NIFRMA Task F - A comprehensive review of the adequacy of Indian forest land management plans, including their compatibility with applicable tribal integrated resource management plans and their ability to meet tribal needs and priorities.

Pine plantation – Leech Lake. Photo by Larry Mason.

This review of a set of forest management plans for properties as diverse as the tribal forests is necessarily a subjective undertaking. Forest planning is an exercise of discovery and plans must reflect the resources, issues and opportunities unique to each individual forest. This assessment relies heavily on our experience developing and reviewing forest management plans on hundreds of private, federal, state and tribal forests. This being the third such review, we believe it important to build on the findings of past IFMATs and to identify what can now be seen as trends. We realize that a functional forest plan is more than just the final planning document, and during our site visits we listened to tribal forest managers describe the planning process, the forest plan and their efforts to manage consistently with the forest plan objectives. In general, we found that these discussions indicate that the forest plans were prepared thoughtfully and enjoy the support of the forest managers. In short, it appears NIFRMA's emphasis on planning and subsequent efforts by BIA and tribal foresters has been well placed.

All the forest management plans we reviewed during this assessment were from Category 1 or 2 reservations that have a significant commercial timberland component. There is great diversity among reservations and our recommendations are necessarily broad. There is no such thing as a one-size-fits-all forest plan, and we urge readers to consider these recommendations within this broader context and think about how and whether the recommendations might or might not apply to any particular forest.

In this section we first describe the purpose and benefit of a forest plan. We then summarize findings from IFMAT I and II. Then we summarize our review of the planning documents. We conclude with our findings and recommendations.

Aerial and ground views of strip thinning to aid birch release – Lac du Flambeau.
Photos provided by Scott MacDougall and Larry Mason.

Purpose and benefit of a forest management plan

Forest management plans (FMPs) are required for all Indian forest lands in federal trust status. NIFRMA mandates that all management activities on Indian trust forest lands be consistent with an approved FMP. NIFRMA also defines an IRMP as a document, approved by an Indian tribe and the Secretary, which provides coordination for the comprehensive management of such tribe's natural resources.

Ideally, a FMP is a living document that provides the forest manager with a number of benefits over a long period of time. Here we list a few.

- **Authorize management.** A FMP specifies the objectives of forest management, identifies the tactics used to achieve those objectives, and establishes practices, schedules, standards and guidelines and contingencies for implementing decisions made in the plan.
- **Establish trust standards.** A FMP for tribal forests reflects tribal objectives and vision for the forest. For trust lands, the management objectives and the proposed management set forth the Trustee's obligation to trust beneficiaries.
- **Resolve issues.** A successful forest planning process identifies a variety of forest management issues and provides the decision makers with the information needed to find an acceptable resolution.
- **Set budget, staffing and revenue expectations**. A FMP should clearly identify the resources necessary to meet planning objectives. The plan and/or the planning analysis can also be used to evaluate both additional investment opportunities as well as the short and

long-term consequences of funding or staffing shortfalls.

- **Consider impacts of proposed changes in management.** Forest managers are often faced with suggestions for changes to current forest practices and strategies. A well-designed forest planning analysis considers and evaluates such changes, offering insight about short and long term consequences of such proposals. Well-designed forest planning tools, furthermore, can be used to evaluate proposals that arise after the initial planning effort has concluded.

Planning progress on forested reservations

Over the past 20 years, FMP development has demonstrated a positive trend. Currently, about 90 percent of Category 1 and 2 reservations have FMPs as compared to 53 percent in 1991. From 1991 to 2011, FMP development on the remaining reservations also increased from 13 percent to 43 percent (Table F.1).

In 2011, an estimated 14.9 million acres of Category 1 and 2 and 645,000 acres of Category 3, 4, and 5 forested reservations were covered by a FMP for a total of 15.5 million acres. The number of acres covered by an FMP has grown substantially since IFMAT I and II. In 1991, about 5.8 million acres were covered by a FMP, which then increased to about 7.3 million acres in 2001 (BIA Green Book, 2013).

IRMPs are not required and have not progressed at a similar pace. BIA data reports that 24 forested reservations (8.2 percent) had an IRMP in 2011. The majority of those (88 percent) were developed for Category 1 and 2 reservations.

Table F.1. Progress of FMP development on forested reservations.

Performance Indicator	**1991**	**2001**	**2011**
Percent of Category 1 & 2 Forested Reservations covered by a FMP	53%	68%	90%
Number of Category 1 & 2 Forested Reservations covered by FMP	44	64	85
Total Category 1 & 2 Forested Reservations	**83**	**94**	**94**
Percent of Category 3, 4, & 5 Forested Reservations covered by a FMP	13%	21%	43%
Number of Category 3, 4, & 5 Forested Reservations covered by FMP	6	19	86
Total Category 3,4, & 5 Forested Reservations	**47**	**92**	**200**

Source: BIA Funding and Planning Analysis, 1991 – 2011

Note: Data includes only reservations held in trust not including Alaskan reservations.

Summary of previous IFMATs

IFMAT I found that FMPs had the potential for focusing and directing forest management, but that the analysis was often inadequate, planning faced funding and personnel limitations and that implementation was difficult. Sustained yield was narrowly defined, forest inventories were useful, but could be improved. IRMP had not yet been implemented. IFMAT I also recognized that there were issues requiring special planning and management, including allotments, Alaska, mixed ownerships and off-reservation lands.

IFMAT I recommendations (*emphasis* added) included:

- Ensure that coordinated resource management plans guide Indian forest management *via clearly defined objectives, standards, operations plans, and monitoring procedures*.
- Direct more staffing and funding towards bringing *cultural resource planning*, initiatives and baseline data to where it can be effective in coordinated resource management.
- *Improve forest planning analysis*.
    - Broaden definition of sustained yield management – focus on ecological processes and forest productivity.
    - Make plan results accessible to the lay reader – graphs, figures, charts, etc.
    - Develop and analyze diverse set of alternatives.
    - Provide detailed timber supply discussion under the plan recommendations.
    - Modernize harvest scheduling techniques and up-to-date sustainability check.
    - Increase operational planning to implement forest plans and coordinated resource plans.
- *Improve the Bureau of Indian Affairs (BIA) CFI system*.
- Address *special planning and management issues*: allotments, Alaska, mixed ownerships, and off-reservation lands.

IFMAT II found that planning was decentralized, resulting in a wide variation between forest plans in terms of approach, content and quality. Progress on IRMPs was progressing slowly. While most FMPs defined a "tribal vision" there was much room for improvement. Progress had been made in describing ecological processes, describing the future forest, and linkages to operational plans, but there was still room for improvement. IFMAT II found that most plans defined sustainability solely in terms of harvest outputs. IFMAT II found that Continuous Forest Inventory (CFI) compared favorably to inventory and planning systems used by other agencies, but there were organizational inefficiencies in the CFI effort and in GIS support. At that time, continuing support of the CFI system was uncertain. It found that because of inadequate planning budgets, most BIA support was aimed at inventory analysis, rather than forest planning. Larger tribes were found to have the resources to support their own forest planning efforts.

IFMAT II recommendations focused on strengthening the planning effort and the systems that support it. Specific recommendations (*emphasis* added) include:

- Broaden and deepen the assessment of the ability of FMPs to sustain tribal forests and their benefits – *make 'achieving the tribal vision on a continuing basis' the definition of sustainability.*
- Maintain IRMP process, *increase funding so that 10 IRMPs could be completed annually.*
- Amend the BIA Manual to *allow for plans to be considered current until amended* in an effort to avoid conflict and costly tribal impacts associated with tribes not have a current FMP

- Convene a task force to *further define sustainability* in operational terms that be translated to management realities.
- Consolidate the *CFI analysis* and integrate it with the GIS support.

Findings

We reviewed in detail FMPs for the 20 forests we visited and discussed the plans on our site visits. For consistency and to allow for comparisons between previous IFMAT assessments, we used planning elements developed by IFMAT I and IFMAT II to review FMPs for the 20 current forests we visited. These planning elements are:

- A set of goals that reflect tribal aspirations for forest management (linked to the tribal vision for the forests).
- A discussion of the natural history of the forest, including historical disturbance processes.
- A discussion of human use of the forest (the history of human use) and its roles in the culture and economy of the tribe.
- Trends of vegetation and current conditions.
- A description of future forest reflecting tribal goals that becomes the long-term objective for the plan (and whether the plans give a visual or other portrayal of this future forest such that laymen can understand it).
- A description of the kinds of actions that the tribe will take to achieve its desired future forest conditions, uses, and values.
- Projections of future stand conditions, growth, and yield.
- A definition of sustainability related to achieving the tribal vision on a continuing basis, including protection of underlying ecological processes and forest productivity, and a demonstration that the plan will contribute to sustainability.
- A portrayal of the benefits that will result from the management plan in the short-term and their economic and social effects, including the economic outputs produced in the near term in a form usable by tribal enterprises.
- An assessment of whether these benefits can be maintained in the long-run (up to 100 years into the future).
- Compatibility of the forest plan with tribal IRMPs.
- Integration of the forest plan with plans for the management of other resources such as fire plans.
- Linkage to operations plans that will guide implementation, including a description of the type and location of activities.
- Standards and guidelines forest-wide and for different zones within the forest to guide implementation.
- A set of measures to gauge achievement of plan goals and a mechanism for monitoring their achievement and revising the plan as necessary (adaptive management plan).

- How does the plan determine and calculate harvest? How sophisticated are the modeling procedures? What type of inventory is used?
- Standards setting forth the funding and staffing requirements to carry out FMP.
- Level of quantitative criteria to evaluate the performance of FMP implementation.

During the course of our review, we identified additional criteria that were useful:

- Is the acreage distinguished between land classifications (trust, non-trust, allotments, etc.)?
- Is the plan approved by the tribal council?
- How long was the planning process and did the process include public participation?
- Were planning alternatives considered and analyzed thoroughly?

Thinned, burned, and regenerated - Colville. Photo by Larry Mason

Our review of FMPs from visited reservations suggests that there is a wide variety between plans in terms of quality of the plans – some plans were much more comprehensive and detailed than others. It also suggests some general areas of strength and weakness across the set of plans we reviewed. Few plans, for example, addressed staffing and funding needs with much specificity. Most plans, on the other hand, had a clear statement about the vision and purpose of forest management.

In our experience, a comprehensive and well-written forest planning document does not necessarily mean that the plan is effective. To be effective, a plan must enjoy the support of tribal leaders, forest managers, and the tribal public. It must have addressed and resolved, to the extent possible, key management issues. It should provide the vision and direction needed for continuity as new managers come to the forest. A well-written plan that sits on the shelf is not a good plan.

Table F.2. Ratings of the degree to which desirable elements of 16 tribal forest management plans were addressed of tribes visited by IFMAT (Four tribes did not provide a separate FMP from which the elements could be rated). Planning elements were chosen to be consistent with NIFRMA and previous IFMAT reports. Rating values reflect professional judgment of IFMAT members, using a scale of 1-5 (5 = completely addressed).

Plan Elements	Tribe															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Forest Management Goals	2	4	4	5	2	4	4	4	4	3	4	4	1	2	3	5
Natural History Discussion	2	5	2	5	0	1	2	3	4	1	3	4	1	4	0	4
Human Use Discussion	1	5	4	4	0	2	2	3	3	1	4	4	1	3	0	4
Trends of vegetation & current conditions	2	5	4	5	0	5	3	5	3	5	4	5	0	3	0	5
Long-term objectives of future forest	1	5	4	5	2	3	2	4	3	3	3	5	1	3	1	5
Specific actions to achieve future forest	2	4	4	5	3	3	3	3	4	4	4	4	2	3	2	4
Projection of future forest stand conditions, growth & yield	2	3	5	3	0	4	2	2	4	4	3	4	0	0	0	2
Definition of sustainability relating to tribal vision	0	3	1	3	2	3	1	1	5	0	2	3	0	0	1	4
Short-term management plan benefits	2	4	2	3	2	2	2	3	4	4	4	4	2	3	1	2
Assessment of long-term feasibility of benefits	3	3	0	2	2	3	0	1	2	0	2	3	1	2	0	1
Forest plan compatibility with IRMP	0	5	0	4	0	0	0	0	0	1	0	2	0	0	0	2
Integration of forest plan with other tribal resource plans	1	4	1	4	2	0	0	2	2	3	3	3	0	0	1	1
Linkage to operations plans - implementation	2	4	3	4	3	1	2	2	2	3	4	4	0	1	3	3
Standards & Guidelines to guide implementation	3	3	4	5	3	3	4	2	5	5	4	5	3	3	3	5
Measures and monitoring plans	0	4	4	5	1	2	1	2	0	5	4	5	1	0	3	3
Inventory, Harvest Modeling Procedures	1	3	5	5	1	4	3	2	3	5	3	5	3	3	1	2
Current Staffing and Funding	5	1	0	0	4	3	0	1	0	2	2	2	0	5	0	3
Staffing needs and funding to implement FMP	5	0	0	0	4	3	0	4	0	4	1	1	0	5	0	4
Quanitative criteria to evaluate performance	1	5	0	5	2	2	1	3	0	0	2	2	3	0	0	4

The commitment to and ongoing use of the FMP was a key element of inquiry in our site visits. Based on our review of the plans and our discussions with forest managers and BOFRP, we offer the following findings:

F1. The Indian Forest Management Handbook[24] is an excellent document that provides clear instruction on the necessary elements of a FMP satisfying the requirements set forth in Chapter 2, Part 53 of the Indian Affairs Manual (Forest Planning).

F2. Most forested acres are now covered by a plan.

F3. There exists great variation between plans in terms of approach, depth, content, and rigor.

F4. Forest plans are still primarily timber management plans, with some standards, guidelines or limitations imposed by other resources. We observed some efforts to integrate other resource management objectives into the timber management program, but much of this was expressed as limitations on timber management, rather than a more deliberate effort to use timber management to create forest conditions favorable to other resources.

F5. Planning technology within the BIA has not kept pace with forest planning developments on other ownerships. The BIA's CFI system, furthermore, does not support a more comprehensive approach to planning. It is not state of the art in terms of providing the comprehensive resource inventory necessary for more detailed and specific forest management plans.

F6. While it is sometimes difficult to discern a strong statement about tribal vision in a forest plan document, our site visits indicate that forest managers had a clear understanding and a deep commitment to a tribal vision.

F7. There is a wide range of approaches and of success in obtaining and incorporating input from the tribal public into the forest planning process.

F8. FMPs generally do not address climate change, forest health, or forest restoration.

F9. Progress on IRMPs is slow. Only 24 forests have IRMPs. A few of the forests we visited have IRMPs and forest managers on those forests cite benefits. Efforts on other forests are stalled and there are questions about the need or viability of IRMPs. Funding and technical support for IRMPs is limited.

F10. Most plans identify five or ten years' worth of upcoming projects. But most do not identify resources (funding, positions, investments) needed to support the effort. In fact, only 25 percent of the FMPs we reviewed fully addressed standards setting forth the funding and staffing requirements to carry out FMP. Some of the FMPs cover the organizational structure of the forest management department and current funding, but lack discussion on future funding needs.

[24] Indian Forest Management Handbook http://www.bia.gov/cs/groups/xraca/documents/text/idc008867.pdf

Pine savannah – Flathead. Photo by Vincent Corrao.

F11. Most of the FMPs provide some level of quantitative criteria to evaluate performance of FMP implementation but only a few provide evaluation criteria that are detailed and comprehensive.

F12. Many tribal foresters find value in the IDT approach prescribed by NEPA regulations, and indicate that they would follow a similar interdisciplinary review process even if not required. On some forests, NEPA appears to be more of a burden and cost than on others.

F13. There is little or no recognition of tribal enterprises in the forest plans. The plans do not address the nature of the wood needed by local processing facilities.

F14. Allotments are under-planned. Allottees have little or no view of when harvest will occur. Allotment harvest appears to be more opportunistic than planned.

F15. Some reservations that IFMAT visited contain commercial woodland with FMPs that addressed woodland management. Most provide limited direction for how the tribe should manage woodlands.

Recommendations

IFMAT continues to believe that strong forest planning will go a long way toward resolving issues and ensuring efficient and effective forest management. A good FMP authorizes management,

resolves resource issues, sets cost and revenue expectations, and describes the long-term impacts of proposed management. A well-crafted FMP transfers knowledge and expectations from one generation of forest managers to the next, helping to promote vision and consistency over time.

In an effort to manage a time consuming and costly planning process, IFMAT II recommended the BIA amend the planning manual to eliminate the fixed ten-year FMP review period and allow FMPs to remain current until amended. The BIA subsequently acted on this recommendation and the BIA Manual now allows a FMP to "remain 'current' unless it is determined that the plan no longer represents tribal goals or forest management policy, or the state or condition of the forest/timber resources."

We continue to support this change as it will reduce the cost of planning. However, we caution that FMP revision and modification should not be avoided simply because the regulations allow for more flexibility. New tools and data are consistently being developed which can ensure that forest planning processes address resource management issues as they evolve through time.

Tribes should consider a regular FMP review process to assess whether or not the document sufficiently addresses of all the resource management issues of the time. Changed conditions, new data, new management techniques, significant differences in funding and new management issues are reasons for considering modification to existing forest management plans. We offer the following recommendations for improving forest management plans as they are revised.

F1. Tribes should consider a desired-future-conditions based approach to forest planning. The current regulations describe the objective of forest planning as establishing sustainable harvest levels, given the nature of the resource and some restrictions designed to protect other resources. This approach is similar to federal and state forest planning approaches designed in the 1970s and 1980s. More recent forest planning efforts focus on agreeing on some kind of desired future condition (DFC) and deciding how best to move the forest toward the DFC. We note that a DFC is not a static state, but takes into account and makes provision for the dynamics of natural agents of change (fire, insects, disease, storms, and climate change). A DFC-based planning approach requires more specific data and more complicated forest planning tools than are currently available to tribes, as discussed below.

F2. Better inventory data are needed to build better planning models. The BIA's current CFI system is a low cost approach to providing the minimal amount of information needed to support basic timber management planning tasks. While a long-running CFI may provide scientists with an exceptional basis for evaluating the long term effects of climate change, management actions, etc., it does not provide land managers with data needed to decide what to do next and where to do it. Most state and private timberland managers have moved toward in-place inventories that provide the stand-level information needed to support management. Tribal foresters have devised a variety of workarounds to get some of the

information that an in-place inventory provides that can be inexpensively linked to management decisions and plan assessment. We did not make a comprehensive evaluation of other resource inventory information but we understand that such information is also limited.

Pine shelterwood – Menominee. Photo by Vincent Corrao.

The current sustained yield calculation, known as the Austrian Formula, the basis for the AAC calculation specified in BIA planning regulations, is an anachronism abandoned by most other timberland managers in the middle of the last century. While it can be used to calculate an AAC, it does not provide a cost efficient approach to meet multiple objectives, nor does it suggest to the planner where to go or how to manage the forest to achieve the AAC. At best it is an approximation heavily influenced by the opinion of the planner about future growth, harvest and mortality, and some kind of average inventory target.

Forest planners for federal, state and private lands have designed a variety of forest planning approaches that make provision for multiple management objectives, and provide forest managers with much more specific management direction.

The BIA should evaluate and adopt a more robust and more modern approach toward forest inventory and forest planning.

F3. BIA should provide more technical support for forest planning. Forest planning is a difficult chore. It requires a working knowledge of all fields of forestry (inventory, biometrics, management, economics, policy, regulation, etc.), wildlife and fishery biology, hydrology, range management, ecological processes, cultural values and is typically performed only periodically. As a result, tribal forestry organizations often do not have a forest planning specialist on staff. Our visits suggest that tribal forest planners would benefit from additional support.

BIA regional offices have a reduced capability to provide the technical support needed by tribal forestry organizations. Additional support is especially important as forest planning moves toward even more complicated planning systems. We recommend that BIA investigate approaches for providing more technical support. A team of planning specialists at the regional or even national level could go a long way toward providing support and assistance.

F4. Forest plans should recognize and account for natural processes. While most of the FMPs we reviewed describe potential insect and disease agents and treatments for infested and infected stands, most do not lay out management strategies designed specifically to treat such stands or avoid similar problems in future stands. For the most part, we did not see major insect and disease problems on our site visits. But some tribal forests have had significant health problems in the past, and some still have substantial problems. A forest plan offers the tribal forester an opportunity to take a proactive approach by identifying management designed to avoid developing insect and disease problems, and quickly treating problems as they arise.

F5. Forest plans should consider and address climate change. None of the forest plans we reviewed addressed climate change. Given that many of the tribal forests are in areas that could experience substantial changes, and that Tribal forests are typically managed on long rotations, climate change could have substantial impacts. Forest plans should address this issue.

A potential starting place for tribal forest managers could be the USFS's 10-point Climate Change Performance Scorecard that addresses organizational capacity, engagement, adaptation, and mitigation.[25]

In addition, the USFS created the guidebook, *Responding to Climate Change in National Forests,* that contains science-based principles, processes, and tools necessary to assist with developing adaptation options for national forest lands (Peterson et al. 2011). Another resource for addressing climate change is the Forest Service web portal called the 'Climate Change Resource Center[26] that contains resources for those seeking information on land management tools related to climate change.

[25] Climate Change Performance Scorecard http://www.fs.fed.us/climatechange/advisor/scorecard.html

[26] Climate Change Resource Center http://www.fs.fed.us/ccrc/

Douglas fir pre-commercial thin – Coquille.
Photo by Vincent Corrao

F6. Forest plans should consider current and future manufacturing infrastructure. Many tribes have some kind of tribal enterprise, and some of those are manufacturing facilities. None of the FMPs we reviewed, however, had any discussion about the correlation between the proposed management and needs of the tribal enterprise or other local manufacturing facilities. In fact, our field visits suggest there are sometimes substantial differences between the wood needed by the tribal enterprise and the harvest proposed for the forest.

We have seen, for example, harvest focused on removing small trees to promote the growth of larger trees, but the tribal mill and/or marketing of tribal timber are focused on higher quality large trees. This mismatch creates problems on both ends. We also saw where a reduction in AAC for other purposes leaves mills with insufficient timber resulting in higher manufacturing costs.

The FMP offers tribal foresters, enterprise managers and Tribal Council an opportunity to coordinate efforts and expectations. Indeed, coordination between land managers and manufacturing facilities is the basis of the Anchor Forest initiative. Coordination among tribes and adjacent landowners seems like a necessary first step.

F7. Forest plans should more completely describe staffing and funding needs to carry out implementation of FMP goals and objectives. Most FMPs we reviewed provided a description of the tribe's current forest management staff and budget details. They did not, however, provide significant detail regarding staffing and funding necessary to successfully implement goals and objectives set forth in the FMP.

The capacity of each tribe's forest management staff as well as the funding mechanisms needed to implement an FMP are important to meeting FMP goals and objectives. Tribal forest management would benefit from a more detailed and critical look at these needs within FMPs providing an opportunity for periodic evaluation of departmental personnel and funding levels.

F8. Forest plans should include quantitative criteria in more detail and clarity to evaluate FMP goals and objectives. Many FMPs we reviewed included criteria to help evaluate and monitor the progress of FMP implementation. In most cases, the criteria presented were mostly qualitative. To have an effective adaptive management process quantitative criteria should also be developed and integrated into the FMPs. Both qualitative and quantitative criteria will help tribes evaluate FMP goals and objectives as implementation occurs and will inform future planning decisions.

Douglas fir commercial thin – Tulalip. Photo by Vincent Corrao.

F9. Planning for allotments needs more attention. While data is not available to quantify the acreage of Indian forest land that is in allotments, evidence suggests that the extent of forested allotment is significant (see discussion in Task D). The proportion in allotments and the impacts on tribal forest planning vary considerably by reservation. In addition to management challenges, the accounting difficulties and expense associated with allotments have been well documented as evidenced by the Cobell settlement, and the OST.

Our site visits indicate that the allotment system presents a special set of challenges to the forest manager as well, and that these challenges are amplified where allotments are highly fractionated.

In our view, the allotments get little attention in tribal forest plans. Forest conditions on and historic and projected harvest levels for allotments are typically not reported separately. In fact, the very nature of the CFI inventory does not lend itself to describing or planning for allotments separately from Tribal trust lands – another reason for an in-place (stand level) inventory.

Forest plans should effectively communicate to allottees the kind of management and magnitude of revenue they could expect during the planning period. We recommend that BIA planning regulations be modified to direct forest planners to prepare a brief description of the forest conditions on each allotment, a statement about the objectives of allotees where such objectives can be determined, and a recommended forest management schedule for each allotment. Much of this detail can be carried in an appendix to the FMP and should be updated annually to reflect progress.

IRMP recommendations

Past IFMATs have offered strong support of efforts to create IRMPs. An IRMP offers tribal resource managers a way to enhance compatibilities and understand tradeoffs in production of multiple resources. Differences among reservations, however, make it difficult to specify the nature of the IRMP, or to even recommend that every reservation needs an IRMP.

The development of an IRMP has the potential to offer tribes additional benefits that are a result of the comprehensive planning process that accompanies IRMP development. An IRMP potentially can:

- Resolve conflict between tribal members, land managers, and tribal councils;
- Facilitate communication among resource managers (forestry, fisheries, etc.);
- Describe a more comprehensive vision for the tribe's natural resources;
- Create opportunities for collaboration with government and state agencies that may open up alternative funding sources for implementation;
- Result in NEPA relief through categorical exclusions or other mechanisms.

Our discussions with some tribal planners suggest that the development of an IRMP requires considerably more time, expense, and expertise than does a FMP. Many Tribes do not appear to have the required resources. With respect to IRMPs, we offer the following recommendations:

F10. The development of IRMPs may not be appropriate for every tribe. BIA funding and technical support for IRMP development may be best targeted to reservations that can benefit most from an IRMP. Criteria could include size of the reservation, the nature of natural resources, current resource conflicts, status of self-determination, etc. This focused approach to IRMP development could give a lift to the IRMP development success rate.

F11. For tribes that are moving in the direction of self-determination, an IRMP-type document could also serve as the trust agreement between the tribe and Secretary. We propose that a new kind of agreement between the Secretary and a tribe could better

define the trust obligation and responsibilities of both parties with respect to tribes moving toward self-determination. A document like an IRMP could be the basis for such an agreement. As currently described and written, the IRMPs are more strategic level plans. To make an IRMP a more suitable basis for an agreement, the document would need to tier to a tactical plan for achievement of long-term goals while also portraying the impacts on resources. Such a document should incorporate the following kind of information:

1. Description of who does what (this might be similar to the contract/compact documents).
2. Specification of funding needed to implement the vision, with some kind of contingency built in.
3. Description of the outcomes expected of the manager.
4. Adaptive management language.
5. A monitoring program.
6. A resolution process if inputs or outcomes stray from expectations.
7. Some relief from burdensome processes because of the existence of the agreement.

We offer this as a starting point. If the tribes and BIA decide to pursue this option, then more thought will need to be given to the nature of the document used as a basis for that agreement. Our hope is that such an agreement would provide more certainty and an articulation of clear boundaries between the government and the tribe regarding the responsibilities and obligations of both parties.

Woodlands

Woodlands comprise a sizeable portion of the forested tribal trust lands. Because they do not generate as much revenue or employment, woodlands typically receive much less attention from planners. Since the last IFMAT assessment, the BIA has been working diligently to prepare forest plans for smaller reservations which are typically weighted toward woodlands.

Only four of the reservations we visited had any significant amount of woodlands, and in those cases, the commercial forest land outweighed the woodlands in terms of size, significance and attention. We did not visit any reservations that were primarily woodlands, and recommend that future IFMAT assessments include one or more of those reservations.

F12. Reservations with a significant woodland component should integrate woodland management considerations into tribal FMPs. IFMAT II recommended that tribes bring woodlands "into the mainstream of forest management planning." We agree with this

recommendation and stress that a gap remains in woodland management planning, which acknowledges that significance and extent of the woodland resource. The ecological and cultural significance the woodland resource calls for a better understanding of the related resource management issues such as wildlife habitat, grazing, fuelwood, and non-timber forest products.