# Appendix VIII Standard Operating Procedures - Road Deactivation



#### **Western Forest Products Limited**

## Road Deactivation Standard Operating Procedures **SOPs**

June 2000



Standard Operating Procedures -Road Deactivation

Notes

This Standard Operating Procedure (SOP) provides documented guidance to Western Forest Products staff, employees and contractors. By following these procedures, our operations should comply with all laws, regulations, and guidelines pertaining to forest practices and environmental protection.

WFP SOPs are intended to be working documents. They will be revised to reflect changes to laws, regulations, and guidelines related to forest management, and to reflect input from staff, employees and contractors.

Under no circumstances are these procedures to replace or come before WFP's Safety Policy.

 $\ensuremath{\mathsf{SOPs}}$  apply to everyone working in our company and contract operations.

These SOPs require that each employee perform their duties to the best of their abilities. We encourage staff, employees and contractors to take responsibility to clarify plans or activities if they are uncertain about how to achieve the desired results.

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Notes

Planning Guidelines

Review of Plans and Approvals

The Company Planner must review cutblock opening files (including maps, prescriptions, and correspondence) before road deactivation begins.

- · Confirm that the road deactivation plan has been
- Understand and comply with conditions that regulatory authorities may have prescribed.

Office and Field Review before Start-up

- Before work starts up, the Company Planner must meet with the Supervisor to review the deactivation plans for
- Review the deactivation plan, cutting permit, and road permit conditions, and the silviculture prescription (especially soil disturbance commitments).
- Review the layout, special prescriptions, stream and gully classifications and crossing requirements, and leave-tree strategies. Also review the field-marking
- Review the safety considerations and hazards identified during layout, and the appropriate action to be taken.
- Review the location of areas identified to have risks of landslides.
- 2. The Company Planner must confirm the accuracy of the cutblock map and deactivation plan.
  - Make adjustments where necessary.
- Prepare copies of maps, plans, and prescriptions for operators. Date and initial all copies.

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- The Company Planner must provide the Supervisor with up-to-date copies of all maps and plans.
   Exchange amended plans and maps for outdated
- Destroy all outdated maps and plans.
- The Company Planner must resolve concerns raised by the Supervisor; record the distribution list for maps and prescriptions issued; and accurately record meeting minutes, including names of participants.
- Document this information in a diary or pre-work checklist.
- Sign and date the pre-work checklist. File a copy in the internal record-keeping system.

On-site Crew Meeting before Start-up

- The Supervisor must review deactivation plans with operators before road deactivation begins.
  - . The Supervisor must ensure that all operators review and understand the operating commitments before beginning work in an area. Operators must also know who to contact, and how to contact them, if they encounter problems or cannot comply with the deactivation plan commitments.
- Review sensitive or amendment areas with operators before deactivation begins in these special areas. Where necessary, the Company Planner and Supervisor must walk and review sensitive areas with Operators before work starts in these areas.
- The Supervisor must give each operator an up-to-date copy of the deactivation plan and map. These must be stored in the machine for easy reference. Operators must return the plan and map to the Supervisor when they finish the deactivation work.

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- 3. It is the operator's responsibility to always match the plan and map to what they find on the ground. (For example, the map must match the field layout.) Operators must also ensure that they know and understand their roles before beginning work in an area.
- 4. During crew meetings, the Supervisor must keep an accurate record of attendance and any comments and concerns raised.
- · Document this information in a diary or crew meeting
- · Resolve concerns raised during these meetings in a timely manner

Monitoring Road Deactivation

- The Supervisor must regularly monitor road deactivation quality and progress by road system. Findings must be documented.
- Schedule regular monitoring of activities within each active area to ensure they are achieving planned objectives. Camp management will decide on the frequency of on-site visits according to company policy. Adjust the frequency to reflect the following:
- rate of progress
   weather conditions and seasonal constraints
   experience of operators
   complexity of deactivation plans
   environmental risks.

- Strictly follow seasonal constraints for worker safety and environmental protection. All activities must stop on or downslope of areas identified to have risks of landslides during periods of heavy rainfall.
- The Supervisor must monitor activities to ensure roads are properly deactivated and comply with the soil disturbance commitments noted in the silviculture prescription.

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- After each on-site visit, the Supervisor must document significant issues for follow-up.
- 2. Operators must report potential problems or resource features not noted on the deactivation plan to their Supervisor.
- · Do not disturb resource features (such as bear dens active or protected bird nests, and culturally-modified trees) not identified in the road deactivation plan.

  Report them to the Supervisor every day.
- Do not continue activities that may disturb these features until the Supervisor reviews them in the field and gives written instructions about how to continue. Written instructions must be attached to all copies of plans and maps.
- Operators must contact their supervisor immediately if they are uncertain of the deactivation plan, or have a problem meeting the plan's objectives. Operators must work elsewhere until they get instruction from their supervisor on how to continue.
- The Supervisor must accurately document resolutions of problems, and report them to the Company Planner The Company Planner must keep a written summary about all resource features, problems, and issues.

The Company Planner must co-ordinate final inspections of roads on a road system or cutblock basis, at the same time road deactivation is being completed.

- Ensure that, where required, a qualified, registered professional has certified that the works were completed in general conformance with the deactivation plans.
- Formally assess whether deactivation complies with approved plans and this SOP shortly before deactivation is completed on a road system or cutblock. Prepare action plans for all outstanding issues. Give a copy to the Supervisor to correct the deficiencies.

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- Do a site degradation resurvey if required in the silviculture prescription.
- Correct problems to ensure compliance with the approved deactivation plan. Document, date, and sign off on actions taken on the action plan and final inspection report. File all documentation in the internal record-keeping system.
- · Review assessments with the Supervisor and operators.

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Notes

General Road Deactivation Procedures

These procedures are written to help workers do their job in a safe and environmentally sound manner.

Safety quidelines

 At all times, activities must comply with WFP's Occupational Safety Guidelines. If you identify hazards and cannot safely correct or avoid the situation, notify your supervisor immediately. Work elsewhere until you get instructions on how to

Start-up meeting

- The Supervisor must document attendance, date and time of the meeting, the instructions given, and the distribution list for deactivation plans and maps in a diary or checklist
- Supervisors must give all operators key documents and instructions about the deactivation objectives and safety procedures before work begins. Instructions should be given progressively, as cutblocks are deactivated (in manageable amounts, specific to where work is occurring).
- Review the field-marking codes (ribbons and paint colours) and the map legend with the Operators.
- Review rainfall shutdown procedures for areas identified to have risks of landslides.

- Do not begin road deactivation without written plans and approvals.
- Deactivate roads according to approved deactivation maps and plans, and the field layout.

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Uncertain workers

 If a worker is uncertain about how to perform a task to achieve the desired results, they must immediately get clarification from their supervisor before continuing, and work elsewhere until they get further instructions. Workers must take responsibility to ask questions when they are uncertain.

Environmental quality

- When workers encounter the following, they must contact their supervisor immediately (or work elsewhere until they get instructions on how to proceed):
- unforeseen problems that could result in environmental damage
   unmapped or wrongly-classed fish streams (S1—S4 streams)
- missing or confusing layout ribbons.
- Deactivate roads to manage water drainage patterns, to minimize site disturbance, to avoid destabilizing slopes, and to prevent sediment from entering watercourses. Do not place erodible material into a riparian area where it can enter a stream, lake, or watercourse.
- In sensitive riparian areas, stop work when you cannot control mud and sillation conditions. Before shutting down, make sure there are no hazards in the area and that the environment is protected.
- Protect regeneration, standing timber and sensitive areas during road deactivation.

The Company Planner, Supervisors, and Operators must walk difficult or sensitive road sections before working on them.

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Streams and gullies

 Make every effort to clean out any erodible materials and woody debris that road deactivation activities have deposited into designated streams and gullies.

Heavy rainfall

- During periods of heavy rainfall (defined in the Slope Stability SOP), stop road deactivation on or downslope of areas identified to have risks of landilide. landslides
- · Get instructions from your Supervisor immediately.

Ditches and culverts

 When deactivating near ditches and culverts, take care to properly restore natural drainage patterns, and to avoid blocking the flow of water through all drainage structures

W ∞d use

- Where possible, place all logs and puncheon recovered from wooden culverts in appropriate areas for salvage or disposal.
- If puncheon is used to control soil disturbance, remove it. Distribute it around the area to comply with reforestation objectives.
- Use non-merchantable logs and tree tops for puncheon.

WCB first aid regulations require safety equipment to be on-site at all times and checked regularly by operators. Correct deficiencies promptly.

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Mre equipment

- During the fire season, all equipment required by the Forest Fire Prevention and Suppression regulation must be on-site, and checked by the Operators on a regular basis, depending on weather patterns and fire danger risks. Correct deficiencies recompile. promptly.
- All workers required to fight fires must be trained annually and understand their fire protection and fire suppression duties.

Petroleum products

Return all petroleum and hazardous waste materials to the shop or camp for proper disposal. Do not store or transfer petroleum (mobile tankers, tidy tanks or barrels) in Riparian Management Areas. Do not store or service equipment within Riparian Management Areas.

Litter and waste

 Contain waste products, litter, and empty containers daily at the site. Dispose of them appropriately in camp.

Spill kits

- · Petroleum and hazardous waste spill kits must be on equipment at all times, and inspected regularly by operators. Restock them promptly. Document all inspections. (Consider using time cards or equipment log books to record routine inspections).
- · Handle all petroleum and hazardous waste spills according to the WFP Spill Plan.
- Supervisors must ensure that operators have spill kits and know spill procedures.

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Equipment service

- Operators must visually inspect hoses, fittings, hydraulic lines, etc. for signs of excessive wear or leaks, as part of their daily service and maintenance
- Repair all leaks and broken or cracked hoses
- Where possible, bleed off air pressure on hydraulic equipment at the end of each shift.
- Clean up all spills immediately. Dispose of soiled cleanup materials in the approved manner. Operators must give spill reports to their Supervisor at the end of the day.
- · Do not refuel, service, or wash equipment in Riparian Management Areas
- Wash machines only in designated and approved areas (such as gravel pits and quarries).
- Return all servicing waste and litter to the shop or camp daily. Dispose of it in the approved manner.

Slides or slumps

Report any slides or significant slumps to the Supervisor immediately.

Plans and maps

Keep road deactivation maps and plans in equipment at all times. Operators must follow the plans, and be able to locate themselves on the plan by referring to field-layout markers.

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Hazard signs

 Make sure road deactivation hazard signs are in place at the start of affected roads before road deactivation or rehabilitation begins.

#### Field modifications

- Make minor field modifications only where necessary to address unforeseen circumstances, and where doing so will not adversely affect other resources.
- Note all modifications and report them to the Supervisor every day.

#### Water management

- During all phases of road deactivation and rehabilitation, manage and control water to maintain water quality and restore natural drainage patterns.
- Operators must check the classification of all streams before removing culverts and bridges. (There may be timing constraints for in-stream work if the stream is fish-bearing.)
- During culvert removal, control sedimentation where water quality concerns exist. (For example, use silt fencing, straw bales or geotextile cloth.)

#### Culvertremova

- Reuse or dispose of metal culverts removed during road deactivation or rehabilitation, in the approved manner.
- Where possible, place all logs and puncheon recovered from wooden culverts in appropriate areas, for salvage or disposal.

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#### Road sloping

- Outslope or inslope road sections to control drainage where required.
- Outslope roads without ditches if fill slopes are stable. Do this for sections where ditches are subject to plugging.
- Inslope roads if fill slopes are erodible. Do this for short sections, installing cross-drains to keep water from building up.

#### Cross-ditches

- Unless the approved plans say otherwise, build all cross-ditches to maintain vehicular access.
- Build extra cross-ditches on steep grades, switchbacks, road junctions, places with heavy ground water seepage, and ditches prone to plugging.
- Make sure all cross-ditches have adequate ditch blocks (made from erosion-resistant materials) on the downhill side.
- Do not direct water onto unprotected, erodible soils.
  Use rip-rap at the outflow as needed to prevent erosion.
- Install all cross-ditches with adequate skew and slope to make sure that they are self-cleaning.
- Avoid overloading existing drainage systems (streams, gullies, and swales). Do not concentrate water onto potentially-unstable terrain.
- Supervisors must make sure operators know about any downstream values when they install crossditches and waterbars.

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#### Sidecast pull-back

- When pulling back sidecast on unstable slopes, place the recovered material on the inside edge of the road surface.
- Take care to prevent water from accumulating in either the ditch or the road prism. Install crossditches frequently (at least as deep as the ditchline) and scarify the road surface.

#### Revegetation

 Where the plan prescribes revegetation, seed all exposed soil capable of supporting vegetation in the first growing season after road deactivation is finished. Document the revegetation program.

#### Riparian Management Areas

- Keep stream courses clear of introduced debris at all times.
- Do not work in Riparian Management Areas without getting written approval beforehand.
- Use machines in watercourses as little as possible.
   Limit it to approved crossings only.
- Restore the integrity of stream channels at all crossings, according to the approved procedures.

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#### Inspections

- Inspect all deactivated roads according to inspection and maintenance plans. Correct any deficiencies promptly, as the Company Planner directs.
- The Company Planner must document all inspections and corrective measures. All inspection and follow-up reports must be filed in the internal record-keeping system.

#### Emergencies

 If an emergency occurs (like a landslide, fuel spill, forest fire, or injury), workers must take appropriate measures to ensure personal safety, then follow applicable WFP policies and procedures. (For example, for fuel spills follow the WFP Spill Plan.)
 Workers must contact their supervisor immediately.

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Temporary (Seasonal) Deactivation Procedures Temporary or seasonal deactivation is used where regular road use is suspended for up to three years.

#### Grader berms

 Remove or breach impermeable grader berms. Breach at least every 50-metres to prevent water build-up on the road surface.

#### Cross-ditches and water bars

- Install cross-ditches on all roads as marked in the field and according to the approved road deactivation plan.
- Install water bars on all switchbacks, steep grades, and areas of high risk.
- Do not divert water onto erodible soils. Use rip-rap at the outflow as needed to prevent erosion.

#### Cleaning ditches and culverts

- Make culverts fail-safe. Clean woody debris from all ditches and culverts. Pile or disperse debris. Make sure it does not damage regeneration.
- Do not disturb vegetation growing in the ditchline, unless it keeps ditches and drainage structures from functioning properly, or unless it obstructs visibility.

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Semi-permanent Deactivation Procedures

Semi-permanent deactivation is used when road use is temporarily suspended in isolated areas and in areas prone to mass wasting. It is also used where regular road use will be suspended for more than three years.

#### Cross-ditches

- Remove all existing culverts, or make them fail-safe with a cross-ditch on the downhill side, according to the approved deactivation plan.
- Do not direct water onto unprotected, erodible soils.

  Use rip-rap at the outflow as needed to prevent erosion.

#### Grader berms

 Remove or breach impermeable grader berms. Breach at least every 50-metres to prevent water build-up on the road surface.

#### Bridges

 Remove or repair temporary and semi-permanent bridges, according to the approved deactivation plan.

#### Road sloping

 Outslope or inslope the road as required to control drainage.

#### Cleaning ditches and culverts

- Make culverts fail-safe. Clean woody debris from all ditches and culverts. Pile or disperse debris. Make sure it does not damage regeneration.
- Do not disturb vegetation growing in the ditchline, unless it keeps ditches and drainage structures from functioning properly, or unless it obstructs visibility.

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Pull-back

Pull back all potentially-unstable sidecast.

Permanent Deactivation Procedures

Permanent deactivation is used where roads will be closed

#### Drainage structures

- Remove or breach all existing culverts and bridge structures.
- Re-establish all natural drainage patterns, and restore channel stability.

#### Grader berms

 Remove or breach all impermeable grader berms, or breach at least every 50 metres to prevent water build-up on the road surface.

#### Road slopin

Outslope or inslope the road as required to control drainage.

#### Cleaning ditches and culvert

- Make culverts fail-safe. Clean woody debris from all ditches and culverts. Pile or disperse debris. Make sure it does not damage regeneration.
- Do not disturb vegetation growing in the ditchline, unless it keeps ditches and drainage structures from functioning properly, or unless it obstructs visibility.

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ull-back

- Pull back all potentially-unstable sidecast, keeping drainage patterns open and free from pull-back materials. Outslope old road surfaces.
- Before placing pull-back materials against a cut slope, scarify or ditch the road surface to promote drainage. Place slash so it is stable.

#### Revegetation

 Where the plan prescribes revegetation, seed all exposed soil capable of supporting vegetation in the first growing season after road deactivation is finished. Document the revegetation program.

#### Rehabilitation

 Rehabilitate required road sections, as specified in the approved road rehabilitation plan.

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#### Road Rehabilitation Procedures

The objectives of rehabilitation are to restore the ability of the site to grow trees, improve slope stability, and maintain good drainage.

#### Permanent deactivation

• Follow permanent deactivation processes.

#### Scarifying

 Remove non-productive ballast, and scarify (rip) the road surface as deeply as possible. This allows water to properly penetrate tree roots.

#### Sidecast pull-back

- Pull back as much sidecast as necessary to create stable slope angles.
- Try to use previously-sorted organic overburden and fertile mineral soil (often darker in colour) as a capping. Distribute the topsoil evenly over the de-built area.

#### Cross-ditching

- Cross-ditch frequently, especially on steep slopes.
- Do not direct water onto unprotected, erodible soils.
- Use rip-rap at the outflow as needed to prevent erosion.

#### Revegetation

 Where the plan prescribes revegetation, seed all exposed soil capable of supporting vegetation in the first growing season after road deactivation is finished. Document the revegetation program.

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## Appendix IX Forest Research Projects

#### **TFL 19 FOREST RESEARCH PROJECTS**

WFP continues as a leader in silvicultural research in coastal BC. The Company has initiated numerous projects aimed at improving and supporting sustainable forestry practices.

The following lists include projects that WFP is following at present. Trials and surveys within TFL 19 are included together with applicable projects from other sites on Vancouver Island.

		O		
		Growth and Yield		
Trial/Survey	Year Established	Measurements	Reports	Other
G & Y Survey	1991	1996, 1991		
Plots				
		Forest Nutrition		
Trial/Survey	Year Established	Measurements	Reports	Other
Hemlock and	1996	1997	1998	
Cedar Fertilization				
Screening Trial				
Amabilis Fir	1996	1996	1997	
Fertilization Trial			1.5.5.5	
Cedar and	1999	1999	1999	
Amabilis Fir				
Fertilization				
Screening Trial				
		Miscellaneous Tria	als	
Trial/Survey	Year Established	Measurements	Reports	Other
Planting	1997	1998, 1997		
Technique Trial				
		Vancouver Island Growth and Yield		
Trial/Survey	Year Established	Measurements	Reports	Other
Site Index Species	1997 (Holberg,	1997	Reports	Otilei
Conversion Survey	Port McNeill,	1991		
Conversion Survey	Jeune Landing)			
Type III Growth &	1988 (Holberg,	1995	1995 MOF Report	Vegetation
Yield Installations	Port McNeill,	1995	1995 MOI Report	measures – 1997
ricia iriotaliationio	Jordan River)			Incasares 1007
G & Y Survey	1994 (Port	1994		
Plots	McNeill)	1001		
G & Y Survey	1993 (Port	1993		
Plots	McNeill)			
G & Y Survey	1992 (Port	1992		
Plots	McNeill)			
G & Y Survey	1991 (Port	1991		
Plots	McNeill, Jeune			
	Landing)			
G & Y Survey	1989 (Port	1989		
Plots	McNeill, Jeune			
	Landing)			
G & Y Survey	1988 (Port	1988		
Plots	McNeill)			

Forest Nutrition				
Trial/Survey	Year Established	Measurements	Reports	Other
SCHIRP <sup>1</sup>	1988 (Port	1997, 1994, 1990,	1996 Field Guide	Foliar Sampling
Establishment	McNeill)	1988, 1987	1996 Update	1997
Trial	,		1994 Synthesis	
Demonstration	1984 & 1987 (Port	1998, 1996, 1990,	1994 Synthesis	Foliar Sampling
Trials	McNeill)	1989, 1988, 1987,		1997
	,	1986, 1985, 1984		
Salal Eradication	1984 (Port	1994	1996 Update	
Trial	McNeill)			
S1CH Scarification	1996 (Port	1997, 1995		Salal Measures
Trial	McNeill)			1998
S1CH Individual	1996 (Holberg,	1997, 1995		
Tree Fertilization	Port McNeill)			
Trials				1
S1CH/S1HA	1996 (Holberg,	1997, 1995		Salal Measures
Transitional Trials	Port McNeill)	D.4	4000 11 1 1	1998
Organic	1990, 1993, 1994,	Many	1996 Update	
Fertilization Trials	1997 (Port			
Onenstienel	McNeill)	Manue	4007 Interior	
Operational Fertilization	1986 - 1999 (Holborg, Bort	Many	1997 Interim	
Monitoring	(Holberg, Port McNeill, Jeune		Report	
Surveys	Landing)			
Ourveys	Landing)	Genetics Trials		
		Genetics Trials		
Trial/Survey	Year Established	Measurements	Reports	Other
Yellow Cypress	1991 – 1999	1991 – 1999	Interim Report	
Clonal Trials	(Holberg, Port			
	McNeill, Jeune			
	Landing, Jordan			
Daniel Co	River)	4007		
Douglas-fir	1993 (Port	1997		
Progeny Trial Hybrid Poplar	McNeill)	1002 1001		
Clonal Trial	1991 (Holberg)	1993, 1991		
Cional Inal				
Miscellaneous Trials				
Trial/Survey	Year Established	Measurements	Reports	Other
Suquash Drainage	1997 (Port	1999, 1998, 1997		
Trial	McNeill)			
S4 Sitka Spruce	1984 (Holberg)	1995, 1990, 1988,	Interim Report	
Trial		1987, 1986, 1985,		
1 Calal Cadar Hamles		1984		

Salal Cedar Hemlock Integrated Research Program

## Appendix X Public Review Plan MP 9

## **Tree Farm Licence 19 – Management Plan 9**

## Stakeholder and Public Review Strategy

Management Plan 9 (MP 9) for Tree Farm Licence 19 (TFL 19) is scheduled for approval and to be effective August 1, 2001 for a period of five years. As part of the preparation of Management Plan 9, this strategy has been developed to address legislation and policy requirements for the stakeholder and public review and involvement in the preparation of MP 9. There are 2 phases to the revised TFL 19 Public Review Strategy:

Phase I Public review of the current Management Plan 8 for TFL 19 (completed)

Phase II Review of the draft Management Plan 9

Phase 1 of the public review strategy was completed in March, 1999 after a 2 month period of extended public access to the currently approved Management Plan 8.

A primary vehicle for TFL 19 reviews is the stakeholder contact list (attached) prepared from a number of sources. The 226 individuals and groups are categorized as follows:

- A. Resource Agencies
- B. Trappers, Guide Outfitters and other licenced resource users
- C. First Nations
- D. Local Government/Resource Boards
- E. Employees, labor unions and contractors
- F. Conservation and Community groups
- G. General public
- H. Suppliers
- I. Other forest licensees
- J. Forest users and others

The following format and strategy is in agreement with that outlined in the guide for Tree Farm Licence Management Plans (20-month) (May 2000)

#### 1. Advertisements, Public and Stakeholder Notification

#### Phase I – Public Viewing of Current Management Plan

- An invitation letter (A) and comment sheet (B) was sent to the 190 names on the TFL 19 stakeholder list outlining the process.
- The attached advertisement (C) appeared twice in the weekly North Island Gazette, the Gold River Record, the Campbell River Mirror and the Campbell River Courier/Islander in February 1998 to inform the public that the current Management Plan 8 was available for review in various WFP and Ministry of Forests offices, the Tahsis Recreation Centre and at WFP's website.
- The advertisement was inserted for two weeks prior to the viewing opportunity.

- The area of distribution of the four newspapers used for advertising is the northern Vancouver Island communities of Port Alice, Coal Harbour, Winter Harbour, Quatsino, Woss, Beaver Cove, Alert Bay, Sointula, Port Hardy, Port McNeill, Jeune Landing and Holberg, Zeballos, Tahsis, Kyouquot, Gold River, Campbell River and Courtenay.
- A mailing was sent to the TFL 19 stakeholder list attached.
- The public comment and review process for Management Plan 8 is focused on making the existing plan available to the public in 7 convenient locations outlined in the advertisement and on WFP's web site.

#### Phase II - Public viewing of Draft Management Plan

- The attached display advertisement (D) will appear twice in the Gold River Record, Campbell River Mirror, Campbell River Courier/Islander and North Island Gazette to inform the public that the draft MP 9 is available at 4 open houses in Gold River, Campbell River and Tahsis on each of three days at varying times accessible to the public during and after working hours.
- The ad will be posted on WFP's website and distributed to the TFL 19 stakeholder list. The draft itself will be on the website also.

#### 2. Individual Notification Letters

#### Phase I

This phase has been completed for MP 9. The attached letter (A) was distributed to those reviewing MP 8. A comment response sheet (B) was provided to those reviewing MP 8. A summary report was provided to the Ministry of Forests on the results of Phase I.

#### Phase II

The stakeholder list (now expanded to 226 as a result of Phase I responses) will be contacted (letter E) to inform them of a series of 4 open houses in Tahsis, Zeballos, Gold River and Campbell River and an offer of special presentations if so desired. During Phase II WFP staff will meet with the 4 local Municipal Councils in Tahsis, Gold River, Zeballos and Campbell River and 4 First Nations groups to solicit comments on the draft plan. As well, WFP will meet with each of the Nootka Region Union/Management Committees (cooperative co design committees in the Gold River and Zeballos Operations respectively). Other meetings will be offered to any groups requesting further information on MP 9 to review the draft plan.

#### 3. Public Reviews and Viewing Format and Reports

#### Phase I

- This phase is completed. WFP supplied a letter and comment form (A &B) to each person who took the opportunity to review MP 8.
- A summary report was prepared with the results of the review. Names of individuals responding in Phase I were used to amend the list for Phase II distributions.

#### Phase II

- The strategy involves notification of the public using display advertising (E) in 4 Central
  and North Island newspapers and contacting the TFL 19 stakeholder list with the notice of
  public viewings and an executive summary of the draft MP
- The four open houses will be staffed by senior WFP foresters and planners to provide details on the draft plan.

- WFP has an excellent format for presenting complex technical information in a display that is easily understood by the public
- A guest list will be maintained (F)
- All attendees will be interviewed and requested to complete a comment sheet on site or to be mailed in. An award will be offered for return of comment sheets (See comment sheet (G)and summary sheet (H).
- Comments from the interviews of open house attendees will be posted on a flip chart for review by other visitors. These comments will be summarized and recorded.
- A summary report will be prepared on the public viewings re:
  - · All activities in Phase II
  - · Number of attendees
  - · Verbal and written comments received
  - · Changes to the draft MP 9 in response to the comments
  - · Other pertinent information

#### 4. Proposed Schedule of Public Reviews

Phase	Item	Proposed or Actual Dates	
1	Public comment on MP 8	March, April 1999	
	Public review strategy prepared	March 1999	
II	Public review of Draft MP	September 2000	



## TFL 19 Management Plan 9 Stakeholders List

File: 94-9

### A. Resource Agencies

District Manager, Don Sluggett	Ministry of Forests	370 S. Dogwood St.	Campbell River, B.C. V9W 6Y7
Regional Manager, Ken Collingwood	Ministry of Forests	2100 Labieux Road	Nanaimo, B.C.V9T 6E9
TFL Forester, Jacques Bousquet	Ministry of Forests	3 <sup>rd</sup> Floor, 1450 Gov.'t St.	Victoria, B.C.V8W 3E7
Resource Planner, Bruce Whyte	Ministry of Small Business, Tourism & Culture	P.O. Box 9806, St. Prov. Gov't	Victoria, B.C.V8W 9W1
Regional Manager, Mike Whately	MoELP BC Environment	2080-A Labieux Road	Nanaimo, B.C.V9T 6J9
Habitat Officer,	MoELP BC Environment	101-370 Dogwood St.	Campbell River, B.C.V9W 6Y7
Forest Ecosystem Specialist, Ron Diederichs	MoELP BC Environment	101-370 Dogwood St.	Campbell River, B.C.V9W 6Y7
Area Supervisor - Nootka Brent Blackburn	MoELP BC Parks	1812 Miracle Beach Dr.	Black Creek, B.C.V9J 1K1
Habitat Technician, Frank Volsey	Dept. of Fisheries & Oceans	315-940 Alder St.	Campbell River, B.C.V9W 2P8
District Manager, Greg Carriere	Ministry of Energy & Mines	2080-B Labieux Road	Nanaimo, B.C.V9T 6J9
Paul S. Watson	B.C. Assessment Authority	1537 Hillside	Victoria, B.C. V8T 4Y2

### B. Trappers, Guide Outfitters, other Licensed Resource Users

Alban Michael		General Delivery	Zeballos, B.C. V0P 2A0
Aloysios Vincent		General Delivery	Kyuquot, B.C. V0P 1J0
Andrew L. Murphy		c/o Box 905	Gold River, B.C. V0P 1G0
Arnold John		Box 681	Tahsis, B.C. V0P 1X0
Cecil Smith		795 Brechin Rd.	Nanaimo, B.C. V0S 2Z3
Earl J. Smith		Box 716	Campbell River, B.C. V9W 6J3
Estate of Anthony John	c/o H. Watts	Box 1224	Port Alberni, B.C. V9Y 7M1
G. Brooks		Box 61	Zeballos, B.C. V0P 2AO
G. Lavoie		Box 156	Merville, B.C. V0R 2M0
George Randall Chipps		4905 E. Sooke Rd. RR#1	Sooke, B.C. V0S 1N0
Herbert Jack		General Delivery	Kyuquot, B.C. V0P 1J0
Jack Johnson		Box 701	Gold River, B.C. V0P 1G0
James Adam		PO Box 459	Gold River, B.C. V0P 1G0
James Short, Sr.		General Delivery	Kyuquot, B.C. V0P 1J0
Joseph Jack		Box 667	Tahsis, B.C. V0P 1X0
Larry Rose		Box 794	Gold River, B.C. V0P 1G0
Estate of Maurus McLean		Box 324	Gold River, B.C. V0P 1G0
S. Neufield		Box 176	Dease Lake, B.C. V0C 1L0
Violet Johnson		Box 747	Gold River, B.C. V0P 1G0
W. Wagner		3213 Lockwell Rd. RR#6	Courtenay, B.C. V9N 8H9
H. Birch		R.R. #4, Site 412, C-16	Courtenay, B.C. V9N 7J3
W. Colbow		Box 25	Merville, B.C. V0R 2M0
P.H. Birch		R.R. #4, Site 412, C-16	Courtenay, B.C. V9N 7J3
Arnold James		PO Box 553	Gold River, B.C., V0P 1G0
Tom Craig		523 Thulin Street	Campbell River, B.C., V9W 2L1
Bill Heidrick		PO Box 37	Zeballos, B.C., V0P 2A0

John Put	PO Box 248	Gold River, B.C., V0P 1G0
Kathryn Ridley	PO Box 159	Tahsis, B.C., V0P 1X0
Reid Robinson	PO Box 103	Zeballos, B.C., V0P 2A0
Arien Gedlaman	PO Box 124	Tahsis, B.C., V0P 1X0
Cindy Cullen	44 Alpine View	Tahsis, B.C., V0P 1X0
Leslie Taylor	PO Box 546	Tahsis, B.C., V0P 1X0
Grant Skinner	PO Box 700	Tahsis, B.C., V0P 1X0
Faye Friesen	PO Box 694	Tahsis, B.C., V0P 1X0
Virginia Mountan	PO Box 659	Tahsis, B.C., V0P 1X0
Sean Jordan	PO Box 248	Gold River, B.C., V0P 1G0
Kum Soo Chong	PO Box 88	Tahsis, B.C., V0P 1X0
Arne Puggaard	PO Box 69	Tahsis, B.C., V0P 1X0
Wayne Magill	PO Box 715	Tahsis, B.C., V0P 1X0
David McIntosh	PO Box 114	Tahsis, B.C., V0P 1X0
Don Stewart	PO Box 1	Tahsis, B.C., V0P 1X0
Wayne Nicholson	PO Box 48	Tahsis, B.C., V0P 1X0
Robert Spencer	PO Box 213	Tahsis, B.C., V0P 1X0
Harold Harms	PO Box 161	Tahsis, B.C., V0P 1X0
Dave & Elva John	PO Box 424	Tahsis, B.C., V0P 1X0
D. Clemenson	PO Box 191	Tahsis, B.C., V0P 1X0
Richard Lucas	PO Box 113	Tahsis, B.C., V0P 1X0
Diane Fisher	PO Box 422	Tahsis, B.C., V0P 1X0
Pierre Benoit	PO Box 346	Tahsis, B.C., V0P 1X0
D. Beamix	PO Box 673	Tahsis, B.C., V0P 1X0
Dennis Rogers	PO Box 184	Tahsis, B.C., V0P 1X0
Sandra Naylor	PO Box 282	Tahsis, B.C., V0P 1X0
Pat Finnegan	PO Box 146	Tahsis, B.C., V0P 1X0
Randy Musfelt	PO Box 396	Tahsis, B.C., V0P 1X0
Clayton Wills	PO Box 472	Tahsis, B.C., V0P 1X0
Joseph Ganyo	PO Box 57	Tahsis, B.C., V0P 1X0
Viv Yagabarum	PO Box 713	Tahsis, B.C., V0P 1X0
John Vincent	PO Box 17	Tahsis, B.C., V0P 1X0
Mike & Carol Dopelhamer	PO Box 335	Tahsis, B.C., V0P 1X0

## C. First Nations

Chief Dawn Amos	Ehattesaht First Nation	Box 59	Zeballos, B.C. V0P 2A0
Chief Richard Leo	Ka:'yu:'k't'h/Chek:k:tles 7et'h'	Box 218	Kyuquot, B.C. V0P 1J0
	First Nation		
Chief Mike Maquinna	Mowachaht/Muchalaht First Nation	Box 459	Gold River, B.C. V0P 1G0
Chair Lillian Howard	Northern Nuu-chah-hulth	Box 428	Gold River, B.C. V0P 1G0
	Tribal Council		
Chief Walter Michael	Nuchatlaht Tribe	Box 40	Zeballos, B.C. V0P 2A0

## D. Local Government and Resource Boards

Chair Tom McCrae	Comox-Strathcona Regional District, West Coast Committee	R.R. #4-4795 Headquarters Rd.	Courtenay, B.C. V9N 7J3
Chair John Crowhurst	Nootka Resource Board	Box 760	Gold River, B.C. V0P 1G0
Mayor Dayle Crawford	Village of Gold River	Box 610	Gold River, B.C. V0P 1G0
Mayor Tom McCrae	Village of Tahsis	Box 519	Tahsis, B.C. V0P 1X0
Mayor Clifford Pederson	Village of Zeballos	Box 127	Zeballos, B.C. V0P 2A0

## E. Employees, Labour Unions, Contractors

Ed McDonald		1901 Bay Street	Nanaimo, B.C. V9T 3A6
Terry Lewis		1472 Valleyview Dr.	Courtenay, B.C. V9N 8S7
Robin Williams		282 Finch Road	Campbell River, B.C. V9W 7C2
	Air Nootka	Box 19	Gold River, B.C. V0P 1G0
	Arcas Consulting Ltd.	55A Fawcett Rd.	Coquitlam, B.C. V3K 6W9

	Bruce Contracting	Box 378	Gold River, B.C. V0P 1G0
	Burman River Contracting	Box 462	Gold River, B.C. VOP 1G0
	Cala Creek Contracting	5832 Carrington Rd.	Nanaimo, B.C. V9T 6C2
Pete Calverley	Calverley Forestry Services	Box 184	Heriot Bay, B.C. V97 1H0
Cliff Lovestrom	Camp Chairman, IWA Local 1-85	Box 88	Zeballos, B.C. VOP 2A0
Cilii Lovestroini	Zeballos Forest Operation	BOX 66	Zeballos, B.C. VOF ZAO
Wayne Munro	Camp Chairman, IWA Local 1-85 Gold River Forest Operation	2960 Suffield	Courtenay, B.C. V9N 3V5
Bill Elder	Camp Chairman, IWA Local 1-85 Tahsis Sawmill	Box 25	Tahsis, B.C. V0P 1X0
	Canadian Air Crane	7293 Wilson Ave	Delta, B.C. V4G 1E5
	Coast Forest Management Ltd.	2338 S. Island Hwy.	Campbell River, B.C. V9W 1C3
Anita Priestly	Coastal Business Services Ltd.	Box 950	Gold River, B.C. V0P 1G0
,	. Conuma Excavating & Trucking Co. Ltd	Box 520	Gold River, B.C. V0P 1G0
	Coon Creek Log Scaling Ltd.	Box 640	Tahsis, B.C. V0P 1X0
	Corey J. Salvage	Box 167	Merville, B.C. V0R 2M0
	Coulson Forest Products Ltd.	4590 Helen St.	Port Alberni, B.C. V9Y 6P5
	Dobson Engineering Ltd.	4-1960 Springfield Rd.	Kelowna, B.C. V1Y 5V7
	Donner Lake Contracting Ltd.	Box 835	Gold River, B.C. V0P 1G0
	Doulyn's Contracting	Box 148	Gold River, B.C. V0P 1G0
	Fedge & Gunderson Contractors	2575 Bowen Rd.	Nanaimo, B.C. V9T 3I4
	Frank Beban Logging Ltd.	1461 A Island Hwy. E.	Nanoose Bay, B.C. V9P 9A3
Rod March	French Creek Forest Services Ltd.	Box 362	Gold River, B.C. V0P 1G0
	Friell Lake Logging Ltd.	Suite 204 814 W 15 <sup>th</sup>	North Vancouver, B.C. V7P 1M6
	G.R. Rainbow Services Ltd.	Box 843	Gold River, B.C. V0P 1G0
	Golder Associates Ltd.	500-4260 Still Creek Dr.	Burnaby, B.C. V5C 6C6
	Gurney Contracting	Site 410,C-20, RR #4	Courtenay, B.C. V9N 7J3
	Hayes Forest Services	Box 100	Cobble Hill, B.C. V0R 1L0
Graham Hues	Hues Forest Management	737 Steerbuck Rd.	Campbell River, B.C. V9W 7J9
0.0	Interior Reforestation	P.O. Box 487	Cranbrook, B.C. V1C 4J1
	Islands West Scaling Contractors	165 Finch Rd.	Campbell River, B.C. V9H 1K5
Jack Turley	Jack Turley Forest Eng. Services	330 Country Aire Dr.	Campbell River, B.C. V9W 7N1
	Kay Cee Enterprises Ltd.	Box 179	Tahsis, B.C. V0P 1X0
	Kelsey Forest Engineering Services	Box 79	Gold River, B.C. V0P 1G0
	L.G. Hall Engineering Services	1815 Aspen Way	Campbell River, B.C. V9W 6Y6
	L'il Timber Silviculture	Box 908	Gold River, B.C. V0P 1G0
Blake Marshall	Lemon Pt./Cypress Ck. Logging	Box 879	Gold River, B.C. V0P 1G0
	Madrone Consultants	1977 Herd Road	Duncan, B.C. V9L 1M3
	Mahmaht Forest Products Ltd.	Box 24	Zeballos, B.C. V0P 2A0
	Maxi's Water Taxi & Charter	Box 1122	Gold River, B.C. V0P 1G0
	Moh Creek Contracting	1010 Herring Gull Dr.	Parksville, B.C. V9P 1R2
	Mt. Leighton Forestry Services	Box 640	Gold River, B.C. V0P 1G0
	Nootka Air Crane	7293 Wilson Ave.	Delta, B.C. V4G 1E5
	NTS Contracting	Box 872	Gold River, B.C. V0P 1G0
	Olympic Resource Management	300-475 W. Georgia St.	Vancouver, B.C. V6B 4M9
	Onion Lake Logging Ltd.	1170-C Shoppers Row	Campbell River, B.C. V9W 2C8
	Pacific Regeneration Technology	#4-1028 Fort St.	Victoria, B.C. V8V 3K4
	Peter Bruce & Associates	R.R. #3, Tiesu Rd.	Ladysmith, B.C. VOR 2E0
Monty Mearns	President, I.W.A Local 1-85	4904 Montrose St.	Port Alberni, B.C. V9Y 1M3
Worty Wearing	Quinsam Excavating	2878 Quinsam Rd.	Campbell River, B.C. V9W 4N5
	R.G. Daines Contracting	341 S. McLean St.	Campbell River, B.C. V9W 2M7
Ron Mecredy	R.G. Mecredy Forest Consulting	1751 Meadowbrook Dr	Campbell River, B.C. V9W 6K7
. ton mooreay	Recreation Resources Ltd.	3156 Cobble Hill Rd.	Cobble Hill, B.C. V0R 1L0
	Recreation Resources Ltd.  Ridinger & Cooke Log Scaling	Box 212	Gold River, B.C. VOR 1E0
	Russell & Lilly Logging Ltd.	Box 489	Tahsis, B.C. V0P 1X0
	Sandpiper Charters	Box 179	Tansis, B.C. VOP 1X0 Tahsis, B.C. VOP 1G0
	Sentry Forestry Co Ltd.	c/o Box 347	Campbell River, B.C. V9W 5B6
	Simard Trucking	Box 674	Gold River, B.C. V0P 1G0
	Sitika Silviculture Ltd.	Box 358	Quathiaski Cove, B.C. VOP 1NO
	Spirit Lake Timber	1855 Perkins Rd.	Campbell River, B.C., V9W 6Y4
	SRK Contracting Inc.	#115-2550 Boundary	Burnaby, B.C. V5M 3Z3

		Rd	
	Stan MacLean Trucking	R.R. #3	Qualicum, B.C. V0R 2T0
	Sterling Wood Group	301-1001 Cloverdale	Victoria, B.C. V8X 4C9
		Ave.	
	Surespan Construction Ltd.	Ste 216 545 Clyde	West Vancouver, B.C. V7T 1C5
		Ave.	
	Sylvan Vale Nursery Ltd.	2104A Kelland Rd.	Black Creek, B.C. V9J 1G4
Ken Taylor	Taylor Contracting Ltd.	Box 988	Nanaimo, B.C. V9R 5N2
	Thurber Engineering Ltd.	Suite 210 - 4475	Victoria, B.C. V8Z 6L8
		Viewmont Ave.	
	Tideline Log Salvage	Box 489	Gold River, B.C. V0P 1G0
	Timberline Forest Inventory	401-958 W 8 <sup>th</sup> Ave	Vancouver, B.C. V5Z 1E5
Todd Rudolph	TMR Enterprises	Site #526, Comp 40, R.R. #5	Comox, B.C. V9N 8B5
	Tripp Biological Consultants Ltd.	1784 Extension Rd.	Nanaimo, B.C. V9X 1C9
Brian Green	Tsitika Contracting Ltd.	Box 173	Gold River, B.C. V0P 1G0
	Upland Excavating Ltd.	7295 Gold River Hwy.	Campbell River, B.C. V9H 1P1
	Vancouver Island Helicopters	#1-9600 Canora Rd.	Sidney, B.C. V8L 4R1
	VIH Logging Ltd.	#1-9600 Canora Rd.	Sidney, B.C. V8L 4R1
	Watson Forest Services Ltd.	4962 Lost Lake Rd.	Nanaimo, B.C. V9T 5E4
	Westside Roadbuilding Ltd	P.O. Box 1602	Comox, B.C. V9N 8A2
	Westwood Contracting	Box 8	Zeballos, B.C. V0P 2A0
	Yellow Point Propagation Ltd.	13735 Quenell Rd. R.R. #3	Ladysmith, B.C. V0R 2E0

## F. Conservation and Community Groups

Paul Griffiths	BC Speological Federation	544 Springbok Rd.	Campbell River, B.C. V9W 8A2
	Gold River Chamber of Commerce	Box 39	Gold River, B.C. V0P 1G0
Dale Frame	Gold River Chinook Project	Box 965	Gold River, B.C. V0P 1G0
John Bruce	Gold River Rod & Gun Club	c/o Box 378	Gold River, B.C. V0P 1G0
Heather & Rolf	Mitlenatch Field Naturalists Society	Box 413	Heriot Bay, B.C. V0P 1H0
Kellerhals			
	Nootka Sound Charter Group	Box 515	Gold River, B.C. V0P 1G0
George Woodhouse	Nootka Sound Economic	Box 288	Tahsis, B.C. V0P 1X0
	Development Corporation		
	Tahsis Chamber of Commerce	Box 278	Tahsis, B.C. V0P 1X0
	Zeballos Board of Trade	Box 208	Zeballos, B.C. V0P 2A0
Greg Brooks	Zeballos Fish & Wildlife Assoc.	Box 61	Zeballos, B.C. V0P 2A0

### G. Members of General Public

Anne & Jim Fiddick	Box 610	Gold River, B.C. V0P 1G0
Larry Andrews	Box 765	Gold River, B.C. V0P 1G0
Bill Heidrick	Box 37	Zeballos, B.C. V0P 2A0
John Put	Box 248	Gold River, B.C. V0P 1G0
Kathryn Ridley	Box 159	Tahsis, B.C. V0P 1X0
Reid Robinson	Box 103	Zeballos, B.C. V0P 2A0

## H. Suppliers

C.R All Trucks Ltd.	2380 Island Hwy.	Campbell River, B.C. V9W 2G8
Cyr Family Markets	Box 820	Gold River, B.C. V0P 1G0
Dawson Seed Co. Ltd.	17802 66 <sup>th</sup> Ave Surrey, B.C. V3S 7X1	
	Building B	•
Finning International	P.O. Box 24786 Stn. F	Vancouver, B.C. V5N 5V4
G.R. Auto Parts Plus	Box 729	Gold River, B.C. V0P 1G0
G.R. Builders Supply	Box 295	Gold River, B.C. V0P 1G0
G.R. Crane Rentals Ltd.	Box 613	Gold River, B.C. V0P 1G0
Gold River Marine Services Ltd.	Box 1200	Gold River, B.C. V0P 1G0
Inland Kenworth Sales	2470 N. Island Hwy.	Campbell River, B.C. V9W 2H1

Island Micro Systems	160-10 <sup>th</sup> Ave	Campbell River, B.C. V9W 4E3
Joe's Hardware Ltd.	Box 550	Gold River, B.C. V0P 1G0
Kal Tire	2215 Cliffe Ave.	Courtenay, B.C. V9N 2L5
Loomis Courier Services	Box 6670	Vancouver, B.C. V6B 4B5
Madill Equipment Canada	P.O. Box 4300	Nanaimo, B.C. V9R 5M6
Nootka Sound Service Ltd.	Box 57	Gold River, B.C. V0P 1G0
Overland Freight Lines	151 Spruce St.	New Westminster, B.C. V3L 5E6
People's Drug Mart	Box 349	Gold River, B.C. V0P 1G0
Petro Canada Products	P.O. Box 4038, Stn. A	Toronto, Ont. M5W 1S5
Quinsam Radio Comm.	1437B 16 <sup>th</sup> Ave	Campbell River, B.C. V9W 2E4
Steve Marshall Motors	1384 16 <sup>th</sup> Ave	Campbell River, B.C. V9W 2E1
The Record	Box 279	Gold River, B.C. V0P 1G0
Titan Explosives Ltd.	7898 82 <sup>nd</sup> St.	Delta, B.C. V4C 1L6
T-Mar Industries	5791 Duncan Bay Rd.	Campbell River, B.C. V9H 1N6
Wire Rope Industries Ltd.	Unit B-12330 88 <sup>th</sup> Ave	Surrey, B.C. V3W 3J6

### I. Other Forest Tenure Licensees

Rob Woodside	Canadian Forest Products Limited., Englewood Logging Division		Woss, B.C. V0N 3P0
Paul Pashnik	Hecate Logging	4590 Helen St.	Port Alberni, B.C. V9Y 6P5
Otto Schulte	International Forest Products Limited.	Box 1800	Campbell River, B.C. V9W 5C5
Brad Rodway	ad Rodway MacMillan Bloedel Limited.,		Port Alberni, B.C. V9Y 7N3
	Franklin Woodlands Division		
	Nootka First Nations Forest Prod. Ltd.	Box 636	Gold River, B.C. V0P 1G0
Gary Lawson	Timberwest Forest Limited	Box 2500	Campbell River, B.C. V9W 5C5

## J. Forest Users and Others

	Bowater Inc.	Box 1000	Gold River, B.C. V0P 1G0
	Cougar Creek Charters	Box 752	Gold River, B.C. V0P 1G0
	(Chinootka Lodge)		
	Critter Cove Marina Group	Box 1118	Gold River, B.C. V0P 1G0
George Riley	Galiano Bay Lodge	Box 522	Gold River, B.C. V0P 1G0
Gerry Hunter	Gold River Fish Camp	Box 160	Gold River, B.C. V0P 1G0
	Hoiss Point Lodge	639 Woodland Dr.	Comox, B.C. V9M 3H3
Tim Cyr	Nootka Island Fishing Camp	1322 Pintail Dr.	Parksville, B.C. V9P 2A2
	Nootka Sound Service Ltd.	Box 57	Gold River, B.C. V0P 1G0
	Nu-tka Landing Fishing Resorts	204-301 Dogwood St.	Campbell River, B.C.
Julius Kapitany	TPI Phytogen Inc.	1527 Cliveden Ave.	Delta, B.C. V3M 6P7
	Westview Marina	Box 481	Tahsis, B.C., V0P 1X0
	Westview Towing	Box 481	Tahsis, B.C. V0P 1X0



February 15, 1999

Dear Sir / Madam;

Thank you for participating in this first step of the preparation for Management Plan 9 for Tree Farm Licence 19. There is a 30 month process that Western Forest Products will follow. The current Management Plan 8 expires on July 31, 2001

The first step involves an opportunity for the public to comment on our performance, offer ideas and identify issues that you feel are important to the management of Tree Farm Licence 19. From this information I will take your views and comments and prepare a Statement of Management Objectives Options and Procedures. This second step will also be available for public review and comment.

As part of the public review, the existing Management Plan 8 is available in various offices as per the attached advertisement, to assist with preparation of your comments. I would very much appreciate if you would complete and return the attached questionnaire to me no later than March 15, 1999 so that your comments can be an important part of the Management Plan process for TFL 19.

Yours truly

WESTERN FOREST PRODUCTS LIMITED
General Partner of
Western Pulp Limited Partnership

W.E. Dumont, R.P.F. Chief Forester

WED/dg



February 1999



## TFL 19 Management Plan 9, Step 1 - Public Review of MP 8

We are seeking public input with respect to our performance under the current Management Plan 8. In addition we are inviting interested parties to identify issues, concerns and values that should be considered in the preparation of Management Plan 9 for TFL 19.

The results of the public input will be compiled and forwarded to the Ministry of Forests. Please be as candid and constructive as possible.

Thank you for your participation in this process.

Commen	its and suggestion	s forward to:	Chief Forester, Western Forest Products 2300 – 1111 W. Georgia Street Vancouver, B.C., V6E 4M3
Optional	: Your Name:		
	Address: Phone: Fax:		

You can also access MP 8 on WFP's Website at <a href="https://www.westernforest.com">www.westernforest.com</a>



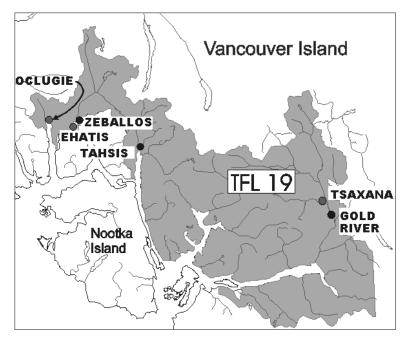
## Your comments and ideas are welcome on Tree Farm Licence 19

TFL 19, held by Doman-Western Lumber Limited and managed by Western Forest Products Limited covers 190,000 hectares of forests on west central Vancouver Island around Nootka Sound. Every five years a new Management Plan and Allowable Annual Cut must be prepared and submitted to B.C.'s Chief Forester for review and approval. The first phase of the 30 month process for preparing Management Plan 9 is an opportunity for the public to comment on our performance and offer ideas and identify issues considered important for TFL 19.

As part of this phase, the existing Management Plan 8 (MP 8) is now available for review by the public during normal business hours at the following locations:

- Village of Tahsis, Recreation Centre, 285 Alpineview Street, Tahsis
- WFP Zeballos Forest Operation Office, Zeballos
- WFP Gold River Office, Gold River
- ♦ WFP Mainland/Islands Office, 118 1334 Island Highway, Campbell River
- WFP Corporate Office, 2300 1111 W. Georgia St., Vancouver
- Ministry of Forests office, 370 South Dogwood Street, Campbell River
- Ministry of Forests office, 2100 Labieux Road, Nanaimo
- Ministry of Forests office, Resource Tenures and Engineering Br., 1450 Government Street, Victoria

#### You can also find MP 8 on WFP's website at www.westernforest.com



TFL 19 provides direct employment for more than 500 Gold River, Tahsis and Zeballos residents and is an important recreational and environmental resource in the Nootka Sound Region.

Your comments and ideas on TFL 19 are welcome before March 15,1999.

Write. Fax or E-mail to:

Chief Forester Western Forest Products Limited 2300 – 1111 W. Georgia St. Vancouver, B.C., V6E 4M3 Fax: 604-665-6268

E-mail: chiefforester@westernforest.com





## Your comments and ideas are welcome on Tree Farm Licence 19

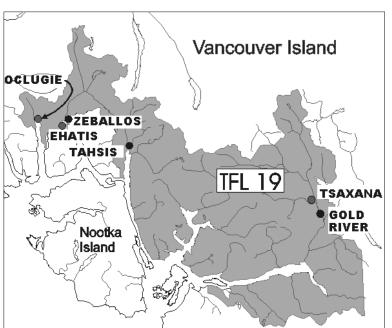
TFL 19, held by Doman-Western Lumber Limited and managed by Western Forest Products Limited covers 190,000 hectares of forests on west central Vancouver Island around Nootka Sound. Every five years a new Management Plan and Allowable Annual Cut must be prepared and submitted to B.C.'s Chief Forester for review and approval. The second phase of the 20 month process for preparing Management Plan 9 is an opportunity for the public to comment on our Draft Management Plan 9

As part of this phase, the Draft Management Plan 9 is now available until November 15, 2000 for review by the public during normal business hours at the following locations:

- Village of Tahsis, Recreation Centre, 285 Alpineview Street, Tahsis
- WFP Zeballos Forest Operation Office, Zeballos
- WFP Gold River Office. Gold River
- WFP Mainland/Islands Office, 118 1334 Island Highway, Campbell River
- WFP Corporate Office, 2300 1111 W. Georgia St., Vancouver
- Ministry of Forests office, 370 South Dogwood Street, Campbell River
- Ministry of Forests office, 2100 Labieux Road, Nanaimo
- Ministry of Forests office, Resource Tenures and Engineering Br., 1450 Government Street, Victoria

#### You can also find Draft MP 9 on WFP's website at <a href="https://www.westernforest.com">www.westernforest.com</a>

TFL 19 provides direct employment for more than 500 Gold River, Tahsis and Zeballos residents and is an important recreational and environmental resource in the Nootka Sound Region.



The Draft Plan and WFP's staff will be available as follows for Open Houses to hear your concerns.

Campbell River, Ramada Hotel & Suites Sept. 19, 2000 - 1 pm - 8 pm

Gold River, Community Centre Lounge Sept. 20, 2000 – 1 pm - 8 pm

**Tahsis Recreation Centre** 

Sept. 21, 2000 – 1 pm - 8 pm

Zeballos Library

Sept. 21, 2000 – 5 pm - 8 pm

Zeballos Community Hall

Sept. 22, 2000 - 1 pm - 5 pm

Your comments are welcome before November 20, 2000

Write, Fax or E-mail to:

Chief Forester

Western Forest Products Limited 2300 – 1111 W. Georgia St.

Vancouver, B.C., V6E 4M3

varicouver, b.c., vol

Fax: 604-665-6268

E-mail: chiefforester@westernforest.com



**Western Forest Products Limited** 



File: 194-9

September 4, 2000

(Stakeholders)

Dear FIELD (Salutation);

### **Draft Management Plan 9 - TFL 19**

In 1999, I wrote you regarding the first phase in the preparation of Management Plan 9 for Tree Farm Licence 19. I appreciated the input and information we received in that process. As the second and final phase in the preparation of draft Management Plan 9, I am pleased to inform you that the draft Plan is now available for public review at a series of open houses to be held as follows:

Location	Time	Date	Place
Campbell River	1:00 pm - 8:00 pm	September 19, 2000	Ramada Hotel & Suites
Gold River	1:00 pm - 8:00 pm	September 20, 2000	Community Centre Lounge
Tahsis	1:00 pm - 8:00 pm	September 21, 2000	Recreation Centre
Zeballos	5:00 pm - 8:00 pm	September 21, 2000	Library
Zeballos	1:00 pm - 5:00 pm	September 22, 2000	Community Hall

The draft plan is also available on Western Forest Products website at www.westernforest.com. We welcome your involvement in the open houses. If you are unable to attend these open houses, we would appreciate receiving any written comments you have regarding our plans. If you or your organization would like to have WFP arrange a special presentation, please contact me at (604) 665-6224. I can best use your comments if we receive them no later than November 20, 2000. Thank you for your assistance.

Yours truly

WESTERN FOREST PRODUCTS LIMITED
General Partner of
Western Pulp Limited Partnership

W.E. Dumont, R.P.F. Chief Forester

WED/dg





## Management Plan 9 - Tree Farm Licence 19

## **Public Review**

. <u>.</u>	

NAME	FULL ADDRESS	PHONE	CONCERN / ISSUE





## TREE FARM LICENCE 19 - DRAFT MANAGEMENT PLAN 9

## **PUBLIC REVIEW AND OPEN HOUSE COMMENTS**

		LOCATION:
Employ so that process	yment and Economic Opportunities. your ideas, views, comments and co	Management Plan 9 and our proposals for We appreciate the completion of this question oncerns can be part of the Management Plan also help us evaluate our performance at this
ease be a	as candid and constructive as possibl	le. If space is insufficient please use extra pag
What	do you consider to be the 3 most imp	portant values of Tree Farm Licence 19?
1.	Important Value	Why?
2.		
3.		
•	u have any comments/concerns abou	ut logging and forestry programs in TFL 19?
	•	ew meeting?
	s □ No If yes, these are:	

5	Are there any aspects of TFL 19 you would like to know more about?  ☐ Yes ☐ No If yes, what are these?					
6.					□ Yes □ No	
7.	How did you hea	r about this rev	view session? □	Newspap	per ad □ Invitatio	n □ Other
8.	How well did WF					
	Excellent		Satisfactor	y	poor	
		Ш	Ц	Ц		
9.	Was the informa	tion presented		lable manr		
	Very	_	Easily	_	Too comp	olex
		Female O			41-55 □ over 55	_
	If you wish a writ	ten response t	o your comments	s please pr	ovide your:	
	Name:		Add	lress:		
	Postal Code:		Pho	one:		
tour p	an best use your co program in parts of ge your tour.		•			
	Please return this	s to the box pro	ovided or mail in	the addres	ssed, stamped env	elope to:
		2300 - 11	rester Forest Products 11 West Georgia er, B.C., V6E 4M	a Street		

Phone: 665-6224 FAX: 665-6268

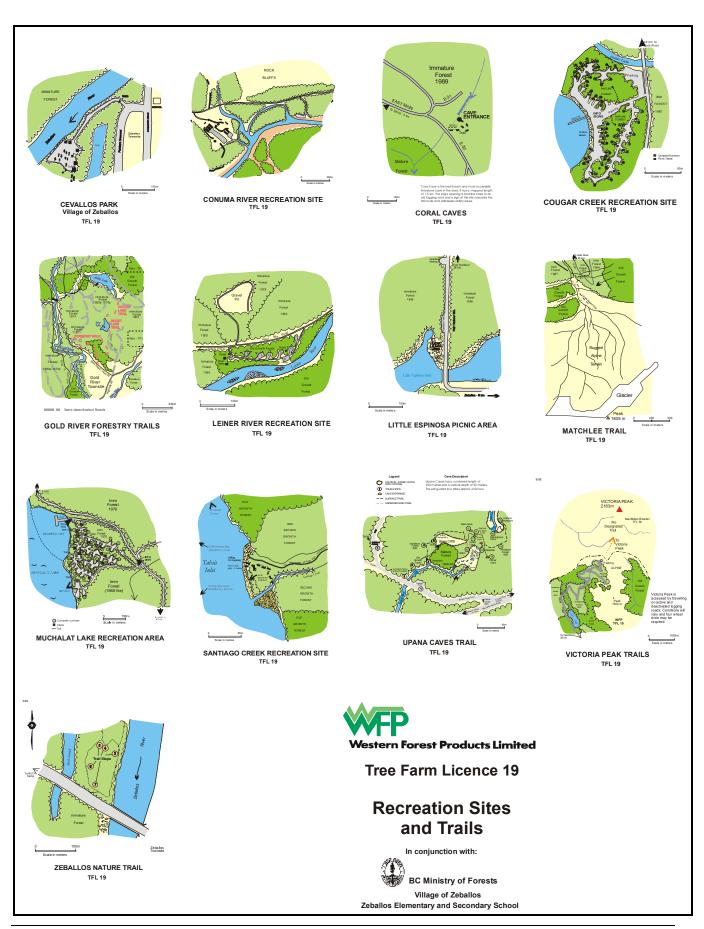




## Public and Stakeholder Response Summary TFL 19 Public Viewings For Draft Management Plan 9

Date	Location	No. of Participants	Response Sheets	Response Sheets	Letters Received
	Total				

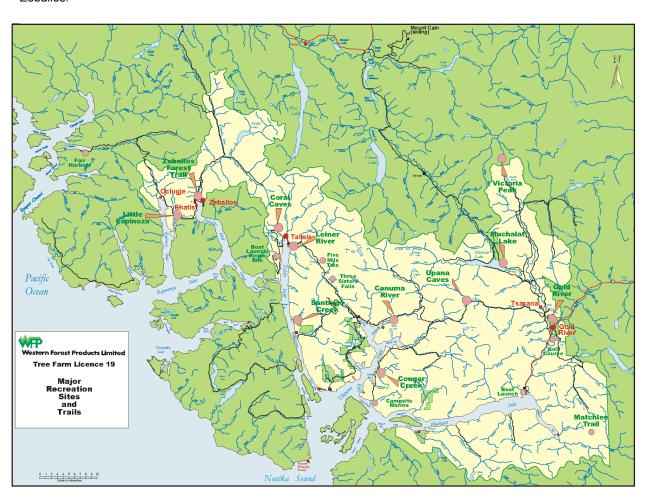
## Appendix XI Trails and Recreation Sites



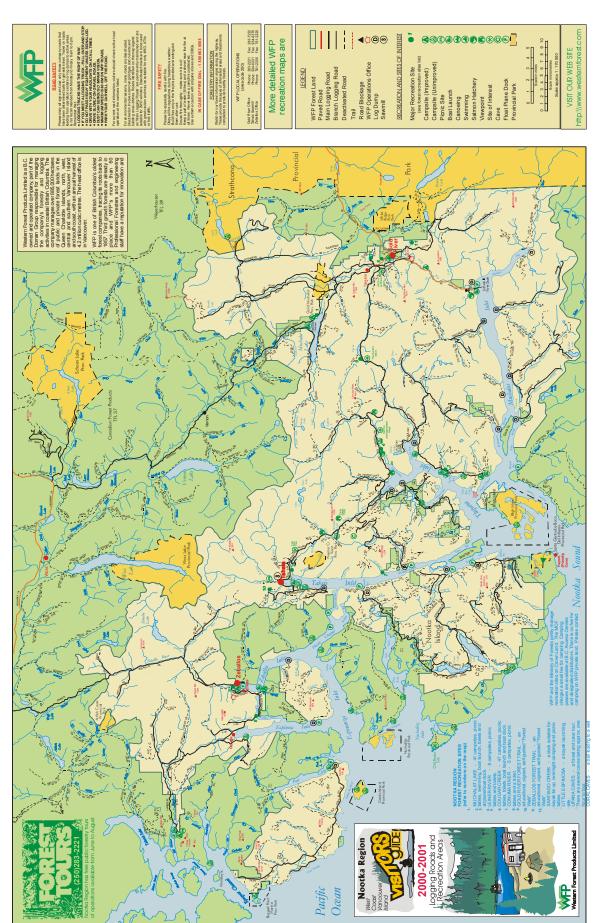
## TFL 19 TRAILS AND RECREATION SITES With individual site maps

- CEVALLOS PARK: picnic tables, toilets and parking. Park is on Zeballos River inside Zeballos Townsite.
- CONUMA RIVER: 5 campsites, picnic tables and toilets along the river, just off of the Head Bay Forestry Road. There is a fish hatchery nearby.
- CORAL CAVES: a trail leading to a well-known limestone cave just NE of Tahsis.
- COUGAR CREEK: 45 campsites, picnic tables, toilets, boat launch and boat dock in Tlupana Inlet.
- GOLD RIVER FOREST TRAIL: an educational signed, self-guided "Forest Walk" just north of town.
- LEINER RIVER: 8 campsites, picnic tables and toilets just SE of Tahsis
- LITTLE ESPINOSA: a kayak launching site just SE of Zeballos.

- MATCHLEE TRAIL: is a rugged undeveloped trail leading to Mt. Matchlee. It is reached by travelling on the Ucona Main southward from Gold River then onto U-29 which is a deactivated road.
- MUCHALAT LAKE: 37 campsites, picnic tables, swimming, boat launch, toilets and airplane/boat dock.
- SANTIAGO CREEK: a dock suitable for kayak tie up, overnight camping and picnic tables along Tahsis Inlet.
- 11. UPANA CAVES: is a self-guided tour that takes about one hour to walk. It is reached by driving a little over 10 km west from Gold River on the Head Bay Forest Road.
- 12.VICTORIA PEAK: is a rugged undeveloped trail leading from TFL 19 onto TFL 39. It is reached by travelling up the Gold River Valley past Twaddle Lake. The last part is a couple of kilometres of deactivated road.
- ZEBALLOS FOREST TRAIL: an educational signed, self guided "Forest Walk" just across the river from Zeballos townsite.



## Appendix XII Nootka Region Visitors Guide



**TFL 19 Tourist Map** 

Page 1 TFL 19 - Tourist Map

# Appendix XIII Recreation Analysis and Management Strategy Report

(This appendix contains only a portion of the full report)

## **Recreation Analysis and Management Strategy Report**

RRL Recreation Resources Ltd.

March 2001

## **Summary**

This Recreation Analysis and Management Strategy Report (RAMS) has been prepared using the Ministry of Forests guidelines contained in Circular #VCR-98, dated November 30, 1998.

Information from the Recreation Features, Visual Landscape and Recreation Opportunity Spectrum inventories was reviewed, and combinations of features, patterns of travel, landscapes resources, probable forest development areas and options for enhancing recreation opportunities have been identified. Scenic landscapes, beaches and trails, rivers, camping areas, natural history, First Nations history, boat launches, freshwater fishing, nature study; all these resources are present in TFL 19.

Discussion with Charlie Cornfield, Recreation Specialist, Campbell River Forest District, with Western Forest Products Limited staff and with stakeholders served to identify key recreation management issues within TFL 19.

The analysis identifies gaps and issues related to the key recreation opportunities in the TFL. The recreation management options address the issues and gaps identified through the analysis and lists objectives and strategies designed to protect or enhance the recreation potential of the resources.

TFL 19 covers 191,990 ha on west central Vancouver Island. The extent of the TFL is from Espinosa Inlet in the west, east to the town of Gold River, south to the height-of-land between Muchalat Inlet and Clayoquot Sound, and north to Kaipit Lake.

The nearest major centre is Campbell River, 90 km to the east along Highway 28. Communities close to the TFL are Gold River, Tahsis, Zeballos, Oclugje and Tsaxana.

TFL 19 is bordered by TFLs 37, 39, 44 and 54. Strathcona Provincial Park, Weymer Creek Karst Provincial Park, Woss Lake Provincial Park, Artlish Caves Provincial Park, Gold/Muchalat Provincial Park, and the White Ridge Provincial Park all either border the TFL or are surrounded by it.

Three Special Management Zones (SMZs) are located within or border onto TFL 19: Woss-Zeballos, Schoen-Strathcona and Pinder-Atluck. The latter borders the TFL on its northernmost extent at the head of the Zeballos River.

Five out of the seven ROS classes are distributed within the TFL. The Roaded Modified ROS Class has the largest area. This is quite common because most roaded forestland falls in this category. The Roaded Natural class covers the second largest area. It is similar to the Roaded Modified but has little or no alteration. The dominant area of SPNM is located along the northwest side of the TFL where is adjoins Woss Lake Provincial Park. One area of SPM occurs in the extreme southeast corner of the TFL where it borders Strathcona Provincial park. Urban is for settled areas such as Gold River and Oclugie.

According to the public input survey that was completed as part of the inventory updates, the most popular recreation activities are picnicking, camping, angling, driving logging roads, beach activities, photography and wildlife viewing.

The main recreation issue identified within the TFL through the public input survey was the deactivation of forestry roads. Other resource issues are discussed in Section 5.0 of the report.

One hundred and thirty seven commercial tourism businesses rely on the natural resources within and around this TFL. Most of these businesses use the road and marine travel corridors that go through or around the TFL while travelling to key recreation areas, (e.g. Cougar Creek) and to departure points (e.g. the boat launch at the head of Muchalat Inlet).

A high value is placed on natural resources by both residents of BC and visitors to BC. Opportunities for eco-tourism, adventure tourism, non-consumptive tourism and scenic viewing are in demand.

Proactive management involving community members and leadership by Western Forest Products in the area of landscape resources and recreation feature and activity management are seen as the foundations for successful use of all resources to promote stable communities.

## 5.0 Recreation Management Options, Objectives and Strategies

#### 5.1 Recreation Analysis

This section compares the supply of recreation opportunities identified in the recreation inventory with their value and demand. The existing supply, use and projected demand is used to identify gaps (short-falls) that limit a full range of recreation opportunities.

Recreation Opportunity/ Supply	Demand/Trends	Issues and Gaps
Scenic Landscapes: Tourism Opportunities Eight of the 24 high capability sites are in or border onto TFL 19. The areas were prioritized.  Hisnit Inlet/Deserted Lake Tahsis Narrows Espinosa Inlet (Head, mouth and Little Espinosa Junction) Hanna Channel – North side Tahsis Inlet/Strange Island Tahsis Inlet/Tsowwin Narrows Head Bay Moutcha Bay Gold River surround (Muchalat Lake to Donner Lake)  TFL 19 has 190 km of shoreline. Many of these landscapes have a large component of old growth forest.	The conclusions of Nootka Sound Forest Recreation and Tourism Opportunity Study derived sites that had high capability for certain tourism products.  Recreation and tourism interests want to ensure that high quality visual experiences remain available even in working forest settings.  Strong interest and participation in salt and freshwater sports fishing.	Commercial tourism development may occur in the high capability areas, having implications for forest management, i.e. visual landscape management and access.  Current landscape conditions are less than recommended visual quality class in some areas. Refer to Figure 6.

Recreation Opportunity/	Demand/Trends	Issues and Gaps
Supply		
Karst and caves Approximately 26% of the potential karst on VI is located in Nootka Sound.	Interest in cave/karst features falls into two categories, general public and enthusiasts.	Standard operating procedures for proposed forest development in karst areas are in place.
Extent of karst coverage and presence of caves in TFL is reasonably well known.		Commercial cave guiding/tours occurs on a limited basis in the TFL. There is high potential for greater commercial development of this resource.
Exploration continues and new caves are being discovered.		Access to much of the higher elevation karst ecosystems in the TFL is limited.
Mountain and Alpine/Subalpine Areas In addition to neighbouring Strathcona Park, there are many high quality mountain and alpine/subalpine areas in TFL 19.	Backcountry/wilderness areas are particularly attractive if close to population centres and if there is motorized access to the periphery of the area.	Proposed road development in Zeballos Lake and the upper Leiner River would reduce the size of the largest wilderness/mountainous area in the TFL.
These areas overlap with wilderness areas and sometimes with karst areas. Refer to Figure 8.		See also road access/deactivation
Lakes There are 15 lakes with significant recreation value in or nearby the TFL.	Continuing demand for lake based recreation, including swimming, boating, and camping, picnicking.	Need for trails at lakes, i.e. Bull Lake, Muchalat Lake through old growth, Zeballos Lake links to alpine, Twaddle Lake recreation site development.
		Visual quality in Muchalat Lake viewshed is below RVQCs in some areas. Refer to Figure 6.
		Demand for visual quality in lake viewsheds, i.e. Twaddle, Zeballos Lakes.
Rivers There are seven good fishing rivers in the TFL.	High demand for quality river fishing settings	Pull outs needed at bridge crossings, i.e. where Head Bay Forest Road crosses the Conuma River.
River kayaking popular on Gold River. Potential for kayaking on Ucona.		

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Recreation Opportunity/	Demand/Trends	Issues and Gaps
Supply  Trails/Hiking Areas  There are both formally managed and informally managed hiking trails that provide access to alpine areas.  Trails conditions vary from near level and well surfaced to rough flagged routes.  See 3.1 – Mountains and Alpine/Sub-alpine Areas.  An abundance of deactivated logging roads which could be turned into a trail network. There is potential to enhance this activity through the creation of marked trails, annual races, rental facilities and appropriate marketing (Nicolson, 1998).	Day hiking is a popular activity.  Broad demand for heritage tours.	Tahsis River valley trail to Woss Lake is an old, cross-island grease trail. Also has logging history.  Trail to Matchlee Mtn. Trail is rough, may be difficult to find. The access road is semi-deactivated and some users find passage difficult.  See also: road access/deactivation.
Nature Study – Land Large trees, forest ecosystems, karst ecosystems, rivers, lakes, fossils, intertidal zones, estuaries, marine landscapes  Wildlife Continuum of settings, Terrestrial, marine, sea birds, land birds.	Nature study is the recreation activity with the highest demand provincially.  Demand for high intensity tourism trips, i.e. trips offering sea, land, and alpine experiences all in a short time frame.	Demand for these settings impacts on forest management, i.e. demand to view wildlife in attractive settings, view marine life with natural appearing landscape backdrops.
Heritage Features Tahsis River Grease Trail.  Pandora Iron Mine, Spud Creek and Privateer Mines, Hisnit Quarry.  First Nations History, Yuquot, sites throughout Nootka Sound	Strond demand for heritage specific tours, and as part of multi-activity packages offered by resorts/lodges.	Tahsis Trail is undeveloped and there is community interest in its development.  No formal development of heritage features other than at Yuquot.
Mushrooms	Established demand for	No formal structure for

D	D	
Recreation Opportunity/ Supply	Demand/Trends	Issues and Gaps
Good growing and picking sites in some areas in TFL 19, e.g. around Star Lake, Gold River-Muchalat River	mushrooms for sale and for personal use.	management of impacts of forest development on mushroom habitat. Extent of mushroom resource not known.
junction just outside of the Park.		Concerns over damage to mushroom areas by logging and by incorrect mushroom harvesting techniques.
Interagency Agreements Wildlife Habitat Area at Weymer Creek	Demand for nature/cave tours	Area may not be suitable for tours.
Recreation Sites 7 Camping and 14 day use areas. Road and water access. There are boat launches providing access to lakes and to Nootka Sound.	Well established demand for rustic camping opportunities as provided by Ministry of Forests/Forest Industry type recreation sites and boat launches  Site user survey indicates steady increase in user numbers.	There are 137 Commercial Recreation/Tourism businesses based in or are using Nootka Sound, 34 of which provide only accommodation services. Informal sites: Gold River/Muchalat River junction, Hoiss Creek, McCurdy Creek, Zeballos river north of canyon (picnic site), Bull Lake (picnic
Maps/Signage A recreation map is available for TFL 19, as well as smaller, detailed maps for recreation sites and trails. Ministry of Forests maps and brochures available.	Self-guided tours are popular.	site).  No issue or gaps. Maps are available.
Road Deactivation/Access Mainline and secondary logging roads provide access to high value recreation areas, i.e. subalpine and alpine settings.	Strong demand for motorized recreation opportunities (2WD, 4x4, ATV and high clearance vehicles).  Strong demand for access to or close to sub-alpine areas.	Deactivation of roads can limit recreation access.  Trails leading from secondary logging roads typically have no formal management or status, leading to variable access conditions, uncertainty regarding whether access is available.
Opportunity for a road connecting Tahsis and Zeballos.	Tahsis and Zeballos want a connection between them.	Logging roads between Tahsis and Zeballos are close to connecting.  Tourism operator use of logging roads for business purposes.

## **5.2 Recreation Management Options**

Options have been developed to address each of the issues or gaps identified in Section 5.1. Each option has a management objective(s) and strategies to meet those objectives.

Issues	Management Options	Management Objectives	Management Strategy
Scenic Landscapes: Current landscape conditions are less than	Allow natural regrowth to repair	Allow normal recovery to occur	Plan for normal recovery of landscape quality
desired in a limited number of areas. Refer to Figure 6.	2) Apply intensive silviculture, road debuilding etc. to accelerate visual recovery	Reduce recovery time of visual quality	Identify potential candidate areas for rehabilitation, i.e. Hisnit Inlet.
Scenic Landscapes: tourism opportunities Recreation and tourism interests want to ensure that high quality visual experiences continue remain available even in working forest settings.	Develop methods for incorporating commercial tourism requirements for visual quality into visual landscape management	Improve awareness of co-existing visual resource inventories and analysis at operational planning level.	Include Tourism Opportunity Survey visual resources data from commercial tourism businesses in setting levels of landscape management
Karst and Caves Standard operating procedures for proposed forest development in karst areas is in place.	Encourage responsible public and commercial development of karst resources.	Protection of the public in the case of caves and cave entrances	In proposed forest development areas where karst is believed to occur, field check local geology as per standard operating procedures.
Commercial cave guiding/tours occurs on a limited basis in the TFL. There is high potential for greater		Protection of karst resources.  Facilitate caving opportunities	Participate in karst development/planning processes.
commercial development of this resource.			Facilitate access to karst areas. Refer also to Road deactivation/access
Access to much of the higher elevation karst ecosystems in the TFL is limited.			Maintain current public caving recreation sites

lanca	Managanant	Managanant	Management Otherton
Issues	Management Options	Management Objectives	Management Strategy
Mountain and Alpine/Sub-alpine Areas Proposed road development in Zeballos Lake and the upper Leiner River would reduce the size of the largest wilderness/mountainous area in the TFL.  See also road access/deactivation	Zeballos Lake: proposed road development has potential to facilitate access to Rugged Mountain, Haithe Range and Woss Lake Provincial Park	Facilitate access to higher value alpine/sub-alpine areas	Refer to Road Access/Deactivation  Improve trailhead to Victoria Peak Trail, i.e. sign and make level parking area. The road is steep road with no pullout area.
Lakes Need for trails at lakes, i.e. Bull Lake, Muchalat Lake through old growth, Zeballos Lake links to alpine, Twaddle Lake recreation site development.  Visual quality in Muchalat Lake viewshed is below RVQCs in some areas.  Demand for visual quality in lake viewsheds, i.e. Twaddle, Zeballos Lakes.	Set up trail building/ maintenance stewardship with local groups	Meet demand for lake based recreation.  Meet demand for a range of trail types.  Meet demand for nature study.	Bull Lake: consider pull- out/picnic area for vehicles. Build circle trail around the lake, connecting with Conuma Peak Trail.  Muchalat Lake: build trails through old growth forest on south side of the lake opposite the recreation site and/or on the north side near the west end of the lake.  Zeballos Lake: build campsite, picnic sites, interpretative trail, trail links to sub-alpine.  Twaddle Lake: build day use recreation site. Build trail around the lake.  Refer to Scenic Landscapes.
Pull outs needed at bridge crossings, i.e. where Head Bay Forest Road crosses the Conuma River.		Safe and environmentally sound access to rivers	Build and maintain pull-outs where safe to do so at creek and river crossing.

Issues	Management Options	Management Objectives	Management Strategy			
Trails/Hiking Areas Tahsis River valley trail to Woss Lake is an old, cross-island grease trail.  Trail to Mt. Matchlee. Trail is rough, may be difficult to find. The access road is semideactivated and some users find passage difficult.	Trail development might be funded by commercial tourism businesses  Set up trail building/ maintenance stewardship with local groups	Meet demand for a range of trail types, including opportunities for historical interpretation.	Lend corporate skills and supplies (mapping, machine operation, photographs) to Tahsis residents who want to build the Tahsis River trail.  Field check condition of road and trail to Matchlee Mtn. and decide whether to repair existing trail, or would roads associated with new development provide better access.  See also: road access/deactivation.			
Nature Study  Demand for these settings impacts on forest management, i.e. demand to view wildlife in attractive settings, view marine life with natural appearing landscape backdrops.	Manage for higher landscape quality in key nature study areas.	Manage landscape quality to reflect other resource values.	Refer to scenic landscapes and Road Deactivation/Access.			
Heritage Features Tahsis River Trail is undeveloped and there is community interest in its development.  No formal development of heritage features other than at Yuquot.	Formalise management of suitable heritage features.	Promote cultural history associated with logging history in the TFL  Apply appropriate protection of heritage features so they remain available for future use	Refer to Trails/Hiking Areas for Tahsis River Trail.  If trails are built into old mines in the Zeballos and Nomash valleys, assist with logistics such as building parking areas beside roads.  Inventory examples of early logging  Consult with stakeholders in areas where proposed development may overlap archaeological resources.			

Jeane	Managament	Managament	Managament Strategy
Issues	Management Options	Management Objectives	Management Strategy
No formal structure for management of impacts of forest development on mushroom habitat.  Extent of mushroom resource not known.  Concerns over damage to mushroom areas by logging and by incorrect mushroom harvesting techniques.  Exact conditions required for mushrooms not known  Concern by pickers over damage to mushroom areas by logging	Inventory this resource to obtain a measure of its extent and temporal changes to location expected with forest succession.	Identification of mushroom resources in order to ensure appropriate protection and management of impact of pickers on the mushroom resource	During the prime mushroom maturation period, proposed forest development/harvest areas should be examined to assess the presence of mushrooms and to assess the quality of the area for mushroom production.  Consult with the forest district to determine an assessment and appraisal format.  Mushrooms are a known resource. Proposed forest harvesting plans should take into account the presence of this resource, modifying forestry and engineering practices as necessary.  Develop inventory of mushrooms and other forest floor products
Interagency Agreements Wildlife habitat area at Weymer may not be suitable for tours.		Protection of the bat habitat	If caves are suitable for commercial or public tours, maintain road access.  If caves are not suitable for tours, deactivate access.
Recreation Sites There are 137 Commercial Recreation/Tourism businesses based in or are using Nootka Sound, 34 of which provide only accommodation services.  Informal sites at the Gold River/Muchalat River junction, Hoiss Creek, McCurdy Creek, Zeballos River north of canyon (picnic site), Bull Lake (picnic site)	Continue to upgrade or build recreation sites as required  Encourage commercial development of new recreation sites	Meet public demand for rustic recreation facilities.  Improved site maintenance through formal management of informal campsites	Further site development might be better done by commercial recreation and tourism businesses. WFP should review Commercial Recreation (CR) applications pertaining to TFL 19.  Encourage formal management of informal sites  See also Lakes and Trails/Hiking Areas

Issues	Management Options	Management Objectives	Management Strategy
Peactivation/Access Deactivation of roads can limit recreation access.  Trails leading from secondary logging roads typically have no formal management or status, leading to variable access conditions, uncertainty regarding whether access is available.  Logging roads between Tahsis and Zeballos are close to connecting.  Tourism operator use of logging roads for business purposes	Maintain road access to key recreation areas  Identify roads where commercial tourism businesses share responsibilities for maintenance	Provide opportunities for motorized recreation in a variety of settings  Consistent mapping and signage of trail heads  Inform visitors of road conditions	Keep certain roads in TFL 19 open to 4x4 level of access to access recreation areas, i.e.  Nomash Main and N-50 to Rugged Mountain and Haithe Range,  H-60M to Conuma Peak,  U-29 to Matchlee Mountain, W-79 and W-79K to Victoria Peak,  WD-7 to Big Baldy Mountain, Cala Creek road,  C-60 to Alava and Peters Lakes,  Conuma River roads to McNally Ridge,  Nomash and Extravagant Creek roads to Nomash Meadows  Z-60P to Zeballos Peak  Vary degrees of road deactivation where possible to reflect recreation values  Signpost levels of road deactivation at beginning of roads/spurs  Encourage users to approach WFP for current information on road conditions.  Where commercial tourism operators use roads for their business, define roles and responsibilities for maintenance, liability and cost sharing.

## 6.0 Recommended Recreation Management Options (RMO's)

Recommended Management Options are identified in Section 5.2 - Recreation Management Options.

In most cases there is only one option. For example, in the case of mushrooms, which is a known resource, but not quantified, some form of survey is necessary in order to develop a management strategy.

This section discusses those resource issues having more than one management option.

## Scenic Landscapes: Current Conditions

Recommended Management Option (RMO): Where possible, Option #2 should be pursued: *Apply intensive silviculture, road debuilding, etc. to accelerate visual recovery.* 

There may be opportunities to coordinate with watershed restoration, road debuilding etc. to achieve visual resource management objectives.

## **Trails/Hiking Areas**

RMO's: Both options may apply. Consult with stakeholders and with commercial tourism operators to develop management approach.

#### **Recreation Sites**

RMO's: Both options may apply. Consult with stakeholders and with commercial tourism operators to develop management approach.

#### Road Deactivation/Access

RMO's: Both options may apply. Consult with stakeholders and with commercial tourism operators to develop management approach.

Appendix XIV Goshawk Inventory

# Gold River "Queen Charlotte" Goshawk Inventory 1999

Erica McClaren, February 2000

## **Summary**

A two person crew conducted northern goshawk (*Accipiter gentilis laingi*) inventories for the second year in forests surrounding Gold River between May and August 1999 (Figure 1). Known nest territories were assessed for reoccupancy and new areas were inventoried to gain more information on the breeding distribution and breeding habitat of goshawks on Vancouver Island. Attempts were made to capture breeding adults and affix backpack radio-transmitters so that we can learn more about goshawk seasonal habitat use and movement patterns, survival and breeding dispersal. One-hundred and eighty-nine broadcast stations (2,457 ha) and 14.5 hours of stand-watch surveys resulted in three new alternate nest sites within known goshawk territories. As well, one new goshawk territory was reported by Western Forest Product employees and was confirmed by goshawk crew members to be active. Thus, goshawk breeding activity in the Gold River area was relatively low in 1999, with one of the three (33.3%) previously known territories being active (which failed in June) and only one new nest territory located. The one successful nest in the Gold River area fledged two young. The adult female at the newly found Bolton Lake territory was captured and radio-tagged and continues to be tracked throughout the winter months.

## Objectives for Gold River goshawk inventory:

- 1. To return to known goshawk territories in order to assess territory reoccupancy, nest site and mate fidelity and breeding dispersal movements for banded and tagged individuals, and to gather nest productivity data.
- 2. To survey for goshawks in Gold River for a second year and to survey new areas on Nootka Island and in Zeballos to increase our knowledge of goshawks breeding distribution and habitat associations. Forestry personnel prioritized survey areas, as there were a limited number of areas that could be inventoried during the breeding season. Within these prioritized areas, effort was distributed equally in three landscape types: 1) continuous old growth; 2) continuous second growth; and 3) fragmented forests, so that data collected may be compared among silvicultural treatments and to prevent survey bias. However, within Gold River, effort was mainly in continuous old-growth forests as this is the dominant landscape type within this area.
- 3. To provide additional data for the development of a nest habitat suitability model for goshawks so that this model will accurately represent the full range of habitat variables found around goshawk nest sites on Vancouver Island. The aim of this model is to streamline the process of surveying for goshawks, alleviating a potential bottleneck for forest harvesting.
- 4. To utilize reoccupancy and nest productivity data and the nest habitat suitability information from goshawk inventory to develop Wildlife Habitat Areas (WHAs) around specific goshawk nest territories as instructed by the *Managing Identified Wildlife: Procedures and Measures. Volume I.* (Ministry of Forests and BC Environment 1999).
- 5. To assess the effectiveness of the standardized Resource Inventory Committee (RIC) methodology for the inventory of goshawks (Ethier and McClaren 1997), modified from the original goshawk inventory protocol described by Kennedy and Stahlecker (1993).

6. To assist researchers on Vancouver Island with the capture of goshawks at active nest sites in order to band birds, collect blood and affix backpack radio transmitters. Radio telemetry data will provide information on home range size and habitat use, as well as on nest site and mate fidelity, breeding dispersal and other seasonal movements. Survivorship data may also be gathered through radio telemetry. Additionally, radio telemetry has proven to be an invaluable inventory tool for locating nesting pairs from year to year and for finding new nests and territories.

#### **Study Areas**

Table 1. Description of study areas where goshawk inventory occurred near Gold River in 1999.

	Study Area	Forest Type	Predominant Age Distribution
GOLD RIVER AREAS	Muchalat Lake	fragmented old growth	old forest >250 yr., recent clearcuts and young second growth (<40 yrs.); little or no connectivity between forest patches
	Gold/Muchalat Park	fragmented old growth	old forest >250 yr., recent clearcuts and young second growth (<40 yrs.); little or no connectivity between forest patches
	Twaddle Lake	continuous old growth	majority (>70%) >250 yr.; connectivity between forest patches
	Leagh Creek	continuous old growth	majority (>70%) >250 yr.; connectivity between forest patches
	Conuma/Norgate Rivers	continuous old growth	majority (>70%) >250 yr.; connectivity between forest patches
	Star Lake	continuous old growth	majority (>70%) >250 yr.; connectivity between forest patches
	Nootka Island	fragmented old and second growth	old forest >250 yr., recent clearcuts and second growth forest (0-65 yr.)
	Curly Creek, Zeballos	continuous old growth	majority (>70%) >250 yr.; connectivity between forest patches

## **Results**

## Goshawk Inventory

Between May and August 1999, 189 broadcast stations (2,457 ha) resulted in two confirmed goshawk detections leading to one new territory and three new alternate nests within known territories (Table 2). Eighty-nine percent (2197 ha) of call stations occurred in continuous old-growth forests, none occurred in continuous second-growth forests and 10.6% (260 ha) were in fragmented forests. Both goshawk detections occurred in continuous old-growth forests.

Although 14.5 hours of stand-watch surveys were conducted, no goshawks were detected using this technique (Table 2). Stand-watches were conducted within continuous and fragmented old-growth forests where there were good vantage points.

One new goshawk territory was reported by Western Forest Product employees and one alternate nest was located in this territory. This brings the total number of confirmed goshawk nest territories currently known on Vancouver Island to 41.

Table 2. Survey effort, goshawk detections, and nest territories found in Gold River survey areas and forest types (OG=old-growth, SG= second-growth) on Vancouver Island, May-August 1999.

Survey	Forest Type		Call Stations Stand-watches		No. New			
Areas		no.	area(ha)	detections	no.	hours	detections	Nests
GOLD RIVER	Continuous OG	169	2197	2	7	11	0	5 <sup>ab</sup>
	Continuous SG	0	0	_	0	0	_	_
	Fragmented OG/SG	20	260	0	2	3.5	0	0
TOTAL	All Forest Types	189	2457	2	9	14.5	0	5

<sup>&</sup>lt;sup>a</sup>Three of these were new nests in known goshawk territories and the other two were new nests in a new territory.

<sup>&</sup>lt;sup>b</sup>The new territory with one active and one alternate nest was reported by forest company employees.

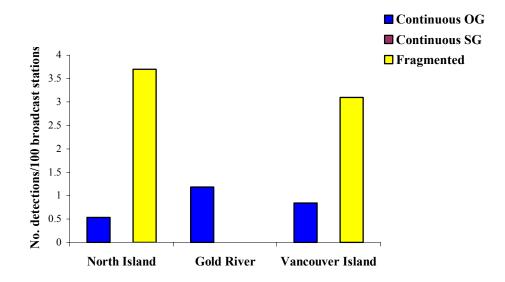


Figure 2. Broadcast survey success, May-August 1999.

Broadcast survey success, measured as the number of detections per 100 broadcast stations, was 0.8, 0.0, and 3.1 for all surveys on Vancouver Island in continuous old-growth, continuous second-growth and fragmented forests, respectively (Figure 2). Separated by survey area, broadcast surveys were most effective in fragmented forests on the north island with 3.7 detections/100 broadcast stations compared to continuous old-growth (0.5) and continuous second-growth (0.0) forests. In Gold River survey areas, all goshawk detections occurred in continuous old-growth forests resulting in a detection rate of 1.2 detections/100 broadcast stations. Broadcast survey success rates in 1999 for Vancouver Island translate to approximately one new goshawk nest (within an unknown or previously known territory) being located for every 1.4 goshawk detections.

## Territory Reoccupancy and Nest Productivity

When the three previously known goshawk territories in the Gold River area were assessed for reoccupancy and activity in 1999, one (33.3%) was reoccupied by nesting adult goshawks, although the other two territories were occupied by transmittered females in April.

As well as assessing known goshawk territories for reoccupancy, the number of young in each nest approximately one week prior to fledging (≈39 days of age) was documented. The Muchalat Lake

territory that was active in June failed to produce any young and the females that were in the other two territories in April, never initiated incubation. Productivity for the one successful nest was two young. Mean productivity over all years data have been collected at nests in the Gold River area is  $1.75\pm0.63$  (n=4).

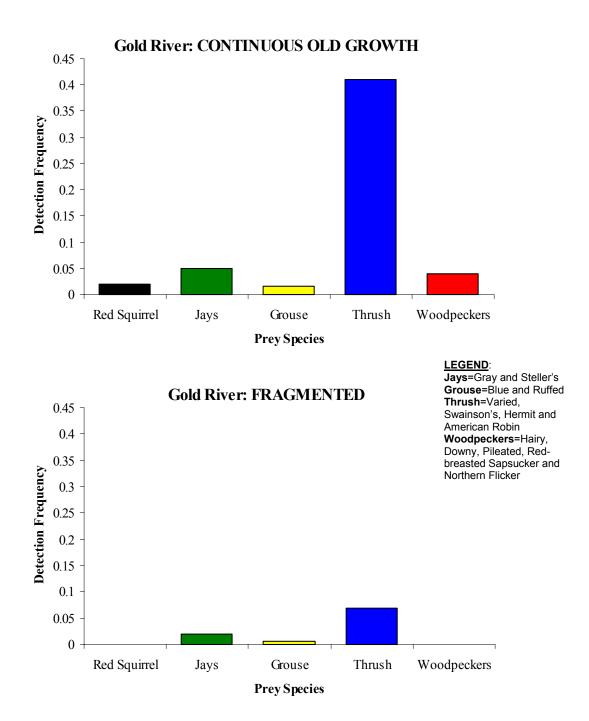


FIGURE 3. GOSHAWK PREY DETECTION FREQUENCIES AT BROADCAST STATIONS IN TWO FOREST TYPES WITHIN GOLD RIVER INVENTORY AREAS ON VANCOUVER ISLAND, MAY TO AUGUST 1999.

## Goshawk Prey

The main prey items for goshawks on Vancouver Island were determined from information reported by Titus *et al.* (1994) on the prey species for goshawks in southeast Alaska along with pellet analysis data from goshawks on Vancouver Island (Ethier 1999). From this information, the occurrence of potential goshawk prey species was noted at broadcast stations between May and August 1999 (Figure 3). Overall, thrush species, including Varied Thrush (*Ixoreus naevius*), American Robin (*Turdus migratorius*), Hermit Thrush (*Catharus guttatus*) and Swainson's Thrush (*Catharus ustulatus*) were the most abundant prey group in all forest types whereas red squirrels (*Tamiascurius hudsonicus*) were least abundant. Jays (Steller's Jays, Gray Jays), woodpeckers [Red-breasted Sapsuckers, Northern Flickers (*Colaptes auratus*), Pileated Woodpeckers (*Dryocopus pileatus*), Downy Woodpeckers (*Picoides pubescens*), Hairy Woodpeckers (*Picoides villosus*)], thrush and red squirrels were detected most frequently in continuous old-growth forests whereas grouse [Blue Grouse (*Dendragapus obscurus*), Ruffed Grouse (*Bonasa umbellus*)], were detected most often in continuous old-growth and fragmented forests.

## Nesting Habitat

All known goshawk nest territories around the Gold River area were located in forests consisting primarily of continuous old-growth forest (Table 3). Stand aspect, defined here as the aspect of the forested slope measured at the nest tree, varied among goshawk nest territories on Vancouver Island (Figure 4). Of the 34 nest territories where stand aspect data have been collected, territories were evenly distributed among the four cardinal directions. Likewise, this is approximately the trend for the new nest territories located each year. The elevational range of new goshawk nests found in Gold River in 1999 was between 233 m for the Bolton Lake nest and 660 m for the Muchalat Lake nest.

At a smaller scale, goshawk nests were found in a wide variety of tree species. In Gold River, two (40.0%) were in Douglas fir (*Pseudotsuga menziesii*), and three (60.0%) were in western hemlock (*Tsuga heterophylla*). Unfortunately nest tree data were not collected from three nest sites in 1999. In general, nest trees had a relatively large DBH (range from 121 to 314 cm) and nests were located between 1/3 to 1/2 the way up nest trees. All goshawk nests found in 1999 were in live trees.

Table 3. Habitat characteristics of goshawk nest trees found during the summer of 1999 in continuous old-growth (COG), continuous second-growth (CSG) and fragmented (FRAG) forests in Gold River, Vancouver Island.

<b>Nest Territory</b>	Forest	Nest T	ree Characte	eristics				
-	Туре			Tree Ht. (cm)			DBH Elev. (cm) (m)	
Bolton Lake #1	COG	60-80	WH	39.7	14.5	127.5	410	Alive
Bolton Lake #2	COG	>250	WH				233	Alive
Muchalat Lake #2ª	COG	>250	WH			230	660	Alive
Muchalat Lake #3ª	COG	>250	DF			121	635	Alive
Gold/Muchalat Park #2 <sup>a</sup>	COG	>250	DF	74.0	25.5	314	285	Alive

These nests were unknown alternate nest trees found within known goshawk territories in 1999.

<sup>&</sup>lt;sup>b</sup>DF = Douglas-fir; WH = Western Hemlock

Note: missing data indicate no data were collected for these parameters due to time and/or equipment constraints.

#### Trapping and Radio-telemetry

From the one pair of goshawks known to be nesting in the Gold River area in 1999, the adult female was captured and radio-tagged (Table 4). In general, male goshawks are more difficult to capture because they spend more time away from the nest site foraging and are less aggressive due to their smaller body size. Thus, we were unable to catch the male at the Bolton Lake nest. During the summer of 1999, the Gold Park and Oktawanch females, that were radio-tagged in 1998 at Gold River nest sites, moved around throughout the Gold River area but did not settle down on nest territories to breed.

Table 4. Goshawk trapping results from Gold River area nests in 1999 using a Great Horned Owl and mistnet (GHOW + mn).

Study Area	Capture Location	Date	Sex (M/F)	Age (A/Imm.)	Capture Method
<b>GOLD RIVER</b>	Bolton Lake #1 nest	99/06/23	F	Α	GHOW+ mn

Currently, the Gold Park male and female, both tagged in 1998, have died; the male died during the winter of 1998/99 and the female died this winter. The cause of death to these goshawks is unknown and may be from the weight of transmitters, winter weather, fluctuations in prey abundance and/or changes in habitat conditions. The Oktawanch and Bolton lake females continue to be located during winter telemetry flights on Vancouver Island. It remains difficult to maintain consistent contact with radio-tagged individuals because of poor weather and steep terrain complications.

## **Literature Cited**

- Ethier, T. and E. McClaren, eds. 1997. Standardized Inventory Methodologies for Components of British Columbia's Biodiversity: Raptors (Vs. 1.1). Resources Inventory Committee, Ministry of Environment, Lands and Parks, Victoria, BC. 23pp.
- Ethier, T. 1999. Breeding habitat of northern goshawks (*Accipiter gentilis laingi*) on Vancouver Island: a hierarchical approach. Master's Thesis. University of Victoria, BC.
- Kennedy, P.L. and D.W. Stahlecker. 1993. Responsiveness of nesting northern goshawks to taped broadcasts of 3 conspecific calls. *Journal of Wildlife Management* 57:249-257.
- Ministry of Forests and BC Environment. 1999. Managing Identified Wildlife: Procedures and Measures. Volume 1. 1999. 180pp.
- Titus, K., C.J. Flatten and R.E. Lowell. 1994. Goshawk ecology and habitat relationships on the Tongass National Forest goshawk nest sites, food habits, morphology, home range and habitat data. First Annual Progress Report. Contract 43-0109-3-0272 with USDA Forest Service. Alaska Dept. of Fish and Game, Juneau, Alaska. 69 pp

## Appendix XV WRP – Habitat Restoration Plans

## **WRP - HABITAT REHABILITATION PLAN**

LOCATION	DESCRIPTION
Twaddle	41 km of road have been deactivated within the Twaddle River planning unit. Benefits associated with this work include lower risk of slope instability and a reduced volume of sediment negatively impacting fish habitat through erosion.
Muchalat Lake	28 km of road have been deactivated within the Muchaat Lake planning unit. Benefits associated with this work include lower risk of slope instability and a reduced volume of sediment negatively impacting fish habitat through erosion.
Oktwanch River	3 km of side channel habitat has been developed off of the Oktwanch River to date. Future plans call for an additional 1 km of side channel development and bank stabilization structures to be installed along 1.5 km of the Oktwanch River itself.
Zeballos Estuary	0.9 km of side channel habitat is being developed at the Zeballos River estuary in the 2000 field season. An additional 0.4 km of possible side channel development has also been identified for future work.
Tsowwin	7.3 km of road have been deactivated within the Tsowwin River planning unit. Benefits associated with this work include lower risk of slope instability and a reduced volume of sediment negatively impacting fish habitat through erosion.
Conuma	Currently the Conuma planning unit is under going overview assessments to identify what potential risks exist to fish habitat. Based on these findings, prescriptions will be drawn up and the work carried out in 2001 and 2002. Initial findings estimate approximately 15 km of road may need deactivating and there is likely little need for instream work.
Upana	Currently the Upana planning unit is under going overview assessments to identify what potential risks exist to fish habitat. Based on these findings, prescriptions will be drawn up and the work carried out in 2001 and 2002. Initial findings estimate approximately 30 km of road may need deactivating and there may be need for instream work.
Ucona	Currently the Ucona planning unit is under going overview assessments to identify what potential risks exist to fish habitat. Based on these findings, prescriptions will be drawn up and the work carried out in 2001 and 2002. Initial findings estimate approximately 5 km of road may need deactivating and there is likely little need for instream work.
Leiner/Perry	Leiner/Perry planning unit will under going overview assessments in the near future to identify what potential risks exist to fish habitat. Based on these findings, prescriptions will be drawn up and the work carried out in 2001 and 2002.
Zeballos River	19 km of road have been deactivated within the Zeballos River planning unit. Benefits associated with this work include lower risk of slope instability and a reduced volume of sediment negatively impacting fish habitat through erosion.

Appendix XVI Twenty-Year Plan



## TWENTY-YEAR PLAN

IN PREPARATION OF

**MANAGEMENT PLAN 9** 

**FOR** 

**TREE FARM LICENCE 19** 

Submitted to the Campbell River Forest District, Ministry of Forests

May 2001



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## 1.0 INTRODUCTION

This report, together with the accompanying maps, demonstrates the spatial feasibility of initial harvest levels proposed in the associated Timber Supply Analysis (TSA). As the timber supply model used in the TSA is spatially explicit, spatial feasibility is automatic making the primary purpose of a twenty-year plan redundant. However, a manually developed hypothetical twenty-year harvest schedule was used within the model to emulate more operationally-based harvest blocks than normally occur with spatial models using computer generated aggregation and harvest controls (i.e. oldest first, closest to the mill and/or minimize growth loss). Note that this schedule is not a definitive operational plan.

## 2.0 Procedure

Harvest projections were developed manually to cover the twenty-year period from 2001 to 2020. Completed using the methodology outlined in the attached Terms of Reference harvest blocks were assigned planning periods based on:

2001 – 2005	Involves planning harvesting operations in previously undeveloped portions of watersheds, blocks adjacent to "greened-up" stands and
	satisfy Coastal Watershed Assessment Procedures (CWAP), Visual
	Quality Objectives (VQOs) etc. Blocks illustrated are generally within the
	approved 1999 – 2003 Forest Development Plan for operations within
	TFL 19.

- 2006 2010 Involves planning harvesting operations in previously undeveloped portions of watersheds, blocks adjacent to stands "greened-up" during the period and blocks satisfying CWAPs and VQOs during the period.
- 2011 2020 Involves second passes at watersheds previously developed and blocks satisfying CWAPs and VQOs during the period.

Harvest blocks defined manually were scheduled to meet the current AAC for the TFL. Assumed harvesting for the year 2000 was also projected and simulated as part of the manual process to bring the forest inventory in line with the planning horizon for this plan.

The completed manual twenty-year plan was then incorporated into the timber supply model to guide harvest aggregation and scheduling. As the timber supply model is set with current management assumptions<sup>10</sup>, such as VQOs, biodiversity and green-up, the twenty-year plan was readily evaluated for any harvest constraint violations.

To allow for some flexibility in how the manual twenty-year plan schedule was used within the timber supply model, set-up procedures were designed so that the block schedule was used only as a guide as to when blocks became available for harvest (i.e. the schedule was not forced within the model). In other words, if a block were scheduled for 2002, the

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<sup>&</sup>lt;sup>10</sup> A complete listing of all assumptions used in the TSA can be found in the TFL 19 Information Package.



model was set up so that the block becomes available for harvest, but doesn't necessarily get harvested unless it is actually needed to meet the harvest volume requested. By using this methodology, the model is able to alter the manual harvest schedule around to avoid constraints or to accommodate changes in volume requests by period.

## 3.0 Results

Results for the combined manual twenty-year plan and timber supply model are presented here. Harvest levels obtained for each of the five-year periods are presented in Table 1.

Period	Projected Annual Harvest Rates (m³/year)	Projected Total Harvest (m³)
2001 – 2005	940,347	4,701,735
2006 – 2010	904,144	4,520,720
2011 – 2015	869,334	4,346,670
2016 – 2020	835,865	4,179,325
Total	3,549,690	17,748,450

**Table 2. Projected Harvest Rates** 

Overall, the results show that the manual twenty-year plan schedule worked well in the first five-year period, but deviations occurred in the following periods. Analyses of model outputs indicate that the deviation from the manual schedule is due primarily to VQO constraints, which is not surprising given the difficult nature in accommodating this constraint manually. Other deviations were caused by the integration of new information since the completion date of the manual plan (i.e. recreation inventory) and challenges with "cutting-in" the manually identified harvest areas into the timber supply modelling dataset.

Although the manual twenty-year plan sequence varied in the timber supply model, the spatial feasibility of harvesting at the projected harvest rates was verified. Note however that other sequences would be feasible, just as other acceptable block layout configurations could be designed manually or using modelling procedures. This plan does not represent any operational commitment and should not guide or project actual forest development planning.

The following tables summarize harvest stats for the twenty-year period covered.

Period	Area/yr	Mean Age	Mean DBHq	Mean Vol/ha
2001 - 2005	1,584.4	278	49.7	618.2
2006 - 2010	1,546.3	304	49.5	609.1
2011 - 2015	1,444.2	253	49.4	627.0
2016 - 2020	1,490.6	258	46.2	584.1
Total	6,065.5			

Table 3. Areas, Age, Piece Size and Volume



Table 4. Harvested area by operability (ha)

	Operable Con	ventional	Operable He	licopter	Total(ha)
PERIOD	(ha)	%	(ha)	%	
2001 - 2005	1244.3	79%	340.1	21%	1584.4
2006 - 2010	1169.2	76%	377.1	24%	1546.3
2011 - 2015	1191.9	83%	252.3	17%	1444.2
2016 - 2020	1277.4	86%	213.2	14%	1490.6
Total	4882.7	80%	1182.8	20%	6065.5

No economic constrained operable areas (Oce or Ohe) are identified in the results as they are excluded in the Current Management Option used in the TSA. The manual twenty-year plan did include some of these areas, which further explain some deviations that occurred.

As the model uses all constraints defined in the Current Management Option of the TSA, the possibility of violating constraints designed to protect non-timber values is eliminated in this projection. The table below reports on areas identified as having both timber and non-timber values that are being harvested over the twenty-year projection.

Table 5. Harvest area with overlapping non-timber values

		VQO		Karst	Recre	eation	Wildlife	Stab	ility
PERIOD	М	PR	R		НМ	VHM	PWA	Class 4	Class 5
2001 - 2005	351.8	207.0	10.7	117.7	22.5	4.9	632.0	480.3	48.9
2006 - 2010	354.6	149.8	3.6	158.6	32.6	3.7	160.8	369.5	61.2
2011 - 2015	327.7	257.4	2.2	71.3	15.5	1.3	93.5	375.2	53.4
2016 - 2020	336.0	244.6	8.8	124.1	15.6	7.7	152.6	347.3	46.1
Total	1370.1	858.8	25.3	471.8	86.2	17.6	1038.9	1572.3	209.6



## Appendix XV-A Terms of Reference for 20 Year Plan

## For TFL 19 MANAGEMENT PLAN No.9 (2001-2005)

## 1.0 Objective

The twenty-year plan is a requirement of the TFL licence agreement. The plan will be prepared as a component of Management Plan No.9 for Tree Farm Licnece 19 (TFL 19). The twenty-year plan will be projected for the period 2001-2020. The plan confirms that harvest levels presented in the base case of the timber supply analysis are achievable given spatial constraints of the land base. This plan is to serve a link between the harvest level indicated from the timber supply analysis for TFL 19 and operational planning at the cutting permit and five-year Development Plan level. The twenty-year plan is due on **September 30,2000**.

## 2.0 Methodology

To spatially identify timber harvest blocks for a twenty-year period, based on the indicated AAC, consistent with the requirements of the Forest Practices Code of BC and Higher Level Plans.

The following criteria will apply:

## A) Mapping Scale

The initial planning will be done on 1:5,000 scale maps. Final submission to the Ministry of Forests will be at 1:20,000 scale maps.

## B) Planning Periods

1<sup>st</sup> Five Year Period - involves planning harvesting operations in previously undeveloped portions of watersheds, blocks adjacent to "greened-up" stands and satisfy Coastal Watershed Assessment Procedures (CWAP), Visual Quality Objectives (VQO's) etc. Blocks illustrated are generally within the approved 1999-2003 Five Year Development Plans for operations within TFL 19.

2<sup>nd</sup> Five Year Period – involves planning harvesting operations in previously undeveloped portions of watersheds, blocks adjacent to stands "greened-up" during the period and blocks satisfying CWAP and VQOs during the period.

3<sup>rd</sup> and 4<sup>th</sup> Five Year Periods – involves second passes at watersheds previously developed and blocks satisfying CWAPs and VQOs during the period.



## C) Operability

New 1:20,000 operability mapping has been completed for the TFL. The terms of reference were submitted to the Ministry of Forests in February 1999 and approved by the Regional Manager in June 1999. Operability will be segregated by yarding system as per the terms of reference:

1) Conventional Yarding Systems

**Operable Conventional** 

Operable Conventional with Economic Constraints

2) Non-Conventional Yarding Systems

Operable Helicopter

Operable Helicopter with Economic Constraints

## D) Harvest Block Size

Block size will vary depending on:

- Resource Management Zone (RMZ) objectives
- Visual Quality Objectives
- Watershed Assessments
- Wildlife values
- Biodiversity values

## E) Leave Areas

FPC states that you can only harvest a cutblock that is adjacent to a previously harvested cutblock if the previously harvested cutblock is greened-up. No where does it state the size of leave block required to be left between the previously harvested cutblock and the proposed cutblock. The size of leave block will depend on:

- Economics
- Sufficient volume for 2nd pass
- Hydrology
- Wildlife
- Scenic and recreational values
- Biodiversity

## F) Block Design and Location

Each block must have a logical boundary that allows for the following:

- i. Road location;
- ii. Immature and logged areas;
- iii. Environmentally Sensitive Areas
- iv. Logging system.
- v. Profitability
- vi. Avoidance of isolated timber
- vii. Efficiency of subsequent operations



## G) Watershed and Streamside Management

Watershed assessments are carried out in community watersheds, watersheds that have significant downstream fisheries values, licenced domestic water users or as otherwise determined necessary by the district manager. Within TFL 19 a majority of communities are on well water. Currently there is only one community watershed located at Tahsis. Forest development plans must be consistent with the results and recommendations of the watershed assessments. These same recommendations will be incorporated into the twenty-year plan.

The 1994 inventory of riparian areas in the TFL has been updated to Forest Practices Code standards. New riparian reserve and management zones have been used in the timber supply analysis for MP 9 and will be incorporated into the twenty-year plan.

## H) <u>Cutblock Scheduling</u>

Harvest schedule guidelines for visual quality objectives will be incorporated:

VQO	Maximum Portion of Landscape Unit Harvestable
Retention	5 %
Partial Retention	15 %
Modification	25 %
Maximum Modification	40 %

Before scheduling of adjacent cutblocks the existing harvested blocks require to be meet visually effective green-up (VEG). For Nootka Region, VEG equates to 5-meter tall trees at 15 years old.

## I) <u>Harvestable Age</u>

Site	Minimum Harvest Age
Good	60
Medium	80
Poor	100

## J) <u>Environmentally Sensitive Areas</u>

Environmentally sensitive areas for soils, avalanches, wildlife, recreation, watersheds and fisheries have been updated and new areas have been incorporated into the timber supply analyses for MP 9. Generally class I (i.e. Ew1, Es1) will be reserved from harvest except where approved under the Forest Development Plan.

#### K) Road Design and Location

All mainline and branch roads that provide access to the cutblocks will be determined as per the operability plan. Locations of major crossings will also be shown.



## 3.0 20 Year Plan Report

The report will consist of a write-up explaining the underlying assumptions of the 20-year plan and if and how the plan deviates from the base case of the timber supply analysis. The report will include tabular information showing for each block:

- five year period
- block name
- area
- volume
- conventional or helicopter harvesting system

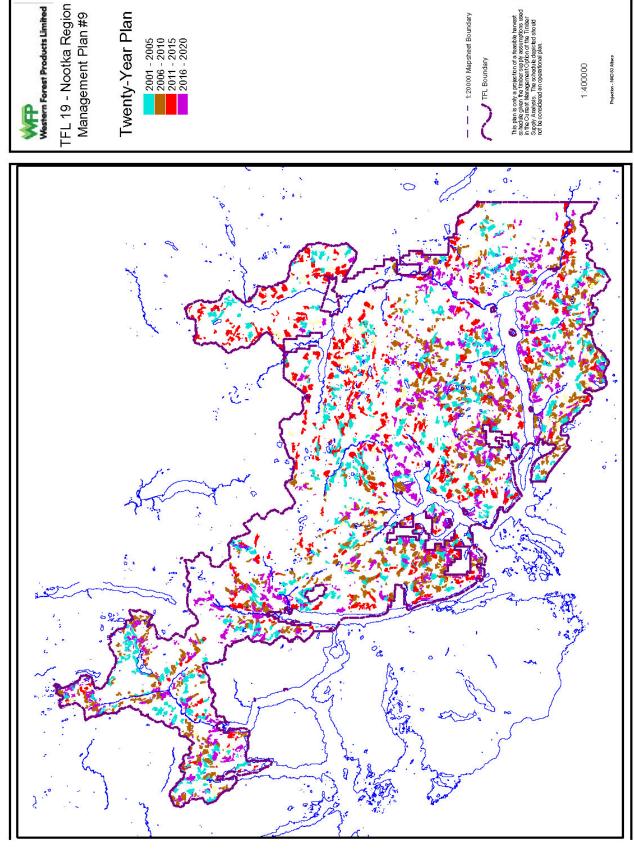
5 year Period	VQO (ha)	Recreation (ha)	Wildlife (ha)	Conventional Harvest (ha)	Helicopter Harvest (ha)	Total Area (ha)	Total Volume (ha)

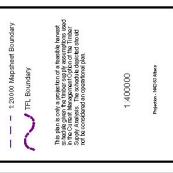
## 4.0 20 Year Maps

The maps will show the following features:

- Licence boundaries
- Municipal and community watershed boundaries
- Cutblock boundaries on approved forest development plan
- Broad timber types
- Operability as defined by an approved operability plan
- Years of harvestable timber by block, colour coded into 5-year periods
- Harvest system for each block
- Existing roads and river crossings
- Future (next 20 years) roads and river crossings
- Management zone boundaries
- Land use planning boundaries
- Sensitive sites
- Existing recreation developments
- Priority cutting areas
- LU boundaries
- VQOs
- Other resources with timber supply implications







## Appendix XVII ISO 14001 Registered Environmental Management System



## WFP Environmental Management System (EMS) registered to ISO 14001 Standard

Western Forest Products Limited (WFP) is registered effective April 12, 2000 to the international environmental standard ISO 14001 by independent auditor Quality Management Institute (QMI) following an audit of WFP's forest operations, regional offices and corporate office. The overall aim of the ISO 14001 standard is to support environmental protection and prevention of pollution in balance with social and economic needs.

ISO 14001 is an international standard that specifies the requirements of an environmental management system (EMS). An EMS is established to achieve and demonstrate sound environmental performance by controlling the impact of our activities on the environment and taking into account our environmental policy and objectives. The EMS is a structured process for meeting all legislative requirements and measuring environmental protection.

Using the EMS framework, we set specific environmental objectives and targets that reflect our legislative requirements and information about the significant environmental impacts in our day-to-day forestry activities. We evaluated all environmental aspects of our forest operations such as road construction, yarding and loading, harvesting and silviculture for the potential risk they pose to the environment as the basis for establishing environmental programs.

The environmental programs are a key element of our EMS because they outline how WFP's objectives and targets will be achieved, including timelines and personnel responsible for implementation. We have set measurable objectives and targets within our 8 environmental programs. These programs (attached) detail WFP's targets for environmental performance that maintain air, soil and water quality. WFP has set parameters for maintaining these values that we will monitor over time. For instance, we will track the number of reportable spills in our operations to ensure we are meeting our target of reducing spills by 10% per year. WFP's EMS brings environmental issues into the day to day activities of our forest operations so that we have a positive impact on the ground.

WFP conducts regular internal audits to measure our compliance with the environmental management system standard. The WFP Internal Audit Team visits all operations to monitor progress on our environmental programs and our overall environmental performance. The Internal Audit Team reports to WFP's Management Environment Review Committee that meets annually to review the results of our environmental programs and assesses the effectiveness of our environmental objectives so that we can achieve continual improvement.

QMI awarded the registration on the company's entire operations based on WFP's commitment to the environmental management system (EMS) that applies to all of WFP's forest activities including road construction, silviculture and fisheries protection.

The registration applies to WFP's 41 forest operations and supporting facilities such as log sorts and the Saanich Forestry Centre and covers an annual harvest of 4.2 million cubic metres, making it one of the largest ISO 14001 registrations in North America.

The independent registration provides objective evidence to the public and customers that WFP's EMS is clearly a tool for continual improvement and addresses "on the ground" forest practices by setting objectives and targets. The ISO 14001 registration process is part of WFP's sustainable forest management strategy that includes ongoing certification projects such as Forest Stewardship Council (FSC), Canadian Standards Association (CSA) and other related initiatives.

ISO 14001 – EMS Page 1

Revised: April 2001

Program 1 (pg 1 of 2) - 2001

Revised: April 2001

Program 2 (pg 1 of 2) File: F-11-8-1 (Original Only)

Revised. April 2001	File: F-11-8-1 (Orginal On
<b>₩FP</b>	ENVIRONMENTAL PROGRAM RECORD
Western Forest Products Lin Register Area: Forest Opera	
OPERATION [DEPARTMENT	(s)]: All WFP Forest Operations [Logging, Engineering, Forestry & Lands]
PROGRAM NAME/TITLE.: Enha	nced Standard Operating Procedures, Spill Plans and Haz/Mat Training
OBJECTIVE(S): 1.) Protection of	water quality 2.) Protection and conservation of soil resources
3.) Maintenance of ecosystem con	dition and productivity
	liminate Petroleum and Hazardous Spills 2.) Zero Non-compliance's per year ad related landslides which impact on streams 4.) Zero accidental industry caused forest
TARGET(S): 1.) Reduce the num	ber of reportable Petroleum and Hazardous spills by 10% per year
2.) Maintain 7% or less of the tota	l area under prescription as permanent access structures (Regional average)
3.) Reduce annual accidental fires	to 10 or less per year (company wide)
Authorized by: (General Marie Resources Required:	rger, Logging & Engineering, Chief Förester, Regional Manager, Environment Manager, etc.)
1.) Training	
2.) \$16,000 (Video Production)	
Program Supervisor:	
Environment Manager (Corporate	Environmental Department)
Method of monitoring & meas	urement:
1.) Operations Environment Comn	nittee Meeting Checklists 2.) Training records
3.) # of reportable spills per year	
4.) # of landslides reported per ye	ar. 6.) # of accidental fires
Note: Resources	may include Training, Maintenance, Financial, Outside Agencies, etc.

Original: Corporate Office Copy(s): EMS Manual Holders

WFP-8 (2001) xls

ENVIRONMENTAL PROGRAM RECORD Western Forest Products Limited Register Area: Forest Operations OPERATION [DEPARTMENT(s)]: All WFP Forest Operations [Forestry & Lands, Logging] PROGRAM NAME/TITLE: Waste Disposal Program OBJECTIVE: Protection and conservation of soil resources PERFORMANCE GOAL: Reduce solid waste TARGET: Create procedures for transport and disposal of "Special Waste" by December 2002 DATE: April 2001
Authorized by: (General Manager, Logging & Engineering, Chief Forester, Regional Manager, Environment Manager, etc.) Resources Required: 1.) Legal counsel 2.) Financial Program Supervisor: Environment Manager (Corporate Environmental Department), Purchasing Manager (Corporate Office) Method of monitoring & measurement: 1.) Monthly reports by Environment Manager Note: Resources may include Training, Maintenance, Financial, Outside Agencies, etc.

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Revised: April 2001

Program 3 (pg 1 of 2) - 2001 File: F-11-8-1 (Original Only)

Western Forest Products Limited
Register Area: Forest Operations

OPERATION [DEPARTMENT(s)]: All WFP Forest Operations [Logging (Falling & Bucking, Dryland Sort)]

PROGRAM NAME/TITLE: Log Quality and Waste Reduction Program

OBJECTIVE: 1.) Maintanence of ecosystem condition and productivity 2.) Maintenance of air quality PERFORMANCE GOAL: Reduce solid waste

TARGET: 1.) Maintain "trim waste" of 1% or less of total scaled production

2.) Maintain utilization standards of 15 cubic meters per hectare of avoidable waste (company wide)

DATE: 2-ptil 2001

Authorized by 1; General Manager, Lagang & Engineering, Oner Foreign, Regional Manager, Enformment Manager, etc.)

Resources Required:

1.) Training - Fallers, Landing Buckers, Dryland Sort Buckers

2.) Outside Agency - Bob Mortin Consulting, Mark Fiddick, Steve Jacksons

Program Supervisor: Regional Managers (NVIR, Nootka, M/I)

Method of monitoring & measurement:

1.) Waste and Residue Surveys

2.) Dryland Sort - Scaled volume of Trim Waste

3.) Outside Agency Reports

Note:

Resources may include Training, Maintenance, Financial, Outside Agencies, etc.

Revised: April 2001

Program 4 (pg 1 of 2) - 2001 File: F-11-8-1 (Original Only)

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<b>WFP</b>	ENVIRONMENTAL PROGRAM RECORD
	Products Limited Forest Operations
OPERATION [	EPARTMENT(s)]: All WFP Forest Operations [Forestry]
PROGRAM NAM	:/TITLE: NSR Reduction Program
OBJECTIVE: Mair	stenance of ecosystem condition and productivity
PERFORMANCE	GOAL: Maintain forest cover
TARGET: 1.) Mair	tain forest cover by reducing NSR to 2.0 yrs of annual logging
DATE: April 2001 Authorized by:	(General Manager, Logging & Engineering, Chief Forester, Regional Manager, Environment Manager, etc.)
Resources Requ	red:
1.) Outside Agenc	red: - Tree planting contractors ox. \$4,000,000 (treeplanting cost only)
Outside Agence     Financial - App  Program Superv	- Tree planting contractors  ux. \$4,000,000 (treeplanting cost only)
Outside Agence     Financial - App  Program Superv Chief Forester (Forester (Forester))  Method of monit	- Tree planting contractors  ox. \$4,000,000 (treeplanting cost only)  sor:  sor:  estry & Lands - Corporate Office)  oring & measurement:
Outside Agence     Financial - App     Program Superv Chief Forester (Forester (Forester))	- Tree planting contractors  ox. \$4,000,000 (treeplanting cost only)  sor:  sor:  estry & Lands - Corporate Office)  oring & measurement:

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 Revised: April 2001
 Program 5 (pg 1 of 2) - 2001

 File: F-11-8-1 (Original Only)

**WFP** ENVIRONMENTAL PROGRAM RECORD Western Forest Products Limited Register Area: Forest Operations OPERATION/DEPARTMENT: All WFP Forest Operations [Forestry & Lands, forestry] PROGRAM NAME/TITLE: Fertilization Program OBJECTIVE: Maintenance of ecosystem condition and productivity PERFORMANCE GOAL: Fertilize all suitable areas within WFP TFL lands TARGET: Identify and prioritize suitable areas for fertilization by 2002 DATE: April 2001

Authorized by: (General Manager, Logging & Engineering, Chief Forester, Regional Manager, Environment Manager, etc.) Resources Required: 1.) Outside Agency - B.A. Blackwell & Associates, University of British Columbia 2.) Financial (FRBC Funding dependent) Program Supervisor: Chief Forester (Forestry & Lands - Corporate Office) Method of monitoring & measurement: 1.) Screening trials - foliar response Note: Resources may include Training, Maintenance, Financial, Outside Agencies, etc.

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Revised: April 2001

Program 6 (pg 1 of 2) - 2001 File: F-11-8-1 (Original Only)

ENVIRONMENTAL PROGRAM RECORD
Western Forest Products Limited Register Area: Forest Operations
OPERATION [DEPARTMENT(s)]: All WFP Forest Operations [Forestry & Lands, Forestry]
PROGRAM NAME/TITLE: Salmon Enhancement Program
OBJECTIVE: Maintenance of ecosystem condition and productivity
PERFORMANCE GOAL: 1.) Operate hatcheries at 95% capacity
TARGET: 1.) Annually release 750,000 salmon fry (10 year average)
DATE: April 2001  Authorized by: (General Manager, Logging & Engineering, Chief Forester, Regional Manager, Environment Manager, etc.)
Resources Required:
1.) Financial - Approx. \$45,000 (between Marble River, Cordy Creek, Colonial and Sewell Inlet)
Program Supervisor:
Chief Forester (Forestry & Lands - Corporate Office)
Method of monitoring & measurement:
1.) # of Salmonids released
Note:
Resources may include Training, Maintenance, Financial, Outside Agencies, etc.

Revised: April 2001 Program 7 (pg 1 of 2) - 2001 File: E-11-8-1 (degrad Dely)

ENVIRONMENTAL PROGRAM RECORD Western Forest Products Limited Register Area: Forest Operations OPERATION/DEPARTMENT: Kimsquit Forest Operation [Logging] PROGRAM NAME/TITLE: Camp Decommissioning Program OBJECTIVE: 1.) Protection and conservation of soil resources 2.) Maintenance of ecosystem condition and productivity PERFORMANCE GOAL: 1.) Acquire a "Letter of Abandonment" or "Certificate of Compliance" TARGET: 1.) Remediate site within 5 years DATE: April 2001
Authorized by: (General Manager, Lagging & Engineering, Chief Forester, Regional Manager, Environment Manager, etc.) Resources Required: 1.) Outside Agency - Reid Crowler Consulting (Professional Engineering Consultant/Contractor) 2.) Financial - \$30,000 (consultant), \$220,000 (Remediation) Program Supervisor: Area Manager (Logging - Mainland/Islands) Method of monitoring & measurement: 1.) Acquired "Letter of Abandonment" or "Certificate of Compliance" Note: Resources may include Training, Maintenance, Financial, Outside Agencies, etc. Revised: April 2001

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Program 8 (pg 1 of 2) - 2001 File: F-11-8-1 (Original Only)

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<b>WFP</b>	ENVIRONMENTAL PROGRAM RECORD
Western Forest Products Register Area: Forest Op	
OPERATION [DEPARTM	ENT(s)]: All WFP Forest Operations [Logging (Dryland Sort), Forestry & Lands]
PROGRAM NAME/TITLE: D	ryland Sort and Camp Improvement Program
OBJECTIVE: 1.) Protection of	f water quality
PERFORMANCE GOAL: 1.)	Achieve a rating of Zero or less on MoELP Dryland Sort Inspections
TARGET: 1.) Internally audit	all Dryland Sorts within 2 years
DATE: April 2001	
Authorized by: (General	Manager, Logging & Engineering, Chief Forester, Regional Manager, Environment Manager, etc.)
Resources Required:	
Resources Required: Program Supervisor(s):	
Program Supervisor(s):	ry & Lands - Corporate Office)
Program Supervisor(s): Environment Manager (Forest	ay & Lands - Corporate Office) Engineering / Regional Managers
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# Appendix XVIII Profiles of Main Communities

## **NOOTKA SOUND REGION**

In July 1776, aboard the Resolution, Captain James Cook, R.N. sailed from England on his third (and last) voyage of exploration around the world. In March 1778 he entered what is now known as Nootka Sound and anchored in the vicinity of Blight Island. He landed at Friendly Cove where he claimed the surrounding territory for Great Britain. He became the First European to set foot on what is now known as British Columbia. Ten years after setting foot in the Nootka Sound region the vessel "Northwest America" was built from local timber and used for the fur trade. The Captain, John Meares, also instructed his men to cut spars and saw planks for trade in China. This was the beginning of the forest industry in the province.

At Friendly Cove, Cook met the Mowachahts, which numbered several thousand. They were the greatest whaling people in North America at the time. Cook successfully traded ofter skins and established a fur trade. This brought the First Nations people into extensive contact with Europeans.

In 1789 Spain took possession of Nootka Sound and established a settlement named Nootka at Friendly Cove. Spain captured some British vessels and war nearly broke out. Captain Vancouver, for Great Britain, and Captain Quadra, for Spain, met at Nootka in 1792 and supervised the return of the area to British rule. For many years during this period and many years after, Nootka was the most important seaport north of Mexico.

In 1954 the Tahsis Forest Management Licence was created and in 1957 it was changed to Tree Farm Licence 19. Tahsis Company was the holder of the licence. In 1985 Tahsis Company was taken over wholly by Canadian Pacific and in 1993 the company named was changed to Pacific Forest Products Limited. In 1998 Bowater became the owner of the pulp mill at Gold River. In 1998 Pacific Forest Products was purchased by Timberwest who then sold off the TFL 19 portion along with the Ladysmith Division to Doman Industries Limited. Western Forest Products Limited, the forest company entity of Doman Industries Limited became the steward of TFL 19.

#### **ZEBALLOS**

Zeballos Arm was named after Ciriaco Ceballos, who explored the region for the Spanish in 1971. It was at the head of Zeballos Arm, in 1935, that a spectacular gold rush occurred. Within a year, a prosperous town with a population of 1,500 had arisen, and by 1937 there were six producing mines. The gold mines shut down in 1945. In the 1960's an iron mine operated. In 1969 the Tahsis Company moved a logging camp from Fair Harbour to Zeballos and today there are about 250 residents.

Zeballos is about 37 kilometres off of highway 19 (the Island Highway) over a gravel road. It is a logging town and the centre for Western Forest Products Limited Zeballos Operation.

The area is very popular for recreation. There is excellent caving, hiking and climbing in the vicinity. Being on the coast water sports are also popular. There is good fishing, diving and kayaking. There is a boat launch just south of Zeballos at a BC Forest Service campsite. There are campsites, RV sites and some hotels in or near the village. Boats can also be chartered and planes can land at the float plane dock.

Just across the bay is the Ehatis Indian Reserve where about 80 live. Approximately 10 kilometres east by road is the Oclugie Indian Reserve where about 50 live.

Profiles of Main Communities Page 1

#### **TAHSIS**

The community is located where Chief Maquinna entertained Captains Vancouver and Quadra in 1792. The Tahsis sawmill was a bold venture by the Gibson Brothers and critics said they were crazy. The Tahsis Mill was built in 1945 and deep sea freighters started showing up before the wharf was even finished. The mill burnt down in 1947 but a new mill with triple the capacity was built in its' place.

Before 1972 Tahsis was a remote location. In 1972, the Head Bay Forest Road and BC Hydro power line was completed. Today Tahsis is the location of a modern mill and townsite which exports its' lumber directly to world markets.

The community, a mill town, is home to approximately 950 residents. The mill employs 190 people. The area is also known for caves and there is the Coral Cave on the hillside above the townsite. There is also excellent fishing, boat charters and a boat launch near the village. Nearby are campsites and picnic areas. On the road into Tahsis are several points of interest including the Three Sisters waterfalls.

## **GOLD RIVER AND TSAXANA**

The Gibson Brothers had a logging camp at the head of Muchalat Inlet in 1950. It was moved to the mouth of the Gold River in 1954. In 1966 the Tahsis Company decided to move the town about 12 kilometres upriver in order to build a pulp mill on the old townsite.

The pulp mill worked from 1966 to 1998. Bowater, the owner of the mill in its' last years finally decided to close down the mill due to lack of profitability.

Currently, the town is home to approximately 1800 residents and just north of the townsite is the First Nations settlement of Tsaxana that has about 200 residents. The town is the main centre for the administration of TFL 19 and the Gold River and Nootka Contractor operations.

The area is also well known for its' recreational aspects and there is a large provincial park right next to TFL 19. Nearby and within the TFL is Muchalat Provincial Park and Muchalat Lake; both areas have excellent recreational features. There are many nearby parks, trails, campsites, picnic areas and even a golf course. For water sports there is a boat launch at the mouth of the Gold River and there is excellent fishing in Muchalat Inlet. The M.V.Uchuck III plies the waters of the Nootka Sound region year round and is popular with tourists.

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