



# ECOSYSTEM-BASED MANAGEMENT *Learning Forum*

a project of the Coastal First Nations Turning Point Initiative

## Summaries of Land Use Objectives

### Introduction

Land Use Objectives (LUOs) were amended for the South Central Coast (SCC) and Central and North Coast (CNC) in March 2009. For First Nations and their territories, this means that there are new rules in place about where and how forestry can take place.

Under the LUOs, a number of values are afforded better protection than under the previously existing forestry rules for the coast. The values addressed in the LUOs include First Nations' cultural and heritage resources, aquatic and riparian habitats, and other biodiversity values such as grizzly bear habitat and old growth forests. Furthermore, the obligation to consult with First Nations is embedded within many of the LUOs.

The LUOs were first established in 2007 via two separate Ministerial Orders, one for the South Central Coast and one for the North and Central Coast. These LUOs were based on the ecological management strategies described in Government-to-Government agreements between First Nations and the Province signed in February of 2006 (Coastal First Nations Land and Resource Protocol Agreement and the KNT Agreement-in-Principle). The LUOs were amended on March 24<sup>th</sup>, 2009, incorporating changes resulting from Detailed Strategic Plans developed by many First Nations in the intervening period. The final version of the LUOs also took into account input from stakeholders such as conservation groups, the forest industry, and members of the general public. The LUOs differ somewhat between the South Central Coast and the North/Central Coast.

Within the next six months (starting March 24<sup>th</sup>, 2009), forest companies must update their Forest Stewardship Plans to reflect the amendments to the Land Use Orders. This means that there is a narrow window of opportunity for First Nations to influence these updates.

The following pages summarize all of the sections of the Orders except for the Schedules<sup>1</sup>.

### Preamble

The Preamble to the Ministerial Orders, although not legally binding, is important because it states the management intent of the LUOs, which is to protect important First Nations cultural values, and maintain ecosystem integrity. The Preamble also mentions that Ecosystem-Based Management (EBM) aims to improve human well-being, which will be supported through other policies and initiatives. Lastly, the Preamble makes a commitment to monitor implementation of EBM in terms of ecological and human well-being.

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<sup>1</sup> Readers should look to the Orders for specific legal language. If there is any discrepancy between this summary and the Orders, refer to the language in the Orders.

## **Part 1: Interpretation**

### **1. Relationship with *Forest and Range Practices Act* Objectives**

This section describes how the Land Use Objectives are related to existing legislation. They also specify exemptions from the Orders for some forestry licence holders, including woodlots, community forest agreements, and some existing tenures, and state that these Orders do not limit aboriginal or treaty rights.

### **2. Definitions**

This section provides definitions of terms used in the Order that are not defined in other legislation, or are defined differently in other legislation. It also provides a weblink to the 'ftp' site that contains the official spatial datasets for boundaries delineated on schedules to the Orders.

## **Part 2: First Nations**

These objectives address Traditional Forest Resources and Heritage Resources, Culturally Modified Trees, Monumental Cedar, and retention of red cedar and yellow cedar inside logging cutblocks.

### **3. First Nations traditional heritage resources**

This objective requires maintaining traditional forest resources in a manner that supports First Nations' food, social, treaty and ceremonial use of the forest. Traditional forest resources include resources like monumental cedar, wild plant foods, botanical medicines, and wildlife.

### **4. First Nations traditional heritage features**

Traditional heritage features are defined as archaeological and historical artifacts, sites, and locations that are important to the cultural practices, knowledge, and heritage of a First Nation.

This objective requires maintaining traditional heritage features (other than Culturally Modified Trees, which are addressed in another objective), including a management zone to protect them. However, if information-sharing or consultation<sup>2</sup> identifies that either the traditional heritage features are not important to the First Nation, or the company needs to log there for road access, other infrastructure, or to address worker safety issues, the traditional heritage features can be logged. If the traditional heritage feature is important to

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<sup>2</sup> The Orders identify that information-sharing or consultation means "information-sharing by a person required to produce a Forest Stewardship Plan or consultation by the Province or both, as the context requires and, when requested by the applicable First Nation, includes provision of any applicable watershed assessment, adaptive management plan, and site-specific information.

the First Nation, then the company must come up with specific ways to mitigate or “seek to accommodate” this negative impact.

### **5. Culturally modified trees**

In areas where a company plans to build roads and/or log, the company is required to identify and reserve single Culturally Modified Trees (CMTs), including a management zone to protect them. The company is also required to reserve CMT ‘areas’ (defined as areas where there are 10 or more CMTs all found within 1 tree length of each other) if they are identified through information-sharing or consultation with First Nations and this is feasible. However, the CMTs can still be logged if information-sharing or consultation with the First Nation determines that one or more of the following is true:

- the CMT is not of continuing importance to the First Nation
- the company needs to log the CMT for road access, other infrastructure, or to address worker safety issues
- reserving all of the CMTs in the cutblock would make logging it ‘economically unviable’ (how this is to be determined is not explained in the Orders)

Based on this information-sharing or consultation, if there will nevertheless be logging or road-building that would have a negative impact on a CMT that is of continuing importance to the First Nation, then the company must come up with specific ways to “address or seek to accommodate” this negative impact.

### **6. Monumental Cedar**

Both Ministerial Orders identify that forest companies and the provincial government have a responsibility to work with First Nations to identify the amount and quality of monumental cedar needed to support the First Nation’s present and future cultural use of monumental cedar. Monumental cedar is defined as large, old cedar that meets First Nation’s domestic needs (which includes shelter, transportation, tools, fuel, and art, but not trade or commercial use)<sup>3</sup>.

In areas where a company plans to build roads and/or log, the company is required to identify and reserve monumental cedars if the First Nation has identified that those cedar trees might be important for cultural use. However, the monumental cedar trees can still be logged if information-sharing or consultation with the First Nation determines that one or more of the following is true:

- the monumental cedar is not needed by the First Nation for cultural use
- the monumental cedar will be cut and delivered to the First Nation for cultural use

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<sup>3</sup> This definition is amended from the 2007 version of the LUOs.

- the company needs to log the monumental cedar for road access, other infrastructure, or to address worker safety issues<sup>4</sup>.

Based on this information-sharing or consultation, if nevertheless there will be logging or road-building that would have a negative impact on monumental cedar needed by the First Nation, then the company must come up with specific ways to “address or seek to accommodate” this negative impact.

### **7. Stand level retention of Western Red and Yellow Cedar**

These objectives require forest companies to maintain enough volume and quality of western red and yellow cedar to support First Nations’ domestic use of cedar (defined as cedar for shelter, transportation, tools, fuel, and art, but not trade or commercial use).

Some First Nations have identified Cedar Stewardship Areas (Schedule 8 in both Orders). In these areas, forest companies must maintain or recruit cedar to support First Nations use.

At the cutblock scale, the first 15% of trees retained (see Objective 16) must include cedar in the same proportions as it was found in the original stand.

## **Part 3: Aquatic habitats**

The intent of these objectives is to maintain ecological functioning, water quality, and water quantity in fish-bearing streams, important fisheries watersheds, and special aquatic features, as well as to maintain ecological function in riparian forests.

### **8. Important fisheries watersheds**

Both Ministerial Orders contain maps showing important fisheries watersheds that were revised by First Nations through the Detailed Strategic Planning (DSP) process.

Within these watersheds, the important fisheries watersheds objective applies a default 20% Equivalent Clearcut Area (ECA), which means that at any given time, no more than 20% of the forested part of the watershed is in a state that is equivalent to a clearcut in terms of how it moderates the flow of water (including melted snow) through the watershed. Clearcuts, recent clearcuts, windthrow, and forests where many trees are killed by fires, insects, or disease can all be similar to clearcuts in terms of their ability to moderate water flow.

If forest companies wish to log more than the 20% ECA, they are required to:

- Share information with the relevant First Nation (and the Province must consult with the First Nation if the context requires)

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<sup>4</sup> The 2007 CNC Order allowed for logging of monumental cedar if reserving all monumental cedar in a cutblock would make the cutblock ‘economically unviable’. This option was removed in the 2009 amendments.

- Complete a special watershed assessment to determine how much forest needs to be kept where within the watershed to maintain the natural flow of water throughout the watershed.
- Develop and implement an adaptive management plan to research or monitor the outcomes of management strategies and practices during planning and primary forestry activities<sup>5</sup>, to the extent feasible.

### **9. High value fish habitat**

Forest companies must maintain reserve zones around ‘high value fish habitat’ that are, on average, one and a half tree lengths wide<sup>6</sup>. These reserve zones cannot be altered unless there is no feasible alternative.

The Orders define ‘high value fish habitat’ as areas that contain critical spawning or rearing habitat, including estuaries, wet floodplains, and “marine interface” areas such as kelp beds.

The SCC Order specifies that in the Allison Landscape Unit, only high value fish habitat for anadromous fish (fish that migrate from the ocean to freshwater to spawn) must be maintained. It also specifies a 100m reserve zone around the lower Klinaklini River and Viner Creek.

The CNC Order specifies a 150m reserve zone around the lower portion of the Kimsquit River.

### **10. Aquatic features that are not High Value Fish Habitat**

This objective establishes management zones around the following features:

- Streams more than 1.5 m wide that contain fish or are within community watersheds
- Lakes larger than 0.25 ha (50 m x 50 m)
- Fens and marshes larger than 0.25 ha (50 m x 50 m).

For these types of streams and for lakes, fens, and marshes, the management zone requires retention of 90% of ‘functional riparian forest’. This applies in the CNC Order within 1.5 tree lengths of the feature if it is a stream or is greater than 1 ha in size, and within 1 tree length of the feature if it is a lake, fen, or marsh between 0.25 and 1 ha in size. In the SCC Order, it applies within 1.5 tree lengths of the feature. ‘Functional riparian forest’ is defined as forest that is old enough to maintain stream channels and flow, and that contains some large trees adjacent to streams. The 90% retention can be reduced to 70% in the CNC

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<sup>5</sup> “Primary forest activities” are defined under other regulations as timber harvesting; silviculture treatments; and road construction, maintenance and deactivation.

<sup>6</sup> The Order does not describe how a tree length is to be identified, but the intention is to use the height of dominant trees in the stand.

Order, or to regular forest practice requirements for management zones and buffers in the SCC Order<sup>7</sup>, provided that

- Forest companies share information and/or the Province consults with First Nations;
- Forest companies assess and retain enough 'functional riparian forest' to maintain stream channels; and
- Forest companies develop and implement an adaptive management plan to research or monitor the outcomes of management strategies and practices during planning and primary forestry activities, to the extent feasible.

### 11. Forested Swamps

For forested swamps larger than 0.25 ha, a management zone is required with retention of 70% of functional riparian forest within 1.5 tree lengths of the feature. The 70% retention can be reduced to 60% if

- the company needs to log the monumental cedar for road access, other infrastructure, or to address worker safety issues, or
- the 70% retention would make logging the cutblock 'economically unviable' (how this is to be determined is not explained in the Order)

And provided that the company

- shares information with and/or the Province consults with First Nations;
- assesses and retains enough 'functional riparian forest' to maintain the integrity of the forested swamp; and
- develops and implements an adaptive management plan, to the extent feasible.

### 12. Upland streams

This objective applies to the portions of a watershed where upland streams occur, where upland streams are defined as streams of a gradient steeper than 5% that are either fish-bearing/in a community watershed and smaller than 1.5 m, or not fish-bearing and not in a community watershed. In these areas, forest companies must maintain 70% of the functional riparian forest, unless

- the forest company shares information and/or the Province consults with First Nations;

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<sup>7</sup> These regular forest practice requirements (as defined under the Forest Planning and Practices Regulation) provide considerably less buffering for many types of streams, wetlands, and lakes than the default requirements in the Orders.

- A qualified professional assesses watershed sensitivity to logging and identifies how much forest is needed to maintain natural water flow in the watershed, and the company retains that much forest; and
- The forest company develops and implements an adaptive management plan, to the extent feasible.
- In the CNC Order, the upland stream objective applies to all watersheds. In the SCC Order, it applies only to 'important fisheries' watersheds.

### 13. Active fluvial units

Active fluvial units include active floodplains and active 'fans': areas that experience periodic flooding. Logging on an active fluvial unit followed by a flood event could de-stabilize the entire unit, resulting in severe damage to stream channels and their associated habitat, and debris flows and siltation downstream.

The CNC Order requires that next to active fluvial units, 90% of the functional riparian forest be retained in a management zone 1.5 tree lengths wide. In the SCC Order, 90% of the functional riparian forest on active fluvial units must be retained. In both Orders, and additional 10% can be logged if

- The forest company shares information and/or the Province consults with First Nations;
- The forest company assesses and retains enough functional riparian forest to maintain stream channels; and
- The forest company develops and implements an adaptive management plan, to the extent feasible.

## Part 4: Biodiversity

### 14. Landscape Level Biodiversity

#### Old forests

Both Ministerial Orders require forest companies to reserve areas of old growth forest in each ecosystem<sup>8</sup> in a landscape unit to meet specified representation targets for each landscape unit (Schedule 4 combined with 4a or 4b), and to meet additional representation targets for some ecosystems (listed in Schedule 4c and 4d [4d applies in the SCC Order only]). Old forest is defined as forest older than 250 years<sup>9</sup>. The combination of default targets in the Schedules requires that each ecosystem be maintained at, or recruited to, at

<sup>8</sup> The Orders refers to 'site series surrogates' as a classification of ecosystems. Site series surrogates combine the most common tree species with site productivity and with broad climate units. The Orders also allows forest companies to use 'site series', which are a true ecosystem unit that captures climatic factors, soil types, and vegetation communities. Site series mapping is not yet available for about half of the area covered by the Orders.

<sup>9</sup> The 2007 version of the SCC Order defined old forest as 180 years or older.

least 50% of its natural levels<sup>10</sup> of old growth in the combined area of both Orders, though the amount may differ in each landscape unit.

When there is not enough old forest to meet a target, forest companies must, to the extent feasible, recruit enough younger forests to meet the targets (rather than logging them), so that the forests can recover and provide old growth habitat in future.

However, forest companies can retain less than the landscape unit target for old forest if all of the following conditions are met:

- The forest company shares information and/or the Province consults with First Nations;
- A qualified professional assesses how much habitat is needed for species at risk and regionally important wildlife in that landscape unit, and enough old forest is retained to sustain those species;
- At least 30% of the natural amount of old forest is retained in each ecosystem (which differs depending on the ecosystem, ranging from 12% to 29% in old forest in a given ecosystem); and
- The forest company develops and implements an adaptive management plan to research or monitor the outcomes of management strategies and practices during planning and primary forestry activities, to the extent feasible.

To the extent feasible, habitat for key species such as marbled murrelet and grizzly bear; red and blue-listed plant communities; and monumental cedar should be included in old forest retention areas.

### Medium-aged forests

The Ministerial Orders also require that if there is more than 50% medium-aged (“mid-seral”) forests in an ecosystem in a landscape unit, licensees must develop a strategy to address this problem within 80 years, by either logging some of those forests or recruiting them to old condition. Mid-seral forests are defined by age, ranging from 40 years up to either 80, 100, or 120 years, depending on the ecosystem. The intention of this objective is to prevent having too many medium-aged forests because they provide poor habitat for many forest-dependent creatures.

## **15. Red and blue-listed plant communities**

Red and blue-listed plant communities are rare plant communities that are at risk of disappearing if they are further disturbed. They may be naturally rare or may have been made rare by human activities (e.g. logging). Red-listed plant communities are so rare that there are typically 20 or fewer high quality occurrences of each community in all of B.C. The

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<sup>10</sup> The ‘natural’ amount of old growth is defined based on information describing how often the ecosystems would be disturbed by natural factors like fires or windthrow. This natural amount of old forest is often referred to as ‘RONV’, which stands for ‘range of natural variation’.

Ministerial Orders require that 100% of these red-listed plant communities be reserved, with up to 5% disturbance only if there is no other alternative for road access, other infrastructure, or to address worker safety issues. The Ministerial Orders also list blue-listed plant communities; this list is a subset of the blue-listed plant communities “of special concern” in the region. 70% of the area in each blue-listed plant community must be retained.

#### **16. Stand-level retention**

Both Ministerial Orders require licensees to leave standing trees within cutblocks. The reason is to maintain structure and habitat elements so that the cutover area will recover more quickly and can still be used by many different types of plants and animals in the meantime.

The Land Use Objectives require that when the cutblocks are larger than 15ha, at least 15% of the total area of trees within the cutblock must be kept standing, with at least half of those standing trees being within the cutblock boundaries (except in a second growth stand where there is a high windthrow hazard). These trees should be selected to, where feasible, include: habitat elements for key species; red and blue-listed plant communities; cedar trees; riparian forest; wildlife trees; and fallen trees (known as “coarse woody debris”) that provide habitat and nutrients.

#### **17. Grizzly bear habitat**

The grizzly bear habitat objective requires that forest companies maintain important grizzly bear habitat (100% of Class 1 habitat in the South Central Coast Order and 100% of Class 1 and 50% of Class 2 in the Central and North Coast Order). However, a forest company can alter this habitat, if they obtain confirmation from a qualified professional that this would not have a negative impact on the suitability of the habitat; to the extent feasible develop an adaptive management plan; and share information with First Nations and/or the Province engages in consultation. There is an additional exception for road access, other infrastructure, or to address worker safety issues, which can allow logging of critical grizzly bear habitat provided information sharing or consultation occurs.

#### **18. Objectives for Kermode habitat (CNC Order only)**

This objective applies to Kermode Stewardship Areas (which encompass the northern end of Princess Royal Island and Gribbell Island), where it (1) limits the amount of young and mid-aged forests in each watershed (2) requires that managed young forests do not have completely closed canopies (in order to improve their habitat value for Kermode bears) (3) requires reserves next to known black bear dens (4) requires retention of critical black bear habitat. However, up to 5% of this critical habitat can be logged for road access, other infrastructure, or to protect worker safety, following information-sharing or consultation with First Nations.

## Part 5: “Transition”

This section of the Order describes when the objectives take effect, and when they must be implemented in forest company logging plans.

The amendments to the Orders took effect on March 24<sup>th</sup>, 2009. Forest companies have 6 months past this date to update their existing Forest Stewardship Plans (FSPs) to incorporate these amendments. Once the FSPs are amended, any new cutting permits or road permits that are issued will be consistent with the Orders. Because cutting permits can be in effect for as long as four years, it is possible that logging will continue for up to four years under cutting permits issued *before* the FSP was amended. However, forest companies usually apply for cutting permits that they intend to cut within a year or two, so logging starting in the summer of 2010 should begin to be consistent with the Orders.

### List of Schedules

|                    | <b>CNC Order</b>  | <b>SCC Order</b>  |
|--------------------|---|---|
| <b>Schedule 1</b>  | Landscape Units covered by this Order (map)   | Landscape Units Covered by this Order (map)   |
| <b>Schedule 2</b>  | Grizzly Bear Habitat (map)  | Grizzly Bear Habitat (map)  |
| <b>Schedule 3</b>  | Important Fisheries Watersheds (map)  | Important Fisheries Watersheds (map)  |
| <b>Schedule 4</b>  | Landscape Units and Default / Risk Managed Old Forest Representation Targets (table)                      | Landscape Units and Default / Risk Managed Old Forest Representation Targets (table)                      |
| <b>Schedule 4a</b> | Site Series RONV Requirements for Landscape Unit Targets in Schedule 4 (table)                            | Site Series RONV Requirements for Landscape Unit Targets in Schedule 4 (table)                            |
| <b>Schedule 4b</b> | Site Series Surrogate RONV Requirements for Landscape Unit Targets in Schedule 4 (table)                  | Site Series Surrogate RONV Requirements for Landscape Unit Targets in Schedule 4 (table)                  |
| <b>Schedule 4c</b> | Modal, Rare, and Very Rare, Old Forest Site Series Surrogate Analysis Unit Representation Targets (table) | Modal, Rare, and Very Rare, Old Forest Site Series Surrogate Analysis Unit Representation Targets (table) |

|                      | <b>CNC Order</b>  | <b>SCC Order</b>  |
|----------------------|---|---|
| <b>Schedule 4d</b>   | Modal, Rare, and Very Rare, Old Forest Site Series Analysis Unit Representation Targets (table) | Site Series Surrogates and Additional Representation Targets Incremental to Schedule 4          |
| <b>Schedule 4e</b>   | n/a   | Modal, Rare, and Very Rare, Old Forest Site Series Analysis Unit Representation Targets (table) |
| <b>Schedule 5</b>    | Red-listed Plant Communities (table)  | Red-listed Plant Communities (table)  |
| <b>Schedule 6</b>    | Blue-listed Plant Communities (table)   | Blue-listed Plant Communities (table)   |
| <b>Schedule 7</b>    | Lower Kimsquit River (map)  | n/a   |
| <b>Schedule 7(a)</b> | n/a   | Klinaklini River 100m buffer (map)  |
| <b>Schedule 7(b)</b> | n/a   | Viner Creek 100m buffer (map)   |
| <b>Schedule 7(c)</b> | n/a   | Allison Landscape Unit (map)  |
| <b>Schedule 8</b>    | Cedar Stewardship Areas (map)   | Cedar Stewardship Areas (map)   |
| <b>Schedule 9</b>    | Kermode Stewardship Areas (map)   | n/a   |