

Implementation of Earning Capacity Rents

Background

In August 2010 Land Information New Zealand (LINZ) and the High Country Accord (HCA) hosted three workshops in Christchurch, Lake Tekapo and Cromwell. The workshops aimed to provide you, as a leaseholder, with an overview of the proposed new earning capacity rents system (ECR). Looking back, the workshops encouraged good discussion, plenty of questions and answers, and provided a positive platform for transparency of the project.

Since meeting with you, we have made considerable progress and in the last couple of months have been testing the assumptions for the BASE carrying capacity model by carrying out 'ground truthing' on selected properties. Due to the impact of the Canterbury earthquakes on LINZ Christchurch office we have not communicated with you for a while.

This update is an important part of ensuring we continue to keep you informed about the new rent system. We encourage you to take the time to read our update below and to contact Murray Mackenzie on (03) 374 3844 or email: mmackenzie@linz.govt.nz should you have any questions regarding this communication.

Please note that the Crown Pastoral Land (Rent for Pastoral Leases) Amendment Bill 2010 has not yet been enacted and that the decision of the Land Valuation Tribunal in relation to Minaret Station is subject to appeal by the Crown. Accordingly, the information is offered without prejudice to the Crown's position on rents in dispute or not yet fixed.

Status Update

Rental Rate work programme: We worked together with the Ministry of Agriculture and Forestry (MAF) and Jonathan Wallis (HCA representative) as members of the Rental Rate expert panel (the Panel) together with experts with a background in agricultural economics: Peter Clough (New Zealand Institute of Economic Research), Stuart Ford (Agribusiness Group), and Rob Davison (Beef and Lamb NZ Economic Service).

The Panel have completed work on the fixed rate that will be used to calculate the new rents. NZIER were commissioned to draft the final rental rate report that includes the Panels' findings. The final report was reviewed and accepted by LINZ and the HCA and is available on the LINZ website [referenced on page 3]. A summary of the report is set out later in this update.

Carrying Capacity work programme: The Carrying Capacity Expert Panel (the Experts) consisting of Cam Hagan, Ken Taylor and James Barringer (Landcare Research) have spent the last 10 months working with our project team, as well as consulting with the HCA, to produce the BASE stock carrying capacity model. This model uses geographic information to determine the BASE carrying capacity for South Island high country pastoral leases. The model is now at a stage where the Experts have completed the testing and analysis that can be done for each high country property. A detailed report on the methodology and how the model was developed is in the final stages of being reviewed and will also be available to leaseholders once it is signed off.

Legislation: The Crown Pastoral Land (Rent for Pastoral Leases) Bill is currently being considered by the Primary Production Select Committee. The Committee have heard and considered all the submissions on the Bill and will shortly be reporting the Bill back to Parliament on 5 July probably with some minor changes as a result of issues raised in the submissions. The legislation may not progress through Parliament this year because of the limited time available before the election and the large amount of other legislation awaiting consideration. The current version of the Bill is available on the Legislation NZ website www.legislation.govt.nz and once the Select Committee reports the Bill back to Parliament that version will also be available on the website.

Going forward, the Valuer-General will be working on the Rules and other supporting documentation so they can be put in place as soon as possible after the Bill is passed.

Introduction to the Model

The model at the core of the proposed new system for setting pastoral lease rents is:

$$\text{RENT} = \text{RATE} \times (\text{BASE}) + (0.15 \times (\text{CURRENT} - \text{BASE}))$$

This update tells you what RATE applies to leases where reviews were due up to July 2010 and provides you with an estimate of the BASE figure for your lease based on the model LINZ developed up to March 2011. By adding an estimate of CURRENT carrying capacity, you will be able to roughly calculate what your RENT under the new system could be.

BASE is only as accurate as the modelling up to March 2011 as explained below. There are several steps before base carrying capacity can be set for any lease:

- the model may need to be refined
- the Valuer-General will make Rules which may specify tolerances and adjustments to be made when using base figures from the model
- there may be provision for adjusting the model based figures to reflect the realities of the land on particular leases

The 'RATE' uses the method as described below, but it can only be calculated for leases with review dates up to and including 2010.

Any of the components of the formula could conceivably change as the legislation proposing the new system progresses through Parliament. Changes are not likely and any changes that do occur will probably be minor and would require consultation with Leaseholders.

Self estimating CURRENT to get a rough indication of rent

Using the example of a high country property, the information provided gives

Modelled BASE	2,353 stock units
Relevant review date	2005
RATE applicable to the 2005 review date	\$4.95
Leaseholders self estimate of CURRENT	Say 17,000 stock units

By self populating an estimate of CURRENT a rough estimate of RENT can be calculated:

$$\begin{aligned} \text{RENT} &= \text{RATE} \times (\text{BASE}) + (0.15 \times (\text{CURRENT} - \text{BASE})) \\ &= \$4.95 \times (2,353) + (0.15 \times (17,000 - 2,353)) \\ &= \$4.95 \times (2,353) + (0.15 \times 14,647) \\ &= \$4.95 \times (2,353) + 2,197 \\ &= \$4.95 \times 4,550 \\ \text{RENT} &= \$22,522.50 \end{aligned}$$

CURRENT Carrying Capacity

At this stage we envisage that CURRENT will be assessed on the average efficient level of stock in standard stock units. So if a pastoral lease is farmed at above-average efficient stocking levels, CURRENT will be below the actual stocking levels. If a pastoral lease is farmed at below-average efficient stocking levels CURRENT will be above the actual stocking levels.

We do not envisage CURRENT will be calculated on stock wintered but rather use the stock units that can actually be run on the leasehold property. So, if under average efficient stocking levels in an area of a lease can carry 1000 stock units for three months of the year, that area would contribute 250 stock units (1000/4) to CURRENT.

BASE Carrying Capacity

BASE is intended to operate in the new system as an easily calculated proxy for the unimproved carrying capacity of land. The proposed new system will not involve a new inquiry into unimproved carrying capacity of each lease. Rather BASE will be assessed starting with the figures from a model like the one described below (or an improved version of it) and allow for adjustments on individual leases.

RATE

The Panel decided that the RATE should be calculated as 0.33 of the five year rolling average of EBITR (earnings before interest tax and rent) derived from the annual Beef and Lamb New Zealand farm survey; Class 1 South Island High Country.

More detailed information about the method for calculating RATE can be found on the LINZ website: <http://www.linz.govt.nz/docs/crownproperty/cpl-rent-method.pdf>.

The figures produced by this method are:

Review date	Beef and Lamb New Zealand figures from	The system described above produces a RATE of
1-Jan-04	2001/02 actual	4.16
1-Jul-04	2002/03 actual	4.55
1-Jan-05	2003/04 actual	4.95
1-Jul-05	2003/04 actual	4.95
1-Jan-06	2004/05 actual	5.14
1-Jul-06	2004/05 actual	5.14
1-Jan-07	2005/06 actual	4.50
1-Jul-07	2005/06 actual	4.50
1-Jan-08	2006/07 actual	4.39
1-Jul-08	2006/07 actual	4.39
1-Jan-09	2007/08 actual	4.26
1-Jul-09	2007/08 actual	4.26
1-Jan-10	2008/09 actual	4.70
1-Jul-10	2008/09 actual	4.70

The March 2011 model of BASE

Ken Taylor and Cam Hagan provided estimates of BASE at a number of points on pastoral leases. From April 2010 Ken and Cam together with James Barringer, developed a model to extrapolate those points over all pastoral leases. The March 2011 model of BASE represents the current best fit of that extrapolation with the estimates provided by Ken and Cam.

The process for modeling BASE

Ken and Cam provided estimates of BASE for 250 or so points across representative parts of pastoral leases. James developed models using characteristics of the land to produce a surface that extrapolated and interpolated around and between the data points provided by Ken and Cam. James looked at many datasets and made more detailed examinations of approximately 20 including soil particle size, soil permeability and soil type elevation, aspect, yearly average soil temperature, Land Use Capability (LUC) class, and soil moisture vapour deficits for various months.

As the process developed the Experts iterated through six major versions with many more minor changes; they added around 120 further data points to better resolve the model. Versions of the model were ground truthed on The Grampians, Bargour, Patearoa Syndicate, Ben McLeod, Rees Valley, Lake Heron, Glenfalloch, Waterloo and Glenaray pastoral leases. There were a number of other properties that the Experts looked at briefly. The surface of the pastoral leases provides a model which allows a BASE figure to be produced for any point or any area in the pastoral lease estate.

BASE number for your property

We have calculated the BASE number for your property; this is shown on the attached form. We would also like to provide each leaseholder with a spreadsheet that provides BASE numbers for all properties identified in the ECR project. The rationale for releasing numbers to other leaseholders is to enable you to get a feel for where your BASE number sits relative to other leases.

We would like to re-emphasise that you consider all of the information provided above, and whilst the BASE figure will eventually form part of the title documents, at this stage BASE numbers are only indicative and will remain confidential between LINZ and Leaseholders.

I would also like to reiterate that if you have questions regarding this communication please do not hesitate to contact us.

For the future, we are also proposing the idea of workshop meetings with leaseholders as we did back in August 2010. I expect to be in a position to provide more definitive details to you later this year.

Thank you for taking the time to read this communication.

Kind regards,

Mathew Clark
Manager Pastoral
Land Information New Zealand

Copy of Leaseholder Communication