a logical definition of the objectives sought, and on the propriety of the mechanism selected to accomplish them. IPRs may be one of the devices to be used, but their limits and ramifications should be clearly gauged. A balance should be struck between the protection and promotion of the use of such knowledge. The extent to which the myriad proposals made for the protection of TK convey the aims and cultural values of the LICs they intend to serve should not be ambiguous. There is a risk of transferring concepts and models unsuited to their realities to such communities, or which may prove ineffective in solving the issues they are supposed to address. The protection of TK should not outweigh the fact that its preservation and use requires ensuring the survival and improvement of living conditions in the ambiance and cultural setting of such LICs.

THE WAY AHEAD

The following actions could be taken in future in this field:

- A comprehensive national level development strategy boosting the protection of TK, including the settlement of prime issues such as land rights and the need to respect and maintain the lifestyles of LICs.
- Recognizing the varying needs for the protection and promotion of TK in several areas such as TM and plant genetic resources.
- Administering farmers' rights at the national level.
- Progressing towards the enactment of a misappropriation regime in the short-run.



- Expediting the work in WIPO, UNCTAD, WTO and other fora to clarify the possible role, scope, and content of protection mechanisms for TK.
- Guarantying a wide and effective participation of representatives from LICs in the definition and implementation of any protection system for TK.