

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

Forest Management Certification

Public Summary Information

Project Number:	7054-CH
Client:	Group certification Thurgovian forest
Country:	Switzerland
Scope:	<p>Participating forest district corporations and forest owners within the group certification scheme of the Thurgovian forest, currently 22 participants including private, corporation, municipality, town, state and federal forests, totalling 11,734 ha.</p> <p>Teilnehmende Forstrevierkörperschaften und Waldbesitzer im Rahmen der Gruppensertifizierung Thurgauer Wald, aktuell 22 Teilnehmer mit Privat-, Korporations-, Bürgergemeinden-, Zivilgemeinden-, Staats- und Bundeswald; insgesamt 11.734 ha.</p>
Main species/products:	Spruce, fir, beech, ash, maple, oak and larch
Annual production:	Total of approximately 100,000 m³
Assessment date:	18 – 20 September 2000
Certificate Number:	SGS-FM-0583
Date of Issue:	11/12/00
Duration:	5 years
Contacts:	Waldwirtschaft Verband Thurgau (WVTG)
Name:	Bernhard Friedrich, President
Address:	Ermatingerstrasse 5 CH-8268 Salenstein Switzerland
Tel. P:	++41 71 664 18 39
E-mail:	b.friedrich@bluewin.ch
Tel. office/fax office:	++41 71 672 6565 / ++41 71 672 8705

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

Details of the Certification Unit

The Thurgovian Forestry Association, represented by its president, encompasses, with a few exceptions, all forest owners of the canton of Thurgovia.

At the time of the certification, the group included the following members (see management handbook Ch. 7, appendix 1.2):

District No.	District Name	Public Forest	Private Forest	Total ha	Town	Municipality	State Forest	Federal Forest	Other (Parish Corp.)
107	Sonnenberg	0	353	353					
202	Fischingen	493	899	1392	45	48	347		53
203	Bichelsee	56	380	436		16	21		19
204	Lommis-Wängi	83	324	407		65			18
205	Affeltrangen	15	568	583	7	8			
207	Sirnach	148	292	440	9	86	22		31
208	Herdern	247	323	570		74		173	
210	Müllheim	198	43	241		198			
301	Diessenhofen	231		231		231			
302	Schlatt	278	108	386		278			
305/ 306	Schlattingen/ St.Katharinental	256	74	330		98	144		14
307	Hüttwilen	308	209	517		22	286		
308	Feldbach	413	515	928		302	101		10
309	Salenstein	183	298	481		183			
310	Berlingen	187	18	205	187				
312	Eschenz-Mammern	154	375	529		131			23
313	Wagenhausen	151	158	309		138			13
403	Tägerwilen	521	51	572		521			
405	Kreuzlingen and surrounding area	407	631	1038		170	170		67
414	Bischofszell	326	161	487		326			
502	Ottenberg	250	385	635		240			10
503	Bürglen	129	535	664	5	98	21		5
22 Districts		5034	6700	11734	253	3233	1112	173	263

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

TABLE OF CONTENTS

SECTION I - PUBLIC SUMMARY REPORT 1

1. INTRODUCTION AND SCOPE 1

2. COMPANY BACKGROUND..... 2

3. FOREST MANAGEMENT SYSTEM..... 3

 3.1. Bio-physical setting..... 3

 3.2. History of use..... 3

 3.3. Planning processes 4

 3.4. Harvest and Regeneration..... 5

 3.5. Silviculture 5

 3.6. Monitoring processes..... 6

4. SOCIO-ECONOMIC AND ENVIRONMENTAL CONTEXT 7

 4.1. Social aspects..... 7

 4.2. Environmental aspects 8

 4.3. Regulations..... 8

5. LOCAL STANDARDS 8

6. THE ASSESSMENT 9

 6.1. Schedule..... 9

 6.2. Team 9

 6.3. Peer reviewers..... 9

 6.4. Process..... 9

 6.5. Sampling..... 11

7. ASSESSMENT RESULTS 12

 7.1. Findings Related to the General QUALIFOR Program 12

 7.2. Issues Related to the QUALIFOR Group Certification Program..... 19

 7.3. Issues Raised by Stakeholders..... 22

 7.4. Issues Raised by Peer Reviewers 22

8. STRENGTHS AND WEAKNESSES 25

 8.1. Strengths 25

 8.2. Weaknesses 25

9. CERTIFICATION RECOMMENDATION..... 29

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

SECTION I - PUBLIC SUMMARY REPORT

1. INTRODUCTION AND SCOPE

This report presents the results of the assessments of the forest management operations of the participating forest owners and forest district corporations of the group certification of the Thurgovian Forestry Association (WVTG) in the canton of Thurgovia in Switzerland. The assessments were conducted during the period of 18 to 20 September 2000. The evaluation of the forest management was done for those forest districts, which have made a binding agreement with the WVTG to participate in the group certification program.

The purpose of the assessment was, on the one hand, to examine the fulfillment of the FSC requirements for the group representation of the WVTG and, on the other hand, to evaluate the activities of the participating forest owners and forest district corporations according to the requirements of the QUALIFOR Program. The QUALIFOR program is the forest certification program of SGS, which was accredited by the Forest Stewardship Council (FSC). It encompasses all principles and criteria of the Forest Stewardship Council (FSC P&C). An integral component of the evaluation is the "National Standards for Forest Certification in Switzerland" dated June 1999.

At the extraordinary delegates' meeting of the Community of Interests of the Thurgovian Forest (IGTW) on February 22, 2000, the main item on the agenda was the certification. At the meeting of the board of directors of the IGTW (now WVTG) on June 21, 2000 it was decided to have the interested forest district corporations of the canton of Thurgovia certified according to the FSC principles and criteria. The board of directors appointed a certification working committee, which was granted the authority to initiate and carry out appropriate actions. The manager of forest county three, as the coordinator of the working committee, took charge of administrative actions.

The forest owners desiring to become members, who are organized in and represented by the forest district corporations, were allowed to decide upon registration if they wanted to be certified and had to fill out an agreement and make a self-declaration for this. The type of ownership and the corresponding distribution of the area of the participants from parts of the canton of Thurgovia are currently as follows:

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

Type of Ownership	Forest Area (incl. areas w/o yield)
Towns (5)	253 ha
Municipalities (21)	3233 ha
Parishes, Corporations (12)	263 ha
Federal forest (1, Wpl Frauenfeld)	173 ha
State forest (diverse)	1112 ha
Private (about 5400 juristic and natural persons)	6069 ha
Total	11,734 ha

The participants in the group certification program currently include 22 forest district corporations. The state is also participating in the program and is integrated into the district structures. Due to the obligatory membership in forest district corporations (see paragraph 5 of the Forest Law, paragraph 7 of the regulation for the Forest Law), the numerous owners of large and down to the smallest private forest areas can also participate in the program. At the present about 5400 owners in 22 forest district corporations have taken advantage of this.

2. COMPANY BACKGROUND

The Thurgovian Forestry Association is the umbrella organization for forest owners in the canton of Thurgovia. It is composed of about 106 public and 8972 private forest owners. The highest body is the delegates' meeting. The votes of the delegates are distributed in an appropriate relationship to the ownership structure in the district and particularly with respect to public and private forest. The number of votes is based on the forest area represented – per district one vote for 100 ha as well as for residual areas over 50 ha. The canton forestry field office, as the representative of the state forest, manages a state forest enterprise and is a member of the particular district.

The board of directors consists of a maximum of seven members. It is elected at the delegates' meeting and constitutes itself with the exception of the president. A representative of the canton's administration is presently a member of the board of directors.

- B. Friedrich: BG President, FRK President
- J. Himmelberger: FRK President
- R. Engeler: BG President
- P. Rickenmann: FRK President

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

- P. Sauter: FRK President, private forest owner
- W. Vogt: WK President
- H. Kuhn: Forest county three

The state functions are carried out by the heads of the forest counties and/or the forest rangers. The management of the forest is accomplished by the personnel employed by the towns, municipalities, the state or the joint forestry enterprises. The forest ranger, whose district is constituted as a corporation under public law, exercises the state functions.

The operating units of the group are organized as forestry enterprises of a larger forest owner (main enterprise) or as joint forestry enterprises of several owners. The WVTG is represented by the board of directors and in particular by the president. Within the framework of the certification an FSC workgroup has special tasks. It consists of four members of the board of directors of the Thurgovian Forestry Association, an internal assessor and an external consultant. The manager of forest county three, who is also a member of the board of directors and of the workgroup, functions as the coordinator.

3. FOREST MANAGEMENT SYSTEM

3.1. Bio-physical setting

The area to be examined consists of about half of the canton of Thurgovia. Geographically the canton of Thurgovia can be divided into the covering gravel plates of the lakeside hills, the broad Thur valley with the canton capital of Frauenfeld, the area between the Thur and the Murg, which is partially covered with moors and contains glacial features, and the colline to montane levels of the fir cone country south of the axis between Winterthur and St. Gallen. The expansive forest areas are concentrated on the lakeside hills with the steeply indented streams flowing to Lake Constance and the Thur valley, on the southern hills of the Thur valley and the hilly levels of the Molasse in the southern part of the canton.

The high altitudes are located between about 400 meters ASL in the north on the Rhine up to about 1000 ASL in the southern part of the canton. This produces an extraordinary great site variety with respect to geology, topography, climate and forests.

In the past years, surveys of soils and soil types and natural forest communities were made for almost the whole canton. The plant-sociological site mapping describes the ecologically supportable coniferous wood share in the commercial forest for each site. This forms an important basis for the selection of tree species for silvicultural planning. The Thurgovian forest grows exclusively on good to very good sites. The site quality is above the average of the Swiss plains.

3.2. History of use

The history of use of the forests in the canton of Thurgovia, which has been described many times in other places, was not described in detail

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

here. Evidence of the management practices in the last 50 to 100 years can be seen clearly. Among these are, in particular, remains of pure coniferous stands with classical age class distribution and the former coppices with stands, mixed forests and oak forests, which have remained with an almost natural composition. About 90 percent are uniformly developed high forests. In addition, there are over 1000 hectares of former coppices with stands and non-uniform high forests.

The average timber stock in the Thurgovian forest is 436 cubic meters per hectare. The total timber stock amounts to about 9.1 million cubic meters. It has increased in the last ten years, to the same degree in public as in private forests, by around 1.2 million cubic meters. Above all, the over-100-year old stands have increased. Due to the good forest sites and the current forest development, the annual wood growth of 14.9 cubic meters per hectare is the highest in Switzerland. The average use in the past years was approximately 10 cubic meters per hectare.

A large number of stands today, however, show, at least as a whole, a broad variety of species and management is done according to the principles of natural forest management based on the continuous forest principle and the felling principle. Forest meadows can no longer be found and the meadows are fenced off.

In the gravel fields of the Thur and the Murg, which are partially forested, there are large gravel quarrying areas. The canton planning guidance designates the potential gravel quarrying areas on the basis of the geological conditions and ability to quarry the gravel and the quality. The priority areas are Diessenhofen, Eschenz, Warth-Weiningen, Weinfeld, Hohentannen and Aadorf. Within the process of weighing all interests, in some cases forest is used on the edge of such areas. In the future, regional planning will contain guidance for the quarrying of gravel for these priority areas. For any clearing work, which is necessary, reforestation is a requirement.

3.3. Planning processes

The management of the forests in the canton of Thurgovia is based on the provisions of the new Forest Law of September 1994, which became effective on April 1, 1996, and the Forest Regulation of March 26, 1996. The forest rangers, who are under the supervision, both according to state laws and technically, of the heads of the current five forest counties, are responsible for the management.

Within the canton two planning levels are differentiated. The regional forest planning (regional forest plan) is prepared by the canton forest service with the participation of the interested counties. The contents of these regional forest plans include information about forest functions and the weighting of these as well as the determination of the measures necessary for the sustainment of these functions. Two regional forest plans have allowed the collection of experience in this area for forestry

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

planning. The regional forest plans are binding for agencies and are issued by the government council.

The owners are basically responsible for the management of the forests. The basis for this is the forest management plans, which are to be prepared for every forest owner with an area of 40 or more hectares. For forest property, which is smaller than this, a management plan is prepared for the district, which includes this. The management plans are prepared by the canton forest service and issued by the Swiss department. They are binding for the owner with respect to forest conservation measures. The forest owners can be obligated to plan measures to assure the fulfillment of the protective functions or as the basis for support measures. The canton collects the planning basis with regular inventories and makes these available to the forest owners.

In addition to the mid to long-term management plans, the forest enterprises also prepare annual plans for measures and/or work plans.

3.4. Harvest and Regeneration

The basis for the harvest is the silvicultural planning and the annual allowable cut, which is set in the management plan. The harvest is still done for the most part using motor-manual procedures and ground hauling procedures. In flatter and less sloping terrain harvesters and processors are also used in thinned stands. This work is done, as a rule, by contractors. The employment of contractors for timber harvesting varies considerably for the individual enterprises and depends, among other things, on the amount of their own personnel.

For logging, skid tracks are established if they have not already been permanently built for previous thinning operations.

The regeneration technique depends primarily on the silvicultural planning. Femel felling, border felling, shelter wood felling and increasingly selective cutting are used. The type of regeneration is primarily based on the selection of the tree species. As a matter of principle, they attempt to use natural regeneration and this has been successful for over half of the regeneration areas. If necessary, those tree species, which are desired but are missing in the present composition of the old stands, are planted under trees or are admixed. Area planting is the exception in stands, which are to be transformed from pure coniferous timber into hardwood requiring light such as oak.

3.5. Silviculture

The selection of the silvicultural methods is left to the owner. The canton forest law only requires that measures are to be taken for the development of a stable stand and following the principles of a near-natural silviculture. For timber harvesting there is the requirement for marking by the forest service and approval is required for this with the exception of those areas in the regional forest plan, which are designated as areas primarily for forest utilization.

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

Several forest operations have, to a degree, changed some time ago from age-class to continuous forest management. Some of the heads of forest counties and several forest rangers are members of the Association of Natural Forestry Switzerland (ANW) and are promoting the transformation from age-class forests to continuous forests. But, depending on the forest management goal, felling and border felling are also used. The share of standing and lying dead trees is around one percent of the growing stock and is in comparison four-times less than the average in the Swiss plains.

With the plant-sociological site mapping an instrument was created, which provides the forest rangers with a basis for the selection of the tree species. The growing stock goals are primarily related to the natural tree species composition but do, however, allow a certain amount of freedom for the use of so-called exotic tree species such as indigenous and exotic species, which do not occur naturally in the area.

3.6. Monitoring processes

Monitoring activities related to forest management in the canton of Thurgovia are carried out at the most varied levels.

According to the law, the canton forestry field office along with the forest counties and forest districts compose the canton's forest service. The forest service is responsible for the enforcement of the legal regulations, the performance of state functions and providing consultation for the forest owners. The most obvious control of the forest service consists of the approval of forest utilization and the marking requirement for timber harvesting.

At the operational level, the forest rangers primarily have enforcement responsibilities in the area of forestry planning and regulations concerning forests.

In the area of work safety the SUVA plays a significant role. The prescribed responsibilities of the employer for the protection of the employees within the framework of the EKAS guideline number 2134, Forest Work, are carried out in the forestry sector through the branch solution, Forest, of the Forestry Association Switzerland and the Forestry Contractor Association. Inspections are conducted on their own through those appointed of the branch and through the SUVA.

In the operational and financial area, larger forest owners are urged to maintain financial accounting and perform cost accounting. Forestry enterprises with a forest area larger than 40 hectares are to maintain an operational equalizing fund.

The preparing of cost accounting is widely practiced in the canton of Thurgovia. The data from 37 forest enterprises with a total of 6583 hectares of forest area were collected and this encompasses 77 percent of the public forest area. Following the annual survey, a private engineer office makes the evaluation.

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

The monitoring of the quality of the work of one's own forestry personnel and of the contractors used is performed by the forest ranger but varies significantly in intensity.

A technical inspection of the work of the forest rangers is, according to law, the responsibility of the heads of the forest counties.

4. SOCIO-ECONOMIC AND ENVIRONMENTAL CONTEXT

4.1. Social aspects

The canton of Thurgovia is characterized by a predominate share of forest, which is in private ownership. The approximately 9000 private forest owners have a share of 10,870 hectares (55%) of a total of 19,500 hectares of forest, which is an average of 1.2 hectares of forest per owner. They, therefore, have a high value as far as the forest itself is concerned. The public forest encompasses an area of 8630 hectares and of this 1400 hectares are state forest.

The socio-economic environment varies significantly. In the vicinity of the agglomerations and in particular in the surrounding areas of the towns of Frauenfeld, Weinfelden, Romanshorn, Kreuzlinger and Wil (the canton of St. Gallen), the forests have a great significance as nearby recreational areas. The well-developed forest road network with a length of over 1200 kilometers is highly used and with a density of between 54 and 74 running meters per hectare this can be considered as complete.

In more remote areas, the production of timber is of primary importance and the forests are used less for recreational purposes. Here, however, there is also a certain pressure exerted by those seeking recreation and sports enthusiasts such as riders, moto-cross drivers, mountain bikers, hikers and orienteering participants etc.

Protective functions are primarily of relevance on the steep slopes to Lake Constance and to the Thur as well as in the source area of the Murg in the southern part of the canton.

As a whole, most of the forests in the canton of Thurgovia are within an interesting area of conflict between the various utilization demands and structural transformation for the forest owners away from doing their own management. The forest rangers are thus highly integrated into public relations work and providing consultation.

Due to economic reasons, a structural transformation has been taking place in the canton of Thurgovia for some years in that individual forest enterprises have been combining within the framework of the formation of forest district corporations to conduct joint management through a main enterprise or to form joint forest enterprises consisting of several towns and municipalities, which own forest, and the state and private forest owners. This also has, to a degree, effects on the employment situation. The large number of full-time forestry personnel, which previously existed,

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

is increasingly being replaced by a few highly mechanized private forest contractors.

4.2. Environmental aspects

The following areas have been identified as the most important environmental aspects:

- Selection of tree species within the framework of economic bounds of the plant-sociological site mapping.
- Selection of the harvesting methods, in particular driving on forest soil, and the use of ecological supplies such as lubricants and chemical protective agents in the forest.
- Work facilities, in particular storage locations for supplies and waste disposal.
- Game population and damage situation
- Implementation of the forest reserve concept based on an inventory of forest sites, which are worthy of protection.

4.3. Regulations

The legal foundations concerning forest management in the canton of Thurgovia have been comprehensively established. In addition to the canton forest law and the regulations for this, the most important group of laws, which are a responsibility of the canton forestry field office and are passed on to all forest rangers, are concerned with the following aspects:

- The Law on Hunting and the Protection of Mammals and Birds Living in the Wild dated May 13, 1992
- Planning and Building Law dated August 16, 1995
- Introductory Act to the Federal Law on the Protection of Bodies of Water dated January 24, 1991 (March 5, 1997)
- Law on the Protection and the Conservation of Nature and Region dated April 8, 1992
- EKAS guideline number 2134 "Forest Work" and the SUVA guidelines

5. LOCAL STANDARDS

The "National Standards for Forest Certification Switzerland" of June 1999 were used as local standards. These standards are not recognized by the FSC as official national standards and were therefore added to the general QUALIFOR checklist.

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

6. THE ASSESSMENT

6.1. Schedule

The assessment was preceded by a preassessment by SGS QUALIFOR conducted on 26 and 27 April 2000. Two main goals were pursued in doing this: first, the management system of the WVTG was inspected as the representative of the group and second, the management systems of selected members of the Association were also inspected. The central contact partners were the members of the board of directors of the IGTV, the FSC workgroup, the canton forest service and the forest rangers for the forest enterprises, which were visited.

The information collected was used for the planning of the certification assessment. The most important stakeholders were identified.

The certification assessment took place from 18 to 20 September 2000. The detailed assessment program is contained in appendix I to the entire report.

6.2. Team

- Lead Assessor and Team Leader: The lead QUALIFOR assessor is a forest engineer with 11 years of professional experience in the areas of forestry organization, forestry technology, wood energy, eco-balances, environmental compatibility inspections and project management and has completed a total of eight assessments as co-assessor or assessor.
- Local Specialist: Lead QUALIFOR assessor. Forest engineer with 12 years of professional experience, of this five years in the evaluation of forest management.

Curricula vitae of the assessors are provided in appendix II to the full report.

6.3. Peer reviewers

Three independent Swiss specialists with international standing have been selected to review this report.

6.4. Process

The main assessment was conducted in the steps outlined below.

Preparation

Using the results of the preassessment and the local standards, a checklist was prepared derived from the general QUALIFOR Requirements Catalogue. The management handbook (FSC Handbook) of the WVTG and the self-declarations of the forest district corporations selected for the assessment served as the essential basis for the assessment preparation.

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

Stakeholder Notification

The most varied national stakeholders were informed about the planned assessment and requested to pass this information on to their appropriate canton and regional organizations in order to integrate their concerns about the topic of forest management in the canton of Thurgovia. The stakeholders contacted represent environmental and nature protection associations, forestry clubs, forest owner associations, forest user clubs, personnel associations etc. At the same time, a broad public relations action in the regional press provided information about the coming certification assessment. Within the framework of the regional forest plans, being prepared at this time, there are extensive consultations at the regional and local level for stakeholders.

Opening Meeting

An opening meeting was conducted with the government council responsible for the forest, the canton forest engineer, members of the FSC certification workgroup, (president and vice president of the WVTG, a delegate of the canton forestry field office and the head of forest county three and the internal assessor) and those responsible for forest planning of the canton forestry field office. The extent and the schedule for the assessment was explained. See list of those present in appendix I of the entire report.

Management System of the Group Representative

The group management system of the WVTG, as the group representative, was inspected prior to the opening meeting for the fulfillment of the requirements of the FSC for group certification programs.

Document Review

The most important management documents were examined on-site with the manager to check them for their completeness and appropriateness concerning the requirements of the QUALIFOR Program. These documents encompass management models, site mapping, management plans, systems and schedules (branch solution, Forest), work instructions, control mechanisms for annual allowable cut and area checks, and proof of work.

The self-declarations of the registered forest districts were checked prior to the field assessment.

Field Assessments

Field visits in the forest had the goal of determining the degree, to which the activities in the forest corresponded to the documented management systems, the QUALIFOR Program requirements and the national standards. Discussions were held with representatives of the forest service, the board of directors of the WVTG, the forest rangers and managers, with forestry personnel of the enterprises, representatives of the forest district corporations and various forest owners in order to determine to what degree they were familiar with the management models

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

and schedules and instructions, which are important for their work, and if they were working according to these instructions.

Stakeholder Interviews

The interest associations, which operate at the national level, were provided information, including summary information by e-mail concerning the planned certification. No comments were received from these people. No personal discussions were conducted with stakeholders concerning the certification assessment. The consultation provided by the canton forestry field office within the framework of the regional forest planning was examined and found to be purposeful.

Summing-up and Closing Meeting

At the conclusion of the field assessment, findings were presented during a closing meeting to a representative of the WVTG and the internal assessor. Any areas of non-conformance with the QUALIFOR Program were raised as one of two types of corrective action requests (CAR) with differing weighting:

- **Major CARs** - which must be corrected and measures must be introduced and re-assessed before certification can proceed.
- **Minor CARs** - which do not preclude certification, but must be corrected within a time frame, which is agreed upon, and will be checked at the first surveillance visit.

6.5. Sampling

Of the 22 members participating in the group certification program, seven forest enterprises and district corporations – some were just being established - were selected and visited. The selection was done according to regions, enterprise structure and special characteristics. Within the regions, random samples were taken but the districts visited during the preassessment were not selected. At those enterprises visited, randomly selected areas from the certification requirements were chosen. Documents, work facilities and stands were inspected and work carried out in forests (cultivation, thinning and regeneration areas) areas with priority for nature protection and reserve areas were visited to determine if the completed work met the regulatory requirements.

For the field assessments the main concentration was placed on the following topics:

- Organization of the districts and management forms of varying ownership structures as well as appropriate work facilities.
- Stands, in which regeneration was initiated in the past years, existing regeneration expanded or cultivated (natural regeneration areas, planting in an arrangement or as an admixture).
- Stands, in which in the past years thinning or harvest cutting was conducted, in particular for those, in which contractors worked.

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

- Reserves and areas with priority for nature
- Potential conflict areas with superimposed recreational and leisure functions

7. ASSESSMENT RESULTS

Detailed assessment findings are included in the full report. For each QUALIFOR requirement, the related findings and any observations or corrective actions are listed.

The main issues are discussed below. They concentrate on the requirements of the FSC for group certifications - requirements for the group representative – and the fulfillment of the national standards.

7.1. Findings Related to the General QUALIFOR Program

PRINCIPLE 1 Compliance with the Law and FSC Principles

The management of the forests in the canton of Thurgovia is based on the legal framework of the canton Forest Law dated September 14, 1994. The forest rangers have the newest documents available concerning all relevant regulations. This compilation is supplied and updated by the canton forestry field office. In addition, cartographic documents used included those for soil, vegetation, groundwater protection areas etc. For some parts, the forest rangers are supplied directly by the SUVA (work safety) or from the communities. The most important documents are used as decision assistance when consulting with forest owners.

No gross violations of the law were identified during the assessment. In individual cases, uncertainties concerning fire prevention regulations for the storage of fuel, use of chemicals in the forest and EKAS guidelines were found.

The tax obligations are known and fulfilled. During the course of the formation of forest district corporations or the reorganization and consolidation of forest enterprises and in particular with the current contracting for the removal of windfall timber, uncertainties developed concerning value-added tax obligations of the forestry enterprises.

During the transfer of the Community of Interests Thurgovian Forest to the Thurgovian Forestry Association a model was created for the Association and the principles of the group policy were set and approved at the extraordinary delegates' meeting of February 22, 2000. These are to be increasingly communicated to the levels of the owners, forest workers and contractors. In individual cases, forest district corporations and joint forest enterprises have prepared a model and strategic goals during the course of their founding. For future expansions of the group, in particular, the private forest owners are to be actively informed and all interested parties are to be involved in the process.

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

PRINCIPLE 2 Tenure and Use Rights and Responsibilities

The real estate ownership is entered in the land title register. The ownership relations are clear and undisputed in the canton of Thurgovia both for public as for private forests and are maintained in a current state by the canton forestry office. See the district overview for the canton of Thurgovia.

The right of use and enjoyment for the general public is clearly defined in the forest law. This primarily encompasses the right to enter freely, which is already guaranteed by civil law. Driving on forest roads with motor vehicles for non-forest and non-hunting purposes is limited. Riding on new paths and riding, for example, with mountain bikes and riding through a stand off of a firm path are forbidden.

PRINCIPLE 3 Indigenous Peoples' Rights

Not relevant.

PRINCIPLE 4 Community Relations and Workers Rights

The canton forestry field office is responsible for forestry training questions, supported by the professional associations and the forestry organizations. The Swiss department has issued a regulation for training, advanced training and in-service training for forest workers. For advanced training and in-service training for all levels, the canton training representative coordinates courses for both forestry personnel and for forest owners. The very broad range encompasses a variety of technical and operational courses concerning nature and landscape protection as well as social, hygienic and medical aspects. To a certain degree, set training budgets exist and in other enterprises the courses offered are used as needed. The training is documented administratively by the district head in the personnel files. For private forest owners, courses are offered by the canton and the WVTG on timber harvesting and work safety.

Forestry training in enterprises is accomplished by appropriately trained trainers, at the canton trade schools and at the inter-cantonal forestry schools. Courses are offered by the Forestry Association Switzerland, the SUVA and the forestry schools.

The primary factor for employment is training. For contractors, long-term cooperation is, as a rule, the goal.

Dangers zones in the forest and in special timber harvesting are to be marked with appropriate signs and blocked with barriers. In two concrete cases, deficient or lacking barriers were found. The **corrective action request No. 2** requires the WVTG to take immediate action for the fulfillment of the valid regulations.

Information concerning accidents is to be collected and documented at district level. Until now, this activity has been limited to their own personnel. The **corrective action request No. 4** obligates the WVTG to establish and maintain purposeful accident statistics for the entire group area.

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

In most of the enterprises, the forest ranger is heavily involved with public relations work, and excursions for schools and community agencies are offered. Trips around the forest or forest days are also offered regularly for the general public. The construction of recreational facilities and the maintenance of these is actively supported.

The branch solution, Forest, has been introduced in all enterprises and is already being well implemented. Safety assessments have already been conducted by specialists from the WVS and the VSFU.

The forest rangers are members in the Forester Association Thurgovia (FVT), which is consolidated with the other canton associations at the national level in the Association Swiss Foresters (VSF). At the forest warden level, the degree of organization is very low. Discussions with forest wardens and forest workers have shown, that the need for membership in an association is insignificant. Farmer piece workers are also not organized in farmer associations. The conditions of employment of the forest rangers have been harmonized through service and salary regulations of the canton. The conditions of employment for piece workers and employees of contractors were, however, not discussed in detail.

The FSC Handbook contains a list of the most important stakeholders. See appendix IV. Communications with stakeholders are not explicitly regulated. The participation of the general public in the determination of forest functions has been accomplished within the framework of planning for two regional forest plans, which are binding for agencies. In addition, any expansion of forest roads is based on the canton public review process for plans.

PRINCIPLE 5 Benefits from the Forest

The forest enterprises maintain cost accounting and financial accounting. A comparison of the cost accounting shows, to a degree, significant differences, which could be due to the existing enterprise structures such as separate invoicing, separate planning and timber sales for every forest owner participating in the enterprise and the lack of cost transparency such as the division of expenses and earnings according to appropriate items.

Continuous and periodical maintenance of roads, cultivation work for young forests, game damage prevention measures and windfall timber removal etc. are set in the budgets and/or in supplementary loans for the forest owners.

The exercising of police functions for the forest is assured through the area-wide division of the forest into 40 districts at the present time and the resulting association with the forest enterprises and joint forest enterprises. The performance of state services such as the consultation for forest owners, implementation of forest nature protection goals etc. is reimbursed by the canton.

The implementation of the branch solution, Forest, by the contractors is a matter of inquiry for the acceptance procedures for the forest district corporations and the registration of the forest district corporations included

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

a listing of all contractors employed. The contractual relations between the customer - the forest owner and forest district corporation etc. - and the contractor vary considerably. It is recommended to the Association that it offer a hand for a uniform regulation with a model solution. This would contribute to the contractual determination of the desired work quality and the instructions for the prevention of damage and the defining of sanctions if these are not fulfilled and the setting of dates for the acceptance of work.

The harvested timber is scaled by the forest rangers or at the plant. The invoicing is done by the manager and the collection is done through the owners such as the municipalities, towns, state and private owners. In addition to a broad range of round timber assortments and industrial round wood, the forest enterprises also offer end products such as tables, benches, troughs for wells, posts, nesting boxes, Christmas trees, wreath and covering branches, firewood, chips etc.

Recreational usage in the forest is, at times, intensive. The recording of the various forest functions will, where it is not presently known, be accomplished within the framework of the participation in the regional forest planning and be made available by the canton.

The current usage is continually recorded and compared with the annual allowable cut. It is the responsibility of the canton to provide the most important basic elements about growth and accumulated usage, which are then integrated into the management plans. The annual allowable cuts are exhausted where possible. But, however, areas with a nature priority are not only designated for low yield sites.

PRINCIPLE 6 Environmental Impact

Effects on the environment are relevant from two differing aspects.

Existing inventories and mapping are of primary importance - forest reserve concept, KLN and BLN inventories, plant-sociological and pedological mapping - with respect to the protection of species and ecosystems. An important instrument for silvicultural planning, which is now available to practically all forest rangers, is site mapping with information about the ecological compatibility of tree species mixtures in commercial forests. These are used systematically when establishing stands and controlling the mixture. The cultivation of exotic tree species as an area was not observed. Information about species of flora and fauna, which are rare, endangered and threatened with extinction, such as the middle spotted woodpecker is available and is included in the measures for nature priority areas.

In the canton of Thurgovia, a forest reserve concept was prepared. This forms the basis for the designation of forest reserves and a contractual agreement on these. It is expected that the presently designated and future nature priority areas, such as oak stands with the middle spotted woodpecker and exposed pine-orchard sites, and total reserves will amount to over 10 percent of the total forest area. For individual areas,

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

protection goals and required measures as well as efficiency reviews will be defined. Considering the intended size of the individual total reserves, there is considerable need for action. The forest reserve concept was acknowledged with approval in a letter dated September 28, 1999 and it contains all the necessary elements for approval and a recommendation for the preparation of an implementing concept. The concept was passed internally by the forestry field office and will be implemented as a participatory procedure of the regional forest plans. For the canton of Thurgovia, with a total forest area of around 19,000 hectares, it identifies a natural forest priority area (natural forest reserve) of about 1000 hectares, a share of five percent. The area of special natural forest stands (special forest reserves) composes about 1000 hectares, a share of five percent, and consists of mostly smaller areas, whose number has not yet been determined. The actual total reserves without any invasive action with an area larger than 20 hectares have not been designated. According to valid forest law, 14 hectares of natural and special forest reserves have been designated indefeasibly. In addition, dozens of hectares of nature protection areas exist in the forest (local planning) as well as many areas, which have been secured with easement contracts. The implementation, which is binding for agencies, of the forest reserve concept is carried out within the framework of regional forest planning and will be examined during the surveillance assessments.

The game population varies considerably in the canton of Thurgovia. Natural regeneration without protective measures is frequently only possible, where the tree species composition in the old forest stand corresponds to the growing stock goal and a large amount of browsing food is available. Conversion stands with planting are to be fenced in to protect against browsing. Basically, the possibility exists, due to the BUWAL county correspondence No. 21, that the recording of the damage and the planning of shooting can be prepared jointly by the forest rangers and the professional hunters. In the regulation for the Thurgovian Forest Law, paragraph 23 requires that the near-natural silviculture is to orient on the knowledge from the site mapping and that natural regeneration is to be the goal. According to paragraph 29 it is possible for the canton forestry field office to submit a request to the government council for measures to control the game population. Individual forest rangers participate personally in district hunting or in the hunting commission in order to exert direct influence on-site. The **corrective active request No. 03** obligates the WVTG to present measures for a long-term game population density, which is compatible with natural regeneration.

The silvicultural techniques have been adjusted in the past years and decades and a more near-natural management is the goal for all locations or it has already been implemented. Area usage, which amounts to clear cutting, was not found. Regeneration often occurs naturally except in stands, in which the old forest stands rich in spruce are to be converted into a natural tree species composition. Planting is only required, where natural regeneration does not provide the desired tree species or the pressure from game makes fencing absolutely necessary, for example, for

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

femel felling with following planting of oak. For natural regeneration, biological rationalization is of primary interest. In doing this, however, attention must be given to the fact that in spite of possible short-term cost savings the appropriate resources for future tending (mixture control) are to be provided in order to achieve site-adapted growing stock to the greatest degree possible. Nevertheless, planting is still done today with tree species, which are not suited for the site. Therefore, **corrective action request No. 5** requires the WVTG to maintain the selection of the tree species within the bounds of the site mapping and to provide appropriate consultation and clarification to the forest owners.

Another important environmental aspect is the storage and use of chemical products and fuels. Due to the favorable storage costs for the buyer, if the timber in the log dump is not transported on time, it is sprayed upon request and at the cost of the buyer. The spraying is done by the forest ranger or under his control. The required specialty identification is available. Those products, which are authorized by the canton, are known to the forest rangers. They record the use in a corresponding form. Appropriate documents are available. Experiments are also made with sheeting to protect against beetle infestation. In one case, it was observed that in nurseries in a forest area copper solutions and herbicides were used. **Corrective action request No. 06** requires the WVTG to immediately enforce the legal provisions and to systematically search for alternatives.

The construction standards of the work facilities correspond to the technical and legal requirements. The SUVA and/or storage conforming to fire prevention requirements at the facilities were inspected within the framework of the branch solution, Forest. In vehicles, which transport fuel, drain pans should be available in case chain saws have to be fueled in groundwater protection zones.

When work is contracted to third parties - use of contractors - the management goals concerning work safety (requirement to wear a helmet), conserving treatment of stands (driving on sensitive soils) and ecology (ecological fuels) have not been systematically made a requirement for the contractor and frequently there is not any acceptance of the work and not any closing meetings.

PRINCIPLE 7 Management Plan

At the operational level, management plans with a time horizon of at least ten years are prepared. For forest enterprises, with an area of 40 or more hectares, individual management plans are made. Checks have shown that individual management plans are no longer current. Without a detailed description of management goals, where available, and without the maintenance of basic plan documents such as stand maps and measures maps it is very demanding to base the management solely on the plant-sociological site mapping. It is, however, possible for a limited time to continue the management plans with running planning. The canton

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

has prepared a program for updating the management plans, which is to be coordinated with the intended regional forest planning.

The basis for the revision of the management plans and in particular inventories and results are provided regularly by the canton. The newest scientific knowledge is integrated into the management plans through the activities of the canton - implementation of forest nature protection inventory. In individual enterprises, research projects are being conducted such as for soil, stand and crown analysis but the owners and/or the manager are not always informed about the goals and the results of the research. Here contact could be made with the responsible research offices to allow this information to be made available.

Through the reorganization of the forest districts, trained foresters are managers for all forestry enterprises. The district boundaries follow the property boundaries of the individual owners. Thus all forests are subordinate to one forest ranger from a legal aspect but are not completely consolidated operationally.

For training and in-service training, the annual areas of concentration, which are set annually by the canton forestry field office, are very balanced and include technical and operational topics such as work safety and timber trading customs; ecological and nature protection topics such as brooding birds, the development of the forest edge and woodpecker trees etc; and also social-cultural-medical topics such as safety harvesting, first aid and public relations work etc.

PRINCIPLE 8 Monitoring and Assessment

Internally within the enterprise, cost accounting with individual account plans and growing stock inventories are available as control instruments. All enterprises maintain invoicing mostly according to operational parts, meaning per owner, which provides information about the harvested products.

The monitoring of the work carried out in the forest by their own personnel and contractors is done by the forest ranger. These checks also include topics concerned with work safety. In this area, increased and more systematic checks are necessary. See corrective action request No. 02 and 04.

Data for forest growth, regeneration and forest condition are collected through the canton inventories according to uniform criteria for the entire canton. Information about the vegetation and the ecological and economic tree species spectrum can be found in the plant-sociological maps.

Operational accidents are reported to the SUVA using the normal forms. Central statistics are to be maintained on all forest managers by the canton in the future and are also to include the accidents in private forests.

The timber is scaled by the forest rangers or goes direct to the buyer for scaling at the plant. The marking of the scaled timber is done with plastic

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

plates. The origin of the timber can be traced with timber lists and/or plant scaling lists.

To a certain degree, timber and particularly industrial round wood is taken over by the contractor on stock and sold by the contractor. These contractors are subject to the FSC requirements and are to be integrated into the timber chain in a suitable manner (chain of custody (CoC) see corrective action request No. 01).

PRINCIPLE 9 High Conservation Value Forests

At the present, the FSC is preparing implementation criteria for the definition of forests with a high conservation value in the individual countries and regions. It is therefore still not clear if and to what degree forests in Switzerland will be affected by principle nine.

Potential areas with high conservation value were surveyed in the forest reserve concept. These areas are included in the regional forest planning and form the basis for the definitive designation of forest reserves and their contractual control and compensation. For the ecological increase in value of forest borders and the support of rare forest sites, canton contributions can be made. For the determination of potential forest reserves - area, location, competition with other usage interests - and the implementation, there are still uncertainties. The implementation occurs within the framework of the Regional Forest Plans and will be pursued during the subsequent surveillance visits.

All of these aspects are subject to the provisions of principle six, which is why principle nine is not basically applicable.

PRINCIPLE 10 Plantation

Pure stands of the same age, which are not near-natural, are still found in individual cases in older growing stock, partially as reforestation on former agricultural areas. Due to the systematic implementation of the borders for ecological compatibility for tree species in commercial forests, on the basis of plant-sociological site mapping, there is a continual transformation into more near-natural stands. This is occurring through conversion in steps, systematic promotion of site-adapted tree species during tending or within a shorter time period through felling and following planting. See corrective action request No. 05.

In former nurseries and in maximum height zones, Christmas tree cultures are maintained to a small extent. Silver fir, spruce and increasingly Caucasian fir are being used, which sell well on the market. The origin of the seed is not declared individually by the tree nursery and can be determined. No fertilizer or pesticides are used in the Christmas tree cultures.

7.2. Issues Related to the QUALIFOR Group Certification Program

The Thurgovian Forestry Association acts, in its capacity as a forest owner association, as the group representative with respect to its members. The

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

WVTG therefore assumes a certain responsibility for the maintenance of the certification requirements by the participating forest owners. This responsibility must be exercised primarily through set acceptance, resignation and expulsion procedures, the conduct of internal checks and the maintenance of a list of participants.

The FSC workgroup of the WVTG has conducted development and information work in this area, both internally and externally, and described this in a manual for the management system - FSC Handbook, release date of August 10, 2000. The basis for the participation in the group certification is an agreement, which regulates the responsibilities and the rights of the forest owners, the withdrawal of the voluntary obligation, the withdrawal of the usage of the certificate and the provision of data.

The participation of forest owners, who want to join, in the canton of Thurgovia outside of the participating district corporations is open as a satellite. See FSC Handbook chapter on membership, item 3.1.3.

The agreement is to be signed by the FSC workgroup on behalf of the WVTG, by the district president on behalf of the forest owners and the individual forest owner (satellites) and the responsible forest ranger.

To clarify the qualification for participation, a self-declaration was drafted for the forest district corporations and the forest owners, who want to join. This was filled out for all concerned forest owners by the forest ranger, as their representative, and signed by the president of the forest district corporation. The self-declaration was examined by the county forest engineer and the president of the WVTG and signed by these and reviewed by the internal assessor for formal completeness and plausibility.

The points in the self-declaration essentially include the "national standards," work safety, the fulfillment of the corresponding laws and regulations, conserving and near-natural forest management, the use of special fuels and biological lubricants, waiver of the use of fertilizers in the forest, the implementation of the forest reserve concept, the management planning; the statistics concerning accidents, training and in-service training; forest utilization, regeneration areas and techniques, and the use of chemicals, protection of stands and soil such as the branch solution, Forest; and the employment of contractors. If the self-declaration contained areas, which did not fulfill the certification requirements, the forest owner had to suggest measures for the improvement of the situation.

The self-declaration is basically a good means for evaluating the forest owners, who are registering. During the certification assessment, it was, however, shown that the corrective actions derived from the weak points were not systematically recorded and given dates. The required corrective actions are to be determined with the group participants, to be confirmed with completion dates in writing and to be included in the internal assessment program.

The registration of the forest district corporations only partially fulfills the requirements for an active integration and the provision of comprehensive

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

information and clarification for all participating forest owners. The agreement between the WVTG and the participating group members regulates the responsibilities and rights of the forest owners. The principles of the FSC and the consequences for forest management must be known to the public and the private forest owners of the district corporations so that their actions are based on these principles. Inspections and corrections can only make sense if knowledge of these can be assumed. At the same time there is the great danger of a major corrective action request and the associated loss of the certificate. The **corrective action request No. 01**, therefore, obligates the WVTG, upon the acceptance of forest district corporations, to obtain an excerpt of the minutes of the general shareholders' meeting, which shows the information the forest owners have and their majority approval.

In the present management system of the WVTG, the important areas such as internal assessments, sanctions for the lack of fulfillment of the requirements, procedures for expelling a member etc. are described according to the provisions of the FSC but have not been applied in practice.

The procedures for suspending and expelling participants and internal controls are of decisive importance.

For the procedures for expelling a member, the responsibilities are defined correctly within the hierarchy for every step. This means that the internal checks, the determination of corrective actions with follow-up inspections and suspension are the responsibility of the internal assessment office. The next higher level is the FSC workgroup, which makes the decision concerning a request by the assessment office to expel members. Following this the affected forest owner has the right of appeal. The final authority for a definitive decision is the board of directors of the WVTG.

Internal checks are accomplished at the level of the forest district and are described in the FSC Handbook. The assessments are conducted by an internal assessment office consisting of foresters and/or forest engineers. Checklists have been prepared for surveillance visits, which are oriented on subject priorities and/or deficiencies found. The selection is based on a sampling process, which requires one visit within the period of validity of the certificate for districts with an annual allowable cut of less than 7000 cubic meters and two visits for districts with more than 7000 cubic meters.

The manual for the management system (FSC Handbook) was inspected prior to the certification assessment and the results were summarized in a short report. These were integrated into the present version and therefore no comments are made on these. The assessors found that the contentual requirements for group certification by the FSC have been fulfilled. The formal requirements for a management system such as information about the author, assessor, date of release, number of pages, distribution etc. and the structure of the list of the group members are sufficient.

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

7.3. Issues Raised by Stakeholders

During the course of the consultation with the most varied stakeholders, no matters of concern were presented. Any matters of concern of stakeholders received later will be directed to the WVTG and treated within the framework of the surveillance visit.

7.4. Issues Raised by Peer Reviewers

This report was reviewed by three independent peer reviewers. The following points were raised:

Issue Raised	Response
The actual conduct of internal safety inspections is not apparent from the report.	The introduction of the branch solution, Forest, was inspected at all enterprises. The degree of implementation was found to be very high in general. However, the conduct of safety inspections was not examined in detail and not systematically. This will be conducted during the first surveillance visit.
For internal checks and increasing work safety, primarily for private forest owners, the information brochure, "Profi in Your Own Forest" should be made available as a training instrument.	The suggestion will be passed on to the WVTG and the implementation assessed during the first surveillance visit.
The requirement to initiate accident statistics for the entire group area and to maintain these goes somewhat too far for the first phase of certification.	The accident statistics are required so that information, primarily for private forests, is available to the internal office and the certifying office. The practicality of the statistics can, if necessary, be examined during a later phase.
The majority approval of the forest owners of a district corporation for the fulfillment of the certification requirements is not sufficient for the certification of the entire district corporation.	The district corporation can only participate as an entity in the certification of the group and this means implicitly that all owners must fulfill the certification requirements. The majority resolution of the owners only concerns the decision for the basic participation in the program.

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

<p>Direct contact with the local stakeholders is only done through the regional forest planning. Thus, the consultation with the local stakeholders is only done indirectly within the framework of the certification. The impression exists that the motivation for direct contact is not very high. This impression must be corrected with the coming regional forest planning.</p>	<p>The local stakeholders are known to the canton (county foresters) and to the owners. Records from existing regional forest planning have shown that the consultations were extensive and in detail. The assessors recommend that the goals and requirements of the certification be explicitly presented by the WVTG during current and future consultations and the matters of concern in this area be requested.</p>
<p>A reserve designation concept does exist, however, an implementation concept does not exist. Reference is made to regional forest planning, where this is to take place. This gives rise to some uncertainties concerning the implementation and in particular in connection with the absolute requirement for minimum areas of reserves. An additional corrective action request will be recommended, which requires such minimum areas. A further corrective action request is recommended, which requires that in those regions, where no regional forest plans will be developed in the next five years that sufficient areas for reserves be designated.</p>	<p>This demand for forest reserves conflicts partially, in a time sense, with the determination of forest reserves. The assessors obtained the impression that, based on the existing reserves and those presently in the process of being designated, and discussions with representatives of the canton forestry field office, great importance is attached to the designation of sufficient forest reserves of sufficient area. The assessors therefore suggest that both additionally recommended corrective action requests be presented to the WVTG as observations and that the next surveillance visit determine if the WVTG intends to make corresponding inputs for the fulfillment of the reserve demands within the next 20 years.</p>

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

<p>For the well functioning of the group as a whole, a quality management system is necessary. The observation that for a consequent implementation of the group policy the owners need to be informed and motivated, is not sufficient. For this reason, an additional CAR is required.</p>	<p>The CAR no. 1 requires essentially the improvement of the application process. WVTG has established a management system, which appears to be sufficiently detailed for the purpose. The system could indeed be extended to a full quality management system, however this would go beyond the requirements of the FSC. The suggestion is, however, forwarded to the group management for its consideration and the functioning and appropriateness of the management system will be checked on subsequent surveillance visits.</p>
<p>The elaboration and implementation of a concept for the prevention of soil and stand damages is required, which is able to reduce the impacts on the environment on the stand level.</p>	<p>The assessors have, in contrary to other certification projects, the impression that in the participating forest corporations in the canton of Thurgovia there is no excessive obvious damage on soil and stands, even considering the complicated removal work after the windfall. A written procedure and implementation instructions for entrepreneurs for the reduction of damage to soil and stands is, however, forwarded as an observation to the group management. The group management is asked to establish procedures. The results will be monitored on the first surveillance. The procedure should include: acceptable (weather) conditions for using heavy machinery, acceptable level of damage, pre-qualification criteria for entrepreneurs.</p>

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

8. STRENGTHS AND WEAKNESSES

8.1. Strengths

With the group certification program, the Thurgovian Forest Association has started an initiative, which will allow all forest owners in the canton to obtain certification according to the FSC with the support of the canton forestry field office. The Association has made a considerable effort to provide the forest owners and the forest rangers information and clarification about this opportunity.

The canton Forest Law of September 14, 1994 and the associated regulations give the canton forestry field office and the forest service a modern and practice-oriented legal basis. Of particular importance are the responsibilities, described in this, for two-level forestry planning - management planning and regional forest planning - and the regular inventories, the consideration of ecological and economic values, and the organization of all forest owners into forest district corporations. The clear support of the indigenous, renewable raw material, wood, as a building material and energy source as well as the obligation that state agencies are to promote the use of wood is unique.

The high degree of involvement of the managers in the forest districts and enterprises is to be particularly emphasized and in all cases they actively implement the certification requirements and conduct promotional work in public and private forest areas. The main area of concentration of the activities of the forest rangers is on consultation and motivation of the forest owners and the timber sales. It is amazing that, in spite of the numerous forest owners, marketable sales units can be composed based on the exploitation of the sorting criteria. In the future, industrial round wood is to be marketed by the neighboring St. Gallen Forest Association.

The high level of work quality, the varied training and in-service training programs for all levels and categories of forest owners, the active implementation of the branch solution, Forest, and the systematic application of plant-sociological site mapping are also to be particularly emphasized.

Special mention must also be made of the active participation of the canton through the interest and the presence of the responsible government council, the participation as a forest owner with the state forest, the participation in the FSC workgroup and the release of a state-paid forest ranger to work as an internal assessor.

8.2. Weaknesses

A total of six corrective action requests (CARs) are necessary. All non-compliances were categorized as "minor." They are described in the following paragraphs. In the table, the designation of the requirement refers to the indicator, which was used in the QUALIFOR Program to test

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

each of the FSC principles and criteria and/or to the requirement of the QUALIFOR Group Certification Program.

CAR No.	QUALIFOR Requirement (FSC P&C)	Description
1.	Group management (GM) GM 3.1.1	<p>The agreement between the WVTG and the forest owners regulates the responsibilities and rights of the forest owners, who are members of the forest district corporations. Based on the financial competence of the boards of directors, the decision to join the certification process was partially made only at the board of directors' level without information from and participation of the individual forest owners. To a certain degree, the forest district corporations are still in the founding phase and will only assume a legal status in the coming year.</p> <p>Based on the selected acceptance procedure for membership, it is possible that significant certification requirements will not be fulfilled but that the owners will be accepted as members in spite of this.</p> <p>This does not assure the voluntary participation, the information and the conscious decision of the forest owners. Upon registration, the district corporations are to submit an excerpt of the minutes, which shows the information concerning the consequences of management according to FSC principles and the decision to participate.</p>
2.	CL 4.2.6	Work in the forest, in accordance with the danger and the valid regulations, is to be indicated with signs and if necessary blocked with barriers.
3.	CL 6.2.5 / 6.2.6	The game population varies considerably in the canton of Thurgovia. Natural regeneration without protective measures is frequently only possible, where the tree species composition in the old forest stand corresponds to the growing-stock objective and a concurrent large amount of browsing food is available. Conversion stands with planting are to be fenced to protect them from browsing. The survey of damage and the shooting planning are to be done jointly by the forest rangers and the professional hunters. For near-natural silviculture, which is oriented on the information from site mapping, natural regeneration is the goal. The canton forestry field office can request measures for the control of the game population from the government council.

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

CAR No.	QUALIFOR Requirement (FSC P&C)	Description
4	CL 4.2.9	The information concerning accidents is to be collected and documented at forest district level. Up until the present, these activities have been limited to the enterprise's own personnel. The collection of useful accident statistics for the entire group area and all relevant activities is to be initiated and maintained.
5.	CL (CH 4) / 6.3.1	Regeneration often occurs naturally except in those stands, in which the old forest stands rich in spruce are to be converted to a natural tree species composition. Planting is only required, where natural regeneration does not offer the desired tree species or the game pressure makes fencing of these areas absolutely necessary. Nevertheless, planting of tree species, which are unsuited for the site, is still conducted today. The amount of freedom in the choice of the tree species is to be based on the site mapping and the forest owners are to receive appropriate consultation and clarification.
6.	CL 6.6.3	It was reported that in one nursery copper solutions and herbicides were employed in a forest area. The valid legal provisions are to be enforced and at the same time alternatives are to be systematically sought.

In addition to the six CARs, further essential aspects are described as observations.

Obs. No.	QUALIFOR Requirement (FSC P&C)	Description
1.	Group management (GM) GM 3.1.2 / 4.3.2 / 4.3.3	The self-declarations submitted with the registration of the group participants contain suggested corrective actions. These should be recorded by the internal assessor along with the responsible forest ranger in the monitoring program and assigned dates for completion.
2.	GM 4.3	The planned schedule of internal inspections is described extensively. A job description for the internal assessor does not yet exist and helps to implement these actions in a more concrete manner.
3.	1.2.1 / 1.2.2	The value-added tax required for forestry services is interpreted depending upon the type of enterprise: joint business, main enterprise, administrative enterprise without its own personnel etc. It is recommended that the Association provide clarification for this and appropriate reserves be established.

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

Obs. No.	QUALIFOR Requirement (FSC P&C)	Description
4	GM 1.5; CL 1.6.1 / 1.6.2 / 1.6.3	<p>The systematic implementation of the group's policies by all forest owners requires the active participation of all forest owners. The forest owners are to be appropriately informed and motivated for this purpose.</p> <p>The essential contents of the internal information still to be provided concerns the following points:</p> <ul style="list-style-type: none"> -The selection of tree species and the control of mixture for young forest and brushwood tending (CL 6.3.1, Ch. 5a) -Forest utilization, which conserves the stand and soil, concentration on skid tracks, stopping of uncoordinated travelling on forest soils (CL 5.3.17/ 5.3.2 / 6.5.1 / 7.1.8 / 10.6) -After the depletion of the existing inventories of conventional lubricants and fuels, forest owners, forest enterprises and contractors are to strive to achieve the conversion to environmentally friendly and biodegradable products (CL 6.6.8). The WVTG could, as a wholesale purchaser, make the conversion easier for the forest managers with corresponding discounts. <p>Contractors, who function as timber resellers, are also to agree to meet, as an enterprise, the requirements of the FSC principles and criteria - integration into the group as a satellite. See GM 3.1.3.</p>
5.	GM 1.4 / 1.5; CL 1.6.1 / 1.6.2 / 1.6.3 / 6.3.1 / 6.3.2	<p>The forest owners of the most varied orientations can, through training, be made familiar with the peculiarities of forest sites based on the newly created principles of plant-sociological mapping and the description:</p> <ul style="list-style-type: none"> -Plant-sociological and pedological mapping (6.3.1 Ch. 2) -Integration of pioneer timber and shrubs into stand tending (6.3.2, Ch. 7) -Promotion of dead trees (6.3.2, Ch. 8) -Establishment of skidding tracks and timber harvest techniques (5.3.1, 5.3.2, 7.1.8)
6.	CL 6.7.4 / 8.2.8	The prohibition concerning the placement of agricultural residual products, dump sites and disposal in the forest is also to be expressly enforced for forest owners.
7.	CL 6.6.1 (Ch. 9)	Before the use of chemicals, in this case sprays for commercial timber beetles, non-chemical alternatives are to be examined. A central list of all forest owners, who still must use chemicals, is to be maintained by, for example, the forest ranger.

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

Obs. No.	QUALIFOR Requirement (FSC P&C)	Description
8.	CL 6.3.2	When obtaining plants, the origin of the type used is to be recorded and maintained for at least ten years. To a certain degree, the required information is missing on packing slips and/or invoices.
9.	CL 4.2.4 / 4.2.5 / 4.2.8	The prescribed safety equipment is to be worn by all forest managers. Checks are to be made by the safety representative of their own personnel, of contractors and forest owners. Deficiencies are to be corrected in an expeditious manner. See GM 4.3.3 with appendix.

From the Internal Review, tow additional Minor CARs have been raised:

CAR No.	QUALIFOR Requirement (FSC P&C)	Description
7.	Group Management (GM) GM 3.1.2	In the self-declaration, shortfalls with regards to the National Standards identified in the district corporation applying are named and proposed corrective actions described. However, close-out dates and checks for remedial action are not defined. (see observation no. 1 above)
8.	CL 7.2.5	Some management plans in the visited district corporations have not been updated in some cases as far back as 1996. The observation that a renewal will be made once the regional plans are available, is not sufficient. As a minimum, intermediate measures must be discussed with the cantonal forest engineer responsible, and he must approve necessary measures in writing until a new plan is available.

9. CERTIFICATION RECOMMENDATION

Since no major corrective actions were found, the assessment team of the QUALIFOR Program management recommends the granting to the Thurgovian Forestry Association, for the management of the forests of the participating owners in parts of the canton according to the current list,

the certificate for the fulfillment of the principles and criteria of the Forest Stewardship Council, including the enterprise's own further processing (CoC).

QUALIFOR Program	Project Number	7054-CH
FOREST MANAGEMENT MAIN ASSESSMENT REPORT	Company	WVTG

The outstanding minor corrective actions do not prevent certification, however, the WVTG must implement the agreed-upon measures within the set time period. These will be inspected by the SGS QUALIFOR during the next surveillance visit. If the measures taken are satisfactory, the non-compliances will be considered to have been eliminated, verification of corrective actions. Otherwise minor corrective actions will be raised to major corrective actions.