

# ENVIRONMENT

# NT

The Newsletter of the Environment Centre NT  
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## Halting the onslaught- ECNT's new landclearing report

A new report documents the threats to the Top End's native vegetation from agricultural and horticultural expansion. The report- "**Clearing Moves North - Review of Landclearing in the Northern Territory**" was written for ECNT by highly respected Top End botanist John Brock, author of 'Native Plants of Northern Australia' and was launched on May 2 by the Environment Centre.

This report is a significant step towards documenting and understanding the current threats to woodland habitats from landclearing. With massive agricultural and horticultural projects planned for the Daly Basin, Tiwi Islands (see pages-4-5-) and the expansion of the Ord Stage 2 there is a real and immediate threat to the ecological integrity of the northern woodlands.

The report documents the devastating impacts of landclearing. The Brock report identifies that species numbers decline dramatically after clearing due to loss of habitat and fragmentation. Other impacts such as soil erosion, sedimentation of waterways, invasion of weed species, altered fire regimes and contamination of soil and water from pesticide and other chemical use, further contribute to land and water degradation.

Launching the report Jann Crase, ECNT and Environs Kimberley's woodlands campaigner said "It is time for the NT to stop thinking that clearing is not an issue up here" "

There has already been a huge increase in clearing over the last 5 – 7 years and it is set to drastically increase due to agricultural and horticultural expansion planned on a massive scale"

"The Northern Territory has the chance to prevent the kind of soil and water degradation which has choked the life out of Australia's great river systems and left vast tracts of agricultural land unusable because of salinity."

*The executive summary of the Brock report follows on pages 2 & 3.*

### Inside...

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## Jabiluka mine- deferred but not dead

Rio Tinto announced last week at their Annual General Meeting that "there is no near term prospect of development at Jabiluka even being contemplated." Furthermore Sir Robert Wilson the company's chair acknowledged that Jabiluka could not be developed without the consent of the Northern Land Council and traditional owners and that "clearly at this stage that consent is nowhere near forthcoming and maybe it will never be forthcoming."

Shareholders were met at the AGM by a large group of protesters outside the building, whilst Mirrar traditional owner and environment group representatives voiced their concerns inside the meeting. Such

demonstrations of opposition to the mine have no doubt influenced Rio's decision to put Jabiluka on the backburner- the company admitted in March that because of continuing Aboriginal traditional owner and wider community opposition combined with a weak market for uranium that it was deferring development plans.

However Rio Tinto have refused to rule out development of the mine in the future and it also announced in April that it intends to retain its 68% stake in ERA, and thus continue its involvement in uranium mining in Kakadu. Rio also signalled that it is looking at options for extending the life of Ranger mine, leading traditional owners to respond

with threats of legal action.

Clearly the campaign to stop the Jabiluka mine has been enormously successful. Production at Jabiluka was scheduled to begin in 1999- now the project has been shelved until 2011 if Rio Tinto are to be believed. Congratulations to all involved in the campaign to date. However the campaign is not over. ECNT will continue to work with traditional owners, other environment groups and the public towards a nuclear free future for Kakadu.

Kirsten Blair & Mark Wakeham

# CLEARING MOVES NORTH- EXECUTIVE SUMMARY– John Brock

***“Land clearing is a political and economic problem. No science is needed to work out that the current direction of development in the north is not sustainable, nor in the longer term even worthwhile.”***

(Don Franklin, *Wingspan* Vol 10:1, March 2000, p21)

Landclearing, the removal of native vegetation, represents the single greatest threat to Australia’s biodiversity, and is responsible for much of Australia’s wide-scale land and water degradation. Destruction of habitat, a direct result of land clearance, is one of the main causes of loss of biodiversity. It is believed that up to 20 bird species, 21 mammal species, and 97 plant species have become extinct in Australia since European settlement. Some of this loss is a direct result of landclearing. Land clearing continues to be a significant factor in contributing to Australia’s annual greenhouse gas emissions.

In 1999, over half a million hectares of land were cleared in Australia, figures that indicate Australia ranks as the fifth highest country in the world in terms of rate of land clearing. All Australian Governments have agreed on a national goal to reduce the decline in quality and extent of native vegetation cover in Australia by June 2001. As yet Australian Governments have failed to meet either this national objective, or to meet internationally agreed targets for greenhouse gas reductions.

In the Northern Territory, where land and ecosystems are coming under increasing development

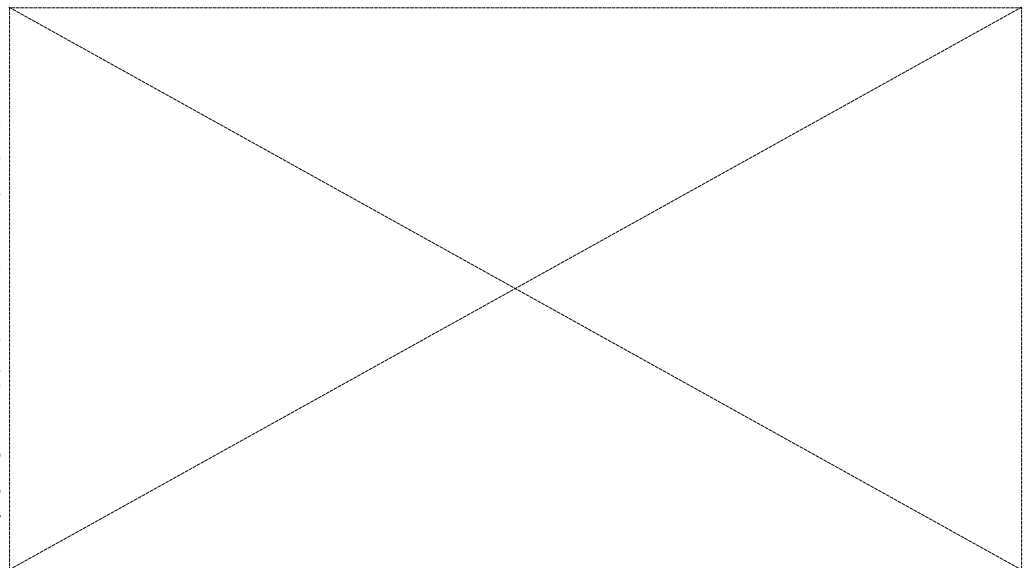
pressure, there is no legislation in place to control land clearing across all land tenures. Between 1983-1991, estimated average clearing rates in the NT were about 16,300 ha per year, and from 1990-1995 were recorded as about 3,300 ha per year; more recent clearing figures are unavailable. Since the mid 1990’s, intensive clearing in Darwin, Litchfield Shire and associated rural region has led to an accelerated rate of clearing.

While land clearing so far has largely been concentrated in southern and eastern Australia, particularly in Queensland, recently there has been much interest in developing and expanding the agricultural industry across Northern Australia. Several massive agricultural schemes are proposed in the NT and northern WA. The schemes proposed show intent to clear native vegetation on a scale and intensity not before experienced in the region.

Stage 2, the Sturt Plateau and the Point Stuart/Wildman River area. Clearing of native vegetation for forestry is being undertaken on the Tiwi Islands, with interest in large areas elsewhere in the Top End of the NT. In the greater Darwin and rural area, urban expansion, infrastructure development and expansion of the horticulture industry account for significant vegetation clearing and recent increased rates of clearing.

Tropical northern Australia (NT & WA) has been witness to the demise of several large and ambitious agricultural ventures in the past. The same key factors, including the wet/dry tropical climate, militate against the success of future agricultural developments in the region.

There is a risk that the same grave mistakes associated with land clearing in southern Australia may be repeated in the north. Without overarching clearing



Major agricultural ventures are proposed for the Katherine and Daly River region (Daly Basin), the Ord River Irrigation Scheme

regulations in the NT, and given the current unseemly haste to



clear more existing bushland, there is no room for complacency about the future of the bush, and no reason to assume that the same environmental costs will not be incurred.

The opportunity for the NT is to enact clearing controls now, informed by the principles of ecological sustainability, to ensure the long-term maintenance of the Territory's existing native bushland, vital to the survival of its native animals and natural ecosystems

## TABLE

### Regions Under Threat – activities, bioregions, scale of operation

A number of large-scale schemes promoted the NT Government would result in significant land clearing if the projects proceed to full implementation. The scale of development (proposals & other activities), based on government statements and available information, is provided as:

- a) estimates of area cleared to date,
- b) estimates of total area of potential clearing for the proposal, and
- c) estimates of area under general threat from potential clearing.

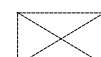
Development	*NT Bioregion	Scale of Development	
		a) Est. Area Cleared to Date (ha)	b) Est Pot. Clrg c) Est. Threat (ha)
Darwin Area - urban & infrstr	Darwin Coastal (Top End Coastal)	6,000	b) large areas at threat: urban expsn, infrstr & Darwin Harb developmt
Greater Darwin – subdiv/agric/hort	Darwin Coastal/ Pine Creek	Not known	c) under threat – up to 1 million
Litchfield Shire – hort, rural farms	Darwin Coastal/ Pine Creek (PC-A)	10,000	b) up to 20,000 c) not known
Agri-bus - crops, cotton, imp past	Daly Basin	150,000	b) & c) - possibly up to 1 million
Tiwi Is. Forestry	Tiwi-Cobourg (Top End Coastal)	Approx 2,500	b) 30,000 (poss up to 100,000)
Forestry	Darwin Coastal/ Arnhem Coastal/ Pine Creek (PC-A)	Not known	b) poss up to 100,000
Ord R Irrigat Scheme Stage 2 – sugar, cotton, crops, hort	Victoria-Bonaparte (NT) / Kunnunurra Region (WA)	Not known	b) 25,000 (NT); b) 64,000 (total – NT & WA)
Sturt Plateau - agric/hort	Sturt Plateau	Not known	b) up to 10,000
Pt Stuart/Wildman - agric/hort	Darwin Coastal (TEC)	Not known	b) up to 5,000
Venn/Katherine – agric/hort	Daly Basin	Not known	b) Not known

**Key:** agric = agriculture; hort = horticulture; agri-bus = agri-business; imp past = improved pasture; infrstr = infrastructure; subdiv = subdivision.

\*NT Bioregions - See Figure 1 (p 8) - bioregions as defined by Thackway & Cresswell (1995). NB two bioregions are further subdivided into sub-regions - Top End Coastal (divided into Tiwi-Cobourg, Darwin Coastal & Arnhem Coast) and Pine Creek – Arnhem (PC-A) (divided into Pine Creek & Arnhem Plateau), as per Connors *et al* (1996).

-John Brock

The report in full can be downloaded from the ECNT website- [www.ecnt.org](http://www.ecnt.org), or copies can be ordered from the Environment Centre at a cost of \$15 each



# Massive Acacia Plantation for the Tiwi Islands?

The idea of establishing a forestry plantation on the Tiwi Islands has been around for many years. Several attempts to establish such an industry on the islands have failed in the past. Whilst there is an obvious need for Land Councils to establish appropriate industry on Aboriginal land for the economic survival and prosperity of communities, the Environment Centre has a number of concerns relating to the most recent plantation proposal. The proposed project is a joint venture project between the Tiwi Land Council, Sylvatech (plantation managers), Australian Plantation Group (lessors of the land) and First Management Corporation (project managers). The Environment Centre is supportive of ecologically sustainable development and specific concerns about the sustainability and environmental impacts of the proposal are described below.

## Background to the proposal

The current proposal on Melville Island involves the establishment of 25,000 hectares of *Acacia mangium* to provide wood chips to South-East Asian markets, primarily Indonesia. There are already 5,200 hectares of *Acacia mangium* presently under cultivation and indications have been made that the total future area for plantation will be 100,000 hectares. Even 25,000 hectares represents a significant portion of the island – 4.3%, but 100,000 hectares is an enormous area of land, which will undoubtedly permanently alter the ecology of the island. The Environment Centre supports in principal the establishment of plantations on already cleared land. This project proposal however involves clearing native vegetation to establish a forestry plantation

## Ecology of the Tiwi Islands

The Tiwi Islands represent a highly unique area of biodiversity attributable to the high annual rainfall and isolation from the mainland. Several endemic species are found on the islands, such as the Masked Owl (Tiwi Island), however little information is generally known about their distribution, food sources, breeding patterns etc due to a lack of data. Although there have been some studies of the ecology of the islands and particular species on the islands, there have been no comprehensive or extensive baseline data collection projects. This knowledge gap is extremely dangerous in the face of increasing pressure to develop the islands. It is essentially impossible to determine the significance of impacts from development proposals, such as the plantation, due to the lack of information. It is therefore difficult to ascertain the long-term costs and benefits of any project when possible impacts are unknown. More detailed studies are urgently required to allow for informed decision making on proposed developments.

## Assessment and Approval Process

The proposal is going through the initial stages of the assessment process under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) ('EPBC'). The proposal was referred to the Environment Minister to determine whether the plantation constitutes a 'controlled action'. That is, whether the plantation is likely to have a significant impact on a matter of national environmental significance. There are six matters of national environmental significance, however only two are relevant for the proposal – nationally listed threatened species and migratory species. Public submissions can be made on projects that are referred and the Environment Centre lodged such a submission on the plantation proposal last week. The Minister for the Environment must consider the ECNT submission (and any other submissions) when



deciding whether the plantation will have a significant impact on nationally listed threatened species or migratory species.

The nationally listed species that may be impacted on by the project include:

- the critically endangered Bare-rumped Sheath-tailed Bat;
- the endangered plant species *Burmannia* – only found on Bathurst Island; and,
- the vulnerable Butler's Dunnart, Masked Owl (Melville Island subspecies), Partridge Pigeon, Red Goshawk, and False Water-rat.

Generally the project is likely to impact on these and other species by:

- ⇒ removing and fragmenting habitat;
- ⇒ altering fire regimes;
- ⇒ allowing for weed invasion;
- ⇒ disturbing the hydroecology of the area;
- ⇒ increasing sedimentation in waterways due to soil erosion; and
- ⇒ increasing pollutants in waterways such as weedicides, herbicides and insecticides from run off.

The capacity of many species to 'feed and breed' could be significantly reduced due to the proposed plantation.

**If the proposal is declared a 'controlled action' by the Minister for the Environment, the proposal will have to be assessed and obtain an approval under the EPBC Act. It is likely that an Environmental Impact Statement ("EIS") will be required which will be publicly available and on which the public can make submissions. The decision as to whether the project constitutes a controlled action or not is likely to be made before the end of May. Once submissions have been lodged on the EIS the Minister will decide whether to issue an approval or not, and what conditions to attach to that approval. It should be noted that the EPBC Act assessment process is only concerned with matters of national environmental significance, for example, nationally listed threatened species.**

### Conclusion

This particular proposal represents a significant development and the decision whether to approve it or not **must** be made on basis of comprehensive and adequate information. Without this data the impacts on the species and habitat of the island as a result of the plantation establishment cannot be predicted, mitigated or managed.

For further information on the project, the ECNT submission or if you are interested in getting involved please contact Jann – 8941 7439 or northernwoodlands@octa4.net.au.

Jann Crase  
Northern Woodlands Campaigner

### **Ecologically Sustainable Development**

ESD means many different things to many different people so here's the definition from the **National Strategy on Ecologically Sustainable Development (1992)**:

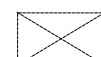
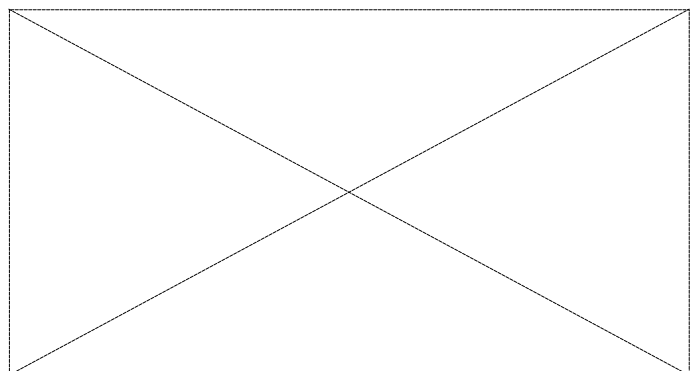
ESD means 'using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life, now and in the future can be increased'.

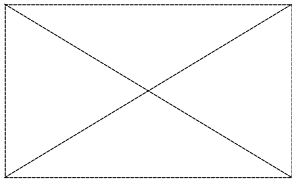
#### Principles of ecologically sustainable development:

- a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations;
- b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;
- c) the principle of inter-generational equity – that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;
- d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making;
- e) improved valuation, pricing and incentive mechanisms should be promoted.

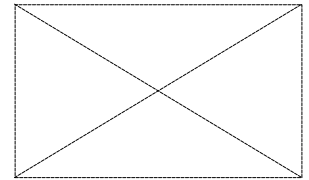
Section 3A, Environment Protection and Biodiversity Conservation Act 1999 (Cth)

Jann Crase





# Huge Prawn farm proposed for Middle Arm



In early April the Public Environment Report (PER) was released for the Phelps/Panizza Blackmore River Aquaculture project. This is the prawn farm that was planned for Shoal Bay but was moved after community outrage about the potential impacts of the development on the barramundi breeding grounds at Shoal Bay.

ECNT has been reviewing the PER and will be making a submission before the 8<sup>th</sup> May deadline. Our initial response is that the scale of the project and its likely impacts is alarming and unacceptable. The NT Government have offered Phelps-Panizza a 790 hectare lease on Middle Arm, an area equivalent to over 400 football fields or slightly smaller than the existing Palmerston township. Some of our concerns with the proposed development are as follows:

**1) Rationale for the project-** the developer claims that growing prawns in farms takes pressure off wild fish stocks.. There is however no demonstrated link between aquaculture developments and a reduction in pressure on wild fish stocks. In fact prawn farms generally are heavily dependent on fishmeal sourced from wild stocks. Most aquaculture production which relies on fishmeal feeds increases pressure on wild fishery stocks rather than decreasing it. Scientists estimate that around 2.8kg of wild caught fish are required to be ground up into feed to produce 1kg of aquaculture prawns (Naylor R et al Effect of Aquaculture on World Fish Supplies. Nature vol 405. 29 June 2000 p 1017-1023)

**2) Site-selection process-** the rationale for choosing the Blackmore River site is weak. In the absence of any Government aquaculture plan, the developer seems to have selected the site with a view to not upsetting recreational fishermen again, rather than according to comprehensive selection criteria. A clear selection criteria for aquaculture sites needs to be developed by Government in association with the community and industry.

The criteria need to be based on thorough environmental assessment of sites which if developed will have a low environmental impact

**3) Major on-site environmental impacts-** The site has high conservation values and is relatively intact. As the developers state in their development application "In summary, environmental effects of the proposed development will be...alteration of the specific area of the site from a relatively unmodified wilderness to an intensive aquaculture site". Phelps-Panizza propose to clear 420 hectares of woodlands, 61 hectares of drainage lines, 8 ha of grasslands and 1 hectare of mangroves for the establishment of the prawn farm. The Environment Centre believes that clearing mangroves in Darwin Harbour is unacceptable, given their high conservation value. Similarly the clearing of 420 hectares of eucalyptus woodlands represents a major loss of habitat. The area may be habitat for the threatened Partridge Pigeon and several other vulnerable species according to the consultant's report. The proposed development would also destroy an area of the rare plant species 'Grevillea Longicuspis'. If the project proceeded in its current form it would destroy 6 archaeological sites in the area.

**4) Potential off-site environmental impacts-** impacts on marine life in the Harbour have barely been considered in the PER. The PER indicates that wastewater containing phosphorous and nitrogen may be released into the Blackmore River with potential downstream effects. Given that it is possible to operate zero nutrient release prawn farms, any aquaculture developments in the NT should be required to operate closed systems that retain all nutrients on site. The level of nitrogen which may be released is calculated as 27kg per day in some circumstances. This is equivalent to the nitrogen in human sewage from over 2000 people. (An average human produces around 11-12g of nitrogen in bodily wastes per day [Folke et al

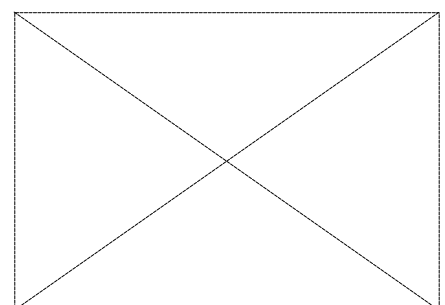
(1994) The costs of eutrophication from Salmon farming: Implications for policy. Journal of Environmental management 40, 173-182])

**5) The scale of the project-** if this project proceeds in full it would be one of the largest aquaculture developments in Australia. Given our inexperience with and lack of regulation of aquaculture in the NT we should be laying the groundwork before we rush into major aquaculture developments. A number of aquaculture ventures including prawn farms in the Northern Territory have collapsed shortly after establishment and been abandoned by their owners. The taxpayer is then left to pick up the tab of rehabilitation, if, in fact, any rehabilitation is carried out. This is unacceptable and developers should be required to lodge a rehabilitation bond for all such developments to avoid this happening again.

**ECNT has a copy of the Public Environment Report that members and the public are welcome to access. Submissions are due on the 8<sup>th</sup> of May.**

**ECNT is in the process of developing a position paper on aquaculture. If you are interested in contributing to this process please let Kirsten or Mark know on 8981 1984.**

-Mark Wakeham & Kirsten Blair



# Bits and Pieces

## Sick of Waste?

Are you dissatisfied about the way our council handles the issue of waste in Darwin?

The contract for recycling has been given to Wastemaster (for 6 more years!) who are also required to carry out recycling and education programs. However their programs do not seem to be very effective, judging by the figures for recycling for the last 6 months of 2000. Recycling of steel and aluminium cans (which are only about 5% by weight of all recycling.) doubled, plastics stayed about the same, but there was a decrease in the recycling of newspaper, cardboard and glass. The contamination rate of about one third stayed the same. This is extremely disappointing, - it seems that new tactics need to be adopted. The elected members of council need to know that we want more from them.

Councils in other cities for example, have helped set up **composting** schemes, timber recycling centres, and other businesses that turn "waste" into valuable resources.

There are some council employees who are keen to do more, but they need to know the community supports them, so if you write to or phone the Lord Mayor or your local council member, send a copy on to :

*Maryanne Tamvakis or Brendan Dowd , GPO Box 84, Darwin NT 0801*

We would also like to know your thoughts on what you would like done by the Council.

In the meantime, we can all make sure we do our best in keeping valuable resources out of the

waste stream by;  
-Composting all out kitchen scraps, including washed egg shells, tea and coffee leftovers, with plenty of dry leaves added. Compost grows the BEST vegetables and it is ready so fast in this climate!  
-Sorting our recyclables – all paper except glossy magazines and waxed cardboard are being recycled at present  
-Try to reduce your use of plastic bags (they take ages to break down)  
**We have lovely cloth bags for sale @ \$5 with colourful ECNT turtles swimming on them.**

-Di Koser

## Renewing Memberships by Phone

Do you put off renewing your membership to ECNT because you have to cut out the form etc, etc? Well an easier way is to simply ring us up and give us your credit card details. You might even consider joining the growing band of people who have decided to renew for three years and save themselves (and us) a lot of extra paper work.

## Spaghetti Western Night

You will have found the flyer about our fundraiser in this issue, and we invite you to join us— maybe organise a group and buy your tickets in advance—save yourselves lining up at the door. We are hoping for a huge turn up. The Deckchair now has space for 200+ people and it would be great if we could fill it!!

Of course , the more volunteers we have the better. We'll be contacting people in the next week to see if you're able to help.

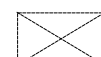
## Public comment open for Litchfield Shire LUO's

The *Proposed Litchfield Planning Concepts and Land Use Objectives* document has been released for public comment and the closing date for submissions is May 31<sup>st</sup>. The document is an attempt to map out future land uses for the Litchfield Shire and is intended to guide planning and development decisions. The release of the Litchfield Land Use Objectives has been anticipated for some time as this process is an opportunity to have input into the future of some important parts of the Top End.

ECNT is currently preparing a submission- following are some of the points we will make:

- Beagle Gulf Marine Park to be declared
- All rainforest patches, mangrove communities, known populations of threatened species and waterways must have appropriate protective buffers around them
- Aquaculture siting must be subject to a public environmental impact assessment process and all aquaculture developments should utilise zero nutrient release technology
- Potential impacts of all major industrial developments at Gunn Point and Weir Peninsula to be assessed together rather than proposal-by-proposal as is currently the case
- Mangroves of Darwin Harbour to be protected
- Planning Concepts have only limited influence in terms of planning decisions and the Development Consent Authority can override Land Use Objectives whether or not ministerial approval has been granted.

**If you would like more information or help with writing a submission of your own, please contact Kirsten or Mark at the office.**



## Dates to remember in May

- 10th and 24th May:** ECNT stall @ Mindil markets—volunteers needed from 4pm
- 20th May:** BodyShop Global Day of Action –Darwin focus on land clearing –contact Casuarina Bodyshop
- 3 June:** World Environment Day event @ Museum 1.30—4pm
- 5 June:** World Environment Day , ECNT Spaghetti Western; “A Fistful of Dollars “ @ Deckchair Cinema from 6.30pm.

The views expressed in *EnvironmeNT* are not necessarily those of the Environment Centre NT management committee  
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