



## **Information on the Kaingaroa Timberlands Management Plan of Exotic Species in the Blue and Green Lake Catchment Areas**

Notice Dated: 12 May 2008

### **Summary**

The Kaingaroa Timberlands' (KT) management plan, which relates to their commercial plantations of exotic conifers (mainly Douglas fir and Radiata) around the Blue and Green Lake, received consent in 2006 from Rotorua District Council (RDC). Timberlands Limited is the forest management company that acts on behalf of the owners of Kaingaroa Timberlands forest estate.

These plantations are dynamic and cannot be preserved to remain as they are today. The management plan was formulated in consultation with external experts, including landscape architects and specialist forestry experts. The plan ensures the long-term sustainability of the existing exotic forest cover around both lakes from a recreational, environmental and economic view point.

The conditions of RDC's consent protects the lakes' water quality, the overall landscape and the recreational activities. The planned logging operations are thinning and small scale felling, not whole-scale clearfelling.

### **Covenant Details**

The Douglas fir around the Blue and Green Lake are part of a covenanted area in which the forest management was defined under the original Crown Forest Assets Act 1989, and then again through the RDC's Lakes Variation notice in 2001, in which the community was fully consulted.

In summary the main points of the covenant are:

- The forest is to be managed in a sustainable manner under a selection system, which means only small areas, or groups of trees can be felled at any one time.
- Any area felled should be replanted in Douglas fir or similar species within a year of harvesting.
- Ground-base skidding of logs is not allowed to ensure no deterioration of the lake water quality.
- Any operation shall have due regard to and promote the landscape amenity of the land and forest.
- Prior to any operations, consultation with the Green Lake Owner (Lake Rotokakahi Board of Control) is required.
- All operations had to be authorized by the landlord – Land Information New Zealand (LINZ).

## **Management Plan**

The Douglas fir stands around the Blue and Green Lake are managed plantations. The reason they have amenity and recreational value is due to previous proactive forest management, which involved extracting trees for timber. The stands are all around 90 years old, and, like all plantations, require active management to maintain health and vigour, and ensure continuity of forest cover.

KT's management plan was given consent by the Rotorua District Council in 2006. It proposes to convert the even aged stands of Douglas fir and Radiata Pine around the Blue and Green Lake to stands of uneven aged Redwoods over a minimum period of 25 years, in 5 phases. The vision is that in 25 years or more, the forests around the two lakes will be a mosaic of different aged Redwoods, the largest of which could be 35m tall. At this stage the stands will be healthier, have improved biodiversity with mixed ages, be more capable of withstanding a storm event, and be aesthetically attractive.

Douglas fir is not a suitable species for selection forestry as it is not shade tolerant. Redwoods are shade tolerant and regrow naturally by coppicing on old stumps. Once the mixed aged Redwood stands are established, management of these can move to a single tree selection system with a periodic harvest of individual large valuable trees making way for younger trees. Replacement of the larger trees, which could reach 70m tall, will occur through natural coppicing of the older stumps. Thinning of these coppice shoots will be required to ensure these grow to large trees.

### **First Phase of Plan**

The first phase of this plan has been consented by the RDC and can be summarized as follows:

#### ***1. Blue Lake Catchment***

- a. Area 20m above the walking track down to the lake:
  - Harvest clumps of 5 trees in every 33 trees and replant with redwood. This is a 15% removal of the crop not a clearfell.
- b. All other areas in this catchment:
  - Thin out weaker and smaller trees to leave 80-120 trees per ha. This will allow the remaining trees to remain strong and healthy.
  - Harvest areas of trees in thin strips along the contour, no wider than 30m, to ensure screening by the standing trees, and no greater in area than 1 ha, and replant with Redwoods within one year of harvest. Strips to constitute no more than 25% of the area and the distance between strips to be more than twice the width of a strip.

## **2. Green Lake**

- a. Area within 20m of the Green Lake shoreline:
  - Remove all exotic species as required by the lake owners, Lake Rotokakahi Board of Control. This area to be regenerated with native species.
- b. All other areas in this catchment:
  - Thin out weaker and smaller trees to leave 80-120 trees per ha. This will allow the remaining trees to remain strong and healthy.
  - Harvest areas of trees in thin strips along the contour, no wider than 30m, to ensure screening by the standing trees, and no greater in area than 2 ha, and replant with Redwoods within one year of harvest. Strips to constitute no more than 25% of the area and the distance between strips to be more than twice the width of a strip.

All the harvesting around the Blue Lake and most harvesting around the Green Lake will be carried out using a helicopter to lift the logs out to existing skids outside the sensitive areas. Therefore there will be no extraction along the ground and minimal ground disturbance. The branches and tops of the felled trees will be allowed to rot down to replace soil nutrients. The walking tracks will be closed during the week whilst operations are on-going but open on Sundays and most Saturdays.

Both RDC and Environment Bay of Plenty have inspected the Green Lake operations and are satisfied that the environmental consent conditions have been met. This was confirmed by the RDC Mayor at a meeting with Timberlands on 6 May 2008.

### **Conclusion**

To conclude there will not be whole-scale clearfell of the Douglas fir around the Blue or Green Lake. The operations will ensure the long-term sustainability of the forests around both lakes from a recreational, environmental and economic point of view.