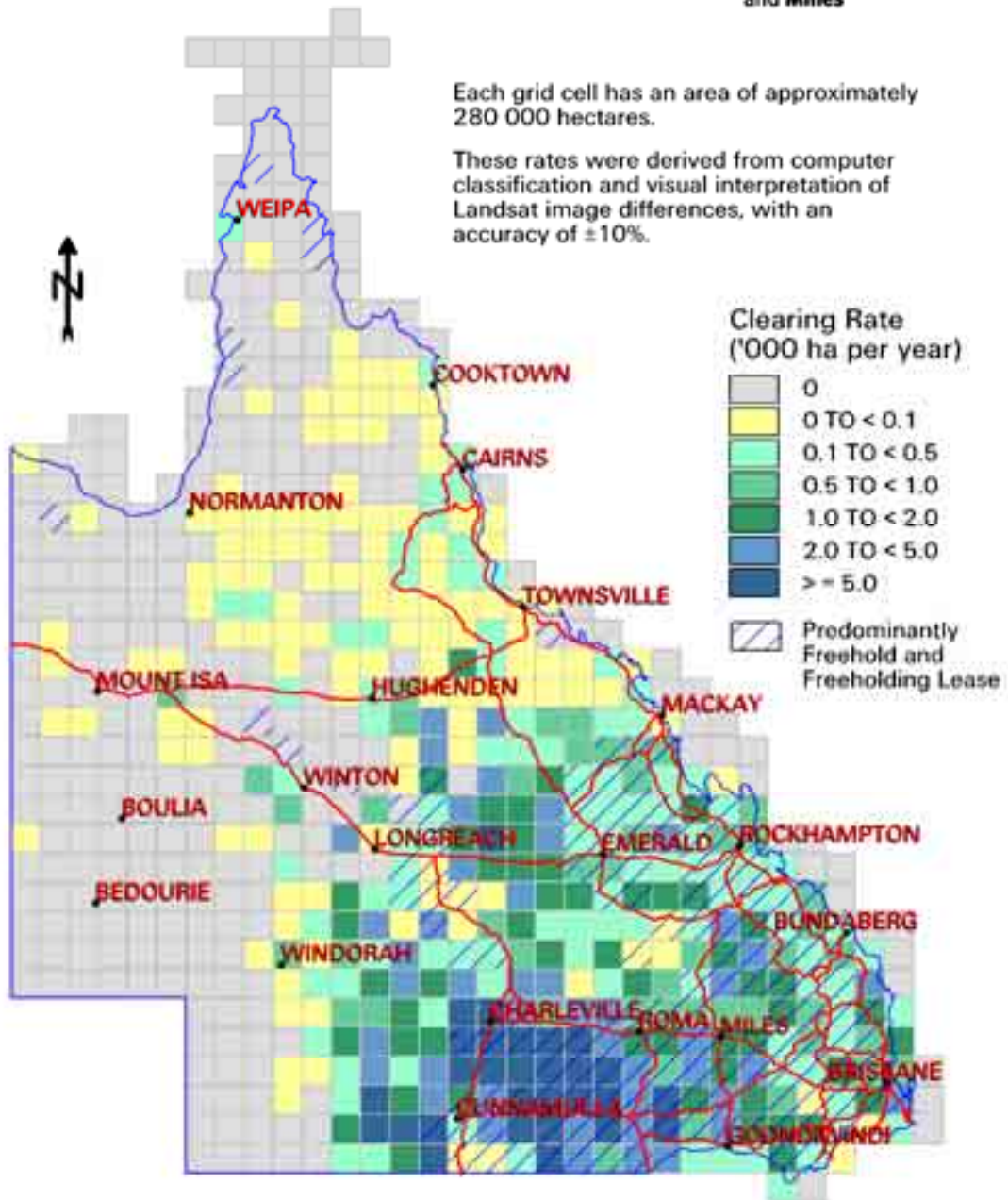


QUEENSLAND
CLEARING RATE ('000 HECTARES PER YEAR)
BY 30' X 30' (LAT/LONG) GRID CELL

2002-2003



Queensland
Government
Natural Resources
and Mines



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Figure 6: Average annual clearing rate (2002–2003).

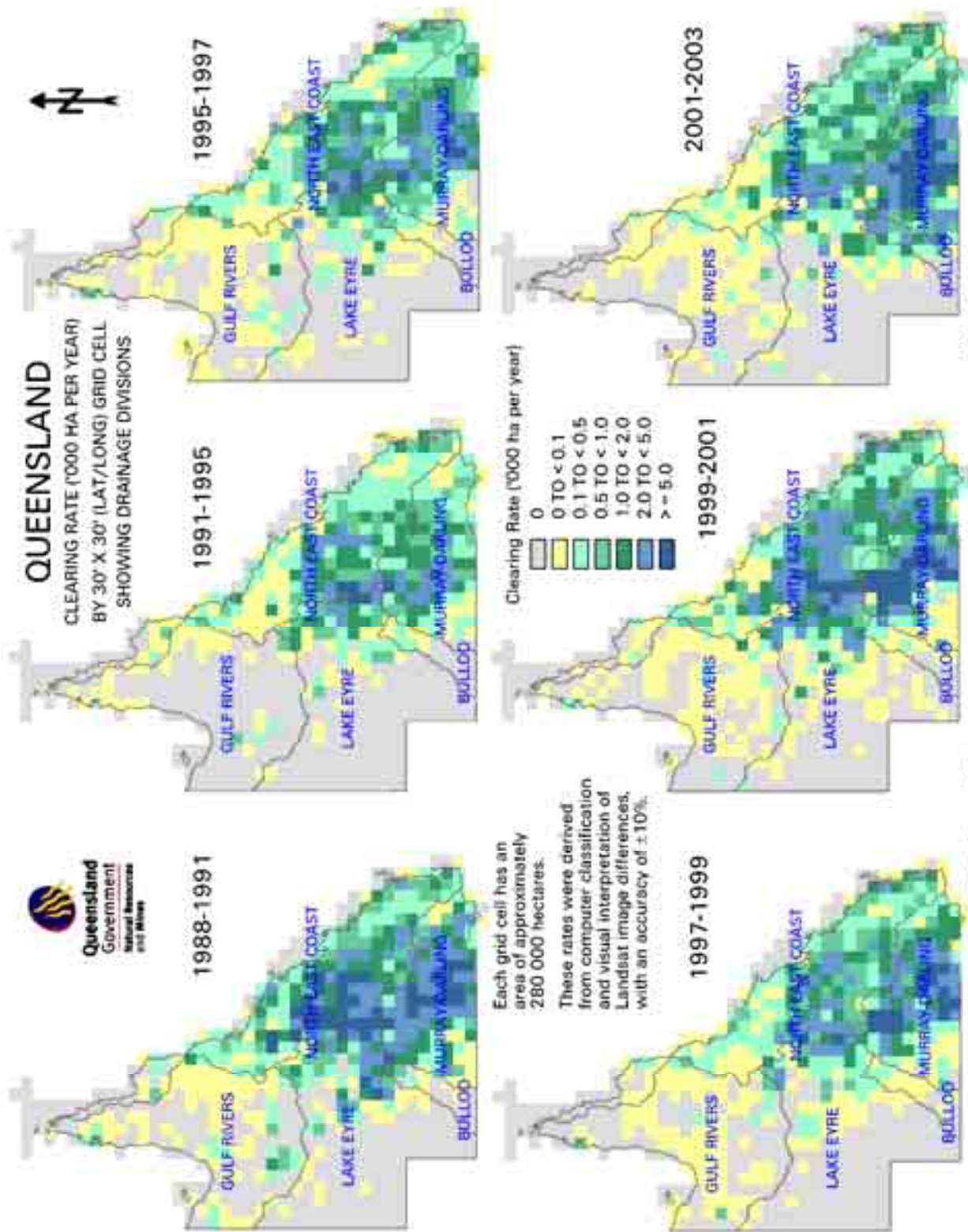


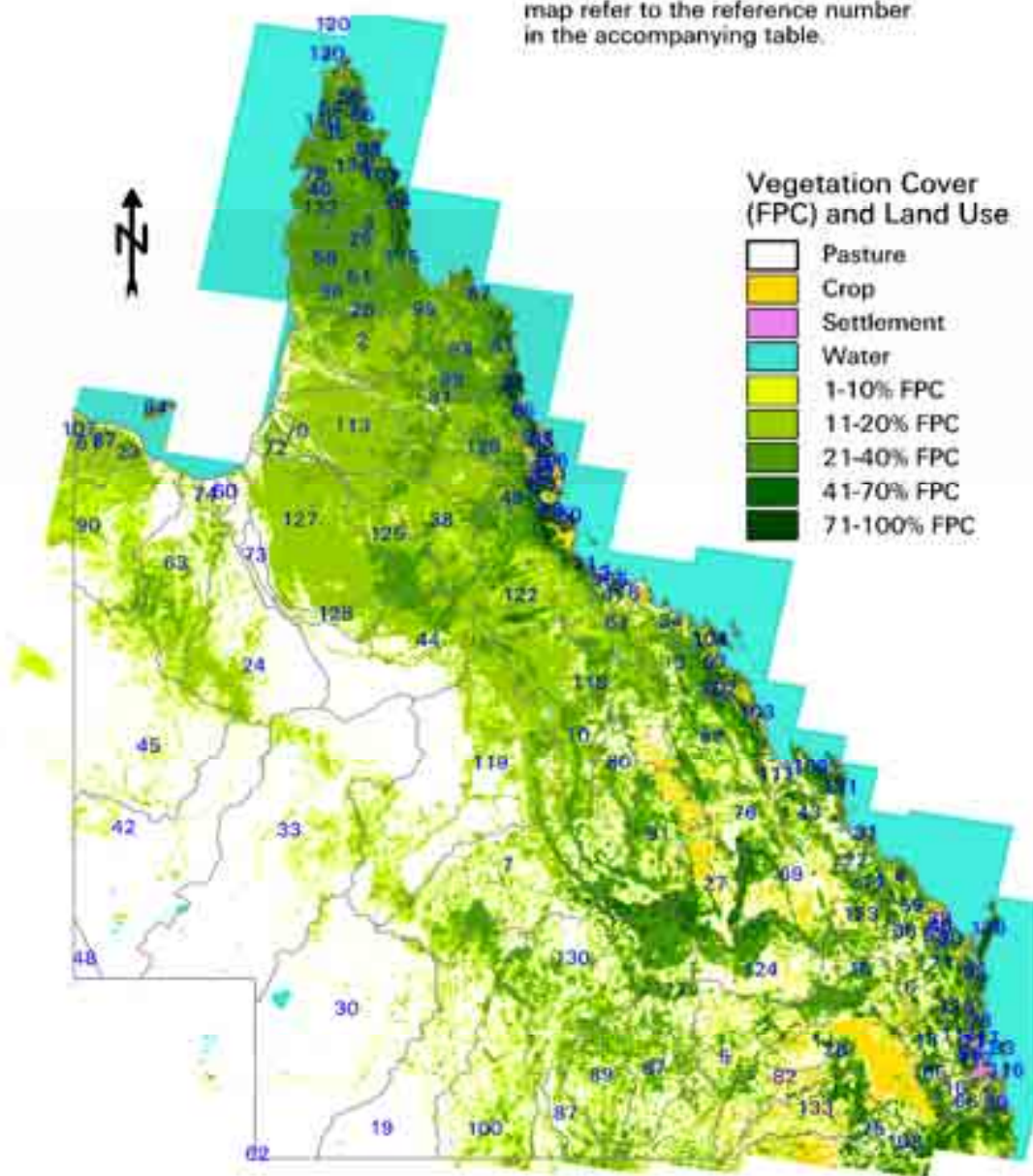
Figure 7: Average annual clearing rate for each of the SLATS change periods (1988–2003).

QUEENSLAND VEGETATION COVER AND LAND USE SHOWING CATCHMENTS

2003



NOTE: Numbers on the face of the map refer to the reference number in the accompanying table.



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Figure 8: Woody vegetation cover and land use (2003).

4.2 Woody Vegetation Change by Remnant Vegetation Mapping

In many cases, clearing of trees for grazing is not permanent and trees regrow from lignotubers or seed. An analysis was done to examine the proportion of clearing that consists of remnant vegetation. The Queensland Herbarium consider that vegetation is remnant if it is greater than or equal to 70% height or greater than or equal to 50% cover of the dominant stratum, relative to the normal height and cover of that stratum (Boulter *et al.*, 2000).

The 2001–2002–2003 woody clearing data were cross tabulated with remnant vegetation data provided by the Queensland Herbarium and the resulting figures are shown in Table 2. These figures relate only to the woody component of the vegetation and do not include gaps in open woodlands and grassland areas which may be defined by the Herbarium to be remnant vegetation. The figures are preliminary and will be subject to revision as the Queensland Herbarium updates its mapping using the 2001–2003 change analysis and 2003 Landsat TM imagery.

A similar cross tabulation with remnant mapping was done for the 1995–1997 and 1997–1999 SLATS change analyses and these figures are also shown in Table 2. The 1988–1991 and 1991–1995 change data were not included in the analysis because 1995 is the earliest year for which RE maps are available. Additionally, up-to-date RE mapping was incomplete at the time of the 1995–1997 and 1997–1999 SLATS change reporting. Hence, the remnant clearing rates for these periods were based on an extrapolation of a sample of clearing for which RE mapping was available (which amounted to greater than 90% of the total clearing area).

The trend in clearing of remnant woody vegetation over time (1995–2003) is shown in Figure 1. Figure 9 shows the trend in clearing of remnant woody vegetation and non-remnant vegetation over time but with a division based on tenure type.

Table 2: Area cleared of remnant and non-remnant woody vegetation by tenure (1995–2003).

Period		Clearing rate (,000ha/yr)				Total
		Freehold	Leasehold	Other tenures ¹	Other reserves ²	
1995–1997	Remnant	125.2	95.9	2.6	3.5	227.2
	Non-remnant	72.8	38.1	0.5	1.7	113.1
1997–1999	Remnant	168.2	113.6	2.6	1.9	286.3
	Non-remnant	86.1	47.8	0.4	4.6	138.9
1999–2000	Remnant	322.63	179.90	0.73	1.50	504.75
	Non-remnant	174.66	74.11	0.05	4.21	253.04
2000–2001	Remnant	76.21	134.13	0.71	1.96	213.01
	Non-remnant	93.74	68.52	0.03	4.86	167.16
2001–2002	Remnant	121.07	152.86	0.01	1.54	275.48
	Non-remnant	126.12	91.51	0.11	4.69	222.42
2002–2003	Remnant	181.15	183.41	0.21	1.14	365.91
	Non-remnant	142.35	40.61	0.07	4.97	188.00

4.3 Woody Vegetation Change by Land Tenure and Land Cover

The 2001–2003 woody vegetation change rates have been grouped by tenure and land cover in Table 3. Figure 10 is a map of the four broad tenure classes used in Table 3. Leasehold tenure is the dominant tenure by area in Queensland. Table 4 and Figure 11 shows the clearing rate by tenure for all of the periods mapped between 1988 and 2003. This information was derived by combining the woody vegetation change data with the State's Digital Cadastral Data Base and Tenures Administration System data. The area of predominantly freehold tenure is also shown in Figure 5 using hatching.

The replacement land cover after clearing for all of the periods mapped between 1988 and 2003 is summarised in Table 5 and the trend presented in Figure 12. The majority of clearing was for conversion to pasture for grazing with conversion to crop the second largest in area.

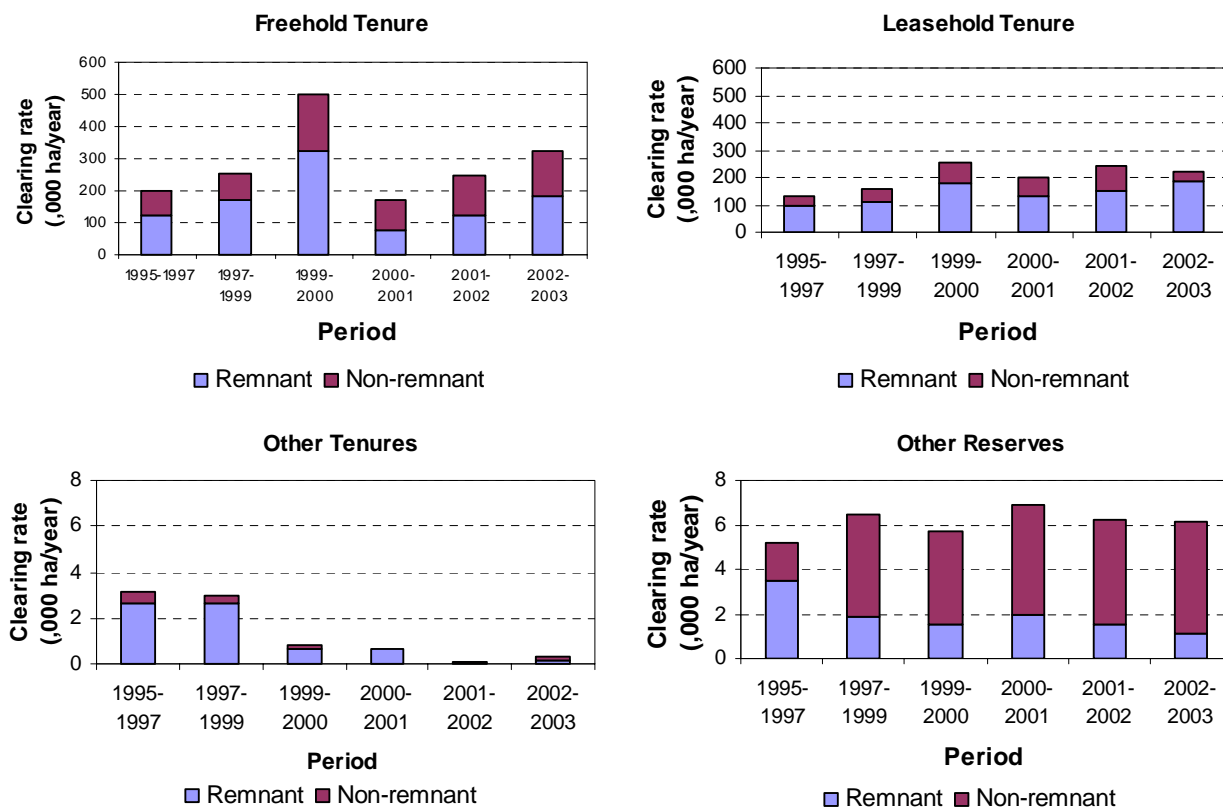


Figure 9: Trend in clearing of remnant woody vegetation by tenure (1995–2003).

Table 3: Woody vegetation change by tenure type and land cover (2001–2003).

Tenure	Area (,000ha)	Clearing Rate (,000ha/yr)							2001 Wooded vegetation cover	2003 Wooded vegetation cover	% of Total clearing in QLD
		Pasture	Crop	Forest	Mining	Infra- structure	Settle- ment	Total			
Leasehold ²	116745	229.28	0.10	0.05	0.66	4.05	0.14	234.29	55002.31	5445.62	44.37
Freehold	44362	281.21	0.58	1.04	0.78	1.30	2.50	287.41	17099.48	16628.99	54.43
Other Tenures ³	389	0.07	0.00	0.00	0.00	0.05	0.07	0.19	317.62	305.86	0.04
Other Reserves ⁴	11282	1.34	0.01	4.59	0.17	0.04	0.01	6.15	8841.58	8836.37	1.16
State Totals	172797	511.90	0.68	5.68	1.61	5.44	2.72	528.05	81260.99	80216.83	100.00

² Includes roads and rivers

³ Includes Commonwealth lands, mining, main roads, railways, ports, action pending etc.

⁴ State forest, timber reserves and national parks