Anchor Forests

This section addresses ITC question 3: Consideration of changes in forest management, harvesting, and transportation infrastructure in the vicinity of reservations and the potential for Indian forests to become "anchors" of forest infrastructure.

"The Nation behaves well if it treats the natural resources as assets which it must turn over to the next generation increased, and not impaired, in value.[14]"

For more than one hundred years, North American foresters and resource policy makers have sought to achieve sustainability (Floyd 2002). Initially envisioned as a sustained yield of timber flow, we now take a broader view. Although there have been many definitions (Fedkiw 2007, Helms 1998), for the last several decades sustainability has been characterized by interlocking circles reflecting a balanced intersection of three realms of consideration: the ecological, the social, and the economic (Bare 2002). The simplicity of the image, however, belies the challenge of its implementation.

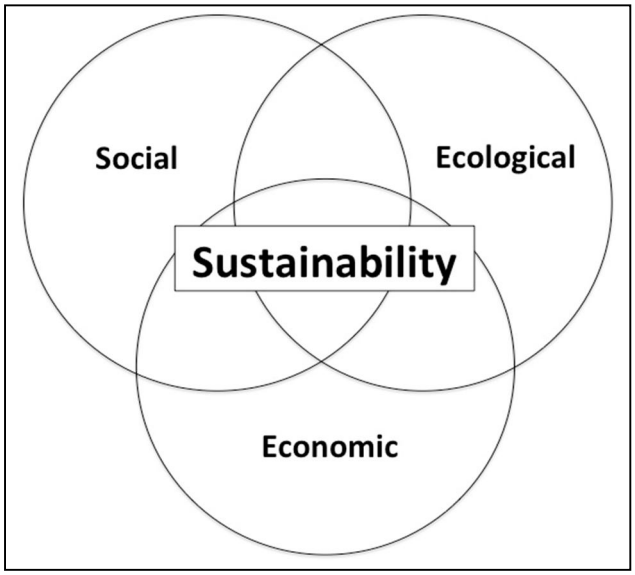

Figure AF.1. The overlapping circles of sustainability highlight the intersection of economic, environmental, and social factors.

Public and private forest managers have long struggled with attempts to integrate stewardship of ecological processes with maximizing returns on investment. A recently completed National Report on Sustainable Forests identified a host of threats to America's forests, ranging from fragmentation and development to forest fires, insect-induced mortality, and invasive species (USDA 2011). Declining markets and losses of processing infrastructure undermine sustainable forest management further (Woodall et al. 2012). Increasing trends in private forestland conversions to non-forest uses are compromising ecosystem functions (Stein et a. 2005, Smail and Lewis 2009). Climate change, with forecasted potential to alter distribution of forest cover, species, and disturbance patterns across entire landscapes, may present the greatest challenge of all (Vose et al. 2012).

Budget trends bode ill as well. For instance, with forest health in decline, wildfires grow larger each year in size, intensity, and cost. As suppression costs escalate, funds are redirected away from conservation strategies such as hazardous fuels treatments (USDOI 2012). As investments in hazard reductions dwindle, the threats and costs of wildfires increase (Ingalsbee 2010). Agency personnel now refer to this trend as "the suppression monster." The Government

[14] Roosevelt, T.R. 1910.

Accountability Office showed that appropriations for federal agencies to prepare for and respond to wildfires rose from an average of $1.1 billion per year in fiscal years 1996 through 2000 to an average of more than $2.9 billion per year from fiscal years 2001 through 2005 (GAO 2007). By FY2008, wildfire funding, including emergency supplements, had reached $4.5 billion, more than in any previous year (Gorte 2011). Upwardly spiraling suppression costs of uncharacteristically destructive wildfires -- so-called "mega-fires" -- combine with losses of resources, habitats, and water quality to push sustainability further and further from reach (Williams 2011). Whether measured by the escalating costs of wildfire suppression (Western Forestry Leadership Coalition 2009) or the precipitous loss of forest products manufacturing facilities (Smith and Guldin 2012), the evidence that we are on an unsustainable path is abundant and compelling.

"The threats our forests face and the inadequacy of our current response to these threats have caused concern as to whether the nation's forests are sustainable.[15]*"*

Moreover, contemporary forest issues are now broadly acknowledged as too large to be successfully addressed at a local level or single ownership (NASF 2009). Federally supported collaborations, such as LCC's, the Wildland Fire Leadership Conference, and the Collaborative Forest Landscape Restoration Program (CFLRP), are seeking multi-ownership conservation strategies at landscape scales. More and more policy makers and land managers are recognizing the growing interdependence between forest industry sectors, public agencies, and forest-managing Indian tribes.

"The threats facing our forests don't recognize property boundaries…we must operate at a landscape-scale by taking an 'all-lands approach.[16]*"*

During the course of this IFMAT investigation, we have heard clearly and often from tribal leaders across the nation that, given current economic and environmental declines, the future of tribal forests may be in question. Depressed markets for forest products have led to revenue shortfalls, job losses, and diminished ability to care for tribal forests. Forest health declines, often most acute on neighboring federal lands, threaten resources vital to tribal lifeways, such as water, fish, wildlife, cultural foods, materials, and medicines. A sense of emergency is growing within many forest-dependent Indian communities, especially in the West.

Tribes are increasingly acknowledged as the senior caretakers of American landscapes. Indian people share a common responsibility to manage the environment on behalf of present and future generations. Years back, the fundamental tribal objective was protection of Indian people and resources from the intrusive pressures of the outside world. However, faced with the growing threats of declining forest systems and limited economic and employment opportunities, concerned tribal leaders are now turning their attention and stewardship abilities to environmental challenges beyond reservation borders. The future of the forests on and off the reservation may depend upon the success of their effort. There is a growing agreement

[15] Western Governors Association.
[16] Agriculture Secretary Vilsak. 2009

between tribal and BIA resource managers that no other public or private entity is up to the task (IRDS 2012, ONR 2010).

> *"Tribal and indigenous peoples'…lifestyles can offer modern societies many lessons in the management of resources in complex forest, mountain, and dryland ecosystems.*[17]*"*

The ITC is a 36-year-old association of 70 forest-owning Indian tribes and Alaska Native organizations. ITC is dedicated to improving the management of natural resources of importance to Native American communities. Leaders of ITC have brought forth the concept of Anchor Forests as a means to help focus collaborative efforts to sustain forests.

Anchor Forests have a simple and sensible premise: sustainability. In order to sustain desirable cultural, ecological, and economic forest objectives, sufficient levels of timber harvest must be assured such that stewardship programs, industrial infrastructure, and forest dependent communities remain viable. Harvests must reliably come from multiple owners: large and small, public and private. In areas with significant Indian forests, tribes can become "anchors" to multi-owner stewardship programs.

The Anchor Forest concept is not new. National concern for the economic stability of forest-dependent communities following decades of "cut and run" harvesting was formalized when Congress passed the Sustained Yield Forest Management Act in 1944. The act empowered the Secretary of Agriculture to establish cooperative "sustained yield units" comprised of private and federal forestlands. Six sustained yield units were established to support the raw material needs of local manufacturing (Clary 1987). During the 1950s, the Forest Service also established two long-term supply agreements in Alaska with pulp manufacturers (Morse 1997). Although several of these arrangements lasted for decades, only one federal unit is still active today in Lakeview, Oregon. These early prototypes for cooperative forestry eventually failed because of unstable federal resource policies and a lack of adequate engagement with diverse stakeholders (Clary 1987).

Anchor Forests are intended to provide a foundation to foster the development of common visions through collaboration and cooperation across ownership boundaries and among disparate interests. For regional planning and development, Anchor Forests support the capacity to mount and focus financial resources for infrastructure investments by identifying regional needs and opportunities, and informing forest land owners of prospects for future timber markets.

Anchor Forests are envisioned as large, contiguous areas of land guided by collaborative agreements across ownerships based upon four major objectives:

1. A reasonable expectation for sustainable wood commodity production;
2. Timber harvest volumes sufficient to support economically viable manufacturing, processing, and workforce infrastructure within accessible/affordable delivery distances;

[17] World Commission on Environment and Development. *1987.*

3. Long-term management plans, supported by inventory and monitoring systems, professional staff, up-to-date technical capabilities; and integrated research, i.e., capable of workable adaptive management strategies;
4. The institutional and operational commitment and capacity needed for implementation.

The first two objectives center on the relationship between commercial activities and the ability to care for forests. Anchor Forests must be capable of sustaining production levels of forest products at a scale necessary to maintain at least a minimal level of competition (~100 MMBF/yr) within viable transportation distances (~60 mile radius) from the woods to processing facilities. Income from the utilization of forests is essential to help underwrite the costs of stand improvements to sustain vital ecological functions and economic systems. Minimum levels of harvesting, manufacturing, processing, transportation and work force infrastructure must be identified, maintained and improved to address forest health problems and support rural forest-dependent communities. Currently, harvesting and processing infrastructure is in a critical state of decline. Once these human and physical resources disappear, they will be very difficult to replace. Without access to markets for forest products, without the ability to prepare and implement management prescriptions, without loggers and mills and the means to transport wood to markets, without the income generated from harvest to defray costs of forest health treatments at the scale required, forests are facing the prospect of increasing losses from insects, disease, wildfire, conversion and climate change. They, in essence, move from being community assets to community liabilities.

> *"In the long term, a sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks, while producing an annual sustained yield of timber, fiber, or energy from the forest, will generate the largest sustained mitigation benefit.*[18]*"*

The third and fourth Anchor Forest objectives emphasize the importance of having the institutional capability, the staff, equipment, facilities, and organizational components, necessary to support coordinated management across the landscape. Information and staff are needed to undertake cross-boundary analysis and management planning for investment and to restore, maintain, and enhance road systems, habitats, forest health, ecosystem functions and services. Landscape-scale analyses are required to plan for and reduce risks of loss due to wildfire, insects, and disease, maintain ecosystem functions, and increase resiliency to uncertain stresses from climate change to acceptable levels (Hemstrom et al. 2012).

A trusted foundation for decision-making and facilitated active involvement of agencies, scientists, and practical advice from the field is needed to bring the collective knowledge, expertise, and information to bear on the issues under deliberation. Multi-disciplinary, multi-party science support will be needed to support informed stakeholder deliberation. To the extent possible, scientific uncertainties need to be diminished, or at least identified and agreed to their extent, so discussions can effectively focus on matters of policy. Participants need to

[18] Intergovernmental Panel on Climate Change. 2007

have confidence in the collation, analysis, and synthesis of information, the identification and evaluation of options and trade-offs, and the currency and relevancy of developments in information, technology and research. Integration of traditional knowledge and understandings with contemporary science and technical capacity should be encouraged such that managers and scientists might learn from tribal elders and holistic problem-solving might proceed.

Tribes are uniquely positioned to convene stakeholders in support of multi-ownership forestry collaborations. Tribes are political sovereigns with reserved rights on ceded lands that have potential for unparalleled influence in the co-management of federal lands. Tribal resource programs are backed by unique legal and political relationships with the United States established through treaties, statutes, executive orders, and judicial decisions. All federal actions that impact Native Americans and Alaska Natives must proceed based upon consultation with tribal leaders. The federal Indian trust responsibility is a legally enforceable fiduciary obligation on the part of the United States to protect and enhance tribal sovereignty, treaty rights, lands, assets, and resources.

Federal trust obligations to Indian tribes parallel broader US environmental responsibilities embodied in common law by the public trust doctrine. At the core of the doctrine is the principle that every sovereign government holds vital natural resources in "trust" for the public (Sax 1970). As trustee to both Indians and all citizens, the government has a dual responsibility to protect natural resources and the environment for present and future generations of all Americans. Fulfillment of trust responsibility to Indian tribes is an unavoidable moral and legal obligation that can positively be considered as an investment in Anchor Forests.

Indian tribes are not politically aligned with stakeholder extremes from either industry or environmental groups. They answer to the forest and the people not the federal bureaucracy. In some regions, especially in the West, tribes have the last remaining processing infrastructure and natural resource management staff. Tribes are reacquiring forestlands, which once acquired, will not be sold.

> *"Indian tribes are here to stay. We will not sell our land or shear down our forests during wavering economic times and relocate our operations elsewhere. Our ancestors - our culture - is committed to the land upon which we live.*[19]*"*

Indian tribes are keepers of TEK. Handed down through interpersonal teachings, stories, and practices, TEK reflects cumulative understandings of how the people coexist in natural environments. TEK can be important in development of collaborative arrangements because it brings together different forms of knowledge and practices while creating opportunities for mutual learning and relationship building (Donoghue et al. 2010).

Resource management approaches adopted by modern society have long been dominated by western science. Yet, a cascade of environmental misunderstandings and unintended consequences now demonstrate that science alone may not be adequately equipped to address

[19] Former ITC President J. Pinkham. 1995. Testimony at the NIFRMA Oversight Hearing

complex environmental challenges such as climate change and forest health declines. While TEK and science represent historically different ways of thinking, these two realms of knowledge share a common understanding that the natural world is amenable to explanation. Both develop sophisticated knowledge used to inform cause and affect relationships from which strategies might emerge (Mason et al. 2012). Anchor Forests represent unprecedented opportunities for bringing TK and science together to broaden understanding of a complex and changing world.

The BIA, located within the DOI, is the primary federal agency charged with carrying out the United States' trust responsibility to American Indian and Alaska Native people, maintaining the government-to-government relationship with the federally recognized Indian tribes, and promoting and supporting tribal self-determination (BIA 2013). Indian reservations represent ten percent of the land base within DOI jurisdiction and the largest permanent human residential population on DOI lands. DOI has federal trust obligation to protect, preserve, and enhance Indian land for its beneficiary inhabitants.

Indian tribes and the USFS share nearly 3,000 miles of contiguous borders. Sixty tribes have treaty rights that extend onto federal forests where culturally important resources and sacred sites require protection and stewardship. The agency and tribes are more than just neighbors; they are partners with common goals for social, cultural, ecological, and economic sustainability (USDA 2012). In the face of deteriorating conditions in federal forests that threaten Indian resources, tribes have contracted with the Forest Service to conduct hazardous fuels reduction treatments on federal lands through stewardship contracting and the TFPA. However, the scope of these activities has been tentative and inadequate. As mentioned earlier in this report, TFPA partnerships for co-management of federal lands should be aggressively expanded, as 80 million acres of national forest lands are in need of treatment and pose a threat to tribal resources. "Goods for Services" contracts with tribal enterprises can help offset the costs of federal forest health treatments while providing raw material to tribal enterprises. In many areas of the nation, without an increase in fuels treatments and timber harvests on federal lands, sustainability will not be achievable. Given the potential for accomplishment, we are left to ask what might be slowing progress?

Anchor Forests will require a social and political climate that enables on-the-ground treatments at the scale required to address forest health and support investment, i.e., large landscapes. Ideological differences in values and perspectives have led to an atmosphere of confrontation and controversy that has stymied forest management, particularly on federal lands. Resolution has been elusive. The need for collaboration has been acknowledged but has manifested as a diverse and confusing array of programs intended to help but unable to move beyond the project pilot scale. Effective utilization of funds and authorities could be improved through coordinated focus within an Anchor Forest "all lands" context. Federal programs for collaborative management should seek out tribal participation as leaders and facilitators. This will be especially important to the evolution of climate change strategies for adaptation and mitigation.

In the beginning of this report we looked across the specific charges of our NIFRMA assignment to form central questions that have helped to guide our inquiry. We find that tensions surrounding chronic underfunding, challenged staff retention and uncertain federal commitment to trust responsibility, as noted in prior IFMAT reports, remain unresolved. However, the intractability of these issues does not mean that progress has not been observed. We offer *Fire, Investment, and Transformation (FIT)* as an emergent theme reflective of the hopeful developments that we see occurring in Indian Country. As noted two decades ago by IFMAT I, Indian forests are places of experimentation where many examples of effective, innovative, and adaptive management can be found. We find that the Anchor Forest proposal is a particularly encouraging development for the rescue of forest landscapes and communities. Anchor Forests are a welcome manifestation of "transformation."

Although an objective of sustainability has long been established in rhetoric and regulation, a fresh look at the human dimension of sustainability is instructive. We draw upon the familiar three-circle schematic to suggest that sustainability be considered as a social construct dependent upon three attributes, capability, commitment, and vision—the convergence of which fosters stewardship. The success of collaborative landscape management and Anchor Forests will be determined by our collective ability to summon stewardship forward.

Capability means sufficient, dedicated, and competent interdisciplinary staff with access to technical experts as well as the education and research communities. Harvest and processing infrastructure to support sales of forest products and creation of employment must be available. Adequate financial resources for investments in support of short- and long-term economic, ecological, and cultural objectives will also be required from both public and private sources.

Commitment means enduring ties by local people to the land and the community. Collaboration, as envisioned for Anchor Forests, is a process of social learning and durable relationship building reliant upon establishment and maintenance of trust. Stewardship will be poorly practiced if approached as a transient activity or with a priority objective of short-term financial gain. Commitment extends beyond the people to the status of the land and the resources. Significant forestlands must be dedicated, harvested, and cared for; not sold, converted, or abandoned.

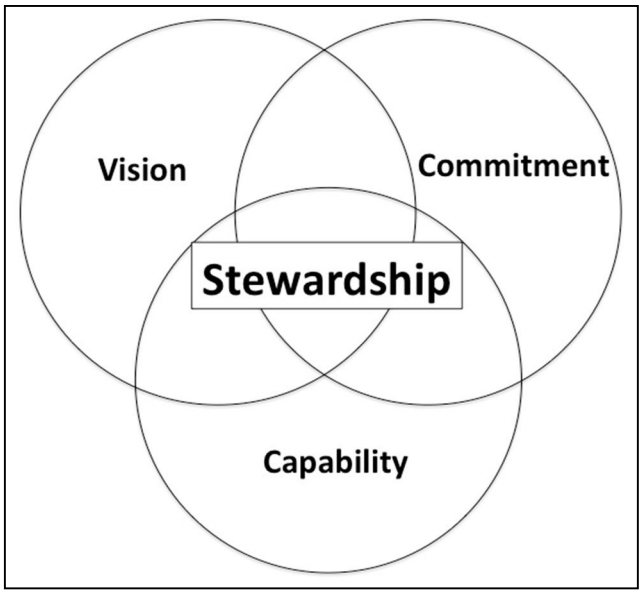

Figure AF-2. The overlapping circles of vision, commitment, and capability characterize stewardship, which is sustainability in practice.

Vision is the ability to "see" the past in the context of potential and adaptive futures. Vision evolves when critical thinking and observations coalesce into guiding principles and understandings of an interconnected world. Tribal keepers of TEK are uniquely qualified to contribute vision. Tribes live on the front lines of climate change, are uniquely dependent upon jeopardized resources, and have the vision to recognize change well in advance of climate scientists, yet tribes have only nominally been invited to participate in federal programs that address climate impacts to forested ecosystems. When thinking of stewardship, note that while capability and commitment might be schooled, hired, contracted, or purchased; vision is only available to those with a long history on the land. Vision has been a critical missing element in past landscape management experiments.

Vision, commitment, and capability must all be present such that informed planning can proceed to implementation, the unanticipated can be accommodated, and unintended consequences, such as the contemporary challenges detailed above, might be avoided. We have observed dedicated forestry professionals and technicians, Indian and non-Indian, working together in tribal and BIA operations, employed under the watchful eye of elders, to care for Indian resources and fulfill the wishes of the tribe. Tribal forestry programs strive to do the best they can with the resources available. Tribal people live with the consequences of their decisions. Stalled action is not any more of an alternative than rapid exploitation. Some reservations can be viewed as regional models for sustainable forestry (IFMAT I 1993, IFMAT II 2003).

Donoghue and others (2010) report an increase in collaborative resource management projects involving Indian tribes and agencies. On federal and tribal lands, awareness of the importance of cultural values and traditional management is on the rise supported by increased acknowledgement of treaty rights, affirmed commitment to consultation, and evolving understanding of tribal self-determination. For example, projects such as the restoration of meadows in the northern California Maidu Stewardship Project, the Nez Perce Gray Wolf reintroduction in Idaho, wild rice restoration in Minnesota by the Red Lake Band of Chippewa, the Navajo Nation Hogan Project in Arizona, and others have brought together tribes with federal, state, and private partners for shared objectives of tempering the contemporary by counterbalancing the traditional (Donoghue et al. 2010).

> *"We must work towards a shared vision -- a vision that conserves our forests and the vital resources important to our survival while wisely respecting the need for a forest economy that creates jobs and vibrant rural communities.*[20]*"*

Anchor Forests represent a new and welcome expansion of collaboration between forest tribes and others. In central Washington State, the first Anchor Forest pilot project, the Tapash Sustainable Forest Collaborative, has been convened. The partners include the USDA Forest Service, The Nature Conservancy, the Washington Department of Natural Resources, the Washington Department of Fish and Wildlife, and the Yakama Indian Nation. The primary focus is to create interactive, consensus-based solutions for restoring forest health and avoiding

[20] Agriculture Secretary Vilsak. 2009.

forestlands conversion within the east Cascades. The Tapash represents a hopeful beginning; however, more projects need be undertaken as stakes are high and time is short in the forest areas where Indian reservations abut untended national forests.

"Start with the rising sun, and work toward the setting sun, take only the mature trees, the sick trees, and the trees that have fallen. When you reach the end of the reservation, turn and cut from the setting sun to the rising sun and the trees will last forever.[21]"

Findings

AF1. Multi-ownership "all lands, all hands" management of landscapes has been rightly championed by USDA Secretary Vilsack as necessary to address forest health, conversion, fragmentation, climate change, and other threats to US forests.

AF2. Federal trust obligations to Indian tribes parallel the broader US environmental responsibilities embodied in common law by the public trust doctrine. As trustee to both Indians and all citizens, the government must protect natural resources and the environment for present and future generations of all Americans.

AF3. Conversion and fragmentation of forestlands threaten the sustainability of American forests. Landscape strategies that fail to address conversion and fragmentation cannot succeed.

AF4. In the face of environmental and economic crises, tribes as sovereign nations with obligated federal protections and a long tradition of stewardship, now feel compelled to pursue stewardship beyond reservation borders.

AF5. Anchor forests bring together stewardship partners, convened by tribes and including federal, state, and private forestland owners, with a shared objective to provide sustainable harvest of timber sufficient to supply local process infrastructure, provide jobs, generate revenues, and support stewardship.

AF6. Anchor forests are based upon understandings that people are part of nature and that people have a responsibility to care for the land.

AF7. Tribes live on the front lines of climate change, are uniquely dependent upon jeopardized resources, and have the vision to recognize change well in advance of climate scientists, yet tribes have only nominally been invited to participate in federal programs that address climate impacts to forested ecosystems.

[21] Menominee Chief Oshkosh, 1854.

AF8. Fulfillment of trust responsibility to Indian tribes is a moral and legal obligation that can also be considered as an investment in Anchor Forests. When thinking of stewardship, note that while capability and commitment might be schooled, hired, contracted, or purchased; vision is only available to those with a long history on the land.

Recommendations

AF1. Anchor Forests, such as currently being piloted in Washington, should be supported. In general, new entrepreneurial approaches to collaborative resource management should be bolstered and more widely applied. Innovative tribal forest resource management techniques and people should be considered as co-managers or managers of appropriate portions of the federal forest estate. Federal lands, taken inappropriately from tribes during the allotment period and within reservation boundaries, should be returned to tribal trust status as a part of Anchor Forest stewardship and consolidation.

AF2. Anchor Forests can evolve when applicable federal agencies bring Indian tribes into collaborative programs, such as Landscape Conservation Cooperatives and the CFLP, as funded partners, facilitators and acknowledged stewardship leaders. Shared funding and involvement should extend to climate change. Equivalent levels of funding to that of sister agencies within DOI should be provided to BIA.

AF3. Non-governmental organizations and federal resource agencies should underwrite costs of tribal purchases of private forestlands through loans, grants and tax incentives such that lands are placed in trust status and perpetually remain in forestry. Shared costs of restoring traditional lands to tribes are cost-effective investments in conservation and bestow deserved rewards for tribal provision of ecosystem services such as clean air and water, wildlife habitats, and viewsheds.

AF4. Stewardship Contracting and TFPA are valuable but underutilized opportunities for tribes to assist fuels removals on federal lands. These contracting authorities should be linked to Anchor Forests, expanded, and extended to support ten-year agreements.

Selectively harvested forest – Warm Springs. Photo by Vincent Corrao.
Tribal lumber production – Warm Springs. Photo courtesy of Warm Springs Forest Products Industries.