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HOW THE 1982 RAINFOREST DECISION BENEFITED THE FAR NORTH COAST:

A Reply to "Promises and Realities"

Prepared by Dailan Pugh
for the
North East Forest Alliance

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Table of contents

1. INTRODUCTION
 - 1 Border Ranges National Park and Murray Scrub Flora Reserve
 - 2 Nightcap National Park
 - 3 Washpool National Park
2. ASSESSING ECONOMIC IMPACTS
 - 1 Resource changes
 - 2 Employment effects
 - 3 Economic losses of logging
3. MANAGEMENT AREA DETAILS
 - 1 Urbenville (and Kyogle) Management Area
 - 2 Murwillumbah Management Area
 - 3 Casino West Management Area
 - 4 Grafton Management Area
4. NOTES
 - 1 Quota volumes
 - 2 Profit/loss
 - 3 Economic multipliers
5. REFERENCES

Dailan Pugh has no economic qualifications. He does not hold a B.Sc (Hons) degree from London University or a M.Env. Stud. degree from Macquarie University. He is a co-ordinator for the North East Forest Alliance and was involved in the rainforest campaign, and thus can not claim to be impartial. He has over 14 years experience in researching and writing reports, articles and books on the forests of the far north coast. For the past four years he has been working full time on forest issues. He has presented the facts as truly as possible and believes they speak for themselves.

1. INTRODUCTION AND SUMMARY

This report examines the impact of the 1982 Rainforest Decision on the far north coast of NSW, with particular consideration of extravagant claims made in a booklet titled 'Promises and Realities' (Gibbs 1992), prepared for the Forest Products Association.

The region considered incorporates the Tweed, Richmond River and part of the Clarence River valleys. This area is covered by the Forestry Commission's Urbenville, Murwillumbah, Casino West, Grafton and Casino Management Areas. Only the first four of these were affected by the Rainforest Decision and are thus dealt with in detail in this report.

On the 26th October 1982 the NSW Government reacted to years of public pressure from the community by agreeing to transfer 87 739 hectares of public land to the control of the National Parks and Wildlife Service and creating 1 825 ha of new Flora Reserves (DEP 1983 pp 16-17). In the far north east of NSW this involved the creation of the Murray Scrub Flora Reserve, Cambridge Plateau Flora Reserve, Bundoozle Flora Reserve, Nightcap National Park, Washpool National Park and a major expansion of the Border Ranges National Park.

Nine years after that decision there has been a slight increase in timber industry employment within the region, in addition some 200 to 300 jobs within the region may have been created by tourism associated with the new reserves. It is surprising that with mill closures and amalgamations, reductions in quotas aimed at achieving sustainable yields, the economic downturn of the early 80's and 90's and the loss of resource within Washpool National Park that timber industry employment has remained so buoyant.

While no assessment of the output of mills within the region can be undertaken (due to the companies refusal to divulge such information to the public) it would be unusual, given the constant employment figures and presumably increased productivity, if output has not increased.

There have been reductions in the volumes of hardwood sawlogs being removed from two (Murwillumbah and Grafton) of the four Forestry Commission Management Areas affected by the decision, though these reductions were foreshadowed before the Rainforest Decision and are primarily the result of past overcutting. In the Grafton MA this reduction has apparently been compensated for by allocations from other Management Areas and a reported resurgence in private property logging.

There is a need for a detailed independent assessment to determine the overall resource changes within the region.

In the past 10 years the public have paid well over a million dollars for the industry to remove over a million cubic metres of hardwood sawlogs and a significant quantity of other timber from public forests in the four management areas. This timber would now be worth in the order of \$35-40 million in royalties and over \$200 million as sawmill output.

Quantifiable, but unaccounted, costs include damage to council roads by logging trucks. The non-quantifiable costs have included loss of wildlife, stream pollution, loss of topsoil, reduced water yields, loss of nutrients, loss of old-growth forest, loss of wilderness and destabilisation of ecosystems.

The Rainforest Decision reserved the few larger remnants of old-growth rainforest left within the Mt. Warning region, which would otherwise have already been irreversibly degraded, and part of the largest stand of old-growth rainforest and wet eucalypt forest left in NSW. These remnants of unmodified forest are priceless treasures where natural processes have been able to continue and from which we can assess the impacts of our activities upon other forests. At least a few bits have been left for future generations to experience and not sacrificed for dubious and transient financial returns.

1.1 Border Ranges National Park & Murray Scrub Flora Reserve

The Rainforest Decision led to the expansion of the Border Ranges National Park and creation of the Murray Scrub Flora Reserve within the Commission's Kyogle Management Area.

By 1982 unsustainable logging had left only three significant areas of potentially accessible forest as old-growth in the Kyogle MA. Lever's Plateau (in the already agreed Border Ranges NP) had escaped logging in part because of its difficult access and a desire on the behalf of Mr. Lever (the son of the founder of Munro and Lever's mill) to see its old-growth rainforest left alone. Grady's Creek (Wiangaree SF) was gazetted a Flora Reserve in 1973 to protect a representative sample of old-growth rainforest along the Border Ranges. Murray Scrub (Toonumbar SF) had been left largely alone because of a local belief that it should be reserved and recommendations from District Foresters that it be gazetted a Flora Reserve. No significant accessible areas of eucalypt forest remained as old-growth.

Years of campaigning by concerned people resulted in the Border Ranges Inquiry in 1978, as a consequence of which a long narrow park, encompassing Lever's Plateau and Grady's Creek Flora Reserve, was agreed to be created. The flora reserve was to be revoked, logged and then added to the park. Further community pressure led to the inclusion of all of Roseberry and Wiangaree State Forests in the Border Ranges National Park in 1982 and the protection of the Murray Scrub in a Flora Reserve.

The years of overcutting had left the Kyogle Management Area with no significant volumes of hardwood sawlogs. Munro and Lever's rainforest quota had been temporarily transferred to the Urbenville MA in 1982. This rainforest quota was permanently transferred to the adjacent Urbenville MA, but the mill continued to lose money and was closed for economic reasons in 1983. In accordance with a long standing proposal the Kyogle MA was incorporated into the Urbenville MA for management purposes around this time, officially being incorporated in 1986.

1.2 Nightcap National Park

The creation of the Nightcap NP followed a campaign to stop roading and logging of a small area of old-growth rainforest and associated eucalypt forests in the Terania Creek basin. This involved a demonstration in 1979 at which 39 people were arrested and a subsequent inquiry. In 1982 logging was halted in the rest of Goonimbah State Forest by further demonstrations and eventually an injunction granted by the Land and Environment Court, on the grounds that the Forestry Commission had to first comply with the Environmental Planning and Assessment Act and prepare an Environmental Impact Statement.

By the time the park was dedicated logging of accessible areas was almost complete, with old-growth rainforest and some fringing sclerophyll forests only surviving in the

Terania Creek basin, in a few scattered pockets and in largely inaccessible areas. Decades of overcutting by the timber industry was coming to a close as the forests were becoming exhausted of millable timber. Timber removals and employment had been in decline since the early 1970's and the mill taking timber from Goonimbah SF was to cut itself out of resource from that working circle before 1985, even if it logged the few remnants.

The creation of the Nightcap NP had no significant impact upon the timber industry, it merely hastened by a month or so an inevitable restructuring due to greed and short-sightedness. Its protection did however prove a significant boost to the local economy by attracting tourists to the area.

1.3 Washpool National Park

A forested area on the Gibraltar Range, centred around the headwaters of Washpool Creek was identified as one of NSW's last remaining wilderness areas in 1976. It encompassed the largest expanse of tall wet old-growth forests, both rainforest and eucalypt forest, left in NSW. Public pressure forced the Forestry Commission to prepare an Environmental Impact Statement for the Washpool Area in 1980, which was strongly criticised by both the Department of Environment and Planning and National Parks and Wildlife Service.

The Rainforest Decision incorporated a large part of the tall old-growth forest in the Washpool National Park, though left a significant part out for logging.

A revival of public pressure in 1989, including a blockade and eventually a court case, led to the Forestry Commission being required to prepare a new EIS and undertake rehabilitation of rainforests they had illegally logged since 1981.

While the southern end of the Washpool National Park had been logged the majority of it remained as tall old-growth eucalypt forest and rainforest, though much of it was steep gorges. Three Forestry Commission Management Areas were affected by the creation of the park; Grafton, Casino West and Glen Innes. Of these only Grafton MA was significantly affected.

Before the Rainforest Decision the Grafton Management Area had been accelerating its unsustainable logging and in 1980 was faced with the realisation that quotas had to be immediately reduced by 40% if the industry was to be sustained beyond 1998. A 25% quota cut was instigated in 1981, and another planned for 1985.

The Rainforest Decision removed a significant proportion of potentially available 'hardwood' resource from the Grafton Management Area. This has not caused any quota reductions that were not already under consideration as early as 1980, though the reduction that took place in 1986 may not have had to be as severe if the park had not been dedicated.

2. ASSESSING ECONOMIC IMPACTS

In March 1992 the Forest Products Association launched a report prepared by Diana Gibbs entitled 'Promises and Realities: Political Decisions Affecting the Timber Industry' which claimed that since the Rainforest Decision of 1982 there has been an annual drop in output from the industry (gross sales) of \$11 million, up to 600 jobs have been lost and that value of output for the region could now be more than \$24 million lower per annum than it was in 1980/81 (in real price terms), and regional employment could have declined by over 1 300.

This critique provides evidence that Diana Gibbs has got it completely wrong.

Gibbs (1992 p3) also claimed 'A large share of this decline has been a direct result of the 'Rainforest Decision'', and that 'tourism has not expanded (in terms of visitor numbers) and tourist-related activities cannot match the real economic wealth now lost as a result of contractions in the timber industry.'

Gibbs' estimates of the relative impact of the Rainforest Decision as compared to the legacy of decades of gross overcutting on timber resources is clearly wrong. She grossly misrepresents the significance of tourism associated with the new parks, employment losses in the timber industry, and the loss of resource as a result of the Rainforest Decision.

2.1 Resource changes

Since around 1980 the area of dedicated State Forest in the four affected Management Areas has declined by some 17 800 ha (approximately 5%)(Table 2), with losses to the new parks being compensated to a large extent by dedication of other Crown land as State Forest and the purchase of private properties for State Forest dedication.

The annual volumes of hardwood quota timber removed from State Forests in the four MA's has declined by 33% from the period 1977/78-1981/82 to 1987/88-1990/91.

Urbenville/Kyogle and Casino West MA's have actually increased their output while Murwillumbah and Grafton MA's have significantly reduced their output (Table 1).

Reductions in the volumes of timber removed from the two management areas have primarily eventuated from gross overcutting prior to the Rainforest Decision and plans in place prior to 1982 to reduce logging to a more sustainable level (see 3.2 and 3.4). Overcutting is still occurring in Casino West and Grafton Management Areas (see 3.3 & 3.4)

Table 1. Average annual quota hardwood sawlog removals from Crown lands over the past 19 years.

MANAGEMENT AREA	AVERAGE ANNUAL H/W QUOTA SAWLOG REMOVALS m3 net			
	72/73-76/77	77/78-81/82	82/83-86/87	87/88-90/91
Urbenville	24 507	18 925	16 952	22 527
Murwillumbah	16 680	15 490	9 800	6 497
Casino West	33 072	34 777	32 083	34 883
Grafton	56 980	61 160	43 160	24 025
TOTALS	131 239	130 352	101 995	87 932

Gibbs (1992 p22) claims the timber industry suffered 'virtually total loss of brushwood (rainforest) resource'. While there was a loss of potential rainforest resource as a result of the Rainforest Decision the two mills principally affected, Munro and Lever and Big River Timbers, suffered no short term loss of quota, with a guarantee that rainforest timbers would continue to be supplied at 1981 quota levels until 1988 and 1990 respectively.

Their rainforest quotas were redirected to other Management Areas. (see 3.2 and 3.4). The total loss of potential hardwood resource from the four Management Areas, as a result of the Rainforest Decision, was in the order of 314 855 m3 net of quota sawlogs (somewhat less than Gibbs estimation of 350 500) (Table 2 and section 3). The Grafton MA was most significantly affected by this loss.

2.2 Employment effects

For 1984 the annual visitation to the Border Ranges National Park was 18 466, Nightcap National Park 17 556 and Washpool National Park was 2 250, this gives a total of 38 272 (NPWS 1985). By 1990 the visitation rates had almost quadrupled to 148 800; Border Ranges NP - 43 800, Nightcap NP - 70 000, Washpool NP 35 000 (NPWS 1991).

Gibbs' (1992 p3) claim that "tourism has not expanded (in terms of visitor numbers)" is fictitious. Gibbs (p22) also wrongly attributes visitation rates of 12 150 cited by the Forestry Commission (1986 p47) explicitly only for state forests in the Urbenville Management Area to the Border Ranges National Park.

The Kuring-gai Colledge of Advanced Education (1988) found that of visitors to the rainforest parks of New England and Dorriggo 37% were local visitors, 12% were 'day-trippers' from outside the region, and 51% 'overnight visitors' from outside the region. The average daily expenditure per visitor were estimated as \$34, \$59 and \$89 respectively. This implies that the average park visitor would have spent \$65 in 1988, which (allowing for CPI rises) represents \$77 at current values.

With the 1990 visitation rate of 148 800 to the three parks and an average daily expenditure of \$77, this gives a yearly expenditure of some \$11.5 million-dollars in 1990 by park visitors. Using Gibbs' (1992) estimation that

each visitor spends \$50 a day and these visitation rates for the three parks the resultant direct annual income to the region would be \$7.44 million (vastly different from Gibbs pretence of \$0.6 million).

Of this expenditure 39% has been estimated to flow directly into local wages (Kuring-gai Colledge of Advanced Education 1988), which has an employment flow on effect of 2.06 (employment multiplier), giving a range of total regional employment of 200 to over 300 dependent upon the parks (assuming annual wages of \$30 000).

The visitation rates to the three parks are rapidly increasing; Border Ranges NP at a rate of some 15% per annum, Nightcap NP at 25% per annum and Washpool NP at 40% per annum (NPWS 1991). There can be no doubt that the creation of the parks has already been of immense economic benefit to the region and that this benefit will continue to escalate.

The impact of the creation of the parks on timber industry employment has been minimal for the Urbenville, Murwillumbah and Casino West Management Areas.

The employment declines in the first two areas can be attributed primarily to past overcutting, mill restructuring, closure of uneconomic mills, and the general economic downturn of the 1980's (Table 2).

Table 2. Hardwood quota included in National Parks, and timber industry employment and State Forest area before the 1982 Rainforest Decision and now.

MANAGEMENT AREA	1982 QUOTA H/W LOSS TO PARKS m3net	EMPLOYMENT ¹		S.F. AREA 2	
		1981/82	1990/91	Pre82	1992
Urbenville/Kyogle	-	296	230	88.6	68.5
Murwillumbah	6 000	169	91	18.9	18.5
Casino West	32 000	345#	498#	65.0	79.4
Grafton	276 855	439	435	154.3	142.6
TOTALS	314 855	1249	1254	326.8	309.0

1. Employment figures provided by District Foresters, they do not include Forestry Commission personnel. They represent total timber industry employment within the MA, processing timber from all sources. #Casino West figures are for the entire Casino Forestry District (Casino West and Casino MA's).

2. State Forest area in 1 000's of hectares. Pre 1982 areas are based on available figures, as at 1980 for Grafton MA, 1975 Murwillumbah MA, 1979 Casino West MA and, 1978 Urbenville MA and 1979 Kyogle MA (the figures for Urbenville/Kyogle do not include pine plantations).

There was a significant loss of resource from the Grafton MA, though it is hard to precisely determine what impact this has had because of the aforementioned reasons and the relatively low proportion (24%) of the industry dependent upon timber from the district's public forests. The situation is complicated by the allocation of resources from other Management Areas to Grafton mills and the resources being obtained from private lands. Despite significant quota reductions from the public forests of the Grafton MA employment over the decade since the 1982 decision remained relatively constant in the Grafton District (Table 2).

Gibbs' (1992 p2, p14) 'partial survey of the present sawmilling sector of the industry' led her to claim that there has been a loss of 600 timber industry jobs in the region since the 1982 Rainforest Decision. She then uses the questionable multiplier of 2.2 (see notes 4.3) to

derive that 1 320 jobs may have been lost (Gibbs 1992 p19). This is clearly wrong as there has been no employment loss since 1982, but rather a slight increase (Table 2).

Many of Gibbs' subsequent extravagant claims of the impact of the Rainforest Decision on the regional economy are based upon her flawed employment loss figures. Her inclusion of logging with agriculture (Gibbs 1992 Fig. 2) is also misleading - employment figures should be separated for a proper comparison.

There is no evidence of any loss of employment as a result of the 1982 Rainforest Decision, rather there is evidence that the creation of the three parks has possibly resulted in the creation of 200 - 300 additional jobs in the region. Thus it may be assumed that the Rainforest Decision assisted in diversification of the region's economic base and has been of immense financial benefit.

2.3 Economic Losses of logging

Over the 10 years 1981/82 to 1990/91, one million cubic metres net of quota hardwood sawlogs were removed from the Urbenville/Kyogle, Murwillumbah, Casibo West and Grafton Management Areas. At the average 1991 NSW royalty rate for hardwood sawlogs of \$30 per cubic metre the cost of this timber to the mills would now represent some \$30 million.

Using Gibbs' (1992 p13) estimation that the sawntimber yield would average 40% of the net timber removed and be valued at \$450 m this represents \$180 million as output to the mills. The additional revenue generated from massive volumes of poles and ex-quota timber also removed over this period would add to this considerably. The removal of this timber, and the provision of 'public-good' benefits, has been at a direct cost of over one million dollars to the public (Table 3). The indirect (hidden) costs to the public are in fact much higher.

As noted by the Public Accounts Committee (1990):

'... native forest asset valuations really only consider replacement costs, a satisfactory inventory of native forests is lacking, there is no accounting for the non-timber values inherent in the native forest; ... and numerous subsidies enjoyed by the Commission ... are not quantified in the accounts.' (p21)

'The State's timber processing industry is heavily subsidised by the public sector. Chief among the subsidies are under priced raw materials (in the case of Eucalypt logs), and failure to bear the full costs of road construction and maintenance which are attributable to the industry's operations. As a result of these subsidies, sawmilling businesses which would be marginal or non-viable in their present form are able to continue operating and to continue resisting the pressures to change their inefficient methods of operation.' (p31)

Table 3. Profit/Loss statements for each Management Area. No account has been made of hidden subsidies. Dollars have been converted to current (1991) dollar values (see Notes).

M.A.	PROFIT(+) / LOSS(-) \$1 000's										
	81/2	82/3	83/4	84/5	85/6	86/7	87/8	88/9	89/90	90/1	Total
Urb.	-236	-322	-291	-82	-228	-412	+104	+457	+ 255	+408	- 347
Mur.	-293	-377	-289	-153	-128	-336	-174	+ 93	+ 191	+ 57	- 1 409
C.W.	-120	- 63	+143	+360	+ 93	- 60	+154	+538	+ 826	+511	+ 2 382
Gra.	-424	-613	+ 19	- 51	-198	- 24	-137	- 67	+ 77	-298	- 1 716
TOT.	-1073	-1375	-418	+ 74	-461	-832	- 53	+1021	+1349	+678	- 1 090

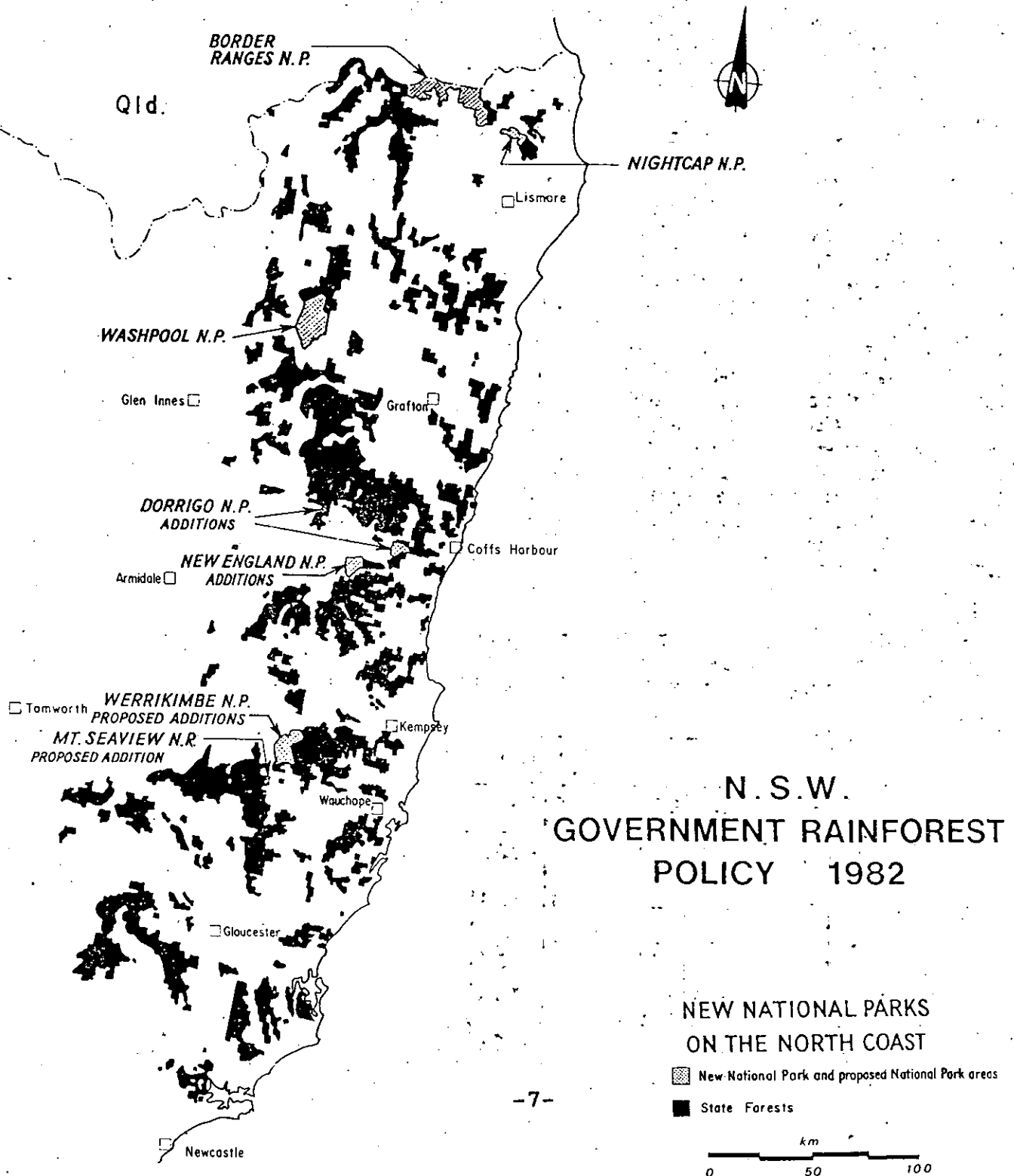
As can be seen from Table 3 most of the Management Areas began to improve financially around 1987/88. This was due to the passage of the Forestry Amendment Act which gave an additional subsidy to the Forestry Commission by relieving them of the interest payable on their accumulated debt of some \$110 million! They were supposed to pay a dividend to Treasury in return, though failed to do so in 1987/88 or 1988/89 (PAC 1990 p27).

In the past 10 years the public have paid well over one million dollars for the industry to remove timber from public forests in the four management areas that would now be worth in the order of \$35-40 million in royalties and over \$200 million as sawmill output.

Quantifiable, but unaccounted, costs include damage to council roads by logging trucks (at a rate of 4 c per net tonne kilometre this is quite significant - PAC 1990 p34).

The non-quantifiable costs have included loss of wildlife, stream pollution, loss of topsoil, reduced water yields, loss of nutrients, loss of old-growth forest, loss of wilderness and destabilisation of ecosystems.

The public has benefited through the provision of regional employment, access roads, recreational facilities and other 'public good' activities of the Forestry Commission.



3. MANAGEMENT AREA DETAILS

3.1 Urbenville (and Kyogle) Management Area

The Department of Environment and Planning (1983 p2) notes:

"The only timber mill affected by the Border Ranges policy is Munro and Lever's plywood mill at Grevillia. Sufficient rainforest timber is available to fulfil the entire quota for Munro and Lever from the Urbenville Management Area until 1988. Under the policy, the Grevillia mill will phase out use of rainforest timber in the late 1980s and thereafter utilise plantation pine resources. The Border Ranges policy will have no effects on employment."

With the expansion of the Border Ranges National Park and creation of the Murray Scrub Flora Reserve in 1982 Munro and Lever's sawmill at Grevillia lost access to old-growth rainforest in the Grady's Creek Flora Reserve and Murray Scrub, and in return had their rainforest quota transferred to the Urbenville MA.

The rest of the accessible rainforests and eucalypt forests within the new reserves had already been logged (with the exception of rainforests on Lever's Plateau which was reserved from logging in 1978) and were not considered to represent any significant resource (FC 1979b).

Over the five years 1977/78 to 1981/82 the average annual removal of hardwood sawlogs from the Kyogle and Urbenville Management Areas was 18 925 m³ net (Table 1). As at 1986 the quota hardwood sawlog volume was set at 25, 530 m³ net. Over the four years 1987/88 to 1990/91 the average annual hardwood sawlog removal increased to 22 527 m³ net (Table 1).

The Forestry Commission's Management Plan for Kyogle Management Area (1979b) notes that:

"As determined quota commitments, and assuming the full availability of the estimated volumes, the current cutting cycle in hardwood stands will be completed by about 1981 ... Following completion of the current cutting cycle previously logged and treated hardwood stands would not be expected to be ready for quota sawlog logging until about the years 2005-2015." (p24)

The Forestry Commission's Management Plan for Urbenville Management Area (1977) notes that:

"At existing annual quota commitments, and allowing for realisable increment from logged stands during the current cutting cycle, this cycle will be completed in the general quota area by about 1993. Following this, a delay of the order of 10-20 years is expected in the general quota area before previously logged and treated hardwood stands would be ready for logging." (p22)

"It is estimated that this forest area, with minimal investment or silvicultural treatment, could provide in the long term a sustained yield of 20 000 m³ gross/annum." (p23)

"The yield for this harvesting shall be limited initially to current annual commitments to industry, and opportunities through changes in industry structure or economics, to reduce this yield and thus extend the life of the mature merchantable growing stock, shall be taken." (p30)

From the above information it is evident that the 'hardwood' (eucalypt and Brush Box) forests incorporated into the park included negligible sawlog resource as they had already been logged out. In fact the removal of 'hardwood' sawlogs from the combined Management Areas has actually increased since 1981/82.

Subsequent to the Rainforest Decision Carricks Ltd announced in March 1983 that they were going to close the Munro and Lever mill at Grevillia. Gibbs (1992 pp 11-12) falsely claims this was

"as a direct result of loss of resource (particularly brushwood) from the area incorporated into the Border Ranges National Park in 1982."

This is incorrect as 4 000 m³ of rainforest quota lost from the Kyogle Management Area as a result of the 1982 decision was transferred to the Urbenville Management Area, and because the mill closed for unrelated economic reasons.

The only resource involved was rainforest timber ('brushwood'), not 'particularly brushwood'

Carricks Ltd Annual Report for 1982 showed an operating loss of over \$1.5 million dollars for Munro & Lever Pty Ltd, with the Director's Report commenting on the fortunes of its timber activities as follows:

"The Wood Products Division was affected by falling demand, imports, and depressed prices. It traded at a substantial loss over the whole year.

"Having considered the state of the economy, the cash investment needed for modernization of mills, the effect of losses during that modernization, and the long term prospect of competition from larger, more efficient mills both interstate and offshore, your directors have reluctantly decided to close or dispose of all but four of the group's timber mills.

"As at the end of February four mills had been closed; every effort is being made to sell or lease three others, failing which these too will be closed."

There was an outcry when the mill closed, with the decision being wrongly blamed on the Rainforest Decision by local timber industry people. The Government reacted by providing assistance to allow a workers co-operative to take over the mill to process hardwoods.

3.2 Murwillumbah Management Area

The Department of Environment and Planning (1983 p4) notes:

"Standards Sawmilling Co. at Murwillumbah is the only mill receiving a Crown timber quota in the Murwillumbah Working Circle. This mill has a combined hardwood/brushwood quota. Even if the proposed Nightcap National Park were to be logged there would be timber available in the Murwillumbah Working Circle only until mid-1984.

With timber supplies from outside the proposed national park and an additional volume from the adjoining Mullumbimby Working Circle, supplies to Standards Mill will be available until the beginning of 1984."

In 1976 the former Mullumbimby Working Circle was assessed to be able to maintain a 'hardwood' sawlog quota of 7 000 m³ per annum until 1989 (FC 1984 pp22-23), the former

The Forestry Commission (1986 p49) provide a graph of timber industry employment in the Urbenville (& Kyogle) Forestry District which shows that employment dropped from a high of some 370 in 1971 to 296 in 1981, then plummeted with the closure of Munroe and Lever's mill to less than 110 in 1983.

Employment has increased in recent years, and in 1991 had reached 230 (M. Curran, FC, pers. comm.), this has largely been due to the opening of a veneer mill at Kyogle to utilise the Hoop Pine and Bunya Pine plantation resource forfeited by Carricks.

Timber industry employment in the Urbenville (& Kyogle) Management Area has declined as a result of long term overcutting of the 'hardwood' resource (to the point of exhaustion in the old Kyogle MA) and the closure of the Grevillia rainforest mill for unrelated economic reasons. Industry employment has dropped from 296 in 1981 to 230 in 1991.

There is no evidence that the creation of the Border Ranges National Park had any significant impact on the local timber industry, though it has evidently provided a significant boost to the local economy by attracting tourists to the area.

Murwillumbah Working Circle (which then included the present Nightcap National Park) was planned to be cut out by the mid 1980s (FC 1984 p23):

"The long standing approved yield of 9 970 m³ net for this Working Circle had been maintained in the expectation that liquidation of the over-mature sawlog resource would be completed in the mid 1980s, and that there would be a cessation of logging until regrowth resulting from the earliest logged stands was of merchantable size, towards the year 2020."

The Forestry Commission (1984 p14) also note:

"The majority of the Area's rainforest stands were selectively harvested by 1982, when general purpose rainforest logging ceased. Some areas of unlogged rainforest remain, mostly in reserves and in isolated or less accessible sites."

As a result of the 1982 Rainforest Decision the Nightcap National Park was created, this was to potentially result in the loss of 6 000 m³ net quota hardwoods, though the actual volume lost may have only been some 4 011 m³ net (FC 1988/89 Annual Report for Murwillumbah MA).

In part as compensation 451 ha of forested land was purchased from the Banana Growers Federation for dedication as Goonengerry State Forest. Standard Sawmilling had earlier received \$750 000 (tax free - the equivalent of \$1.6 million) compensation as a result of the decision to dedicate the original Border Ranges National Park in 1978.

Over the period 1977/78 to 1981/82 an average annual 15 490 m³ net of 'hardwood' sawlogs were removed from the Murwillumbah MA. In 1984 the 'hardwood' quota was set at the 1976 estimate of 7 000 m³ net (FC 1984 p39). Over the period

1987/88 to 1990/91 the average annual hardwood quota removal was 6 497 m³ net (Table 1).

A graph in the 1984 Management Plan (FC 1984 App.17) shows employment in the Murwillumbah Management Area declined from a peak in 1971 of some 280 to around 189 in 1981. In 1984 employment dependent on the MA was 159 (FC 1984 p42), in 1991 this had declined to a total of 91 (Murwillumbah FC, pers. com.)

The Forestry Commission (1984 p43) note:

"The [employment] decline can be attributed to a number of factors including the severe economic downturn of the early 1980s and to a lesser extent a reduction in available sawlog yield through current sustained yield management strategies."

3.3 Casino West Management Area

The Department of Environment and Planning (1983 p8) notes:

"The 'lives' for the two mills in the Casino West Management Area will not be affected under the policy."

As a result of the rainforest decision small parts of the Casino West MA were added to the Washpool National Park representing a total hardwood volume of 32 000 m³ net, and areas incorporating 66 000 m³ net of hardwood were transferred from the Grafton MA to Casino West, giving a total increase in available resource of 34 000 m³ (FC 1979a p22).

Rainforest quotas from the Grafton MA were transferred to the Casino West MA, which had until then ceased general rainforest logging. Of the hardwood volumes it was subsequently decided that 72 000 m³ would be allocated to the Grafton Management Area (FC 1979a pp27-28), giving an effective loss of hardwood resource to the Casino West MA of some 38 000 m³ net.

Casino West MA is divided into two Working Circles - Richmond Range and Ewingar - managed as discrete units. The direct effect was only on the Ewingar Working Circle. This area is intentionally being logged on an unsustainable basis, with the prediction in 1983 (FC 1979a p23a) that:

"the current hardwood sawlog yield could only extend until about mid 1995 after allowing for the estimated 72 000 m³ to be supplied against the Grafton Management Area commitments ..., before the economically accessible

old-growth resource would be utilised... is it estimated that a replacement mature sawlog crop could not be recruited for approximately a further 60 years."

A reassessment of the Richmond Range Working Circle forests in 1986 (FC 1989) identified an additional uncommitted annual resource of some 8 577 m³ net (12 253 m³ gross) quota hardwood sawlogs available from the Management Area. If allocated to the Ewingar Working Circle this would have more than compensated for any quota loss as a result of the dedication of the park.

In 1981 the quota hardwood allocation from the Casino West Management Area was 33 275 m³ net, and has remained constant since. The average annual removal of quota hardwood from 1977/78 to 1981/82 was 34 777 m³ net, and from 1987/88 to 1990/91 was 34 883 m³ net.

It is evident that the potential resource lost from the Casino West MA as a result of the dedication of Washpool National Park is negligible. The potential effect was hastening the demise of logging in the Ewingar Working Circle by less than two years. The discovery of additional quota resource more than compensates for any quota loss.

There has been no loss of employment in the Casino West MA as a result of the Rainforest Decision, in fact within the Casino District there has been a dramatic increase in employment since then (Table 2). Though, because of continued intentional unsustainable logging, loss of employment can be expected to result in the near future.

3.4 Grafton Management Area

The Department of Environment and Planning (1983 p8) notes:

"Under the policy, 42 percent of the available volume of the hardwood in the Washpool area will be logged. ... In the Grafton Management Area, there is sufficient hardwood outside Washpool to supply Grafton mills at their current quota at least until the year 2000. Hardwoods to be logged from Washpool would provide a further three years' supply at current quota levels to the Grafton mills.

It was previously proposed to commence the second cutting cycle of forests in the Grafton Management Area in 2010. The second cutting cycle will be brought forward as far as practicable, consistent with sustained yield management. There will be no reductions in quotas for the Grafton mills prior to the next scheduled review of quotas in 1985."

In 1980 the sawlog quota was 42 880 m3 net, this was reduced by 25% in 1981 to 32 170, with a further planned reduction of 25% to 24 120 in 1985 considered necessary to achieve a sustained yield (DEP 1982 pl12). Before the Rainforest Decision three Grafton mills had hardwood quotas which encompassed the Washpool area; Duncans - 14 540 m3, Allen Taylor - 12 480 m3, and Notaras - 5 150 m3. Big River Timbers had a rainforest quota of 6 260 m3. In 1986 the hardwood sawlog quota was set at 20 490 m3 net.

Over the period 1977/78 to 1981/82 the average annual quota hardwood removal was 61 160 m3 net, which was 43% more than the quota allowed. Over the period 1987/88 to 1990/91 the average annual quota sawlog removal was 24 025 m3 net, which is 17% more than the quota allows.

The Forestry Commission (1980a p28) notes:

"Following its most recent assessment of resources, the Commission advised [the companies with hardwood quotas] in June, 1980, that quotas would be reduced by 25% from the commencement of the 1981/82 quota year and, subject to updated yield determinations at that time, foreshadowed a further reduction from 1985/86."

- and (1980a p32) also;

"The veneer mill can be expected to close when the current Crown commitment to supply the total allocation is fulfilled and log supply ceases. ... The best resource estimates currently available indicate that present levels of hardwood quota sawlog yield could only be

maintained until about 1998. This would leave a hiatus of at least twelve years before advance growth in previously logged stands will be developed sufficiently to be available for further quota sawlog harvesting on present standards of utilisation. Continuation of this rate of cut would therefore probably result in the closure of the Crown hardwood mills at that time."

Department of Environment and Planning (1982 pl12) notes:

"From discussions with the Forestry Commission it has been determined that the 2 quota reductions will result in a 44% decrease of annual log intake from 1980 levels. The second proposed quota cut however, will depend on the position in relation to the remaining resource over the next 5 years and will probably not be implemented."

The Forestry Commission (1987 pp32-33) notes:

"Production peaked in 1972/73, and there was a major decline from 1980/81. This was a result of:

- * The transfer of the Dundurrabin quota back to the Dorrig Management Area in 1979/80 following the completion of logging of the main areas of purchase tenure lands.

- * The reduction of quotas by 25% from the commencement of the 1981/82 quota year as a result of yield review and prescriptions incorporated in the 1980 Management Plan.

- * Transfer of the Washpool Group of State Forests to National Park, and partly the Casino West Management Area, in 1982 and consequent cessation of rainforest logging as logging was completed in accessible rainforest areas.

Consequent further yield reviews and rationalisation of quotas in Grafton and Dorrig Management Areas resulting in an overall reduction in sawlog allocations of 40% from Grafton Management Area by:

- * Transfer of 6 580m3 quota to Dorrig Management Area from 1983/84 on a permanent basis.

- * Further reduction of quotas by 25% from 1.1.86."

Gibbs' (1992 pp9-10) claim that the creation of Washpool National Park "led to an immediate 25% reduction in quota" is plainly wrong as the quota cut occurred before the park decision, and was part of the Commission's attempts to reduce cutting to a sustainable level (FC 1980b p52).

Before the Rainforest Decision the Forestry Commission estimated the quota hardwood resource in the Grafton MA as 921 000 m3 net (DEP 1982 p114), of which it was estimated (in 1980) that 761 000 m3 was to come from unlogged stands (FC 1980a p21).

The total volume estimated to have been lost as a result of the dedication of the Washpool National Park is 276 855 m3 net (FC 1980b p36), with a further 66 000 m3 being transferred to the Casino West Management Area (FC 1979a p22). It was subsequently determined that 72 0000 m3 of the Casino West MA's hardwood volumes would be allocated to Grafton MA (FC 1979a p27). Thus the effective loss of hardwood resource to Grafton MA was 270 855 m3 net, some 29%.

The rainforest allocation to Big River Timbers was halved to a total of 25 300 m3 from 1982/83 and transferred to the Casino West MA, though the quota remained as 6 260 m3.

The explicit intention of Cabinet was that this allocation was to expire in 1990, in line with the Forestry Commission's previous intent to "phase out" rainforest logging. The Cabinet also undertook to assist Big River Timbers in regard to technology and access to alternative sources in private ownership. Details of the compensation paid to Big River Timbers have not yet been obtained.

The Forestry Commission (1987 p65-66) provide a table which shows that total timber industry employment in the Grafton MA in 1978 was around 480, peaked at just over 500 in 1981, declined to a bottom of some 310 in 1983 due to "the economic recession", and in 1987 had risen to over 470.

There is a discrepancy between these figures and those supplied by the District Forester (B.Williams, pers. comm.) which give the employment in June 1982 as 439 and in June 1991 as 435.

The Forestry Commission (1987) note:

"Although there was some decline in timber industry employment in the early 1980s, reflecting economic and market downturns, overall employment in the regional timber industry has been relatively stable over the last two decades"

Of the 493 people employed in the timber industry in the Grafton District in 1987 some 119 (24%) were dependent on the resources available from the District's public forests (FC 1987 p65).

In 1990/91 the Grafton MA operated at a loss of \$298 000 (without considering the numerous hidden subsidies), with the total loss over the 10 years from 1981/82 to 1990/91 of \$1 715 690 (in 1991 dollar values) (Table 3). In 1987 the royalties charged in the Grafton MA for hardwood sawlogs was 76% of the State average (FC 1987 p69).

There is no doubt that the creation of the Washpool National Park resulted in the loss of significant volumes of 'hardwood' potentially available to the Grafton mills. Though it is evident that this has not yet had a significant impact on the allocation of resources or employment in the Management Area.

All quota reductions to date have primarily been in line with Forestry Commission proposals in 1980 to reduce logging to a sustainable level. Though the quota cut in 1986 may not have been as severe if the resource now in Washpool National Park had still been available.

It is reprehensible that the MA has consistently been logged at a rate far in excess of the determined sustainable quota.

The continuation of this practice is in contravention of the Management Plan (FC 1987 p80) and, since the passing of the Timber Industry (Interim Protection) Act, is highly illegal.

4. NOTES

4.1 Quota Volumes

Quota sawlogs are the only timber volumes referred to on the basis that large sawlogs are the most limited resource and because these are the most common figures appearing in the literature.

Quota sawlog volumes have been obtained from a variety of Management Plans, Annual Reports and from enquiries to District Foresters. Recent volumes have had to be converted from gross to net to be consistent, the conversion factors utilised have been those used by the Forestry Commission within the respective management areas (note that as well as varying from district to district there are significant variations within districts [from 0.70-0.78], at times for no apparent reason). Adopted multipliers to convert gross to net are; Urbenville 0.714, Murwillumbah 0.767, Casino West 0.758 and Grafton 0.74.

4.2 Profit/loss

Profit/loss figures were obtained from a combination of various Management Plans, Management Area Annual Reports and by enquiries to various District Foresters to fill in missing figures. Values were converted to 1991 dollar values by accounting for CPI rises. It was noted that in the 1991 Annual Report for the Murwillumbah MA figures for a number of years had failed to be converted to current values (as claimed), similar problems probably occur with some of the other figures, so figures given are minimum.

4.3 Economic multipliers

A 1984 study of the economic impact of tourism and recreation in Cooloola (Qld.) estimated the regional output multiplier of these activities to be 1.85, thus the total outlays by visitors in 1982 of \$2.97 million resulted in a total regional output of \$5.86 million (cited in Kuring-gai College of Advanced Education 1988).

The Kuring-gai College of Advanced Education (1988) undertook a New England-Dorrigo Tourism study, which included a survey of local businesses to determine the multiplier effect resultant from visitor expenditure. They estimated that for each \$1 000 spent this ultimately resulted in \$804 in local wages, with the ratio of total income generated to the initial income determined as 2.06 (i.e. the employment multiplier).

The Forestry Commission (1980 p112) adopts an employment multiplier for the timber industry in the Grafton region of 2.2. The same multiplier was adopted for the Murwillumbah area (FC 1984 p43), though in the Urbenville area a multiplier of 2 is adopted (FC 1986 p48) as it is in the Casino area (FC 1983 p29). There does not appear to have been any proper assessment within the region to determine an accurate multiplier for the timber industry.

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