Native vegetation: assumed impacts of intervention on quality

Progress towards RCT 3.3:
Improve the quality of 90% of existing (2000) native vegetation
by 10% by 2030
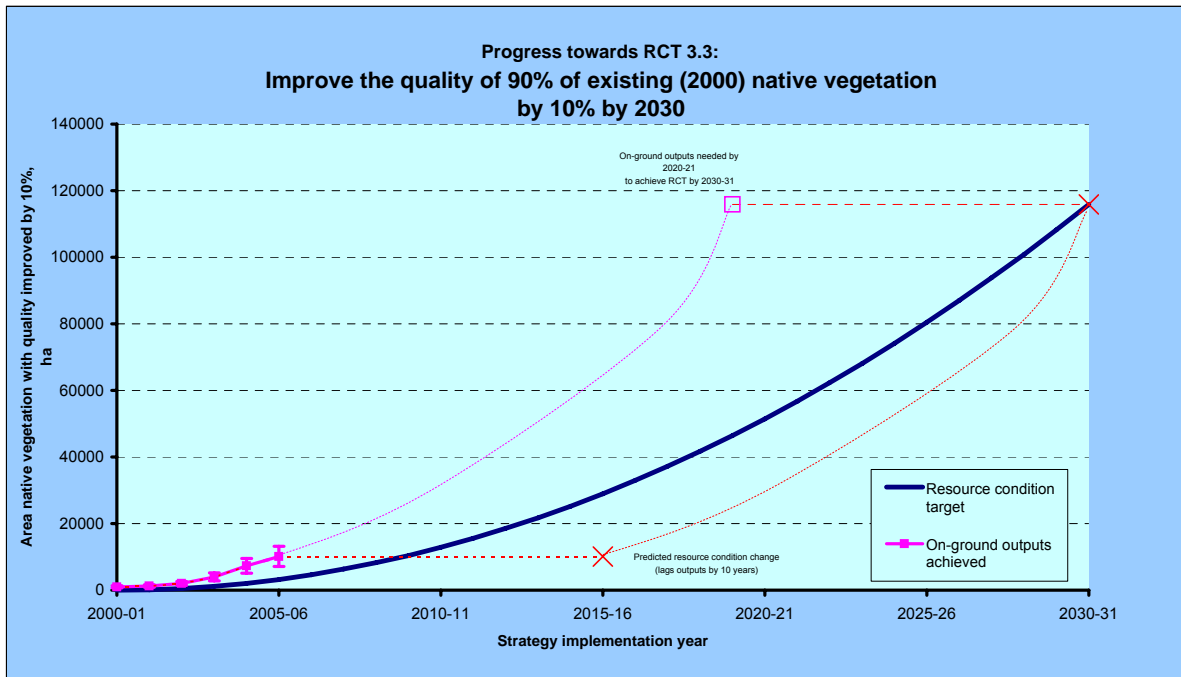
Assumptions	Uncertainty	Importance for decision-making
Area native vegetation quality improved by 10% =		
1. 2* x	H	VH
2. [area remnant fenced (terrestrial, wetland or stream/river) +	H	M
3. area covenanted]	H	M
4. Lag time between action and 10% improvement is 10 years (indicated byX). (This will mean that sufficient actions will need to be undertaken 10 years before RCT date of 2030-31, indicated by▢).	VH	H
5. Data for actions undertaken 2000-01 to 2002-04 were interpolated from 2003-04 and 2004-05 results.	H	L
6. Cumulative actions achieved in 10 years to 2000-01 = 1,000 ha.	VH	M
7. No further decline in quality on private land will occur. (Most of the damage was done in the first 50 years of European settlement and the quality of remnants will be maintained or improved.)	VH	H
8. Annual increase in targets (progress towards RCT) is not expected to be linear: new mechanisms will be developed to enable greater levels of works or destocking. Projects are underway in the Catchment to identify these mechanisms. In now seems unlikely that existing mechanisms will result in the rate of change required to achieve the long-term RCT. The implications of achieving less than the RCT require significant research.	H	VH
TOTAL increase is DOUBLE that supported by Government funds. This includes component assumptions (that need to be tested separately) of: *- contributions without Government funds, including works undertaken and natural regeneration* *- reductions from direct native vegetation removed, and,* *- reductions from native vegetation dying.*		

Notes, including data management issues

1 Report card compiler: Kate Brunt and Rod McLennan.

2 Error bars (+/- 30%) are based on expert opinion (Kate Brunt and Tim Barlow) and are for a 95% confidence level. These error bars will become less than 30% as major assumptions are refined.

3 Satellite imagery is not yet a reliable means of measuring progress: ongoing imagery improvements result in finer patches of vegetation being detected and hence greater areas recorded. The lag time between seedling and detection also complicates the use of the data to verfiy that actions are translating into outcomes in the medium term (3-10 years).

4 A survey is expected to be undertaken during 2006 to determine the level of works undertaken (including destocking) without government funding.

5 Targets apply to private land only: this is where GB CMA has most influence. (Figures are being collated for public land and these will be included in future updates.)

6 Two possible sources for "covenant": Information in GB CMA 2004-05 Annual Report on page 37 provided by Trust for Nature's Doug Robinson has been used. 1,440 ha permanent protection (23 covenants, mean size 42 ha; one permanent purchase, three Revolving Fund purchases and one brokered Crown land purchase). The alternative in the compiled figures on page 8 was not used. Similarly, the figure from Doug in the 2003-04 Annual Report was used (only the total number of covenants was recorded in the combined outputs table earlier in the Report).

7 Full referencing of assumptions will be included in future updates.

Outputs contributing to RCT for 2005-06

	From funds received through GB CMA			
	Target	Achieved		% achieved
A Fence terrestrial remnant vegetation	382	519	ha	136
B Fence wetland remnant	13	6	ha	46
C Fence stream/river remnant	92	115	ha	125
D Binding management agreement (license, Section 173, covenant)	1,000	758	ha	76

Calculation: progress towards RCT

Formula	2 x [A+B+C+D]		*Total (all sources)*	2,796 ha with vegetation quality improved