

Crown Pastoral Land Tenure Review

Lease name : LOWER CASCADE

Lease number : PH 002

Conservation Resources Report - Part 6

As part of the process of Tenure Review, advice on significant inherent values within the pastoral lease is provided by Department of Conservation officials in the form of a Conservation Resources Report. This report is the result of outdoor survey and inspection. It is a key piece of information for the development of a preliminary consultation document.

Note: Plans which form part of the Conservation Resources Report are published separately.

These documents are all released under the Official information Act 1982.

July 05

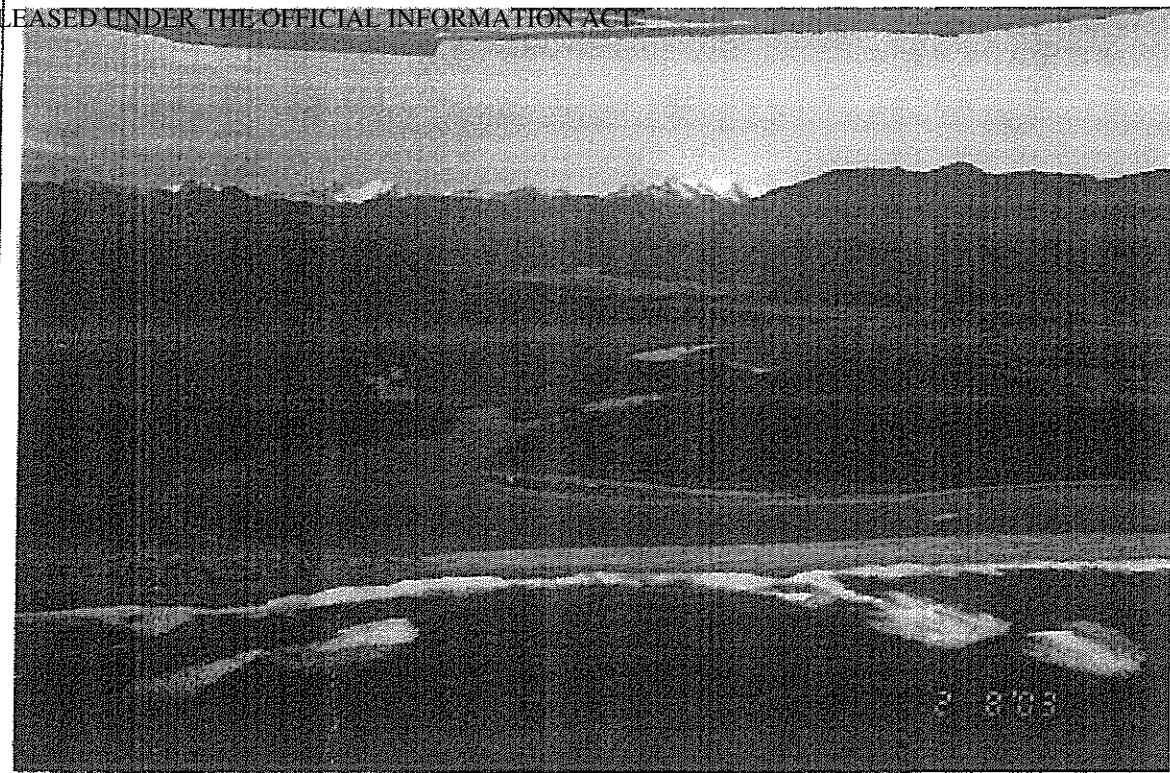


Fig. 5 There is a whitebaiter's camp close to the airstrip at the river mouth, and the lower reaches of the Cascade are an important whitebait fishery. In order to maintain this fishery it is important that the margins of the river and its tributaries, meanders and ox-bow remnants are kept as nearly as possible in their natural state. Land drainage and farm development would have serious adverse effects on vital whitebait habitat.

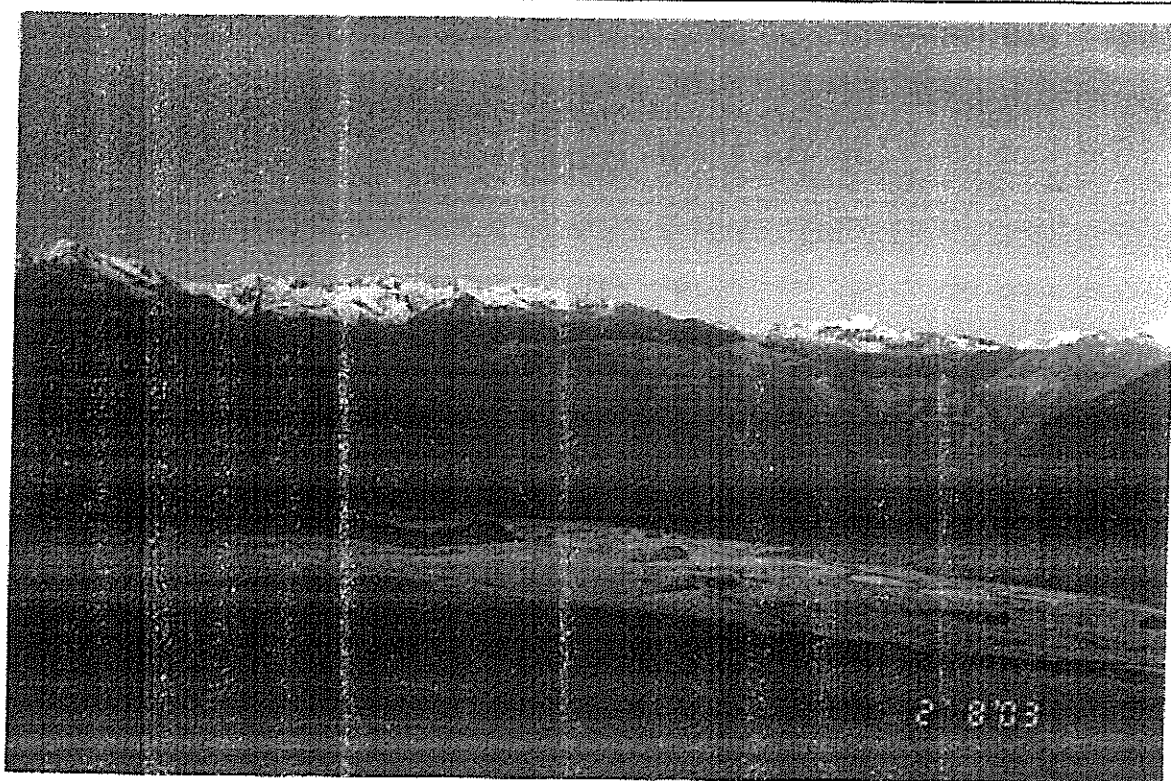


Fig. 6 The two Cascade pastoral leases are surrounded by a vast natural area of protected conservation land. It is anomalous and inappropriate that marginal farmland should exist in such a setting. Beyond the leasehold land, the Cascade River valley leads to the right up to the Red Hills, beyond which can be seen the mountains of Mt Aspiring National Park and the Main Divide.

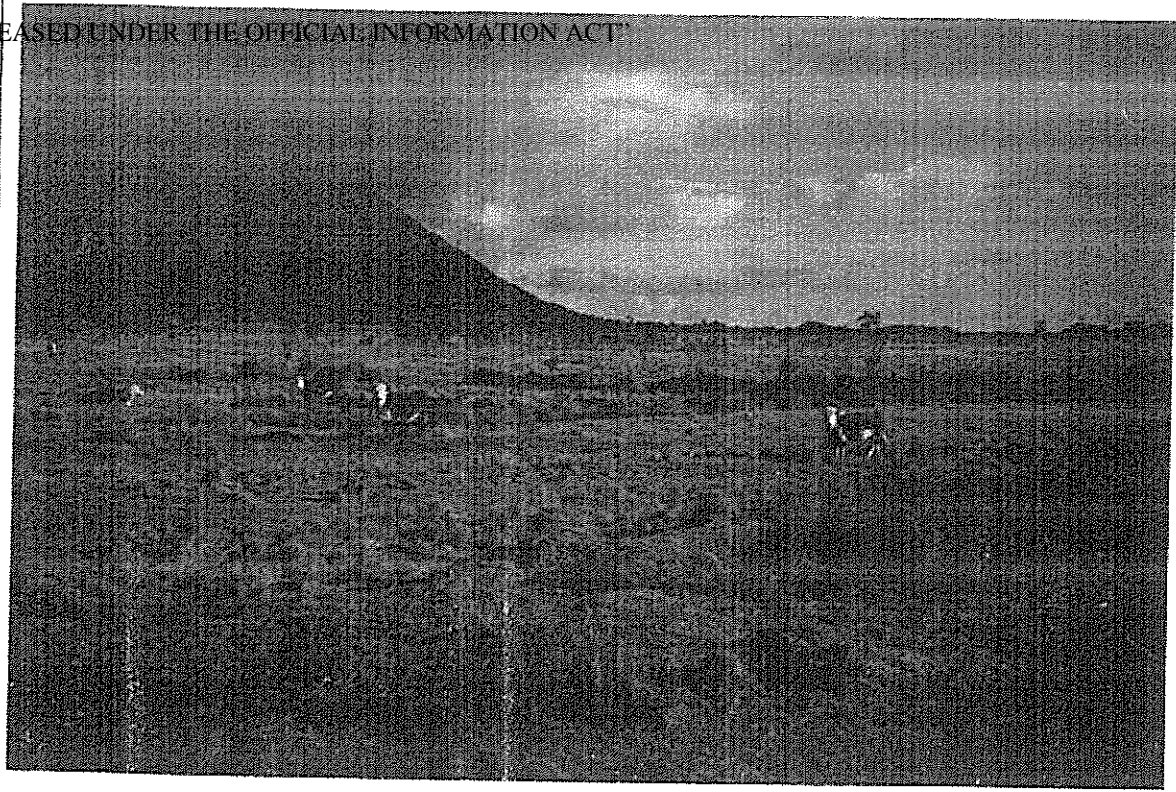


Fig. 7 Some rather better drained areas have been improved. However, soil fertility is low and leaching losses are high under the heavy rainfall regime of the west coast. To maintain sustainable pastoral use, these losses must be replenished by fertiliser application but the costs of cartage are high to such a remote place. This is probably not worthwhile but without replenishment the system cannot be ecologically sustainable.

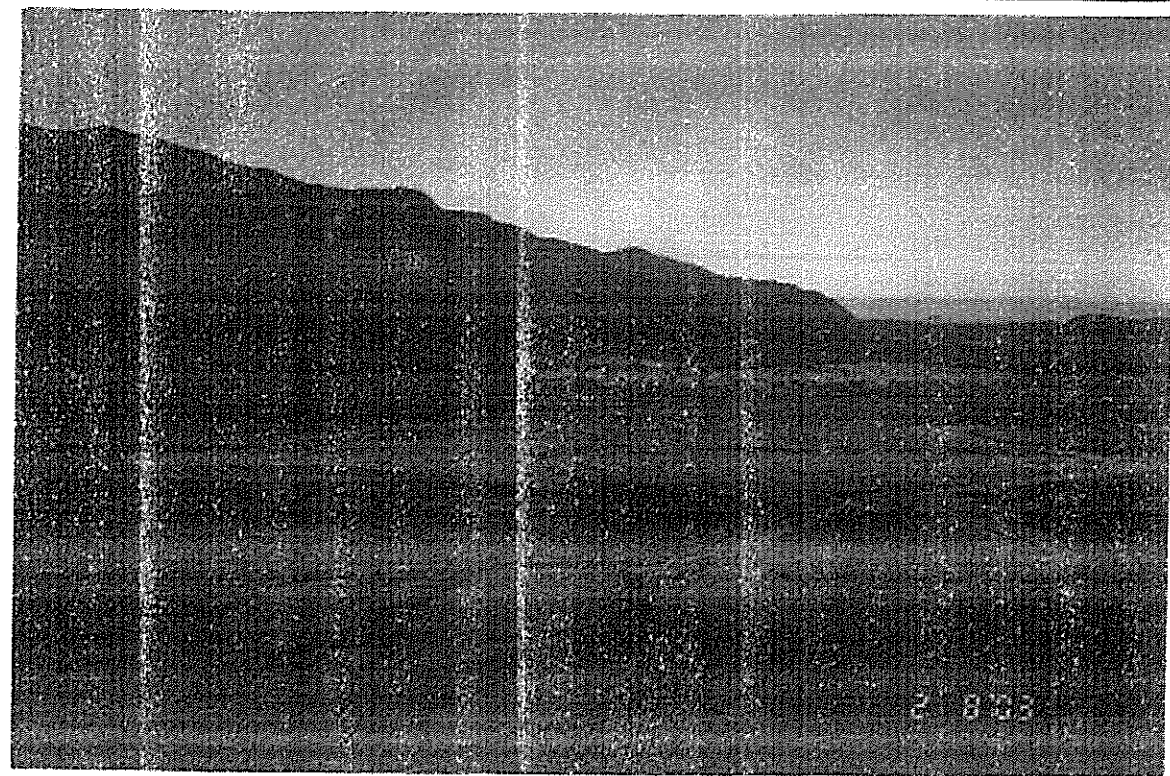


Fig. 8 Much of the land is at risk from flooding and changes in the course of the river. Evidence of past river changes is provided by the remains of ox-bow loops and other traces of former river channels. Such features add to the geological interest, but also indicate the instability of such flood plain landscapes. They also provide important habitat for whitebait.

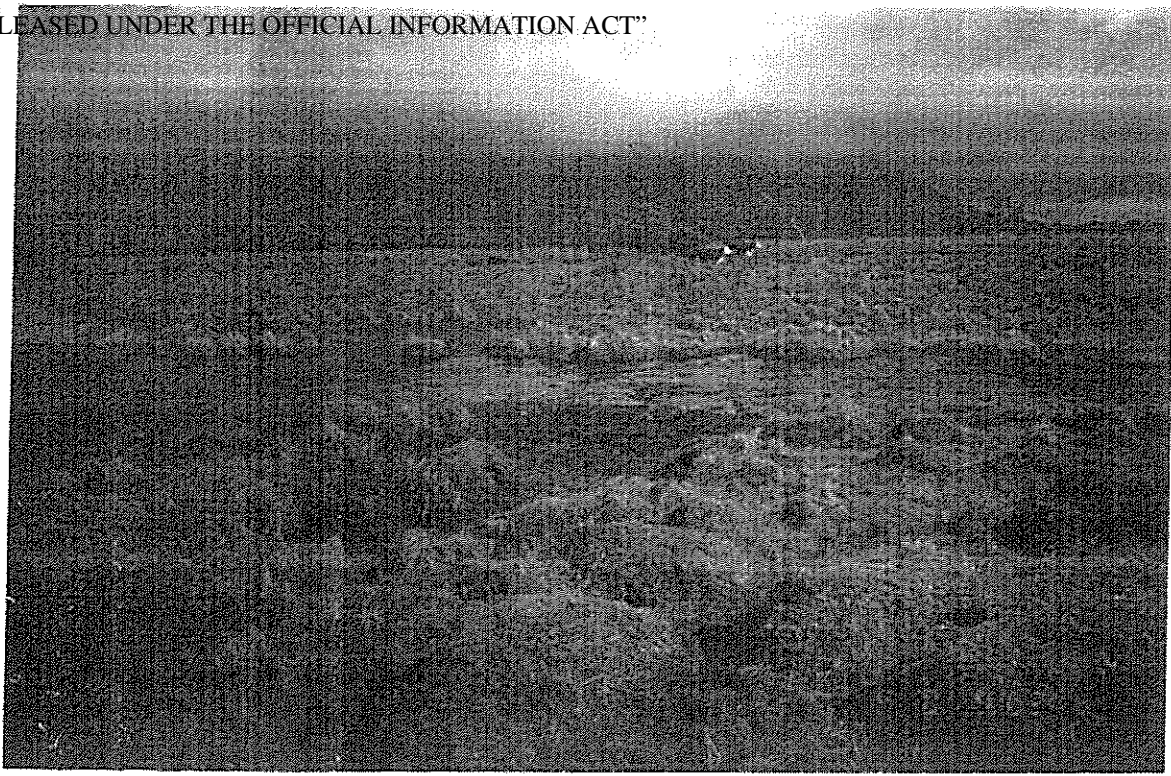


Fig. 9 The river flats are also at risk of exacerbated erosion due to trampling and pugging by cattle. Such effects can lead to the formation of new waterways by floodwaters following channels created by animal pressures. Cessation of grazing would eliminate these adverse effects and allow a return to a situation where natural geological processes can run their normal course.

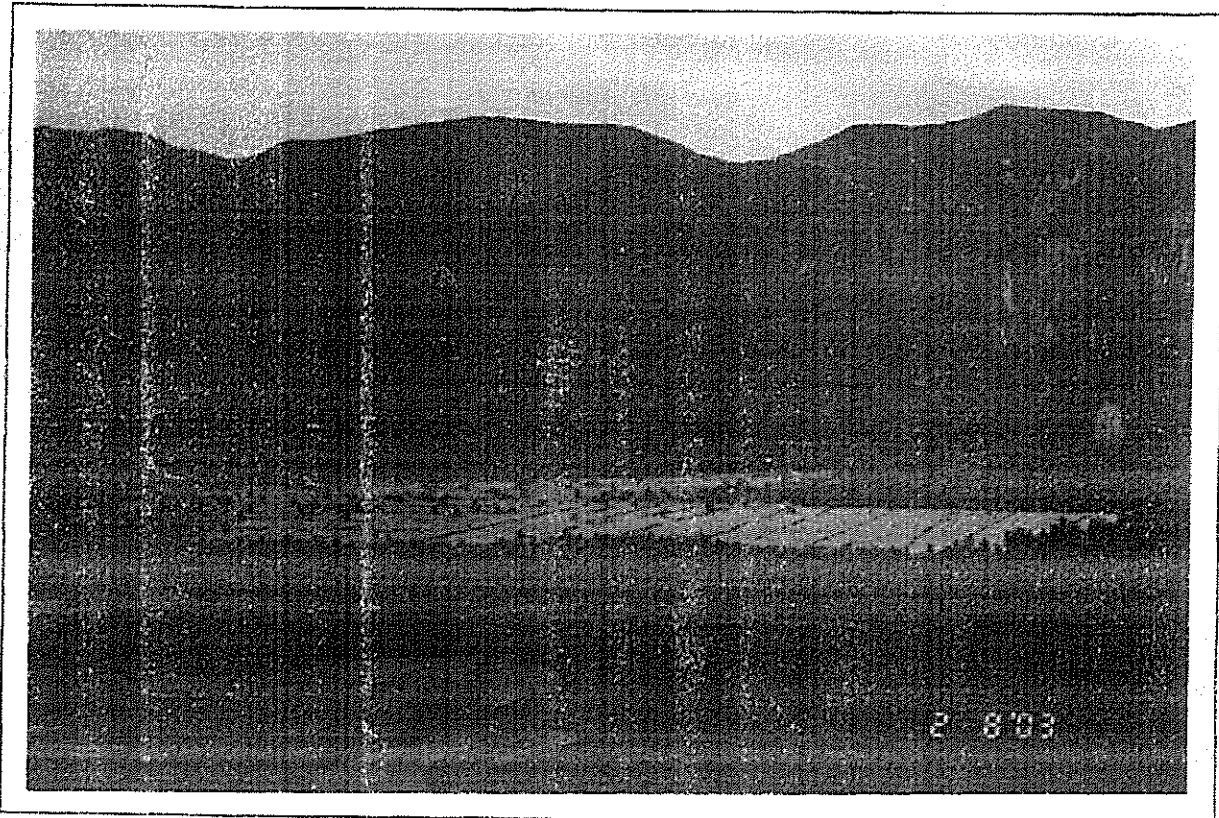


Fig. 10 There is an area of about 100 ha which has been cleared by felling and root raking. This is one of the few parts of the property which, with appropriate inputs, might be capable of being managed sustainably. It is however, so small that it would not provide an economic unit and would be better managed for conservation and allowed to revert to forest.