
National and Marine Parks in Jervis Bay

Issues and Conflicts at Greenfield Beach and Chinamans Beach

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This information was provided at Jervis Bay to open up discussion of the major issues affecting local Marine Parks while participants were actually standing in the Park. Similar issues affect numerous Marine Protected Areas in Australia.

Background notes

In March 1995, an area of vacant crown land, from Greenfield Beach to the Commonwealth/NSW border was formally declared as part of the Stage 1 gazettal of NSW Jervis Bay National Park. This area was reserved to protect its high habitat, scenic and recreational values.

The park is remarkable for its diversity of vegetation communities, including rainforest, tall open forest, woodland, and closed-open woodland. Rare and endangered plants recorded here include: *Blechnum ambiguum*, *Grevillea barklyana*, *Leucopogon rodway* and *Pultenaea villifera*.

During mammal surveys conducted recently in the Greenfield beach area, 10 species were recorded with potential for nine species listed on schedule 12 of the NSW National Parks and Wildlife Service Act, endangered, vulnerable and rare species being present.

The European history of Greenfield Beach has been researched by the Shoalhaven Historical Society. Europeans first entered the bay in 1791 and Crown land at Greenfield Beach was for sale by 1843. In 1942, Colin Greenfield took a conditional Crown lease over 12 acres and built his home. He grew potatoes, hence the name Spud Cove, cleared the big trees and built a road. The next inhabitant was Max Voss who lived there with his family until 1977 when the land was resumed under the NSW Government land Protection Scheme. There are a number of features at Greenfield Beach that illustrate the history of the place, including the rows of mature pine trees and other plantings, and a concrete weir in the creek. The landscaping, toilet block, and play equipment were installed by the Shoalhaven City Council in the early 1990s.

A number of Aboriginal sites, including shell middens and artifact scatters have also been recorded between Greenfield and Chinamans Beaches. The middens are all located on rocky headlands above rock platforms that would have provided plentiful resources for hunter gatherers.

During 1995-96 the Service undertook a major works program, redesigning the Greenfield beach BBQ/Picnic area, replacing existing walking bridges to facilitate wheel chair access, upgrading existing walking tracks and construction of new loop walking track (see Figure 1). Information shelters were installed at Greenfield Beach to educate visitors about the conservation values of the park. A Review of Environmental Factors describing the development and assessing its impact on the environment was prepared and placed on public exhibition in September 1995.

The Chinamans Beach rock platform, which will form part of the Service's interpretation program, is a good example of a diverse marine habitat. In 1994, NSW Fisheries released a draft management plan for a proposed Marine Reserve for Jervis Bay. The draft management plan for the marine reserve identifies a number of marine areas to be zoned as Sanctuary Zones, which prohibit the removal or damage of fish, molluscs and algae except under permit for scientific research or education, and prohibit damage and interference with habitats. The Chinamans Beach rock platform is to be adjacent to one of the proposed Sanctuary Zones and thus offers an ideal opportunity to promote the concept of integrated management of marine and terrestrial protected areas.



National and Marine Parks in Jervis Bay

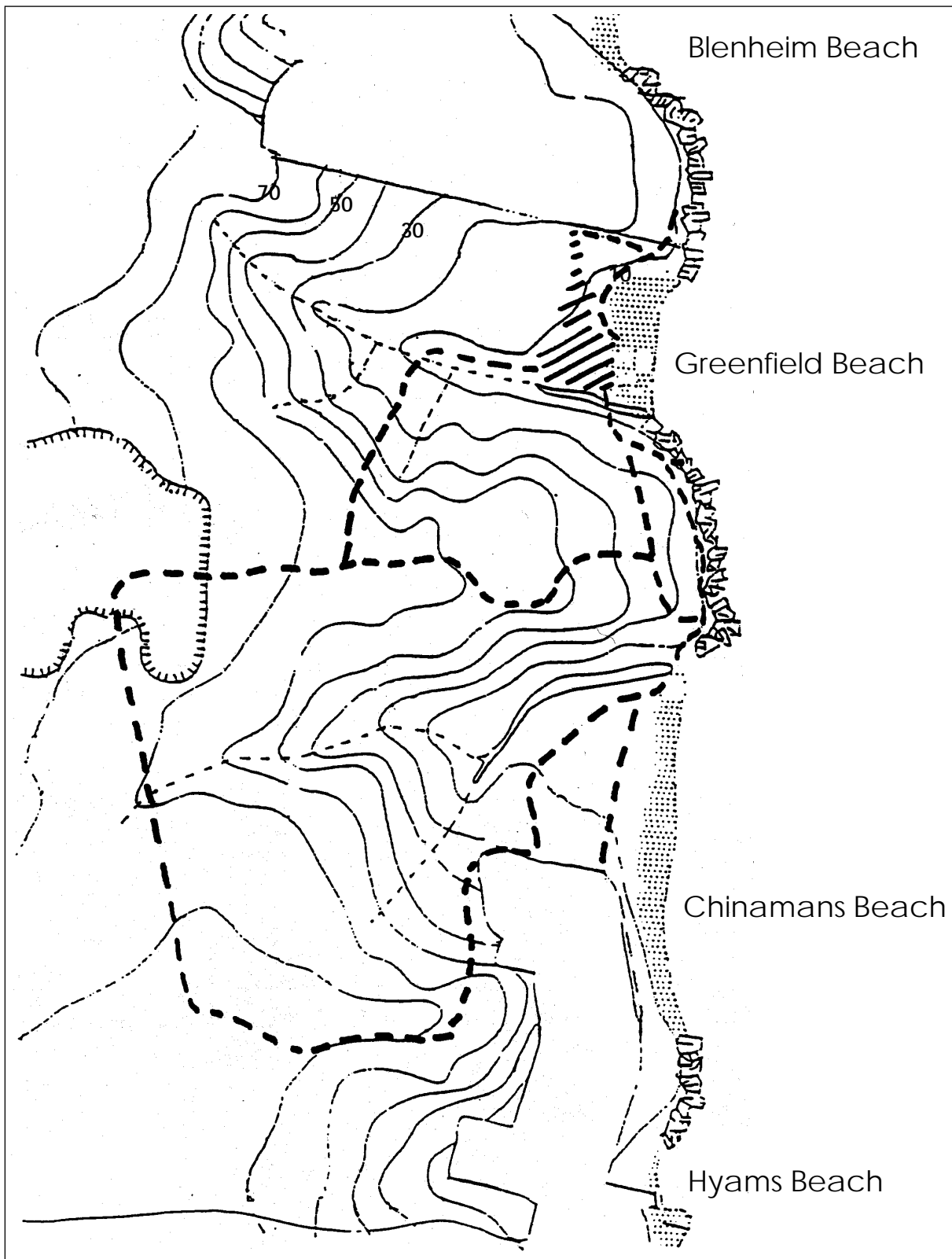


Figure 1. Walking tracks in the vicinity of Greenfield Beach

National and Marine Parks in Jervis Bay

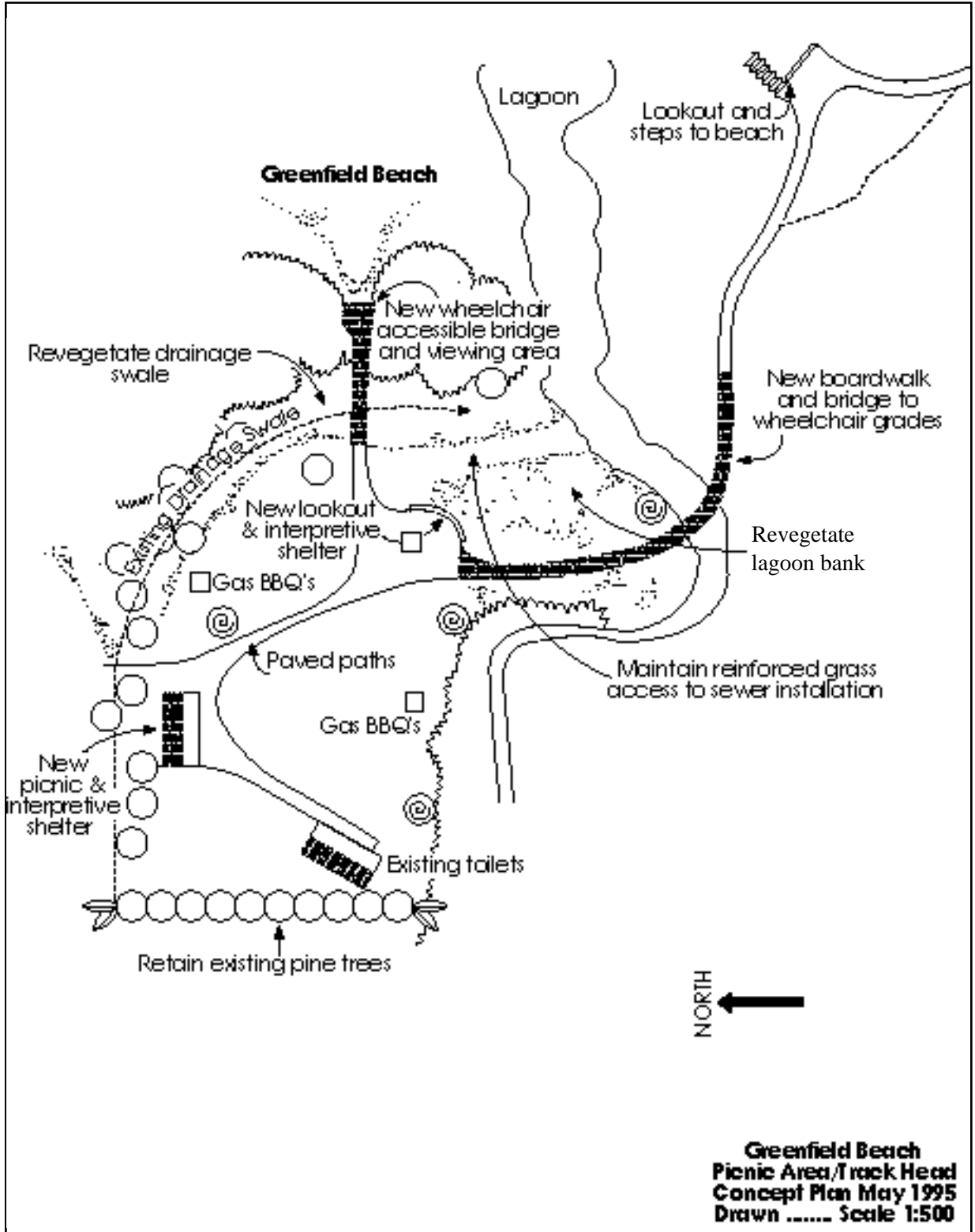


Figure 2. Concept plan of the Greenfield Beach picnic area and track head

National and Marine Parks in Jervis Bay

Discussion questions

- List the features that you consider to make these beaches worthy of special preservation.
- Which of the features are cultural?
- Should the exotic pines and other vegetation planted by early settlers be removed from the Park?
- Refer to the map of the concept plan for Greenfield Beach and the picnic area (see Figure 2). List the types of activities a family group could undertake at the picnic area. Would these be different from those undertaken by a person in a wheelchair?
- Why are certain areas being set aside as Sanctuary Zones?
- What is your understanding of a Sanctuary Zone. Should school groups be able to enter a Sanctuary Zone for a field trip?
- Both beaches are attractive and interesting sites, with curving sandy beaches, and interesting headlands backed by a variety of vegetation communities. Do you consider aesthetics alone should 'entitle' an area to be conserved in a Marine reserve?
- What do you consider the key elements of an 'integrated management'?
- Several problems have occurred since the National Park has been developed. These include increasing graffiti on the walls of the toilets and on wooden fencing, destruction of vegetation (burnt in open fires), and vastly increased litter both dropped in the car parks and foreshore areas, as well as being deposited in rubbish bins. What are your suggestions for solving problems such as graffiti, litter, etc?
- As a few areas have been opened up for car parking, there has been further demand for parking spaces. Should the NPWS cut further into the vegetated areas to provide more car parking?
- The NPWS is intending to provide information boards and publish leaflets on the features of the Park. Some long-time user groups have objected, saying that the 'wilderness' values of these Beaches are now under threat, and that further information is not needed. How would you reply to the local objections to providing information boards?
- Access tracks have been cut through the bush by the NPWS to improve access to the beaches. Even with careful grading, some of these tracks are now acting as drains for rainwater and are becoming eroded. Further hardening may be needed, and this could include such construction as gutters, gravel, steps, and wooden walkways in some marshy areas. Maintenance then rises and the Service is hard pressed to allocate sufficient funds. What would you suggest can be done about access points?
- One of the roads leading into Greenfield Park is a dirt track, and after rain requires four wheel drive vehicles to travel on it. Should the Service upgrade access roads or leave them in a rough state?
- Many of these Marine and National Parks are used in concentrated bursts during the year; the school holidays, Christmas, and Easter, are peak usage times. Outside these periods, there may be as few as a dozen visitors in the entire area. What problems do you think are caused by variable use of the Park?

National and Marine Parks in Jervis Bay

Species Lists

Some common Birds

Rainbow Lorikeet
Crimson Rosella
Australian King Parrot
Galah
Yellow-tailed Black Cockatoo
Laughing Kookaburra
New Holland Honey eater
Red Wattlebird
Australasian Gannet
Great Cormorant
Pied Cormorant
Silver Gull
Sooty Oystercatcher
White-bellied Sea eagle
Powerful Owl
Boobook Owl

Some common reptiles

Eastern Water-skink (*Eulamprus quoyii*)
Jacky Lizard (*Amphibolurus muricatus*)
Grass Skink (*Lampropholis delicata*)
Garden Skink (*L. guichenoti*)
Copper-tailed Skink (*Ctenotus taeniolatus*)
Common Blue Tongue (*Tiliqua scincoides*)
Red-bellied Black Snake (*Pseudechis porphyriacus*)

Some common frogs

Common Froglet (*Crinia signifera*)
Peron's Tree Frog (*Litoria peronii*)
Brown-striped Frog (*Ljimmodynastes peronii*)

Some common mammals

Short-beaked Echidna
Swamp Wallaby
Sugar Glider
Ring-tailed Possum

Long-nosed Bandicoot
Antechinus
Bush Rat
Swamp Rat
White-striped Mastiff Bat

Introduced mammals

Red Fox
Dog
Cat
European Rabbit

Common rocky reef fauna

Molluscs

Chitons—various
Limpet (*Cellana tramsERICA*)
Sydney Rock Oyster (*Saccostrea cucullata*)
Zebra Periwinkle (*Austrocochlea constricta*)
Bembicium nanum
Mulberry Shell (*Morula marginalba*)
Blue Littorinid (*Nodilittorina unifascita*)
Agnewia tritoniformis
Tent Shell (*Australium tentoriformis*)
Striped Turban Shell (*Turbo undulatus*)
Turban Shell (*Turbo torquatus*)
Abalone (*Haliotis ruber*)
Haliotis cocoradiata
Hairy mussel (*Brachidontes hirsutus*)

Echinoderms

Long-spined urchin (*Centrostephinus rogersii*)
Heliocidaris erythrogramma
Sea stars (*Patiriella calacar*)

Sea anemones

Green anemone (*Cnidopus verater*)
Oulactis mucosa

National and Marine Parks in Jervis Bay

Worms

Galeolaria caespitosa

Ascidians

Cunjevoi (*Pyura stolonifera*)

Crustaceans

Crab (*Leptograpsus variegatus*)

Seaweed crab (*Naxia tumida*)

Barnacles (*Chamaesipho columna*)

Flotsam & jetsam on sandy shores

Banded sand shell (*Bankivia fasciata*)

Pipi (*Donax deltoides*)

Common mussel (*Mytilus edulis plantatus*)

Jingle shell (*Anomia descripta*)

Star limpet (*Patella*)

Cuttlefish Bone

Port Jackson Shark egg shell casing

Blue bottle

Scallop shell (*Pecten fumatus*)

Fin fish recorded on rocky reefs in Jervis Bay

This list contains a few fin fish commonly caught on reefs in the Bay.

Snapper (*Pagrus auratus*)

Luderick (*Girella tricuspidata*)

Yellowfin Bream (*Acanthopagrus australis*)

Blue Groper (*Achoerodus viridis*)

Crimson-banded Wrasse (*Pseudolabrus tetricus*)

Six-spined Leatherjacket (*Meuschenia freycineti*)

Chinaman Leatherjacket (*Nelusetta ayraudi*)

Red Rock Cod (*Scorpaena cardinalis*)

Common Weedfish (*Heteroclinus perspicillatus*)

Rocky reef seaweeds

Green algae

Caulerpa cactoids

Codium fragile

Codium lucasii

Ulva latuca

Brown algae

Colpomenia sinuosa

Dictyota dichotoma

Ecklonia radiata

Hormisira banksii

Phyllospora comosa

Red algae

Amphiroa spp.

Ceramium spp.

Champia viridis

Corallina officinalis

Delisia pulchra

Laurencia botryoides

Peyssonnelia spp.

Encrusting corallinaceae

(difficult to identify)