

A Comparison of Guidelines for the Forest Stewardship Program and Other Standards of Sustainable Forest Management

STUDY DESCRIPTION

In the interest of advising the process of revising the national guidelines for the Forest Stewardship Program, the USDA Forest Service commissioned the Pinchot Institute for Conservation to carry out comparisons of the Program's guidelines – at both the national and state level – to other widely recognized standards for sustainable forest management. In addition to the national guidelines for the Forest Stewardship Program, the guidelines for the Program that were developed by six different states, as well as those that guide four non-governmental systems aimed at promoting sustainable forestry, were reviewed. The four systems represented are: the Forest Stewardship Council; the American Tree Farm System; Green Tag Forestry; and the National Association of State Foresters' Principles and Guides for a Well-managed Forest. For the sake of clarity, this report refers to these non-governmental entities "systems" rather than programs.

This report summarizes the key findings of the comparisons of guidelines, which fall mainly into the categories of similarities and differences. In addition, a number of individual forest stewardship plans were compared to their corresponding state's guidelines for the Forest Stewardship Program in order to shed light on the extent to which these plans are addressing the issues flagged by the guidelines.

BACKGROUND ON THE FOREST STEWARDSHIP PROGRAM

The Forest Stewardship Program is authorized by the Cooperative Forestry Assistance Act as amended by the Food, Agricultural and Trade Act of 1990 (a.k.a. the 1990 Farm Bill). At the national level, the USDA Forest Service oversees the Program. The purpose of the Program is to deliver information and technical assistance to landowners primarily by helping them develop long-term, multi-resource management plans, also known as "forest stewardship plans." These plans are aimed at sustaining the long-term productivity of timber and non-timber forest resources "to help meet future public demand for all forest resources."

A set of national guidelines advise the delivery of the program by 59 state and territorial forest agency partners, and all of these partners augment the standards to address unique local circumstances. The national Forest Stewardship Program guidelines were developed for non-industrial private forest landowners and were last revised in 1994. The guidelines for the non-governmental systems reviewed in this study have been updated since that time, drawing upon advancements in science and policy that the Forest Service did not have the opportunity to benefit from when the national guidelines for the Forest Stewardship Program were last revised fifteen years ago.

BACKGROUND ON THE NON-GOVERNMENTAL SYSTEMS¹

American Tree Farm System (ATFS). Initiated in 1941, the ATFS is a program of the American Forest Foundation. Its stated mission is “to promote the growing of renewable forest resources on private lands while protecting environmental benefits and increasing public understanding of all benefits of productive forestry.” To help landowners meet these goals, the ATFS provides outreach, education, and technical assistance.

Forest Stewardship Council (FSC). The FSC is an international organization that was founded in 1993 by representatives of environmental groups and the timber industry, as well as foresters, indigenous peoples, and other interested parties from 25 countries. FSC-U.S. is responsible for overseeing the evolution of FSC standards in the U.S. and the ongoing development of regional standards for each region of the country. The FSC guidelines for a well-managed forest encompass ecological, economic, and social aspects of forest management.

Green Tag Forestry. The Green Tag program was developed by the National Forestry Association, in cooperation with members of the Association of Consulting Foresters and the National Woodland Owners Association. It aims to support forestry practices that assure a balance of natural diversity and sustainable forest productivity. Green Tag is expressly designed for use by private forest landowners.

National Association of State Foresters’ (NASF) Principles and Guides for a Well-Managed Forest. The NASF developed these Principles and Guides as a means to help state forestry agencies, forest landowners, and other interested parties assess the capacity of a system or program to guide forest owners and managers in their efforts to achieve well-managed forests while attaining the landowner’s personal objectives for the property. Size or scale of the management units is an essential consideration in the use of these guidelines.

STUDY METHODOLOGY

In order to facilitate the comparisons called for by this study, seven different matrices were developed – six comprehensive matrices and one “quick look” matrix. Each of the six major matrices compare an individual state’s guidelines for the Forest Stewardship Program to the national Forest Stewardship Program guidelines, the relevant regional FSC guidelines, and the guidelines developed by the other aforementioned systems. The “quick look” matrix is a summary table comparing all sets of guidelines.²

The six comprehensive matrices – each containing information specific to one of the six states’ sets of guidelines for the Forest Stewardship Program – are divided into the categories listed below. The topics these categories represent are primarily reflective of the issues raised by the FSC regional guidelines,³ since they are the most extensive of any of the sets of guidelines under study. In some cases, elements of the FSC guidelines were combined into a single category

¹ Information on the ATFS, Green Tag, and the FSC was excerpted from *Guidebook: Guidebook: Forest Management Certification for Private Forest Landowners in the U.S.* (Pinchot Institute, 2003). Information on the NASF Principles and Guides for a Well-managed Forest was excerpted from www.stateforesters.org/positions/P&G2003.htm (NASF, 2003).

² See Appendix A.

³ The FSC regional guidelines reviewed in this study share the same Principles and Criteria for sustainable forest management, while the Indicators may differ based on regional variations.

and/or renamed to better reflect the components of all of the programs and systems under review. When program or system guidelines addressed issues not covered by the FSC standards, new categories were created or existing categories were expanded.

For each category, relevant language was inserted *verbatim* from each set of guidelines when the guidelines addressed the issue(s) raised by the category heading. Therefore, the only information that differs among the six large matrices is that which corresponds to the state guidelines for the Forest Stewardship Program and the FSC regional guidelines.

Matrix Categories

Below are the major categories and corresponding subcategories that comprise the matrices:

1. *Compliance with Certification System Requirements and Laws*

Subcategories:

- Compliance with Certification System Requirements
- Verification of Conformance with Certification System Requirements
- Compliance with Laws and State Guidelines
- Compliance with State Best Management Practices (BMPs)
- Payment of Applicable Taxes and Fees
- Compliance with International Agreements
- Illegal Harvesting and Unauthorized Activities
- Consultation with Professionals

2. *Tenure*

Subcategories:

- Land Tenure and Property Rights
- Customary Tenure/Use by Local Communities
- Tenure Disputes

3. *Community Relations*

Subcategories:

- Sharing of Information with Community/Public
- Consideration of Community in Forest Management
- Consultation with Community/Community Input
- Contribution to Well Being of Communities
- Contribution to Local and Regional Goals
- Work and Training Opportunities for Local Communities
- Contribution to Local Economy
- Recreational Opportunities
- Environmental Education
- Grievances and Compensation

4. *Forest Worker Relations and Requirements*

Subcategories:

- Quality of Work
- Worker Safety and Health
- Workers' Rights
- Use of Trained Contractors

5. *Indigenous Relations*

Subcategories:

- Indigenous Rights
- Compliance with Treaties
- (Compensation for) Use of Traditional Knowledge

6. *Special Sites*

Subcategories:

- Protection of Special Sites -- Cultural, Historic, Archeological, Indigenous
- Protection of Special Sites -- Biological, High Conservation Value Forests (HCVFs)

7. *Economic Aspects*

Subcategory:

- Economic Viability of Forest Management Operations

8. *Aesthetic Considerations*

Subcategory:

- Managing for Aesthetic Considerations

9. *Environmental Considerations*

Subcategories:

- Biodiversity
- Wildlife Management and Habitat
- Threatened and Endangered Species
- Ecological Connectivity within the Landscape
- Environmental Services – Air, Water, Soils, Carbon Sequestration
- Environmental Assessments
- Restoration of Ecological Functions
- Ecosystem, Species, and Process Representation
- Roads
- Fire
- Insects and Disease
- Use of Chemicals/Pest Control
- Grazing
- Exotic and/or Invasive Species
- Conversion to Plantations or Other Uses

10. *Silvicultural Practices*

Subcategories:

- Silvicultural Systems are Sustainable and Sensitive to Environmental Values
- Specific Harvesting Guidelines
- Regeneration and Reforestation
- Minimization of Disturbance/Damage
- Water Quality Considerations During Mechanical Operations
- Clearcuts
- Timber Salvage
- Forest Product Utilization (Timber and Non-timber)
- Non-merchantable Species

11. Management Plan

Subcategories:

- Management Plan Required
- Elements Included in Management Plan
- Revision and Timeliness of Management Plan
- Review/Approval of Plan
- Public Availability of Management Plan
- Implementation of Management Plan: On Site Activities
- Implementation of Management Plan: Worker Training

12. Monitoring and Assessment

Subcategories:

- Monitoring Requirement
- Frequency and Intensity of Monitoring
- Data Collection and Use
- Chain of Custody
- Incorporation of Results into Management Plan
- Availability of Monitoring Results

FSC Stands Alone. As stated earlier, the regional FSC standards were used as templates for the six primary matrices because they cover the widest range of topics. However, this approach leads to large gaps in the matrices, which should not be interpreted indicators of comprehensiveness. The issues explicitly addressed by the regional FSC standards include the following:

- Compliance with International Agreements
- Illegal Harvesting and Unauthorized Activities
- Sharing of Information with Community/Public
- Contribution to Local and Regional Goals
- Work and Training Opportunities for Local Communities
- Contribution to Local Economy
- Grievances and Compensation
- Quality of Work
- Workers' Rights
- Indigenous Rights
- Compliance with Treaties
- (Compensation for) Use of Traditional Knowledge
- Ecological Connectivity within the Landscape
- Implementation of Management Plan: Worker Training
- Tenure Disputes
- Chain of Custody
- Incorporation of Results into Management Plan
- Availability of Monitoring Results

THE COMPARATIVE ANALYSIS

Differences in Guidelines Within the Forest Stewardship Program

For the most part, the individual states' guidelines for the Forest Stewardship Program reflect the national Forest Stewardship Program guidelines. However, the states' guidelines also explicitly address a number of issues that the national guidelines do not. While this is not necessarily surprising, as the Program was designed to be adapted at a more local level, a revision of the national guidelines to include those issues that states are addressing in their guidelines would serve to highlight the importance of the issues. To follow are the issues addressed by *all* of the states' guidelines but *not* the national guidelines:

- Compliance with Laws and State Guidelines;
- Protection of Special Sites: Cultural, Historic, Archeological, Indigenous;
- Regeneration and Reforestation.

Commonalities Among All Sets of Guidelines

The only issue that is explicitly addressed by ALL sets of guidelines – for both the Forest Stewardship Program and the non-governmental systems -- is “Managing for Aesthetic Concerns.” Additionally, there are several issues that are addressed by all entities *except* for one state's guidelines for the Forest Stewardship Program (the state differs depending on the issue). These issues are:

- Wildlife Management and Habitat;
- Threatened and Endangered Species;
- Environmental Services – Air, Water, Soils, Carbon Sequestration.

Differences Among the Program's and Systems' Guidelines

With 11 sets of guidelines for this study to consider (national Forest Stewardship guidelines, six states' guidelines for the Forest Stewardship Program, FSC guidelines, ATFS guidelines, Green Tag guidelines, and NASF guidelines), numerous comparisons could be made. However, this report highlights those comparisons that indicate the differences between the Forest Stewardship Program's guidelines – at both the national and state levels – and several widely accepted, non-governmental sets of guidelines for sustainable forest management. With this information in hand, Forest Stewardship Program managers can more readily assess the extent to which the Program's guidelines overlap with or diverge from these other sets of guidelines, *and* determine if and how the Program's guidelines should be revised. To follow is the articulation of some of the differences between the guidelines.

1. *The Systems' Guidelines Compared Collectively to the Forest Stewardship Program's Guidelines at the National and State Levels.*

There are several issues that *all* of the non-governmental systems explicitly address in their guidelines, which the national and states' guidelines for the Forest Stewardship Program do *not*. These issues are:

- Protection of Special Sites: Biological, HCVFs;
- Use of Chemicals/Pest Control;
- Use of Trained Contractors;
- Worker Safety and Health.

2. *ATFS Guidelines Compared to the Forest Stewardship Program's Guidelines at the National and State Levels.*

The issues that the ATFS guidelines explicitly address, which the national and state FSP guidelines do *not*, are the same as those that are addressed only by the systems (see #1 in this section).

3. *Green Tag Guidelines Compared to the Forest Stewardship Program's Guidelines at the National and State Levels.*

In addition to issues listed under #1 in this section of the report, the Green Tag guidelines explicitly address several issues, which neither the national nor states' guidelines for the Forest Stewardship Program do. These issues are:

- Economic Viability of Forest Management Operations;
- Clearcuts;
- Forest Product Utilization;
- Public Availability of Management Plan;
- Data Collection and Use.

4. *NASF Guidelines Compared to the Forest Stewardship Program's Guidelines at the National and State Levels.*

In addition to issues listed under #1 in this section of the report, the NASF Principles and Guides for a Well-managed Forest explicitly address several issues, which neither the national nor states' guidelines for the Forest Stewardship Program do. These issues are:

- Economic Viability of Forest Management Operations;
- Restoration of Ecological Functions;
- Conversion to Plantation or Other Uses;
- Forest Product Utilization;
- Data Collection and Use.

FOREST STEWARDSHIP PLANS

Five individual forest stewardship plans from each of the six states whose guidelines for the Forest Stewardship Program are part of this study were reviewed in an effort to indicate the extent to which these plans, assumed to be illustrative of activities occurring on the ground, reflect their respective state's Forest Stewardship Program guidelines.

Similarities and Differences Among Plans

In some respects, the plans are similar regardless of the state in which they were developed. For example, they all include: a general property description; a forest inventory; resource management unit descriptions; and, recommended actions. Also, most plans explicitly address a variety of social concerns, including recreation, aesthetics, and the impact of management activities on neighbors.

At the same time, differences between the forest stewardship plans exist, and some of them occur among plans prepared under the same state's guidelines. In several of the states, all forest stewardship plans are prepared by the state forestry agency; however, in the other states, consulting foresters or the landowners themselves sometimes prepare the plans. Other differences include the duration of the plans reviewed, which range from five to 50 years, and the inclusion of a detailed Implementation Record for monitoring purposes.

Comparing Plans to Guidelines

The states' sets of guidelines for the Forest Stewardship Program under review are not exactly the same, although they address many of the same fundamental issues. Their differences seem to reflect regional variations in ecology, social values, and overall approaches to encouraging sustainable forest management. Likewise, some of the issues addressed by the forest stewardship plans prepared under these sets of guidelines differ; but, in many cases, the plans are found to go beyond what may be detailed in the guidelines. The information to follow illustrates this point.

State #1

Although State #1's guidelines for the Forest Stewardship Program do not explicitly refer to "Protection of Special Sites: Biological, HCVPs,"* "Use of Chemicals/Pest Control," or "Economic Viability of Forest Management Operations," there is evidence that some, if not all, of the forest stewardship plans prepared for individual properties in this state address these issues. Some of the plans designate Stream Management Zones and recommend chemical use for the treatment of invasive species. And all of the plans include a fact sheet on selling timber.

State #2

The forest stewardship plans prepared under State #2's guidelines for the Forest Stewardship Program do not expound upon any issues that are not already addressed by the guidelines themselves.

State #3

State #3's guidelines for the Forest Stewardship Program do not mention "Forest Product Utilization," but some of the forest stewardship plans prepared provide information on wood products.

State #4

State #4's guidelines for the Forest Stewardship Program do not highlight "Economic Viability of Forest Management Operations" or "Data Collection and Use," but all plans reviewed discuss economic and market conditions, and some of the forest stewardship plans include an Accomplishments Record (which serves as documentation of data collected).

State #5

Similar to States #1 and #4, State #5's guidelines for the Forest Stewardship Program do not directly address "Use of Chemicals/Pest Control," "Economic Viability of Forest Management Operations," or "Data Collection and Use," but some of the forest stewardship plans reviewed encourage the use of herbicides and fertilizers, when necessary, and include information on merchantable timber. And all of the plans encourage monitoring.

State #6

State #6's guidelines for the Forest Stewardship Program do not specifically mention "Protection of Special Sites: Biological, HCVPs,"** "Economic Viability of Forest Management Operations," "Clearcuts," or "Data Collection and Use." Yet, some of the forest stewardship plans reviewed include one or more of the following: protection measures for preserving ecological value, recommendation for clearcuts in certain situations, a Land Exam, and a

* While none of the management plans mention High Conservation Value Forests (HCVPs) specifically, several plans from several different states indicate areas in need on special protection for ecological reasons. In addition, no plans explicitly address "Restoration of Ecological Functions," but most include resource inventories and an awareness of ecological functions.

Practices Report. Additionally, all the plans reiterate the program's purpose, which is to "encourage the growth of future commercial crops."

Issues Not Addressed by the Forest Stewardship Plans

None of the forest stewardship plans reviewed demonstrated that the following issues are being addressed:

- Use of Trained Contractors;
- Worker Safety and Health;
- Public Availability of Management Plan;
- Conversion to Plantations or Other Uses.

Of these issues, "Worker Safety and Health" is the only one that was included in one of the state's guidelines for the Forest Stewardship Program. The others do not appear in any of the states' guidelines, but are a part of the guidelines for almost all of the non-governmental systems.⁴

On the whole, it seems as though the forest stewardship plans reviewed lack depth in the areas of economic information, monitoring, and issues directly affecting workers.

CONCLUSION

An important point to consider when assessing the similarities and differences between the Forest Stewardship Program and other systems for promoting sustainable forest management is that simply because an issue is not *explicitly* addressed in a forest stewardship plan or a set of guidelines does *not* necessarily mean that related activities are not occurring on the ground. In reality, any forest stewardship plan abiding by state and federal laws will indirectly meet some of the guidelines articulated by the non-governmental systems regarding adherence to treaties, protection of worker's rights, compliance with BMPs, etc.

In terms of revising the Forest Stewardship Program's guidelines to more closely align with those of the non-governmental systems reviewed in this study, the ATFS presents the easiest match. There are the least number of differences between the national the state guidelines for the Forest Stewardship Program and the ATFS. Meeting the requirements of Green Tag Forestry and the NASF would be more difficult, but not impossible.

On the other hand, it would be a significant challenge for a landowner enrolled in the Forest Stewardship Program to simultaneously meet the FSC guidelines. In simply comparing the state and national guidelines for the Forest Stewardship Program to those for FSC, it is evident that there are too many major issues that are not addressed on the Forest Stewardship Program side. However, a report prepared by a FSC auditor for State #6 indicates that shortfalls in the issues addressed by the forest stewardship plans prepared under the state's guidelines can be overridden by meeting future conditions set by FSC.

It is not the purpose of this study to determine which, if any, system the Forest Stewardship Program should strive to emulate. In fact, these systems can be as different from each other as the Forest Stewardship Program may seem to be when compared to any of them. Similarly, it is should not be assumed that the non-governmental systems reviewed in this study necessarily

⁴ "Use of Trained Contractors" is not part of the FSC guidelines.

represent the “truest” standards of sustainable forest management. They are simply a reflection of what are considered to be widely accepted guidelines aimed at that end.

If this study revealed a tremendous amount of overlap between the guidelines for the Forest Stewardship Program and these other systems, it might make sense for the Program’s guidelines to be revised to help landowners essentially kill two birds with one stone -- receive technical assistance through the Forest Stewardship Program while also setting themselves up for having their land certified by one of the non-governmental systems. In some cases, certification allows landowners to put a “green seal” on the wood harvested from their certified land. Such a label indicates to consumers that the wood derives from a sustainably managed forest and, ideally, this product can demand higher prices than non-certified wood. At the same time, it should be noted that there is often a fee landowners must incur for having their land assessed for certification, and this condition makes the landowner’s decision to pursue certification a financial one rather than simply a personal one.

As this study indicates, the range of differences that *actually* exist between the Forest Stewardship Program and the systems reviewed suggest that close consideration of the *purposes* of these entities be revisited before any major guideline revisions take place. While the Forest Stewardship Program does not offer a green seal or other such market-based incentives, it does promote sustainable forest management by providing landowners with the technical assistance they need to be good stewards of their forestlands. The one aspect of the guidelines that Program managers – at the national and state levels -- may wish to revisit regardless of their interest in aligning the Forest Stewardship Program with outside standards of sustainable forest management is monitoring. If a more thorough approach to documenting the Program’s outcomes on the ground was encouraged, its impact on private lands stewardship could be more accurately measured and, subsequently, strengthened.

Consideration of Community in Forest Management												
Consultation with Community/ Community Input												
Contribution to Well Being of Communities												
Contribution to Local and Regional Goals *not addressed in the LS Standard												
Work and Training Opportunities for Local Communities												
Contribution to Local Economy												
Recreational Opportunities												
Environmental Education												
Grievances and Compensation												
Forest Worker Relations and Requirements	FSC	ATFS	GT	NASF	FSP Nat'l	FSP #1	FSP #2	FSP #3	FSP #4	FSP #5	FSP #6	
Quality of Work												
Worker Safety & Health												
Workers' Rights												
Use of Trained Contractors												
Indigenous Relations	FSC	ATFS	GT	NASF	FSP Nat'l	FSP #1	FSP #2	FSP #3	FSP #4	FSP #5	FSP #6	
Indigenous Rights												
Compliance with Treaties (Compensation for) Use of Traditional Knowledge												
Special Sites	FSC	ATFS	GT	NASF	FSP Nat'l	FSP #1	FSP #2	FSP #3	FSP #4	FSP #5	FSP #6	
Protection of Special Sites: Cultural, Historic, Archeological, Indigenous												
Protection of Special Sites: Biological, HCVFs												
Economic Aspects	FSC	ATFS	GT	NASF	FSP Nat'l	FSP #1	FSP #2	FSP #3	FSP #4	FSP #5	FSP #6	
Economic Viability of Forest Management Operations												
Aesthetic Considerations	FSC	ATFS	GT	NASF	FSP Nat'l	FSP #1	FSP #2	FSP #3	FSP #4	FSP #5	FSP #6	

Managing for Aesthetic Considerations *not addressed in NE standard												
Environmental Considerations	FSC	ATFS	GT	NASF	FSP Nat'l	FSP #1	FSP #2	FSP #3	FSP #4	FSP #5	FSP #6	
Biodiversity												
Wildlife Management and Habitat *not addressed in the SW Standard												
Threatened and Endangered Species												
Ecological Connectivity within the Landscape *not addressed in the SW or LS Standards												
Environmental Services – Air, Water, Soils, Carbon Sequestration												
Environmental Assessments												
Restoration of Ecological Functions												
Ecosystem, Species, and Process Representation												
Roads *not addressed in the SW or LS Standards												
Fire *not addressed in the LS Standard												
Insects and Disease *not addressed in the SW or RM Standards												
Use of Chemicals/ Pest Control												
Grazing												
Exotic and/or Invasive Species												
Conversion to Plantations or Other Uses												
Silvicultural Practices	FSC	ATFS	GT	NASF	FSP Nat'l	FSP #1	FSP #2	FSP #3	FSP #4	FSP #5	FSP #6	
Silvicultural Systems are Sustainable and Sensitive to Environmental Values												
Specific Harvesting Guidelines												
Regeneration and Reforestation *not addressed in the SW Standard												
Minimization of Disturbance/ Damage												
Water Quality Considerations During Mechanical Operations												
Clearcuts *not addressed in the SW, LS, NE or RM Standards												

Timber Salvage <small>*not addressed in the SW Standard</small>												
Forest Product Utilization (Timber and Non-timber)												
Non-merchantable species												
Management Plan	FSC	ATFS	GT	NASF	FSP Nat'l	FSP #1	FSP #2	FSP #3	FSP #4	FSP #5	FSP #6	
Management Plan Required												
Elements Included in Management Plan												
Revision and Timeliness of Management Plan												
Review/ Approval of Plan												
Public Availability of Management Plan												
Implementation of Management Plan: On Site Activities <small>*addressed by the RM Standard</small>												
Implementation of Management Plan: Worker Training												
Monitoring and Assessment	FSC	ATFS	GT	NASF	FSP Nat'l	FSP #1	FSP #2	FSP #3	FSP #4	FSP #5	FSP #6	
Monitoring Requirement												
Frequency and Intensity of Monitoring												
Data Collection and Use												
Chain of Custody												
Incorporation of Results into Management Plan												
Availability of Monitoring Results												