FOREST RESOURCES MANAGEMENT PROGRAM

Afforestation Sub-program

SHAREFARMING REQUIREMENTS

West Coast Sharefarm Unit

LAND INFORMATION BRANCH
INFORMATION PRODUCTS AND SERVICES

August 1993

0

CONTENTS

Introduction 1.0

2.0 **Presigning Phase**

- 2.1 Workflow
- 22 Products - Stage 1
 - 2.2.1 Certificate of Title
 - 2.2.2 Survey Plan
 - 2.2.3 Presigning Aerial Photography2.2.4 Presigning Photo Enlargement

 - 2.2.5 Concept Plantation Workbase
- 2.3 Products - Stage 2
 - 2.3.1 Concept Plantation Map
 - 2.3.2 Lease Agreement Plant
- 2.4 Services
 - 2.4.1 Nomenclature Approval

3.0 **Plantation Establishment Review Phase**

- 3.1 Workflow
- 3.2 **Products**

4.0 Sustainable Growth Review Phase

- 4.1 Workflow
- 4.2 **Products**
 - 4.2.1 Sustainable Growth Aerial Photography
 - 4.2.2 Sustainable Growth Workbase
 - 4.2.3 Interim Plantation Map
 - 4.2.4 Final Plantation Map
 - 4.2.5 New Lease Agreement Plan

5.0 Post Plantation Establishment Phase

- 5.1 Workflow
- 5.2 **Products**

6.0 **General Services**

Appendices

- A. Costings
- **Definition of Terms** B.

1.0 Introduction

This document describes the products and services together with delivery times based on average property size sectioned according to the various phases of a sharefarm plantation life cycle; vis *Presigning, Plantation Establishment, Sustainable Growth Review and Post Plantation Establishment,* provided by Land Information Branch to support the West Coast Sharefarm activity within the Afforestation Management sub program of the Forest Resources Management Program. Costs and average timings for each product and service are documented separately in appendix A. Detailed descriptions and specifications of the products and services are to be provided in a separate document entitled - "Data Definitions and Specifications".

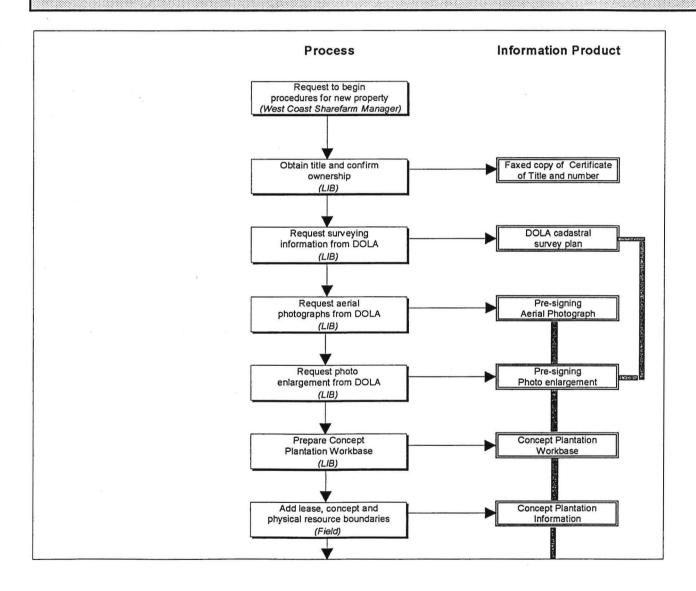
Development of the sharefarming methodology has been and continues to be an evolving process and has resulted not unexpectedly in documentation lagging behind and a lack of standardisation of processes. The production of this document has assisted in formalising and standardising the approach and will provide the model for extending the services to encompass all the land related information requirements for the Afforestation Program. Significant commitment remains to bring together in an integrated environment the system from which the delivery of this required information will be realised and a seperate project brief is being developed by LIB to address this issue.

2.0 Presigning Phase

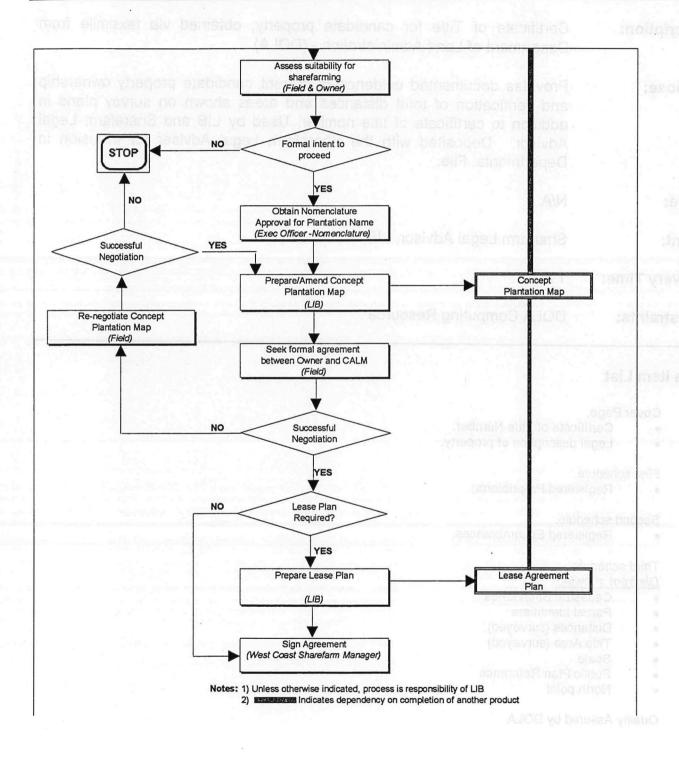
The Presigning phase includes all activities from initial interest in a property to the signing of a formal agreement between CALM and the property owner(s) and concludes prior to any physical plantings.

2.1 Workflow

PRESIGNING PHASE



PRESIGNING PHASE -cont



2.2 Products - Stage 1

2.2.1 Certificate of Title

Description: Certificate of Title for candidate property, obtained via faxsimile from

Department of Land Administration - (DOLA).

Purpose: Provides documented evidence of current candidate property ownership

and verification of total distances and areas shown on survey plans in addition to certificate of title number. Used by LIB and Sharefarm Legal Advisor. Deposited with the Sharefarm Legal Adviser for inclusion in

Departmental File.

Scale: N/A.

Client: Sharfarm Legal Advisor, LIB.

Delivery Time: 1 hour

Constraints: DOLA Computing Resource.

Data Item List

- i) Cover Page.
 - Certificate of Title Number.
 - Legal description of property.
- ii) First schedule.
 - Registered Proprietor(s).
- iii) Second schedule.
 - Registered Encumbrances.
- iv) Third schedule

Diagram showing:

- Cadastral Boundaries
- Parcel Identifiers
- Distances (surveyed)
- Title Area (surveyed)
- Scale
- Public Plan Reference
- North point
- NB Quality Assured by DOLA

2.2.2 Survey Plan

Description: A plan of a cadastral survey of the candidate property carried out by a

licensed surveyor and registered with Department of Land Administration.

Purpose: To precisely define the boundaries of the parcels making up the candidate

property, in terms of bearings, distances and angles.

Used by LIB to:

Define the scale required for the Photo Enlargement.

 Define the property boundaries on the Concept Plantation Workbase and all subsequent plans.

Produce Lease Agreement Plan if required.

Scale: Various.

Client: LIB

Delivery Time: 1-2 working days.

Constraints: AMG coordinates for boundaries not defined.

Data Item List

- i) Tenure Theme
 - Parcel Identifiers
 - Cadastral Boundaries (surveyed)
 - Distances (surveyed)
 - Parcel Area (surveyed)
- ii) Marginal Information
 - Scale
 - Field Book Number
 - Public Plan Reference
 - Land District Name
- iii) Survey Theme
 - Surveyors Certificate
 - Angles (surveyed)
 - Bearings (surveyed)
 - Distances (surveyed)

NB Quality Assured by DOLA

Quality Assured by DOLA

2.2.3 Presigning Aerial Photography

Description:

Most suitable aerial photography of a candidate property.

Colour preferred at scale 1:25,000. Usually black and white available as fall back position.

Purpose:

To identify the candidate property and immediate surrounding properties and to highlight discernible topography.

- Field provided with stereoscopic coverage of candidate and surrounding properties for navigation, reconnaissance and relief assessment (e.g. drainage)
- Used by LIB to prepare aerial photo enlargement order for DOLA processing.

Scale:

If available 1:25,000 colour however B&W normally available at 1:50,000 or 1:40.000.

Client:

West Coast Sharefarm Manager

Delivery Time:

New Order: 10 -15 working days

Suitable photography available in CALM: up to 5 working days

Constraints:

- Only supplied at a nominal scale and not rectified.
- The aerial photography that is available at LIB or Regional/District offices may be out of date and/or not at the required scale. In these cases a new order is placed with DOLA (via LIB).

Data Item List

- i) Aerial Photography Theme.
 - Job Number/Project Number
 - Job Title
 - Flying Height
 - Focal Length
 - Scale
 - Film Number
 - Run Number
 - Photo Number
 - Photography Date

NB Quality Assured by DOLA

2.2.4 Presigning Photo Enlargement.

Description: Enlargement of the Presigning Aerial Photography to a nominated scale,

covering the candidate property and surrounds. Two (2) copies required;

one for field usage, one for West Coast Sharefarm Manager.

Purpose: Used by LIB as the base for the Concept Plantation Workbase.

Scale: Determined from survey information obtained from Survey Plan.

Approximately 1:10,000.

Client: LIB, Field.

Delivery Time: 10-15 elapsed working days. (Multiple orders can be processed

concurrently)

Response: West Coast Sharefarm Manager to return completed Product

Acknowledgement Slip upon receipt of photography.

Constraints: Same as for *Presigning Aerial Photography*.

In addition as DOLA hold negatives, their priorities influence delivery.

Data Item List

0

i) Aerial Photography Theme. Refer to *Presigning Aerial Photography* except that the scale represents the scale of the enlargement, not the scale of the photography used to produce the enlargement.

NB Quality Assured by DOLA

2.2.5 Concept Plantation Workbase

Description:

A workbase covering a candidate property consisting of;

- (i) **Presigning Photo Enlargement** of the candidate property enhanced with relevant tenure information
- (ii) overlay defining soil units boundaries and classifications
- (iii) overlay defining the proposed plantation design
- (iv) an overlay defining the lease agreement.

The workbase is compiled in two stages.

LIB initially prepares the workbase with clear overlays of items (ii)-(iv) and appropriate legends and forwards the workbase to the field managers. Field managers subsequently complete the overlays. The completed overlays are returned to LIB for the preparation of the concept plantation map.

Purpose:

Provides the mechanism for field officers to

 record/delineate soil, proposed plantation layout, relevant topography and proposed lease definition information arising from field negotiations and reconnaissance

Client:

West Coast Sharefarm Managers

Delivery Time:

1-3 working days after receipt of photo enlargement.

Constraints:

As the base is an unrectified photo enlargement, all interpretations and boundaries delineated on the base will similarly be unrectified(distorted). Any area statements calculated from the base or overlays will be imprecise and nominal only and must be viewed with extreme *caution*.

Data Item List

i) Base.

Tenure Theme

Cadastral Boundaries Parcel Identifiers Registered Proprietors

Marginal Information

CALM District Name Scale (Nominal) National Map Reference CALM Map Reference Registration Marks North Point

- Aerial Photography Theme
- Photo Enlargement Area Statement

Property Title Area

Photo Interpreted Property Area

Area Variance

(

Quality Assurance

LIB Endorsement **Endorsement Date**

Physical Resource Survey Overlay

- Cadastral Boundaries (Nominal)
- Soil Units

Soil Unit Polygons

Northcote Soil Classification

Soil Grade

- Area Statement by soil grades (Nominal)
- Physical Resource Survey Legend
- Marginal Information

Product Name

Surveyed By

Interpreted By

Survey Date

CALM Plan Number

Registration Marks

Quality Assurance

Field Manager Endorsement

Endorsement Date

- Concept Plantation Layout Overlay (iii
 - Cadastral Boundaries (Nominal)
 - Concept Plantation Layout
 - **Planting Units**

Planting Polygon (Nominal)

Planting Species

Planting Year

Non Planting Type

Non Planting Units

Non Planting Polygon (Nominal)

- **Boundary offsets**
- **Plantation Layout Legend**
- Layout By
- Layout Date
- Topographic Theme
- Marginal Information

Product Name

CALM Plan Number

Registration Marks

Quality Assurance

Field Manager Endorsement

Endorsement Date

- iv) Lease Agreement Overlay
 - Cadastral Boundaries (Nominal)
 - Sharefarm Lease Polygons (Nominal).
 - Lease Layout By
 - Lease Layout Date
 - Marginal Information.

Product Name

Registration Marks

Quality Assurance

Field Manager Endorsement

Endorsement Date

Registered Proprietors

2.3 Products - Stage 2

2.3.1 Concept Plantation Map

Description:

The consolidation of the concept plantation workbase into a single map product, displaying;

- (i) relevant cadastral and topographic information using data from the **Concept Plantation Workbase** and other sources.
- (ii) Concept plantation layout as described in the **Concept Plantation Workbase**.

Purpose:

As an integral part of the formal contractual agreement, it defines the conceptual layout of the plantation and area statements used for the initial determination of annuity payments to the property owner(s).

Serves as the recording base print for POCS (section 13.4 of the Pine Management Guide)..

Scale:

1:10,000.

Client:

West Coast Sharefarm Managers, LIB, Forest Management Branch, Fire Protection Branch.

Delivery Time:

2 - 3.5 working days after receipt of Concept Plantation Workbase. If geodetic control information not available at LIB an additional day required.

Constraints:

The provision of correct spatial positioning of the property boundaries is dependent upon the time available to acquire accurate survey coordinates from DOLA.

The methodology for transcribing other boundaries from the presigning photo enlargement workbase involves a simple linear transformation relative to the positioning of the cadastral boundaries and excludes any compensation for distortion in the photography. Consequently internal boundaries and calculated areas are approximate only.

Data Item List

- i) Tenure Theme
 - Cadastral Boundaries
 - Parcel Identifiers
 - Registered Proprietors

(

- ii) Marginal Information
 - **CALM District Name**
 - Scale

0

- **Local Government Authority**
- National Map Reference
- CALM Map Reference
- Product Name
- Physical Resource Information iii)
 - Soil polygon(database attribute)
 - Soil grade (database attribute)
 - Northcote soil classification (database attribute)
 - Area statement by soil grade
- Concept Plantation Layout
 - Plantation Name
 - **Planting Units**
 - Planting Polygon

Planting Species Planting Year

Non Planting Units

Non Planting Polygon Non Planting Type

Aea Statement

Planting by species

Non Planting by non planting type

Nett Planting Area Nett Non Planting Area **Gross Plantation Area** Annuity Area

- iv) Sharefarm Lease Theme
 - Lease Polygons
 - Lease Area
- V) Topography Theme
- vi) **Quality Assurance**
 - Field Manager Endorsement
 - **Endorsement Date**
 - LIB Endorsement
 - **Endorsement Date**
 - **Accuracy Statement**
- Coordinate System vii)
 - Australian Map Grid (AMG)

2.3.2 Lease Agreement Plan

Description: Provides a legal description of the area of land to be leased by CALM. The

plan contains: distances, angles, area to be leased and relevant cadastral information. This plan is not required if the lease is coincident with a location(s) that can be identified by legal description. West Coast

Sharefarm Manager to advise if plan required.

Purpose: Legal description required for contractual documentation and registration

with the Land Titles Office, DOLA.

Scale: 1:10,000.

Client: Sharefarm Legal Adviser, LIB.

Delivery Time: 1-2 working days.

Constraints: The plan is prepared using precision survey traversing methodology but is

not mapped in true geographic position.

Data Item List:

- i) Tenure Information
 - Property(s) boundaries
 - Parcel identifiers
 - Distances and angles
 - Registered proprietor(s)
 - Certificate of Title number
- ii) Marginal Information
 - Product Name
 - CALM District Name
 - Land District
 - Local Government Authority
 - National Map Reference
 - CALM Map Reference
 - CALM File Number
 - Capture method
 - North Point
- iii) Sharefarm Lease Theme
 - Lease Polygon
 - Lease Area
- iv) Quality Assurance
 - LIB Endorsement
 - Endorsement Date
 - Field Manager Endorsement
 - Endorsement Date

2.4 Services

0

2.4.1 Nomenclature Approval

Description: In accordance with the Plantation Nomenclature Guidelines, circular 1/91,

the West Coast Sharefarm Manager or delegated LIB officers formulate a plantation name and sends it through to the Executive Officer, Departmental Nomenclature Committee for approval. Client to be notified

Client: West Coast Sharefarm Manager.

Delivery Time: 0.5 days to prepare notification to Executive Officer. Up to 5 days before

confirmation is given. Executive Officer Nomenclature Committee has delegated authority to provide approval without reference to Nomenclature Committee if plantation name is in accordance with policy and guidelines.

Constraints: Nomenclature Committee meets quarterly or as required. Queries on policy

or changes in policy may delay approval.

0

3.0 Plantation Establishment Phase

This phase covers the period from the signing of the formal sharefarm agreement, and subsequent planting and tending operations through until the commencement of the **Sustainable Growth Review Phase** (refer to section 4.0 for definition)

3.1 Workflow

LIB is not involved during this period.

3.2 Products

No products or services have been identified to be supplied by LIB during this period.

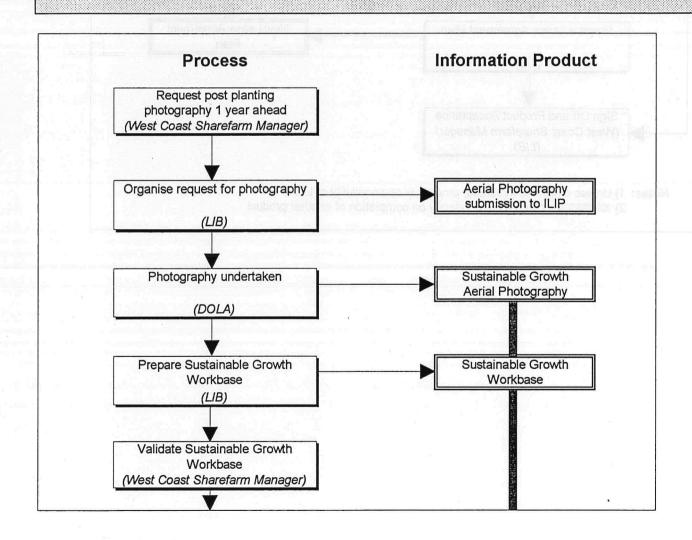
4.0 Sustainable Growth Review Phase

This phase covers the period during which a review is undertaken of the concept plantation layout versus actual plantings and concludes with a final plantation map. The review period commences from the time that sustainable growth **should** have occurred as stipulated in the Sharefarm Agreement or as deemed by the West Coast Sharefarm Manager to have been achieved. For simplicity, the term 'when sustainable growth should have occurred' is used in this document to refer to the timing of this phase.

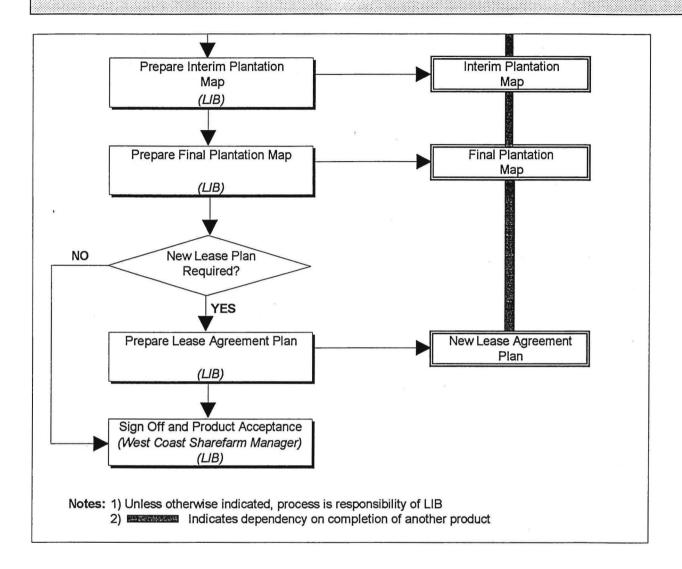
The commencement and/or duration of the review period may or may not be specified in the Sharefarm Agreement. For softwood sustainable growth should occur approximately 3 years after planting.

4.1 Workflow

SUSTAINABLE - GROWTH REVIEW PHASE



SUSTAINABLE - GROWTH REVIEW PHASE (cont)



4.2 Products

4.2.1 Sustainable Growth Aerial Photography

Description:

Black and white stereo aerial photography taken of a sharefarm property when sustainable growth should have occurred. Two (2) sets required, one to remain in pristine condition for forwarding to property owner, as per contract. The other for LIB and field use.

Purpose:

- to enable LIB to initially delineate and identify planting and non planting units
- to enable field officers to carry out field validation of planting and non planting units.
- Used by field officers for other non sharfarming activities.

Scale:

Approximately 1:10,000.

Client:

West Coast Sharefarm Manager, LIB

Delivery Time:

Usually within 2 months of the flying date specified by CALM in its annual aerial photography program.

Constraints:

Must be planned at least 12 months in advance so as to be prioritised departmentally with other requests for inclusion in CALM's annual aerial photography submission to the State's Land Information Capture Program. The approximate dates for when the photography should be flown for individual sharefarm properties are to be specified.

Weather conditions may delay the photography program and cause the delivery time of the photography to be longer than two months.

Must be completed within a specified time, if stipulated in the Sharefarm Agreement.

Only supplied at a nominal scale and is not rectified.

Supplied in conjuction with the Sustainable Growth Workbase.

Data Item List:

i) Aerial Photography Theme. Refer to Presigning Aerial Photography

4.2.2 Sustainable Growth Workbase

Description:

A workbase used to define actual growth (a snapshot) of a sharefarm plantation when sustainable growth should have occurred.

It is compiled in two stages:

Using photogrammetric techniques LIB interprets the **Sustainable Growth Aerial Photography** and maps on the workbase **discernable** planting and non planting areas (and classified broadly as such) and relevant topography. LIB augments this with the lease and property boundaries and other descriptive information extracted from the **Concept Plantation Map** and forwards the workbase to the West Coast Sharefarm Manager.

The West Coast Sharefarm Manager validates, rationalises, and amends interpretations, classifies planting and non planting together with the four (4) categories of "failure", colour coded according to specifications, and returns the completed workbase to LIB for compilation of the Final Plantation Map.

Purpose:

Used in conjunction with the **Sustainable Growth Aerial Photography**, to provide the mechanism to field officers to field validate the planting and non planting areas.

Scale:

1:10,000.

Client:

West Coast Sharefarm Managers, LIB.

Delivery Time:

After receipt of Sustainable Growth Aerial Photography properties pre 1991 (2-3.5 days), post 1991 (1-2 days).

Constraints:

Dependent on the accurate identification of control points on aerial photography.

Production is governed by priorities and resources. An annual works program .needs to be developed, prioritised and funded during the budgettry cycle.

Delays will be experienced if non conformity to the specifications occur.

Data Item List:

i) Tenure Theme
Cadastral Boundaries
Lease Polygon

ii) Topography Theme

iii) Plantation Growth Identification
Planting Polygons
Non Planting Polygons
Non Planting/Planting Indicator
Plantation Layout Legend
Plantation Name

Completed by West Coast Sharefarm Manager:

Planting Polygons (revised)
Planting Year
Planting Species
Non Planting Polygons (revised)
Non Planting Type
Boundary Offsets
Planting Status
Categorisation of failed areas (colour coded)

iv) Marginal Information
Scale
Product Name
Compiled By
Compilation Date
National Map Reference

v) Quality Assurance
LIB Endorsement
Endorsement Date
Field Manager Endorsement
Endorsement Date

4.2.3 Interim Plantation Map

Description: This is an interim product to assist the field in verifying LIB's interpretation

of the negotiations rundertaken in defining the final and agreed plantation

layout and resource area statement for a sharefarm property.

Purpose: Used by the field to verify interpretation of field information..

Scale: 1:10,000.

West Coast Sharefarm Manager

Delivery Time: 1.5 - 3 days after return to LIB of completed Sustainable Growth Workbase

and negotiation details.

Constraints: As per Sustainable Growth Workbase

Data Item List

Client:

As per the Sustainable Growth Workbase.

4.2.4 Final Plantation Map

Description:

The consolidation of the **Sustainable Growth Workbase** and negotiations into a map defining the final and agreed plantation layout and resource area statement for a sharefarm property.

Purpose:

Used by the field

for the recalculation of annuity payments

 as the final base print for POCS (section 13.4 of the Pine Management Guide).

for other operational activities

Scale:

1:10,000.

Client:

West Coast Sharefarm Manager, Regional and District Managers and Planners, Fire Protection Branch, Forest Management Branch

Delivery Time:

1.5 - 2.5 days after return to LIB of completed Interim Plantation Map.

Constraints:

As per Sustainable Growth Workbase

- Agreed resource area statement may differ to the areas used for the calculation of annuities as specified in the Concept Plantation Map.
- With present mapping methodology at 1:10,000 Scale LIB can guarantee area statements to be correct to 0.5 hectare per category, i.e. the gross plantation area, the total area of successful plantation, the total area of failed plantation, the total area of native vegetation.

Data Item List

As per the Concept Plantation Map except

- i) references to Concept Plantation are changed to Plantation (Planting status changed from proposed)
- ii) inclusion of
 - a) Planting Year
 - b) Nett Successful Establishment Area
 - c) Nett Failed Establishment Area

0

4.2.5 **New Lease Agreement Plan**

Description: Where variations have occurred between the proposed and actual planting

> boundaries to the extent that planting has occured outside the lease boundary, LIB will advise West Coast Sharefarm Manager with the possible

> The plan is prepared using precision survey traversing methodology but is

outcome of a new lease agreement to be prepared.

Purpose: To redefine the legal description, if necessary, as required for contractual

documentation and registration with the Land Titles Office, DOLA.

Scale: 1:10,000.

Client: Sharefarm Legal Adviser, LIB.

1-2 working days.

Constraints:

not mapped in true geographic position.

Data Item List:

Delivery Time:

As per Lease Agreement Plan

5.0 Post Plantation Establishment Phase

This phase covers the period after the completion of the Sustainable Growth review Phase.

5.1 Workflow

LIB is not involved during this period.

5.2 Products

No products or services have been identified to be supplied by LIB during this period.

6.0 General Services

Description:

LIB provides general support services, such as to

- advise on and resolve adhoc technical and procedural problems.
- develop and document workflows, procedures and methodologies
- carry out system development
- provide representation on committees, working groups

Client:

West Coast Sharefarm Manager, Field Officers, Legal Advisor, Forest

Management Branch and other CALM staff.

Delivery:

As appropriate.

Constraints:

Resource availability.

Products and Services Costings

Labour and material costs are generally a function of the complexity of the plantation layout, and the topography and the size of the property, therefore a standard and firm cost per property is not applicable. Nevertheless an estimate based on prior experience, has been calculated for an average or medium complexity property 100 ha in size. The costings in the following relate to this "average" sharefarm property. In practice variations of up to 50 per cent can be expected.

These costings have been reviewed and the administrative overhead as detailed in CALM Administrative Instruction No 28 negated. The following figures can be used as performance indicators with a review period of 6 months following formalisation of this document.

COSTS:

Figures used are based on:

the top of level 1 officer = \$16.11 per hour mid level 4 officer = \$21.66 per hour top of level 5 officer = \$26.66 per hour

Based on times and costs for an average or medium complexity property of 100ha.

		TIME (HOURS)	COST(\$)	COST PER HA (\$)
Presigning Phase	Minimum	40.50	816	
	Maximum	70.00	1504	
	Average	55.25	\$1160	\$11.60
Sustainable Growth	Minimum	22.00	490	
Phase (post 1991)	Maximum	43.00	951	
	Average	32.50	\$720	\$7.20
Sustainable Growth	Minimum	29.00	642	
Phase (pre 1991)	Maximum	55.00	1211	
	Average	42.00	\$926	\$9.26

0

Presigning Phase - Summary

Product/Service

		<u>L</u>	<u>abour</u>	<u>Materials</u>
Sta	age 1	Average Hours	e Cost	Cost
1.	Obtain title, confirm ownership dispatch title.	1	\$16	\$7.50/title
2.	Obtain Survey Plan.	1	\$16	\$2.0/plan (1-3)
3.	Obtain and dispatch Aerial Photographs Photographs.	0.5	\$13	\$4.0/print (2-4)
4.	Obtain Photo Enlargement.	1	\$27	\$60.0/Enlargement (2)
5.	Prepare and distribute Concept Plantation Workbase.	15	\$258	\$10
6.	Obtain Nomenclature Approval.	1	-	
			\$330	\$159.50
Sta	ige 2			
7.	Compile Concept Plantation Map.	28.25	\$603.50	\$25
8.	Prepare lease Agreement Plan (if required)	8.5	\$254	\$20
	, , ,		\$857.50	\$45
		Total	\$1187.50	\$204.50

Notes

- 1. Except where asterisked, salary rate of top increment level 3 has been used. Asterisked costs reflect top increment level 5.
- 2. Salary overheads in accordance with Administrative Instruction 28 have not been used.

Sustainable Growth Review Phase - Summary

Product/Service

		Labour		<u>Materials</u>	
		Average hours	Cost	Cost	
1.	Coordinate requests and supply aerial photography.	1.5	\$40*	\$4.0/print (13)	
2.	Prepare and supply Sustainable Growth Workbase.*	10	\$216.5	\$20	
3. 4.	Prepare Interim Plantation Map Prepare and supply Final Plantation Ma	16.5 ap. 4.5	\$364.5 \$100	\$20 \$5/print (5)	
		Total	\$721.00	\$117.50	
5.	Prepare New Lease Plan (if required)	8.5	\$254	\$20	
		Total	\$975.00	\$137.50	

Notes

- * An additional 9.5 hours/\$206 average is normally required for pre 1991 plantings.
- 1. Except where asterisked, salary rate of top increment level 3 has been used. Asterisked costs reflect top increment level 5.
- 2. Salary overheads in accordance with Administrative Instruction 28 have not been used.

Freehold property that has been identified for initial assessment for sharefarming

APPENDIX B

Definition of Terms

Annuity Area

An area used in the determination of annuity payments. Only one version of the **Annuity Area** should occur. The one cited on the **Concept Plantation Map** is equal to the **Nett Planting Area**.

Area Variance

Expressed as a percentage (%) deviation from the property area as shown on the **Certificate of Title** and the area derived by measurement of the identified property boundaries from the aerial photo enlargement

Australian Map Grid

A national metric grid co-ordinate system of northings and eastings derived from a Universal Transverse Mercator projection of latitude and longitude to which spatial position can be referenced.

Boundary Offset

Spatial shift of a polygon/boundary from a known spatial boundary position.

Cadastral Boundary

Spatial representation of legal survey describing land tenure property boundary.

CALM Head Office File Number

Numerically sequenced number applied to individual catagories of correspondence. Allocated by Records Management Branch in SOHQ.

CALM Map Reference

Refers to published name of 1:50000 CALM map series.

CALM Plan Number

Land Information Branch's numeric indexing for miscellaneous map registration. eg. CALM 1370 - SW of WA 1:500,000.

Candidate Property

Freehold property that has been identified for initial assessment for sharefarming purposes.

Catchment Name

0

A name applied to a physical water catchment area and approved by the appropriate Nomenclature body. Refer to *Plantation Nomenclature*.

Certificate of Title Dealing Number

See Certificate of Title Instrument Number

Certificate of Title Instrument Number.

Dealings on a Certificate of Title are formally identified by an Certificate of Title Instrument Number.

Certificate of Title Area

The surveyed area of land shown on the Certificate of Title.

Certificate of Title

Interests/Shares in freehold property are formally registered by DOLA on the *Certificate* of *Title*, commonly referred to as *C/T*. A *C/T* is uniquely identified by a *Certificate* of *Title Register Number*.

Certificate of Title Register Number

The unique identfier for a Certificate of Title and consists of:

Volume (section of Land Act).
Compartment Folio (Serial number).

Compartment Number

Refer to Plantation Nomenclature.

Concept Plantation Layout

The optimum or preferred design of the plantation.

Fire Break

A cleared lane, especially in or around a plantation or forest, designed to contain outbreaks of fire and to provide rapid access to the site of fires.

Forest Block Name

A main territorial division of a forest, generally bounded by natural features and bearing a local proper name. (From: Forestry Terminology in WA - F.H.McKinnell; Tech Paper No.1)

Gross Plantation Area

The sum of the Nett Planting Area and the Nett Non Planting Area.

Land District

The DOLA subdivision of the referencing of Locations; normally a continuous area. All surveys are referenced to Districts.

Local Government Authority

A statutory administrative elected body under control of the Local Government Act. Either City, Town or Shire.

Locality Name

The name given to a general area and approved by the appropriate Nomenclature body. Refer Plantation Nomenclature.

Marginal Information

The explanatory notes, diagrams and scales shown in the margin of a map.

National Map Reference

A scale dependent map referencing system for the Australian Continent.

Nett Failed Planting Area

The aggregation of the *Polygon Areas* for all *Planting Units* with a *Planting Status* of *Failed Establishment*

Nominal

Within the context of this document, refers to any scale, area or distance derived by utilising now standard practices or rigorous solutions for corrections of source, spatial data errors.

Nett Non Planting Area

The aggregation of the **Polygon Areas** for all **Non Planting Units**

Nett Planting Area

The aggregation of the *Polygon Areas* for all *Planting Units*

Nett Resource Area

See Nett Successful Establishment Area

Nett Successful Planting Area

The aggregation of the calculated areas for all *Planting Units* with a *Planting Status* of *Successful Establishment*

Non Planting Types

0

Is one of:

- _ Native Vegetation
- Fire Break
- Other Exclusion

Non Planting Polygon

A tract of land, delineated by a **Polygon**, that is identified as not available for planting operations.

Non Planting Unit

A tract of land identified as unavailable for planting defined by:

- Non Planting Polygon
- Non Planting Type
- _ Polygon Area

Parcel Identifier

The unique identifier for a parcel of land, defined in terms of *Land District* and Lot/Location number or lot on plan/diagram number.

Photo Interpreted Area

An area interpreted by photo image analysis.

Plantation Name

Refer Plantation Nomenclature.

Plantation Nomenclature

A unique name assigned to a plantation. Refer to circular 1/91 for detailed description. The name consists of:

Forest Block Name, Locality Name or Catchment Name.

Compartment Number (optional) - sequential number assigned according to a managable unit size.

Planting Status

Is one	e of:
	Proposed
=	Successful Establishment
_	Failed Establishment

Failed Establishment is qualified by the Sharefarm Party responsible for failure.

Planting Species

Scientific name of resource such as
P. Radiata
P. Pinaster
E. Globulus

Planting Unit

A tract of land identified for planting and representing a management unit, defined by:

- _ Planting Polygon
- _ Planting Species
- _ Planting Status
- _ Polygon Area
- __ Planting Year

Planting Year

The year of planting for a Planting Unit.

Planting Polygon

A tract of land, delineated by a *Polygon*, that is identified as not available for planting operations.

Polygon

An enclosed boundary that has as generic attributes **Polygon Area** and **Perimeter** which are calculated from the spatial definition of the polygon. Polygons are usually classified in some way such as a type, category or theme.

Proprietor

The registered proprietor/owner of freehold property as stated on the Certificate of Title

Sharefarm Lease Agreement

The contractual document between CALM and property owner(s) defining the conditions under which the freehold property can be used for sharefarming purposes. Each agreement is uniquely identified by the *Certificate of Title Dealing Number* or *Certificate of Title Document Number*. The spatial extent of the Sharefarm Lease is defined by one or more *Sharefarm Lease Polygon*(s).

Sharefarm Lease Polygon

A tract of land, delineated by a Polygon, that is covered by a Sharefarm Lease.

Sharefarm Party

Is one of

- Sharefarm Proprietor(s)
- CALM

Sharefarm Property

Freehold property that encompasses one or more Sharefarm Lease Agreements.

Sharefarm Proprietor

The Proprietor(s) of a Sharefarm Property

Soil Survey Area Statement

The aggregate of each soil type.

Soil Unit

A tract of land identified as having a set of uniform soil characteristics, defined by

- Soil Unit Polygon
- Soil Grade
- Northcote Soil Classification
- Polygon Area

Soil Unit Polygon

A tract of land, delineated by a Polygon, that has a uniform set of soil characteristics.

Soil Classification

Soil type according to Northcote classification system

Soil Grade

Soil grade according to Physical Resource survey system

Standard LIB Sharefarm Project

All contracts entered into shall have the following products and services provided and will incur standard costs.

- (i) Copy of Certificate of Title.
- (ii) Survey plan of property.
- (iii) Aerial photography of property.
- (iv) Photo enlargement 1:10,000 scale.
- (v) Concept Workbase with 3 overlays.
- (vi) Concept Plantation map.
- (vii) Lease agreement plan (if required).
- (viii) Aerial photography of property after sustainable growth has occurred.
- (ix) Sustainable growth Workbase.
- (x) Final Plantation map.
- (xi) New lease agreement plan (if required).

Special LIB Sharefarm Projects

All contracts entered into that have additional products/alterations/iterations and services provided, on approval of the Afforestation Manager, to the standard products.

Surveyed Area

The official DOLA area calculated fron licensed surveyors field notes and used as legal area. Unit: Hectare.

Presigning Phase - Details

2.2.5 CONCEPT PLANTATION WORKBASE

(Asterisk indicates level 5 officer. Otherwise level 1).

i)	Verify details of request for field and ascertain photography and map coverage	0.5hr to 1.0hr	
ii)	Order aerial photography from DOLA (if required)	0.5hr	
iii)	Order and receive title from remote search	0.5hr to 1.0hr	
iv)	Search/order and receive survey information	1.0hr to 2.0hr	
v)	Prepare and order photo enlargement	0.5hr to 1.0hr	
vi)	Prepare/produce and distribute concept plantation workbase to field	6.0hr to 12.5hr	

TOTAL TIME 10.0hrs to 20.0hrs LABOUR COST \$172 to \$343

2.3.1 CONCEPT PLANTATION MAP

(Asterisk indicates level 5 officer. Otherwise level 2/4 officer Salary rate used).

i)	Search and obtain Geodetic files held by LIB	1.0hr
ii)	Check availablity of DAP data	0.5 to 1.0hr
iii)	Compile concept plantation map	4.0hr to 7.0hr
iv)	Polygonise and edit concept plantation map produce verification plot	4.0hr to 7.0hr
V)	Corrections/amendments	1.0hr to 2.0hr
vi)	Produce and distribute concept plantation map	1.0hr to 2.0hr
	TOTAL TIME LABOUR COSTS	13.0hrs to 24.5hrs \$247 to \$548

Note: If geodetic files are not held by LIB, the following additional items have to be included.

ix)	Search survey information to provide connection	2.0hr to 4.0hr	
	to geodetic traverse		
X)	Input survey data at Geodetic Services - DOLA	4.0hr to 7.0hr	
xi)	File translation (DOLA to CALM)	1.0hr	

TOTAL TIME	7.0hrs to 12.0hrs
LABOUR COSTS	\$152 to \$260
TOTAL TIME	20hrs to 36.5hrs

2.3.2 LEASE AGREEMENT PLAN

(Asterisk indicates level 5 officer. Otherwise level 2/4 officer salary has been used).

i)	Compile Lease Agreement plan	4.0hrs to 7.0hr
ii)	Produce verification plot	1.0hr
iii)	Corrections/amendments	1.0hr
iv)	Produce and distribute plans	1.0hrs

TOTAL TIME 7.0hrs to 10.0hrs LABOUR COSTS \$200 to \$308

Sustainable Growth Review Phase - Details

4.2.1 SUSTAINABLE GROWTH AERIAL PHOTOGRAPHY

Coordinate requests and supply of aerial photography

property

4.2.2 SUSTAINABLE GROWTH WORKBASE

(Usually prepared by level 4 officer).

Prepare, produce and distribute Workbase

5hrs to 15hrs \$108 to \$325

Note: If location has not been previously precision captured, steps ix) to xi) under 2.3.1 above, have to be completed before plotting can commence, and the additional items have been included.

TOTAL TIME 7hrs to 12hrs

\$152 to \$260

HENCE:

TOTAL HOURS 12hrs to 27hrs

\$260 to \$585

This will occur for all properties prior to 1991 plantings.

4.2.3 INTERIM PLANTATION MAP

(Asterisk indicates level 5 officer. Otherwise level 2/4 officer salary has been used).

i)	Search and assemble all relevant data files	1hr
ii)	Compile interim plantation information	4hrs to 7hrs
iii)	Polygonise, edit, area calculation produce verification map	4hrs to 7hrs
iv)	Corrections/amendments	1hr to 2hrs
V)	Produce and distribute interim plantation map	1hr to 2hrs
vi)	Problem Resolution	1hr to 2hrs

TOTAL TIME 12hrs to 21hrs LABOUR COSTS \$265 to \$464

LABOUR COSTS Note: When the data base has been established, times are anticipated to be 7.0 to 15.0 hrs in total.

4.2.4 PLANTATION MAP

(Asterisk indicates level 5 officer. Otherwise level 2/4 officer slary has been used).

Note: Figures are estimates only.

i) Corrections/amendments to Interim Plantation Map 2h

ii) Produce and distribute Final Plantation maps

2hrs to 3hrs 1hr to 2hrs

TOTAL TIME LABOUR COSTS

3.5hrs to 5.5hrs \$77 to \$122

4.2.5 NEW LEASE AGREEMENT PLAN

(Asterisk indicates level 5 officer. Otherwise level 2/4 officer salary has been used).

i) Compile New Lease Agreement planii) Produce verification plot4.0hrs to 7.0hr1.0hr

iii) Corrections/amendments 1.0hr
iv) Produce and distribute plans 1.0hrs

TOTAL TIME 7.0hrs to 10.0hrs

LABOUR COSTS

\$200 to \$308