# GORDONS BAY

Plan of Management

Prepared for

RANDWICK CITY COUNCIL

Ву

LAND SYSTEMS EBC PTY LTD

OCTOBER 1994

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# Randwick City Council

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#### Introduction

As every resident, and thousands of visitors, know there are within the Randwick City Council area some of the best and most beautiful beaches on the Australian eastern seaboard.

Spurred on by Randwick Mayor, Councillor Chris Bastic and his Council colleagues, the City Council has accepted a deep felt responsibility -- to protect the natural environment of the beaches while maintaining public accessibility and enjoyment of the recreational resources.

Balancing these two community demands is never easy, but with the co-operation and involvement of the local community, and close consultation with residents and community groups, it can be achieved.

As part of its future plan for the local area, Randwick City Council is looking to enhance public facilities and amenities at Clovelly, Gordons Bay, Maroubra Beach and Malabar Beach in a way similar to what has been achieved at Coogee Beach.

Council's planning and reconstruction has made Coogee Beach one of the premier beaches in the Sydney Metropolitan area.

This plan for new and expanded family facilities at Gordons Bay will lead to a revitalisation of the beach as a recreational venue for residents and visitors. What has been achieved at Coogee Beach can, with planning and local community involvement, be achieved at the other beaches. None will be a replica of Coogee Beach. Rather, each will maintain its individuality and special features.

Working with local residents and community groups, plans of management have now been released for Gordons Bay and Malabar Beach.

Councillor Bastic recently called on local residents to give their views on the plan of management for Maroubra Beach. Presently, Plans of Management are being developed for both Maroubra Beach and Clovelly Beach.

With the involvement of the community and the people who live in the area telling Council what they want done with the local beaches and recreational amenities, the future use of the beaches will reflect the wishes and desires of the residents.

COUNCILLOR CHRIS BASTIC
MAYOR OF RANDWICK

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# 1.0. EXECUTIVE SUMMARY

### 1.1. Purpose

The Gordons Bay Plan of Management was prepared on behalf of the Gordons Bay Consultative Committee (GBCC) and Randwick City Council (RCC). It addresses the existing physical, ecological and cultural resources of the bay and the future management of these to guide and rehabilitate the area.

The gradual deterioration of the bay, through an increase in use and other pressures, and the intense concern for the area by the local community has prompted the preparation of this plan of management. The bay forms part of Sydney's Coastal Beaches Walk and has recently been declared an intertidal protected area. In the future, with increasing demands upon its carrying capacity, the bay will become the subject of greater public scrutiny and hence public accountability.

This report documents the investigations undertaken by Land Systems EBC Pty. Ltd and other specialist consultants (Section 2.3) and includes the preparation of a master plan and future management strategies for the site. In addition, a cost plan and implementation strategy have been developed to assist in the administration and implementation of the recommendations.

The concern of the local community for the bay resulted in an extensive programme of public consultation involving meetings, telephone discussions, interviews, surveys and workshops. As a result, the opinions and attitudes of the community have been gauged and their requirements taken into consideration.

# 1.2. Background (Refer Section 3.1)

The Gordons Bay Consultation Committee was formed in August, 1992 and comprises residents, councillors, Council officers and representatives from various sporting clubs and government departments.

In April 1993, Land Systems EBC was engaged by Randwick City Council on behalf of the GBCC to prepare a Draft Plan of Management. The study aims for the project included "To manage and maintain Gordons Bay (including Gordons Bay Beach, the surrounding vegetation, rock platform and the marine environment) so as to help improve the aesthetic, recreational, safety and environmental qualities and values of the area."

# 1.3. The Gordons Bay Site

Gordons Bay is a deeply incised bay with steep sandstone cliffs and a small beach at its head. A public reserve, consisting of some remnant natural, heathland vegetation (on the north side) and a mix of exotic and native plant species (south side) is also located at the head of the bay. The site is surrounded by residential development with a park (Dunningham Reserve) located on top of the southern headland and a large open car park (Clovelly carpark) on the northern headland.

The study area includes the public reserve and beach areas, the foreshore areas and sandstone cliffs, the water of the bay extending out to the bombora and across to the headlands and Clovelly carpark.

The bay is largely unknown to the broader community due to its incised and secluded nature and the limited potential for land based recreation. It is, however, a popular area for local residents and provides great scenic value to all adjacent properties.

The main recreational features of the bay include the coastal walking path, the Gordons Bay Amateur Fishing Club and the scuba diving activities within the bay.

# 1.4. The Master Plan and Management Strategies

The main components of the proposed master plan and management strategies include the following.

- Investigate options for widening the existing path from the Major Street entrance in order to provide access for small Council vehicles (for rubbish collection), and consider any effects that path widening would have on existing vegetation. Should the power poles be removed during path widening power supply shall be placed underground.
- Restoration of the footpath between the fishing club and Tower Street steps.
- Implementation of a vegetation restoration program involving the expansion of the activities of the Gordons Bay Bush Regeneration project with support by Council. Initial re-planting and refurbishment programme by Council. Preparation of a comprehensive vegetation study.
- Provision of composite signage elements in strategic locations to communicate information such as prohibited activities and the environmental sensitivity of the area.
- Commissioning of a hydraulic study to identify the various water pollution sources of the bay and to formulate appropriate solutions.
- The demolition of the existing fishing club structure and construction of a new facility nearby. The new building shall be designed to be incorporated within the landscape. The former site of the club house can then be utilised as a public seating area associated with the footpath.
- Landscape enhancement to the two entry areas of Major Street and Clovelly carpark.
- Provision of bench seating to specific areas along the pathway and the provision of cold water external shower facilities for divers and adjacent to the clubhouse.
- Redesign of the Clovelly carpark to create a more efficient and visually acceptable carpark and the creation of a parkland area to the foreshore. An

interim design is also proposed prior to the long term concept implementation.

- The construction of diver preparation facilities adjacent to the entry path to the scuba diving trail.
- The construction of a new path to the bay from Battery Street in conjunction with the redevelopment of Cliffbrook by the University of NSW.

## 1.5. Management Strategies

- The establishment of Honorary Rangers for the policing of invertebrate collection and other prohibited activities.
- The training of Council by-law inspectors by NSW Fisheries to enforce bag limits and prohibit invertebrate collection.
- Formalise the management of the scuba diving trail.
- Council should continue to monitor and assess the leasing arrangement with the
  fishing club in accordance with Council's general pricing policy. Professional
  use of the fishing club facilities shall be prohibited and future lease agreements
  should encompass this issue.
- Strict adherence to the existing planning controls in relation to the surrounding development.
- Investigation into the preparation of a Development Control Plan to safeguard the visual quality in areas surrounding the bay.

# 1.6. Cost Plan and Implementation Strategy

A detailed cost estimate has been prepared for those works listed within the master plan (refer Appendix 4). In addition Figure 18 indicates the implementation and staging strategy for the works. The works have been prioritised and broken up into three main stages. These stages generally relate to the priority of the works and the year they are to be implemented.

### 2.0. INTRODUCTION

In April 1993, Randwick City Council, on behalf of the Gordons Bay Consultative Committee (GBCC), commissioned Land Systems EBC to undertake a Plan of Management study for Gordons Bay. Gordons Bay is located between Coogee and Clovelly beaches seven kilometres south east of the Sydney CBD.

The study involved an analysis and assessment of the site's physical, ecological and cultural resources in the light of current and future usage, and the development of a new management regime to guide the rehabilitation and conservation of the bay.

# 2.1 Study Aims

The aims of the study are as follows.

- To manage and maintain Gordons Bay (including Gordons Bay beach, the surrounding vegetation, rock platforms and the marine environment) so as to help improve the aesthetic, recreational, safety and environmental qualities and values of the area.
- To prevent any activity which adversely affects the condition or special features of the bay.
- To provide opportunities for public recreation and educational use of the bay.
- To ensure that the needs of local residents, visitors and user groups within the community are properly catered for without encouraging ecologically unsustainable use of the bay.
- To conserve and enhance landscape values, native fauna and flora habitats and other natural values.
- To ensure the most efficient allocation of management resources by the preparation of development and maintenance programs commensurate with Council's budgetary limits.
- To continually monitor and evaluate the use and level of satisfaction derived from recreation activities and the effectiveness of the environmental management strategy for the bay. The monitoring and evaluation process should include Council staff who are involved in the management of the bay's environment.

### 2.2 Study Tasks

In order to fulfil these aims the following tasks were undertaken.

- Definition of the reserve's management zones;
- Determination of management issues and objectives and guidelines for each issue;

- Establishment of priorities to manage the area, and
- Description of specific actions to be undertaken.

The study included the preparation of an inventory of the existing environment, including physical and cultural characteristics and existing management practices.

The concern of the local community for the bay resulted in a programme of public consultation which included:

- meetings with the Gordons Bay Consultative Committee;
- meetings and telephone discussions with individuals from the GBCC and representatives of the various user groups,
- a letter box drop survey of the local community,
- advertisements in the local newspapers, and
- workshops with the GBCC.

In addition consultation with relevant government departments and authorities was also undertaken. These included:

- Department of Sport and Recreation;
- Water Board;
- Department of Conservation and Land Management;
- Department of Planning;
- NSW Fisheries;
- Environment Protection Authority, and
- National Parks and Wildlife Service.

# 2.3 Specialist Studies

Two specialist consultants were engaged to undertake specific studies. Ms Renee Ferster Levey, a zoologist, carried out a terrestrial vertebrate survey of the bay and Marine Pollution Research Pty Ltd conducted a marine ecology/water quality study. These studies involved investigation and analysis of the existing environment and the formulation of recommendations for the future management of the bay in terms of their specific issues.

# 2.4. Study Structure

The study included three phases.

Phase 1 - Specialist's Studies: This phase included the gathering of information and assessment of the existing environment, definition of management issues and objectives, and the formulation of management guidelines.

Phase 2 - Development of Management Approach: This phase involved the formulation and evaluation of development and management strategies, the preparation of a cost estimate and an implementation strategy culminating in a draft report.

Phase 3 - Draft Plan of Management: This phase will involve the public exhibition and review of the Draft Plan of Management.

# 3.0. BACKGROUND AND CONTEXT

# 3.1. Background

Gordons Bay is a site of imposing physical beauty characterised by a strong sense of seclusion created by the deeply incised guily and sheer sandstone headlands.

It is a largely unknown place for the majority of Sydney-siders, but one which is treasured by the local community who have an intense concern for its gradual deterioration over the decades and for its future in the face of new urban pressures.

It is these pressures that have created the need for a plan of management. As the coastal beaches walk becomes more popular and with the declaration of Gordons Bay as an intertidal protected area the site will have to cope with greater pressures. In coming years it will be subject to increasing demands upon its carrying capacity and it will become the subject of greater public scrutiny and hence public accountability.

Whilst the bay is highly valued as a recreational facility these values are based on largely unquantified assessments of the bay's physical, ecological and aesthetic resources. A valuation of the national, regional and local significance of the bay is required to provide the data upon which informed management decisions can be made.

# 3.1.1. Gordons Bay Consultation Committee

The Gordons Bay Consultation Committee was formed in August, 1992. The committee is comprised of residents, Councillors, Council officers, the State Member for Coogee, representatives from Gordons Bay Amateur Fishing Club, a representative of the Gordons Bay Scuba Diving Club, the NSW Department of Sport and Recreation and the NSW Department of Fisheries.

The terms of reference of the GBCC are listed below.

- To advise Randwick Council on the scope and components of the proposed Plan of Management for Gordons Bay.
- To advise the Council on the compilation of the proposed Plan of Management for Gordons Bay.
- To advise the Council on the appropriate mechanisms for ensuring adequate
   public discussion on the proposed Plan of Management for Gordons Bay.
- To review the applicability of current documentation regarding Gordons Bay.
- To monitor the implementation of the final Plan of Management for Gordons Bay.
- To determine the timetable for preparation of the Plan of Management.

In April, 1993 Land Systems EBC, landscape architects and site planners, was engaged by Randwick City Council on behalf of the GBCC to prepare the Draft Plan of Management for Gordons Bay.

#### 3.2. Site Location and Local Context

The study area is defined by Clovelly Surf Lifesaving Club, Clovelly Beach carpark and Cliffbrook Parade in the north, Dunningham Reserve in the south and the former Atomic Energy Commission property known as Cliffbrook (recently purchased by UNSW) and private residences adjacent to the reserve in the west. Refer Figure No.1.

It comprises approximately 17 hectares of land and water and includes Clovelly carpark, Cliffbrook Parade, Gordons Bay Reserve, the rock shelf platforms and cliffs, the bombora and all the water contained by these elements.

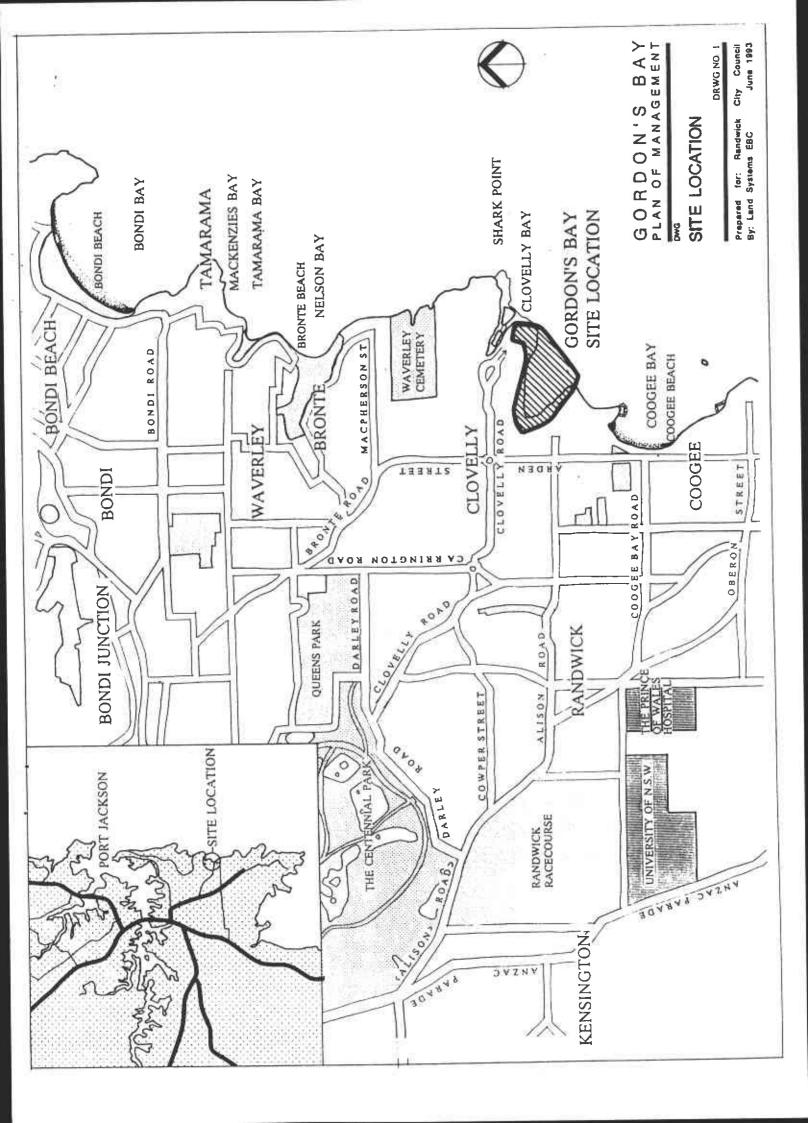
The principal natural features of Gordons Bay are the existing indigenous heathland vegetation, the water area, rock platforms and sheer sandstone cliffs.

The area is surrounded by residential development. The popular swimming beaches at Coogee and Clovelly are located adjacent to the bay to the south and north respectively.

The bay is largely unknown to the broader community due to its deeply incised and secluded nature and the limited potential for land based recreation. It is however, a popular area for local residents and provides great scenic value to all adjacent properties.

The main recreational features of the bay include the coastal walking path, the Gordons Bay Amateur Fishing Club and the scuba diving activities within the bay.

Due to the ease of access to the water edge, excessive collection of shell fish has resulted in a large depletion of intertidal marine life. Consequently, NSW Fisheries has declared Gordons Bay an Intertidal Protected Area.



# 4. THE EXISTING ENVIRONMENT

# 4.1. Geomorphology

In an earlier geological time, Gordons Bay was the head of a short incised coastal stream valley which fed part of a lower river running parallel to the present coastline. This (easterly stream) flowed from Sydney Harbour through a valley south of Ben Buckler (between Rose Bay and Bondi Beach).<sup>1</sup>

As sea levels rose between 10,000 and 6,000 years ago, the eastern river bank and the lower river section were inundated and the heads of the short easterly flowing streams formed the present inundated bays of Tamarama, Clovelly and Gordons Bay.

Gordons Bay, which is aligned approximately in a NW-SE direction, is 500 metres wide at the heads narrowing to 250 metres wide in the middle. The small narrow catchment area of Gordons Bay lies to the north west, with its apex situated at Clovelly Post Office. The Gordons Bay catchment abuts the Coogee Beach catchment (to the south) and the Clovelly Bay catchment (to the north).

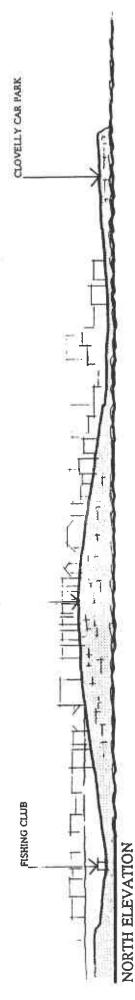
The sheer sandstone headlands along the length of the inlet form shore platforms at sea level which are caused by natural weathering of the sandstone cliff (Refer Figure No.2). However, within the bay where greater protection is afforded from wave action, the platforms are replaced by large boulders and other eroded material.

The bay is protected from the south east by a shallow subtidal shelf and bombora running north east from the southern headland. Both the bombora and the predominantly steep, narrow and incised shape of the bay (creating a narrow surf zone) dissipate wave energy into the bay creating what is termed a reflective beach.

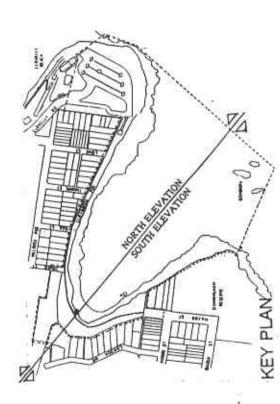
Deposition of sand occurs at the head of the bay. The more dissipative the wave action, the greater is the amount of available sand, which is stored temporarily within the surf zone.<sup>2</sup> Only with storm events is sand removed from the bay.

The geology and soils of the area comprise Hawkesbury sandstone (medium to fine grained sandstone with minor shale and laminate lenses) with marine sands located at the head of the bay extending through the gully area. Soil profile ranges from sandy lithosols on the headlands to deeper yellow podzols in the gully area. Areas of deep white clay can be seen on site behind the retaining wall at the head of the bay and under the northern path.

- 1. Marine Pollution Research, 1982., Draft Marine Ecology/Water Quality Report Gordons Bay, 1993.
- Chapman, D.M., Geary, M. et al., 1982 Coastal Council of NSW. Coastal Evaluation and Coastal Erosion in NSW. Government, NSW.



FISHING CLUB -CLIFF - MAX HEIGHT 30M DUNNINGHAM RESERVE SOUTH ELEVATION



GORDON'S BAY

GEOMORPHOLOGY

Prepared for: Randwick City Council By: Land Systems EBC June 1993 June 1993 DRWG, NO. 2

Gordons Bay Plan of Management

#### 4.2. Climate

The climate affecting Gordons Bay is typical of that experienced along Sydney's eastern coastline. The summers are typically warm to hot and the winters cool to mild with a Summer maximum of rainfall. The average monthly temperature range for January is between a minimum of 18°c and a maximum of 25.7°c. During July the monthly temperature range is between a minimum of 7.9°c and maximum of 16°c. The average annual rainfall is 1226mm. The highest average monthly falls of rain of 135mm occur in March, whilst the lowest of 69mm occur in September.

From November until March the dominant winds are from the east. During these summer months the coast experiences light southerly winds in the morning swinging around to the southeast, east and northeast and becoming more intense during the afternoon.

In the winter months the dominant winds are from the west.

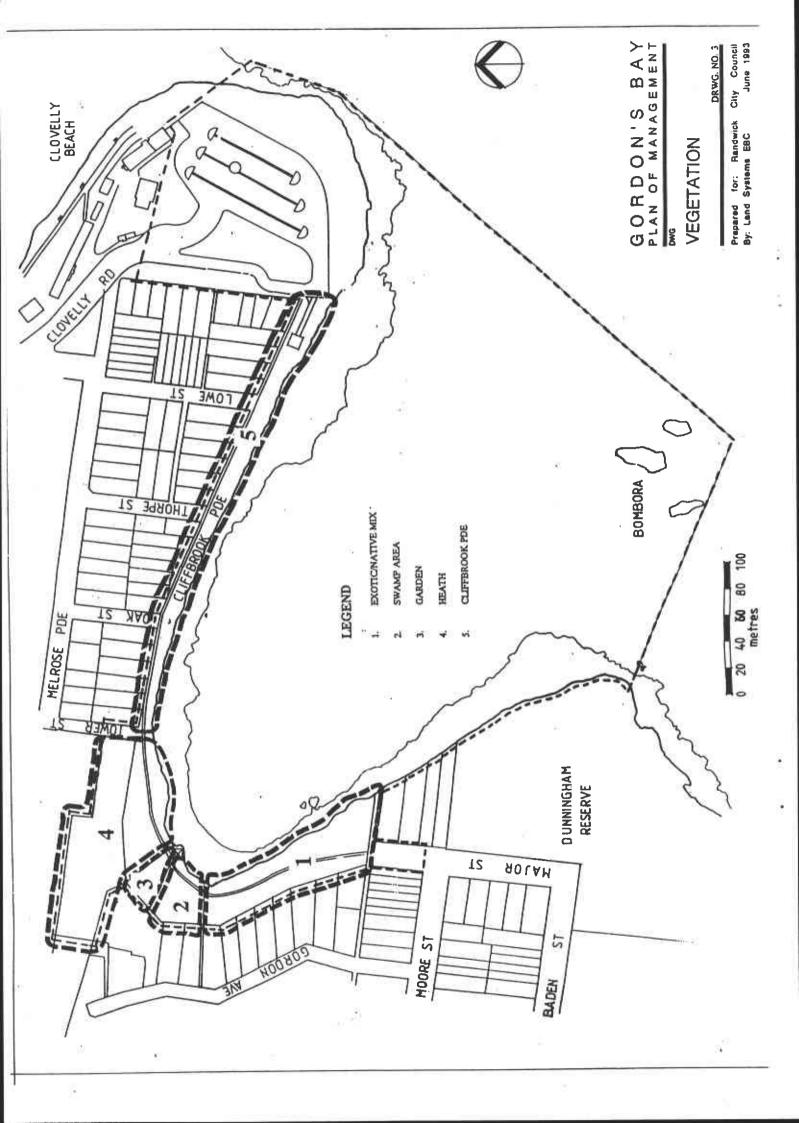
Gordons Bay is most likely to be affected by the southerly winds. These winds increase the impact of aerosaltic spray on the bay by accelerating erosion to the sandstone headland and increasing the amount of salt cover on plants. The area is well protected from the west, therefore largely unaffected by the strong westerly winds that occur in Sydney during the Winter months.

### 4.3. Existing Vegetation

The vegetation of Gordons Bay has been classified into 5 areas (Refer Figure No. 3). These are:

- Area 1: The Southern Area, consisting of mixed forest/scrub vegetation with a
  variety of remnant, native and exotic tree and shrub species and is infested
  with numerous weeds.
- Area 2: The Swamp Area is a small area consisting of reeds and water loving plants.
- Area 3: The Cleared Gordons Bay Fishing Club Area consisting of grass, small exotic shrubs introduced by the fishing club and some indigenous plant species.
- Area 4: The Heath Area consisting of indigenous shrub and groundcover species with weed infestation.
- Area 5: Cliffbrook Parade containing predominantly weeds and exotic species
  to the clifftop and adjacent to the path and some natives from previous
  landscape works.

3. Bureau of Meteorology: Pers. comm. 1993



The following species list is indicative only. The information presented here is preliminary and supplied for general purposes only. This list was compiled with the assistance of Danie Olbrich of Randwick Community Nursery and Rein Weiver from the Ryde School of Horticulture.

### Area 1 - Southern Area

Acacia sophorae (Coast Wattle)(N)
Banksia integrifolia (Coast Banskia) (N)
Convolvulus arvensis (Morning Glory) (W)
Coprosma repens (Looking Glass Plant) (W)
Cortaderia selloana (Pampas Grass) (W)
Erythrina indica (Coral Tree) (E)
Eupatorium adenophorum (Crofton Weed) (W)
Glochidian ferdinandi (Cheese Tree) (N)
Leptospermum laevigatum (Coast Tea- Tree) (N)
Ligustrum lucidum (Large Leaved Privel) (W)
Lomandra longifolia (Lomandra) (N)
Phoenix canariensis (Canary Is. Date Palm) (E)
Protoasparagus plumosus (Asparagus) (W)
Tropaeolum sp. (Nasturtium) (W)
Westringia fruticosa (Coastal Rosemary) (N)

#### Area 2 - Swamp Area

Commelina cyanea (Bindweed) (W)
Isolephis nodosa (N)
Lobelia alata (Labelia) (E)
Persicaria decipiens (N)
Phragmites australis (Common Reed) (N)
Typha sp. (Cumbungi)(N)

#### Area 3 - Cleared Area

Banksia integrifolia (Coast Banksia) (N)
Bauera rubioides (Wiry Bauera) (W)
Breynia oblongifolia (N)
Carpobrotus glaucescens (Pigface) (N)
Ficus rubiginosa (Port Jackson Fig) (N)
Impatiens sp. (Balsam) (E)
Kennedia rubicunda (Dusky Coral Pea) (N)
Pelargonium sp. (E)
Pennisetum clandestinum (Kikuyu) (W)
Tradescantia sp. (Wandering Jew) (W)

(N) = Native, (E) = Exotic, (W) = Weed

#### Area 4 - Heath Area

Acacia myrtifolia (Myrtle Wattle) (N) Acacia sophorae (Coastal Wattle) (N) Acacia suaveolens (Sweet Wattle) (N) Acetosa saggitatus (Turkey rhubarb) (W) Acetosa saggitata (Turkey Rhubarb) (W) Ageratina adenophera (Crofton Weed) (W) Allocasuarina distyla (She-oak) (N) Anagallis arvensis (Scarlet Pimpernal) (W) Anredera cordifolia (Madeira Vine) (W) Araucaria heterophylla (Norfolk Island Pine) (E) Araujia hortorum (Moth Vine) (W) Baeckia imbricata (Baeckia) (N) Banksia integrifolia (Coast Banksia) (N) Banksia serrata (Old Man Banksia) (N) Bauera rubioides (Wiry Banksia) (N) Bidens pilosa (Cobbler's Peg) (W) Brevnia oblongifolia (N) Briza maxima (Quaking Grass) (W) Canna indica (Canna) (W) Carpobrotus glaucescens (Pigface) (N) Chrysanthemoides moniliferum (Bitou Bush) (W) Commelina cyanea (Bindweed) (N) Conyza canadensis (Canadian Fleabane) (W) Coprosma repens (Looking Glass Plant) (W) Crinum pendunculatum (Swamp Lily) (N) Cynodon dactylon (Couch Grass) (W) Cyperus rotundus (Nut Grass) (W) Cyperus brevifolius (Mullumbimby Couch) (W) Dianella caerulea (Flax lilies) (N) Digitaria sanguinalis (Summer grass) (W) Eleusine indica (Crowsfoot grass) (W) Eriostemon buxifolius (Box-leaf waxflower) (N) Erythrina x sykesii (Coral Tree) (E) Euphorbia peplus (Milkweed/Petty Spurge) (W) Gazania sp. (Blackeyed Susan) (W) Gnaphalium spaericum (Common Cudweed) (W) Gonocarpus teucrioides (N) Hakea teretifolia (Dagget Hakea) (N) Hakea sp. (Kakea) (N) Hibbertia scandens (Snake Vine) (N) Hypochoeris radicata (Catsear) (W) Imperata cylindrica (N) Isolepis nodosa (N)

Kennedia rubicunda (Dusky Coral Pea) (N)

Lantana camara (Lantana) (W)

Lasiopetalum ferrugineum (Rusty Velvet Bush) (N)

Leptospermum laevigatum (Coastal Tea Tree) (N)

Lobelia alata (Cobelia) (N)

Lolium rigidum (Rye Grass) (W)

Lomandra longifolia (Lomandra) (N)

Lonicera japonica (Japanese Honeysuckle) (W)

Lycopersicon sp. (Tomato) (E)

Melaleuca armillaris (Bracelet Honey-myrtle) (N)

Melaleuca nodosa (Ball Honey-myrtle) (N)

Metrosideros excelsa (New Zealand Christmas Tree) (E)

Monotoca elliptica (N)

Morus alba (Mulberry) (W)

Nothoscordum inodorum (Onionweed) (W)

Opercularia asperu (Stink weed) (N)

Oxalis corniculata (Yellow Wood Sorrel) (W)

Parietaria judaica (Asthma Weed) (W)

Paspalum dilatatum (Paspalum) (W)

Pennisetum clandestinum (Kikuyu) (W)

Plantago lanceolata (Ribgrass) (W)

Polygala myrtifolia (Myrtle-leaf Mikwart) (W)

Protoasparagus plumosus (Asparagus) (W)

Rubus fruticosus (Blackberry) (W)

Rumex crispus (Curled dock) (W)

Senecio mikanioides (Cape Ivy) (W)

Senecio madagascariensis (Fireweed) (W)

Solandra maxima (Trumpet Vine) (E)

Solanum nigrum (Black Nightshade) (W)

Sonchus oleraceus (Sowthistle) (W)

Stenotaphrum secundatum (Buffalo) (W)

Taraxacum officinale (Dandelion) (W)

Trifolium repens (White Clover) (W)

Vicia sativa (Vetch) (W)

Westringia fruticosa (Coastal Rosemary) (N)

# Area 5 - Cliffbrook Parade

Canna indica (Indian Shot) (W)

Coprosma repens (Mirror Bush) (W)

Impatiens sp. (Balsam) (W)

Lantana sp. (Lantana) (W)

Lomandra longifolia (Lomandra) (N)

Westringa fruiticosa (Coast Rosemary) (N)

(N) = Native, (E) = Exotic, (W) = Weed

Note: This species list is indicative only and was compiled from several sources.

#### 4.4. Fauna

A survey of the terrestrial vertebrates of Gordons Bay was carried out between 30 April and 30 May 1993. The study employed the following techniques: mammal trapping, bird census, intensive searches by day and spotlighting at night. Additional information was gained from a questionnaire distributed to residents and regular users of the bay.

One species of frog, eight reptile species, 42 bird species (comprising 36 native and six introduced species) and five mammal species (three of which are introduced) were recorded in and around the bay.

The following issues are of concern due to their impact on the viability of the habitat of the bay. The issues recognise the food, shelter and breeding needs of species present.

- Erosion, particularly on the northern slope, is leading to loss of vegetation and wildlife habitat.
- Stormwater runoff and other causes of contamination are destroying the habitat of freshwater pools and pose a serious threat to the survival of frogs.
- Pollution by pesticides and/or herbicides from surrounding gardens presents a threat to invertebrates and hence to reptiles, frogs and birds.
- There is insufficient shelter for small birds and reptiles, especially with many cats present and an increase in the number of predatory birds such as Currawongs.
- Virtual monocultures of Gladiolus and Coprosma have taken over some areas
  of the bay. While these species are used for food and shelter by some animals,
  the reduction in floristic diversity and stratification is leading to decreased
  faunal diversity.
- Weeds from surrounding gardens can exacerbate the above problem, and dumping of garden cuttings has been seen near the Tower Street steps.
- The Clovelly car park is a virtual wildlife desert, and only attracts introduced and pest species (Silver Gull), which are fed by many visitors. Rats have also been reported on the rocks below the car park.
- The gradual degradation of the heathland due to weed infestation and clearing.
   The heath area is an important habitat area offering food and shelter to a diversity of species.

# 4.4.1. Recommendations of the Study

The recommendations of the fauna study are to:

- prevent further erosion and loss of habitat;
- prevent stormwater runoff;
- monitor the water quality in pools and springs, and take steps to prevent further reduction in breeding habitat for frogs;
- increase habitat diversity by a gradual bush regeneration program and revegetation using locally indigenous species;
- purchase and/or arrange to manage the northern slope above the path with its valuable native heath and wildlife habitat. This area should be protected and managed in a manner consistent with principles of bush regeneration;
- revegetate sections of the car park with low, locally native plants;
- implement an educational program aimed at encouraging residents to:
  - keep cats indoors at night;
  - stop using pesticides and herbicides which may wash down into the bay;
  - stop washing cars on the street;
  - . plant local native species, and
  - encouraging an appreciation of the local native flora and fauna.
- instruct users of the bay not to feed introduced animals and Silver Gulls, and
- monitor the vertebrate groups regularly as changes are implemented.

# 4.5. Marine Environment

The deeply incised and narrow form of Gordons Bay is characteristic of a number of such narrow embayments situated between Bondi Beach and Botany Bay.

There is no water quality data available for Gordons Bay. Beachwatch has collected water quality information from Clovelly Pool and from off Coogee Beach. These data show that near shore coastal waters in the vicinity of Gordons Bay improved following the substitution of deep water ocean sewage outfalls for the shoreline outfalls at Bondi and Malabar. No information was available for assessment of sewage overflows (thought to be rare) or for stormwater flows into the bay. Information on stormwater catchments was not available.

Biologically, the bay intertidal and shallow sub-tidal communities are similar to sheltered oceanic communities throughout the Sydney region. The bay does not have extensive intertidal foreshores and no intertidal rock platforms. The fauna of the intertidal and shallow sub-tidal zones appear depauperate in many respects, probably due to continuing over-collecting. The bay floor is shallow (less than 10 m depth) and comprises about half mobile marine sands and half shallow rocky reef/outcrops. The rocky outcrops support mainly kelp communities, characteristic of the Sydney region. The bay supports abundant (and typical) shallow rocky reef, sand and shallow coastal fish communities.

Gordons Bay is a prime recreational asset on the Sydney coast, mainly by virtue of its high accessibility. The two main recreational uses are angling (from the shore or from boats launched from the head of the bay) and scuba diving (mainly from the established diver entry and exit pathway at the northern head of the bay). These uses are enhanced by the ample parking on Clovelly headland. The bay and its environs are also important to local family groups in the summer months. The Gordons Bay Amateur Fishing Club has about 60 members. Club members generally venture by boat into deeper waters outside the bay to fish over deeper reefs.

By virtue of its shelter and accessibility, the bay is a popular scuba diving location, particularly with learner and novice divers. An underwater nature trail and a concrete walkway into the water to facilitate diver entry and exits was established in the mouth of Gordons Bay in 1990. Parts of the trail are in disrepair and a section has been smothered by mobile marine sands.

# 4.5.1. Recommendations of the Study

The location and catchments of all stormwater flows and of possible sewage overflows into Gordons Bay should be investigated and documented. Once this is done, an assessment of probable water quality, volumes and litter loads could be made. Following this assessment, remedial works (source controls, source pollution traps and outlet pollution traps (grates, sediment pits, landscaped wetlands) could be planned.

Over-collecting of marine invertebrate life from the intertidal and shallow sub-tidal zone is the prime management issue for marine areas in Gordons Bay. NSW Fisheries have formulated regulations to prohibit all collection from Gordons Bay, (and from other sites in the region). The current status of these regulations is the declaration of the bay as an intertidal protected area. This prohibits harvesting of invertebrate stocks in any form for a minimum period of 5 years. These provisions should be supported by appropriate signage and education programmes.

The two major issues for subtidal areas of the bay are the restoration of the scuba trail and prevention of disturbance to marine life along the trail. Given the identified importance of the scuba trail, restoration is recommended. Protection of the sub-tidal invertebrate fauna from collection and disturbance pressure may well be afforded by the combined (existing) spear-fishing ban and the total intertidal invertebrate collection ban. Whatever the combination of bans, closures or proclamations of aquatic reserves given to the bay, the protection of marine life will still be based on a combination of user education and enforcement. The former will be based on

overcoming the problem of loss and vandalism to signage plus a local education campaign. The latter could well hinge on local education.

# 4.6. Historical Overview

Much of the area now known as Gordons Bay was included in a land grant to a Mr Lewis Gordon, a Government Surveyor, in 1840. A house was subsequently erected and the land became known as the Cliffbrook Estate and the bay as Gordons Bay.

Subsequent owners included Mr John Thompson giving rise to the confusion in the name of the bay, with some people knowing the area as Thompson's Bay. It is believed he was responsible for the planting of many of the Norfolk Island Pines and Morton Bay Fig trees in the late 1800's which no longer exist.

During the 1870's a stone mansion was erected in the Classic Italianate style for a squatter, Mr George Hill. The building was constructed of site sandstone, brick and timber. It was a large building which included large verandahs and finishes in elaborate Italian decorative styles. Extensive gardens surrounded and complemented the house. Horse stables, staff quarters, and laundry rooms were then added in the north of the estate (where the present Atomic Energy Commission buildings stand).

In 1905 the boundaries of the Cliffbrook Estate included Gordons Bay highwater mark, Battery Street to the north, Beach Street to the west and Moore Street to the south.

Ownership of the house passed through many people including Sir Denison Miller, Governor of the Commonwealth Bank who entertained many members of the aristocracy. The estate was gradually subdivided and in 1913 the foreshores of the bay were sold to Randwick City Council for £3,000.00. In 1976, Cliffbrook was classified by the National Trust and was recognised as the most significant historic building in Coogee. It was, however, unfortunately demolished in 1977 to make way for 6 individual house lots.

The Gordons Bay Amateur Fishing Club was formally established in 1964 after acquiring the lease for an unused boat shed. The club was established for fishing and social purposes. The building structure has undergone repair on several occasions since the club's formation, and in 1974 a storm caused major damage to the building structure, retaining wall and pathway at the head of the bay. The storm damage was subsequently rectified by Council.<sup>5</sup>

4. Randwick Historical Society, Cliffbrook House - Coogee, NSW.

5. N. Ward, President - Gordons Bay Amateur Fishing Club, pers. comm. 1993.

# 4.7. Visual Quality and Landscape Character

The following key visual elements have been identified in Gordons Bay (Refer Figure No.'s 4 and 5).

- The sandstone cliffs.
- The water surface.
- The vegetation areas.
- Urban development.
- The fishing club.
- The beach and boat racks.
- Clovelly carpark.
- The pedestrian pathway.
- Power lines.

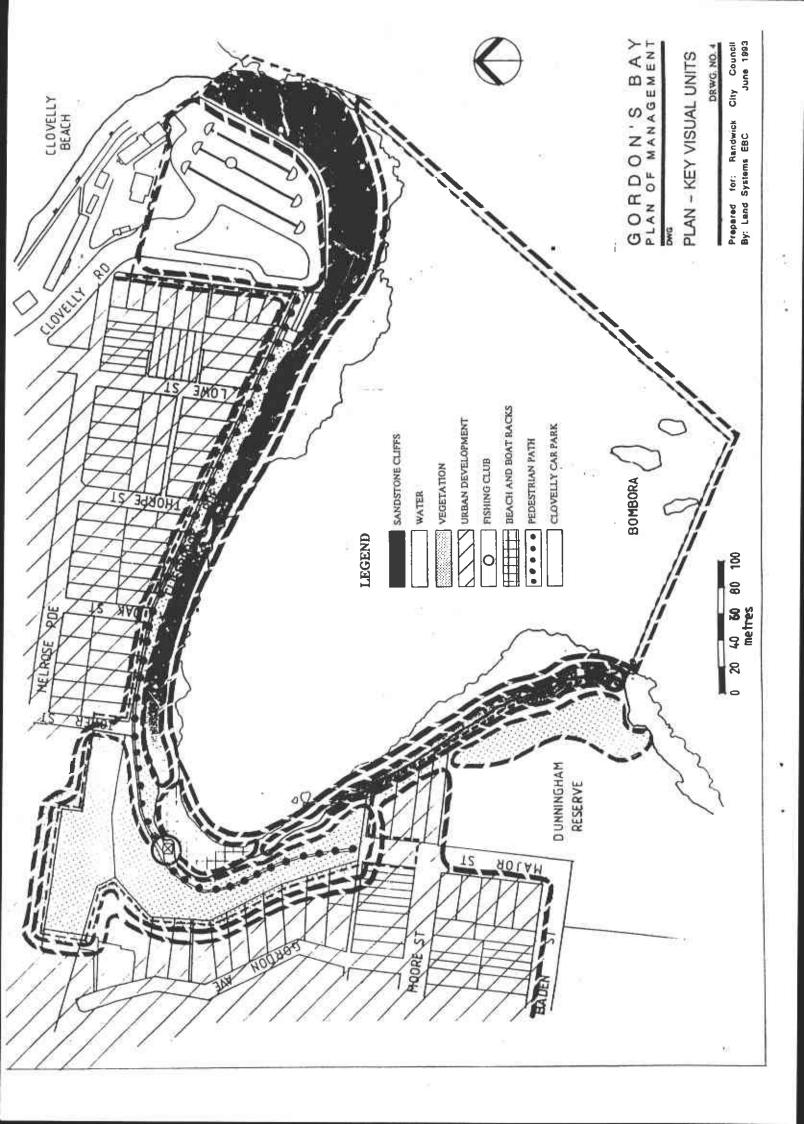
These provide the basic structural elements of the site's landscape character and are described below:

# 4.7.1 The sandstone cliffs

The vertical faces of the sandstone cliffs and exposed rock outcrops at the top, offer a diversity of rich honeycomb colours and textures and are visually prominent from all aspects of the bay. The cliffs vary in height from 4m to approximately 35m.

# 4.7.2 The water surface

On fine days when the swell is minimal, the water is smooth and clear offering a rare but extensive view of the submarine environment. The bombora reduces the swell entering the bay and generally creates a smooth water surface varying in colour from light greens and blues to deep grey.



URBAN DEVELOPMENT VEGETATION - HEATH SANDSTONE CLIFFS FISHING CLUB BEACH AND BOAT RACKS WATER VEGETATION EXOTICNATIVE MIX SPRING AND REEDS PEDESTRIAN PATH

GORDON'S BAY PLAN OF MANAGEMENT WAS

KEY VISUAL UNITS DRWG, NO. 5

Prepared for: Randwick City Council By: Land Systams EBC June 1993

# 4.7.3 Vegetation of the reserve and clifftop areas

The vegetation of the bay consists of indigenous and exotic species reinforcing and defining the bay's form and creating a green background to the bay. The head of the bay is protected from winds thus allowing a greater diversity of plant species including large Coral Trees.

#### 4.7.4 Urban development

The dominant cultural feature of the bay is the presence of residential buildings surrounding the area. These consist of 1,2 and 3 storey detached dwellings and 4 and 5 storey residential flat buildings.

These structures line the clifftop on the north side and above the gully and reserve areas on the western side of the bay. On the south side, three buildings (two cottages and a block of units) are situated on top of the cliff off Major Street. The boundaries of these allotments are located virtually on the top of the cliff thus allowing no open space to link the Gordons Bay Reserve with Dunningham Reserve on the southern headland.

The mass of urban development surrounding the bay further accentuates the enclosed nature of the area. The urban development provides a conflict of colours and textures to the perimeter of the bay. Many buildings within this zone are visually incompatible by virtue of their form, scale and colour and create visual confusion and lack of cohesion.

### 4.7.5 The fishing club

The small masonry club house is a visual focus at the head of the bay. The structure is visually obvious and contrasts with the natural backdrop and foreground of the bay.

The structure has recently been painted in a colour recommended by Council to match other foreshore buildings in the area, eg. Clovelly and Coogee surf clubs.

#### 4.7.6 The beach and boat racks

The beach area is very small. The colour and texture of the sand is typical of Sydney's beaches and is an important visual element of Sydney's coastal character. The timber boat racks and boats provide the bay with a distinctive 'fishing village' character which is rare if not unique on Sydney's eastern beaches.

#### 4.7.7 The pedestrian pathway

While not visually dominant, the concrete footpath is an additional visual element impacting upon the bay. The colour of the path is inoffensive. In addition, the path functionally defines much of the perimeter of the bay area.

### 4.7.8 Clovelly carpark

Clovelly car park is a large expanse of impervious bitumen pavement. The black bitumen dominates the entire headland. With no screening element present, the profusion of cars adversely impacts upon the visual quality of the area. The car park is located on the most visually prominent position in the area and is seen from headlands on either side and elevated positions within the surrounding urban areas.

#### 4.7.9 Power Lines

Overhead power lines follow the footpath from Clovelly carpark to Major Street. The poles and lines are not visually dominant but do detract from the visual quality of the area.

# 4.8. Impact of Federal, State and Local Government Planning Instruments

# 4.8.1. Sydney Regional Environmental Plan No. 14

Gordons Bay is included within the State Government's 'Sydney Regional Environmental Plan No. 14 – Eastern Beaches' (SREP 14) Design and Management Guidelines. The recommendations of these guidelines relevant to Gordons Bay are summarised as follows:

# (a) Access and Circulation

- A comprehensive system of pedestrian paths, trails and cycleways should be provided within and linking open space areas, commercial areas, promenades, car parks and other facilities;
- A coastal walking trail should be developed initially from Bondi to Malabar but eventually from South Head to La Perouse. The development of the coastal walking trail should;
  - ensure public safety through the provision of barriers, fences and railings;
  - provide a path width and surface finish appropriate to the landscape setting;
  - minimise clearance or disturbance of existing indigenous vegetation;
  - ensure the design of any necessary structures is in harmony with the surroundings;
  - accommodate disabled people;
  - provide rest benches at intervals of 150m or less, and
  - incorporate cycleways where possible.

### (b) Clovelly Carpark

The plan recommends reducing the size of the Clovelly carpark and replacing it with a number of small parking areas and planting to soften the area.

### (c) Gordons Bay

SREP 14 recognises the restricted potential for recreational use of Gordons Bay due to the small size of the beach and adjacent open space. It also recommends part of that land zoned as Research (Cliffbrook) be developed to incorporate additional access to the bay.

In addition other recommendations of SREP 14 include:

- encouraging and facilitating the use of the underwater dive trail;
- upgrading the pedestrian entry point from Clovelly carpark;
- limiting building heights to 2 floors above natural ground level within the backdrop area of the bay;
- extending pedestrian access at cliff top levels around the southern side of the bay to link with Dunningham Reserve;
- providing for continued use of the bay for small boats, including their storage,
   and
- encouraging the continuation of snorkelling and scuba diving activities by designating an area as an underwater marine park.

### 4.8.2. Randwick Local Environmental Plan No. 71

The area is also subject to the Randwick Local Environmental Plan No. 71 (Coogee Precinct). The relevant clauses of the plan are described below.

#### (a) Residential area on north side of bay.

"This area is zoned Residential 2(c1). The objectives of this zone are to provide a multi-unit residential zone to encourage a broad mix of dwelling types and certain other development compatible with the environmental capabilities of each site and development in the locality."

# (b) Residential area on western and southern sides of bay

"This area is zoned Residential 2(b1). The objectives are to maintain areas of low density housing and to permit attached housing and certain other development compatible with the existing scale and character of the locality."

### (c) Clovelly Car Park

"This area is zoned 6(a) (Open Space [Existing Recreation] Zone).

The objective of this zone is to permit a wide range of public recreation and leisure activities."

# (d) Gordons Bay Reserve - Zone 6(a) as above

The eastern portion of the former Atomic Energy Commission land is also zoned 6(a) - Open Space.

# (e) Cliffbrook Parade - Dedicated road reserve

# (f) Foreshore Scenic Protection Area and Aesthetic Appearance

Residential areas immediately surrounding the bay are subject to two special provisions.

# 1. The Foreshore Scenic Protection Area

This provision prohibits a dwelling which exceeds 5m in height except with the consent of Council. Council, in its determination of such developments, must consider the probable aesthetic appearance of the development in relation to the foreshore.

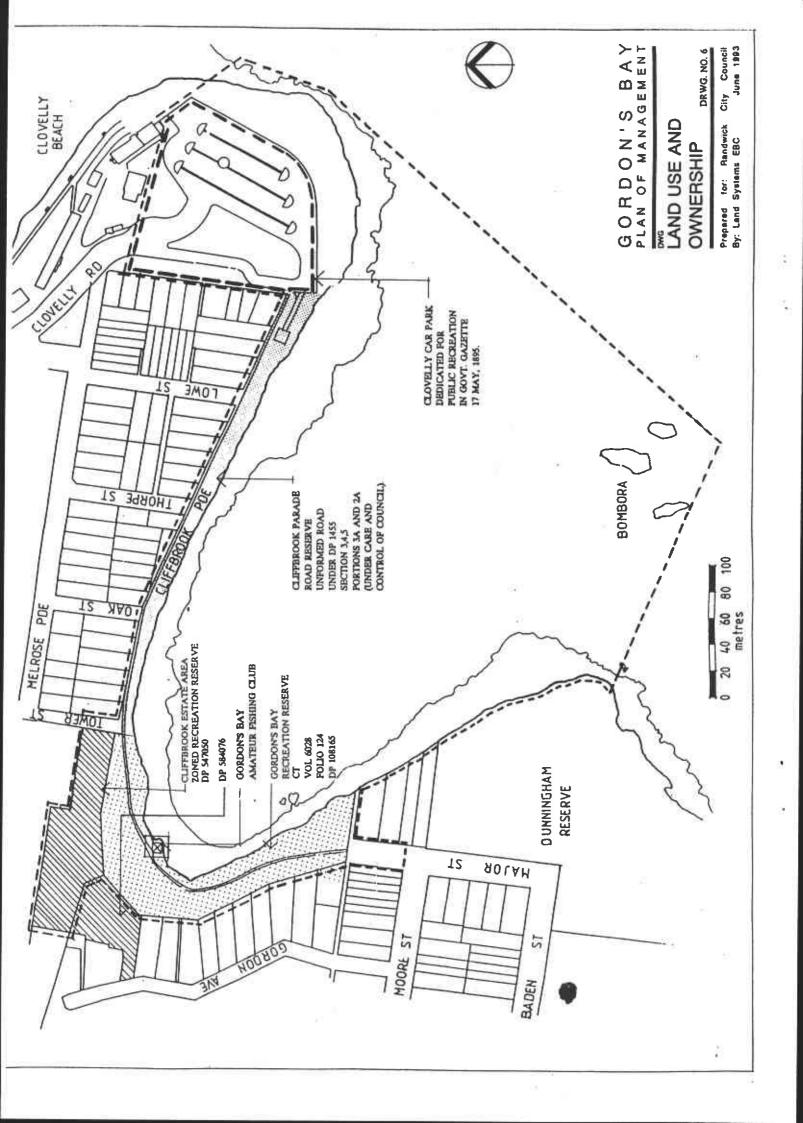
# 2. Aesthetic Appearance

This provision covers developments which are visible from waterways or public recreation areas. The condition of this provision is for Council to take into consideration the probable aesthetic appearance of the proposed building when viewed from the waterway/public reserve.

# 4.9. Land Use and Ownership

The study area comprises the following land uses (Refer Figure No. 6).

- The Gordons Bay recreation reserve, (CT. Volume 6028, Folio 124, DP 108165) which is bounded by Major Street and adjacent residential lots in the south, residential lots in the west, Cliffbrook Estate and residential lots to the north, and the bay in the east. This is a Crown Land Reserve under the care and control of Randwick City Council.
- Cliffbrook Parade (DP 1455, Sections 3,4 and 5, Portions 3A and 2A) a dedicated road reserve which follows the clifftop to the north.
- Clovelly Carpark (dedicated for Public Recreation in Government Gazette 17 May, 1895) a Council owned carpark on the northern headland.
- Residential lots in the south off Major Street. These lots extend from Major Street to the clifftop edge prohibiting bay frontage access to Dunningham Reserve on the southern headland.



- The Gordons Bay Amateur Fishing Club. The club leases the clubhouse building from Council. The club currently has about 60 members with approximately 30 boats stored on the boat racks on the beach. The current lease of the club house is for a period of 5 years and terminates at the end of 1995. The lease payment is \$50.00 per annum.
- Cliffbrook Estate. (DP 584076 and DP 547050) much of the reserve on the
  northern side of the bay falls within the land known as Cliffbrook. This area is
  currently zoned Open Space. Formerly owned by the Australian Nuclear Science
  Technology Organisation, this land has recently been purchased by the University
  of New South Wales which intends to use the property and associated buildings
  as an Asian Studies facility.

# 4.10. Access (Refer Figure No. 7)

#### 4.10.1. Pedestrian Access

Access to the reserve areas of the bay is limited to pedestrians. The concrete footpath is accessed from Major Street in the south and via Tower, Oak, Thorpe and Victory Streets in the north. Clovelly carpark and Major Street provide the major access points to the footpath. No access is available from Lowe Street due to a 5 metre cliff terminating the street.

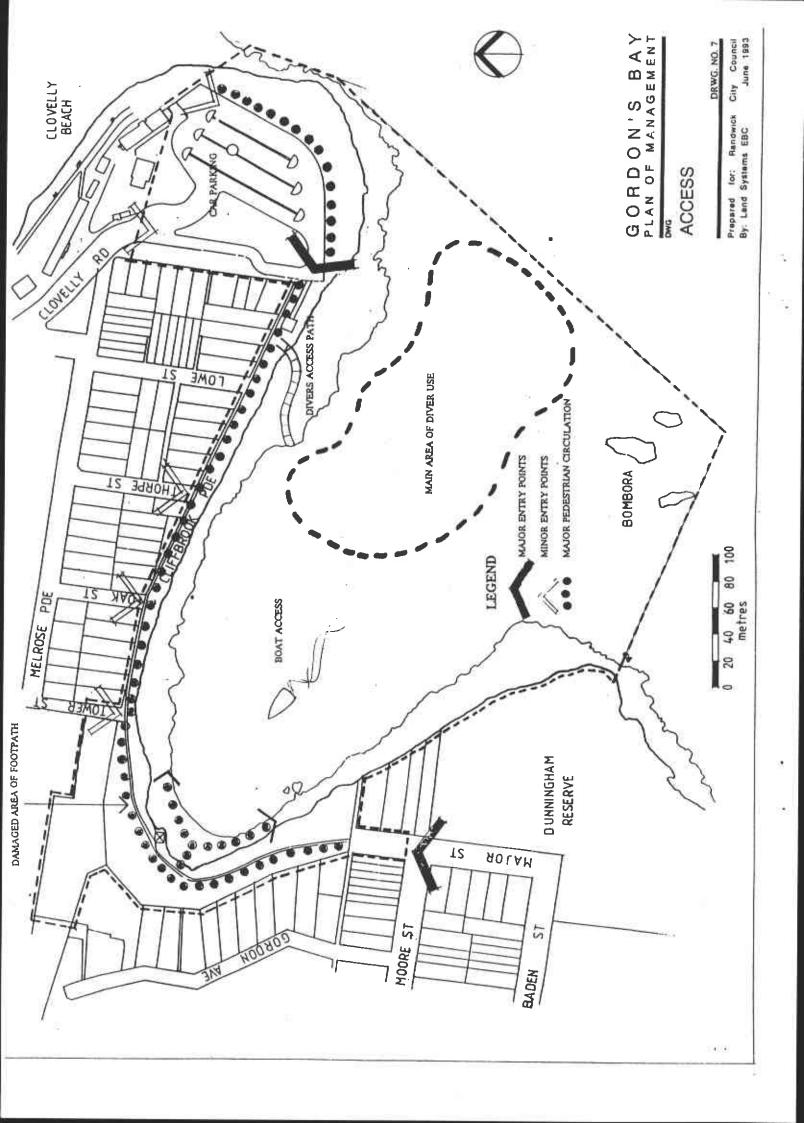
The footpath is used by 'through' walkers, fishermen accessing the clubhouse and boats, and swimmers and sunbathers accessing the beach and rock areas. The path is also used extensively by 'joggers' or recreational runners, subsequently traffic and conflicts arise between the joggers and walkers using the same path.

Access to the beach from the path is restricted by the boats and boat racks. A 2m wide stairway provides access to the sand and water in the centre of the beach. The presence of the boats and racks and the length they extend along the path limits access to the beach area.

The concrete footpath varies in width from 800mm (adjacent to the fishing clubhouse) to approximately 2400mm in the southern area of the bay adjacent to Major Street. A timber post and rail fence provides a barrier extending along the bayside of the path from the fishing club to about 20m south of the beach and boat racks. The barrier is needed due to the path's proximity to the cliff edge and unstable ground.

The path's position around the fishing club structure creates a dangerous situation. The narrow width of the path and restricted sight lines means the corner is difficult to negotiate, particularly if people are approaching from opposite directions.

The area of footpath located in the northern part of the reserve between the fishing club and Tower Street is damaged structurally. On inspection the subgrade of the path has been eroded by drainage from the upper slopes causing instability and subsidence of sections of the path. It is believed that the source of this water is from a nearby swimming pool discharging into the stormwater drain.



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The path in the southern area of the reserve is affected by a water leak through a retaining wall. This leak is constant but its source is as yet unknown. The seepage water on the path forms moss and creates a dangerous surface for people walking on the path.

The main footpath has several sets of stairs within the Cliffbrook Parade reserve. These stairs, and the limited width of the path, limits use of the path by cyclists.

#### 4.10.2. Divers Access

A purpose built concrete footpath located adjacent to Clovelly car park provides access for divers and swimmers from the main footpath to the waters edge.

#### 4.10.3. Water Access

Water access to the bay from the open ocean is generally not inhibited. Fishing club craft enter and exit the bay frequently. Other craft that enter the bay include jet skis, rubber duck inflatable craft and paddle craft.

Several years ago a conflict existed between fishing boats entering and exiting the bay and scuba divers. The presence of the dive trail and the use of the area for dive training meant that safety was compromised with the motorcraft. This conflict now seems to have been resolved through mutual understanding by both parties and the use of dive flags.

# 4.10.4. Dogs

A Council by-law prohibits people taking their dogs into the reserve. However, dogs and their owners are seen frequently within the area. The concerns over the presence of dogs include the danger to the public by dogs not on leashes and a health hazard caused by droppings.

#### 4.10.5. Vehicular Access

Currently, no vehicular access into the reserve area or footpath is possible due to the width of the pathway. The absence of maintenance or emergency vehicular access should be rectified.

#### 4.10.6. Carparking

Carparking in the area includes the large Clovelly carpark and kerbside parking in Major Street and other surrounding streets. The Clovelly carpark has a capacity of approximately 300 cars. It fills to capacity only 10 days per year on average and principally services Clovelly beach and the scuba divers. The fact that the carpark extends out close to the sandstone cliff and offers a clear uninterrupted 180° view over the ocean, makes it very attractive to people who wish to park their car and enjoy the view from within. Nevertheless the carpark's location, size and layout are inappropriate for such a visually prominent headland.

# 4.11. Services (Refer Figure No. 8)

Services within the site include:

- a sewer line which traverses the reserve in a north/south direction;
- a sewerage pumping station located in Cliffbrook Parade, adjacent to Victory Street;
- water and gas lines located within Cliffbrook Parade reserve;
- a stormwater pipe, approximately 1200mm diameter which discharges into the
  bay just east of the fishing club house. Council currently has no records
  indicating the pipe's location or its catchment area. It is understood this pipe
  may commence in the vicinity of the original Denison Miller House.

The spring discharging into the bay adjacent to the clubhouse is thought to originate from Centennial Park. A buried concrete tank exists above and to the west of the path, behind the fishing club building. This tank is thought to have been installed by the army in the Second World War for water supply purposes.

Overhead electricity lines and lights follow the footpath along the entire length of the path from Clovelly car park to Major Street. Overhead lighting was installed primarily for safety reasons. Glare from some of this lighting causes concern for several residents immediately surrounding the bay.

# 4.12. Recreational Usage

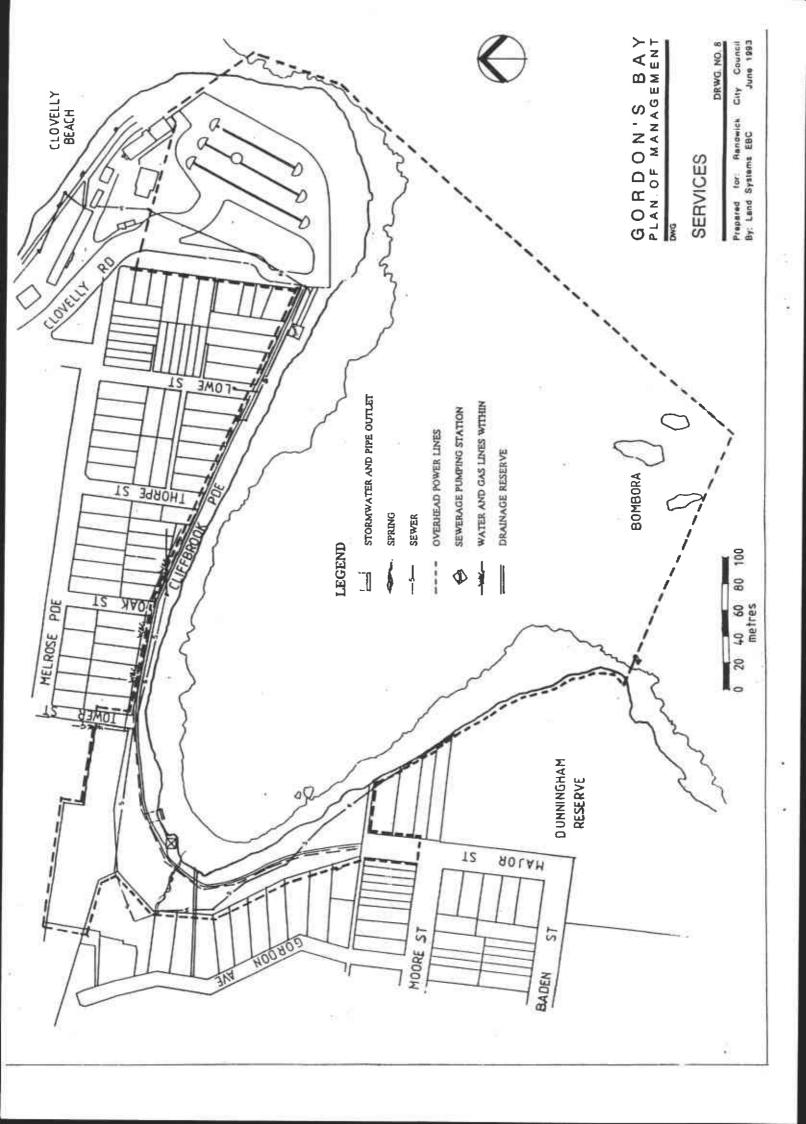
Current recreational usage of the bay consists of passive recreational activities (ie. non structured activities including walking, jogging, relaxing, fishing, swimming, beach fossicking etc.) and structured recreational activities comprising organised fishing and scuba diving. The various user groups are described below.

# 4.12.1. Walkers

Walkers are generally members of the local community and use the main path in the bay for access between points of destination (within and outside the bay) and for general exercise purposes.

# 4.12.2. *Joggers*

Joggers or recreational runners generally use the path as access. Runners come from areas as far away as Bondi, utilising the pedestrian coastal path and following Bondi, Tamarama, Bronte and Clovelly Beaches. Given the runners speed and the width and condition of the path in Gordons Bay, a dangerous conflict exists between runners and people walking along the path.



# 4.12.3. Sightseers

Many people enjoy stopping in the bay and enjoying the view of the bay and ocean. People tend to congregate around the path at the head of the bay above the fishing boats. They also sit on the steps, the sand and surrounding rocks.

#### 4.12.4. Swimmers and Snorkellers

A limited number of people use the bay for swimming and snorkelling. People tend not to swim out from the beach itself as they are deterred by the presence of the accumulated pollution from the stormwater outlet and the weed and rubbish around the boat racks. However, people do tend to enter the water from rock platform areas. The water there is seen to be cleaner.

# 4.12.5. Shellfish Collectors

Due to the ease of access to the intertidal areas surrounding the bay, and the protected nature of the area, the rate of collection of intertidal invertebrate by people is high. Intertidal invertebrates in rock platform areas include octopus, crabs, sea urchins, snails, limpets, chiton and cunjevoi. People collect intertidal invertebrates to eat and for bait purposes.

The numbers of invertebrate stocks have been dangerously reduced within Gordons Bay and along the Sydney coast through over harvesting. The NSW Fisheries Department has just released new bag limits for the collection of stock and have now declared Gordons Bay an Intertidal Protected Area. Refer 4.5 Marine Ecology.

#### 4.12.6. Fisher Persons

Fishing in the bay is generally conducted by individuals using fishing lines from the shore. It has been recognised that fish stocks in the area are depleted. The declaration of the bay as an Intertidal Protected Area will still allow for line fishing provided no invertebrates are collected. Currently, spear fishing is also prohibited within the bay due to the danger of further depletion of fish stocks and the danger to swimmers, divers and surfers.

# 4.12.7. Gordons Bay Amateur Fishing Club

The fishing club's activities within the bay include:

- storage of equipment and motors within the clubhouse building;
- storage of approximately 30 boats on the boat racks;
- use of the bay as access to the ocean (fishing within the bay is conducted infrequently);
- cleaning of fish adjacent to the clubhouse, and

social gatherings in the garden area.

Membership of the fishing club varies but generally is maintained at around 60 members. The clubhouse building is currently leased from Council (see Section 4.13 Management Practices/Arrangements). The clubhouse has electricity connected and utilises the natural spring as a water supply.

The fish cleaning activities of club members results in fish offal collecting in the beach area, attracting rats, and generally creating a health hazard. The fish offal is then found in the water of the swimming area. Two 'wheelie' bins are provided adjacent to the clubhouse.

A garden area has been created by the fishing club behind the building. Exotic plants have been planted, grass areas established, and picnic tables and chairs provided. This area was constructed by the club members for their social purposes. Its use by the public was also intended but few people are seen utilising the area.

The garden area has gradually been extended over the past 3 years and has had a substantial impact upon the existing native vegetation in the area. While the garden is maintained, the exotic plant species such as Impatiens are invading the indigenous planting areas surrounding it.

In addition, a small timber deck adjoins the clubhouse on its north-eastern side. This small area is also used by members for social purposes.

#### 4.12.8. Scuba Divers

The bay is frequently used by scuba divers and scuba diving schools for training purposes. It is regarded as a regional centre for scuba diving activities with divers coming from as far away as Canberra.<sup>6</sup>

The underwater dive trail was established by 'Pro-Dive' and is a major diving attraction and diver training ground.

Divers use the bay on a daily basis and as many as 500 divers can visit the area on a Saturday or Sunday in summer. The divers consist of instructors and students as well as private groups. The area is good for teaching and training purposes because of the large areas of sandy ocean floor.

The divers park their cars in Clovelly carpark and prepare their equipment in the south/east corner of the car park and the adjacent grass area. They enter the water via a concrete access path leading from this area.

The future of the bay as a diver training facility and attraction will probably result in the area being used more and more frequently, as the popularity of the sport is increasing.

- 6. Long, Maria. Department of Sport and Recreation. Pers. Comm. 1993
- 7. Pro Dive, Coogee Pers. Comm. 1993.

# 4.12.9. Surfers

Surf board riders occasionally use the bombora located at the mouth of the bay for surfing purposes. When conditions are right, as many as 20 surf boards riders may be seen.

# 4.13. Management Practices/Arrangements

# 4.13.1 Limits of Responsibilities

The areas above the high water mark and extending to the adjacent private property boundaries are owned and managed by Randwick Council. These areas include the beach, the Recreation Reserve, Cliffbrook Parade and Clovelly carpark.

The area below the high water mark is Crown Land and is the responsibility of the Department of Conservation and Land Management.

#### 4.13.2 Maintenance

Previous maintenance programmes for the reserve included replanting schemes. Inappropriate planting and weeding techniques were employed and resulted in much of the weed infestation and degradation currently seen on the north side of the reserve. Mass clearing and planting methods require regular maintenance to ensure weed regeneration is minimised. Hand weeding of selected areas and bush regeneration methods such as the Bradley method would more appropriate for this area. Council's current maintenance of the area is very limited and inhibited by a lack of vehicular access.

#### 4.13.3 The Fishing Club

In recent years, the fishing club has been maintaining a small portion of the reserve and beach area. This practice was initiated as a result of a general and informal beautification scheme devised by several of the club's members in the mid 1980's. This led to club members holding an occasional working bee to maintain the area.

Current practices by the fishing club includes fish cleaning adjacent to the club house. The fish offal and general build up of litter on the beach and surrounding areas even though regularly cleared, attracts rats and other vermin. The boats, boat racks and the stormwater pipe provide an ideal habitat for rats and mice.

# 4.13.4 The Bush Regeneration Project

A community project was initiated by several residents in August 1992 after a fire destroyed some of the native bush on the northern side of the bay. The local residents formed "The Gordon Bay Reserve Regeneration Project" and, in co-ordination with Council, the volunteers (primarily residents) are currently removing many of the weeds within the area and planting indigenous plant species.

The bay reserve has been subject to several bushfires. Approximately 20 years ago a fire caused severe damage to the vegetation.

Apart from contributions of plant stock and mulch, Council has not previously allocated funds to the general maintenance and upgrading of the Bay. However, we understand that Council has established preliminary budgets for development works between 1993–1997. The preliminary projected funding for the reserve and surrounds is listed below. These projections are preliminary and are subject to confirmation by Council.

1993: \$37,500 (specifically for access improvements).

1994: \$100,000 1995: \$50,000 1996: \$50,000 1997: \$50,000

Another management issue for the bay is the current leasing arrangement with Gordons Bay Amateur Fishing Club. The club has leased the shed from Council since 1964. Currently, the arrangement is a 5 year lease (1990–1995) at an annual rental of \$50.00. Council has limited the lease period to 5 years and maintain a clause within the lease documents giving Council the option of terminating the lease on 6 months notice.

Current Council regulations prohibit dogs and spear fishing in the bay. The consumption of alcohol is not prohibited.

# 4.14. Survey Results

The following is a brief summary of the results of a survey conducted through letter box drops in May, 1993 (refer Appendix). 2,500 questionnaires were distributed in letter boxes to households between Gordons Bay, Arden Street, Dolphin Street and Clovelly Road. Questionnaires were also left at the fisherman's club for people using the bay and walkway.

260 completed questionnaires were returned to Council. The relatively high response rate suggests a genuine interest and concern for the future planning and management of Gordons Bay by the residents and users of the bay.

This research is an important indication of the community's concerns and attitudes. The specific data is of little statistical value as it is the trends or general tendances that are of interest.

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# Question 1

How often do you visit Gordons Bay?

Most people surveyed visited the bay daily (31%), weekly (41%) or monthly (12.5%).

# Question 2

Why do you use or visit Gordons Bay?

The most frequent reasons given for using or visiting the bay were as follows: walking, relaxing, enjoying nature, swimming, access, snorkelling and jogging.

# Question 3

What do you like about Gordons Bay?

The most frequent reasons given for liking the bay were: the peace and quiet, enjoying the scenic/visual qualities, enjoying nature, experiencing the marine environment and the fact that there were no motor vehicles present.

# Question 4

What do you dislike about the bay?

The major objections of respondents to aspects of the bay included litter, water pollution, weeds, the unsafe (dark and enclosed) pathway, dogs, nude bathing and the lack of pedestrian access.

# Question 5

How would you like to see the bay improved?

The most frequent responses to this question were: the upgrading of the bushland, enhancement and the preservation of marine life, and the repair and upgrading of the footpath.

# Question 6

Of the items in question 5, please list the three items you consider most important?

The response to this question reflected the items identified in question 5 ie: the three most important issues are the upgrading of the bushland, the repair and upgrading of the footpath and the preservation of marine life.

# Question 7

With regard to Clovelly carpark what improvements (if any) would you like to see implemented?

Responses included in order of preference: planting of shrubs and trees, reduction in the size of the car park, reduction of speed through use of traffic control devices, provision of bins for rubbish.

# Question 8

Is there anything further you would like to say about improving Gordons Bay?

A general response to this question was the desire to maintain the character and visual quality of the bay. There were many responses indicating little or no improvements should be implemented. These comments, however, can be interpreted as an expression to maintain the general nature of the bay. Other concerns included stormwater, beach and water pollution.

#### Conclusion

The principal findings of the questionnaire are as follows:

- Gordons Bay is primarily used by the local community for passive activities of walking, relaxing, swimming, scuba diving and snorkelling.
- Responses such as 'peace and quiet', scenic/visual qualities and enjoying nature all rated highly when people stated what they like about the bay, along with enjoying the marine enjoyment and the lack of motor vehicles.
- Litter rated as the main concern of respondents followed by weed invasion.
  Major improvements people would like to see involved the upgrading of
  bushland along with the removal of weeds and planting of native species,
  repairing and upgrading of the footpath, preserving marine life and general
  cleaning up of pollution in the bay.

Most people considered the Clovelly carpark needed some planting and that it should be reduced in size. Respondents generally felt that the bay needed little improvement although many voiced their concern over the possibility of development which would ruin the natural setting.

# 5. MANAGEMENT ISSUES, OBJECTIVES AND GUIDELINES

The following list of management zones, issues and objectives is a result of the synthesis of specialist studies and investigations to date.

Management zones have been defined and are shown in Figure 9. These zones have been established through the identification and definition of landscape character and functional characteristics of various areas within the bay. The management zones are:

- Zone 1 Enclosed water area.
- Zone 2 Water edge and foreshore.
- Zone 3 Fishing club area.
- Zone 4 Car park area.
- Zone 5 Bushland and natural areas.
- Zone 6 Perimeter areas.
- Zone 7 Major pedestrian paths.

Within each management zone, issues concerning the management of the area have been identified. For each issue objectives and guidelines have been formulated.

# 5.1. Philosophy

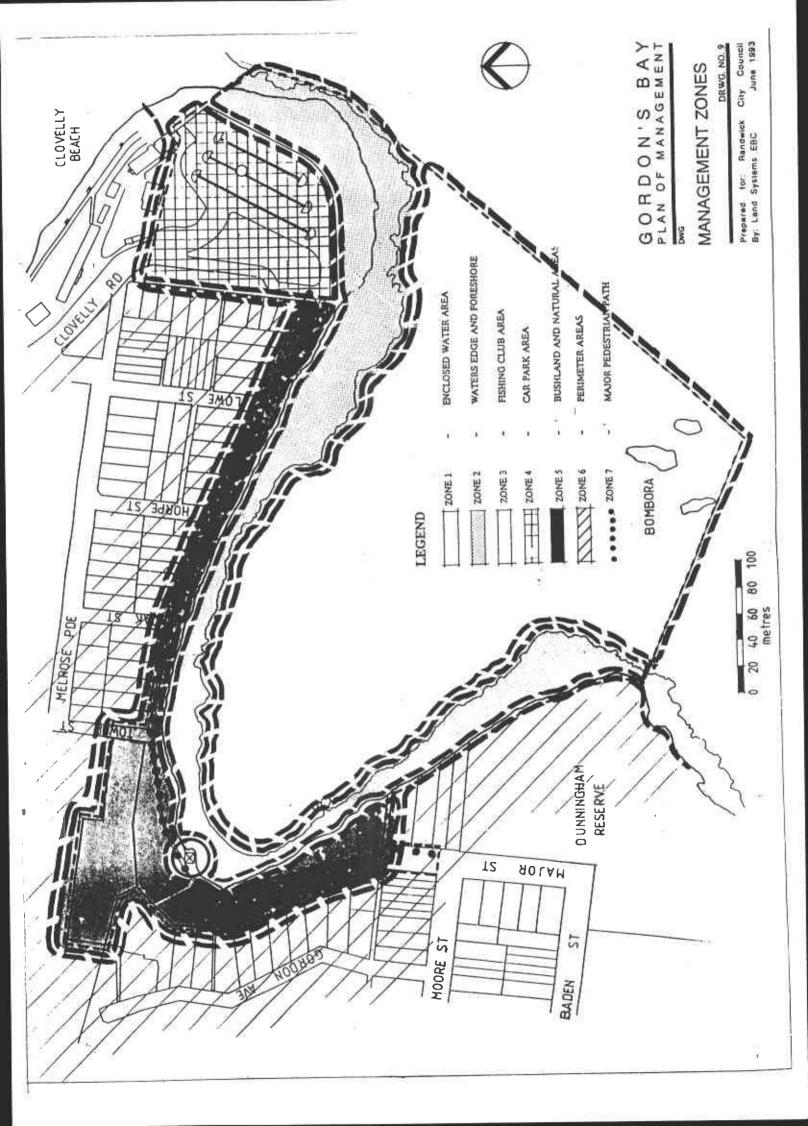
In order to establish a common ground for the purposes of making discussions, a series of philosophical statements were formulated. These are listed below.

 Character - Generally maintain the existing overall character of the bay (peace and quiet, sense of intimacy, 'naturalistic'). Regenerate natural heathland character whilst maintaining areas of culturally significant planting within the short term.

Key Words/Terms: Peace and quiet, uncluttered, tranquil, preserve/repair native bushland.

Access - Provide for the existing level of pedestrian use through upgrading of the pathway system and creating an acceptable level of safety. Limit pedestrian access to existing defined areas but allowing for future additional pedestrian access through Cliffbrook House. Provide for the access of maintenance vehicles from Major Street.

Key Words/Terms: safety, pedestrian only, wheelchair access, rationale, private access paths.



• Structures and Fishing Club - Maintain the Gordons Bay Amateur Fishing Club and facilities on site but redevelop the facilities to be more compatible with other existing recreational activities.

Key Words/Terms: minimise structures, structure to be in character.

• Pollution - Generally maintain the area (land and water) free of pollution.

Key Words/Terms: pollution free, local eduction.

Nuisance Free - Generally maintain the area free of nuisance activities including, but not limited to, nude bathing, dogs, motorcraft, etc. without inhibiting the accepted recreational activities within the bay.

Key Words/Terms: enforcement, safety.

- Maintenance Provide a level and type of maintenance consistent and appropriate to the bay's ecology, character and land use.
- Aesthetics Maintain and improve the visual quality of the bay taking into consideration existing views and sightlines from residences and future development surrounding the bay.

	ISSUE	OBJECTIVE	GUIDELINES
ZON	NE 1 - THE ENCLO	SED WATER AREA	
1a)	Water Pollution	Minimise water pollution in order to maintain safe water quality levels for both humans and marine life.	Identify and investigate sources of water pollution with particular regard to the stormwater outlet at the head of the bay. Provide appropriate cost effective solutions for the treatment of these sources.
1b)	Protection of Marine Life	Provide an environment suitable for the ongoing preservation of marine life.	Acknowledge establishment of Intertidal Protected Zone.  Enforce prohibitions through community awareness and additional signage.  Investigate feasibility of appointment of Honorary Rangers.  Train Council by-law inspectors for policing procedures of the marine reserve.

ISSUE	OBJECTIVE	GUIDELINES
Activities	Provide for sustainable and controlled levels of recreational activities including: scuba diving, snorkelling, swimming and line fishing.	Provide diver preparation facilities and amenities in the area between the diver access path and the car park (refer sketch below).  Rehabilitate underwater dive trail and provide ongoing maintenance.  Improve water quality for swimmers and snorkellors.
		Diver Preparation Location
1d) Motorcraft	Minimise noise and danger caused by motorcraft within the bay.	Restrict type of motorcraft and speed allowed within bay.  Provide signage to communicate these restrictions.
<b>2</b>		Implement community awareness/education procedures.
ZONE 2 - WATERS EI SHELF AND CLIFF AI	DGE AND FORESHORE INCL REAS	UDING THE BEACH, ROCK
2a) Protection of Marine Life	Provide for the protection of marine life and its habitat, in particular intertidal invertebrates within rock shelf areas and other areas.	Acknowledge establishment of intertidal marine reserve.  Enforce prohibitions through community awareness and additional signage.
	Eliminate/discourage use of	Implement public awareness programme.
2b) Nude Bathing	the bay by nude bathers by enforcing existing Council ordinances.	Provide signage.

	ISSUE	OBJECTIVE	GUIDELINES
2c)	Stormwater Pollution	Minimise pollution of the area by stormwater to satisfy acceptable health criteria.	Investigate and treat stormwater outlet as per 1a.
2d)	Aesthetics	Maintain and improve the visual character of the bay.	No additional built structures to foreshore. Upgrade/redevelop existing structures to be more visually acceptable.
ZON	IE 3 – STRUCTURI	ES	
3a)	Visual Quality	Ensure the visual quality and character of the bay is not compromised by existing or future structures.	Provide maintenance standards specific to each existing or future structure and, where applicable, incorporate these standards within lease documents to the relevant body.
3b)	Use of Space	Examine the Council lease agreements that apply in Gordons Bay and prepare a suitable rental in terms of cash contributions and services to the community.	Assess the demand and impact upon the reserve by those user groups and provide a maintenance value for the up keep of these areas.
3c)	Fish Cleaning	Eliminate fish offal on the beach and enclosed water area.	Prohibit fish cleaning within the bay area, specifically by the fish club.
3d)	Land Use - Club House Structure	Two options have been identified for the treatment of the fishing club. These two options and their corresponding advantages and disadvantages are presented below.	
		Retain the fishing club facilities but enhance the existing structure and create an efficient and safe use of the surrounding space.  **PROPRIEME STRUCTURE**  DEACH PATH  DEA	
		Option A	

ISSUE	OBJECTIVE	GUIDELINES
	Option a) Advantages:	
Si.	Relatively minor costs involved in refurbishing structure.	17 V
	Minimum interruption to fishing club activities.	
	Minimum disturbance to surrounding area.	
	Option a) Disadvantages:	
	The structure remains in a very visually prominent location.	
	Pathway around clubhouse structure will require to be redesigned and directed further into existing vegetated area to rectify circulation problems, thus removing existing vegetation.	*
	Refurbishment potential is limited.	
1211	Use of prime foreshore space by a minority user group for essentially storage purposes only.  or  Option b)	
	Relocate club house structure to the cleared area behind but maintain existing racks and boats.	
	RE-LOCATE PESENG CLUB STRUCTURE  MAINTAIN PATH ALIGNMENT  NEW PUBLIC SEATING AREA	
	Option B -	

ISSUE	OBJECTIVE	GUIDELINES
	Option b) Advantages	
	Makes available foreshore space for public area – specifically circulation.	2
	Solves circulation safety problems.	
	Generally a more efficient use of space.	
	More visually desirable with an opportunity to create a structure that is more in keeping with the landscape and more appropriately sited.	1835
	Increased amenity for fishing club through design of a more suitable storage facility.	3
	Proposed location already cleared therefore creating minimal disturbance.	
	Option b) Disadvantages  Significant capital cost.  Use of existing reserve area for fishing club storage.	Implement Option - 'b'. Provide club house storage facilities within existing cleared garden area.  Demolish existing structure and restore foreshore pedestrian path.
3e) Land Use – Boats and Boat Racks	Reduce number of boats without eliminating existing rights of users. Payment of an equitable lease commensurate with the significance of the high space and public value.	Retain minimum of boats on racks.  Amount of boats and boat racking reduced based upon number of regularly used boats (cg. once per month min.).  Lease to be at an agreed rate based
		upon Council's standard lease rates and similar boat mooring facilities.  However, consideration is to be given to the contribution that the boats make to the character of the bay.

Improve the recreational potential of the northern headland by reducing the prominence and extent of the car park area and creating a more appropriate passive recreation environment consistent with other eastern beaches headlands and the guidelines of the Sydney Region Environment Plan No. 14 Eastern Beaches (SREP No. 14).  Objectives for the redesign of the headland are:  reduced extent of car parking area.  reduced visual impact of car parking area.  provide foreshore park space visually integrating the headland with the backdrop areas.  provide an open space link between Gordons Bay and Clovelly Beach.	ISSUE	OBJECTIVE	GUIDELINES
potential of the northern headland by reducing the prominence and extent of the car park area and creating a more appropriate passive recreation environment consistent with other eastern beaches headlands and the guidelines of the Sydney Region Environment Plan No. 14 Eastern Beaches (SREP No. 14).  Objectives for the redesign of the headland are:  reduced extent of car parking area.  reduced visual impact of car parking area.  provide foreshore park space visually integrating the headland with the backdrop areas.  provide an open space link between Gordons Bay and	ZONE 4 – CAR PARK		
		potential of the northern headland by reducing the prominence and extent of the car park area and creating a more appropriate passive recreation environment consistent with other eastern beaches headlands and the guidelines of the Sydney Region Environment Plan No. 14 Eastern Beaches (SREP No. 14).  Objectives for the redesign of the headland are:  reduced extent of car parking area.  reduced visual impact of car parking area.  provide foreshore park space visually integrating the headland with the backdrop areas.  provide an open space link between Gordons Bay and	Long Term Concept  The redesign of the headland is to be subject to a traffic management study and detail landscape design. Since the above concept involves major capital costs the following interim concept has been prepared. The interim concept is based upon retention of much of the existing car parking area in its existing condition but reclaiming a 20m strip along the foreshore for passive recreation open space.

	ISSUE	OBJECTIVE	GUIDELINES
4b)	Aesthetics	Visually soften the car park through the introduction of planting and the breaking up of the large area into several smaller areas.	Refer sketch above.
ZON	NE 5 - BUSHLAND	AND NATURAL AREAS	
5a)	Pollution and Rubbish	Minimise/eliminate dumping of rubbish and litter including garden refuse,	Promote local community awareness.  Increase public vigilance.  Communication with public by
		06)	Council inspectors.
	_		Promote residential composting facilities.
5b)	Visual Quality	Maintain and improve the visual quality of the beach and natural areas without affecting	Promote awareness and education of scenic quality among local residents.
		existing views from adjacent residences.	Additional strategic planting on public and private land in consultation with local residents.
5c)	Habitat	Prevent further loss of habitat and increase indigenous vegetation.	Regenerate indigenous vegetation.  Ensure protection of existing heath areas.
			Ensure protection of Port Jackson Figs.
	18		Maintain and rehabilitate reed areas.
			Increase community awareness: eg. keeping cats indoors at night.
			Minimise use of herbicides and pesticides.
			Encourage planting of native species in private gardens.
			Provide regular on-going maintenance.

	ISSUE	OBJECTIVE	GUIDELINES
5d)	Weed Infestation	Eliminate weeds.	Promote and assist the Gordons Bay Bush Regeneration Group.
			Eliminate dumping of garden refuse.
			Encourage planting of native species by private residents.
			Initiate regular ongoing maintenance by Council utilising appropriate management practices.
			Rehabilitate cleared areas and replace with indigenous plant species.
5e)	Lack of Maintenance	Reintroduce controlled Council maintenance appropriate to the bay's ecology and ensure long term monitoring procedures are implemented.	Provide regular Council maintenance to the reserve. Train Council staff in bush regeneration techniques to work in conjunction with and provide advice to the local bush regeneration group.
5f)	Access – Vehicular	Make provision for limited vehicular access for maintenance vehicles to selected appropriate areas of the bay.	Provide for small wheel base maintenance vehicle access from Major Street to fishing club area – 2.5m width required.
5g)	Access – pedestrian	Optimise existing pedestrian access to the foreshore in a manner which protects and enhances the bay's environment.	Provide access path from Beach Street along perimeter of Cliffbrook and accessing the main path at the clubhouse area. Refer to 7a for technical guidelines.
5h)	Bushfire	Ensure that the threat of bushfire to the bush and other areas is minimised.	Provide for emergency vehicle access to the heath areas from Cliffbrook.
5i)	Planting	Retain and extend the existing indigenous vegetation association throughout the reserve.	Continue and expand bush regeneration operations.
			Gradually replace exotic species with indigenous vegetation.
			Prepare a planting strategy to co- ordinate planting activities.

ISSUE	OBJECTIVE	GUIDELINES
ZONE 6 - BOUNDARY	AREAS	
6a) Visual Quality	Ensure the scenic quality of the area is not impinged upon by adjacent developments.	Employ strict control in the assessment of future developments within the visual catchment of the bay. Particular attention should be given to the Foreshore Scenic Protection Area and Aesthetic Appearance provision within the Local Environmental Plan No. 71.  As an alternative, a Development Control Plan may provide visual guidelines for future development around the bay and provide Council with an appropriate mechanism to enforce these guidelines.  Revise LEP No. 71 - multi-unit residential zoning [2(c1)] to be consistent with the S.R.E.P. No. 14 - Eastern Beaches, limiting surrounding development to 2 storeys.  Develop planting strategies for private yard areas.
6b) Access to/from Private Residences	Assess the existing condition of privately built paths and steps. Determine Council's legal liability and the physical impact of such paths.	Remove those paths and steps deemed unsuitable under the following criteria:  - safety hazard  - unsightly  - used by only one residence  - an impact upon the bush potential.  Those paths and steps remaining are to come under Council control and responsibility and be maintained as such.

	ISSUE	OBJECTIVE	GUIDELINES		
ZON	ZONE 7 - MAJOR PEDESTRIAN PATHS				
7a)	Safety	Address and rectify the following areas of safety concerns.	See sketch below.		
1)	Physical Condition	Upgrade existing footpath between Tower Street steps and the fishing club and the path leading to Major Street.	SATISMENT WALL AS INCURRED PROFIT		
			Typical Path		
2)	Drainage and Moss	Prevent surface drainage entering path areas.	All new path construction to adequately accommodate subsoil drainage.		
			All existing sources of onto path to be identified and treated appropriately.		
3)	Circulation and Sightlines	Ensure line of path allows for free flow of circulation and eliminate visual obstructions.	Provide a minimum sight distance of 10m along entire length of pathway.		
4)	Lighting	Additional lighting is not to be installed as it is inconsistent with the character of the reserve and with the community philosophy.	No additional lighting installed.		
7b)	Access to/from the Existing Major Entry Points	Ensure access to the bay from the two main entry nodes is adequate in terms of physical capacity and in creating an identity for the bay.	Provide landscape treatment to promote the identity of Gordons Bay incorporating information facilities eg. signage structures.		
7c)	Seating Facilities	Provide for the comfort of users of the bay by providing appropriate seating facilities to selected areas.	Provide comfortable, vandal resistant seats in locations where people gather and in positions offering good views.  Generally provide seats at 100m intervals along the pathways and at selected areas.		

# 6. MASTER PLAN

#### Overview

Gordons Bay is an important natural asset to the local community. Its imposing physical beauty and sense of seclusion is highly valued by the local residents and other users. The recreation demands upon the bay and the conflicts created by these demands are of great concern.

The bay offers to the local community and other users a sense of naturalness and seclusion. This character is generated by the natural vegetation of the reserve, the marine environment and the landform of the area. It is these assets which must be conserved and rehabilitated to ensure the bay remains the cultural and environmental resource it is today.

Functionally the bay must provide a safe and secure environment in which to carry out the various recreational activities. This involves maintaining a safe level of water quality within the bay, improving pedestrian facilities such as the footpath traversing the reserve and minimising conflicts between user groups.

The existing vegetation of the reserve is a significant ecological resource. This resource must be maintained and rehabilitated to ensure its ongoing viability as a natural bushland area and for its potential habitat value.

The recent declaration of Gordons Bay as an Intertidal Protected Area is indicative of the significance of its marine environment. In addition, the presence of the underwater scuba diving trail and its high rate of use is a testimony to the bay's recreational significance and potential. It is vital that the bay's waters are protected and managed to ensure its value as a quality resource.

In the light of the ever increasing usage and demands on the site from the local and regional community, it is essential that alienation of public space is minimised. The needs of special groups must and can be accommodated but not at the expense of polarising existing and future uses. Specific user groups such as the fishing club must be accommodated in an equitable manner whereby their facility requirements are incorporated within the bay without impacting upon the general amenity of the area.

The surrounding residential environment has a substantial visual impact upon the bay. Much of the development is not amenable to the natural visual qualities of the bay and present planning procedures are not effective in controlling the form of the surrounding built environment. As a means of regulating future development surrounding the bay, appropriate planning mechanisms must be adopted and implemented to ensure the long term visual impact upon the bay is minimised.

Much of the success of the future management of the bay will be dependent upon the support of the local community and user groups. The more local residents and users understand and appreciate the sensitive nature of the bay and the problems associated with it, the more likely the bay will be maintained and managed to the quality expected by the community.

#### 6.1 Zone 1 - The Enclosed Water

The enclosed water area is that area permanently covered with water and excludes the intertidal zone. The eastern boundary extends from the tip of the southern headland out to the bombora and then to the northern headland.

The recommendations for this zone are:

- Construction of diver preparation facilities adjacent to the car park area. These facilities should include an area of paving for laying out of equipment, a vehicular 'drop off' point for the loading and unloading of equipment, an external cold water shower and installation of seats.
- Rehabilitation of the underwater dive trial. Due to the significance and high use of area, the trail should be refurbished and upgraded to a standard commensurate with its significance and rate of use. These works are to be the responsibility of the specific bodies involved. Control and responsibility for the trail should be formalised in consultation with the Council and the Department of Sport and Recreation.
- Motorcraft entering the bay are to be restricted to a maximum speed of 4 knots. This is to apply to all craft including jet skies and rubber inflatable surf craft.
- Acknowledgment of the establishment of the Intertidal Protection Zone (Refer Section 6.2).

# 6.2. Zone 2 - Water's Edge and Foreshore including the Beach, Rock Shelf and Cliff Areas

This zone includes the intertidal area, the beach at the head of the bay and the cliff and rock areas surrounding the water of the bay. The recommendations for this zone are:

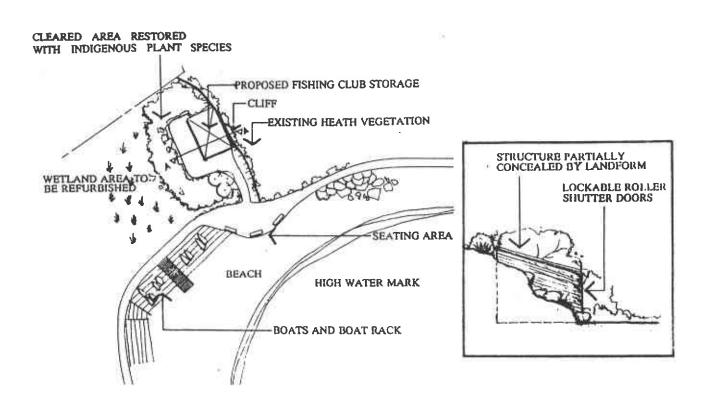
- Acknowledge establishment of Gordons Bay as an Intertidal Protected Zone as
  declared by NSW Fisheries. This declaration should be acknowledged through
  the provision of signage (refer Signage Section 6.9), which defines the activities
  prohibited by this declaration.
- Treatment to the stormwater outlet should be subject to a separate hydraulic study - refer Management Strategies, Section 7.1.

# 6.3. Zone 3 - Fishing Club

This zone includes the fishing club house structure, the boats and boat racks located at the head of the bay.

The recommendations for this zone are as follows.

• Relocate the club house facility to the cleared garden area behind and demolish the existing structure. The new building is to be sited and the surrounding area treated so as to visually screen the structure from adjacent areas. Refer Figure 10. The building should be designed to incorporate the existing equipment and facilities found within the existing structure and take into account the future needs of the club. An external cold water shower should be located adjacent to the club.



PLAN SECTION

# Figure No. 10: Fishing Club Relocation

Reduce the number of boats and the extent of boat racks on the beach to a level more compatible with the capacity of the beach area, thus allowing a portion of the beach to be used by the public. Discussion concerning the number of boat racks on the beach should be raised in the future when details about the club house relocation are being organised (possibly 1995/96 financial year).

Only those boats used more than once a month are to be stored on the beach area. Those boats which are less frequently used are to be removed from the site or stored within the new fishing club storage building.

• The use of the fishing club by professional fishermen shall be prohibited and this prescription shall be incorporated in future lease agreements.

#### Lease Rates – Boats and Boat Racks

The current lease between Council and Gordons Bay Fishing Club does not include the boat racks or the area of land they encompass. A new lease should be prepared and an appropriate lease rate should be determined for the boat rack area.

However, the contribution these boats make to the character of the bay should be taken into account when Council are assessing the lease rate, therefore a concessional lease rate may be determined.

As a guide, the Maritime Services Board apply a lease rate of \$15/m² per year for 'Wetland Moorings' in Double Bay and Vaucluse. The MSB rates are determined by the Valuer General and are a function of the value of the surrounding land.

As a guide the Department of Conservation and Land Management charges a fee for "Berthing Areas" attached to jetties, ramps and pontoons in waterways under its administration.

An alternative method of assessment would be based upon comparison with lease rates of comparable recreation facilities and clubs within the municipality.

Since the land is owned and controlled by Council the leasing rate must ultimately be determined by them. Council should take responsibility for the maintenance of the boat racks and proposed new storage facility.

Lease Rate – Fishing Club Storage Structure

A new lease and lease rate should be determined for the club storage structure in accordance with Council's general pricing policy. The area currently used by the existing structure should be integrated within the foreshore pedestrian path to create a small sitting and viewing area above the beach.

#### 6.4. Zone 4 - Car park

This zone includes the Clovelly car park on the northern headland, but excludes the Clovelly Surf Life Saving Club and kiosk.

The recommendations for this zone areas follows.

- In the long term, the car park should be redesigned to create a more efficient and visually acceptable car park and the creation of a parkland area to the foreshore. Refer Figure No. 11. The redesign should be subject to a traffic management study and detail landscape design.
- 8. MSB Waterways Authority, pers. comm..
- 9. Department of Conservation and Land Management pers. comm., Licensing Section.

Principle design considerations for the development should include the following.

- Reduce the extent of the car parking area to a more manageable and less conspicuous area. The traffic study should determine required capacity of the parking area.
- Reduce the visual impact of the car parking area by providing a number of smaller areas interspersed by planting. In addition, the traffic study should determine the required capacity of the parking area.
- Provide a foreshore park visually integrating the headland with the back drop areas and enveloping the car parking areas.
- Provide an open space link between Gordons Bay and Clovelly Beach by continuing the pedestrian path and the general landscape character of Gordons Bay and Clovelly.
- Careful attention should be given to the climate situation upon selecting plant material with particular reference to the sites exposure to southerly winds.
- Since the design and construction of the new car park and parkland area will require major capital input, it is envisaged these works would not be initiated for several years. As an interim measure, the existing car park can be reduced and a 20m strip reclaimed as a foreshore park as soon as funds are available. This foreshore park can then be integrated into any future proposal for the headland. The existing triangular grass area can be used as overflow parking in times of high use. (Refer Figure: 11).

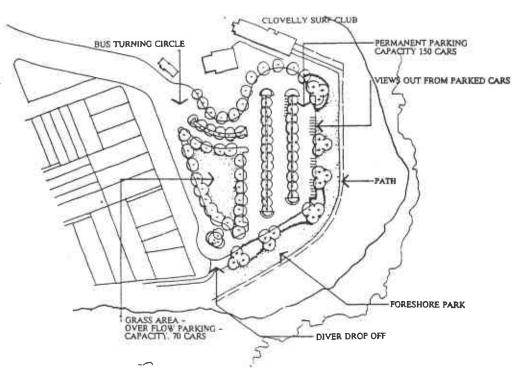


Figure No. 11: Interim Carpark Layout

# 6.5 Bushland and Natural Areas

The bushland and natural area includes all those vegetated areas within the reserve.

The recommendations for this zone are as follows.

- Continue and expand the bush regeneration programme. The bush regeneration programme is to encompass the entire reserve area and is to be formally controlled by Council. The activities of the bush regeneration programme are to be incorporated within Council's formal maintenance programme. Council are to provide trained staff to co-ordinate the programme.
- The reserve is to be returned to the indigenous vegetation. This will require removal of the extensive weeds and exotic species, particularly within the southern area. Exotic species, such as the Coral Trees, should be removed gradually as each plant dies and replaced with native species. This will be incorporated within the bush regeneration programme.
- Initial replanting and maintenance works of the area are to be initiated by Council in conjunction with the bush regeneration programme.
- A 50m section of the pedestrian path from Major Street to the fishing club is to be widened to accommodate small maintenance vehicles. The path width should be a minimum of 2.5m. The Council Engineer should assess the structural integrity of the path to accommodate vehicular loads. (Refer Figure 12).

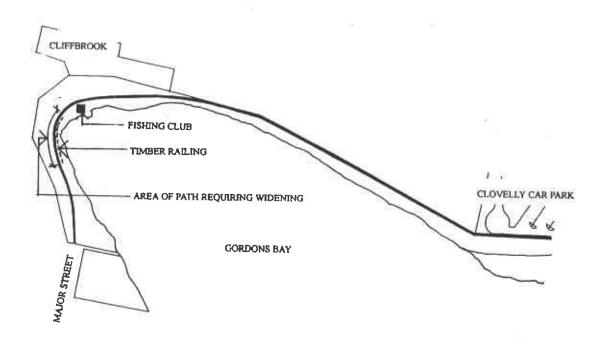


Figure No. 12: Major Street Path Widening

• Install a new 1.8m wide access path from Battery Street along the southern boundary of Cliffbrook. These works can be associated with the future development of the Cliffbrook site by UNSW. Refer Figure No. 13.

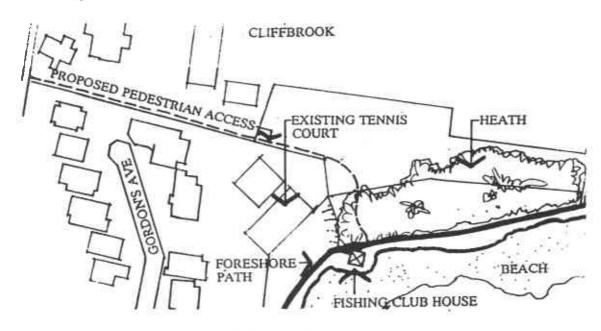


Figure No. 13: Access through Cliffbrook Estate

- The public reserve of Cliffbrook is to be managed and controlled by Council.
   This reserve encompasses a substantial area of natural heath and should be managed as part of the public reserve of Gordons Bay.
- The reed area at the head of the bay should be restored. The practice of slashing this area should be stopped and the wetland vegetation restored for water quality measures.
- All private access paths and steps which are deemed unsatisfactory under the following criteria should be removed.
  - safety hazard
  - unsightly
  - significant impact upon bushland potential.

Those paths and steps remaining should become the responsibility of Council and maintained as such.

# 6.6. Zone 6 - Boundary Areas

The boundary areas of the bay include all those areas adjacent to the study area including all the residential development.

The recommendations for this zone are as follows.

- The visual impact caused by the surrounding residential development should be reduced through a co-ordinated planting scheme within and adjacent to private lots. Refer to Management Strategies Section 7.6.
- The scenic quality of the bay shall be protected and enhanced by effective statutory processes. A review of the effectiveness of the LEP should be undertaken and visual quality controlled by a specific Development Control Plan established for this purpose.

# 6.7. Zone 7 - Major Pedestrian Paths

This zone includes the pedestrian path extending from Major Street to Clovelly car park and all associated adjacent areas.

The recommendations for this zone are:

• The existing concrete path between the Tower Street steps and the fishing club should be demolished and a new concrete path 1.8m wide should be constructed to engineers details. Refer Figure No. 14.

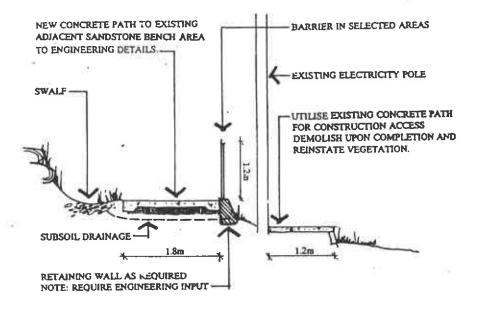


Figure No. 14: New concrete path between Fishing Club and Tower Street Steps.

- The structural integrity of the path between the fishing club and extending south along the cliff edge should be assessed by Council's engineer. Any rectification works are to be incorporated within the proposed widening of this footpath.
- All surface drainage along the path should be diverted in order to avoid health and safety problems.
- The footpath to the fishing club area should be redesigned to provide adequate sight lines and this work should be implemented in conjunction with the fishing club relocation.
- Detail landscape design is required to Major Street and car park entry areas. These areas should incorporate signage structures and create an entry identity to the area. These areas are to be subject to a detail landscape design exercise.
- Seats should be installed to areas along the footpath in locations indicated in (Figure No. 15.)
- Consideration be given to fencing the entire length of the new pathway system to provide greater public safety.

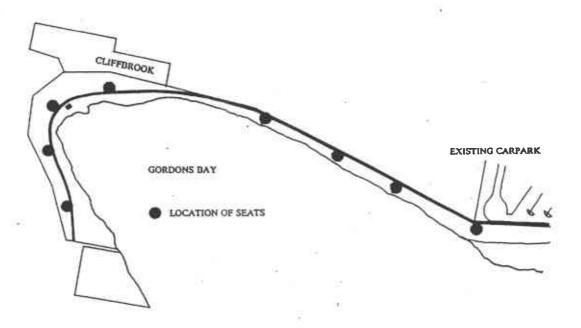


Figure No. 15: Seat Locations

#### 6.8 Community Awareness Programme

Many of the solutions to management problems at Gordons Bay involve passive action. This involves measures such as increasing public/community awareness and voluntary policing and reporting measures.

Issues which will be affected by these measures include:

- protection of intertidal invertebrates and limits on collection of marine creatures;
- nude bathing, dogs, alcohol and other Council prohibitions;
- the sensitivity of the environment and reasons for its protection;
- dumping of rubbish, and
- cleaning of fish in the reserve or beach area.

To assist in promoting awareness of these issues, a system or network of communication should be established so that the appropriate authority can be contacted to act upon specific problems as they occur. For example if a person is seen collecting prohibited marine species or spear fishing, then NSW Fisheries should be contacted and informed.

The establishment of Honorary Rangers should be investigated to determine the appropriate procedures and methods of operation.

The concept of community awareness can be affected initially through such measures as regular newsletters distributed to local residences or regular meetings. The formalisation of the Gordons Bay Consultative Committee into a permanent community body could form the basis of the programme.

# 6.9 Signage

Signage to Gordons Bay will play a major role in communicating the necessary information to the public. Messages such as prohibition of nude bathing, dogs, alcohol, rubbish dumping and fish cleaning can be displayed in addition to expressing the environmental sensitivity of the area and the need to protect the environment.

Rather than have a profusion of eclectic signage through the bay and impacting upon the visual quality of the area, an integrated system of signage can be employed to be both effective and visually acceptable.

Signage 'stations' (Refer Figure No.'s: 16 and 17), consisting of one structure but displaying various graphic messages, can be located at the major entrances and one at the head of the bay near the fishing club structure.



Figure No. 16: Typical Signage Stations

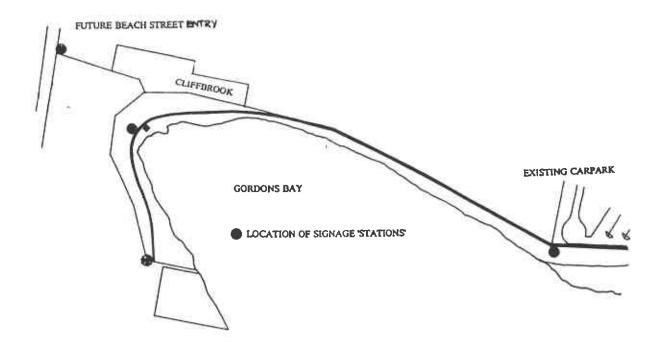


Figure No. 17: Location of Signage Stations