

NATURE CONSERVATION COUNCIL of NSW Coastal Policy

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Preface

The coastal zone is largely defined as the sea-land interface including the marine environment, rivers and estuaries, sandy beaches, rocky headlands and platforms, coastal heaths, mangroves, littoral rainforest, forests, wetlands and salt marshes, extensive flood plains, lagoons, etc., and all their dependent plant and animal species. This Policy aims to address activities within this zone to conserve and enhance the environmental, cultural and social values our unique coastal areas support.

The health of the marine, estuarine, terrestrial and intertidal environments that constitute the coast is of significant concern to the communities of coastal NSW. A Policy to conserve important natural, amenity, public accessible, recreational and intrinsic resources through ecologically sustainable development needs to be embraced.

The capacity for humans to deplete coastal biodiversity, expanded at an exponential rate throughout the last century. Loss of habitat and over-exploitation of the coastline for development are the primary threats to coastal biodiversity. The principle contributors to this degradation include land clearing, water pollution and poorly managed land use activities.

This policy should be considered in conjunction with other related NCC policies on issues such as: Fisheries and Aquaculture; Water; Native Vegetation; Aboriginal Interests; Waste Management; and Greenhouse.

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1. Introduction

The first Nature Conservation Council of NSW (NCC) Coastal Policy was endorsed by the 1990 Annual Conference and presented policy statements on:

- Planning and Management;
- Coastal Land Use: Coastal Protection; Development; Pollution; Vegetation; Intertidal Zone; Vehicles on Beaches; Impact of the Greenhouse Effect; and
- Public Education, Awareness and Participation.

Since the development of NCC's 1990 Coastal Policy, the release of the following NSW Government Policies and Commitments have come into play and need to be considered:

1.1 NSW Coastal Policy 1997

The NSW Coastal Policy is intended to fulfill the Government's election commitment to manage the coast in an ecologically sustainable way. The objective of the Coastal Policy is to protect and conserve the coast for future generations.

Initiatives of the Coastal Policy include:

- Prohibiting new sandmining ventures in coastal National Parks and other environmentally sensitive areas;
- Banning the development of tourist resorts that impede public access to beaches;
- Prohibiting development on the beach and fore dunes (other than for essential purposes such as lifesaving clubs); and
- Re-forming the Coastal Council as a source of professional and independent advice to the Government on Coastal Management Issues.

The NSW Coastal Policy provides for the following Goals, which cover an array of strategic actions, that State and Local Government agencies are obligated to implement:

- Natural environment protected, rehabilitated and improved;
- Coastal processes and hazards recognised and accommodated;
- Aesthetics qualities protected and enhanced;
- Cultural heritage protected and enhanced;
- Ecologically sustainable development and use of resources;
- Ecologically sustainable human settlement;
- Appropriate public access and use;
- Information to enable effective management; and
- Integrated planning and management.

1.2 NSW Wetlands Management Policy

This Policy was endorsed by the State Government in 1996 and aims to apply the principles of Ecological Sustainable Development (ESD) to the management of wetlands across the State. It provides for the encouragement and management of wetlands to halt and where possible, reverse the:

- Loss of wetland vegetation;
- Decline in water quality;
- Decline in natural productivity;
- Loss of biodiversity; and
- Declining natural flood mitigation.

1.3 NSW State Rivers and Estuaries Policy

The State Rivers and Estuaries Policy was approved by the NSW Government in 1991 and established the framework for the management of rivers and estuaries of NSW and related ecosystems, such as wetlands. It is based on the "Total Catchment Management" philosophy defined in the Catchment Management Act 1989.

1.4 State Environmental Planning Policies

State Environmental Planning Policies have been adopted to provide clear management objectives and increased protection for sensitive coastal areas and activities. These include Coastal Wetlands - SEPP 14; Littoral Rainforest - SEPP 26; Sustainable Aquaculture - SEPP 62; and a SEPP for Canal Estates.

1.5 Healthy Rivers Commission Independent Inquiry into Coastal Lakes

The Healthy Rivers Commission conducted an Inquiry into Coastal Lakes to advocate for the existing powers of decision-makers to be applied more rigorously to protect and enhance the coastal lakes of NSW. Recommendations of the Inquiry provide a guide for the future management and conservation of each of our coastal lakes. The Final Report from this Inquiry will play a major role in the Comprehensive Coastal Assessment, a major component of the Coastal Protection Package.

1.6 Coastal Council Coastal Design Guidelines (draft)

The Coastal Council is the Government's advisory body on coastal planning and management and have designed a draft set of guidelines with reference to the NSW Coastal Policy 1997. The guidelines will be used as a guide for the future conservation, development and management of the NSW Coast within the principles of ecological sustainable development (ESD). The Guidelines also complement the NSW Coastal Protection Package.

1.7 NSW Coastal Protection Package

The Premier and Deputy Premier announced on 26 June 2001 a \$11.7 million coastal package to protect the State's beaches and headlands for future generations. The key elements of this package are:

1.7.1 Comprehensive Coastal Assessment

The Comprehensive Coastal Assessment (CCA) is an \$8.6 million program over 3 years that aims to assess the environmental, social and economic values of the State's 1300 km coastline. The CCA will be conducted in the coastal zone as defined in the NSW Coastal Policy, including the areas added by this package. It will also include adjacent coastal lands that are intrinsically linked to coastal land management.

The CCA will provide common data on, and an analysis of, the values of land within the coastal zone for use in planning and management decisions. This will involve standardising and integrating existing data sets and the identification and filling of significant data/information gaps. The CCA will give State and local government, industry and the community high quality information to make decisions about coastal development and conservation.

1.7.2 Protection State Environmental Planning Policy

The Coastal Protection State Environmental Planning Policy (SEPP) will provide consent authority to the Minister for Planning for major high-risk development proposals and development in sensitive locations along the coast. Areas where the SEPP may be evoked include major development on coastal lake foreshores, foredune/frontal dune areas, areas adjacent to nature reserves and areas containing high conservation value.

The SEPP will contain principles to guide plan making and other decision making processes in the coastal zone. The SEPP will give legal force to some elements of the Coastal Policy, including things such as building height controls, public access to beaches and good design principles.

1.7.3 Coastal Water Quality Management Strategy

It is anticipated \$1.2 million will be spent over the next two years on a Pilot Water Quality Monitoring Program that will be accredited under the State Water Monitoring Strategy. The program will focus on recreational water quality and will include training for council staff and accreditation of council water quality tests and facilities. It will provide clear, accessible recreational water quality information for waterway users based on the 'Beach Watch' program.

Marine water quality objectives for the NSW Coast will be developed in consultation with local councils, coastal management committees and interested stakeholder groups. Approximately \$825,000 will be spent on monitoring and risk assessment of shellfish harvest areas to determine if water quality is at an acceptable standard for the cultivation of oysters, mussels and other shellfish.

1.7.4 Extending and Updating the Coastal Policy

The NSW Coastal Policy will be extended to cover the majority of the NSW Coast (with the exception of Sydney Harbour and Botany Bay) with the additions of local government areas extending from Newcastle in the north to Shellharbour in the south. The coastal zone for beachside Sydney local government areas will be restricted to areas affected by or affecting coastal processes. This will include areas such as beaches, foreshores, headlands and cliffs.

Additionally, a review and update of the Coastal Policy involving coastal communities, relevant agencies, local government, industry and other interest groups is planned. This will include comprehensive data collection and mapping of the NSW coastal zone.

1.7.5 Amendments to the Coastal Protection Act

Part 3 of the Coastal Protection Act will be amended to require the preparation of Coastline Plans of Management for any beach area likely to be subject to emergency works and/or public access constraints. These amendments will safeguard public access and will be developed in consultation with key interest groups.

1.7.6 New Coastal Zone Management Manual

The widely used Coastline Management Manual (1990) and Estuary Management Manual (1992) will be reviewed and combined into a single updated manual. The new manual will reflect the principles of the NSW Coastal Policy, the proposed amendments to the Coastal Protection Act and incorporate broad-based natural resource management principles.

1.7.7 Other Initiatives

A review of the Government's coastal land acquisition programs will be undertaken to ensure they are comprehensive, complementary and effective.

Enhanced consultation and participation roles for Aboriginal communities in coastal management will be investigated.

2. Definitions

2.1 Coastal Zone - Coastal Zone is defined to include all land and water bodies from the head of the catchments of watercourses flowing into the sea and three nautical miles seaward of the mainland and offshore islands. Including one kilometer landward of the open coast high water mark and a distance of one kilometer around all bays, estuaries, coastal lakes, lagoons and islands.

2.2 Wetlands - Wetlands are areas of land subject to permanent or periodic inundation and substantially retaining a cover of natural vegetation which generally displays hydrophytic characteristics, or capable of regenerating vegetation to fulfill this criterion (these include mangrove, saltmarsh and seagrass habitats).

2.3 Waterways - Waterways are any lakes, watercourses, wetlands, estuaries, lagoons, swamps or inlets, both permanent and ephemeral.

3. Principles

3.1 Coastal planning and management must identify and protect existing coastal ecosystems and biodiversity;

3.2 Coastal planning and management must identify and rehabilitate degraded coastal ecosystems;

3.3 Coastal planning and management must identify and maintain areas of cultural and environmental significance;

3.4 All sectors of the community must be resourced and facilitated to participate in all stages of planning, development and review processes;

3.5 Development projects must not adversely affect areas of identified environmental or cultural significance; and

3.6 Development projects must minimise their associated impacts on the environment through the application of all appropriate planning and design methods.

3.7 Any development or rezoning of land should be in the context of the NSW Coastal Policy including development and amendments of Local Environment Plans, Regional Environment Plans, Development Strategies and Masterplans, and must also be consistent with other relevant government policy and legislation including the proposed Coastal SEPP; and

3.8 All areas that should never be developed upon need to be identified, listed and protected for biodiversity and future generations.

4. Objectives

- 4.1 To identify, protect and enhance the natural coastal environment and conserve viable coastal ecosystems;
- 4.2 To encourage rehabilitation of degraded natural areas;
- 4.3 To urge all levels of government to restore, maintain and protect coastal ecosystems by adopting sound: principles, objectives, planning and management. This can be achieved via changes to: legislation, government agencies and planning systems, land use management and coastal planning, and public education, awareness and involvement; and
- 4.4 To ensure an Ecological Sustainable Coast for NSW consistent with State and National conservation objectives.

5. The Role of Government

5.1 The Role of the State Government

5.1.1 The State Government should develop and implement a "vision" for the coast:

- a) Reflecting the recommendations of the National Coastal Management Policy;
- b) Incorporating the concept of ecologically sustainable development; and
- c) Having goals of greater certainty and reduced conflict in planning and management.

5.1.2 The State Government should coordinate and maintain a State Coastal Coordination Agency/Council responsible for establishing the "vision" and coordinating government agencies;

5.1.3 The State Government should prepare and implement the State Environmental Planning Policy (SEPP) for the NSW coast reflecting the "vision" for the coast;

5.1.4 The State Government should immediately institute a program of Regional Environmental Studies of the coastal zone prepared on a regional-catchment basis;

5.1.5 The State Government should empower the Coastal Council to undertake a review of all NSW legislation likely to affect the coastal region;

5.1.6 The State Government should revise and update the Coastal Protection Act to reflect the recommendations of the National Coastal Management Policy, in consultation with the Coastal Council, other stakeholder groups and the general public;

5.1.7 The State Government should amend the Environmental Planning and Assessment Act to require that:

- a) Designated development includes tourist developments, mineral sands mining, off-shore mining and waste disposal, all dredging operations, coastal engineering works and forestry;
- b) There be automatic third party rights of appeal against environmentally damaging development; and

c) Proposals under Part V be determined by an independent authority rather than the proponent government authority.

5.2 State Government Planning

5.2.1 The State Government should:

a) Require that a consent authority, the Director, the Minister or a determining authority, comply with the aims, objectives, policies and principles contained in state, regional and local planning instruments;

b) Require that all Government policies, guidelines, all and development projects relevant to the coast be consistent with state, regional and local planning instruments;

c) Require that SEPP's, REP's and LEP's be consistent;

d) Prohibit flexible development controls in non-urban, rural and natural lands along the coast;

e) Require a local environmental study to be prepared for all re-zonings of coastal land;

f) Not allow to be weakened or removed, zonings or provisions identifying land for scenic protection, environmental protection, escarpment protection, foreshore protection, water catchment or wetland purposes; and

g) Require that local councils not be the consent authority in developments impinging on significant environmental areas; the Minister for Planning should have the concurrence role, in consultation with the National Parks and Wildlife Service, the Department of Land and Water Conservation and NSW Fisheries.

5.3 The Role of the Federal Government

5.3.1 The Federal Government should immediately establish a National Coastal Management Working Group. The terms of reference should require:

a) The development of a statutory National Coastal Management Policy, which is consistent with the principles of ecologically sustainable development, the State's Coastal Policies and the NSW Coastal Protection Package;

b) The formulation of strategies to ensure policy implementation, such as education and research programs, funding to state governments provisional upon the achievement of performance criteria, and other financial incentives;

c) The establishment of a joint federal/state Australian Coastal Management Council to oversee the implementation of policy and long-term conservation of the coastal resource (similar to that of the NSW Coastal Council).

5.3.2 The Federal Government should enact a Coastal Zone Management Act following agreement on the national policy; and

5.3.3 The Federal Government should establish a national database inventory for the coast assisted by free transfer of information between government agencies.

5.4 Framework for Coastal Protection - Coastal Protection Package

5.4.1 Comprehensive Coastal Assessment

5.4.1.1 All Coastal Lands are to be assessed for ecological significance and sensitivity. This includes the entire coastal zone as defined in the NSW Coastal Policy 1997;

5.4.1.2 There should be a moratorium on re-zoning in all Coastal LGA's until the CCA process is complete;

5.4.1.3 Development in sensitive areas should be formally deferred until the CCA process is complete;

5.4.1.4 The CCA must determine the capacity of coastal lands and waters to provide aquaculture facilities, and identify areas that are never to be made available for aquaculture;

5.4.1.5 The CCA must assess the capacity of *existing* water, power, transport and waste infrastructure in determining appropriate zonings;

5.4.1.6 The CCA must identify significant or representative terrestrial and aquatic ecosystems that will be protected within a formal reserve system, or protected under the SEPP, Coastal Protection Act or other means such as LGA environmental protection zones;

5.4.1.7 The CCA should identify areas of specific cultural and heritage value, as well as the 'environmental, social and economic value of the State's 1300 km coastline'; and

5.4.1.8 All information that is available in community groups, universities and scientific groups across the State is to be utilised for the CCA, this will assist in gaining local knowledge of sensitive areas and increase the capacity for the community to get involved in coastal management and government processes.

5.4.2 Coastal State Environmental Planning Policy

5.4.2.1 The SEPP must provide strict definitions of coastal settlements (cities, towns, villages, and hamlets), and set out statutory planning requirements that provide a healthy environment in developed zones, maintain the unique character and amenity of settlements, and protect the ecological function of the surrounding environment.

5.4.2.2 Planning for coastal cities and towns should include:

a) provisions for population growth within the current settlement footprint by encouraging infill development as opposed to urban sprawl (especially important for maintaining the character and appeal of coastal towns);

b) wildlife corridors between hinterlands and the foreshore, through built-up areas;

c) habitat links and buffer zones to bring the natural environment into urban areas for community enjoyment;

d) encouraging walking, cycling, and the use of public transport;

e) environmental education facilities such as walking trails with interpretive signage; and,

f) encouraging growth of inland settlements, with appropriate coastal transport links, to detract from the current high demand for development in the more fragile coastal zone.

5.4.2.3 Planning for coastal villages and hamlets should include:

a) ensuring that villages and hamlets stay separate from each other, and larger urban nodes, in an effort to maintain their unique character and appeal;

b) strictly limiting land release to minimise development encroachment on surrounding ecologies, which are vital for maintaining the environmental amenity of villages and hamlets;

c) provision of wildlife corridors and buffer zones; and

d) capping the number of visitors by placing a bed limit on tourist facilities.

5.4.2.4 The SEPP (as well as LEP's) should require all new developments and settlements, and re-developments, to adopt appropriate water sensitive urban designs;

5.4.2.5 In Clause 3(1), under the definition of 'sensitive coastal location', the distance of 100m (in (a) and (g)) must be extended to 500m;

5.4.2.6 The SEPP must require a consent authority to comply with, rather than merely consider, 'master plans', in the granting of consent for the subdivision of lands;

5.4.2.7 The SEPP must make a process available for the Minister of Planning to require the amendment of a master plan that has previously been endorsed by Planning NSW and adopted by a council;

5.4.2.8 There is a need for definition of the criteria that will trigger Ministerial intervention in development applications in sensitive coastal areas under clause 10 (2)(b), otherwise known as a 'call in'. The process that is undertaken following such intervention must be defined also;

5.4.2.9 The SEPP must provide a process by which the community, through due process and ministerial ratification, can nominate a 'significant coastal development' (Schedule 2), or a 'sensitive coastal location' (defined in Clause 3);

5.4.2.10 The SEPP must prohibit inappropriate land clearing and underscrubbing activities except as a condition of development consent;

5.4.2.11 The SEPP must provide a process for the identification and protection of lands of particular environmental or cultural significance and then prohibit any future development on those lands;

5.4.2.12 The SEPP should prohibit any future development on headlands;

5.4.2.13 Appropriate inclusion of more rigorous Environmental Impact Assessment in decision making process. The SEPP must require that consent is granted to developments under Clause 7(b) on the basis of the recommendations of a rigorous Environmental Impact Assessment, not simply the consideration of a number of vague environmental matters listed under Clause 8;

5.4.2.14 The SEPP, along with other environmental planning processes, must instigate a

list of environmental consultants, independently accredited and unanimously approved by a number appropriate agencies (NPWS, DLWS and EPA for instance) to conduct appropriate Environmental Impact Assessments;

5.4.2.15 The SEPP should require coastal councils to submit a publicly available annual report for monitoring and auditing planning and development proposals and approvals; and

5.4.2.16 The SEPP must include effective mechanisms to ensure that the community is facilitated to take part in all planning and development processes.

5.4.3 Coastal Water Quality Management Strategy

5.4.3.1 The Coastal Water Quality Management Strategy (CWQMS) must include stringent monitoring of nutrient and chemical discharge from aquaculture facilities;

5.4.3.2 The CWQMS must ensure that there is no upgrading (increase in discharge) of ocean outfalls of any kind;

5.4.3.3 The EPA must address pollution from land based runoff by supporting the SEPP and local government to ensure that effective Water sensitive urban design (WSUD) principles are a requirement of all new developments and re-developments;

5.4.3.4 The CWQMS must consider ecological functions and processes and the ecological effects of combinations of water quality parameters rather than the use of simple environmental indicators; and

5.4.3.5 To minimise repetition of data collection and maximise efficiency of monitoring programs, the water quality management strategy must make use of data from other programs, such as Streamwatch and Beachwatch.

5.4.4 Extending and Updating the Coastal Policy

5.4.4.1 The NSW Coastal Policy should become a statutory document through linkage to the Coastal Protection Act 1979;

5.4.4.2 The NSW Coastal Policy needs to be amended to include the entire NSW Coastal Zone with the exemption of the Sydney Metropolitan region only - the central coast and south coast (south of Sutherland) must be included;

5.4.4.3 Adequate refuelling and sewage pump-out services must be provided for all boats;

5.4.4.4 Anchoring is not to be permitted over seagrass;

5.4.4.5 Permanent public mooring sites should be established in both high use and environmentally sensitive areas;

5.4.4.6 Development protocols/guidelines are needed for the construction of permanent moorings; and

5.4.4.7 High impact activities (such as jetskis and wake boarding) should be restricted in identified sensitive areas.

5.4.5 Amendments to the Coastal Protection Act

5.4.5.1 Part 3 of the Coastal Protection Act should be amended to include that the Minister has a concurrence role in the protection of the sea, beaches, dunes, shoreline, foreshore, significant habitats for threatened species, mangroves, wetlands, seagrasses etc (not just the shoreline, dunes and beaches);

5.4.5.2 Third party rights and public participation rights must be embodied within the legislation to provide notification, exhibition and public comments on development proposals affecting the coast that are not designated developments;

5.4.5.3 No new construction and removal of existing retaining/break walls, culverts, weirs etc, that unnecessarily restrict tidal flow, except for approved emergency works;

5.4.5.4 Provision should be made for beach national parks where the following activities are banned: collection of shells, bait, etc; use of recreational off-road vehicles; and domestic animal exercise;

5.4.5.5 Public access must be guaranteed to all foreshores, dunes, headlands and beaches;

5.4.5.6 River, wetland and other water bodies must be fenced/protected by a 200m buffer from stock encroachment; and

5.4.5.7 No artificial sand movement. Beach nourishment and sand mining adversely impact upon coastal ecology and have only short-term benefits. The continued costs to the community outweigh the benefits and feasible alternatives need to be explored.

5.4.6 New Coastal Zone Management Manual

5.4.6.1 The floodplain, acid sulfate soil, coastline and estuary management manuals need to be combined to provide a holistic management approach to the NSW coastal zone; and

5.4.6.2 The new manual must include tools to adequately resource, educate and facilitate community involvement in coastal zone management.

6. Coastal Management - Coastal Protected Areas

6.1 Aquatic Reserves, Marine Parks and National Parks/Reserves

6.1.1 The creation of a comprehensive, adequate and representative reserve system for coastal lands and estuarine and marine ecosystems is supported;

6.1.2 The use of comprehensive regional assessments are required to evaluate the natural resources of whole bio-regions, across all land tenures, provided that such assessments employ consultation with Aboriginal people, public participation and scientifically valid and publicly accepted methodologies;

6.1.3 A minimum of 20% of each habitat type across the coastal waters of NSW is to be fully protected within 'no-take' sanctuary zones within aquatic reserves and/or marine parks, as a first step towards the establishment of a comprehensive, adequate and representative (CAR) system of marine sanctuaries;

6.1.4 Guidelines and principles already established by the Australian Committee of IUCN for the selection and establishment of marine and estuarine protected areas should be

adopted;

6.1.5 All representative vegetation/habitat types to be protected within a formal reserve system. This includes all local, regional, state and Nationally Important ecosystems and habitats so that these are protected adequately under the CAR system;

6.1.6 Coastal land and waters adjacent to terrestrial protected areas should be protected within no-take sanctuary zones or intertidal protection zones;

6.1.7 A process should be established to facilitate community nomination of aquatic reserves, marine parks and national parks/reserves;

6.1.8 A process should be established for immediate allocation of adequate funds, through the NSW Coastal Acquisition Fund, to permit the public acquisition of significant coastal lands currently in private ownership, at the earliest possible opportunity;

6.1.9 An immediate moratorium is needed on development (including re-zonings and subdivisions) or new commercial operations, in coastal lands and estuarine and marine ecosystems identified as being likely to be required for a CAR reserve system;

6.1.10 The enactment of NSW legislation is needed for a process for comprehensive regional assessments of coastal lands and estuarine and marine ecosystems in all regions of the state. This process should involve public participation and stakeholder consultation, and be publicly discussed and agreed before being legislated;

6.1.11 Activities such as mineral exploitation and intensive aquaculture must not be permitted within any aquatic reserve, marine park or national park/reserve.

6.2 Wetlands

6.2.1 There is to be no further development in estuarine wetland areas;

6.2.2 There is to be no development in close proximity to or adjacent to SEPP 14 Wetlands;

6.2.3 There is to be no removal of estuarine wetland habitats such as mangroves, seagrass or saltmarsh by methods including dredging, jetties, bridges and foreshore development and reclamation;

6.2.4 Sufficient river flows and ground water supplies should be provided to maintain the viability of natural wetlands in keeping with climatic and seasonal variability;

6.2.5 The construction of additional artificial wetlands is encouraged as long as there is a policy of strict protection of natural wetlands;

6.2.6 Priority should be given to protecting outstanding examples of under-represented wetland habitat types for inclusion in national parks and nature reserves;

6.2.7 Priority should be given to wetland interpretative facilities in plans of management for wetlands in national parks and nature reserves;

6.2.8 The Government should amend State Environmental Planning Policy No. 14 - Coastal Wetlands, to:

- a) Restrict development with 200m designated buffer zones around wetlands;

- b) Require a public inquiry into any proposal to exclude a wetland from the Policy; and
- c) Allow public nominations of areas to be included under the Policy, and include:
 - i) Wetlands in the region from the Illawarra to Broken Bay;
 - ii) Small wetlands and gallery stands below the SEPP 14 size limit; and
 - iii) Degraded and regenerating wetlands with high intrinsic values.

6.2.9 All significant coastal wetlands to be protected within "Aquatic Reserves" or under SEPP 14 - Coastal Wetlands, or within the National Parks Estate, or zoned for environmental conservation in council LEPs;

6.2.10 All nationally significant wetlands nominated and protected as World Heritage and/or Under Ramsar Convention; and

6.2.11 All internationally or nationally important wetland species protected under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 and/or JAMBA and CAMBA.

6.3 Littoral Rainforest

6.3.1 All remaining littoral rainforest to be protected under SEPP 26 or within the National Parks Estate or zoned for environmental conservation in council LEPs;

6.3.2 Restrict development with 200m designated buffer zones around littoral rainforest;

6.3.3 There should be no net loss of littoral rainforest; and

6.3.4 Net increase in quality and quantity of littoral rainforest habitat to be gained through the catchment management process and Catchment Blueprint Actions.

6.4 Aboriginal Lands

6.4.1. Areas of significance to Aboriginal people should be identified and protected (See NCC Policy - Aboriginal Interests and Nature Conservation).

6.5 Waterways

6.5.1. Foreshore management zones should be established around all waterways. The width of these should be initially set at 500m, and PlanningNSW and Department of Land and Water Conservation should conduct studies to finalize the width and location of these zones. These should be protected from development at all times;

6.5.2 Where possible, all foreshores should be re-instated with riparian vegetation for corridor provisions and water quality protection;

6.5.3 All areas that are infested with invasive weed species such as *Caulerpa taxifolia*, to be declared an 'exclusion zone' or 'no go' zone by the Waterway Authority and NSW Fisheries to prevent the spread of these species;

6.5.4 Mooring buoys to be encouraged as opposed to anchoring and marina

development in all waterways across the state; and

6.5.5 The Waterway Authority, in conjunction with NSW Fisheries to develop a "Code of Practice" for high powered vessels in waterways with an aim to protect the intrinsic and natural values of the waterway, prevent loss of amenity from high powered vessels and other intense uses of the waterway.

6.6 Waterways within reserves

6.6.1 National Parks to have jurisdiction over all waterways within reserve systems (this includes aquatic reserves).

6.7 Beaches and intertidal zones adjoining reserves

6.7.1 All terrestrial protected areas are to be linked to an intertidal protected area and adjoined by an aquatic 'no-take' sanctuary zone. This is to gain comprehensive, adequate and representative protection of all coastal habitat types across the state and maintain important protected area habitat linkages. These areas are to be managed by National Parks and Wildlife Service.

6.8 Heritage Values

6.8.1 Heritage items and precincts of cultural and environmental significance to the community should be identified, protected and enhanced in consultation with The National Trust, the National Parks and Wildlife Service, the Heritage Council of NSW and local Aboriginal land councils.

7. Coastal Land Use - Development

7.1 General principles

7.1.1 Developments should not impact adversely on adjoining natural areas (ie. pollution, runoff, etc.), and should be consistent with the scale of local landscape and vegetation;

7.1.2 There should be no infill and ribbon development between existing settlements on the coast;

7.1.3 Development should be directed away from coastal villages to larger towns and nodal transport routes;

7.1.4 Building height restrictions should be imposed to preserve the integrity of the landscape. High rise buildings should be permitted only in major urban areas, to specified height limits and should be prohibited adjacent to the shoreline;

7.1.5 All developments, re-zoning, LEPs, Masterplans and Development Strategies are developed or amended in accordance with the NSW Coastal Policy; and

7.1.6 Any future development or redevelopment must include features that minimise, harvest, and/or treat stormwater runoff and wastewater to reduce impacts on the natural water cycle as much as possible. These features might include:

a) Grass swales, median strips and porous surfaces that allow increased infiltration from storm events;

b) Bio-filtration systems that collect, treat and convey runoff to constructed, or natural, wetlands and watercourses;

c) Harvesting roof runoff, usually in rainwater tanks, but also in constructed aquifers or underground tanks for lower aesthetic impact. (This water can then be used for hot water services, toilet flushing, irrigation, and car washing, with appropriate water quality being maintained by first flush devices in downpipes, and the use of micron grade filters or recirculated sand filters.);

d) A wide range water saving devices; and

e) Community education.

7.2 Urban Development

7.2.1 Urban development should be confined within the coastal boundaries of existing cities and towns, in full consultation with community groups;

7.2.2 Dual occupancy and cluster and terrace style housing, in combination with open space and parklands in appropriate areas, should be encouraged to combat urban sprawl, but planned population levels should not be exceeded in any locality;

7.2.3 There should be no urban sprawl, blanket re-zoning or ribbon development;

7.2.4 The Coastal Council Design Guidelines for NSW Coast, should be implemented by all Local Council's in preparing amendments to LEPs, Master Plans and Development Strategies; and

7.2.5 All coastal development must be consistent with the NSW Coastal Policy.

7.3 Rural development

7.3.1 All prime agricultural land should be retained for agricultural purposes, subject to consideration for nature conservation purposes when the land is still, or could be rehabilitated to, a substantially in a natural condition;

7.3.2 Subdivisions of rural land into small-holdings generally leads to degradation of environmental values, and should only be allowed under very stringent conditions, within carefully prescribed zones;

7.3.3 The Coastal Council Design Guidelines for NSW Coast, should be implemented by all Local Council's in preparing amendments to LEPs, Master Plans and Development Strategies;

7.3.4 There should be no urban sprawl, blanket re-zoning or ribbon development; and

7.3.5 All coastal development should be consistent with the NSW Coastal Policy.

7.4 Tourism Development

7.4.1 There should be a moratorium on coastal development for tourism purposes until:

a) The process of identification, conservation and protection of natural coastal environments has been completed through the CCA;

b) Regional Environment Plans have been completed by the Department of Planning to guide the location and style of coastal tourism in NSW; and

c) Zonings consistent with these REPs are in place and the NSW Coastal Policy.

7.4.2 Major tourist developments should be permitted only in urban zonings;

7.4.3 All tourism development should be consistent with the NSW Coastal Policy; and

7.4.4 All tourism developments should incorporate eco-tourism components and must be energy and water efficient. Developments must not be approved if developments are not designed with Water Sensitive Urban Design or SEDA's energy efficiency program.

7.5 Development Strategies/Master Plans

7.5.1 The Coastal Protection SEPP must give the Minister of Planning the power to amend development strategies and Master Plans where required, even if previously endorsed by Planning NSW. This is imperative as these plans are established to guide the future planning and development in each LGA.

7.6 Re-Zoning - LEP Amendments

7.6.1 Areas zoned for development that have not been developed on, and provide for biodiversity or intrinsic natural values, should be re-zoned into conservation zones in all Council LEPs or REPs.

7.7 Provision of Appropriate Infrastructure and Design

7.7.1 Existing infrastructure, such as water supply, power, roads and waste management should be reviewed and adapted to minimize environmental impact;

7.7.2 No additional development should be approved until the environmental impacts of infrastructure expansion (initial and culminative) have been assessed, and where acceptable, the required infrastructure has actually been provided;

7.7.3 Local councils should be prevented from approving development proposals which exceed the physical capacity of the existing infrastructure;

7.7.4 Communities should be encouraged to use reticulated water and sewerage services if these alternatives are adequate in terms of both environmental and health standards;

7.7.5 Effluent re-use schemes should be devised and implemented in all rural and sub-rural lands. There is to be no upgrading of ocean outfalls to allow for an increase in sewage effluent disposal at sea;

7.7.6 All new developments and re-developments should incorporate water sensitive urban design (WSUD) including water efficiency, demand management appliances, rainwater tanks, grassed swales, porous pavements, onsite stormwater detention; and

7.7.7 All new developments and re-developments should incorporate energy efficiency design such as SEDA's energy efficiency home package/strategy.

7.8 Caravan Parks

7.8.1 Caravan parks should not be located on beachfronts or foreshores;

7.8.2 Caravan parks in close proximity to natural areas should not be located where they have visual impact, pollute waterways or restrict beach access;

7.8.3 Existing parks which have these negative impacts or are on beach fronts should be progressively relocated, ensuring that this is not done at the expense of public access to foreshore areas or in favor of private development;

7.8.4 Caravan Parks are only to be built outside of sensitive areas and there should be minimum clearing for the construction of these developments (they should occur within the natural landscape with little or no excavation works required) and

7.8.5 Caravan parks should be required to have adequate water, sewerage and drainage services.

7.9 Canal Estates and Dredging

7.9.1 Canal Estates are banned under SEPP ...anything for existing ones?

7.9.2 An Environmental Impact Statement should be prepared for all dredging proposals in NSW waters;

7.9.3 Strict sediment controls should be enforced;

7.9.4 Dredging should not occur in areas where toxic sediments could be dispersed into the environment;

7.9.5 Dredging should not occur in areas where sediments may impact upon aquatic vegetation, threatened species or populations; and

7.9.6 New industry that requires the dredging and maintenance of waterways for shipping, must investigate alternative sites for development. This is to protect the natural environment from the irreversible impacts of dredging.

7.10 Coastal Flooding

7.10.1 No further development should be allowed within the 1 in a 100 year flood zone or natural flood holding basins in urban and rural areas;

7.10.2 Development presently within floodways should be gradually relocated where practicable; and

7.10.3 All areas zoned for development or identified for future development in Council Development Strategies to be amended by Planning NSW. There should be no further development in flood prone land.

7.11 Wetlands

7.11.1 There is to be no further development in estuarine wetland areas;

7.11.2 There is to be no development within 200m of SEPP 14 Wetlands;

7.11.3 There is to be no disturbance or removal of estuarine wetland habitats such as

mangroves, seagrass and saltmarsh by methods including degrading, jetties, bridges and foreshore development; and

7.11.4 No development that threatens the viability of seagrass should occur, particularly if threatening *Posidonia* species.

7.12 Headlands

7.12.1 No developments should be allowed to occur on headlands. This must be legislated in the Coastal SEPP.

7.13 Coastal Lakes

7.13.1 There should be no further development on or within 200m of Coastal Lakes of Medium - High sensitivity and High Conservation Value as highlighted in the Healthy Rivers Commissions' Inquiry into Coastal Lakes; and

7.13.2 All development on or adjacent to coastal lakes should to undergo comprehensive environmental assessment prior to approval.

7.14 Beaches, Dunes and Foreshores

7.14.1 There is to be no further development on beaches, coastal dunes and foreshores in undeveloped areas; and

7.14.2 Any further developments within already built up areas should be consistent with the NSW Coastal Policy and Coastal Design Guidelines.

7.15 Offshore Islands and Rocky Outcrops

7.15.1 No development should be allowed on uninhabited offshore islands and rock outcrops except for safety purposes (ie. light houses);

7.15.2 No development is to be approved if runoff or potential adverse impacts from increased human access impacts upon rocky shores. For example, large subdivisions adjacent to or in close proximity to, or where drainage lines run to rocky shores or outcrops; and

6.14.2 Intertidal Protected Areas should be declared adjacent to Aquatic Reserves and/or Nature Reserves and/or National Parks.

7.16 Threatened Species

7.16.1 There is to be no development that impacts on a Threatened Species, Ecological Community of Endangered Population, or the habitat requirements for that species, Ecological Community or Endangered Populations listed under the Environment Protection and Biodiversity Conservation Act 1999, Threatened Species Conservation Act 1995 or the Fisheries Management Act 1994; and

7.16.2 All coastal areas where a Threatened Species, Ecological Community of Endangered Population is known or believed to exist should be identified and protected in State legislation as well as LEP's.

7.17 Acid Sulfate Soil

7.17.1 There should be no further development in actual or potential Acid Sulfate Soil (ASS) areas;

7.17.2 All actual and potential ASS should be managed in accordance with the ASS Management Advisory Council guidelines to minimise oxidisation;

7.17.3 The Acid Sulfate Soils Action Program to be administered by State Government in all areas where ASS is compromising water quality, vegetation growth, land productivity and causing declines in biodiversity;

7.17.4 The State Government should achieve increased community awareness of ASS problems in NSW and implement incentives for the community avoid development on, and sustainably manage these areas; and

7.17.5 No further development should be allowed in actual or potential ASS areas.

7.18 Agriculture

7.18.1 Access by stock to rivers and streams should be restricted;

7.18.2 Watering points should be as far away from rivers and streams as possible;

7.18.3 Runoff from watering points should be directed into diversion ponds or artificial wetlands;

7.18.4 There should be mandatory set back limits when fertilisers are being applied in the vicinity of rivers;

7.18.5 Soil conservation measures should be mandatory to avoid nutrients attached to soil particles being washed into waterways;

7.18.6 The government should provide tax incentives to fence and/or revegetate the areas beside waterways and wetlands to create a nutrient buffer strip. This program should be properly implemented and audited and appropriate incentives given;

7.18.7 Agricultural land use, particularly in floodplains is largely determinative of water quality. There should be a whole of government process established to ensure land use planning and management is improved and is consistent with environmental best practice;

7.18.8 There should be a moratorium on the licensing of new feedlots built near aquatic ecosystems (pending introduction of national guidelines which require zero nutrient contribution to waterways); and

7.18.9 All feedlots, fish farms, piggeries, poultry and other intensive animal husbandry adjoining or likely to impact on aquatic ecosystems should be licensed under the Clean Waters Act (NSW) and aim for zero nutrient contribution to waterways.

7.19 Improved Land Use and Management

7.19.1 Joint strategies should be developed and financial incentives provided for landholders to protect and conserve private wetlands;

7.19.2 Sustainable land use practices should be developed and promoted;

7.19.3 There must be concerted action to reduce the run-off of nutrients, sediment and other pollutants from urban, rural and industrial land-based activities;

7.19.4 The floodplain, ASS, coastline, wetland and estuary management manuals should be combined for an ecosystem management approach; and

7.19.5 Development proposals must undergo a public exhibition and consultation process. Approval of development proposals and licenses must require the development and implementation of an Environmental Management System (EMS), including mitigation measures and controls that are independently audited.

8. Coastal Management: Mining - Extraction

8.1 Offshore Mining and Exploration

8.1.1 There should be no further offshore exploration until a detailed inventory of coastal marine habitat is completed, and areas where mining should be excluded from are ascertained and reserved as marine protected areas;

8.1.2 There should be no offshore mining and exploration in water of a depth of less than 20m, within 2km of high water mark, or within 2km of reserves and other areas of environmental significance; (NB: The conditions of exploration licences are: no exploration in water <20m deep or within 500m of high water mark, or within 1km of reserve boundary.)

8.1.3 There is to be no mining or exploration works conducted within a protected area;

8.1.4 All existing mining and exploration leases in coastal protected areas as defined in this document should be cancelled and those areas affected rehabilitated; and

8.1.5 Offshore mining proposals for NSW should be allowed only after completion of a full Environmental Impact Statement.

8.2 Mineral Sand Mining

8.2.1 New mineral sands mining operations should not be allowed until the Federal Government has:

a) instituted a Resource Assessment Commission Inquiry into the Australian mineral sands industry; and

b) developed a policy on mineral sand mining and sand extraction (including offshore) in Australia;

8.2.2 Sand mining should not adversely affect significant scientific, cultural or environmental aspects of the coast;

8.2.3 There should be no new sand mining operations allowed in coastal wetlands, littoral rainforests, or on headlands, beaches, frontal dunes, foreshores or terrestrial and aquatic protected areas;

8.2.4 Existing operations in these locations should not be expanded, and when extraction is complete the area should be fully regenerated using local native species; and

8.2.5 All existing mining leases in coastal protected areas as defined in this document should be cancelled and those areas affected, rehabilitated using local native species.

9. Coastal Management: Pollution

9.1 Before being allowed to release wastes, polluters should be required to prove that there will be no harm to human health or the environment, and to provide solutions in compliance with government standards for management of wastes.

9.2 There should be an urgent review of current methods of sewage disposal and waste minimization to enable development and implementation of alternative technologies, processes and strategies employed elsewhere in the world.

9.3 Water Pollution

9.3.1 National guidelines on water quality, and national standards for the discharge of industrial waste should be developed based on the precautionary principle;

9.3.2 These industrial effluent standards should be incorporated into existing state and territory pollution laws;

9.3.3 There should be no discharge of sewage into the oceans;

9.3.4 All sewage discharged into any other environment should have full tertiary treatment;

9.3.5 There should be mandatory monitoring of the receiving waters of polluting activities, with the power to close down activities not meeting specified standards;

9.3.6 The discharge of toxic materials such as organochlorides, H.C.B.'s and heavy metals into the creeks, rivers or ocean, either directly or via the sewerage system should be banned;

9.3.7 There should be no discharge of liquid and solid wastes into the ocean;

9.3.8 The use of tributyltin antifouling paint should be prohibited unless it can be conclusively shown that it can be used with out adverse impact on the marine environment;

9.3.9 The development of oil spill contingency plans should continue, and adequate resources should be available at a number of localities and habitat types along the coast for use in emergency situations;

9.3.10 Reuse schemes are encouraged provided that environmental assessment is undertaken;

9.3.11 Exfiltration as a method of sewage disposal is not recommended and should be avoided so as to protect water bodies, particularly groundwater ecosystems and aquifer quality; and

9.3.12 All water and sediment contaminated above World Health Organisation Guidelines should be remediated using the most adequate technology available to minimise and prevent human and ecological health risks.

9.4 Pollution Reduction Strategies

9.4.1 The aim of pollution reduction strategies should be to ensure that there is:

a) Widespread adoption of management practices that will ensure no chemical load (including urban, heavy metals, pesticides) enters the river systems;

b) No pollution of surface or groundwater sources;

c) Licensing of industrial operators that encourages progressive reduction of discharges and polluted runoff from all industrial sites;

d) Development by the EPA of systems ensuring safe disposal of chemical containers and establishment in close co-operation with local government, other agencies, industries and the public;

e) A review of pesticide registration and labeling carried out in order to decrease the current unacceptable contamination of rivers and floodplain ecosystems with pesticides and herbicides escaping from properties upstream;

f) A requirement of new developments for residential, industrial, recreational and commercial purposes to minimise erosion risks, avoid pollution of stormwater runoff and enable treatment of runoff where this may be necessary to achieve the above aim;

g) A requirement for councils to identify and implement means of achieving the above aim in relation to storm runoff from existing urban areas;

h) A review of nutrient discharge to waterways from farm animal runoff; and

i) Organochlorine pesticides should be phased out, where not already banned.

9.5 Waste Disposal Licenses

9.5.1 The system of licenses for the disposal of toxic wastes should require waste reduction phasing into zero pollution, according to defined standards;

9.5.2 Severe penalties should be implemented and policed for breaches of licenses or for illegal dumping or discharge. It is absolutely essential that the NSW Government allocate sufficient resources for effectively policing offenders and imposing penalties; and

9.5.3 NCC supports the "Polluter Pays" principle.

9.6 Sewage

9.6.1 All Sewage Treatment Plants (STPs) should be licensed, monitored and audited;

9.6.2 STPs should not discharge to rivers, estuaries or the ocean;

9.6.3 STPs should be based on biological rather than chemical processes. Further, the government should fund a feasibility study of small scale 'green' STPs and waterless sewage composting systems;

9.6.4 Treated sewage should be de-watered and made available for beneficial reuse. The development of effluent reuse schemes should be encouraged for industrial and agricultural purposes;

9.6.5 The government should educate and regulate the population to reduce entry of chemicals and unbiodegradable matter to sewers;

9.6.6 The Rural Urban Sewerage Renewal Scheme should give priority to upgrading sewage treatment plants that impact on aquatic ecosystems and floodplains;

9.6.7 Stormwater and other urban run-off should be channeled separately;

9.6.8 A nationwide ban on phosphates in cleaning substances should be implemented;

9.6.9 The siting and design of septic tanks should be subject to stricter development control standards;

9.6.10 There should be an urgent review of current methods of sewage disposal and waste minimization to enable development and implementation of alternative technologies, processes and strategies employed elsewhere in the world;

9.6.11 Reuse schemes are encouraged provided that environmental assessment is undertaken;

9.6.12 Exfiltration as a method of sewage disposal is not recommended and should be avoided so as to protect water bodies, particularly groundwater ecosystems and aquifer quality. There should be no discharge of sewage into the oceans; and

9.6.13 All sewage discharged into any other environment should have full tertiary treatment.

10. Coastal Management: Vegetation

10.1 Vegetation clearance

10.1.1 Riparian buffer zones of at least 200m width should be protected from clearing on lands adjacent to waterways, lakes, reserves, frontal dunes, coastal cliff edges, the high water mark, and areas of environmental significance except for the purposes of securing public health and safety;

10.1.2 Clearing of land in excess of one hectare in one or successive operations should require consent of the local council;

10.1.3 Before consenting to clearing operations, local councils should consider the effect of clearing on ecosystem function, visual and scenic qualities; the risk of soil erosion or land degradation; wildlife habitat and movement; aquatic flora and fauna; vegetation communities; and water quality in adjacent waterbodies;

10.1.4 The current 2ha exemption per annum of native vegetation clearing must be removed from the Native Vegetation Conservation Act for the coastal zone;

10.1.5 The clearing of private land in the coastal zone must require consent;

10.1.6 Minister of Land and Water Conservation should ensure that Native Vegetation Management Plans covering coastal areas, when finally adopted, specify no exemptions from requiring approval for clearing in the coastal zones to which they apply;

10.1.7 The Minister for Planning should ensure that all coastal councils adopt effective

Vegetation Preservation Orders (e.g. Taree Council does not have one) for their urban lands requiring all damage to native vegetation in the coastal zone in the urban areas to undergo assessment and approval under the EPA Act; and

10.1.8 A consistent statewide approach with the EP&A Act and NVC Act is required to ensure that no native vegetation in the coastal zone is cut or cut down without first being assessed and approved.

10.2 Vegetation Management and Regeneration

10.2.1 Native aquatic and riparian vegetation should be protected and conserved at all times;

10.2.2 No further clearance of natural vegetation along water courses or in catchments for any purpose, should be approved unless it can be demonstrated that quality and quantity of the water regime is not adversely effected;

10.2.3 Funds should be committed to the improvement and co-ordination of vegetation management and regeneration programs;

10.2.4 Funds should be committed to the biological control of bitou bush, lantana, water hyacinth and other aquatic pests, and where necessary to programs for their replacement with locally indigenous species; and

10.2.5 Funding should be prioritised for rehabilitation works in areas specified in Catchment Blueprints.

11. Coastal Management: Intertidal Zone

11.1 There should be co-ordination of policy and action between state and local government agencies with responsibilities for land and water adjacent to the intertidal zone;

11.2 Integrated protection between the marine environment and terrestrial environment is required;

11.3 Intertidal protected areas should be established adjacent to aquatic reserves and/or National Parks; and

11.4 An integrated Natural Resource Management approach should be used to co-ordinate policy on intertidal issues, including:

a) Harvesting of crustacea, molluscs and other invertebrate marine life (eg. sea-urchins, echinoderms);

b) Protection of vegetation, particularly vulnerable salt marshes and seagrass beds;

c) Off-road vehicle access and use;

d) Pollution from a variety of sources, including marinas; and

e) Proximity of development to intertidal areas.

12. Coastal Management: Vehicles on Beaches

12.1 The use of any motor vehicles on beaches, sand dunes, headlands or coastal protected areas should be prohibited except for legitimate commercial and safety activities and access to designated launching ramps.

13. Coastal Management: Impact of the Greenhouse Effect

13.1 State government agencies should co-ordinate their responses to acknowledged impacts of the Greenhouse Effect into a holistic analysis and action plan; and

13.2 Local councils should be required to consider the hazards of, and develop strategies for dealing with, such impacts arising from the Greenhouse Effect (refer also to NCC Greenhouse Policy).

14. Coastal Management - Water Reform and Coastal Environmental Flows

14.1 Minimum of the 80th percentile of days flow in each river system to be returned to the environment or protected for the environment for adequate environmental flow provisions;

14.2 The Department of Land and Water Conservation should encourage offstream storages in coastal catchments to minimise extraction pressures on river systems during dry times;

14.3 Shift from extraction during A class flows to extraction during C class flows to minimise the impacts on coastal rivers systems during dry times;

14.4 Rehabilitate all degraded coastal wetlands and ensure natural wetting and drying rates are reinstated;

14.5 Ensure that adequate flows to the estuary are protected, particularly first flush flows that trigger fish spawning events and rejuvenate the waterway by flushing out debris and build up of nutrients;

14.6 Government agencies should encourage and promote the ecological sustainable management of the State's water resources to maintain and enhance the biological diversity and ecological integrity of coastal hydrological systems;

14.7 Water usage and land management practices throughout all coastal areas should be ecologically sustainable;

14.8 The natural aspects of in-stream geomorphology should be conserved (and restored where necessary); and

14.9 Removal of all fish barriers such as floodgates, weirs and culverts that impede natural flow and occur in areas where identified threatened species occur. NSW Fisheries has listed "the installation and operation of instream structures and other mechanisms that alter natural flow regimes of rivers and streams" as a Key Threatening Process.

15. Public Education, Awareness and Participation

15.1 Initiatives to increase community knowledge of, and involvement in, coastal

ecosystems must be undertaken in conjunction with improvements in coastal management;

15.2 Federal, State and Local Government bodies should develop programs of public education regarding the use, management and conservation of coastal ecosystems;

15.3 The Federal Government should provide additional funding for Environment Centers throughout Australia to develop coastal awareness kits for distribution throughout the community;

15.4 Coastal issues should be adequately represented in all tertiary environment, conservation, management and planning courses;

15.5 Curriculum materials should be developed for all Australian schools so that a basic understanding of the requirements of reasonable use, development and conservation of coastal environments and their resources can be engendered;

15.6 Field study centers should be established in areas where they will have minimal environmental impact and be used as a means of providing school students with first hand experience and knowledge of the coastal zone issues;

15.7 Open Field Studies Centers for coastal zone education should be provided to the public at those times when they are not in use by school students; and

15.8 There should be effective public participation in all stages of coastal region planning and management. At present, public input is most often limited to the final stages of planning, i.e., comments on an EIS or a draft LEP.

16. Government Reports

16.1 The Nature Conservation Council commends the following reports and urges the Federal and NSW State Governments to implement the recommendations within:

a) The Injured Coastline - Protection of the Coastal Environment. Report of the House of Representatives Standing Committee on the Environment, Recreation and the Arts. April 1991; and

b) Report of the Legislative Council of NSW Parliament Standing Committee on State Development's Coastal Inquiry.

16.2 Other documents recommended for implementation in Coastal Zone include:

- a) NSW Coastal Policy 1997;
- b) NSW State of the Environment Reports;
- c) NSW Wetlands Policy;
- d) NSW Rivers and Estuaries Policy;
- e) NSW Fisheries Policy and Guidelines for Aquatic Habitat Management and Fish Conservation 1999;
- f) NSW Coastal Design Guidelines;
- g) Healthy Rivers Commission Independent Inquiry into Coastal Lakes; and
- h) Conservation of Intertidal Rocky Communities (Identification of candidate sites for declaration as aquatic reserves for the conservation of rocky intertidal communities in the Hawkesbury Shelf and Batemans Shelf Bioregions).