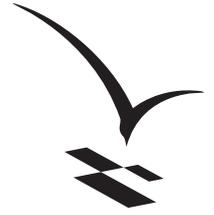




regional environmental plan

Georges River Catchment

Department of Urban Affairs and Planning





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explanatory notes

1.1 Summary

The Georges River Catchment has the potential to be adversely affected by a range of activities carried out on land within the Catchment. This Regional Environmental Plan (REP), prepared under the *Environmental Planning and Assessment Act 1979* (EP&A Act), will influence the land use and environmental planning and management decisions taken where land within the Catchment is affected. This will happen when a council prepares a local environmental plan (LEP) or considers a development proposal or when a public authority plans an activity that is likely to affect the environment within the Catchment.

1.2 Aims of the REP

The REPs aims include:

- maintaining and improving the water quality and river flows of the Georges River and its tributaries
- protecting and enhancing the environmental quality of the Catchment for the benefit of all users
- ensuring consistency in the delivery of the principles of ecologically sustainable development in the assessment of development within the Catchment and promoting integrated catchment management policies.

1.3 The structure of the REP and how it works

The REP consists of three parts:

- introduction
- planning principles
- planning requirements and consultation.

Part 1 Introduction

This part sets out the aims and objectives of the REP and specifies the land to which this REP applies. This land is located within the Greater Metropolitan Region and identified as the Georges River Catchment. Parts of the local government areas of Bankstown, Blacktown, Camden, Campbelltown, Canterbury, Fairfield, Holroyd, Hurstville, Kogarah, Liverpool, Rockdale, Sutherland, Wollondilly and Wollongong, as shown on the map accompanying the plan, are included.

Part 2 Planning principles

This part is divided into two sections. The first section sets out the general principles that are to be taken into consideration whenever:

- a council prepares an LEP
- a consent authority determines a development application
- a public authority or person proposes to carry out development which does not require development consent but which has the potential to adversely affect the water quality, river flows, flood regime and ecosystems within the Catchment.

The second section sets out specific planning principles that will apply where land use decisions are made in respect of all land within the Catchment. These principles are to be taken into consideration in the preparation of environmental planning instruments, development control plans and any other environmental planning codes and guidelines and in the assessment and determination of development applications.

The specific principles address such matters as:

- minimising disturbance and protection of acid sulfate soil areas
- reduction of bank or foreshore disturbance
- recognition of benefits and costs of flooding
- reduction of industrial discharges into the Georges River and its tributaries
- avoiding, where possible, or minimising land degradation processes within the Catchment
- encouragement of on-site sewage management in unreticulated areas
- retention of vegetated buffer areas
- public access along the foreshores
- addressing the relationship between use of the water and foreshore activities
- the adverse impacts of sewer overflows within the Catchment

- impacts arising from urban stormwater run off and appropriate mitigation measures to address these impacts
- development of new housing in accordance with the Metropolitan Strategy
- improvement of water quality and river flows within the Catchment
- protecting the ecological integrity of wetlands.

The specific planning principles address matters that have the potential to cause a cumulative and adverse impact on the Georges River and its tributaries without adherence to a coordinated approach. These principles are also relevant for determining authorities when they carry out their environmental impact assessment functions under the EP&A Act for activities which may impact specifically on the Georges River and its tributaries and the Catchment in general.

Part 3 Planning and consultation

This part contains the requirements for consent and consultation when assessing certain developments and activities within the Catchment. The types of development which have been identified as particularly significant in terms of their potential impacts on water quality and river flows in the Georges River and its tributaries and on other land to which this REP applies, are listed in the Planning Control and Consultation Table included in Part 3.

The REP indicates whether the listed uses:

- require development consent
- are advertised developments
- are prohibited
- require the concurrence of a public authority
- require any agencies or bodies to be consulted.

Definitions are also included for all the uses identified in the plan.

The planning controls set out in this part override controls in other environmental planning instruments where any inconsistency exists, unless otherwise stated. The REP, however, does not permit development which is prohibited by another environmental planning instrument or reduce any existing development standard.

Specific matters which must be considered in addition to the specific and general planning principles in Part 2 are also listed in Part 3. It is intended that consent authorities (and other public authorities including approval bodies) consider the potential for all proposed developments to significantly reduce the water quality of the Georges River and its tributaries and the environmental quality of the Catchment. The *Georges River Catchment Regional Planning Strategy* is also to be taken into consideration when making land use planning and management decisions.

Where an individual proposal falls into more than one category in the Planning Control and Consultation table depending on the type of development, its location and any ancillary activities involved, consideration of the matter listed under each relevant category is required. Any required consultation must also be carried out. The REP does not permit development that is prohibited by another environmental planning instrument (EPI). It may prohibit development that is permitted by such an EPI.

1.4 Other relevant matters

The relationship between this plan and other environmental planning instruments is outlined in the REP. In this context, the controls in the REP do not remove or reduce any development standard or other restriction imposed by another environmental planning instrument affecting how, when or where development within the catchment is carried out. The REP also includes transitional arrangements for applications lodged before the REP was made and a dictionary in which terms used in the plan are explained. The Table of Contents and notes in this REP are explanatory notes and do not form part of the REP.

1.5 Relevant statutes and documents

A brief list of relevant documents and statutes follows. It should be noted that the list is not exhaustive and provides only an indication of other relevant documents and statutes. Local councils can provide advice on any policies and approvals that apply under these statutes and the process to be followed in seeking approval or implementing these policies.

Statutes

Chipping Norton Lake Authority

Chipping Norton Lake Authority Act 1977

Department of Land and Water Conservation

Water Act 1912

Soil Conservation Act 1938

Rivers and Foreshores Improvement Act 1948

Crown Lands Act 1989

Native Vegetation Conservation Act 1997

Department of Urban Affairs and Planning

Environmental Planning and Assessment Act 1979

Environmental Planning and Assessment Regulation 1994

Environment Protection Authority

Clean Waters Act 1970

Environmentally Hazardous Chemicals Act 1985

Waste Minimisation and Management Act 1995

Protection of the Environment Operations Act 1997

Contaminated Land Management Act 1998

Heritage Office

Heritage Act 1977

Heritage Amendment Act 1998

National Parks and Wildlife Service

National Parks and Wildlife Act 1974

Threatened Species Conservation Act 1995

NSW Fisheries

Fisheries Management Act 1994

Other relevant statutes

Drainage Act 1939

Catchment Management Act 1989

Local Government Act 1993

Water Board (Corporatisation) Act 1994

Documents

Acid Sulfate Soils Management Advisory Committee

Acid Sulfate Soil Manual (1998)

Australian and New Zealand Environment and Conservation Council

Australian Water Quality Guidelines for Fresh and Marine Waters (1992)
ANZECC

Department of Bushfire Services

Planning for Bushfire Protection (1991)

Department of Land and Water Conservation

Coastline Management Manual (1990)

Estuary Management Manual (1992)

Flood Policy (1984)

NSW Floodplain Development Manual (1986)

NSW Wetlands Management Policy

NSW Sand and Gravel Extraction Policy for Non Tidal Rivers

NSW Rivers and Estuaries Policy

Department of Urban Affairs and Planning

Publications

Cities for the 21st Century (1995)

EIS Guidelines, DUAP (1996)

Planning Guidelines for Contaminated Land (1994)

Rural Land Evaluation Manual (revised edition, 1988)

Botany Bay Regional Planning Guidelines (1992).

State environmental planning policies

SEPP 1 Development Standards

SEPP 19 Bushland in Urban Areas

SEPP 21 Caravan Parks

SEPP 33 Hazardous and Offensive Development

SEPP 35 Maintenance Dredging of Tidal Waterways

SEPP 48 Major Putrescible Land Fill Sites

SEPP 55 Remediation of Land

Sydney regional environmental plans

Sydney Regional Environmental Plan No. 9 (No. 2, 1995) Extractive Industry

Sydney Regional Environmental Plan No. 17—Kurnell Peninsula

Circulars

C9 Floodplain Development Manual

C10 Planning in Fire Prone Areas

C28 Sydney Water Corporation—Drinking Water Catchments

E3 Guidelines for buffer areas around STPs

E10 Landfilling: Environmental Impact Statement Practice Guidelines

F1 Better Drainage Guidelines for the Multiple Use of Drainage Systems

F8 Procedures for Rezoning Lands in the Urban Development Program

F11 Acid Sulfate Soils Advisory Circular

F13 Total Catchment Management and Planning

Environment Protection Authority

Managing Urban Storm Water: Treatment Techniques (1997) EPA

Managing Urban Storm Water: Council Handbook (1997) EPA

Environmental Guidelines for Solid Waste Landfills (1996) EPA

Landcom and Department of Housing

Managing Urban Storm Water: Soils and Construction (1998)

NSW Fisheries

A.K. Smith and D.A. Pollard (eds) (1997), *Aquatic Habitat Management and Fish Conservation, Policy and Guidelines*

2

the plan

Greater Metropolitan Regional Environmental Plan 1999 No. 2—Georges River Catchment

under the Environmental Planning and Assessment Act 1979

I the Minister for Urban Affairs and Planning, make the following regional environmental plan under the *Environmental Planning and Assessment Act 1979*.
(S98/01110/PC)

Minister for Urban Affairs and Planning

Sydney,

1999

Part 1 Introduction

1 Name of plan

This plan is *Greater Metropolitan Regional Environmental Plan No 2—Georges River Catchment*.

2 Where plan applies

This plan applies to the Catchment, which is part of the region declared under the Act and known as the Greater Metropolitan Region. The Catchment consists of parts of Bankstown City, Blacktown City, Campbelltown City, Camden, Canterbury City, Fairfield City, Holroyd City, Hurstville City, Kogarah, Liverpool City, Rockdale City, Sutherland, Wollondilly and Wollongong City local government areas that are within the Georges River Catchment. The catchment map indicates the boundary of the Catchment.

3 Relationship to other environmental planning instruments

- (1) If this plan is inconsistent with another regional environmental plan or a local environmental plan, then this plan prevails to the extent of the inconsistency, subject to section 36 (4) of the Act.
- (2) However, this plan does not permit development which is prohibited by another environmental planning instrument.
- (3) This plan contains planning principles to help councils prepare local environmental plans that apply to the land within the Catchment.

4 Definitions

- (1) This plan adopts the *Environmental Planning and Assessment Model Provisions 1980*. Other terms used in this plan are defined in the dictionary at the end of this plan.
- (2) The list of contents and the notes in this plan do not form part of this plan.

5 Aims and objectives

(1) The general aims and objectives of this plan are as follows:

- (a) to maintain and improve the water quality and river flows of the Georges River and its tributaries and ensure that development is managed in a manner that is in keeping with the national, state, regional and local significance of the Catchment,
- (b) to protect and enhance the environmental quality of the Catchment for the benefit of all users through the management and use of the resources in the Catchment in an ecologically sustainable manner,
- (c) to ensure consistency with local environmental plans and also in the delivery of the principles of ecologically sustainable development in the assessment of development within the Catchment where there is potential to impact adversely on ground water and on the water quality and river flows within the Georges River or its tributaries,
- (d) to establish a consistent and coordinated approach to environmental planning and assessment for land along the Georges River and its tributaries and to promote integrated catchment management policies and programs in the planning and management of the Catchment,
- (e) to encourage more effective consultation between local government and State Government agencies in executing the responsibility for environmental planning within the Catchment,
- (f) to provide a mechanism that assists in achieving the water quality objectives and river flow objectives agreed under the Water Reform Package.

(2) The specific aims and objectives of this plan are as follows:

Environmental protection and water quality and river flows

- (a) to preserve and protect and to encourage the restoration or rehabilitation of regionally significant sensitive natural environments such as wetlands (including mangroves, saltmarsh and seagrass areas), bushland and open space corridors within the Catchment, by identifying environmentally sensitive areas and providing for appropriate land use planning and development controls,
- (b) to preserve, enhance and protect the freshwater and estuarine ecosystems within the Catchment by providing appropriate development,
- (c) to ensure that development achieves the environmental objectives for the Catchment.

Regional role and land use

- (a) to identify land uses in the Catchment which have the potential to impact adversely on the water quality and river flows in the Georges River and its tributaries and to provide appropriate planning controls aimed at reducing adverse impacts on the water quality and river flows,

- (b) to conserve, manage and improve the aquatic environment within the Catchment which is a significant resource base for the aquaculture industry, by providing controls aimed at reducing pollution entering the Catchment's watercourses,
- (c) to protect the safety and well being of the local and regional community in accordance with standards and processes aimed at improving the water quality and river flows in the Catchment to enable recreation,
- (d) to aid in the improvement of the environmental quality of Botany Bay in conjunction with other regional planning instruments.

6 Savings

The provisions of this plan do not apply to or in respect of:

- (a) a development application or an application for approval of an activity that was lodged with a consent authority or determining authority, but that was not finally determined, before the commencement of this plan, or
- (b) the development or activity allowed to be carried out by a consent or an approval of an activity granted in response to any such application (but only if the consent or approval is in fact granted) or in response to an application for a consent or approval of an activity by a determining authority granted before that commencement.

Part 2 Planning principles

7 When planning principles are to be applied

This Part applies when:

- (a) a council prepares a local environmental plan, or
- (b) a consent authority determines a development application, or
- (c) a public authority or another person proposes to carry out development or an activity which does not require development consent but which has the potential to adversely affect the water quality, river flows, flood regime or ecosystems within the Catchment.

8 General principles

When this Part applies the following must be taken into account:

- (a) the aims, objectives and planning principles of this plan,
- (b) the likely effect of the proposed plan, development or activity on adjacent or downstream local government areas,
- (c) the cumulative impact of the proposed development or activity on the Georges River or its tributaries,
- (d) any relevant plans of management including any River and Water Management Plans approved by the Minister for Environment and the Minister for Land and Water Conservation and best practice guidelines approved by the Department of Urban Affairs and Planning (all of which are available from the respective offices of those Departments),
- (e) the *Georges River Catchment Regional Planning Strategy* (prepared by, and available from the offices of, the Department of Urban Affairs and Planning),
- (f) all relevant State Government policies, manuals and guidelines of which the council, consent authority, public authority or person has notice,
- (g) whether there are any feasible alternatives to the development or other proposal concerned.

9 Specific planning principles

When this Part applies, the following must be taken into account:

(1) Acid sulfate soils

Disturbance of acid sulfate soil areas is to be avoided or minimised and those areas are to be protected in accordance with the requirements set out in the *Acid Sulfate Soils Assessment and Management Guidelines* prepared by the Acid Sulfate Soils Management Advisory Committee. Measures to minimise that disturbance are to take into account the following:

- (a) verification of the existence, locations and extent of acid sulfate soils,
- (b) the capacity of land to sustain the proposed land uses, having regard to:
 - (i) potential impacts on surface and ground water quality and quantity, and
 - (ii) potential impacts on ecosystems and on biodiversity, and
 - (iii) potential impacts on agricultural, fisheries and aquaculture productivity, and
 - (iv) any likely engineering constraints and impacts on infrastructure, and
 - (v) cumulative environmental impacts.

(2) Bank disturbance

Disturbance of the bank or foreshore along the Georges River and its tributaries is to be avoided and those areas and any adjoining open space or vegetated buffer area must be protected from degradation.

(3) Flooding

The following are to be recognised:

- (a) the benefits of periodic flooding to wetland and other riverine ecosystems,
- (b) the pollution hazard posed by development on flood liable land in the event of a flood,
- (c) the cumulative environmental effect of development on the behaviour of flood water and the importance of not filling flood prone land.

(4) Industrial discharges

The discharging of industrial waste into the Georges River or its tributaries must be avoided and the requirements of the relevant consent authority and licensing authority must be met in those instances where industrial discharges into the river and its tributaries occur.

(5) Land degradation

Land degradation processes, such as:

- (a) erosion,
- (b) sedimentation,
- (c) deterioration of soil structure,
- (d) significant loss of native vegetation,
- (e) pollution of ground or surface water,
- (f) soil salinity and acidity, and
- (g) adverse effects on habitats and sensitive natural environments (aquatic and terrestrial) within the Catchment,

must be avoided where possible, and minimised where avoidance is not possible.

(6) On-site sewage management

The potential adverse environmental and health impact associated with effluent disposal is to be recognised and guarded against by meeting the criteria set out in the *Environment Health Protection Guidelines: On-site Sewage Management for single households* and the provisions of the *Local Government (Approvals) Regulation 1993*.

(7) River-related uses

Uses located on immediate foreshore land on the Georges River and its tributaries must be water-related and public access to the foreshore of the river and its tributaries must be provided in order to enhance the environment of the Catchment.

(8) Sewer overflows

The adverse impact of sewer overflows, including exfiltration, on the environment within the Catchment, and specifically on the water quality of the river and its tributaries, is to be recognised and that issue is to be addressed through appropriate planning and management of development within the Catchment.

(9) Urban/stormwater runoff

The impacts of stormwater runoff, including sewage contaminated runoff into or near streams within the Catchment, is to be minimised and mitigation measures that address urban stormwater runoff are to be implemented in accordance with the local council requirements and the Managing Urban Stormwater series of documents. Development is also to be in accordance with the *NSW State Rivers and Estuaries Policy* available from offices of the Department of Urban Affairs and Planning. Stormwater management must be integrated so that quality, quantity and land use aspects are all encompassed.

(10) Urban development areas

The environment within the Catchment is to be protected by ensuring that new or expanding urban development areas are developed in accordance with the *Urban Development Program* and the *Metropolitan Strategy* and that the requirements of the *NSW Floodplain Development Policy and Manual* (prepared by and available from the Department of Land and Water Conservation) are also satisfied. It is important to ensure that the level of nutrients entering the waterways and creeks is not increased by the development.

(11) Vegetated buffer areas

Appropriate buffer widths (as identified in item 21 relating to Development in Vegetated Buffer Areas in the Planning Control and Consultation Table in Part 3) must be retained as a means of improving surface runoff entering into the Georges River or its tributaries.

(12) Water quality and river flows

Water quality and river flows within the Catchment are to be improved through the implementation of environmental objectives for water quality and river flows agreed between the Minister for Environment and the Minister for Land and Water Conservation and by the application of consistent decisions affecting the use and management of land.

(13) Wetlands

Wetlands must be protected through the application of consistent land use and management decisions that take into account the potential impact of surrounding land uses, incorporate measures to mitigate adverse effects and are in accordance with the *NSW Wetlands Management Policy* (prepared by and available from the Department of Land and Water Conservation). Wetlands must also be protected by requiring adequate provisions where clearing, construction of a levee, draining or landscaping is to be undertaken.

Part 3 Planning requirements and consultation

10 Consultation—who consults and procedure for consultation

- (1) Consultation required by this Part must be carried out:
 - (a) if development consent is required—by the consent authority before determining the development application, or
 - (b) if development consent is not required—by the public authority or person carrying out the development, before carrying out the development.
- (2) Consultation by an authority or person with a listed agency must be carried out as follows:
 - (a) the authority or person must write to the listed agency giving a description of the proposed development, and
 - (b) the authority or person must request the listed agency to comment on the proposed development within 21 days from the date the agency receives the notice, and
 - (c) the authority or person must consider any comments made on the proposed development by the listed agency within those 21 days.

11 Planning control and consultation table

- (1) The planning control and consultation table at the end of this clause deals with development defined in that table.
- (2) Under **Planning control**:
 - (a) “Development consent” means that the development may be carried out only with development consent, and
 - (b) “Prohibited” means the development must not be carried out (either generally or only in the circumstances specified), and
 - (c) “Advertised” means the development is identified as advertised development for the purposes of the definition of *advertised development* in section 4 (1) of the Act, and
 - (d) “Designated development” means that the development is declared to be designated development for the purposes of the Act.
- (3) Under **Consultation**, the names of the agencies to be consulted are listed.
- (4) Under **Specific matters for consideration**, matters are listed for consideration by the consent authority when determining a development application or (if consent is not required) by the public authority or person concerned before carrying out the development.
- (5) The council of the area in which development is proposed to be carried out is the **consent authority** for a development application required by this plan, except as provided otherwise by the Act.

PLANNING CONTROL AND CONSULTATION TABLE

1 ARTIFICIAL LAKE

Definition

Construction of a water body such as an artificial wetland or dam, but not a dam of less than 1 hectare in surface area used for agricultural purposes or land flood-irrigated for agriculture.

Planning control

Development consent required unless carried out by or for the Chipping Norton Lakes Authority in which case development consent is not required.
Advertised.

Specific matters for consideration

The likely impact of the proposal on the water table.

The likely impact of the proposal on natural flows in the Georges River and its tributaries.

The likely impact of the proposal on other downstream water users in the catchment. Whether the proposal will contribute to enhancing both the recreational and environmental amenity within the Catchment.

If the proposal is part of rehabilitation works, whether the proposal is in keeping with an approved rehabilitation plan.

Whether the proposal is likely to result in a propagation zone for noxious aquatic weeds.

The likelihood of the development of algal blooms and measures proposed to control that.

2 AQUACULTURE

Definition

Farming of aquatic organisms (including fish, molluscs, crustaceans and aquatic plants) for commercial purposes, requiring intervention in the rearing process to enhance production, whether or not undertaken in a natural or artificially created water body.

Planning control

Development consent required.

Advertised.

Note. Owner's consent for proposed development or an activity on Crown land is required from Department of Land and Water Conservation.

Specific matters for consideration

The potential impact of the proposal on seagrass beds.

The impact of related activities, including the coating of fishing accessories with protective finishes, the transport of cages, racks and other accessories onshore and the cleaning of cages, racks and other accessories. In this regard, consideration is also to be given to the provisions made for the disposal of waste.

The impact of aquaculture additives on water quality within the Georges River and its tributaries.

Whether acceptable health criteria for shellfish are met.

The potential for impacts arising from possible damage from floods, stormwater and erosion.

3 CARAVAN PARKS

Definition

Use of land for caravans or other moveable dwellings requiring an approval under Part 1 of Chapter 7 of the *Local Government Act 1993*.

Planning controls

Development consent required unless on flood liable land in which case it is prohibited.

Permanent facilities and sites identified for long term use as caravan parks are prohibited on land within 40 metres of the Georges River or its tributaries (in this item referred to as “the buffer zone”).

Advertised.

Note. A licence from the Environment Protection Authority may be required for sewage disposal.

Specific matters for consideration

The impact of the proposal on remnant vegetation.

If the caravan park is located on land adjoining the buffer zone, public access to the park is to be restricted to clearly identified pathways. The buffer zone is to be planted or, where vegetated, the vegetation is to be retained, between the Georges River or its tributaries and the caravan park or camping ground.

Sewage treatment and disposal from such sites.

Whether approvals have been sought for access points, such as boat ramps and jetties, to the river.

4 CHEMICAL OR FUEL STORAGE ON LAND

Definition

Use of land for chemical, fuel or fertiliser storage.

Planning controls

Prohibited on flood liable land.

Development consent required for all other land.

Specific matters for consideration

That adequate provisions have been made to contain water that may be contaminated by its use for fire control purposes.

Whether the proposal meets the requirements of the local council's stormwater management plan or, if no such plan is prepared, the local council's stormwater management objectives or policy determined by the council in consultation with the relevant Catchment Management Committees, the community, the Environment Protection Authority and the Department of Land and Water Conservation.

Whether the proposal is in accordance with the local council's soil erosion and sediment management plan or policy.

Any impacts on groundwater.

Provision for on-site bush fire hazard reduction where relevant.

5 EXTRACTIVE INDUSTRY

Definition

The winning of extractive material, or an undertaking which depends for its operations on the winning of extractive material, from land within the Catchment, including any washing, cutting, crushing, grinding, milling or separating into different sizes of extractive material on the site on which it has been won.

Planning control

Development consent is required unless the proposed development:

- (a) is in-stream, in which case it is prohibited, or
- (b) is part of an operation to carry out maintenance dredging and the Department of Land and Water Conservation is satisfied that the proposal is in accordance with the *NSW Sand and Gravel Extraction Policy for Non Tidal Rivers* prepared by and available from that Department, in which case consent is not required.

Specific matters for consideration

The likely effect of the proposal on flood behaviour, geomorphology, vegetation, surface and ground water quality, water quality, water quantity and hydrodynamics of any watercourse within the Catchment.

Whether a Rehabilitation Plan has been prepared in accordance with the Guidelines established by the Department of Land and Water Conservation in its *Urban Erosion and Sediment Control Handbook* (1992).

Whether the noise and vibration levels are generally in accordance with the guidelines in the *Environmental Noise Control Manual* (1994) prepared by the Environment Protection Authority.

Satisfaction that any proposed rehabilitation measures will be carried out in accordance with the guidelines in the *Managing Urban Stormwater Soils and Construction Handbook* (1998) prepared by and available from Landcom and the Department of Housing.

The requirements of the Department of Land and Water Conservation and any relevant river management plan prepared by the Department of Land and Water Conservation or any water management plan approved by the Minister for Environment and the Minister for Land and Water Conservation.

6 FLOOD CONTROL WORKS

Definition

The carrying out of any works in an attempt to mitigate against flooding if the works will change the natural or existing condition of the Georges River or its tributaries, including river flows.

Planning controls

Development consent required.

Advertised

Consultation

NSW Fisheries, the relevant Catchment Management Committee, any relevant Floodplain Management Committee established by the local council in accordance with the *Floodplain Development Manual* and any Water Management Committee established by the Department of Land and Water Conservation.

Specific matters for consideration

Whether the proposal satisfies the stormwater management plan prepared by the local council or, until such a plan is made, the local council's stormwater management objectives determined by the council in consultation with the relevant Catchment Management Committees, the community, the Environment Protection Authority and the Department of Land and Water Conservation.

Whether the proposal is in accordance with the Council's soil erosion and sediment management plan or policy.

Whether the proposal is consistent with State Government policies including the *Floodplain Management Policy*, *State Rivers and Estuaries Policy* and the *Wetlands Policy* prepared by and available from the Department of Land and Water Conservation.

7 HAZARDOUS OR OFFENSIVE, OR POTENTIALLY HAZARDOUS OR OFFENSIVE INDUSTRIES

Definition

Hazardous or offensive industry (as defined in *State Environmental Planning Policy No 33—Hazardous and Offensive Development*) of a type that has the potential to pollute and to lower water quality in the Georges River or its tributaries.

Planning controls

Development consent required unless located on either flood liable land or land within 40 metres of any water course within the Catchment, in which case it is prohibited.

Advertised.

Specific matters for consideration

Whether adequate provisions have been made to contain water that may be contaminated by its use for fire control purposes.

Whether the proposal meets the requirements of the local council's stormwater management plan or, if no such plan has been prepared, the local council's stormwater management objectives or policy determined by the council in consultation with the relevant Catchment Management Committees, the community, the Environment Protection Authority and the Department of Land and Water Conservation.

Whether the proposal is in accordance with the Council's soil erosion and sediment management plan or policy.

Whether any potential impacts will arise in regard to groundwater.

Whether adequate provisions for on-site bushfire hazard reduction are made.

Whether the proposal is in accordance with any water management plan approved by the Minister for the Environment and the Minister for Land and Water Conservation where such a plan has been prepared.

8 HOUSING DEVELOPMENT

Definition

Development of land for housing, including the following:

- (a) development of new areas for housing in accordance with the *Urban Development Program* and the *Metropolitan Strategy*, and
- (b) rural-residential development within the Catchment.

Planning control

For land included in the Urban Development Program:

Development consent required for land identified in the Urban Development Program unless the land is not connected to a reticulated sewerage system or is flood liable, in which case it is prohibited.

For rural residential land, being land within a rural zone on which residential development is allowed by a local environmental plan:

Development consent required.

Consultation

Sydney Water, Department of Land and Water Conservation, any other agency considered appropriate by the consent authority.

Specific matters for consideration

For land within the Urban Development Program:

Whether the proposal for development accords with the *Metropolitan Strategy* and satisfies the strategy's goals and key principles.

Whether the land is adequately serviced.

Whether adequate provision has been made to meet the requirements of any council stormwater management plans and erosion and sediment control plans or policies. Whether provision has been made for sediment and/or erosion control during construction in accordance with best practice.

That any proposed piping or channelisation of the Georges River or its tributaries has any necessary approval of the Department of Land and Water Conservation under the relevant legislation.

Note. Piping or channelisation of watercourses is to be strongly discouraged.

Whether adequate provision has been made to prevent untreated urban runoff including nutrients, oils and greases, animal wastes, detergents and other pollutants from car washing and general litter entering into the Georges River or its tributaries.

Note. The suitability of urban runoff treatment measures may include one or more of the following:

- (a) directing runoff onto artificial wetlands,
- (b) directing runoff into grassed drainage lines and table drains,
- (c) use of on-site detention basins,
- (d) gross pollutant traps,
- (e) adequate sediment and erosion controls.

Any treatment measures will need to be in accordance with the NSW State Rivers and Estuaries Policy and have the necessary approval of the Department of Land and Water Conservation.

The provision of planted areas and the minimisation of hard surface areas mitigates against increased urban runoff from built up areas and must be encouraged. Reuse of treated waste water and the utilisation of appropriate water conservation practices must also be encouraged.

Whether adequate provision has been made to incorporate vegetated buffer areas to watercourses, foreshores or other environmentally sensitive areas.

The potential cumulative environmental impact of urban runoff on the Georges River or its tributaries.

That any proposed piping or channellisation of the Georges River or its tributaries has any necessary approval of the Department of Land and Water Conservation under the relevant legislation.

For land that is not reticulated, including rural residential land:

Whether the proposal meets the requirements of a strategy prepared by the local council for sewage management or adequate provision has been made for on-site sewage management.

9 INDUSTRY

Definition

The manufacturing, assembling, altering, repairing, renovating, ornamenting, finishing, cleaning, washing, dismantling, processing or adapting of any goods or articles for commercial purposes (other than development defined elsewhere in this table).

Planning controls

Development consent required.

Advertised unless involving minor works such as refurbishment, refitting and the like or involving an occupation that is a light industrial activity, in which case not advertised development.

Specific matters for consideration

The potential cumulative environmental impact of any industrial uses on water quality within the Catchment.

The adequacy of proposed stormwater controls and whether the proposal meets the Council's requirements for stormwater management.

Whether proposed erosion control measures meet the criteria set out in *Managing Urban Stormwater: Soil and Construction Handbook* (1998) prepared by and available from Landcom and the Department of Housing.

Likely impact on ground water and remnant vegetation.

The possibility of reusing treated waste water on land and the adequacy of proposed waste water disposal options.

Whether adequate provision has been made to incorporate vegetated buffer areas to protect water courses, foreshores or other environmentally sensitive areas where new development is proposed.

The adequacy of planned waste water disposal options.

10 INTENSIVE HORTICULTURAL ACTIVITIES

Definition

Use of a place to grow a commercial crop of plants or fungi, whether under cover or in the open, using intensive agricultural systems such as hydroponics or a sprinkler system (but not use of a place to grow produce for personal household consumption or enjoyment) which has the potential to impact significantly on the total water cycle.

Planning controls

Development consent required.

Advertised.

Specific matters for consideration

Whether adequate provision has been made for flood mitigation in the event of a 1 in 10 year flood event.

Whether adequate provision has been made for a vegetated buffer area adjacent to watercourses.

Whether adequate provision has been made in relation to soil erosion control.

Whether adequate provision has been made to protect ground water and the Georges River or its tributaries where chemical application is to be undertaken on land adjacent to watercourses.

Opportunities for retention and reuse of site surface runoff.

11 INTENSIVE LIVESTOCK KEEPING

Definition

Use of land for holding cattle, sheep, goats, poultry or other livestock for the purpose of nurturing by a feeding method other than natural grazing, including use of:

- (a) feed lots, and
- (b) piggeries, and
- (c) poultry farms,

but not an animal boarding or training establishment or land used for the keeping of livestock or poultry intended solely for personal consumption or enjoyment by the owner or occupier of the land, or intensive hand feeding of livestock as a result of drought, flood, bushfire or other natural disaster.

Planning controls

Development consent required unless:

- (a) on land within 40 metres of the Georges River or its tributaries, or
- (b) carried out within a floodway,

in which case it is prohibited.

Advertised.

Specific matters for consideration

Whether farm management including the use of appropriate best management practices is proposed so as to mitigate the impact of the development on the water quality of the Georges River or its tributaries.

Whether adequate provision has been made in relation to soil erosion control.

The likely additional impact of the development on the Georges River during a flood event where development is proposed on flood prone land.

Whether adequate provision has been made for a vegetated buffer area adjacent to watercourses.

Whether adequate provision has been made to protect ground water and the Georges River and its tributaries from nutrient enrichment.

12 LAND FILL

Definition

Use of land for the purpose of disposing of waste, including use of a site for the collection and disposal of industrial, trade or human waste (other than development defined elsewhere in this table).

Planning control

Development consent required unless on flood liable land, in which case it is prohibited.

Advertised.

Consultation

The Waste Management Board

Specific matters for consideration

Whether ground water contamination is likely to occur.

The adequacy of any proposed leachate management system and surface water controls.

The long-term stability of the final landform and the adequacy of a site management plan prepared for the development.

13 MAINTENANCE DREDGING

Definition

The winning or removal of extractive material from the bed of the Georges River or its tributaries by or for a public authority for the purpose of obtaining sufficient width and depth in the waterway to enable the waterway to continue to function:

- (a) as a channel for the escape or passage of water, or
- (b) as a safe navigation route for travel or transport by water,

but not including bank or bed works.

Planning control

Development consent required unless carried out by a public authority, in which case consent is not required.

Note. Owner's consent for proposed development or an activity on Crown land is required from Department of Land and Water Conservation. The provisions of ***State Environmental Planning Policy No 35—Maintenance Dredging of Tidal Waterways*** also apply.

Where maintenance dredging is carried out by a public authority, a proposal must be assessed in accordance with the requirements of Part 5 of the ***Environmental Planning and Assessment Act 1979***.

Specific matters for consideration

The likely effects of maintenance dredging on river flows, water quality, geomorphology, flood behaviour and bank stability.

The need to maintain river shallows to protect and support the aquatic habitat.

The potential effect of maintenance dredging on recreational opportunities available in the Catchment.

The need to protect fish breeding grounds, commercial and recreational fishing areas and oyster farming.

The need to protect seagrass beds and mangroves.

The likelihood of disturbing pollutants, sediments and acid sulfate soils and any proposed mitigation measures.

The advantages of using cutter-suction methods as against dragline methods when carrying out maintenance dredging.

14 MANUFACTURED HOME ESTATES

Definition

Development for the purpose of placing of manufactured homes requiring an approval under Part 1 of Chapter 7 of the *Local Government Act 1993*, except where they will be located on land which is zoned for residential purposes.

Planning control

Development consent required unless the proposed development is on flood liable land or sites which are or will not be adequately provided with reticulated water, a reticulated sewerage system, drainage or electricity, in which case it is prohibited.

Advertised.

Specific matters for consideration

The likely impact on any significant remnant vegetation.

Whether adequate provision is made for vegetated buffer areas on land adjacent to watercourses or environmentally sensitive areas.

That the development will not have an adverse impact on any waterway or land having special landscape, scenic or ecological qualities.

Note. The provisions of *State Environmental Planning Policy No 36—Manufactured Home Estates* would also need to be satisfied.

15 MARINAS AND SLIPWAYS

Definition

Development for the purpose of a pontoon, jetty, pier or other structure or apparatus providing berths for boats, and use of adjoining land for any support facilities.

Planning control

Development consent required unless carried out by or on behalf of the Chipping Norton Lakes Authority, in which case development consent is not required.

Advertised.

Note. Owner's consent for proposed development or an activity on Crown land is required from Department of Land and Water Conservation. Some marinas are scheduled under the Protection of the Environment Operations Act 1997 if the size is above a certain threshold.

Specific matters for consideration

The need for a condition of consent requiring centralised pumping stations.

Whether adverse impacts will occur on any natural wetlands, seagrass beds, mangroves and any other flora and fauna habitats.

Whether arrangements for the collection, storage, treatment and subsequent disposal of sewage and other wastes are satisfactory and meet the requirements of the Environment Protection Authority.

Whether measures to prevent the escape of fuels, oils, grease and other chemicals into the waterway are adequate.

Whether the proposal satisfies the document entitled *Environmental Guidelines: Best Management Practice for Marinas and Slipways* (1997) prepared by and available from the Environment Protection Authority.

Whether adequate depth of water exists for the marina and other related land and water shoreline facilities and, if not, whether the means proposed for maintaining adequate water depth are appropriate and will not lead to adverse impacts on the Georges River or its tributaries.

The stability of banks and foreshores and whether acid sulfate soils are likely to be disturbed.

16 PUBLIC UTILITY UNDERTAKING

Definition

Any of the following undertakings carried on by or for a public authority that is likely to significantly affect the water quality and river flows of the Georges River or its tributaries and the environment within the Catchment:

- (a) rail, road, air or water transport,
- (b) provision or maintenance of wharfs and navigation markers,
- (c) telecommunications,
- (c) supply of water, electricity or gas or provision of sewerage or drainage services.

Planning control

The controls set out in the local environmental plan or deemed environmental planning instrument for the land.

17 RECREATIONAL FACILITIES

Definition

Use of a building, work or place for sporting activities, recreation or leisure activities (whether or not operated for commercial gain) being a building that is situated within the Georges River, on land that is situated within the Georges River or on land:

- (a) that adjoins the river or a tributary of the river, or
- (b) that is flood prone land.

Planning control

Development consent required.

Advertised.

Specific matters for consideration

Whether the proposal will encourage bank erosion and the adequacy of any proposed mitigation measures.

The need to retain and maintain riparian vegetation and habitat.

Whether acid sulfate soils will be disturbed by the proposed development and the adequacy of any mitigation measures.

Any proposed effluent disposal system for areas not connected to a reticulated sewerage system.

The suitability of the site for on-site sewage disposal and the likely effect of that disposal on the Georges River or its tributaries, any natural wetland areas, ground water or flood liable land.

The possibility for reuse of treated waste water on land, for irrigation purposes.

Recreation facilities must not obstruct, alienate or pollute the river.

The impact of the proposal on access and use of the Georges River and its tributaries and foreshores.

18 SINGLE MOORINGS

Definition

Provision or maintenance of a berth or apparatus located on or in the Georges River or its tributaries which may be used for the purpose of storing only one vessel.

Planning control

Development consent required unless seagrass beds identified by NSW Fisheries are located on the site, in which case it is prohibited, or unless carried out for or by the Chipping Norton Lakes Authority, in which case development consent is not required.

Advertised.

Specific matters for consideration

The likely impact on any seagrass beds located at the site or within the vicinity of the proposed development.

The type and size of vessel proposed to be moored.

Any requirements for dredging where water depth is inadequate and whether an environmental impact statement is required.

Possibility of developing shared facilities with an adjoining owner.

Note. Owner's consent for proposed development or an activity on Crown land is required from Department of Land and Water Conservation.

19 SEWERAGE MANAGEMENT SYSTEMS OR WORKS

Definition

Development for the purpose of any sewerage system or work which stores, treats or disposes of sewage (including domestic on-site disposal systems that are ancillary to other development which requires consent) but not including a public utility undertaking.

Planning control

Development consent required.

Advertised.

Specific matters for consideration

Whether the proposed development will be capable of connection to a Sydney Water Corporation Limited or council sewerage system either now or in the future.

The suitability of the site for on-site disposal of effluent or sludge and the ability of the sewerage systems or works to operate over the long-term without causing significant adverse effects on adjoining property. Where the proposal is for single dwelling residential development not connected to a reticulated sewerage system, the *Environment and Health Protection Guidelines—On-site Sewage Management for Single Households* (1998) prepared by and available from the Department of Local Government, the Department of Land and Water Conservation, the Department of Health and the Environment Protection Authority must be followed.

The likely effect of any on-site disposal area required by the proposed development on:

- (a) any water bodies in the vicinity, including rivers, streams, creeks, dams, or
- (b) any wetland areas identified and mapped by the National Parks and Wildlife Service, or
- (c) any ground water, or
- (d) any flood liable land within the Catchment.

The sewage management facility or, in the case of on-site disposal systems, the effluent application area should make provision for the following:

- (a) preventing the spread of disease by micro-organisms, emission of foul odours, contamination of water and degradation of soil and vegetation, discouraging insects and vermin and ensuring that persons do not come into contact with untreated sewage or effluent (whether treated or not) in their ordinary activities on the premises,
- (b) the reuse of resources (including nutrients, organic matter and water) and the minimisation of any adverse impacts on the amenity of the land on which the facility or area is installed or constructed and other land in the vicinity of that land,
- (c) the scope for recycling and reusing effluent or sludge on the site,
- (d) the adequacy of wet weather storage and the wet weather treatment capacity (as necessary) of the proposed sewerage system or works,
- (e) likely cumulative impacts downstream where direct discharge of effluent to the Georges River or its tributaries is proposed,
- (f) the need for ongoing monitoring of the system or work.

Note. Direct discharge into the Georges River or its tributaries is strongly discouraged. Where that is permitted, the standards set by the Environment Protection Authority must be satisfied.

20 STORMWATER MANAGEMENT SYSTEM OR WORKS

Definition

Carrying out of works designed to collect, channel, store, treat or disperse stormwater runoff from areas of urban development or from development adjacent to the Georges River or its tributaries. Untreated stormwater is water which has not been subjected to measures designed to reduce litter, suspended solids, nutrients or other substances which contribute to a decline in the quality of water in the Georges River or its tributaries.

Planning control

Development consent is required except where works are in accordance with a Stormwater Management Plan approved by the Director-General of the Environment Protection Authority.

Works that dispose of untreated stormwater into the Georges River or its tributaries are prohibited.

Advertised.

Specific matters for consideration

That untreated stormwater is not disposed of into the Georges River or its tributaries.

The likely impact of stormwater disposal on the quality of any receiving waters.

That the levels of nutrients and sediments entering the waterway are not increased by the proposed development.

Whether any proposals to manage stormwater are in accordance with the local council's stormwater management plans and the Managing Urban Stormwater series of documents and meet the local council's storm water management objectives.

Whether the principles outlined in the *Managing Urban Stormwater Soils and Construction Handbook* (1998) prepared by and available from Landcom and the Department of Housing are followed during each stage of a development (including subdivision).

Whether the proposal satisfies the local council's sediment control plan or, if no such plan has been prepared, any erosion and sediment policies adopted by the local council.

Note. The suitability of stormwater treatment measures will depend on the characteristics of individual sub-catchments. Those measures may, however, include one or more of the following:

- (a) artificial wetlands,
- (b) detention basins,
- (c) grassed drainage lines and table drains,
- (d) trash racks,
- (e) booms.

Source control is to be preferred to downstream engineering solutions and natural treatments instead of hard engineering treatments for watercourses and drainage lines are to be encouraged.

21 DEVELOPMENT IN VEGETATED BUFFER AREAS

Definition

Development on land within the Catchment that adjoins, and is within 100 metres of, a drainage line, creek, wetland or river foreshore area within the Catchment.

Planning control

Development consent required.

Specific matters for consideration

Bushfire hazard reduction measures are not to be confined to the vegetated buffer area.

Whether the proposed vegetated buffer will act as a buffer between developed land and environmentally sensitive areas, including adjacent waterways.

Whether the following specifications have been satisfied for the proposed vegetated buffer area:

- (a) 100 metre minimum buffer width from the edge of the gorge or the top of the banks of the Georges River and its tributaries on currently forested Crown lands and natural bushland classified as community land under the *Local Government Act 1993*,
- (b) 40 metre minimum buffer width from the edge of the gorge or the top of the banks of the Georges River and its tributaries on freehold land that has not been previously developed or cleared,
- (c) 40 metre minimum buffer widths from wetlands identified by the National Parks and Wildlife Service and local council State of the Environment Reports required under the *Local Government Act 1993*,
- (d) 40 metre minimum buffer width from other environmentally sensitive areas, including remnant vegetation and steep slopes, identified on maps prepared by and available from the National Parks and Wildlife Service.

The requirements of the document *Planning for Bushfire Protection* prepared by the Department of Urban Affairs and Planning.

The requirements of the *NSW State Rivers and Estuaries Policy* prepared by and available from the Department of Land and Water Conservation and the *NSW Wetlands Management Policy* prepared by and available from that Department where the development proposals are likely to impact on the quality of water and river flows of the Georges River or its tributaries.

The need to filter runoff from developed areas to improve water quality within the Georges River and its tributaries.

The need to reduce the loss of riparian vegetation and to remove invasive weed species.

The need to minimise damage to river banks and channels so as to reduce bank erosion.

The need to increase or maintain terrestrial and aquatic biological diversity and to provide fauna habitat and corridors.

22 WASTE MANAGEMENT FACILITY OR WORKS

Definition

Development for the purpose of waste management facilities or works described in Schedule 3 (Designated Development) to the *Environmental Planning and Assessment Regulation 1994*.

Planning controls

Development consent required unless on flood liable land, in which case it is prohibited.

Advertised.

Specific matters for consideration

A system is to be required to manage leachate surface controls on the land on which the waste management facility or works is or are proposed.

A site management plan is to be required for the land on which the waste management facility or works is or are proposed.

The likelihood of ground water contamination.

The adequacy of the proposed leachate management system and surface water controls.

The long-term stability of the final landform and the adequacy of the site management plan.

Where the proposed development involves extraction of material, whether an adverse impact on the Georges River or its tributaries will result.

23 WETLANDS AND FRESHWATER RIVERS—FILLING, DREDGING, DRAINING OR CLEARING

Definition

Filling, dredging, draining or clearing of wetland areas and fresh water rivers within the Catchment as identified and mapped by the National Parks and Wildlife Service in consultation with the Department of Land and Water Conservation and NSW Fisheries.

Planning controls

Development consent required unless part of maintenance dredging carried out for or on behalf of a public authority, in which case development consent is not required.

Advertised.

Designated development unless the consent authority is satisfied that development is for the purpose of restoring or rehabilitating a wetland.

Specific matters for consideration

Whether any native vegetation, including mangroves, will be destroyed as a result of any filling, dredging, draining or clearing.

The need to protect aquatic biological diversity.



DEPARTMENT OF URBAN AFFAIRS & PLANNING
 ENVIRONMENTAL PLANNING & ASSESSMENT ACT, 1979

**GREATER METROPOLITAN
 REGIONAL ENVIRONMENTAL PLAN No 2**

- GEORGES RIVER CATCHMENT

L.G.A. VARIOUS
 PARISH OF VARIOUS

LOCALITY VARIOUS
 COUNTY OF CUMBERLAND

Drawn by R. Tyler 11/12/98

Notations

CHECKED BY MANAGER G.I.S. *R. Tyler*

— Catchment Boundary

BY PLANNING OFFICER

— LGA Boundary

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Dictionary

Agreed environmental objectives means the water quality and river flow objectives agreed by the Minister for Environment and the Minister for Land and Water Conservation.

Bank means a change of slope that defines the high bank of the Georges River or its tributaries or the bank which defines the channel in a geomorphic sense.

Bank or bed works means works carried out on the banks or the bed of the Georges River or any of its tributaries other than maintenance dredging.

Bed means the land which contains the Georges River and its tributaries, including that which is alternately inundated or left bare from a rise or fall in the supply of water, but does not include any land inundated only in time of flood.

Biological diversity means the diversity of life and is made up of the following 3 components:

- (a) genetic diversity (the variety of genes, or units of heredity, in any population), and
- (b) species diversity (the variety of species), and
- (c) ecosystem diversity (the variety of communities and ecosystems).

Clearing of wetlands or fresh water rivers means destroying or removing by any means:

- (a) flora which is either a remainder of the natural flora of the land or, if altered, is still representative of the structure and floristics of the natural flora (this includes the destruction or removal of the surface and subsurface soils, leaf litter, the seed bed, and any rocks, stones or pebbles), or
- (b) plants which are not native to New South Wales but which, in the opinion of the consent authority, contribute positively to the scenic quality or water quality of the locality.

However, it does not include:

- (c) destroying or removing plants declared to be noxious weeds by an order under section 7 of the *Noxious Weeds Act 1993* by means not likely to be significantly detrimental to the ecosystem, or
- (d) unavoidably and consequentially destroying or removing flora lying adjacent to any such noxious weeds during the process of destroying or removing those noxious weeds, or
- (e) the removal in accordance with a bush fire management plan of flora which are a bush fire hazard, or
- (f) the removal of flora in accordance with a vegetation management plan approved by the council of the area concerned.

Cumulative environmental impact means the combined effects on the environment of development and resource use within a locality over a period of time.

Development is defined in the Act.

Ecosystems (or ecological systems) are collections of organisms (plants and animals) and the environment (the soil, geology, water and air) in which they live.

Ecologically sustainable development requires the effective integration of economic and environmental considerations in decision-making processes. Ecologically sustainable development can be achieved through the implementation of the following principles and programs:

- (a) the precautionary principle—namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.
In the application of the precautionary principle, public and private decisions should be guided by:
 - (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and
 - (ii) an assessment of the risk-weighted consequences of various options,
- (b) inter-generational equity—namely, that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations,
- (c) conservation of biological diversity and ecological integrity—namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,
- (d) improved valuation, pricing and incentive mechanism—namely, that environmental factors should be included in the valuation of assets and services, such as:
 - (i) polluter pays—that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,
 - (ii) the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,
 - (iii) environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.

Environmentally sensitive natural areas are areas where environmental characteristics mean that the potential impacts of land use are greater than elsewhere in the Catchment. Environmentally sensitive natural areas in the Catchment are the river, vegetated buffer areas (riparian land), escarpments, national parks and nature reserves, wetlands, other significant floral and faunal habitats and corridors and localities containing acid sulfate soils.

Erosion and Sediment Control Plan means a plan addressing all aspects of site disturbance, flow rate changes, erosion and sediment control and site rehabilitation for the duration of the relevant project.

Fauna means all animal life, including birds, mammals, reptiles, fish and invertebrates (such as insects, shellfish and the like).

Floodplain means the floodplain level nominated in a local environmental plan or those areas inundated as a result of a 1 in 100 flood event, if no such level has been nominated.

Flood liable land means land identified in an environmental planning instrument as flood liable land.

Flood prone land means land susceptible to inundation by the probable maximum flood event.

Floodway means those areas of a floodplain where a significant discharge of water occurs during floods. Floodways are areas which, even if partially blocked, would cause a significant redistribution of flood flow, or a significant increase in flood levels.

Flora means all plant life, including higher plants (flowering plants) and lower plants (non-flowering plants such as ferns).

Georges River and its tributaries means all the water courses within the Georges River Catchment.

Habitat means the environment that permanently, periodically or occasionally supports a plant or animal.

Immediate foreshore land means land within 20 metres of the top of the bank of the Georges River or its tributaries.

In-stream extraction means the winning of extractive material or an undertaking which depends for its operations on the winning of extractive material from the channels of the Georges River or its tributaries.

Managing Urban Stormwater series of documents means the following documents prepared by and available from the Environment Protection Authority:

- (a) *Managing Urban Stormwater: Treatment Techniques,*
- (b) *Managing Urban Stormwater: Soils and Construction,*
- (c) *Managing Urban Stormwater: Council Handbook* prepared by Landcom and the Department of Housing.

Metropolitan Strategy means the document entitled *Cities for the 21st Century* prepared by the former Department of Planning and published in 1995. It is available from offices of the Department of Urban Affairs and Planning.

Native vegetation unless otherwise qualified has the same meaning as the definition in section 6 of the *Native Vegetation Conservation Act 1997*.

Public authority has the same meaning as in the Act.

Remnant vegetation means vegetation within the Catchment identified and recorded as remnant in a document available from the National Parks and Wildlife Service.

Riparian areas are the lands immediately adjacent to waterbodies.

Sprinkler system means a high or low level system with a lateral move, centre pivot, travelling irrigator, side roll, end tow or hand shift sprinkler head.

Terrestrial ecosystems are those ecosystems that are land-based, including woodlands, grasslands and forests.

The Act means the *Environmental Planning and Assessment Act 1979*.

The Catchment means the Catchment of the Georges River.

The catchment map means the map marked “Georges River Catchment Boundary” deposited in the Head Office of the Department of Urban Affairs and Planning.

Threatened species, populations and ecological communities has the same meaning as in the *Threatened Species Conservation Act 1995*.

Urban Development Program means the government land release system managed by and available from the Department of Urban Affairs and Planning.

Watercourse means a river or stream, whether perennial or intermittent, flowing in a natural channel with an established bed or in a natural channel artificially modifying the course of the stream.

Water quality objectives means the objectives approved for the Catchment by the Minister for the Environment and the Minister for Land and Water Conservation.

Water Reform Package means the documents so identified prepared by the Department of Land and Water Conservation aimed at reforming the use of the State’s waterways. They are available from the offices of that Department.

Water-related development means development such as jetties, ramps and pontoons located on land within 20 metres of the Georges River or its tributaries.

Waste includes any matter or thing whether solid, gaseous or liquid or a combination of any solids, gases or liquids that is discarded or is refuse from processes or uses (such as domestic, medical, industrial, mining, agricultural or commercial processes or uses).

Wetlands means an area with characteristics of both terrestrial and aquatic environments that is flooded or waterlogged often enough to support aquatic or other plants typical of areas with those characteristics.